



**INVITATION TO BID
BID NO. 9849
ASBESTOS ABATEMENT
FOR TROY SCHOOL DISTRICT**

The Troy School District will receive firm, sealed bids for all labor, material, equipment and all other services to complete Bid No. 9849, Asbestos Abatement, at Costello, Martell, Morse and Leonard Elementary Schools for Troy Schools.

Specifications and proposal forms can be obtained online at <http://www.troy.k12.mi.us>. From the main page click the "Business Services" tab listed under "Departments", then click "Purchasing" and scroll down to locate and access the bid document.

Your proposal and two copies marked "**Bid No. 9849 Asbestos Abatement**" must be delivered no later than 2:00 p.m., Wednesday, November 15, 2017, Troy School District Maintenance/Operations and Purchasing Offices, 1140 Rankin, Troy, MI 48083, at which time all bids will be publicly opened and read aloud immediately thereafter. Bid proposals received after this time will not be considered or accepted.

A mandatory pre-bid walk through has been scheduled for 12:00 p.m., Wednesday, November 1, 2017, at Costello Elementary School, 1333 Hamman, Troy, MI 48085. Interested parties are to meet outside the main office.

All bidders must provide familial disclosure in compliance with MCL 380.1267 and attach this information to the bid proposal. The bid proposal will be accompanied by a sworn and notarized statement disclosing any familial relationship that exists between the owner or any employee of the bidder and any member of the Troy School Board or the Troy School Districts Superintendent. Also, a sworn and notarized Affidavit of compliance for the Iran Economic Sanctions Act certifying the vendor does and will comply with Public Act 517 of 2012 shall accompany all proposals. Both forms will be enclosed in the specification's booklet that shall be used for this purpose. The District will not accept a bid proposal that does not include these sworn and notarized disclosure statement.

In accordance with Michigan Compiled Laws Section 129.201, successful bidders whose proposals are \$50,000 or more, for any bid category, will be required to furnish a U.S. Treasury Listed Company Performance and Payment Bond in the amount of 100% of their bid. The cost of the Bond shall be identified within each proposal.

Prevailing wage rates are a requirement for this project and are attached; this is a qualified bond.

The Troy Board of Education reserves the right to accept or reject any or all bids, either in whole or in part; to award contract to other than the low bidder; to waive any irregularities and/or informalities; and in general to make awards in any manner deemed to be in the best interest of the owner.

Purchasing Department
Troy School District
1140 Rankin
Troy, MI 48083

INSTRUCTIONS TO BIDDERS

PROPOSAL/INTENT

1. The Troy School District will receive firm, sealed bids for all labor, material, equipment and all other services to complete Asbestos Abatement, at Costello, Martell, Morse and Leonard Elementary Schools, in accordance with the attached specifications.
2. Proposals will be submitted only on the forms provided, will be enclosed in a sealed envelope marked with the name of the bidder, the title of the work and must be delivered to Troy School District Maintenance/Operations and Purchasing Offices, 1140 Rankin, Troy, MI 48083, no later than 2:00 p.m., Wednesday, November 15, 2017, at which time all bids will be publicly opened and read aloud immediately thereafter. Bid proposals received after this time will not be considered or accepted. Oral, telephone, fax or electronic mail bids are invalid and will not receive consideration. Submit one original and two copies.
3. A mandatory pre-bid walk through has been scheduled for 12:00 p.m., Wednesday, November 1, 2017, at Costello Elementary School, 1333 Hamman, Troy, MI 48085.
4. Proposals will be made in conformity with all the conditions set forth in the specifications. All items of furniture and equipment must conform to the specifications.
5. Any questions regarding bid specifications must be received no later than noon, November 7, 2017. Questions must be submitted in writing to the attention of Lisa Whitton at Nova Environmental at lwhitton@nova-env.com.
6. Bidder shall be reputable and a recognized organization, with at least five (5) years successful experience on work of this type and scope, of equal or better quality than this project.
7. References in the specifications to any article, product, material, fixture, form or type of construction, etc., by proprietary name, manufacturer, make or catalog number will be interpreted as establishing a standard quality of design and will not be construed as limiting proposals.
8. Bid bond or certified check, for an amount not less than five (5%) percent of the amount of the bid, must accompany each bid. Failure to submit proper bid security shall constitute rejection of bid.
9. A performance bond shall be required for the project if the cost is in excess of \$50,000 and must be listed separately on the proposal form as an individual line item.
10. A completed Familial Disclosure and an Iran Economic Sanctions form must be included with each proposal submitted or the proposal will not be accepted, please note these forms must be notarized.
11. The Troy Board of Education reserves the right to accept or reject any or all proposals either in whole or in part; to waive any irregularities and/or informalities; and in general to make awards or cancel this proposal, if deemed to be in the best interests of the owner.

SCOPE

This bid includes Asbestos Abatement at Costello Elementary School, 1333 Hamman, Troy, MI 48085, Martell Elementary School, 5666 Livernois, Troy, MI 48098, Morse Elementary School, 475 Cherry Street, Troy, MI 48083 and Leonard Elementary School, 4401 Tallman Drive, Troy, MI 48085, for Troy School District. Proposals will be on a line item lump sum basis, according to the schedule listed below and where specified only the qualified products listed will be considered in this proposal.

WARRANTY

All material and equipment will be guaranteed to be free from defects in both workmanship and materials for no less than one year from date of receipt/installation. If manufacturer warranty exceeds this minimum requirement, the manufacturer warranty will prevail. Any item(s) found to be defective will be replaced or repaired within seven working days at Vendor(s) expense.

WITHDRAWAL OF BIDS

Any bidder may withdraw their bid at any time prior to the scheduled time for receipt of bids. No proposal may be withdrawn until after 45 days after bid opening.

FIRM PRICING

Unit pricing will prevail when computing total quantity on bids. No price allowance or extra consideration on behalf of the bidder will subsequently be allowed by reason of error or oversight on the part of the bidder. The successful bidder(s) will hold bid prices firm for all purchase orders placed for a period of approximately one full year.

PERMITS, FEES AND REGULATIONS

The Contractor shall obtain and pay for all permits, assessments, fees, bonds, and other charges as necessary to perform and complete the work of this contract, including disconnection charges, capping and unplugging utilities.

The Contractor shall be responsible for obtaining all permits and licenses necessary for the proper completion of project. Permits and licenses are available from the appropriate agencies having jurisdiction. The Contractor shall give all notices, pay all fees and comply with all laws, ordinances, rules and regulations bearing on the work.

At the completion of the project, the Contractor will provide to the District all paperwork related to the full execution of the permits(s), including all payments and inspections.

If any of the work of the Contractor is done contrary to such laws, ordinance rules and regulations without such notice, he shall bear all costs arising therefrom. The Contractor shall include all cost and taxes in its bid, and make proper provisions for payment of all other State and Federal applicable taxes, fees or other costs.

TAXES

Troy School District is not automatically exempt from State of Michigan Sales and Use Taxes. The District must pay these taxes when materials are to be incorporated into reality. Materials that are permanently attached, built-in, incorporated or otherwise made part of the structure all applicable taxes shall be paid by the Vendor. Troy School District shall not be responsible for any taxes that are imposed on the Vendor. Furthermore, the Vendor understands that it cannot claim exemption from taxes by virtue of any exemption that is provided to Troy School District.

DELIVERY/INSTALLATION

Time of delivery is part of the consideration. It is understood that the bidder agrees to deliver prepaid to the schools, specified from the resulting contract, all items. All cost of delivery, drayage, freight, packing, unpacking, and setup are to be included in the prices bid.

The Contractor is responsible for removing from the project all waste materials and rubbish resulting from his operations and installation including all packing cartons and debris. Removal is to occur on a daily basis. Failure to do so will result in the Owner doing so and the cost thereof shall be charged to the Contractor as a deduction in his contract price.

The Contractor shall provide an adequate number of qualified, experienced installers, in harmony with other works at the site.

BID BOND

Bid Bond or certified check, for an amount not less than five (5%) percent of the amount of the bid, must accompany each bid. The check or bond of each unsuccessful bidder will be returned within ten (10) days after the bid is awarded. Failure of any accepted bidder to enter into a contract to complete the specified work may forfeiture of his bid security. Failure to submit proper bid security shall constitute rejection of bid.

PERFORMANCE BOND/PAYMENT BOND

Within fourteen (14) days after date of issuance of written notice of selection for the award of a contract, which shall be considered as the notice to proceed, the successful bidder shall enter into a contract with the Owner and shall execute and file with the Owner, the following in the amount 100% equal to full contract sum.

A performance bond shall be required for the project if the cost is in excess of \$50,000 and must be listed separately on the proposal form as an individual line item. The Performance Bond must insure the faithful performance of all provisions of the contract and satisfactory completion of the specified work, within the time agreed upon.

The payment bond must insure the payment and protection of claimants supplying labor or materials to the principal contractor or his subcontractors in the prosecution of the work provided for in the contract. The successful contractor's bond company must be listed by the State of Michigan as a licensed carrier and have an excellent or superior rating from AM Best Company.

PREVAILING WAGE

This is a prevailing wage project, see attached schedule.

SAFETY

Under the "General Conditions of the Contract for Construction" of the contract to be awarded, the Contractor;

- a) shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures;
- b) shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the contract;
- c) shall take reasonable precautions for safety of all persons who may be affected, including employees of the Contractor and Subcontractor; and
- d) shall have an accident prevention representative at the site.

The general conditions of the contract for construction and the agreement also require that the Contractor indemnify the Owner in the event of certain claims arising out of the performance of the work.

INSURANCE REQUIREMENTS

The Contractor shall protect, defend and indemnify the Owner, its officers, agents, servants, volunteers, and employees from any and all liabilities, claims, liens, demands, and costs of whatsoever kind and nature which may result in injury or death to any persons, and for any result in injury or death to any person, and for loss or damage to any property, including property owned or in the care, custody, or control of the Owner in connection with or in any way incident to or arising out of the occupancy, use, with this Agreement resulting in whole or in part from negligent acts or omissions of the Contractor, any Subcontractor, or any employee, agent or representative of the Contractor or any Subcontractor.

The Contractor shall maintain, at its expense, during the term of this contract the following insurance:

- a) Worker's Compensation Insurance with statutory limits and Employer's Liability Insurance with a minimum limit of \$1,000,000 each occurrence.

- b) Comprehensive General Liability Insurance including **Asbestos Specific General Liability Insurance** with a minimum combined single limit of \$1,000,000 per occurrence, \$1,000,000 aggregate, in the same amount made for bodily injury and property damage. The policy is to include products and completed operations, cross liability, broad form property damage, independent contractors, and contractual liability coverage. The policy shall be endorsed to provide sixty (60) days written notice to the District of any material change of coverage, cancellation, or non-renewal of coverage.
- c) If Subcontractors are likely to be used, the Comprehensive General Liability policy shall include coverage for independent Contractors.
- d) Owner's Contractor's Protective Policy-comprehensive in the name of the Owner, with a minimum combined single limit of \$1,000,000 per occurrence in the same amount for bodily injury or property damage.
- e) Automobile Liability insurance covering all owned, hired, and non-owned vehicles with personal protection insurance and property insurance to comply with the provisions of the Michigan no-fault Insurance Law, including residual liability insurance with a minimum combined single limit of \$1,000,000 each occurrence of bodily injury and property damage.
- f) All insurance policies shall be issued by companies licensed to do business in the State of Michigan. The companies issuing the policies must be domestic (on-shore) companies and have an A rating by AM Best.
- g) The Contractor shall be responsible for payment of all deductibles contained in any insurance policy required in this contract.

COMPLIANCE WITH SCHOOL SAFETY INITIATIVE LEGISLATION

Meeting the requirements of the School Safety Initiative Legislation, being MCL 380.1230, 80.1230a, 380.1230c, 380.1230d and 380.1230g.

The Bidder acknowledges and agrees that the Bidder will have any and all of its installation personnel (including sub-contractors) subjected to criminal history and background checks. **Personnel that fall into this group will be working on District premises for more than one continuous week.** Criminal history and background checks will be done within a year of the beginning of the project and should be completed before work begins on this project.

The Bidder is required to provide written documentation listing all personnel who fall into the group indicated in the above paragraph. The documentation will also verify that none of the personnel have a "listed offense" as indicated below. This documentation is to be provided before the beginning of the project and updated as necessary for any additions or subtractions from the list as long as the project lasts.

The Bidder shall indemnify, defend and hold the District, its employees, Board of Education, and each member thereof, agents and consultants, harmless from and against any and all claims, counter-claims, suits, debts, demands, actions, judgments, liens, liabilities, costs, expenses, including actual attorney's fees and actual expert witness fees, arising out of or in connection with any violation of, or the Bidder's failure to comply with the above paragraphs.

The Bidder shall be responsible for all costs and expenses associated with the above-required criminal history and background checks.

LISTED OFFENSES

1. MCL 750.145a - Accosting, enticing or soliciting child (less than 16 years of age) for immoral purposes.
2. MCL 750.145b - Accosting, enticing or soliciting child (less than 16 years of age) immoral purposes – second or subsequent offenses.
3. MCL 750.145c - Involvement in child sexually abusive activity or material, including possession of child sexually abusive material (“child” is a person less than 18 years of age who has not been legally emancipated.)
4. MCL 750.158 - Crime against nature (i.e., sodomy and bestiality) if the victim is an individual less than 18 years of age.
5. A third of subsequent violation of any combination of the following:
 - a. MCL 750.167(1)(f) - indecent or obscene conduct in a public place;
 - b. MCL 750.335a - indecent exposure;
 - c. A local ordinance of a municipality substantially corresponding to a section described in (a) or (b), *supra*.
6. Except for juvenile disposition or adjudication, a violation of:
 - a. MCL 750.338 - gross indecency between males; fellatio or masturbation;
 - b. MCL 750.338a - gross indecency between females; oral sex;
 - c. MCL 750.338b - gross indecency between male and female persons;if the victim is an individual less than 18 years of age.
7. MCL 750.349 - Kidnapping, if victim is an individual less than 18 years of age.
8. MCL 750.350 - Kidnapping; child under 14 years of age with intent to detain or conceal from child’s parent or legal guardian.
9. MCL 750.448 - Soliciting or accosting by a person 16 years of age or older, if victim is an individual less than 18 years of age.
10. MCL 750.455 - Pandering
11. MCL 750.520b - First degree criminal sexual conduct.
12. MCL 750.520c - Second degree criminal sexual conduct.
13. MCL 750.520d - Third degree criminal sexual conduct.
14. MCL 750.520e - Fourth degree criminal sexual conduct.
15. MCL 750.520g - Assault with intent to commit criminal sexual conduct.
16. Any other violation of a law of the state or a local ordinance of municipality that by its nature constitutes a sexual offense against an individual who is less than 18 years of age.
17. MCL 750.10a - Offense by sexually delinquent person (i.e., “any person whose sexual behavior is characterized by repetitive or compulsive acts which indicate a disregard of consequences or the recognized rights of others, or by the use of force upon another person in attempting sexual relations of either a heterosexual or homosexual nature, or by the commission of sexual aggressions against children under the age of 16”).
18. An attempt or conspiracy to commit an offense described in (1) through (17).
19. An offense substantially similar to an offense described in (1) through (17) under a law of the United States, any state, or any country or any tribal or military law.

TERMINATION BY THE DISTRICT FOR CONVENIENCE

The District may, at any time, terminate the Contract for the District’s convenience and without cause.

Upon receipt of written notice from the District of such termination for the District’s convenience, the Contractor shall:

- a) Cease operations as directed by the District in the notice;
- b) Take actions necessary, or that the District may direct, for the protection and preservation of the Work; and

- c) Except for Work directed to performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further Subcontracts and purchase orders.

Owner Is An Equal Opportunity Employer

The Owner is an Equal Opportunity Employer. Pursuant to the Executive Order 11246 as amended, you are advised that under the provisions of this order, Contractors and Subcontractors are obligated to take affirmative action to provide equal opportunity without regard to race, creed, color, national origin, age or sex.

Michigan Right to Know Law

Troy School District will comply with the Michigan Right to Know Law by informing Contractors of hazardous chemicals to which they may be exposed. All Contractors will be required to provide Material Safety Data Sheets for any hazardous chemicals brought to the workplace. The Contractor shall comply with all applicable provisions of the Occupational Safety and Health Act for the duration of the specified work.

Asbestos Hazard Emergency Response Act

As required by the Environmental Protection Agency Asbestos Hazard Emergency Response Act, each school district is responsible for providing contractors with information regarding locations of known or assumed asbestos containing material prior to the Contractor entering a building under the school district's jurisdiction. The successful bidder will be required to complete the school district's Contractor Notification forms.

Notification of Assumed Lead-Containing Materials

The intent of this section is to formally notify all Contractors and Sub-Contractors applying for or bidding on work covered within this specification that, due to the age of the facilities within this District, there is the presumption that building components do contain lead-based paint pursuant to OSHA definition. The District has not conducted lead-based paint inspections. As a result, all Contractors and Sub-Contractors bidding must assume that building components do contain lead-based paint.

Furthermore, all awarded Contractors and Sub-Contractors shall be responsible to comply with all applicable Federal and Michigan State lead regulations including, but not limited to, 29 CFR Part 1926.62 of the OSHA Lead Construction Standard, (Part 603 of the Michigan State Standards). All costs associated with regulatory compliance shall be borne by the Contractor and/or Sub-Contractor.

General Conditions

The District reserves the right to accept or reject any or all proposals, to waive irregularities, and to accept a proposal which, in the District's opinion, is in the District's best interest.

The District reserves the right to declare as non-responsive, and reject, any bid which is incomplete or where material information requested is not furnished, or where indirect or incomplete answers or information is provided.

In the event, the Administration Building is closed due to unforeseen circumstances on the day Proposals are due, Proposals will be due at the same time on the next day that the District and/or the Administration Building is open.

Negligence in preparation, improper preparation, errors in, or omissions from, proposal shall not relieve a bidder from fulfillment of any and all obligations and requirements of the proposed Contract Documents.

The District expects that the awarded bidder will complete the work as outlined in the specifications for the amount bid by the bidder. Any additional costs above the amount bid and awarded, must be approved by the District in advance of any work.

Voluntary alternates for bids are acceptable but should NOT be put in the space for the Base Bid on the Bid Response Form but on an attached sheet, clearly labeled Voluntary Alternative. Such Alternates should be described in enough detail for the District to understand the Bidder's intent.

Owner may choose to conduct testing to verify correct products and installation. If the materials and installation are found not to be per spec, owner will require subsequent tests to be performed by Owners testing company at contractors' expense.

Any exceptions to the terms and conditions contained in this RFP or any special considerations or conditions requested or required by the Contractor MUST be specifically enumerated by the Contractor and be submitted as part of its Proposal, together with an explanation as to the reason such terms and conditions of this RFP cannot be met by, or in the Contractor's opinion should not be applicable to, the Contractor. The Contractor shall be required and expected to meet the specifications and the requirements as set forth in this RFP in their entirety, except to the extent exceptions or special considerations or conditions are expressly set forth in the Contractor's Proposal and those exceptions or special considerations or conditions are expressly accepted by the District.

No responsibility shall attach to the District, or the authorized representatives of either one, for the premature opening of any proposal, which is not properly addressed and identified.

The Contract Documents, as outlined in the executed Agreement, shall imply the inclusion of the entire agreement between the parties thereto, and the Contractor shall not claim any modification thereof resulting from any representation or promise made at any time by an officer, agent or employee of the District or by any other person.

Opening and Awarding of Bids

Bids will be publicly opened and read aloud at the Troy School District Maintenance/Operations and Purchasing Offices, 1140 Rankin, Troy, MI 48083, at 2:00 p.m., Wednesday, November 15, 2017.

The recommendation for award will be submitted to the Board of Education at the regular Board of Education Meeting to be held on Tuesday, December 19, 2017.

SCOPE OF WORK
FOR
TROY SCHOOL DISTRICT
AT

COSTELLO ELEMENTARY SCHOOL
1333 HAMMAN DRIVE
TROY, MICHIGAN 48085

MARTELL ELEMENTARY SCHOOL
5666 LIVERNOIS ROAD
TROY, MICHIGAN 48098

MORSE ELEMENTARY SCHOOL
475 CHERRY DRIVE
TROY, MICHIGAN 48083

LEONARD ELEMENTARY SCHOOL
4401 TALLMAN DRIVE
TROY, MICHIGAN 48085

SCOPE-OF-WORK

For all projects: Various construction activities may be occurring during abatement schedule. Dumpster, mobilization, decon chamber locations may change without notice. Owner may be moving items from work areas at beginning of each PHASE. Contractor responsible for removing/replacing any remaining items. Contractor shall provide all necessary utilities if not otherwise provided.

BID #1: COSTELLO ELEMENTARY SCHOOL

Abatement Activities

This section defines the asbestos abatement activities the awarded Contractor will perform at Costello Elementary School.

PHASE 1 – Exterior

1. Remove all windows as designated on drawings, 18 total - dimensions 6' x 7', from throughout the building.

NOTE: 1. Mini-enclosures for removal of all windows and caulk.

2. Contractor to remove all windows/frames/caulk/glazing/glass/panels/trim.
3. Contractor to remove all window materials flush with block/brick.
4. Contractor to remove caulk to the satisfaction of Owner's Representative.
5. All windows/caulk/panels to be removed as non-friable.
6. Contractor to replace all window openings with 2x4 framing and plywood.
7. Contractor to coordinate with Owner's window installation company for removal of all windows.
8. Contractor to remove interior sill trim metal.
9. Contractor to work second shift for Phase 1.

PHASE 2 – Boiler Room

1. Remove 2 boilers, approximately 3' x 5' x 6', from the boiler room.
2. Remove all breeching insulation, approximately 500 square feet, from the boiler room.

NOTE: 1. One full enclosure for removal of all materials.

2. Contractor to remove and dispose of all boiler materials as ACM.
3. Contractor to remove all boiler materials to concrete pad.
4. Contractor to use fire rated poly for enclosure in boiler room.
5. Contractor to work second shift for Phase 2.
6. Contractor to build plywood bag-out as necessary for waste at boiler room exit door.

BID #1: MARTELL ELEMENTARY SCHOOL

Abatement Activities

This section defines the asbestos abatement activities the awarded Contractor will perform at Martell Elementary School.

PHASE 1 – Exterior

1. Remove all windows as designated on drawings, 18 total - dimensions 6' x 7', from throughout the building.

NOTE: 1. Mini-enclosures for removal of all windows and caulk.

2. Contractor to remove all windows/frames/caulk/glazing/glass/panels/trim.
3. Contractor to remove all window materials flush with block/brick.
4. Contractor to remove caulk to the satisfaction of Owner's Representative.
5. All windows/caulk/panels to be removed as non-friable.
6. Contractor to replace all window openings with 2x4 framing and plywood.
7. Contractor to coordinate with Owner's window installation company for removal of all windows.
8. Contractor to remove interior sill trim metal.
9. Contractor to work second shift for Phase 1.

PHASE 2 – Boiler Room

1. Remove 2 boilers, approximately 3' x 5' x 6', from the boiler room.
2. Remove all breeching insulation, approximately 500 square feet, from the boiler room.

NOTE: 1. One full enclosure for removal of all materials.

2. Contractor to remove and dispose of all boiler materials as ACM.
3. Contractor to remove all boiler materials to concrete pad.
4. Contractor to use fire rated poly for enclosure in boiler room.
5. Contractor to work second shift for Phase 2.
6. Contractor to build plywood bag-out as necessary for waste at boiler room exit door.

BID #1: MORSE ELEMENTARY SCHOOL

Abatement Activities

This section defines the asbestos abatement activities the awarded Contractor will perform at Morse Elementary School.

PHASE 1 – Exterior

1. Remove all windows as designated on drawings, 6 total, from the following areas:

LGI Room – 1 @ 12' x 30' plus door/frame
Cafeteria – 5 @ 12' x 12'
2. Remove all transite soffit material (including all caulk/metal/metal/trim), approximately 75 square feet, from the LGI Room

NOTE: 1. Mini-enclosures for removal of all materials.
2. Contractor to remove all windows/frames/caulk/glazing/glass/panels/trim/doors.
3. Contractor to remove all window materials flush with block/brick.
4. Contractor to remove caulk to the satisfaction of Owner's Representative.
5. All windows/caulk/panels to be removed as non-friable.
6. Contractor to replace all window openings with 2x4 framing and plywood.
7. Contractor to coordinate with Owner's window installation company for removal of all windows.
8. Contractor to remove interior sill and all trim metal.
9. Contractor to work second shift for Phase 1.

BID #1: LEONARD ELEMENTARY SCHOOL

Abatement Activities

This section defines the asbestos abatement activities the awarded Contractor will perform at Leonard Elementary School.

PHASE 1 – Exterior

1. Remove all windows as designated on drawings, 26 total, from the following areas:

Main Office – 4 @ 8' x 15'

Gym – 8 @ 3' x 20'

Gym – 8 @ 3' x 15'

Media Center Areas – 1 @ 7' x 7'

Media Center Areas – 5 @ 7' x 4'

NOTE: 1. Mini-enclosures for removal of all materials.

2. Contractor to remove all windows/frames/caulk/glazing/glass/panels/trim/doors.
3. Contractor to remove all window materials flush with block/brick.
4. Contractor to remove caulk to the satisfaction of Owner's Representative.
5. All windows/caulk/panels to be removed as non-friable.
6. Contractor to replace all window openings with 2x4 framing and plywood.
7. Contractor to coordinate with Owner's window installation company for removal of all windows.
8. Contractor to remove interior sill and all trim metal.
9. Contractor to work second shift for Phase 1.

Additional Abatement Requirements (For all Bids)

This section defines other requirements that the awarded Contractor must follow during the course of the above abatement projects.

1. The Contractor shall construct mini-enclosures for the removal of the materials identified in the Scope-of-Work. All walls shall be sealed with a minimum of one (1) layer of four (4) mil polyethylene. All existing floors to remain shall be sealed with a minimum of two (2) layers of six (6) mil polyethylene. Contractor shall construct knee walls as necessary to segregate enclosure. Full decontamination chambers shall be constructed and used for the duration of the projects.
2. Contractor shall remove applicable exterior doors/frames/panels/caulks as non-friable. All materials shall be wrapped in several layers of six (6) mil polyethylene, properly labeled and disposed of as ACM. All exterior windows shall be replaced/secured with wood frame and 1/2" plywood. The Contractor shall construct mini-enclosure(s) for the removal of the materials identified in the Scope-of-Work.
3. The Contractor shall construct full enclosures for the removal of the boiler room materials identified in the Scope-of-Work. All walls shall be sealed with a minimum of two (2) layers of fire rated four (4) mil polyethylene. All existing floors to remain shall be sealed with a minimum of two (2) layers of six (6) mil polyethylene. Contractor shall construct knee walls as necessary to segregate enclosure. Full decontamination chambers shall be constructed and used for the duration of the projects.
4. It shall be the Contractor's responsibility to locate all applicable floor tile/mastic behind/within/below all carpet, univents, walls, cabinets, shelves, lockers casework and any other item and remove/dispose of the materials and associated debris as asbestos. The Contractor shall only remove materials necessary to access and safely remove asbestos materials.
5. It shall be the Contractor's responsibility to locate all applicable pipe and pipe fitting insulation behind/within/below all ceilings, univents, walls, cabinets, shelves, lockers casework and any other item and remove/dispose of the materials and associated debris as asbestos whether identified in scope of work or not. Base bid is lump sum for all buildings. Unit prices will only apply to Auditorium Areas at Rogers Elementary School. The Contractor shall only remove materials necessary to access and safely remove asbestos materials.
6. Contractor shall remove all caulks as non-friable. Contractor shall replace all openings with 2x4 framing and plywood. Contractor shall coordinate window/door removal with Owner's Representative.
7. Contractor shall provide all lift/support/access/structural/scaffold/safety needs and such other protocols for safety and structural integrity satisfying all applicable regulations. Contractor shall provide all necessary fall protection to Owner and Owner's Representatives.
8. The Contractor shall place Air Filtration Devices (AFD's) in work areas only. Wood with cutouts for exhaust ducts shall be placed in doors and windows. The Contractor shall secure the wood in the doors and windows to ensure a protected and secure work area. The following minimum of 2,000 CFM AFD's, abatement techniques and clearance sampling shall be utilized during each phase of abatement.

COSTELLO ELEMENTARY SCHOOL

Phase	Area	# of AFD's	Abatement Technique	Clearance
PHASE 1	Windows	1/room	mini -enclosure	PCM 1 < .01 f/cc
PHASE 2	Boiler Room	1	full enclosure	TEM 5 < 70 str/avg

MARTELL ELEMENTARY SCHOOL

Phase	Area	# of AFD's	Abatement Technique	Clearance
PHASE 1	Windows	1/room	mini -enclosure	PCM 1 < .01 f/cc
PHASE 2	Boiler Room	1	full enclosure	TEM 5 < 70 str/avg

MORSE ELEMENTARY SCHOOL

Phase	Area	# of AFD's	Abatement Technique	Clearance
PHASE 1	Windows	1/room	mini -enclosure	PCM 1 < .01 f/cc

LEONARD ELEMENTARY SCHOOL

Phase	Area	# of AFD's	Abatement Technique	Clearance
PHASE 1	Windows	1/room	mini -enclosure	PCM 1 < .01 f/cc

Abatement Requirements for all projects

1. The Contractor is responsible for all measurements. Measurements for bidding purposes as well as material procurement are the sole responsibility of the Contractor. The Maps included within this specification may not identify all materials listed in the Scope-of-Work. The Scope-Of-work may not identify all materials on Maps. The Contractor is responsible for abatement of all materials whether identified in the Scope-of-Work, the maps or not.
2. The Contractor shall be responsible for moving any non-fixed item in the work area. The Contractor is responsible for returning the work area to the Owner in a condition that satisfies the Owner and the Owner's representative.
3. The Owner shall provide necessary utilities whenever possible. The Contractor shall be responsible for providing any necessary utilities (for Contractor and Owner's Representative) to complete the projects as scheduled, if not provided by the Owner.
4. Complete decontamination chambers with showers shall be constructed for all projects. The Owner and the Owner's Consultant must approve the decontamination chamber location, bag out location, Air Filtration device (AFD) placement and dumpster location.
5. The Contractor may construct a bag out area to facilitate disposal of the materials. The bag out chamber (2 chambers) shall be constructed of wood frame and plywood and shall be sealed with polyethylene (walls/floors/ceilings). The bag out area shall have a wood door with lock.
6. The Contractor shall be responsible for the security and safety of the building. Wood with cutouts for exhaust duct shall be placed in doors and windows. The Contractor shall secure the wood in the doors and windows to ensure a secure work area.
7. The Contractor is responsible for any damage to surfaces, electrical and mechanical equipment. The Contractor shall be responsible for repairing (painting) surfaces: walls, ceilings, floors, windows, doors etc. The Contractor is responsible for all damage resulting from removal operations. All wires shall be properly adhered with cable ties to appropriate hangers.
8. If a Vac Loader is used, the personnel operating the Vac Loader, its placement and standard operating procedures must be approved by the Owner's Representative.
9. Fiber drums shall be utilized for floor tile disposal. They shall have had no hazardous substances placed into them. All drums must be clean and free of hazardous labels when they arrive on the project site. Floor tile and mastic must be placed into lined fiber drums.
10. All areas shall be encapsulated with clear encapsulant.
11. The Workers shall wear PAPRs.
12. The Contractor shall supply a manometer and will be required to maintain a minimum negative pressure of .02 inches of water equivalent. In addition, the Contractor must smoke test the enclosure daily at a minimum.
13. Six sided locked dumpsters only - no open top dumpsters. Dumpsters must be removed from the premises within one day of project completion.
14. No bladder bags may be used without the permission of the Owner or Owner's Representative with conditions.
15. The Contractor shall provide utility lighting for all work areas.

16. No salvaging, by the Contractor or their employees, of any item.
17. The Contractor shall construct wood frame and plywood barriers at all locations requested by the Owner or Owner's Representative.
18. The Contractor will be required to construct an enclosure that satisfies all the requirements of Appendix F of OSHA 1926.1101 "Work Practices and Engineering Controls for Major Asbestos Removal, Renovation and Demolition Operations"

Meeting Requirements

All Contractors submitting bids will be required to attend the following meetings if requested by the Owner's Consultant:

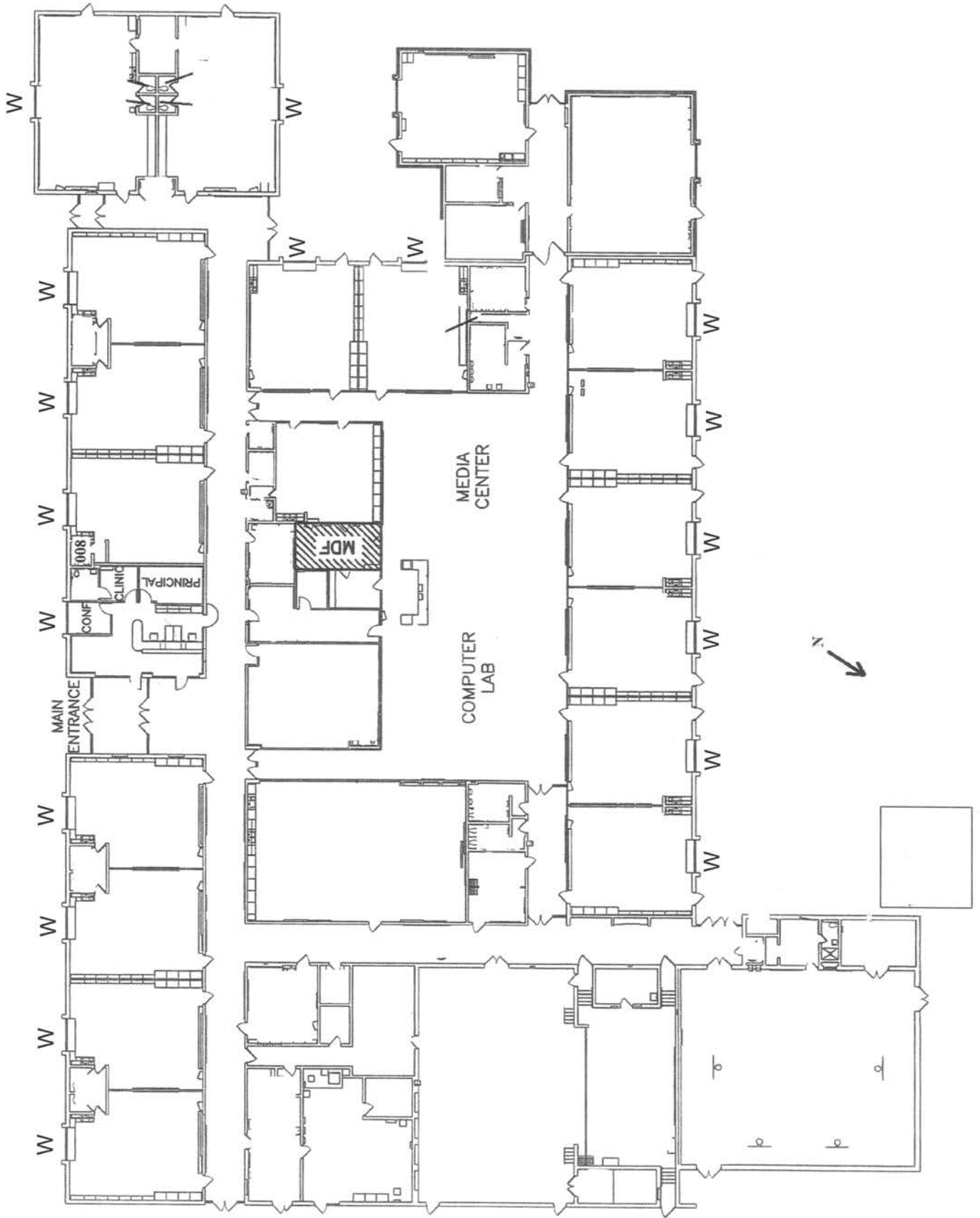
- o Post-Bid Examination: The three lowest bids may be required to meet with the Owner's Consultant to discuss the Contractor's submitted bid and various aspects of the project.
- o Pre-Start Scheduling Meeting: The Awarded Contractor will be required to attend a pre-start meeting on-site with the Owner and Owner's Consultant to schedule the logistics of the project. At this meeting, the Awarded Contractor will be required to furnish all paperwork as required in Item 2 of the "Technical Specifications for Asbestos Abatement."

Floor Plans

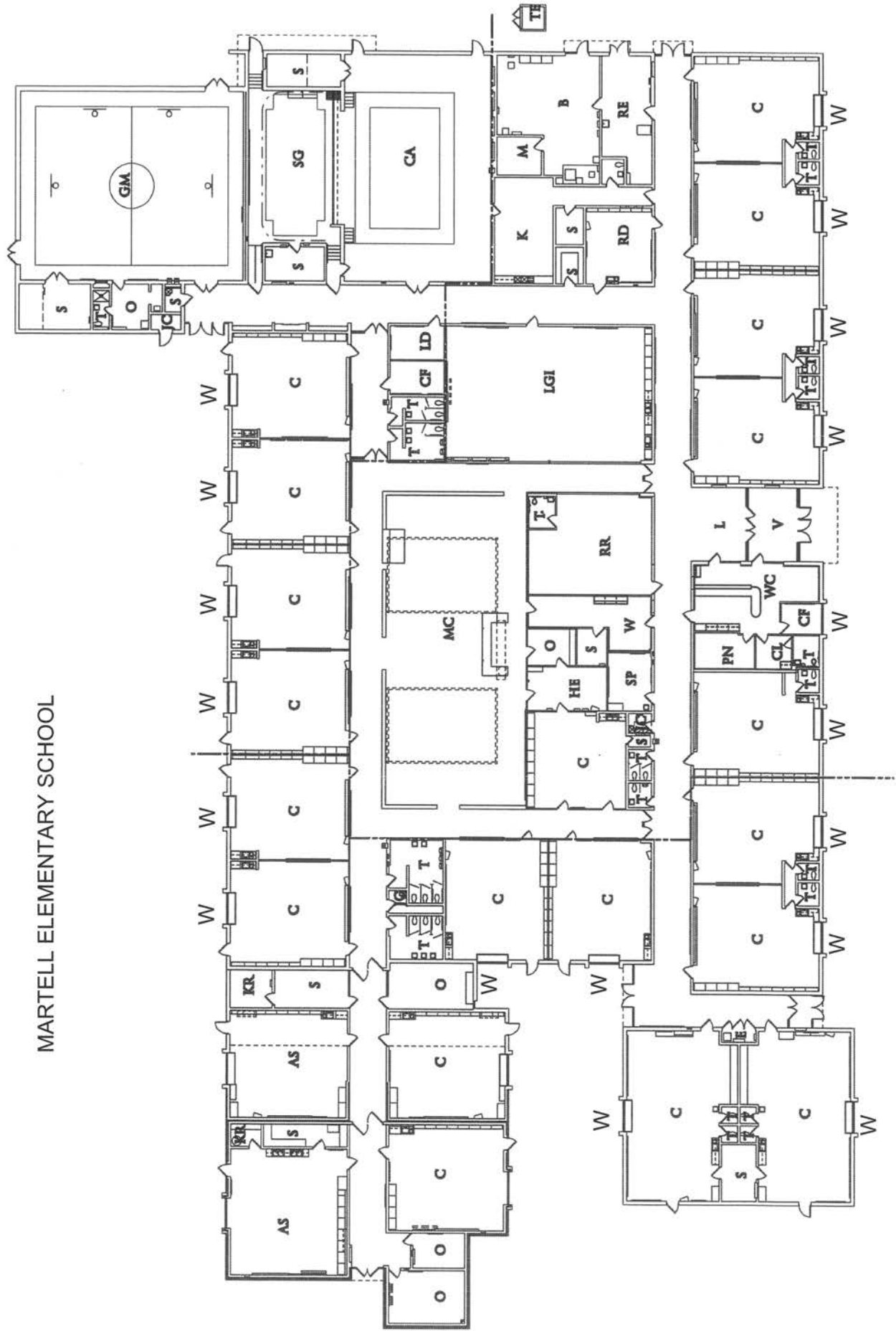
The following floor plans/maps/diagrams will provide additional information which will be useful for proper orientation and descriptions of the building areas. These plans do not include all materials in the scope of work to be removed. While every effort has been made to provide plans at a scale or with listed approximate measurements, all Bidders should be reminded that they are responsible for their own field measurements.

COSTELLO ELEMENTARY SCHOOL
MARTELL ELEMENTARY SCHOOL
MORSE ELEMENTARY SCHOOL
LEONARD ELEMENTARY SCHOOL

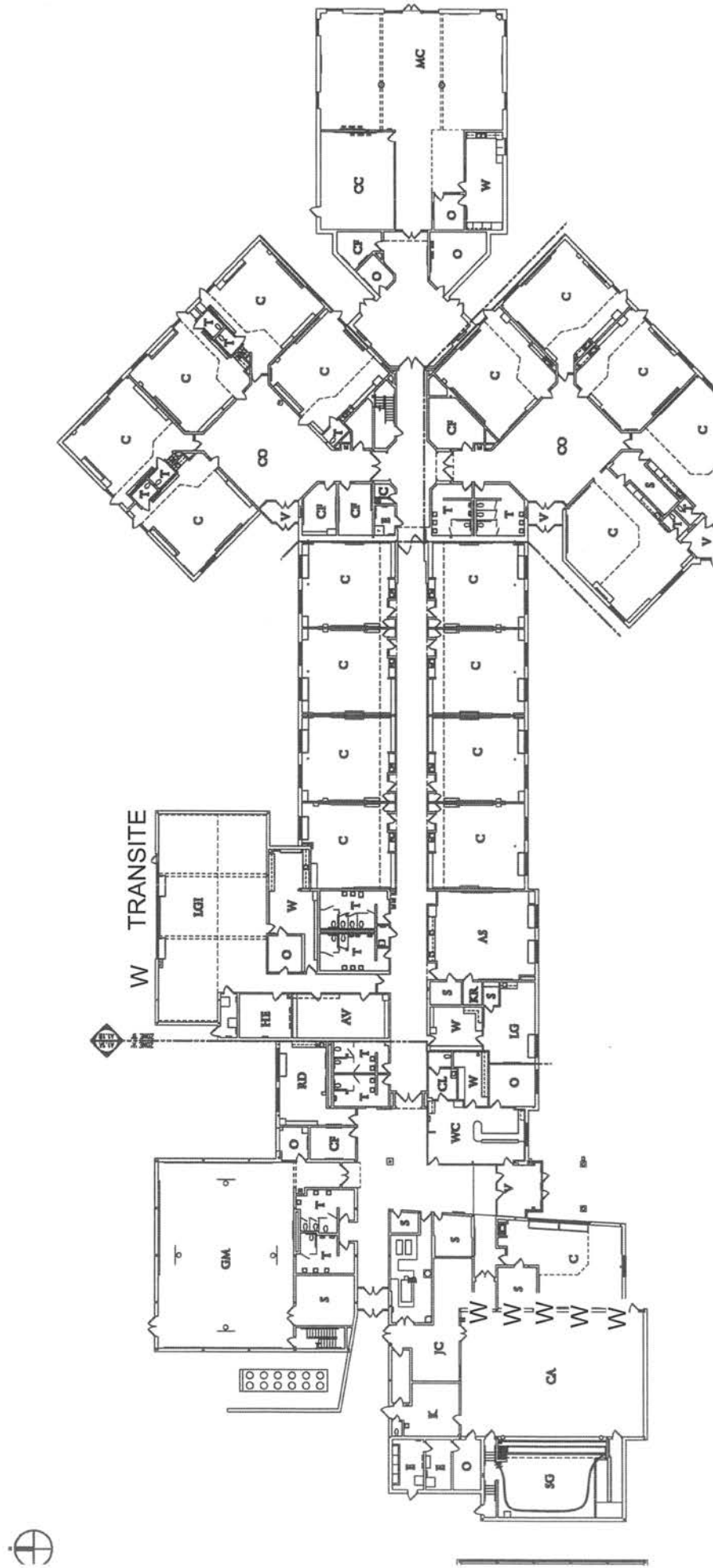
Troy School District
Costello Elementary School

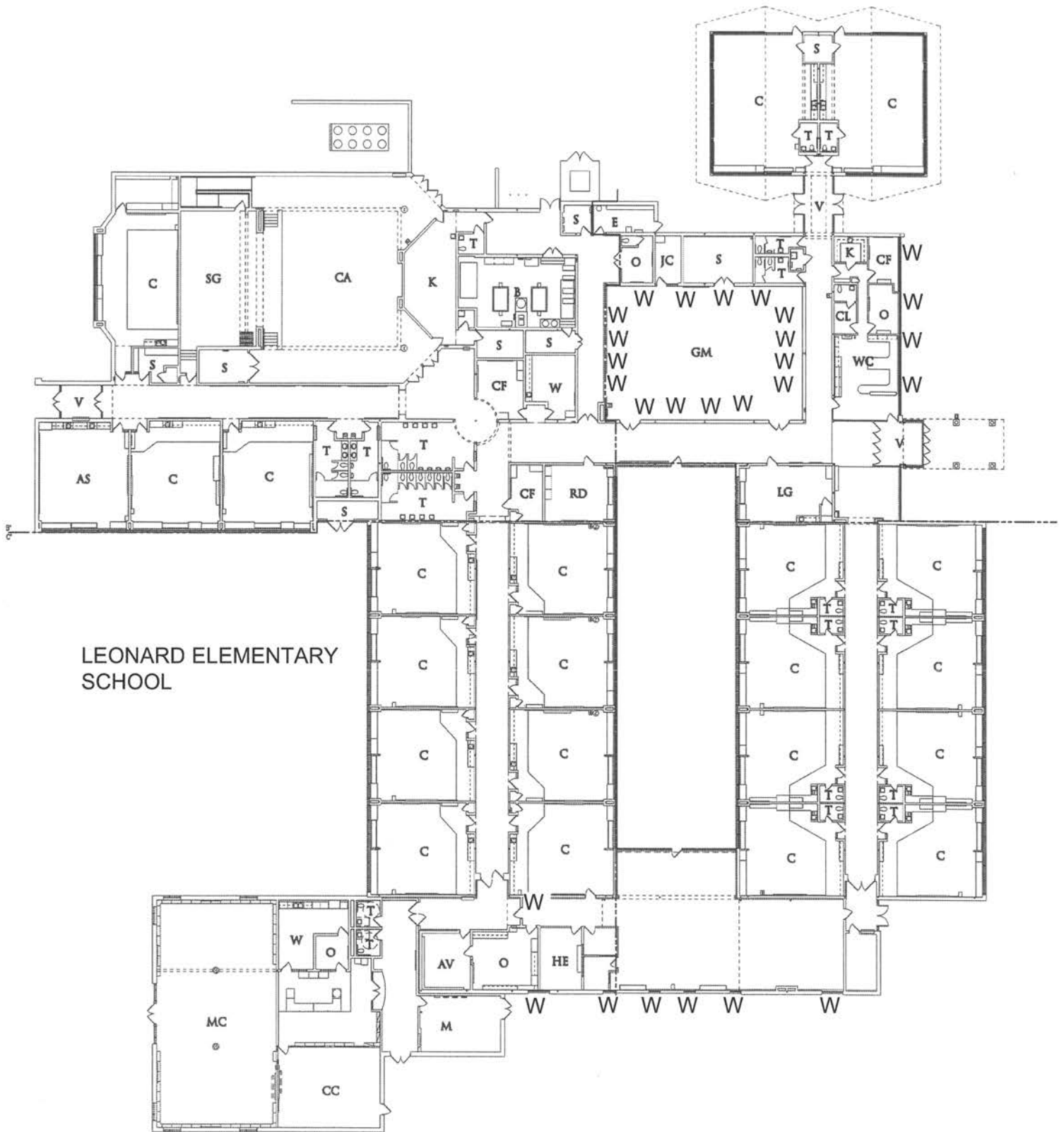


MARTELL ELEMENTARY SCHOOL



MORSE ELEMENTARY SCHOOL





LEONARD ELEMENTARY
SCHOOL

TIME SCHEDULE

The following time schedule must be adhered to by the awarded Contractor(s). This schedule will be made part of the contract documents and will be strictly enforced by the Owner and the Owner's Representative. Any and all variances to this schedule must be cleared by the Owner and the Owner's Representative prior to the commencement of the project(s). If the project(s) is/are not completed within the time period outlined below, the Owner may impose liquidated damages as described below.

ASBESTOS ABATEMENT PROJECTS

Notification

All regulatory agencies including, but not limited to, the Environmental Protection Agency, the Michigan Department of Public Health, and all other applicable Federal, State, County or City municipalities should be notified within 7 days of the signed contract and at least in a period allowable for the project to begin on the start date given below. The Contractor shall also be solely responsible for payment of all applicable fees and charges. Failure to notify in a timely manner will not excuse the awarded Contractor(s) from liquidated damages.

Start and Completion Dates

The Contractor will commence and complete all projects according to the following calendar:

COSTELLO ELEMENTARY SCHOOL

BID 1 PHASE 1	Start Date:	April 9, 2018
	Completion Date:	April 13, 2018
BID 1 PHASE 2	Start Date:	May 21, 2018
	Completion Date:	May 30, 2018

MARTELL ELEMENTARY SCHOOL

BID 1 PHASE 1	Start Date:	April 16, 2018
	Completion Date:	April 20, 2018
BID 1 PHASE 2	Start Date:	May 28, 2018
	Completion Date:	June 6, 2018

MORSE ELEMENTARY SCHOOL

BID 1 PHASE 1	Start Date:	April 23, 2018
	Completion Date:	April 27, 2018

LEONARD ELEMENTARY SCHOOL

BID 1 PHASE 1	Start Date:	April 30, 2018
	Completion Date:	May 4, 2018

*Contractor shall coordinate with Owner, Owner's Representative and Construction Manager for removal of exterior materials to ensure security of the facilities. Owner may be moving items from work areas at beginning of each PHASE.

Dates are subject to change by the Owner. An equal amount of time shall be allowed for the project. The Contractor will be responsible for fulfilling all notification requirements.

All projects will be considered complete for schedule purposes when the project site has passed required clearance testing, the Contractor has completed removal of all supplies and equipment and the Contractor has returned the building to the Owner in a condition that satisfies the Owner and Owner's Representative.

Post Abatement PCM Clearance Testing

Post Abatement PCM Clearance Samples will be collected, analyzed and results verbally expressed to the Owner and to the Contractor within twenty-four (24) hours, with the time period beginning at the completion of the lock down activities. Delays in clearance testing, after the accepted final visual inspection and lock down, will be cause for a proportional extension of the project completion date.

It will be in the judgment of the Owner's Representative as to when Post Abatement PCM Clearance Samples will be collected. All Post Abatement PCM Clearance Samples will be analyzed on-site. PCM Clearance Samples shall not be collected on the same day as visual inspection and lockdown.

Post Abatement TEM Clearance Testing

Post Abatement TEM Clearance Samples will be collected, analyzed and results verbally expressed to the Owner and to the Contractor within forty-eight (48) hours, with the time period beginning at the completion of the lock down activities. Delays in clearance testing, after the accepted final visual inspection and lock down, will be cause for a proportional extension of the project completion date.

It will be in the judgement of the Owner's Representative as to when Post Abatement TEM Clearance Samples will be collected. The Owner will not authorize any turn-around time of less than twenty-four (24) hours. The Contractor may request turn-around times of less than twenty-four hours and incur any additional costs.

Liquidated Damages

Liquidated damages will be incurred by the Contractor if the project(s) is/are not completed by the above completion date(s). Liquidated damages will also be incurred by the Contractor if the post abatement air samples do not pass the required levels set by the Environmental Protection Agencies AHERA Regulations, any other applicable government agency, or by the specifications.

If the Contractor(s) does not complete the projects detailed in the Scope-of-Work within the specified time allotment, the Contractor will be assessed liquidated damages in the amount of 3,000 dollars plus Owner's Consultant costs per day that the project extends beyond the completion date.

If the project site does not pass the post abatement air sampling tests as required by the State of Michigan Public Act No. 147 (as amended), by any other applicable governmental agency, or by the specifications, the Contractor will be assessed liquidated damages in the amount of 3,000 dollars plus Owner's Consultant costs for each day needed to perform additional cleaning, regardless of whether or not the project completion date has been surpassed. The Contractor shall also be solely responsible for payment of all costs incurred by the Owner due to the delay, including but not limited to additional charges for the Owner's Representative, any and all additional sampling costs incurred due to the failure of the project site to meet the clearance requirements (including any and all air samples collected during the additional cleaning) and any and all overtime charges required for custodial personnel. Liquidated damages as set forth herein and any additional costs incurred by the Owner shall be cumulative and shall occur each and every time the Contractor fails the post abatement air sampling tests as defined by regulation. Said liquidated damages and additional charges will be deducted from the contract price immediately upon the occurrence of such charges.

SITE AVAILABILITY

The Contractor shall be allowed in the building between the hours of 4:00 p.m. and 12:00 a.m., or as directed by Owner.

The Contractor may be required Saturdays, Sundays at the discretion of the Owner's Representative at no additional cost to the Owner.

BIDDER'S QUALIFICATIONS QUESTIONNAIRE

All questions must be answered clearly and in a comprehensive manner. Any bidder failing to answer all questions may be rejected on these grounds. It is understood that the by submitting a signed bid, the Contractor is certifying the correctness of all statements and is hereby under oath. If necessary, the bidder may use additional sheets to answer these questions (when complete, any additional sheets that are used must have a reference to this Qualification Statement and must be attached to this Qualification Statement). The bidder may submit any additional information he/she desires.

1. Name of Bidder

2. Permanent Main Office Address

3. When (Name of Bidder) Organized?

4. If a Corporation, Where (Name of Bidder) Incorporated?

5. How many years have you been operating under the (Name of Bidder) name?

6. What other names has/are the principals of (Bidder) operated(ing) under that was/is associated with the asbestos abatement industry?

7. Have the principals of (Name of Bidder) filed for Chapter 11 or Chapter 13 for protection of (Name of Bidder) or for any other asbestos abatement related firm, company or organization, in the last five years? Describe. Use additional sheets if necessary.

8. List all contracts on hand. Show schedule (actual or anticipated commencement and completion dates) and gross dollar amount of each contract. Use additional sheets if necessary.

9. List all specifications (Name of Bidder) currently is submitting bids for which have overlapping working dates. Show schedule (anticipated commencement and completion dates) for each bid. Use additional sheets if necessary.

10. Have you (Bidder and other entities identified in question 6 answers) ever failed to complete any work awarded to you?

If yes, where and why? Use additional sheets if necessary.

11. Have you (Name of Bidder and other entities identified in Question 6 answers) ever been disqualified from bidding in Troy School District?

If yes, when and why? Use additional sheets if necessary.

12. Have you (Name of Bidder and other entities identified in Question 6 answers) ever not been recommended for bidded contracts when you were the low bidder in Troy School District?

If yes, when and why? Use additional sheets if necessary.

13. Have you (Name of Bidder and other entities identified in Question 6 answers) ever not been recommended for bidded contracts when you were the low bidder on a project designed by Nova Environmental, Inc.?

If yes, when and why? Use additional sheets if necessary.

14. List all projects (Name of Bidder) completed in Troy School District since January 1, 2012.

15. List any and all citations with or without monetary penalty received, pending, paid or disputed by (Name of Bidder and other entities identified in Question 6 answers) during the past 3 years for failure to comply with applicable federal, state or local regulations. Describe in detail the type of citation, the reason for the citation and the ultimate disposition of same. Provide copies of all citations received since January 1, 2012, and all correspondence associated with the citations. Use additional sheets if necessary.

16. When was the last on-site inspection by the Michigan Department of Consumer & Industry Services (Michigan Department of Public Health) and the Department of Environmental Quality (Department of Natural Resources)?

MDLARA (MDPH) - _____ DEQ (DNR) - _____

What were the results of these visits? Use additional sheets if necessary.

17. List all penalties incurred through non-compliance with asbestos abatement project specifications, including projects designed by firms other than Nova Environmental, Inc., including liquidated damages, overruns in scheduled time limitations and any subsequent resolutions for (Name of Bidder and other entities identified in Question 6 answers). Use additional sheets if necessary.

18. List all contracts over \$5,000 completed by (Name of Bidder) since January 1, 2012 (contracts with Troy School District) do not need to be listed in response to Question 18), stating approximate gross cost for each, and the month and year completed. Use additional sheets if necessary.

19. List your major equipment (as of January 1, 2018) which will be available for this contract.

20. List the experience of (Name of Bidder) in work similar to this project. Project references must include: names, addresses, and phone numbers of Building Owner's for whom projects were performed (minimum of four). Use additional sheets if necessary.

21. List bank references.

22. Name of Bonding Company and the name and address of agent.



STATE OF MICHIGAN

Wage and Hour Division

P.O. Box 30476 • Lansing, Michigan 48909-7976

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Informational Sheet: Prevailing Wages on State Projects

REQUIREMENTS OF THE PREVAILING WAGES ON STATE PROJECTS ACT, PUBLIC ACT 166 OF 1965

The State of Michigan determines prevailing rates pursuant to the Prevailing Wages on State Projects Act, Public Act 166 of 1965, as amended. The purpose of establishing prevailing rates is to provide minimum rates of pay that must be paid to workers on construction projects for which the state or a school district is the contracting agent and which is financed or financially supported by the state. By law, prevailing rates are compiled from the rates contained in collectively bargained agreements which cover the locations of the state projects. The official prevailing rate schedule provides an hourly rate which includes *wage and fringe benefit totals* for designated construction mechanic classifications. The overtime rates also include *wage and fringe benefit totals*. Please pay special attention to the overtime and premium pay requirements. Prevailing wage is satisfied when wages plus fringe benefits paid to a worker are equal to or greater than the required rate.

State of Michigan responsibilities under the law:

- The department establishes the prevailing rate for each classification of construction mechanic ***requested by a contracting agent*** prior to contracts being let out for bid on a state project.

Contracting agent responsibilities under the law:

- If a contract is not awarded or construction does not start within 90 days of the date of the issuance of rates, a re-determination of rates must be requested by the contracting agent.
- Rates for classifications needed but not provided on the Prevailing Rate Schedule, ***must*** be obtained ***prior*** to contracts being let out for bid on a state project.
- The contracting agent, by written notice to the contractor and the sureties of the contractor known to the contracting agent, may terminate the contractor's right to proceed with that part of the contract, for which less than the prevailing rates have been or will be paid, and may proceed to complete the contract by separate agreement with another contractor or otherwise, and the original contractor and his sureties shall be liable to the contracting agent for any excess costs occasioned thereby.

Contractor responsibilities under the law:

- Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing rates prescribed in a contract.
- Every contractor and subcontractor shall keep an accurate record showing the name and occupation of and the actual wages and benefits paid to each construction mechanic. This record shall be available for reasonable inspection by the contracting agent or the department.
- Each contractor or subcontractor is separately liable for the payment of the prevailing rate to its employees.
- The prime contractor is responsible for advising all subcontractors of the requirement to pay the prevailing rate prior to commencement of work.
- A construction mechanic ***shall only*** be paid the apprentice rate if registered with the United States Department of Labor, Bureau of Apprenticeship and Training and the rate is included in the contract.

Enforcement:

A person who has information of an alleged prevailing wage violation on a state project may file a complaint with the State of Michigan. The department will investigate and attempt to resolve the complaint informally. During the course of an investigation, if the requested records and posting certification are not made available in compliance with Section 5 of Act 166, the investigation will be concluded and a referral may be made to the local prosecuting attorney.



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General Information Regarding Fringe Benefits

Certain fringe benefits **may** be credited toward the payment of the Prevailing Wage Rate:

- If a fringe benefit is paid directly to a construction mechanic
- If a fringe benefit contribution or payment is made on behalf of a construction mechanic
- If a fringe benefit, which may be provided to a construction mechanic, is pursuant to a written contract or policy
- If a fringe benefit is paid into a fund, for a construction mechanic

When a fringe benefit is not paid by an hourly rate, the hourly credit will be calculated based on the annual value of the fringe benefit divided by 2080 hours per year (52 weeks @ 40 hours per week).

The following is an example of the types of fringe benefits allowed and how an hourly credit is calculated:

Vacation	40 hours X \$14.00 per hour = \$560/2080 =	\$.27
Dental insurance	\$31.07 monthly premium X 12 mos. = \$372.84 /2080 =	\$.18
Vision insurance	\$5.38 monthly premium X 12 mos. = \$64.56/2080 =	\$.03
Health insurance	\$230.00 monthly premium X 12 mos. = \$2,760.00/2080 =	\$1.33
Life insurance	\$27.04 monthly premium X 12 mos. = \$324.48/2080 =	\$.16
Tuition	\$500.00 annual cost/2080 =	\$.24
Bonus	4 quarterly bonus/year x \$250 = \$1000.00/2080 =	\$.48
401k Employer Contribution	\$2000.00 total annual contribution/2080 =	\$.96
Total Hourly Credit		\$3.65

Other examples of the types of fringe benefits allowed:

- Sick pay
- Holiday pay
- Accidental Death & Dismemberment insurance premiums

The following are examples of items that **will not** be credited toward the payment of the Prevailing Wage Rate

- Legally required payments, such as:
 - Unemployment Insurance payments
 - Workers' Compensation Insurance payments
 - FICA (Social Security contributions, Medicare contributions)
- Reimbursable expenses, such as:
 - Clothing allowance or reimbursement
 - Uniform allowance or reimbursement
 - Gas allowance or reimbursement
 - Travel time or payment
 - Meals or lodging allowance or reimbursement
 - Per diem allowance or payment
- Other payments to or on behalf of a construction mechanic that are not wages or fringe benefits, such as:
 - Industry advancement funds
 - Financial or material loans



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Informational Sheet: Prevailing Wages on State Projects

OVERTIME PROVISIONS for MICHIGAN PREVAILING WAGE RATE COMMERCIAL SCHEDULE

- Overtime is represented as a nine character code. Each character represents a certain period of time after the first 8 hours Monday thru Friday.

	Monday thru Friday	Saturday	Sunday & Holidays	Four 10s
First 8 Hours		4	8	9
9th Hour	1	5		
10th Hour	2	6		
Over 10 hours	3	7		

Overtime for Monday thru Friday after 8 hours:

the 1st character is for time worked in the 9th hour (8.1 - 9 hours)

the 2nd character is for time worked in the 10th hour (9.1 - 10 hours)

the 3rd character is for time worked beyond the 10th hour (10.1 and beyond)

Overtime on Saturday:

the 4th character is for time worked in the first 8 hours on Saturday (0 - 8 hours)

the 5th character is for time worked in the 9th hour on Saturday (8.1 - 9 hours)

the 6th character is for time worked in the 10th hour (9.1 - 10 hours)

the 7th character is for time worked beyond the 10th hour (10.01 and beyond)

Overtime on Sundays & Holidays

The 8th character is for time worked on Sunday or on a holiday

Four Ten Hour Days

The 9th character indicates if an optional 4-day 10-hour per day workweek can be worked **between Monday and Friday without paying overtime after 8 hours worked, unless otherwise noted in the rate schedule. To utilize a 4 ten workweek, notice is required from the employer to employee prior to the start of work on the project.**

- Overtime Indicators Used in the Overtime Provision:

H - means TIME AND ONE-HALF due

X - means TIME AND ONE-HALF due after 40 HOURS worked

D - means DOUBLE PAY due

Y - means YES an optional 4-day 10-hour per day workweek can be worked without paying overtime after 8 hours worked

N - means NO an optional 4-day 10-hour per day workweek *cannot* be worked without paying overtime after 8 hours worked

- EXAMPLES:

HHHHHHHDN - This example shows that the 1½ rate must be used for time worked after 8 hours Monday thru Friday (characters 1 - 3); for all hours worked on Saturday, 1½ rate is due (characters 4 - 7). Work done on Sundays or holidays must be paid double time (character 8). The N (character 9) indicates that 4 ten-hour days is not an acceptable workweek at regular pay.

XXXHHHHY - This example shows that the 1½ rate must be used for time worked after 40 hours are worked Monday thru Friday (characters 1-3); for hours worked on Saturday, 1½ rate is due (characters 4 - 7). Work done on Sundays or holidays must be paid double time (character 8). The Y (character 9) indicates that 4 ten-hour days is an acceptable alternative workweek.



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Informational Sheet: Prevailing Wages on State Projects

ENGINEERS - CLASSES OF EQUIPMENT LIST

UNDERGROUND ENGINEERS

CLASS I

Backfiller Tamper, Backhoe, Batch Plant Operator, Clam-Shell, Concrete Paver (2 drums or larger), Conveyor Loader (Euclid type), Crane (crawler, truck type or pile driving), Dozer, Dragline, Elevating Grader, End Loader, Gradall (and similar type machine), Grader, Power Shovel, Roller (asphalt), Scraper (self propelled or tractor drawn), Side Broom Tractor (type D-4 or larger), Slope Paver, Trencher (over 8' digging capacity), Well Drilling Rig, Mechanic, Slip Form Paver, Hydro Excavator.

CLASS II

Boom Truck (power swing type boom), Crusher, Hoist, Pump (1 or more 6" discharge or larger gas or diesel powered by generator of 300 amps or more, inclusive of generator), Side Boom Tractor (smaller than type D-4 or equivalent), Tractor (pneu-tired, other than backhoe or front end loader), Trencher (8' digging capacity and smaller), Vac Truck.

CLASS III

Air Compressors (600 cfm or larger), Air Compressors (2 or more less than 600 cfm), Boom Truck (non-swinging, non-powered type boom), Concrete Breaker (self-propelled or truck mounted, includes compressor), Concrete Paver (1 drum, ½ yard or larger), Elevator (other than passenger), Maintenance Man, Mechanic Helper, Pump (2 or more 4" up to 6" discharge, gas or diesel powered, excluding submersible pump), Pumpcrete Machine (and similar equipment), Wagon Drill Machine, Welding Machine or Generator (2 or more 300 amp or larger, gas or diesel powered).

CLASS IV

Boiler, Concrete Saw (40HP or over), Curing Machine (self-propelled), Farm Tractor (w/attachment), Finishing Machine (concrete), Firemen, Hydraulic Pipe Pushing Machine, Mulching Equipment, Oiler (2 or more up to 4", exclude submersible), Pumps (2 or more up to 4" discharge if used 3 hrs or more a day-gas or diesel powered, excluding submersible pumps), Roller (other than asphalt), Stump Remover, Vibrating Compaction Equipment (6' wide or over), Trencher (service) Sweeper (Wayne type and similar equipment), Water Wagon, Extend-a-Boom Forklift.

HAZARDOUS WASTE ABATEMENT ENGINEERS

CLASS I

Backhoe, Batch Plant Operator, Clamshell, Concrete Breaker when attached to hoe, Concrete Cleaning Decontamination Machine Operator, Concrete Pump, Concrete Paver, Crusher, Dozer, Elevating Grader, Endloader, Farm Tractor (90 h.p. and higher), Gradall, Grader, Heavy Equipment Robotics Operator, Hydro Excavator, Loader, Pug Mill, Pumpcrete Machines, Pump Trucks, Roller, Scraper (self-propelled or tractor drawn), Side Boom Tractor, Slip Form Paver, Slope Paver, Trencher, Ultra High Pressure Waterjet Cutting Tool System Operator, Vactors, Vacuum Blasting Machine Operator, Vertical Lifting Hoist, Vibrating Compaction Equipment (self-propelled), and Well Drilling Rig.

CLASS II

Air Compressor, Concrete Breaker when not attached to hoe, Elevator, End Dumps, Equipment Decontamination Operator, Farm Tractor (less than 90 h.p.), Forklift, Generator, Heater, Mulcher, Pigs (Portable Reagent Storage Tanks), Power Screens, Pumps (water), Stationary Compressed Air Plant, Sweeper, Water Wagon and Welding Machine.



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CARPENTER CRAFT JURISDICTION

Michigan recognizes the Carpenters for any and all work related to weatherization that has historically been the work of the Carpenter. This work shall include, but not be limited to: all work defined under the Federal Weatherization Assistance Program.

The jurisdiction of Carpenters, as to all work that has historically and traditionally been performed consisting of the milling, fashioning, joining, assembling, erecting, fastening or dismantling of all materials of wood, plastic, metal, fiber, cork, or composition and all other substitute materials, as well as the handling, cleaning, erecting, installing and dismantling of all machinery, equipment and all materials used by Carpenters.

The jurisdiction, therefore, extends over the following divisions and subdivisions of the trade: Carpenters and Joiners, Millwrights, Pile Drivers, Bridge, Dock and Wharf Carpenters, Underpinners, Timbermen, and Core-drillers, Shipwrights, Boat Builders, Ship-hand, Stair-Builders, Millmen, Wood and Resilient Floor Decorators, Floor Finishers, Carpet-layers, Shinglers, Siders, Insulators, Acoustic and Drywall Applicators, Sharers and House Movers, Loggers, Lumber and Sawmill Workers, Reed and Rattan Workers, Shingle Weavers, Casket and Coffin Makers, Railroad Carpenters and Car Builders, regardless of material used and all those engaged in the operation of woodworking or other machinery required in fashioning, milling or manufacturing of products used in the trade, and the handling, erecting and installing materials on any of the above divisions or sub-divisions, burning, welding and rigging incidental to the trade. When the term "Carpenter and Joiner" is used, it shall mean all the subdivisions of the trade. The trade autonomy of Carpenters therefore extends over the divisions and subdivisions of the trade, which are set forth as follows:

- (a) The framing, erecting and prefabrication of roofs, partitions, floors and other parts of buildings of wood, metal, plastic or other substitutes; application of all metal flashing used for hips, valleys and chimneys; the erection of Stran Steel section or its equal. The building and setting of all forms and centers for brick and masonry. The fabrication and erection of all forms for concrete and decking, the dismantling of same (as per International Agreement) when they are to be re-used on the job or stored for re-use. The cutting and handling of all falsework for fireproofing and slabs. Where power is used in the setting or dismantling of forms, all signaling and handling shall be done by carpenters. The setting of templates for anchor bolts for structural members and for machinery, and the placing, leveling and bracing of these bolts. All framing in connection with the setting or metal columns. The setting of all bulkheads, footing forms and the setting of and fabrication of, screeds and stakes for concrete and mastic floors where the screed is notched or fitted, or made up of more than one member. The making of forms for concrete block, bulkheads, figures, posts, rails, balusters and ornaments, etc.
- (b) The handling and erecting of rough material and drywall, the handling, assembly, setting and leveling of all fixtures, display cases, all furniture such as tables, chairs, desks, coat racks, etc., all de-mountable or moveable partitions such as Von wall, E Wall, Steel Case, Herman Miller, Haworth, American Seating, Westinghouse, Lazy Boy, rosewood, etc. All rebuilding, remodeling and setting up of all kinds of partitions, finished lumber, metal and plastic trim to be erected by Carpenters shall be handled from the truck or vehicle delivering same to the job by Carpenters.



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Informational Sheet: Prevailing Wages on State Projects

CARPENTER CRAFT JURISDICTION

- (c) The building and moving of all scaffolding runways and staging where carpenters' tools are used, the building from the ground up of all scaffolds over fourteen (14) feet in height including metal and specially designed scaffolding. The building and construction of all hoists and derricks made of wood; the making of mortar boards, boxes, trestles, all shoring, razing and moving of buildings. Lift type trucks are to be considered a tool of the trade. Metal siding and metal roofing fall within the scope of jurisdiction for the carpenters.
- (d) The cutting or framing and fireproofing of the openings for pipes, conduits, ducts, etc., where they pass through floors, partitions, walls, roofs or fixtures composed in whole or in part of wood. The laying out of making and installation of all inserts and sleeves for pipes, ducts, etc., where carpenters' tools and knowledge are required. The making and installing of all wooden meter boards, crippling and backing for fixtures. The welding of studs and other fastenings to receive material being applied by carpenters.
- (e) The installation of all grounds, furring or stripping, ceilings and sidewalks, application of all types of shingling and siding, etc.
- (f) The installation of all interior and exterior trim or finish of wood, aluminum, kalamein, hollow or extruded metal, plastic, doors, transoms, thresholds, mullions and windows. The setting of jambs, bucks, window frames of wood or metal where braces or wedges are used. The installation of all wood, metal or other substitutes of casing, molding, chair rail, wainscoting, china closets, base of mop boards, wardrobes, metal partitions as per National Decisions or specific agreements, etc. The complete laying out, fabrication and erection of stairs. The making and erecting of all fixtures, cabinets, shelving, racks, louvers, etc. The mortising and application of all hardware in connection with our work. The sanding and refinishing of all wood, cork or composition floors to be sanded or scraped, filled, sized and buffed, either by hand or power machines. The assembling and setting of all seats in theaters, halls, churches, schools, auditorium, grandstands and other buildings. All bowling alley work.
- (g) The manufacture, fabrication and installation of all screens, storm sash, storm doors and garage doors; the installation of wood, canvas, plastic or metal awnings or eye shades, door shelters, jalousies, etc. The laying of wood, wood block and wood composition in floors.
- (h) The installation of all materials used in drywall construction, such as plasterboard, all types of asbestos boards, transite and other composition board. The application of all material which serves as base for acoustic tile, except plaster. All acoustical applications as per National Agreement or specific agreement.
- (i) The building and dismantling of all barricades, hand rails, guard rails, partitions and temporary partitions. The erection and dismantling of all temporary housing on construction projects.
- (j) The installation of rock wool, cork and other insulation material used for sound or weatherproofing. The removal of caulking and placing of staff bead and brick mold and all Oakum caulking, substitutes, etc., and all caulking in connection with carpentry work.
- (k) The installation of all chalk boards/marker boards.



STATE OF MICHIGAN

Wage and Hour Division

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Toll Free: 1-855-4MI-WAGE (1-855-464-9243)

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Informational Sheet: Prevailing Wages on State Projects

CARPENTER CRAFT JURISDICTION

- (l) The operation of all hand operated winches used to raise wooden structures.
- (m) The erection of porcelain enameled panels and siding.
- (n) The unloading and distribution of all furnished, prefabricated and built-up sections such as door bucks, window frames, cupboards, cabinets, store fixtures, counters and show cases or comparably finished or prefabricated materials, to the job sites or points of installation as used in the construction, alteration and remodeling industry.
- (o) The handling of doors, metal, wood or composite, partitions and other finished bulk materials used for trim from the point of delivery.
- (p) All processing of these materials and handling after processing.
- (q) The making up of panels and fitting them into walls, all bracing and securing, all removal of panels from the casting including all braces, whalers, hairpins, etc.
- (r) The handling and setting of all metal pans and sections from the stock piles of reasonable distance as required by job needs shall be performed by carpenters. The stripping of such metal pans, panels or sections is to be performed by carpenters.
- (s) The sharpening of all carpenter hand or power tools, or those used by carpenters.
- (t) The layout, fabrication, assembling of and erection and dismantling of all displays made of wood, metal, plastic, composition board or any substitute material; the covering of same with any type of material, the crating and un-crating, the handling from the point of unloading and back to the point of loading of all displays and other materials or components.
- (u) The same shall apply to all other necessary component parts used for display purposes such as turntables, platforms, identification towers and fixtures, regardless of how constructed, assembled or erected or dismantled.
- (v) The make-up, handling, cutting and sewing of all materials used in buntings, flags, banners, decorative paper, fabrics and similar materials used in the display decorative industry for draperies and back drops. The decorative framing of trucks, trailers and autos used as floats or moving displays. The slating of walls to hang fabrics and other decorative materials, drilling of all holes to accommodate such installations. Setting up and removal of booths constructed of steel or aluminum tubing as stanchions, railings, etc., handling and placing of furniture, appliances, etc., which are being used to complete the booth at the request of the exhibitor. Fabricating and application of leather, plastic and other like materials used for covering of booths. The handling of all materials, fabricating of same. The loading and unloading, erecting and assembling at the exhibit of show area, also in or out of storage when used in booth decorations.



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CARPENTER CRAFT JURISDICTION

- (w) A display shall be construed as any exhibit or medium of advertising, open to private or public showing, which is constructed of wood, metal, plastic or any other substitute to accomplish the objectives of advertising or displaying.
- (x) Handling, fitting, draping, measuring and installation of fixtures and other hardware for draperies, all manner of making, measuring, repairing, sizing, hanging and installation of necessary fixtures and hardware for shades and Venetian blinds.
- (y) Work consisting of cutting and/or forming of all materials in preparation for installing of floors, walls and ceilings; the installation of all resilient floor and base; wall and ceiling materials to include cork, linoleum, prefabricated, laminated, rubber, asphalt, vinyl, metal, plastic, seamless floors and all other similar materials in sheet, interlocking liquid or tile form; the installation of all artificial turf, the installation, cutting and/or fitting of carpets; installation of padding, matting, linen crash and all preformed resilient floor coverings; the fitting of all devices for the attachment of carpet and other floor, wall and ceiling coverings; track sewing of carpets, drilling of holes for sockets and pins, putting in dowels and slats; and all metal trimmings used; the installation of all underlayments, sealants in preparation of floors, walls and ceilings, the unloading and handling of all materials to be installed and the removal of all materials in preparing floors when contracted for by the employer, shall be done only by employees covered under this Agreement.
- (z) The installation of all sink-tops and cabinets, to include all metal trim and covering for same. All cork, linoleum, congo-wall, linewall, veos tile, plexiglass, vinawall tile, composition tile, plastic tile, aluminum tile and rubber in sheets or tile form and the application thereof. All bolta-wall and bolta-wall tile and similar products.
- (aa) The handling and placing of all pictures and frames and the assembly of bed frames and accessories. The hanging and placing of all signage.
- (bb) The installation of all framework partitions and trim materials for toilets and bathrooms made of wood, metal, plastics or composition materials; fastening of all wooden, plastic or composition cleats to iron or any other material for accessories.
- (cc) The erection of cooling towers and tanks.
- (dd) The setting, lining, leveling and bracing of all embedded plates, rails and angles. The setting of all stay in place forms.
- (ee) Environmental: Clean room, any type of environmental chamber, walk in refrigerated coolers and all refrigerated rooms or buildings.



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Informational Sheet: Prevailing Wages on State Projects

CARPENTER CRAFT JURISDICTION

PILE DRIVING AND CAISSON DRILLING

(ff) All unloading, handling, signaling and driving of piles, whether wood, steel, pipe, beam pile, composite, concrete or molded in place, wood and steel sheeting, cofferdam work, trestle work, dock work, floating derricks, caisson work, foundation work, bridge work, whether old or new, crib work, pipe line work and submarine work. Cutting of all wood, steel or concrete pile, whether by machine or hand; welding and cutting, peeling, and heading of all wood pile, steel sheeting and wood sheeting. The erecting and dismantling of all pile driving rigs, also derricks whether on land or water; also the moving, shoring and underpinning of all buildings. The loading and unloading of all derricks, cranes and pile driving materials. The tending, maintenance and operation of all valves pertaining to the operation of driving of pile. All diving and tending essential to the completion of jurisdictional claims.

All work done in the established yards of the Company and all work not enumerated above, shall be handled and manned as the Employer decides.

The pile driver will unload all material shipped in by rail from the point that the rail car is spotted.

All cleaning and preparation of all piling prior to driving.

The welding and attachment of all boot plates, pile points, splice plates, connectors, rock crosses, driving crosses, driving rigs, point reinforcements and overboots.

The construction, reconstruction, repair, alteration, demolition and partial or complete removal of all marine work including, but not limited to, docks, piers, wharves, quays, jetties, cribs, causeways, breakwaters, lighthouses and permanent buoys, etc. (mixing and placing of concrete excepted).

The driving and pulling of all wood, steel and concrete foundation piles and sheet piling.

The heading, pointing, splicing, cutting and welding of all piles.

The placing of all wales, bolts, studs, lagging, rods and washers including the cutting, drilling, boring or breaking of all holes or openings thereof.

The removal of all materials and/or obstructions of any nature (rip-rap included) that retard or interfere with the driving of piles or with the placing of wales, bolts and rods.



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CARPENTER CRAFT JURISDICTION

This is to be subject to the discretion of the contractor who may choose to use blasting specialists or other demolition specialists.

The handling on the job of all materials used in the work.

The manning of all floating equipment (towing equipment excepted) engaged in the work enumerated, including deck engines, except machinery manned by Operating Engineers.

The placing of all rip-rap, fill stone, bedding stone, cover stone and concrete blocks in connection with marine construction. Work normally performed by Employers, such as soil tests, shoring, underpinning of buildings, cribbing, driving of sheet piling, marine divers, tenders, underwater construction workers and similar operations shall continue to be included in the jurisdiction of this Agreement.

All burning, cutting, welding and fabrication of pipe, H-beams, sheet pile (metal or wood), done on the job site or in the yard of the Employer shall be done by pile drivers. The driving of bearing piles, sheet piling with heavy equipment, caissons, pile caps, auger drilling and boring, the setting up for load testing for any type of piling, all layout and spotting for piling, caisson and boring work, all earth retention, ditch boarding, installing tiebacks.

ASBESTOS ABATEMENT CARPENTERS

(gg) All erection and maintenance of barriers and partitions used in the removing of asbestos or any abatement work. The abatement of any materials previously installed by the carpenter such as transite, ceiling and floor tiles. All operating and maintaining of current equipment used in any abatement work.

State of Michigan

WHPWRequest@michigan.gov

Official Request #: 1234**Requestor:** Troy School District**Project Description:** Asbestos Abatement – Costello, Martell, Morse and Leonard Elementary Schools**Project Number:** 2013 Bond Program, Series 2, BID 9849**Oakland County****Official 2017 Prevailing Wage Rates for State Funded Projects****Issue Date:** 10/20/2017**Contract must be awarded by:** 1/18/2018**Page 1 of 30**

<u>Classification</u>		Last Updated	Straight Time and Hourly	a Double Half Time	Overtime Provision
Name	Description				
=====					
Asbestos & Lead Abatement Laborer					
=====					
MLDC		9/7/2017			
Asbestos & Lead Abatement Laborer			\$41.30	\$55.23	\$69.16 H H H X X X D Y
Apprentice Rates:					
	Trainee 600 hours + 1 calendar year		\$30.22	\$33.28	\$41.73
comment					
4 ten hour days @ straight time allowed Monday-Saturday, must be consecutive calendar days					

Asbestos, Lead and Mold Abatement, Hazardous Material Handler

AS207		3/27/2017			
Asbestos, Lead and Mold Abatement, Hazardous Material Handler			\$40.75	\$54.25	\$67.75 H H H X X X D Y
<i>comment</i> Four ten hour days @ straight time allowed Monday-Saturday, must be consecutive calendar days					

Boilermaker

BO169		2/17/2015			
Boilermaker			\$54.70	\$81.08	\$107.45 H H H H H H D Y
Apprentice Rates:					
	1st 6 months		\$40.31	\$59.49	\$78.67
	2nd 6 months		\$41.45	\$61.21	\$80.95
	3rd 6 months		\$42.57	\$62.88	\$83.19
	4th 6 months		\$43.69	\$64.57	\$85.43
	5th 6 months		\$44.81	\$66.24	\$87.67
	6th 6 months		\$48.63	\$72.50	\$96.36
	7th 6 months		\$49.32	\$73.01	\$96.69
	8th 6 months		\$51.58	\$76.40	\$101.21

Official Request #: 1234

Requestor: Troy School District

Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard

Project Number: 2013 Bond Program, Series 2, BID 9849

County: Oakland

Official Rate Schedule

Every contractor and subcontractor shall keep posted
on the construction site, in a conspicuous place, a copy
of all prevailing wage and fringe benefit rates
prescribed in a contract.

Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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Classification	Name	Description	Last Updated	Straight Time and Hourly	a Double Time	Overtime Provision
Bricklayer						
BR1			10/15/2014			
	Bricklayer, stone mason, pointer, cleaner, caulker			\$52.43	\$78.65	\$104.86 H H D H D D D D Y
	Apprentice Rates:					
	First 6 months			\$31.87	\$47.81	\$63.74
	2nd 6 months			\$33.72	\$50.60	\$67.44
	3rd 6 months			\$35.57	\$53.37	\$71.14
	4th 6 months			\$37.42	\$56.14	\$74.84
	5th 6 months			\$39.27	\$58.92	\$78.54
	6th 6 months			\$41.12	\$61.70	\$82.24
	7th 6 months			\$42.97	\$64.46	\$85.94
	8th 6 months			\$44.82	\$67.24	\$89.64
	<i>comment make up day allowed</i>					
	Saturday for 5 day 8 hour week					
	Friday for 4 day 10 hour week					
	Four 10 hour days allowed M-TH					

Carpenter

CA 687 D			7/5/2017			
	Diver			\$67.26	\$87.51	\$107.76 X X H X X H H D Y
	<i>comment make up day allowed</i>					
	Saturday, Four 10s allowed M-Sat; double time due when over 12 hours worked per day					
CA 687 DT			7/5/2017			
	Diver Tender			\$57.74	\$73.67	\$89.60 X X H X X H H D Y
	<i>comment make up day allowed</i>					
	Saturday					

Official Request #: 1234

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Classification	Name	Description	Last Updated	Straight Hourly	Time and Half	a Double Time	Overtime Provision
CA1045			7/5/2017				
		Carpet and Resilient Floor Layer, (does not include installation of prefabricated formica & parquet flooring which is to be paid carpenter rate)		\$51.94	\$73.28	\$94.62	X X H X X X D Y

Apprentice Rates:

1st 6 months	\$25.87	\$34.92	\$43.98
2nd 6 months	\$29.86	\$40.92	\$51.96
3rd 6 months	\$32.07	\$44.23	\$56.38
4th 6 months	\$34.27	\$47.52	\$60.78
5th 6 months	\$36.47	\$50.83	\$65.18
6th 6 months	\$38.69	\$54.16	\$69.62
7th 6 months	\$40.90	\$57.48	\$74.04
8th 6 months	\$43.10	\$60.77	\$78.44

CA687Z1			7/5/2017				
		Carpenter		\$58.62	\$74.55	\$90.48	X X H X X H D Y

Apprentice Rates:

1st year	\$35.89	\$44.65	\$53.41
3rd 6 months	\$38.43	\$47.99	\$57.55
4th 6 months	\$40.94	\$51.29	\$61.65
5th 6 months	\$43.47	\$54.62	\$65.77
6th 6 months	\$46.01	\$57.96	\$69.91
7th 6 months	\$48.52	\$61.27	\$74.01
8th 6 months	\$51.04	\$64.58	\$78.12

comment make up day allowed

Saturdays, four 10s allowed Mon-Sat; double time due when over 12 hours worked per day

CA687Z1P			7/5/2017				
		Piledriver		\$58.62	\$74.55	\$90.48	X X H X X H D Y

comment make up day allowed

Saturday, Four 10s allowed Monday-Saturday; double time due when over 12 hours worked per day .

Subdivision of county

Official Request #: 1234	Requestor: Troy School District	Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard	Project Number: 2013 Bond Program, Series 2, BID 9849	County: Oakland	Official Rate Schedule
					Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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<u>Classification</u>		Last	Straight Time and	a Double	Overtime	
Name	Description	Updated	Hourly	Half	Time	Provision

Cement Mason

br1cm		10/15/2014				
Cement Mason			\$50.05	\$71.17	\$92.28	X X H H H H D N
	Apprentice Rates:					
	1st 6 months		\$29.13	\$39.45	\$49.77	
	2nd 6 months		\$31.20	\$42.54	\$53.87	
	3rd 6 months		\$35.31	\$48.67	\$62.01	
	4th 6 months		\$39.46	\$54.85	\$70.23	
	5th 6 months		\$41.52	\$57.91	\$74.30	
	6th 6 months		\$45.67	\$64.10	\$82.52	

CE514		8/17/2016				
Cement Mason			\$48.55	\$68.40	\$88.24	H H D H H H D N
	Apprentice Rates:					
	1st 6 months		\$28.17	\$38.03	\$47.88	
	2nd 6 months		\$30.14	\$40.98	\$51.82	
	3rd 6 months		\$34.09	\$46.91	\$59.72	
	4th 6 months		\$38.03	\$52.82	\$67.60	
	5th 6 months		\$39.99	\$55.75	\$71.52	
	6th 6 months		\$43.94	\$61.68	\$79.42	

Drywall

PT-22-D		8/25/2016				
Drywall Taper			\$45.91	\$59.74	\$73.56	H H D H D D D D Y
	Apprentice Rates:					
	First 3 months		\$32.08	\$38.99	\$45.90	
	Second 3 months		\$34.85	\$43.14	\$51.44	
	Second 6 months		\$37.62	\$47.30	\$56.98	
	Third 6 months		\$40.38	\$51.44	\$62.50	
	4th 6 months		\$41.76	\$53.51	\$65.26	

comment make up day allowed

Four 10s allowed Monday-Thursday, Friday make-up day for bad weather or holidays

Official Request #: 1234
 Requestor: Troy School District
 Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard
 Project Number: 2013 Bond Program, Series 2, BID 9849
 County: Oakland

Official Rate Schedule
 Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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Classification	Name	Description	Last Updated	Straight Time and Hourly	a Double Time	Overtime Provision
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Electrician

EC-58-IW			7/5/2017			
	Journeyman Electrician - Inside Wireman			\$64.02	\$84.47	\$104.91 H H H H H H D N
	Apprentice Rates:					
	0-1000 hours			\$42.08	\$51.55	\$61.03
	1000-2000 hours			\$44.07	\$54.54	\$65.01
	2000-3500 hours			\$46.07	\$57.54	\$69.01
	3500-5000 hours			\$48.07	\$60.54	\$73.00
	5000-6500 hours			\$50.06	\$63.52	\$76.98
	6500-8000 hours			\$54.05	\$69.52	\$84.97

EC-58-SC			7/5/2017			
	Sound and Communication Installer			\$40.35	\$54.45	\$68.55 H H H H H H D N
	Apprentice Rates:					
	Period 1			\$26.75	\$34.05	\$41.35
	Period 2			\$28.11	\$36.09	\$44.07
	Period 3			\$29.47	\$38.13	\$46.79
	Period 4			\$30.83	\$40.17	\$49.51
	Period 5			\$32.19	\$42.21	\$52.23
	Period 6			\$33.55	\$44.25	\$54.95

Elevator Constructor

EL 36			8/7/2007			
	Elevator Constructor Mechanic			\$56.46		\$94.99 D D D D D D D Y
	Apprentice Rates:					
	1st Year Apprentice			\$37.74		\$58.93
	2nd Year Apprentice			\$41.90		\$66.94
	3rd Year Apprentice			\$43.98		\$70.95
	4th Year Apprentice			\$48.14		\$78.96

make up day allowed

Official Request #: 1234
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 Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard
 Project Number: 2013 Bond Program, Series 2, BID 9849
 County: Oakland

Official Rate Schedule
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Official 2017 Prevailing Wage Rates for State Funded Projects

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Classification	Name	Description	Last Updated	Straight Time and Hourly	a Double Half Time	Overtime Provision
Glazier						
GL-357	Glazier		8/24/2016	\$49.50	\$65.23	\$80.95 H H H H H H D Y
Apprentice Rates:						
		1st 6 months		\$33.77	\$41.63	\$49.49
		2nd 6 months		\$35.35	\$44.00	\$52.65
		3rd 6 months		\$38.49	\$48.71	\$58.93
		4th 6 months		\$40.06	\$51.07	\$62.07
		5th 6 months		\$41.64	\$53.43	\$65.23
		6th 6 months		\$43.21	\$55.79	\$68.37
		7th 6 months		\$44.78	\$58.15	\$71.51
		8th 6 months		\$47.93	\$62.87	\$77.81

comment

If a four 10 hour day workweek is scheduled, four 10s must be consecutive, M-F.

Heat and Frost Insulator

AS25S	Spray Insulation - Qualified Senior Sprayer, application of all products		3/31/2017	\$29.04	\$42.35	X X X H H H H H N
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Heat and Frost Insulator and Asbestos Worker

AS25	Heat and Frost Insulators and Asbestos Workers		6/3/2016	\$62.65	\$78.41	\$94.16 H H H H H H D Y
Apprentice Rates:						
		1st Year		\$46.90	\$54.78	\$62.66
		2nd Year		\$50.05	\$59.50	\$68.96
		3rd Year		\$53.20	\$64.23	\$75.26
		4th Year		\$56.35	\$68.96	\$81.56

comment

Four 10s must be worked for a minimum of 2 consecutive weeks. OVERTIME is different on a four 10 week. OT is 2x for hours beyond 10. All hours on fifth day, M-F require time and one half. Sat first 8 hours, 1.5, all hours after 8 require double time.

Official Request #: 1234
 Requestor: Troy School District
 Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard
 Project Number: 2013 Bond Program, Series 2, BID 9849
 County: Oakland

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Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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Classification	Name	Description	Last Updated	Straight Time and Hourly	a Double Time	Overtime Provision
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Ironworker

IR-25-F1			2/1/2017	\$35.95	\$48.05	\$60.15 X X H X X X H D Y
Fence, Sound Barrier & Guardrail erection/installation and Exterior Signage work						

Apprentice Rates:

60% Level	\$25.39	\$32.65	\$39.91
65% Level	\$26.71	\$34.58	\$42.44
70% Level	\$28.03	\$36.51	\$44.98
75% Level	\$29.35	\$38.42	\$47.50
80% Level	\$30.67	\$40.35	\$50.03
85% Level	\$31.99	\$42.28	\$52.56

comment

Four ten hour work days may be worked during Monday-Saturday.

IR-25-GZ2			7/5/2017	\$48.13	\$59.92	\$71.70 X X H H H H D D Y
Siding, Glazing, Curtain Wall						

Apprentice Rates:

Level 1	\$31.20	\$37.93	\$44.65
Level 2	\$33.31	\$40.67	\$48.02
Level 3	\$35.42	\$43.41	\$51.39
Level 4	\$37.54	\$46.16	\$54.77
Level 5	\$39.66	\$48.92	\$58.17
Level 6	\$41.78	\$51.67	\$61.55

comment

make up day allowed

Friday, 4 tens may be worked Monday thru Thursday @ straight time.

IR-25-PE-Z1			3/31/2017	\$48.09	\$58.86	\$69.63 X X H X X X X D Y
Pre-engineered Metal Work						

Apprentice Rates:

Probation 1st Year	\$26.83	\$32.03	\$37.23
1st Level	\$28.96	\$34.92	\$40.88
2nd Level	\$28.96	\$34.92	\$40.88
3rd Level	\$31.08	\$37.79	\$44.50
4th Level	\$33.21	\$40.68	\$48.15
5th Level	\$35.33	\$43.55	\$51.77
6th Level	\$37.46	\$46.43	\$55.41

comment

make up day allowed

4 tens allowed M-Th with Saturday make up day

Official Request #: 1234

Requestor: Troy School District

Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard

Project Number: 2013 Bond Program, Series 2, BID 9849

County: Oakland

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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Classification	Name	Description	Last Updated	Straight Hourly	Time and Half	a Double Time	Overtime Provision
IR-25-RF			7/5/2017				
	Reinforced Iron Work			\$57.30	\$85.66	\$114.02	H H D H D D D N
		Apprentice Rates:					
		Level 1		\$40.32	\$59.89	\$79.46	
		Level 2		\$42.68	\$63.43	\$84.18	
		Level 3		\$45.22	\$67.24	\$89.26	
		Level 4		\$47.75	\$71.04	\$94.32	
		Level 5		\$50.29	\$74.84	\$99.40	
		Level 6		\$50.29	\$74.84	\$99.40	

make up day allowed

IR-25-RIG			7/5/2017				
	Rigging Work			\$63.51	\$95.00	\$126.49	H H H H H H D N
		Apprentice Rates:					
		Level 1 & 2		\$38.22	\$56.16	\$74.85	
		Level 3		\$41.05	\$61.54	\$82.01	
		Level 4		\$43.87	\$65.76	\$87.65	
		Level 5		\$46.70	\$70.01	\$93.31	
		Level 6		\$49.53	\$74.25	\$98.97	

IR-25-SD			7/5/2017				
	Decking			\$55.47	\$82.87	\$110.26	X X H H H H D Y

comment make up day allowed

4 tens may be worked Monday thru Thursday @ straight time. If bad weather, Friday may be a make up day. If holiday celebrated on a Monday, 4 10s may be worked Tuesday thru Friday. Work in excess of 12 hours per day must be paid @ double time.

IR-25-STR			7/5/2017				
	Structural, ornamental, welder and pre-cast			\$63.64	\$95.12	\$126.60	H H H H H H D Y
		Apprentice Rates:					
		Levels 1 & 2		\$38.22	\$56.99	\$75.75	
		Level 3		\$41.05	\$61.24	\$81.41	
		Level 4		\$43.87	\$65.46	\$87.05	
		Level 5		\$46.70	\$69.71	\$92.71	
		Level 6		\$49.53	\$73.95	\$98.37	
		Level 7		\$52.35	\$78.18	\$104.01	
		Level 8		\$55.18	\$82.43	\$109.67	

Official Request #: 1234

Requestor: Troy School District

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Classification	Last Updated	Straight Time and Hourly	a Double Time	Overtime Provision
Name Description				

comment make up day allowed

4 tens may be worked Monday thru Thursday @ straight time. If bad weather, Friday may be a make up day. If holiday celebrated on a Monday, 4 10s may be worked Tuesday thru Friday. Work in excess of 12 hours per day must be paid @ double time.

IR-25-STR-D

7/5/2017

Industrial Door erection & construction

\$43.74 \$65.27 \$86.80 H H H H H H D D Y

comment make up day allowed

Friday for bad weather when 4 tens scheduled for M-Th. If holiday celebrated on M, 4 tens may be worked T-F. Work in excess of 12 hours per day must be paid @ double time.

Laborer

L1076-A-A

5/31/2017

Construction laborer, demolition laborer, mason tender, carpenter tender, drywall handler, concrete laborer, concrete chute and concrete bucket handler, and cement finisher tender, wall and ceiling material handler, plasterer tender, mortar mixer and plastering machine operator

\$44.76 \$63.69 \$82.61 H H H H H H D D Y

Apprentice Rates:

0-1,000 work hours	\$38.67	\$54.55	\$70.43
1,001-2,000 work hours	\$39.89	\$56.38	\$72.87
2,001-3,000 work hours	\$41.11	\$58.21	\$75.31
3,001-4,000 work hours	\$43.54	\$61.86	\$80.17

comment make up day allowed

If conditions beyond the employer/employee's control prevent one or more hours of working during Mon-Fri, the employer may choose to work up to 10 hour straight time weekdays. Work may be scheduled up to 10 hours per Mon-Fri for the purpose of reaching 40 hours @ straight time. Make up days may also include 8 hours of work on Saturdays @ straight time.

L1076-A-B

5/31/2017

Signal man (on sewer and caisson work); air, electric or gasoline tool operator (including concrete vibrator operator, acetylene torch and air hammer operator); Scaffold builder; Caisson worker

\$45.04 \$64.11 \$83.17 H H H H H H D D Y

comment make up day allowed

If conditions beyond the employer/employee's control prevent one or more hours of working during Mon-Fri, the employer may choose to work up to 10 hour straight time weekdays. Work may be scheduled up to 10 hours per Mon-Fri for the purpose of reaching 40 hours @ straight time. Make up days may also include 8 hours of work on Saturdays @ straight time.

L1076-A-C

5/31/2017

Lansing burner, blaster and powder man; air, electric or gasoline tool operator (Blast Furnace work or Battery Work)

\$45.55 \$64.87 \$84.19 H H H H H H D D Y

Official Request #: 1234

Requestor: Troy School District

Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard

Project Number: 2013 Bond Program, Series 2, BID 9849

County: Oakland

Official Rate Schedule

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Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

Page 10 of 30

Classification	Name	Description	Last Updated	Straight Time and Hourly	a Double Half	Overtime Provision
=====						
	comment	make up day allowed				
	If conditions beyond the employer/employee's control prevent one or more hours of working during Mon-Fri, the employer may choose to work up to 10 hour straight time weekdays. Work may be scheduled up to 10 hours per Mon-Fri for the purpose of reaching 40 hours @ straight time. Make up days may also include 8 hours of work on Saturdays @ straight time.					

L1076-A-D			5/31/2017			
	Furnace battery heater tenders, burning bar and oxy-acetylene gun			\$45.28	\$62.67	\$80.10 H H H H H H D Y
	comment	make up day allowed				
	If conditions beyond the employer/employee's control prevent one or more hours of working during Mon-Fri, the employer may choose to work up to 10 hour straight time weekdays. Work may be scheduled up to 10 hours per Mon-Fri for the purpose of reaching 40 hours @ straight time. Make up days may also include 8 hours of work on Saturdays @ straight time.					

L1076-A-E			6/2/2017			
	Cleaner/sweeper laborer, furniture laborer - unloading of furniture to the point of installation, the setting in place or relocation of furniture.			\$39.31	\$55.51	\$71.71 H H H H H H D Y
	comment	make up day allowed				
	If conditions beyond the employer/employee's control prevent one or more hours of working during Mon-Fri, the employer may choose to work up to 10 hour straight time weekdays. Work may be scheduled up to 10 hours per Mon-Fri for the purpose of reaching 40 hours @ straight time. Make up days may also include 8 hours of work on Saturdays @ straight time.					

L1076-A-F			6/2/2017			
	Expediter man, top and/or bottom man (Blast Furnace work or Battery Work)			\$46.07	\$65.65	\$85.23 H H H H H H D Y
	comment	make up day allowed				
	If conditions beyond the employer/employee's control prevent one or more hours of working during Mon-Fri, the employer may choose to work up to 10 hour straight time weekdays. Work may be scheduled up to 10 hours per Mon-Fri for the purpose of reaching 40 hours @ straight time. Make up days may also include 8 hours of work on Saturdays @ straight time.					

LPT-1			6/17/2016			
	Plasterer Tender, Plastering Machine Operator			\$44.35	\$63.10	\$81.85 H H H H H H D Y
	Apprentice Rates:					
		1,001 - 2,000 hours		\$39.53	\$55.87	\$72.21
		2,001 - 3,000 hours		\$40.73	\$57.67	\$74.61
		3,001 - 4,000 hours		\$43.15	\$61.30	\$79.45
	comment	make up day allowed				
	f conditions beyond the employer/employee's control prevent one or more hours of working during Mon-Fri, the employer may choose to work up to 10 hour straight time weekdays. Work may be scheduled up to 10 hours per Mon-Fri for the purpose of reaching 40 hours @ straight time. Make up days may also include 8 hours of work on Saturdays @ straight time.					

Official Request #: 1234

Requestor: Troy School District

Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard

Project Number: 2013 Bond Program, Series 2, BID 9849

County: Oakland

Official Rate Schedule

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Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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Classification	Name	Description	Last Updated	Straight Time and Hourly	a Double Half	Time	Overtime Provision
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Laborer - Hazardous

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Apprentice Rates:

0-1,000 work hours	\$37.60	\$53.03	\$68.45
1,001-2,000 work hours	\$38.79	\$54.81	\$70.83
2,001-3,000 work hours	\$39.98	\$56.60	\$73.21
3,001-4,000 work hours	\$42.35	\$60.15	\$77.95

comment make up day allowed
4 10s allowed M-Th or T-F; inclement weather makeup day Friday

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Apprentice Rates:

0-1,000 work hours	\$38.36	\$54.17	\$69.97
1,001-2,000 work hours	\$39.59	\$56.01	\$72.43
2,001-3,000 work hours	\$40.83	\$57.87	\$74.91
3,001-4,000 work hours	\$43.30	\$61.58	\$79.85

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Laborer Underground - Open Cut, Class I

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Apprentice Rates:

0-1,000 work hours	\$34.04	\$42.64	\$51.23
1,001-2,000 work hours	\$35.02	\$44.11	\$53.19
2,001-3,000 work hours	\$35.99	\$45.56	\$55.13
3,001-4,000 work hours	\$37.94	\$48.49	\$59.03

Official Request #: 1234

Requestor: Troy School District

Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard

Project Number: 2013 Bond Program, Series 2, BID 9849

County: Oakland

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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Classification		Last Updated	Straight Time and Hourly	a Double Half Time	Overtime Provision
Name	Description				
Laborer Underground - Open Cut, Class II					
LAUC-Z1-2		9/7/2017			
	Mortar and material mixer, concrete form man, signal man, well point man, manhole, headwall and catch basin builder, guard rail builders, headwall, seawall, breakwall, dock builder and fence erector.		\$39.03	\$50.12	\$61.21 X X X X X X D Y
Apprentice Rates:					
	0-1,000 work hours		\$34.12	\$42.76	\$51.39
	1,001-2,000 work hours		\$35.10	\$44.23	\$53.35
	2,001-3,000 work hours		\$36.09	\$45.72	\$55.33
	3,001-4,000 work hours		\$38.05	\$48.66	\$59.25

Laborer Underground - Open Cut, Class III

LAUC-Z1-3		9/7/2017			
	Air, gasoline and electric tool operator, vibrator operator, drillers, pump man, tar kettle operator, bracers, rodder, reinforced steel or mesh man (e.g. wire mesh, steel mats, dowel bars, etc.), cement finisher, welder, pipe jacking and boring man, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger man, and directional boring man.		\$39.08	\$50.20	\$61.31 X X X X X X D Y
Apprentice Rates:					
	0-1,000 work hours		\$34.16	\$42.82	\$51.47
	1,001-2,000 work hours		\$35.14	\$44.29	\$53.43
	2,001-3,000 work hours		\$36.13	\$45.78	\$55.41
	3,001-4,000 work hours		\$38.10	\$48.73	\$59.35

Laborer Underground - Open Cut, Class IV

LAUC-Z1-4		9/7/2017			
	Trench or excavating grade man.		\$39.16	\$50.32	\$61.47 X X X X X X D Y
Apprentice Rates:					
	0-1,000 work hours		\$34.22	\$42.91	\$51.59
	1,001-2,000 work hours		\$35.21	\$44.40	\$53.57
	2,001-3,000 work hours		\$36.20	\$45.88	\$55.55
	3,001-4,000 work hours		\$38.17	\$48.84	\$59.49

Official Request #: 1234

Requestor: Troy School District

Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard

Project Number: 2013 Bond Program, Series 2, BID 9849

County: Oakland

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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Classification	Name	Description	Last Updated	Straight Hourly	Time and Half	a Double Time	Overtime Provision
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Laborer Underground - Open Cut, Class V

LAUC-Z1-5	Pipe Layer	9/7/2017	\$39.22	\$50.41	\$61.59	X X X X X X X D Y
Apprentice Rates:						
0-1,000 work hours			\$34.26	\$42.97	\$51.67	
1,001-2,000 work hours			\$35.26	\$44.47	\$53.67	
2,001-3,000 work hours			\$36.25	\$45.96	\$55.65	
3,001-4,000 work hours			\$38.23	\$48.92	\$59.61	

Laborer Underground - Open Cut, Class VI

LAUC-Z1-6	Grouting man, top man assistant, audio visual television operations and all other operations in connection with closed circuit television inspection, pipe cleaning and pipe relining work and the installation and repair of water service pipe and appurtenances.	9/7/2017	\$36.67	\$46.59	\$56.49	X X X X X X X D Y
Apprentice Rates:						
0-1,000 work hours			\$32.35	\$40.10	\$47.85	
1,001-2,000 work hours			\$33.22	\$41.41	\$49.59	
2,001-3,000 work hours			\$34.08	\$42.70	\$51.31	
3,001-4,000 work hours			\$35.81	\$45.30	\$54.77	

Laborer Underground - Open Cut, Class VII

LAUC-Z1-7	Restoration laborer, seeding, sodding, planting, cutting, mulching and topsoil grading and the restoration of property such as replacing mail boxes, wood chips, planter boxes, flagstones etc.	9/7/2017	\$33.29	\$41.52	\$49.73	X X X X X X X D Y
Apprentice Rates:						
0-1,000 work hours			\$29.82	\$36.31	\$42.79	
1,001-2,000 work hours			\$30.51	\$37.34	\$44.17	
2,001-3,000 work hours			\$31.21	\$38.40	\$45.57	
3,001-4,000 work hours			\$32.60	\$40.48	\$48.35	

Official Request #: 1234

Requestor: Troy School District

Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard

Project Number: 2013 Bond Program, Series 2, BID 9849

County: Oakland

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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Classification	Name	Description	Last Updated	Straight Hourly	Time and Half	a Double Time	Overtime Provision
Laborer Underground - Tunnel, Shaft & Caisson							
LAUCT-Z1-1			9/7/2017				
	Class I - Tunnel, shaft and caisson laborer, dump man, shanty man, hog house tender, testing man (on gas), and watchman.			\$39.07	\$50.19	\$61.29	X X X X X X X D Y
	Apprentice Rates:						
	0-1,000 work hours			\$34.15	\$42.80	\$51.45	
	1,001-2,000 work hours			\$35.14	\$44.29	\$53.43	
	2,001-3,000 work hours			\$36.12	\$45.76	\$55.39	
	3,001-4,000 work hours			\$38.09	\$48.72	\$59.33	
LAUCT-Z1-2			9/7/2017				
	Class II - Manhole, headwall, catch basin builder, bricklayer tender, mortar man, material mixer, fence erector, and guard rail builder.			\$39.18	\$50.35	\$61.51	X X X X X X X D Y
	Apprentice Rates:						
	0-1,000 work hours			\$34.24	\$42.94	\$51.63	
	1,001-2,000 work hours			\$35.22	\$44.41	\$53.59	
	2,001-3,000 work hours			\$36.21	\$45.90	\$55.57	
	3,001-4,000 work hours			\$38.19	\$48.86	\$59.53	
LAUCT-Z1-3			9/7/2017				
	Class III - Air tool operator (jack hammer man, bush hammer man and grinding man), first bottom man, second bottom man, cage tender, car pusher, carrier man, concrete man, concrete form man, concrete repair man, cement invert laborer, cement finisher, concrete shoveler, conveyor man, floor man, gasoline and electric tool operator, gunnite man, grout operator, welder, heading dinky man, inside lock tender, pea gravel operator, pump man, outside lock tender, scaffold man, top signal man, switch man, track man, tugger man, utility man, vibrator man, winch operator, pipe jacking man, wagon drill and air track operator and concrete saw operator (under 40 h.p.).			\$39.24	\$50.44	\$61.63	X X X X X X X D Y
	Apprentice Rates:						
	0-1,000 work hours			\$34.28	\$43.00	\$51.71	
	1,001-2,000 work hours			\$35.27	\$44.48	\$53.69	
	2,001-3,000 work hours			\$36.26	\$45.97	\$55.67	
	3,001-4,000 work hours			\$38.25	\$48.96	\$59.65	

Official Request #: 1234

Requestor: Troy School District

Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard

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Classification	Name	Description	Last Updated	Straight Hourly	Time and Half	a Double Time	Overtime Provision
LAUCT-Z1-4			9/7/2017				
		Class IV - Tunnel, shaft and caisson mucker, bracer man, liner plate man, long haul dinky driver and well point man.		\$39.42	\$50.71	\$61.99	X X X X X X X D Y
		Apprentice Rates:					
		0-1,000 work hours		\$34.42	\$43.21	\$51.99	
		1,001-2,000 work hours		\$35.42	\$44.71	\$53.99	
		2,001-3,000 work hours		\$36.42	\$46.21	\$55.99	
		3,001-4,000 work hours		\$38.42	\$49.21	\$59.99	
LAUCT-Z1-5			9/7/2017				
		Class V - Tunnel, shaft and caisson miner, drill runner, keyboard operator, power knife operator, reinforced steel or mesh man (e.g. wire mesh, steel mats, dowel bars)		\$39.67	\$51.08	\$62.49	X X X X X X X D Y
		Apprentice Rates:					
		0-1,000 work hours		\$34.60	\$43.48	\$52.35	
		1,001-2,000 work hours		\$35.62	\$45.01	\$54.39	
		2,001-3,000 work hours		\$36.63	\$46.52	\$56.41	
		3,001-4,000 work hours		\$38.66	\$49.57	\$60.47	
LAUCT-Z1-6			9/7/2017				
		Class VI - Dynamite man and powder man.		\$40.00	\$51.58	\$63.15	X X X X X X X D Y
		Apprentice Rates:					
		0-1,000 work hours		\$34.85	\$43.86	\$52.85	
		1,001-2,000 work hours		\$35.88	\$45.40	\$54.91	
		2,001-3,000 work hours		\$36.91	\$46.94	\$56.97	
		3,001-4,000 work hours		\$38.97	\$50.04	\$61.09	
LAUCT-Z1-7			9/7/2017				
		Class VII - Restoration laborer, seeding, sodding, planting, cutting, mulching and topsoil grading and the restoration of property such as replacing mail boxes, wood chips, planter boxes and flagstones.		\$33.28	\$41.50	\$49.71	X X X X X X X D Y
		Apprentice Rates:					
		0-1,000 work hours		\$29.81	\$36.30	\$42.77	
		1,001-2,000 work hours		\$30.50	\$37.33	\$44.15	
		2,001-3,000 work hours		\$31.20	\$38.38	\$45.55	
		3,001-4,000 work hours		\$32.59	\$40.46	\$48.33	

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Classification		Last	Straight Time and	a Double	Overtime	
Name	Description	Updated	Hourly	Half	Time	Provision
=====						

Landscape Laborer

LLAN-Z1-A 10/13/2015
Landscape Specialist: includes air, gas, and diesel equipment operator, skidsteer (or equivalent), lawn sprinkler installer on landscaping work where seeding, sodding, planting, cutting, trimming, backfilling, rough grading or maintenance of landscape projects occurs.

comment

Sundays paid at time & one half. Holidays paid at double time.

LLAN-Z1-B 10/13/2015
Skilled Landscape Laborer: small power tool operator, lawn sprinkler installers' tender, material mover, truck driver when seeding, sodding, planting, cutting, trimming, backfilling, rough grading or maintaining of landscape projects occurs

comment

Sundays paid at time & one half. Holidays paid at double time.

Marble Finisher

BR1-MF 10/20/2014
Marble Finisher

Apprentice Rates:

Level 1	\$19.04	\$25.12	\$31.20
Level 2	\$20.24	\$26.92	\$33.60
Level 3	\$27.01	\$33.96	\$40.90
Level 4	\$28.47	\$36.14	\$43.82
Level 5	\$29.99	\$37.84	\$45.70
Level 6	\$31.61	\$39.86	\$48.10
Level 7	\$33.30	\$41.59	\$49.87
Level 8	\$34.79	\$43.48	\$52.17

comment

A four ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.

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Classification	Name	Description	Last Updated	Straight Time and Hourly	a Double Time	Overtime Provision
Marble Mason						
BR1-MM			10/17/2014			
	Marble Mason			\$50.29	\$64.51	\$78.72 H H D H D D D D Y
Apprentice Rates:						
	Level 1			\$25.14	\$32.65	\$40.15
	Level 2			\$28.20	\$36.49	\$44.78
	Level 3			\$33.41	\$41.97	\$50.53
	Level 4			\$36.15	\$45.66	\$55.17
	Level 5			\$38.42	\$48.17	\$57.92
	Level 6			\$42.07	\$53.56	\$65.05
	Level 7			\$42.74	\$54.38	\$66.02
	Level 8			\$43.67	\$55.78	\$67.88

comment

A four ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.

Operating Engineer

EN-324-A120			6/7/2017			
	Crane with boom & jib or leads 120' or longer			\$59.36	\$77.25	\$95.13 X X H H D D D D Y
	<i>comment</i>					
	Double time after 12 hours M-F					
EN-324-A140			6/7/2017			
	Crane with boom & jib or leads 140' or longer			\$60.18	\$78.48	\$96.77 X X H H D D D D Y
	<i>comment</i>					
	Work in excess of 12 hours per day M-F shall be paid at double time.					
EN-324-A220			6/7/2017			
	Crane with boom & jib or leads 220' or longer			\$60.48	\$78.93	\$97.37 X X H H D D D D Y
	<i>comment</i>					
	Work in excess of 12 hours per day M-F shall be paid at double time.					
EN-324-A300			6/7/2017			
	Crane with boom & jib or leads 300' or longer			\$61.98	\$81.18	\$100.37 X X H H D D D D Y
	<i>comment</i>					
	Work in excess of 12 hours per day M-F shall be paid at double time.					
EN-324-A400			6/7/2017			
	Crane with boom & jib or leads 400' or longer			\$63.48	\$83.43	\$103.37 X X H H D D D D Y

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Classification Name	Description	Last Updated	Straight Time and Hourly	a Double Half Time	Overtime Provision
=====					
	<i>comment</i> Work in excess of 12 hours per day M-F shall be paid at double time.				
EN-324-CW		6/7/2017			
	Compressor or welding machine		\$48.51	\$60.97	\$73.43 X X H H D D D D Y
	<i>comment</i> Work in excess of 12 hours per day M-F shall be paid at double time.				
EN-324-FL		6/7/2017			
	Forklift, lull, extend-a-boom forklift		\$55.82	\$71.94	\$88.05 X X H H D D D D Y
	<i>comment</i> Work in excess of 12 hours per day M-F shall be paid at double time.				
EN-324-FO		6/7/2017			
	Fireman or oiler		\$47.48	\$59.43	\$71.37 X X H H D D D D Y
	<i>comment</i> Work in excess of 12 hours per day M-F shall be paid at double time.				
EN-324-RC		6/7/2017			
	Regular crane, job mechanic, concrete pump with boom		\$58.50	\$75.96	\$93.41 X X H H D D D D Y
	<i>comment</i> Work in excess of 12 hours per day M-F shall be paid at double time.				
EN-324-RE		6/7/2017			
	Regular engineer, hydro-excavator, remote controlled concrete breaker		\$57.53	\$74.50	\$91.47 X X H H D D D D Y
	Apprentice Rates:				
	0-999 hours		\$46.53	\$58.76	\$70.97
	1,000-1,999 hours		\$48.28	\$61.38	\$74.47
	2,000-2,999 hours		\$50.02	\$63.99	\$77.95
	3,000-3,999 hours		\$51.77	\$66.62	\$81.45
	4,000-4,999 hours		\$53.51	\$69.22	\$84.93
	5,000-5,999 hours		\$55.26	\$71.85	\$88.43
	<i>comment</i> Work in excess of 12 hours per day M-F shall be paid at double time.				

Operating Engineer - Marine Construction

GLF D	4/2/2014				
	Diver/Wet Tender/Tender/Rov Pilot/Rov Tender		\$52.80	\$79.20	\$105.60 H H H H H H D N

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 County: Statewide

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Classification Name Description	Last Updated	Straight Time and Hourly	a Double Half Time	Overtime Provision
GLF-1 Diver/Wet Tender, Engineer (hydraulic dredge) <i>comment make up day allowed</i> Holiday pay = 2.5 times the straight hourly rate <u>Subdivision of county</u> all Great Lakes, islands therein, & connecting & tributary waters	1/23/2017	\$72.32	\$93.82	\$115.32 X X H H H H D Y
GLF-2 Crane/Backhoe Operator, 70 ton or over Tug Operator, Mechanic/Welder, Assistant Engineer (hydraulic dredge), Leverman (hydraulic dredge), Diver Tender <i>comment make up day allowed</i> Holiday pay = 2.5 times the straight hourly rate <u>Subdivision of county</u> All Great Lakes, islands therein, & connecting & tributary waters	1/23/2017	\$70.82	\$91.57	\$112.32 X X H H H H D Y
GLF-2B Friction, Lattice Boom or Crane License Certification <i>comment make up day allowed</i> Holiday pay = 2.5 times the straight hourly rate <u>Subdivision of county</u> All Great Lakes, islands, therein, & connecting & tributary waters	1/23/2017	\$72.32	\$93.82	\$115.32 X X H H H H D Y
GLF-3 Deck Equipment Operator, Machineryman, Maintenance of Crane (over 50 ton capacity) or Backhoe (115,000 lbs or more), Tug/Launch Operator, Loader, Dozer on Barge, Deck Machinery <i>comment make up day allowed</i> Holiday pay = 2.5 times the straight hourly rate <u>Subdivision of county</u> All Great Lakes, islands therein, & connecting & tributary waters	1/23/2017	\$66.27	\$84.75	\$103.22 X X H H H H D Y
GLF-4 Deck Equipment Operator, (Machineryman/Fireman), (4 equipment units or more), Off Road Trucks, Deck Hand, Tug Engineer, & Crane Maintenance 50 ton capacity and under or Backhoe 115,000 lbs or less, Assistant Tug Operator <i>comment make up day allowed</i> Holiday pay = 2.5 times the straight hourly rate <u>Subdivision of county</u> All Great Lakes, islands therein, & connecting & tributary waters	1/23/2017	\$60.07	\$75.45	\$90.82 X X H H H H D Y

Operating Engineer Steel Work

EN-324-ef Forklift, 1 Drum Hoist <i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather	6/8/2017	\$60.41	\$79.00	\$97.58 H H D H H H D Y
EN-324-SW120 Crane w/ 120' boom or longer	6/7/2017	\$63.11	\$83.05	\$102.98 H H D H H H D Y

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Classification	Name	Description	Last Updated	Straight Time and Hourly	a Double Half	Overtime Provision
		<i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather				
EN-324-SW120-O			6/7/2017	\$64.11	\$84.55	\$104.98 H H D H H H D D Y
		<i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather				
EN-324-SW140			6/7/2017	\$64.29	\$84.82	\$105.34 H H D H H H D D Y
		<i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather				
EN-324-SW140-O			6/7/2017	\$65.29	\$86.32	\$107.34 H H D H H H D D Y
		<i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather				
EN-324-SW220			6/7/2017	\$64.56	\$85.22	\$105.88 H H D H H H D D Y
		<i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather				
EN-324-SW220-O			6/7/2017	\$65.56	\$86.72	\$107.88 H H D H H H D D Y
		<i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather				
EN-324-SW300			6/7/2017	\$66.06	\$87.47	\$108.88 H H D H H H D D Y
		<i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather				
EN-324-SW300-O			6/7/2017	\$67.06	\$88.97	\$110.88 H H D H H H D D Y
		<i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather				
EN-324-SW400			6/7/2017	\$67.56	\$89.72	\$111.88 H H D H H H D D Y
		<i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather				

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Classification Name Description	Last Updated	Straight Time and Hourly	a Double Half Time	Overtime Provision
EN-324-SW400-O Crane w/ 400' boom or longer w/ Oiler <i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather	6/7/2017	\$68.56	\$91.22	\$113.88 H H D H H H D D Y
EN-324-SWCO Crane Operator, Job Mechanic, 3 Drum Hoist & Excavator Apprentice Rates: 0-999 hours 1,000-1,999 hours 2,000-2,999 hours 3,000-3,999 hours 4,000-4,999 hours 5,000 hours <i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather	6/7/2017	\$62.75 \$49.40 \$51.38 \$53.35 \$55.33 \$57.30 \$59.28	\$82.51 \$63.26 \$66.23 \$69.19 \$72.16 \$75.11 \$78.08	\$102.26 H H D H H H D D Y
EN-324-SWCO-O Crane Operator w/ Oiler <i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather	6/7/2017	\$63.75	\$84.01	\$104.26 H H D H H H D D Y
EN-324-SWCW Compressor or Welder Operator <i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather	6/7/2017	\$55.30	\$71.33	\$87.36 H H D H H H D D Y
EN-324-SWHO Hoisting Operator, 2 Drum Hoist, & Rubber Tire Backhoe <i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather	6/7/2017	\$62.11	\$81.55	\$100.98 H H D H H H D D Y
EN-324-SWO Oiler <i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather	6/7/2017	\$53.89	\$69.22	\$84.54 H H D H H H D D Y
EN-324-SWTD50 Tower Crane & Derrick where work is 50' or more <i>comment make up day allowed</i> 4 10s allowed M-Th with Friday makeup day because of bad weather	6/7/2017	\$63.84	\$84.14	\$104.44 H H D H H H D D Y

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Classification Name Description	Last Updated	Straight Time and Hourly	a Double Half Time	Overtime Provision
EN-324-SWTD50-O Tower Crane & Derrick 50' or more w/ Oiler	6/7/2017	\$64.84	\$85.64	\$106.44 H H D H H H D D Y
comment make up day allowed 4 10s allowed M-Th with Friday makeup day because of bad weather				

Operating Engineer Underground

EN-324A1-UC1 Class I Equipment	9/7/2017	\$55.54	\$71.56	\$87.57 H H H H H H H D Y
Apprentice Rates:				
0-999 hours		\$44.09	\$55.30	\$66.52
1,000-1,999 hours		\$45.68	\$57.70	\$69.70
2,000-2,999 hours		\$47.28	\$60.09	\$72.90
3,000-3,999 hours		\$48.88	\$62.49	\$76.10
4,000-4,999 hours		\$50.49	\$64.91	\$79.32
5,000-5,999 hours		\$52.09	\$67.30	\$82.52

EN-324A1-UC2 Class II Equipment	9/7/2017	\$50.81	\$64.46	\$78.11 H H H H H H H D Y
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EN-324A1-UC3 Class III Equipment	9/7/2017	\$50.08	\$63.37	\$76.65 H H H H H H H D Y
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EN-324A1-UC4 Class IV Equipment	9/7/2017	\$49.51	\$62.52	\$75.51 H H H H H H H D Y
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EN-324A1-UMM Master Mechanic	9/7/2017	\$55.79	\$71.93	\$88.07 H H H H H H H D Y
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Classification Name Description	Last Updated	Straight Hourly	Time and Half	a Double Time	Overtime Provision
Painter					
PT-22-P Painter	10/3/2017	\$44.32	\$57.60	\$70.88	H H D H D D D D Y
Apprentice Rates:					
Year 1		\$31.04	\$37.68	\$44.32	
Year 2		\$33.70	\$41.67	\$49.64	
Year 3		\$36.35	\$45.64	\$54.94	
Year 4		\$40.34	\$51.63	\$62.92	
<i>comment make up day allowed</i> Four 10s allowed Monday-Thursday with Friday makeup day if job down due to weather, holiday or other conditions beyond the control of the employer, 8 hours of repaint work performed on Sunday shall be paid time & one half rate					
Pipe and Manhole Rehab					
TM247 General Laborer for rehab work or normal cleaning and cctv work-top man, scaffold man, CCTV assistant, jetter-vac assistant	4/17/2015	\$28.20	\$38.20		H H H H H H H H N
TM247-2 Tap cutter/CCTV Tech/Grout Equipment Operator: unit driver and operator of CCTV; grouting equipment and tap cutting equipment	4/17/2015	\$32.70	\$44.95		H H H H H H H H N
TM247-3 CCTV Technician/Combo Unit Operator: unit driver and operator of cctv unit or combo unit in connection with normal cleaning and	4/17/2015	\$31.45	\$43.07		H H H H H H H H N
TM247-4 Boiler Operator: unit driver and operator of steam/water heater units and all ancillary equipment associated	4/17/2015	\$33.20	\$45.70		H H H H H H H H N
TM247-5 Combo Unit driver & Jetter-Vac Operator	4/17/2015	\$33.20	\$45.70		H H H H H H H H N

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<u>Classification</u>		Last Updated	Straight Time and Hourly	a Double Half Time	Overtime Provision
Name	Description				
TM247-6		4/17/2015			
	Pipe Bursting & Slip-lining Equipment Operator		\$34.20	\$47.20	H H H H H H H N

Pipefitter

PF-636		7/12/2016				
	Pipefitter, Steamfitter, Refrigeration & Air Conditioning Service		\$69.83	\$91.03	\$108.23	H H D H D D D Y
	Apprentice Rates:					
	1st & 2nd periods		\$29.93	\$38.28	\$45.28	
	3rd period		\$31.93	\$41.28	\$49.28	
	4th period		\$33.18	\$43.16	\$51.78	
	5th period		\$34.43	\$45.03	\$54.28	
	6th period		\$35.68	\$46.90	\$56.78	
	7th period		\$36.93	\$48.78	\$59.28	
	8th period		\$37.93	\$50.28	\$61.28	
	9th period		\$38.93	\$51.78	\$63.28	
	10th period		\$40.36	\$53.92	\$66.14	

comment

Four 10s allowed during the week preceding, following and/or the week of a holiday.

Plasterer

BR1P		11/1/2012				
	Plasterer		\$45.04	\$67.56	\$90.08	H H H H H H D N
	Apprentice Rates:					
	1st 6 months		\$32.11	\$48.17	\$64.22	
	2nd 6 months		\$33.40	\$50.10	\$66.80	
	3rd 6 months		\$34.69	\$52.04	\$69.38	
	4th 6 months		\$37.28	\$55.92	\$74.56	
	5th 6 months		\$39.87	\$59.81	\$79.74	
	6th 6 months		\$42.45	\$63.68	\$84.90	

comment
Saturday

make up day allowed

Official Request #: 1234
Requestor: Troy School District
Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard
Project Number: 2013 Bond Program, Series 2, BID 9849
County: Oakland

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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Classification	Name	Description	Last Updated	Straight Hourly	Time and Half	a Double Time	Overtime Provision
PL67			9/8/2010				
	Plasterer			\$44.72	\$60.11	\$75.50	H H H X D D D D N
		Apprentice Rates:					
		1st 6 months		\$29.33	\$37.02	\$44.72	
		2nd 6 months		\$30.87	\$39.34	\$47.80	
		3rd 6 months		\$32.41	\$41.64	\$50.88	
		4th 6 months		\$35.49	\$46.26	\$57.04	
		5th 6 months		\$38.56	\$51.16	\$63.76	
		6th 6 months		\$41.64	\$55.49	\$69.34	

Plumber

PL-98			7/18/2013				
	Plumber			\$64.45	\$84.87	\$101.29	H H D H D D D D Y
		Apprentice Rates:					
		Period 1		\$19.93	\$26.43	\$32.93	
		Period 2		\$23.90	\$31.40	\$38.90	
		Period 3		\$30.60	\$39.19	\$47.77	
		Period 4		\$31.23	\$40.13	\$49.03	
		Period 5		\$32.39	\$41.87	\$51.35	
		Period 6		\$33.54	\$43.59	\$53.65	
		Period 7		\$34.69	\$45.32	\$55.95	
		Period 8		\$35.86	\$47.07	\$58.29	
		Period 9		\$37.01	\$48.80	\$60.59	
		Period 10		\$38.16	\$50.53	\$62.89	

comment

4 tens allowed M-Th or T-F; OT of time and one half required on 11th & 12th hour of any ten hour days

Official Request #: 1234

Requestor: Troy School District

Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard

Project Number: 2013 Bond Program, Series 2, BID 9849

County: Oakland

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Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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Classification	Name	Description	Last Updated	Straight Time and Hourly	a Double Time	Overtime Provision
Roofer						
RO-149-WOM			9/27/2016	\$55.93	\$70.93	\$85.93 X X H X X H H D N
	Commercial Roofer					
		Apprentice Rates:				
		new apprentice		\$37.34	\$45.07	\$52.80
		Apprentice 1		\$41.85	\$49.81	\$57.77
		Apprentice 2		\$42.36	\$50.57	\$58.79
		Apprentice 3		\$43.87	\$52.84	\$61.81
		Apprentice 4		\$45.37	\$55.09	\$64.81
		Apprentice 5		\$46.88	\$57.35	\$67.83
		Apprentice 6		\$48.29	\$59.47	\$70.65
		Apprentice 7		\$49.90	\$61.89	\$73.87
		Apprentice 8		\$51.41	\$64.15	\$76.89

Sewer Relining

SR-I			11/24/2015	\$43.66	\$59.01	\$74.36 H H H H H H D N
	Class I-Operator of audio visual CCTV system including remote in-ground cutter and other equipment used in conjunction with CCTV					
SR-II			11/24/2015	\$42.13	\$56.72	\$71.30 H H H H H H D N
	Class II-Operator of hot water heaters and circulation system; water jetters; and vacuum and mechanical debris removal systems and those assisting.					

Sheet Metal Worker

SHM-80			7/27/2017	\$65.75	\$84.06	\$102.36 H H D X D D D D Y
	Sheet Metal Worker					
		Apprentice Rates:				
		1st & 2nd Periods		\$41.56	\$49.80	\$58.03
		3rd & 4th Periods		\$43.39	\$52.55	\$61.69
		5th & 6th Periods		\$45.21	\$55.28	\$65.33
		7th & 8th Periods		\$47.06	\$58.04	\$69.03

Official Request #: 1234
 Requestor: Troy School District
 Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard
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Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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Classification	Name	Description	Last Updated	Straight Hourly	Time and Half	a Double Time	Overtime Provision
=====							
<i>comment</i>							
A 4 10 schedule may be worked, 4 consecutive days Monday thru Friday.							

SHM-80-A	10/4/2017	Architectural Sheet Metal Worker after 1,000 hours	\$44.98	\$57.56	\$70.13	H H D H D D D D Y
Apprentice Rates:						
		1st 30 Working Days	\$26.67	\$38.88	\$51.08	
		>30 working days < 1000 hours	\$43.32	\$55.53	\$67.73	

Sprinkler Fitter

SP 704	7/31/2017	Sprinkler Fitter	\$68.92	\$88.21	\$107.49	H H D H D D D D Y
Apprentice Rates:						
		1st Period	\$29.47	\$38.22	\$46.97	
		2nd Period	\$44.86	\$54.71	\$64.55	
		3rd Period	\$47.05	\$57.99	\$68.93	
		4th Period	\$49.24	\$61.27	\$73.31	
		5th Period	\$51.42	\$64.55	\$77.67	
		6th Period	\$53.61	\$67.83	\$82.05	
		7th Period	\$55.80	\$71.11	\$86.43	
		8th Period	\$57.99	\$74.40	\$90.81	
		9th Period	\$60.17	\$77.67	\$95.17	
		10th Period	\$62.36	\$80.95	\$99.55	

comment

4 ten hour days allowed Monday-Friday
Double time pay due after 12 hours worked M-F

Official Request #: 1234
Requestor: Troy School District
Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard
Project Number: 2013 Bond Program, Series 2, BID 9849
County: Oakland

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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Classification		Last Updated	Straight Time and Hourly	a Double Time	Overtime Provision
Name	Description				
Terrazzo					
BR1-TRF		10/17/2014			
Terrazzo Finisher			\$43.97	\$55.03	\$66.08 H H D H D D D D Y
	Apprentice Rates:				
	Level 1		\$19.04	\$25.12	\$31.20
	Level 2		\$20.24	\$26.92	\$33.60
	Level 3		\$27.01	\$33.96	\$40.90
	Level 4		\$28.47	\$36.14	\$43.82
	Level 5		\$29.99	\$37.84	\$45.70
	Level 6		\$31.61	\$39.86	\$48.10
	Level 7		\$33.30	\$41.59	\$49.87
	Level 8		\$34.79	\$43.48	\$52.17

comment

A four ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.

BR1-TRW		10/17/2014			
Terrazzo Worker			\$49.73	\$63.67	\$77.60 H H D H D D D D Y
	Apprentice Rates:				
	Level 1		\$25.14	\$32.65	\$40.15
	Level 2		\$28.20	\$36.49	\$44.78
	Level 3		\$33.41	\$41.97	\$50.53
	Level 4		\$36.15	\$45.66	\$55.17
	Level 5		\$38.42	\$48.17	\$57.92
	Level 6		\$42.07	\$53.56	\$65.05
	Level 7		\$42.74	\$54.38	\$66.02
	Level 8		\$43.67	\$55.78	\$67.88

comment

A 4 ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.

Official Request #: 1234
 Requestor: Troy School District
 Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard
 Project Number: 2013 Bond Program, Series 2, BID 9849
 County: Oakland

Official Rate Schedule
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Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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Classification	Name	Description	Last Updated	Straight Time and Hourly	a Double Time	Overtime Provision
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Tile

BR1-TF			10/17/2014			
Tile Finisher				\$43.50	\$54.32	\$65.14 H H D H D D D D Y
	Apprentice Rates:					
	Level 1			\$19.04	\$25.12	\$31.20
	Level 2			\$20.24	\$26.92	\$33.60
	Level 3			\$27.01	\$33.96	\$40.90
	Level 4			\$28.47	\$36.14	\$43.82
	Level 5			\$29.99	\$37.84	\$45.70
	Level 6			\$31.61	\$39.86	\$48.10
	Level 7			\$33.30	\$41.59	\$49.87
	Level 8			\$34.79	\$43.48	\$52.17

comment

A four ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.

BR1-TL			10/17/2014			
Tile Layer				\$49.68	\$63.59	\$77.50 H H D H D D D D Y
	Apprentice Rates:					
	Level 1			\$25.14	\$32.65	\$40.15
	Level 2			\$28.20	\$36.49	\$44.78
	Level 3			\$33.41	\$41.97	\$50.53
	Level 4			\$36.15	\$45.66	\$55.17
	Level 5			\$38.42	\$48.17	\$57.92
	Level 6			\$42.07	\$53.56	\$65.05
	Level 7			\$42.74	\$54.38	\$66.02
	Level 8			\$43.67	\$55.78	\$67.88

comment

A four ten workweek may be worked Monday thru Thursday or Tuesday thru Friday.

Truck Driver

TM-RB1			6/7/2016			
on all trucks of 8 cubic yard capacity or less (except dump trucks of 8 cubic yard capacity or over, tandem axle trucks, transit mix and semis, euclid type equipment, double bottoms and low boys)				\$44.10	\$48.81	H H H H H H H H Y

Official Request #: 1234
 Requestor: Troy School District
 Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard
 Project Number: 2013 Bond Program, Series 2, BID 9849
 County: Oakland

Official Rate Schedule
 Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.

Official 2017 Prevailing Wage Rates for State Funded Projects

Issue Date: 10/20/2017

Contract must be awarded by: 1/18/2018

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Classification		Last Updated	Straight Hourly	Time and Half	a Double Time	Overtime Provision
Name	Description					
TM-RB1A	of all trucks of 8 cubic yard capacity or over	6/7/2016	\$44.20	\$48.96		H H H H H H H Y
TM-RB1B	on euclid type equipment make up day allowed	6/7/2016	\$44.35	\$49.19		H H H H H H H Y

Official Request #: 1234

Requestor: Troy School District

Project Description: Asbestos Abatement – Costello, Martell, Morse and Leonard

Project Number: 2013 Bond Program, Series 2, BID 9849

County: Oakland

Official Rate Schedule

Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in a contract.



DUE: 2:00 p.m., Wednesday, November 15, 2017

PROPOSAL: BID 9849 Asbestos Abatement

PROPOSAL FORM

We propose to furnish all material, labor and equipment, as per the specifications, for the Troy School District. and all other services to complete Asbestos Abatement, at Costello, Martell, Morse and Leonard Elementary Schools, in accordance with the specifications:

Total Cost - Costello Elementary \$ _____

Total Cost - Martell Elementary \$ _____

Total Costs - Morse Elementary \$ _____

Total Costs - Leonard Elementary \$ _____

Grand Total \$ _____

BIDDER'S FIRM NAME _____

ADDRESS _____

CITY/STATE _____ ZIP _____

TELEPHONE NUMBER _____ FAX # _____

SIGNED BY _____ TITLE _____

TYPED NAME _____ DATE _____

E-MAIL ADDRESS _____

VENDOR: LIST FIVE RECENT REFERENCES, PREFERABLY SCHOOL DISTRICTS:

School District

Person to Contact

Phone Number

School District

Person to Contact

Phone Number

School District

Person to Contact

Phone Number

School District

Person to Contact

Phone Number

School District

Person to Contact

Phone Number

Interested vendors will note in this space only any additional information, criteria or contingencies affecting their proposal, understanding that this additional information, criteria or contingency may be utilized in the evaluation process and subsequent award.

This image shows a single sheet of white paper with horizontal blue or grey ruling lines, typical of notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

**SWORN AND NOTARIZED FAMILIAL DISCLOSURE STATEMENT
FAMILIAR DISCLOSURE AFFIDAVIT**

The undersigned, the owner or authorized office of the below-named contractor (the 'Contractor'), pursuant to the familial disclosure requirement provided to Troy Schools, hereby represents and warrants that, excepts as provided below, no familial relationship exists between the owner or key employee of the Contractor, and any member of the Troy School Board or the Troy School Superintendent. A list of the School District's Board of Education Members and its Superintendent may be found at <http://www.troy.k12.mi.us>.

List any Familial Relationships:

Contractor:

Print Name of Contractor

By: _____

Its: _____

Subscribed and sworn before me, this _____

Seal:

day of _____, 20 ____, a Notary Public

in and for _____ County, _____

(Signature)
NOTARY PUBLIC

My Commission expires _____

CERTIFICATION OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT

Michigan Public Act No. 517 of 2012

The undersigned, the owner, or authorized officer of the below-named Company, pursuant to the compliance certification requirement provided in Troy School District's Request For Proposal, the "RFP", hereby certifies, represents, and warrants that the Company and its officers, directors and employees, is not an "Iran Linked Business" within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the "Act"), and that in the event the Company is awarded a contract by Troy School District as a result of the aforementioned RFP, the Company is not and will not become an "Iran Linked Business" at any time during the course of performing any services under the contract.

The Company further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or two (2) times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of Troy School District's investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a request for proposal for three (3) years from the date the it is determined that the person has submitted the false certification.

NAME OF COMPANY

NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

SIGNATURE

DATE

Acceptance of Proposal

The undersigned agrees to execute a Contract for work covered by this Proposal provided that he is notified of its acceptance within thirty days after the opening of the Proposal.

It is agreed that this bid will not be withdrawn until after forty-five (45) days after receipt of bids.

The undersigned affirms that the bid was developed without any collusion, undertaking, or agreement, either directly or indirectly, with any other bidder(s) to maintain the prices of indicated work or prevent any other bidder(s) from bidding the work.

BIDDER'S FIRM NAME

BUSINESS ADDRESS

TELEPHONE NUMBER

FAX NUMBER

BY (SIGNATURE)

PRINTED NAME

TITLE

SIGNED THIS

_____ DAY OF _____, 20 _____

E-MAIL ADDRESS

TECHNICAL SPECIFICATIONS FOR ASBESTOS ABATEMENT - GENERAL ABATEMENT PROCEDURES -

The following are technical specifications which shall be strictly enforced by **Troy School District**, hereafter referred to as the "Owner" or "Building Owner". The Asbestos Abatement Contractor will hereinafter be referred to as the "Contractor" for the asbestos abatement project and the Project Managers/Air Monitors will hereinafter be referred to as the "Owner's Consultant" or "Owners Representative".

I. INITIAL REQUIREMENTS

1. General Terms

- 1.1 By submitting a bid, the Contractor acknowledges that he has investigated and satisfied himself as to:
 - 1.1.1 The conditions affecting the work, including but not limited to the physical conditions of the site which may bear upon site access, handling and storage of tools and materials, access to water, electricity or other utilities that otherwise may affect performance of required activities;
 - 1.1.2 The character and quantity of all surface and sub-surface material or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including exploratory work done by the Building Owner or a designated Consultant, as well as information presented in drawings and specifications included with this specification. Any failure by the Contractor to acquaint himself with available information will not relieve him of the responsibility of determining properly the difficulty, safety concerns or cost of successfully performing the work. The Building Owner and/or the Owner's Consultant is not responsible for any conclusions or interpretations made by the Contractor on the basis of the information made available by the Building Owner and/or the Owner's Consultant.
 - 1.1.3 The methods and procedures detailed within the technical specifications of this bid package are merely illustrative of the procedures to be utilized on the asbestos abatement projects for the Owner. Other procedures, which are the equivalent of those described, are encouraged at the option of the Contractor but are always subject to the Owner and/or the Owner's Consultant approval.
- 1.2 The Contractor shall furnish all labor, materials, services, insurance, and equipment necessary to perform the asbestos abatement activities contemplated by this specification.
- 1.3 Additional work in the form of change orders, written or verbal agreements must also be completed in accordance with these Technical Specifications for Asbestos Abatement as well as all other sections of this specification document.

2. Pre-Start Meeting

- 2.1 Prior to commencement of work, the Contractor shall meet with the Owner and Owner's Consultant to present and review the items listed below. At that time, the Contractor shall designate at least one "competent" (as described by OSHA 1926.1101(o)) individual who shall be on-site throughout the project with full authority to act on the Contractor's behalf and this person shall attend the pre-start job meeting. This meeting is arranged to discuss and set procedures to be followed throughout the performance of the contract. At this meeting and to be included in the logbook, the Contractor shall provide:
 - 2.1.1 Proof of Contractor licensing to conduct asbestos abatement activities in the State of Michigan in accordance with Act 135 P.A. 1986, as amended, (Asbestos Abatement Licensing Act) and any subsequent State of Michigan Acts.
 - 2.1.2 A list of all employees who will participate in the project, including delineation of experience and assigned responsibilities (including subcontractors' employees who may enter the work area).
 - 2.1.3 Proof that the "competent person" to be responsible for the execution of this project has had training in accordance with 29 CFR, 1926.1101 and the Michigan Department of Consumer & Industry Services. THIS PERSON SHALL BE ON SITE AT ALL TIMES.
 - 2.1.4 Proof that employees who will work on this project have had a minimum of twenty-four (24) hours of training in accordance with 40 CFR, Part 763, Subpart E.
 - 2.1.5 Proof that employees who work on this project have had proper medical screening as required by OSHA 29 CFR, Part 1926.1101 (M) (1) (2) (3) (4) and (N) (3) and 29 CFR 1910.20.
 - 2.1.6 Proof that employees who work on this project have had proper respirator fit testing for all personnel who wear negative pressure respirators (when allowed).
 - 2.1.7 Copies of all worker's Michigan State Accreditation "Cards" must be provided to the Owner's Consultant prior to being allowed within the project area. For any employee(s) who have approval but do not yet have cards in their possession; the Contractor must provide a signed statement (on company letterhead) stating that state approval has been given to that/those employee(s). This statement must include the name of the state employee who granted verbal approval. In addition to this letter, the Contractor must provide a copy of the employee's training certificate, appropriate fit test(s) and doctor's written opinion.
 - 2.1.8 A detailed written explanation of the following items:
 - 2.1.8.1 Preparation of the work area.
 - 2.1.8.2 Decontamination procedure for personnel, work area and equipment.
 - 2.1.8.3 Abatement methods and procedures to be utilized.
 - 2.1.8.4 Procedures for handling and disposing of waste materials including the name and address of the landfill to be used.
 - 2.1.8.5 Emergency Planning Procedures (see Section 8.0 of these specifications).
 - 2.1.8.6 A sequence of work and a performance schedule.

The items discussed in this section must be presented at the Pre-Start Meeting and a copy must also be kept in a log book which will be in view at the job site at all times. The items listed in the "Regulations" section of this

specification must also be included in this log book. Proof of Contractor Licensing and Emergency Procedures as outlined above must also be posted in view near the decontamination chamber entrance as well as the notification addressed in Item 5 and the sign-in sheet addressed in Item 10 of these specifications.

- 2.2 At this meeting the Contractor and Owner shall agree on the existing conditions of the work area and the areas immediately surrounding this area.

3. Log Book/Regulations

- 3.1 The Contractor shall have the following items in view at the job site at all times. These items must be kept in a log book (three (3) ring binder) as described in the "Pre-Start Meeting" section and include all items stated in 2.1.

- 3.1.1 OSHA Regulation 29 CFR, Part 1926.1101.
- 3.1.2 Environmental Protection Agency 40 CFR, Part 61 Subpart M: (National Emission Standard for Hazardous Air Pollutants).
- 3.1.3 Environmental Protection Agency 40 CFR, Part 763.
- 3.1.4 A complete set of these specifications.
- 3.1.5 Appropriate MSDS's.

- 3.2 Whenever during the course of this contract the Contractor, his subcontractor or his employees encounter asbestos, the Contractor shall handle, remove, and dispose of the asbestos strictly in accordance with the rules, guidelines, and regulations specified by EPA, OSHA, the Michigan Department of Consumer & Industry Services, the Department of Environmental Health, and all other applicable regulatory agencies. The most recent edition or revision of any relevant regulation, standard, document or code shall be controlling. Where conflict among the requirements or with these specifications exists, the most stringent requirements shall be utilized.

4. Submittals to Owner's Representative/Consultant

- 4.1 The following shall be submitted for all employees who will participate in the project, to the Owner's Representative before project begins.

- 4.1.1 Copy of Employee Training Certificates.
- 4.1.2 Copy of MDPH accreditation cards or letter by Contractor with verbal acceptance from MDPH (see 2.1.7).
- 4.1.3 Copy of dated fit test.
- 4.1.4 Copy of doctors written opinion.

5. Notification Procedures

- 5.1 The Contractor will make all necessary notifications to the appropriate federal, state and local agencies.
- 5.2 The National Emission Standards for Hazardous Air Pollutants (NESHAP), Asbestos regulation 40 CFR 61, Subpart M, requires that in a facility being renovated, if the combined amount of regulated asbestos containing materials being removed is at least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or is at least 1 cubic meter (35 cubic feet) off of facility components where the length or area could not be measured previously, a ten (10) working day notification must be submitted to the EPA and the Michigan Department of Environmental Quality. All the requirements of 40 CFR 61.145 apply, including but not limited to the following:

- 5.2.1 An indication of whether the notice is an original or a revised notification.
- 5.2.2 Name, address, and telephone number of the facility Owner and operator and the Owner or operator of the asbestos removal firm.
- 5.2.3 Type of operation: demolition or renovation.
- 5.2.4 Facility description including at least the following:
 - 5.2.4.1 Size (square meters (or square feet) and number of floors).
 - 5.2.4.2 Age.
 - 5.2.4.3 Present and prior uses.
- 5.2.5 Procedure, including analytical methods, employed to detect the presence of asbestos-containing material.
- 5.2.6 Estimate of the approximate amount of regulated asbestos-containing material to strip using the appropriate units, either linear meters (linear feet) for pipes, square meters (square feet) for other facility components, or cubic meters (cubic feet), if the asbestos-containing material will be stripped from the facility components without being measured.
- 5.2.7 Estimate of the amount of Category I and Category II non-friable asbestos-containing materials in the affected part of the facility that will not be removed before demolition.
- 5.2.8 Location and address, including building number or name and floor or room number, if appropriate, street address, city, county, and state of the facility being demolished or renovated.
- 5.2.9 Scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material) in a demolition (with the exception of government ordered demolitions) or renovation, and scheduled starting and completion dates of the demolition or renovation.
- 5.2.10 The beginning and ending dates of the report period for planned renovation operations involving individual non-scheduled operations.
- 5.2.11 Description of planned demolition or renovation work including the demolition and renovation techniques to be used and description of the affected facility components.
- 5.2.12 Description of work practices and engineering controls to be used to comply with the requirements of this standard.
- 5.2.13 Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.
- 5.2.14 Certification that only persons trained as required in paragraph (C) (8) will supervise the stripping and removal of asbestos-containing material (effective one (1) year after promulgation).

- 5.2.15 Description of procedures for handling the finding of unexpected regulated asbestos-containing material or Category II non-friable asbestos-containing material that has been crumbled, pulverized, or reduced to powder.
- 5.2.16 For government ordered demolitions, include the name, title, and authority of the government representative ordering the demolition, the date the order was issued, and the date the demolition was ordered to begin by the State or local government representative. Attach a copy of the order to the notification.
- 5.2.17 For emergency renovations, include the date and hour the emergency occurred, a description of the event and an explanation of how the event has caused unsafe conditions or would cause equipment damage or unreasonable financial burden.
- 5.2.18 Name, address, and telephone number of the waste transporter.
- 5.3 Section 220(1)(c) of Act 135 of the Public Acts of 1986, as amended, requires an asbestos abatement Contractor provide the Michigan Department of Consumer & Industry Services a minimum ten (10) day prior notification which includes items under 5.2 (above), in accordance with their requirements for any project that exceeds ten (10) linear feet or 15 square feet or both of friable asbestos-containing material.
- 5.4 All other agency notifications must be made on a timely basis as deemed necessary by those agencies.
- 5.5 Payments of all applicable regulatory required fees and/or charges are the sole responsibility of the Contractor.

II. ABATEMENT REQUIREMENTS

6. Worker's Dress and Safety Equipment

- 6.1 Worker's clothing shall be provided by the Contractor as required by current OSHA regulation. Rips and tears in the coveralls shall be repaired, or else the coveralls shall be replaced.
- 6.2 The Contractor shall provide protective clothing for the Owner's Consultant, and inspection personnel.
- 6.3 Worker's clothing shall consist of disposable full body coveralls (coveralls should be of Tyvek material - disposable paper), underwear, head covers, gloves, and boots. The Contractor shall supply whatever safety gear is necessary to protect those people authorized to enter the work site, including if necessary, hard hats and eye protection. OSHA approved footwear is mandatory while at the project site (inside and outside of the enclosure). No street clothing shall be worn under coveralls.
- 6.4 The Contractor shall have an appropriately rated fire extinguisher in the dirty room and clean room of each enclosure.
- 6.5 The Contractor shall adhere to all OSHA and other regulatory agency requirements regarding the safety of the employees, including but not limited to:
 - 6.5.1 Fire Safety
 - 6.5.2 Ladders
 - 6.5.3 Scaffolding
 - 6.5.4 Confined Spaces

7. Respiratory Protection

- 7.1 Respirator protection for workers shall be provided by the Contractor as required by current OSHA regulation.
- 7.2 Respiratory protection consisting of powered air purifying respirators (P.A.P.R.) with full-face piece and HEPA filters will be provided and used by all asbestos abatement workers. Half-face cartridge respirators may be used for setting up, tearing down, Pre-cleaning and post cleaning work area(s) with the approval and/or at the discretion of the Owner's representative. Workers will always wear a respirator when in the work area. While wearing the respirator, workers will not pull the respirator away from his/her face to talk, smoke, eat, or drink. No workers will be permitted to wear a half-face respirator unless clean shaven. If half-face cartridge respirators are used as described above, then a qualitative fit test for each employee engaged in this work must be completed. These fit tests must be completed in accordance with OSHA regulations.
- 7.3 Combination cartridges (Asbestos and Organic vapor) are required during the removal of mastic materials.
- 7.4 An adequate supply of cartridges and respirators must be on-site and available for workers (regardless of respirator type).

8. Emergency Planning

- 8.1 Emergency planning shall be developed prior to abatement initiation and agreed to by the Contractor and the Owner or Owner's Representative. All plans must be detailed in writing and posted at the job site (in view near the decontamination chamber entrance).
- 8.2 Emergency planning shall include written procedures for the following emergencies:
 - 8.2.1 The Contractor must explain his contingency plan for the possibility of the negative air filtration devices blowing a fuse, tripping a circuit breaker, or losing power.
 - 8.2.2 The Contractor must explain his contingency plan for the possibility that a disposal bag may break or leak.
 - 8.2.3 The Contractor must explain his contingency plan for the possibility of an injury.
 - 8.2.4 For non-life-threatening situations - employees injured or otherwise incapacitated shall decontaminate following normal procedures with assistance from fellow workers if necessary, before exiting the work place to obtain proper medical treatment
 - 8.2.5 For life-threatening injury or illness, worker decontamination shall take least priority after measures to stabilize the injured worker, remove him/her from the work place and secure proper medical treatment.
 - 8.2.6 The Contractor must detail emergency evacuation routes in case of fire, explosion, or toxic atmosphere, etc.
- 8.3 The Contractor shall take all necessary precautions and actions to protect his employees, subcontractors, Owner's Representatives, Owner's Consultants, government inspectors, general public, and the building and structure from exposure to asbestos.

9. Preparation of Work Area for Asbestos Abatement

- 9.1 The Owner shall attempt to furnish utility services for the Contractor's use, including electrical outlets (25 ampere) and water taps in or adjacent to the work area in sufficient quantities and located such that the Contractor can use them for equipment and abatement/decontamination practices. However, should such utility access not be available, the Contractor is solely responsible for the provision of the same. In the event of power failure (regardless of fault), the Contractor is responsible for continuing work using adequate generator power.
- 9.2 Danger signs will be posted at a distance sufficiently far enough from the asbestos abatement work area to permit an employee to read the sign and take necessary protective measures to avoid exposure. Signs shall be in accordance with EPA and OSHA regulations. All possible entrances to the work area shall be posted. Additional signs will be placed at areas designated by the Owner's Consultant.
- 9.3 The building personnel shall attempt to shut down and lock out all heating, cooling, and air conditioning system components that are in, supply, or pass through the work areas. Should building personnel be unavailable or unable to so do, it is the sole responsibility of the Contractor to do so. The Contractor will seal all intake and exhaust vents in the work area with tape and 6-mil polyethylene, as well as any seams in system components that pass through the work area. All affected heating, ventilation and air conditioning system filters will be removed and placed in 6-mil polyethylene bags for disposal as asbestos waste.
- 9.4 The Contractor may be required to Pre-clean all movable objects within the work area using a HEPA filtered vacuum and/or wet cleaning methods. Pre-cleaning will be conducted by the Contractor as deemed necessary by the Owner or the Owner's Consultant. After cleaning, these objects shall be removed from the work area by the Contractor and carefully stored in an uncontaminated location as designated by the Owner's Consultant. (Carpeting, drapes, clothing, furniture, and other fabric items contaminated with asbestos may be required to be disposed of as asbestos contaminated waste.)
- 9.5 The Contractor may be required to Pre-clean all fixed objects in the work area using HEPA filtered vacuums and/or wet-cleaning methods. Pre-cleaning will be conducted by the Contractor as deemed necessary by the Owner or the Owner's Consultant. The extent of the Pre-cleaning will be determined by, but not limited to the following factors: the particular application of the asbestos-containing material, its present condition, friability, asbestos content, visible debris and the type of surface to which the material is applied
- 9.6 Where doors or other such building fixtures are removed by the Contractor prior to abatement activities, the Contractor is responsible for replacing doors and/or fixtures upon completion of abatement. Each door and/or fixture shall be sufficiently marked or otherwise identified by the Contractor to insure replacement in the proper location.
- 9.7 The Contractor shall seal all windows, doorways, elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers, skylights and all other openings between the work area and the areas outside the work area with, at a minimum, 4-mil polyethylene sheeting.
- 9.8 Walls will be covered with at least one layer of 4-mil polyethylene sheeting. Walls that are non-porous and will not be damaged by water, surfactant, or encapsulation do not necessarily need protection. They can be decontaminated using HEPA vacuums and wet cleaning techniques. The Owner or the Owner's Consultant will advise the method deemed most appropriate and the Contractor shall comply with the method chosen.
- 9.9 Floors shall be covered with at least three layers of 6-mil polyethylene sheeting.

- 9.10 Non-waterproof tape may not be used for attaching polyethylene sheeting or for sealing polyethylene leaks. High quality duct tape or its equivalent shall be used for this purpose.
- 9.11 The Owner or the Owner's Consultant must approve the decontamination chamber location, Contractor parking, dumpster location and entrances that the Contractor will use for the movement of supplies and personnel.
- 9.12 Equipment storage, bathroom usage designation, foreman's office and designated break areas (if available) will be determined by the Owner or the Owner's Consultant. Only project areas and designated areas are to be used.
- 9.13 No asbestos abatement shall begin until the Owner's Consultant has inspected and approved the enclosure built around the work area.

10. Decontamination

- 10.1 The Contractor will construct decontamination facilities in a predesignated area which will house the clean room, shower room, dirty room, and, when feasible, an equipment room. This facility will be, at minimum, a three-chambered with an entrance airlock with shower facilities in its central chamber. The dimensions of these chambers will be adequate for the number of men needed for the project. At least two layers of 6-mil polyethylene will be placed on the floor of the entire decontamination chamber, to prevent leakage of water from the showers. The walls, floor, and ceiling covering of the airlock construction will be seamed to each other in a fashion making them air and water tight. One end of this construction will exit to the clean area outside the containment barrier walls. The other end of this construction will exit inside or at the containment barrier walls. Except for these doors, all three chambers will be partitioned from each other with air and water tight flaps made of 6-mil polyethylene. Four (4) flapped doors will be constructed with two (2) layers of 6-mil polyethylene. One door will be at the entrance of the clean room, one door at the entrance to the shower, one door at the entrance to the dirty room, and the last door at the entrance to the work area. Both layers will be attached to the side of the door which faces toward the work area. The first layer of polyethylene will be attached at the top, bottom, and sides of the door opening. It will be slit down the middle. The second layer of polyethylene will be attached only at the top of the door on the dirty side of the door opening. It will be wider than the slit made in the first layer and will hang like a flap. When air is drawn from the clean side of the airlock into the work area it will cause the door flaps to lift. If air attempts to move from the work area end of the airlock toward the clean end or outside of the enclosure, it will force the flaps shut, closing the slit in the first polyethylene layer and thus stopping the air flow. All four (4) door openings or flaps will be constructed to allow clean air into the enclosure, but stopping air from exiting the enclosure. The central chamber will contain shower(s). Each shower stall will sit in a pan with at least six-inch sides. Suitable hoses will be used to supply hot and cold water to the showers. A sump pump or other suitable and safe device will be used to filter and dispose of the shower waste water through a special HEPA filter. No water may leave the work area without undergoing HEPA filtration or being treated as asbestos waste. Black polyethylene sheeting may be used for privacy on the decontamination facility.
- 10.2 The Contractor may construct a two-chambered decontamination airlock to serve as a debris port. All asbestos waste will be moved out through this port or through the decontamination unit. The chamber will be constructed in the same manner as the main decontamination airlock, but excluding the shower facility. As each bag is filled, it will be set into the first room for temporary storage. Three workers will be needed to complete the waste decontamination process. A worker in the first room will wash and hand the bag to a worker in the second room where he/she will then double-bag the material. The second worker will then hand the double-bagged material to a third worker who loads the material on

the transport vehicle (airlocks must exist between each room, as in the main decontamination facility). If a debris port is not possible, all precautions should be taken when hauling waste through the main decontamination facility, where all bags will go through the decontamination process. If a separate decontamination facility is constructed it shall be sealed while not in use.

- 10.3 All workers, without exception, will change street clothes in designated areas (clean room) prior to the start of each days work. Lockers or acceptable substitutes will be provided by the Contractor for street and work clothes. After workers are properly dressed in protective gear, they will walk through the shower and dirty room into the work area.
- 10.4 At the end of the work shift, and anytime the worker leaves the work area, he/she will decontaminate by removing all contaminated work clothes in the dirty room, but leaving his/her respirator on. He/she will then proceed to the showers and properly wash. Respirators will be worn while showering and remain on until the respirator is clean of asbestos. The cartridges will then be removed and disposed of as asbestos waste and the respirator stored in the clean room. Workers will shower before breaks, lunch and at the end of each day's work. Hot water, towels, soap and hygienic conditions shall be provided by the Contractor.
- 10.5 Adequate toilet facilities may be located outside of the work area and decontamination for this purpose will be employed. Where such facilities do not exist, the Contractor will provide portable service.
- 10.6 No smoking, eating or drinking is to take place in the work area. Prior to smoking, eating, drinking or using toilet facilities, workers will fully decontaminate by showering. A new coverall will then be used to re-enter the work area.
- 10.7 Procedures developed for evacuation of injured workers (see 6.3, Emergency Planning) will be used. Aid for a seriously injured worker will not be delayed for reasons of decontamination.
- 10.8 Worker's footwear will remain inside the work area until the completion of the job.
- 10.9 All waste water must be passed through a HEPA filter or collected in an air tight container and disposed of as asbestos waste.
- 10.10 All Contractor's tools and supplies, including large items such as ladders and scaffolding must be properly decontaminated when removing them from the project area.

11. Methods of Asbestos Abatement

NOTE: The use of supplies, equipment, tools, etc., owned, rented or otherwise in the possession of the Building Owner is strictly prohibited.

- 11.1 The asbestos material will be sprayed with either removal encapsulant or "amended water" (which contains an additive to enhance penetration). A fine spray of either solution will be applied to prevent fiber disturbance preceding the removal of the asbestos material. The asbestos will be sufficiently saturated to prevent emission of airborne fibers in excess of the exposure limits prescribed in the OSHA standards referenced in these specifications. The Contractor shall not, however, allow excessive water to accumulate in the work area. If removal encapsulant water is not used, surrounding areas will be periodically sprayed and kept wet to facilitate removal with minimum fiber release. A high humidity will be maintained in the work area to assist in fiber settling. If at any time the Owner's Consultant determines the material is not kept adequately wet, misters and/or sprinklers will be mandatory.

- 11.2 Removal of asbestos material will be done in manageable sections with two-person teams (if needed). Material will be removed as intact sections or components whenever possible and carefully lowered to the floor.
- 11.3 The waste material will be packed in labeled 6-mil polyethylene bags (held within 55 gallon drums with the required EPA & OSHA labels where appropriate) prior to starting the next section to prevent the material from drying. Double bagging will always be used. Bags shall not be over-filled and will be securely taped or sealed at the top to prevent accidental opening or leakage during removal, storage and transport. All bags and/or drums shall have all appropriate warnings and labels attached to them.
- 11.4 Large components removed intact will be wrapped in two layers of 6-mil polyethylene sheeting secured with tape properly labeled for transport to the landfill. Such packaging shall have all appropriate warnings and labels attached to them.
- 11.5 When removal of building materials (electrical, light, duct work, etc.) is necessary, the Contractor shall develop drawings indicating existing materials and their exact locations.
- 11.6 Personnel knowledgeable and experienced in electrical work must be used when installing or making connections to any electrical components within the facility, as well as when removing and/or replacing lights.
- 11.7 All ceiling demolition, including but not limited to wires, hangers, steel bands, nails, screws, metal lath, tin sheeting, and other objects may be required to be treated as asbestos waste. These materials have sharp edged components that will tear the polyethylene bags and sheeting, thus, this waste must be placed into fiberglass or fiberboard drums for disposal and labeled appropriately.
- 11.8 No bags shall be thrown or dropped at any time.
- 11.9 All containerized asbestos waste that is stored on-site (if allowed) shall be properly labeled and placed in a locked or secured location until ready for final disposal. Labels shall be of sufficient size and contrast to be readily visible and legible. The sign shall read:
- "Danger
Contains Asbestos Fibers
Avoid Creating Dust
Cancer and Lung Disease Hazard"
- 11.10 All asbestos abatement projects will be completed with the use of HEPA air filtration devices. Each unit must have three filters, including a HEPA filter capable of removing minute asbestos fibers. Each unit has ducts that must be exhausted to the outside air. Inlet and outlet ports of the air filtration devices must be covered with tape and 4-mil polyethylene sheeting when not in use. HEPA air filtration devices will be set up so that the air in the enclosure is drawn away from the abatement worker. Removal and cleaning operations will always move towards the air filtration devices. HEPA air filtration devices will be run until the completion of the project.
- 11.10.1 The Contractor will provide and maintain a pressure differential strip gauge. It will be activated prior to removal of any building material and continue operating until the final clearance results have been determined. Placement of the differential strip gauge is subject to the approval of the Owner's Consultant. The Owner's Consultant may, at their discretion, utilize additional pressure differential strip gauges or other devices to measure the pressure differential.

- 11.10.2 A minimum reading of 0.020 inches of water on a differential pressure gauge shall be maintained at all parts of the enclosure.
- 11.10.3 Sufficient negative pressure will be used in the enclosure to evacuate the air once every 15 minutes (minimum).
- 11.10.4 Smoke tubes shall be used daily by the Contractor to test for leaks and breeches in the containment.
- 11.11 All air filtration devices must be ducted to the outside of the building from a position that is securable. Flexible duct will be used and placed at a location approved by the Owner's Representative.
- 11.12 All gross amounts of asbestos debris shall be cleaned up, bagged, and sealed at the end of each working day.
- 11.13 The Contractor shall transport materials to the ground via leak-tight chutes or such other containers if the material is being removed or stripped more than 50 feet above ground level and not removed as units or in sections.
- 11.14 A thick encapsulant such as "VIAC" shall be applied to any exposed pipe insulation ends leading away from the enclosure area, regardless of material make-up.
- 11.15 Only vacuums and air filtration devices with "HEPA" filters will be allowed. No "shop-vacs", homemade hybrid vacuums or air filtration devices will be allowed on site.

12. Non-Friable Material

- 12.1 Under certain circumstances, asbestos-containing materials may be removed in a non-friable state. The circumstances which will allow such removal will be determined by and at the sole discretion of the Owner and/or the Owner's Representative.
- 12.2 Non-friable asbestos-containing floor tile may be removed utilizing infra-red heat machines. The following procedures shall be strictly adhered to.
 - 12.2.1 Critical barriers will be established over all vents, doors or other openings between the work area and other areas of the facility. These barriers shall be constructed so as to prevent any objectionable smoke or odor from penetrating outside the work area.
 - 12.2.2 The removal of the asbestos-containing floor tile will be conducted with the use of HEPA air filtration devices. Each unit must have three filters including a HEPA filter. Each unit shall be exhausted to the outside air. Inlet and outlet ducts of the air filtration devices must be covered with tape and at least 4-mil polyethylene when not in use. The HEPA air filtration devices will be activated prior to any removal operations being commenced and will remain running 24 hours per day until the completion of the project.
 - 12.2.3 All air filtration devices must be ducted to the outside of the building. The area where the duct leaves the building must be made so as to be secure and protected from vandalism and the elements. Flexible ductwork will be used and shall be placed at locations approved by the Owner and/or the Owner's Representative.

- 12.2.4 The Contractor has sole responsibility to arrange for the arrival and placement of the infra-red heat machine(s) within the facility. Additionally, the Contractor shall have at least one individual experienced in electrical work who can make whatever electrical connections to power the machines. It is not the Owner's responsibility to make any electrical connections. Any involvement by the Owner's personnel will result in backcharges to the Contractor.
- 12.2.5 The Contractor is responsible for the provision of charged and suitably rated fire extinguishers within the work area(s). The number necessary shall be determined in part by the size of the work area and the number of infra-red heat machines in use. The Owner and/or the Owner's Representative may require additional extinguishers at their sole discretion.
- 12.2.6 The Contractor shall take special care to ensure that the infra-red heat machine(s) are not left on one area of floor tile so as to burn the floor tile and cause excessive odor and smoke.
- 12.2.7 The floor tile will be carefully scraped up off the underlying flooring utilizing such methods as necessary. Special care should be taken so as to be sure that the floor tile is removed in whole pieces. Chipping the floor tile is strictly forbidden. The floor tile must remain in a non-friable state at all times.
- 12.2.8 As the floor tile is removed, the Contractor's personnel shall carefully place the tile into fiberboard barrels. Other types of materials for the barrels will be considered at the discretion of the Owner's Representative. However, barrels shall be required to hold the tile being removed. Exceptions to this policy will not be considered or allowed
- 12.2.9 Each barrel shall be labeled and disposed of in strict compliance with all applicable requirements as set forth in Section 16 et. seq. of these Technical Specifications. The Owner and/or the Owner's Representative shall make the decision in its/their sole discretion whether a requirement is applicable.
- 12.3 Non-friable asbestos-containing transite material may be removed at times utilizing, at a minimum, the following procedures. The circumstances under which such removal will be allowed and exactly which procedures shall be utilized shall be determined by and at the sole discretion of the Owner and/or the Owner's Representative.
 - 12.3.1 The transite must remain in a non-friable state throughout the removal process. special care must be utilized when removing the material from either the underlying substrate or from whatever type of frame is holding the material.
 - 12.3.2 The material should be wetted thoroughly. Special care should be taken with the edges and/or other protrusions through the material (i.e. screw holes, nail holes, etc.) as soon as they are exposed. The wetting process needs to be repeated as necessary to maintain the wetted condition and to prevent fibers from being released.
 - 12.3.3 Polyethylene drop cloths should be utilized whenever possible to enable material to be more easily cleaned.
 - 12.3.4 Any items removed from the transite material shall be disposed of as asbestos waste. Such items would include but not be limited to screws, nails and other such fasteners
 - 12.3.5 The material shall be wrapped in 6-mil plastic and securely sealed with waterproofed duct tape. This wrapped "package" shall then be wrapped again and securely sealed.

- 12.3.6 Certain transite materials may be more economically wrapped by utilizing 6-mil polyethylene asbestos disposal bags. In such instances, the material shall be double-bagged with each bag being sealed individually with high quality duct tape.
- 12.3.7 Any polyethylene drop cloths or other plastic shall be wrapped and sealed as indicated in Section 12.3.6 of these Technical Specifications.
- 12.3.8 Should the removal of the transite material be conducted within the confines of a facility, critical barriers may have to be established over all vents, doors or other openings between the work area and other areas of the facility.
- 12.3.9 The Contractor shall ensure that its employees strictly comply with Sections 6, 7, and 8 of these Technical Specifications regarding worker protection, respiratory protection, and emergency planning. Should additional steps need to be taken so as to prevent the exposure to asbestos fibers for the facility, facility occupants or other workers at the site, the Contractor shall promptly comply with the requests of the Owner and/or the Owner's Representative. The decision to require any additional measures to be taken will be at the sole discretion of the Owner and/or the Owner's Representative.
- 12.3.10 Each "package", bag or other container with transite material within shall be labeled and disposed of in strict compliance with all applicable requirements as set forth in Section 16 et. seq. of these Technical Specifications. The Owner and/or the Owner's Representative shall make the decision in its/their sole discretion whether a particular requirement is applicable.
- 12.3.11 Any areas that may be exposed between the outside and inside of the facility or any areas within the facility shall be sealed by plywood or such other material so as to secure the building both from the elements and vandalism. The Contractor shall be responsible for the security of the area where the work was performed or is being performed.

13. Glove Bag Technique

- 13.1 A solution of amended water shall be prepared (according to manufacturer's instructions) for the airless sprayer.
- 13.2 The glove bag should be fitted to the size of the pipe by cutting the top and the top sides of the glove bag. A polyethylene drop cloth shall be placed under the glove bag work area.
- 13.3 The following tools and supplies at a minimum shall be placed inside the glove bag in the tool pouch: utility knife, wire brush, rags, container with thick encapsulate (such as Childer's VIAC). Additional items or tools shall be placed inside dependent on the particular job.
- 13.4 The glove bag is then attached to the pipe by folding the open edges together (making a top seam above the pipe) and securely sealing them with duct tape, as well as sealing both cut sides around the pipe.
- 13.5 The bottom seam of the glove bag may be sealed with duct tape to prevent any leakage from a defective bag.
- 13.6 Insert the wand of the airless sprayer through the glove bag by making a small hole in a location that allows the wand to move freely in the bag, and tape the polyethylene tightly. (There may be a prefabricated hole, especially for the sprayer.)

- 13.7 Insert the nozzle of the HEPA vacuum through the appropriate opening (prefabricated hole) and tape the polyethylene tightly around the nozzle. The vacuum (turned on), in association with a flap, will be used throughout the duration of the glove bag removal project in order to establish proper negative pressure within the glove bag.
- 13.8 Place your arms into the glove bag appendages and thoroughly wet the pipe insulation.
- 13.9 Using the knife, cut through the asbestos at each end of the section to be removed. The section to be removed is then slit from end to end (keeping material wet while cutting).
- 13.10 The insulation is then lifted off the pipe and lowered carefully to the bottom of the glove bag.
- 13.11 Using the wire brush, towels and water, the pipe shall be thoroughly cleaned.
- 13.12 Wet the entire inside of the bag with specific attention to the polyethylene around the pipe and the arms and sockets.
- 13.13 Following a visual by the Owner's Consultant, the exposed end of the insulation remaining on the pipe shall be encapsulated, as well as the bare pipe.
- 13.14 Put all tools and supplies into wet cleaned arm socket by pulling socket inside out.
- 13.15 Tape the flap and collapse the bag by sucking all of the air out of the bag using the HEPA vacuum.
- 13.16 Tape the arm close to the tools (tape it in two locations with a one-inch space between the taped spots). Cut between the taped spots and put the enclosed tools into a bucket of water.
- 13.17 Remove the sprayer wand and seal the opening.
- 13.18 Remove the vacuum nozzle and seal the opening.
- 13.19 The glove bag should be squeezed tightly (as close to the top as possible) twisted, and sealed with duct tape.
- 13.20 Cut the bag off the pipe above the taped area and put the glove bag and drop cloth into an asbestos disposal bag, as well as the remaining portion of the bag on the pipe.
- 13.21 Clean the tools in the bucket of water and dispose of the water and glove bag remains in the asbestos disposal bag. The clean tools should be placed inside a polyethylene bag for future use.

UNACCEPTABLE PRACTICE USING THE GLOVE BAG TECHNIQUE

- 13.22 Glove bags shall not be slid down the length of the pipe. Only insulation within the dimensions of the glove bag may be removed.
- 13.23 The Owner's Consultant shall determine when the glove bag technique to be used is acceptable.

14. Post Abatement Clean-Up

- 14.1 After completion of all removal and stripping, all surfaces within the work area will be wire-brushed and/or wet-wiped to remove all visible residue.

- 14.2 All visible accumulations of asbestos-containing materials and asbestos-contaminated debris will be removed and containerized. Durable plastic shovels must be used in place of metal shovels in order to minimize damage to floor sheeting.
- 14.3 Tools will be decontaminated by removing any gross amounts of asbestos from them in the work area. Following this, they will be wiped off in the dirty room and then sprayed down with water in the shower area. All hand tools will then be sealed in plastic bags. Workers will wear protective equipment throughout this process. (Where space allows, a separate equipment room will be built inside the enclosure. This will eliminate the accumulation of gross asbestos on tools and equipment and will facilitate decontamination of these items.) No tools or equipment will be allowed to leave the work area without being decontaminated.
- 14.4 Following the cleanup of visible accumulations, the polyethylene sheeting will be removed from the walls and ceiling, and the interior layer will be removed from floors. At this point any asbestos that has fallen behind the polyethylene will be cleaned up. However, all barriers to doors, windows, and other critical barriers to clean areas will be left in place until final air checks are completed.
- 14.5 Following clean up of visible accumulations of asbestos waste, the entire area will be wet-wiped. During setting/drying periods no entry, activity, or ventilation into the work area will be allowed. However, the HEPA air filtration devices will continue to operate.
- 14.6 All removed polyethylene, tape, cleaning material, and contaminated clothing will be placed in 6-mil polyethylene bags or polyethylene lined drums, sealed and labeled as described above for disposal as asbestos waste material.
- 14.7 Only clear drying encapsulants and amended solutions may be used.
- 14.8 Prior to final clearance sampling, all items will be removed from the dirty room.

15. Acceptance Criteria for Area Re-Occupancy

- 15.1 The Contractor will clean all work site surfaces in a proper manner with appropriate equipment in accordance with Item 13 of these specifications.
- 15.2 After completion of the cleaning operations, the following activities shall be performed:
 - 15.2.1 A complete visual inspection to insure dust free conditions. The Contractor shall tour and inspect the entire work area, including but not limited to: ventilation openings, doorways, windows, and other openings; he/she shall look for debris from any sources, residue on surfaces, or any other matter. If any debris or residue is found, repeat the final cleaning until visual inspection is passed. It shall be the right of the Owner's Consultant(s) to accompany the Contractor during the inspection and determine if additional cleaning is necessary.
 - 15.2.2 A clear drying encapsulant will be used to seal all surfaces of the work area. Non-clear drying encapsulants can only be used upon approval by the Owner and/or Owner's Consultant.
- 15.3 Air samples will be collected following completion of all cleaning operations as specified in 14.1 - 14.7, following encapsulation as specified in 15.2.2, and after the work area is completely dry.

- 15.4 Post-abatement air samples collected from an area in which less than or equal to 160 square feet, or 260 linear feet of ACBM have been removed, enclosed or encapsulated, may be analyzed using Phase Contrast Microscopy (PCM). If more than 160 square feet, or 260 linear feet of ACBM are removed, or encapsulated the post-abatement air samples collected must be analyzed by Transmission Electron Microscopy (TEM).

15.4.1 Transmission Electron Microscopy (TEM) Clearance

When the work site has become completely dry, the Owner's Consultant shall collect at least ten post-abatement air samples according to 40 CFR, Part 763 (AHERA Regulations). At least five samples shall be taken in the abatement site; and five samples shall be taken at locations representative of air entering the abatement site. A minimum of 1,200 liters per air sample and a maximum of 1,800 liters per air sample shall be collected using aggressive sampling techniques. If the post-abatement test reveals fiber levels in excess of 0.01 fibers/cc, and/or if the Z-Test analysis in accordance with AHERA does not pass, the cleaning and measurement operations specified in Sections 13 and 14 of these specifications will be repeated until the area is in compliance. Performing the Z-Test analysis is solely at the discretion of the Owner's Consultant.

15.4.2 Phase Contrast Microscopy (PCM) Clearance

When the work site has become completely dry, the Owner's Consultant shall collect at least five post-abatement air samples according to 40 CFR, Part 763 (AHERA Regulations). Five samples shall be taken in the abatement site. A minimum of 2,000 liters per air sample shall be collected using aggressive sampling techniques. If the post-abatement test reveals fiber levels in excess of 0.01 fibers/cc, the cleaning and measurement operations specified in Sections 13 and 14 of these specifications will be repeated until the area is in compliance.

- 15.5 After the work area is found to be in compliance, all entrances and exits are unsealed, and the polyethylene sheeting, tape and any other trash and debris shall be placed in double sealed polyethylene bags (6-mil minimum) or barrels lined with one polyethylene bag (6-mil minimum), and properly labeled and disposed of.

16. Disposal of Asbestos Material and Related Debris

- 16.1 All asbestos materials and miscellaneous debris in properly labeled polyethylene bags (double bagged) or other containers will be transported to the predesignated disposal site in accordance with the guidelines of the U.S. Environmental Protection Agency and the Department of Environmental Quality. Asbestos disposal forms will be completed to document proper disposal of asbestos waste. (These must be submitted before final payment will be made.)
- 16.2 All containers bagged or wrapped materials with asbestos-containing materials shall be labeled with the name and address at which the waste was generated, prior to materials being transported off the facility site.
- 16.3 Workers unloading the polyethylene bags and machinery operators will wear respirators when handling material at the disposal site.
- 16.4 All pertinent DOT rules and regulations will be followed when transporting asbestos.
- 16.5 All containers or wrapped materials shall be posted with Class 9 hazardous waste signs.
- 16.6 All asbestos-containing materials shall be transported in covered vehicles.

- 16.7 All dumpsters, trucks or other containers used to transport asbestos contained materials shall be properly labeled during the loading and unloading of waste.

17. Submittals Prior To Contractor Release & Final Payment

- 17.1 Damages: The Contractor shall promptly repair any and all damages caused to facilities at no cost to the Owner.
- 17.2 The following must be submitted prior to final payment:
- 17.2.1 Copies of Disposal receipts of all asbestos contaminated material, plus copies of all transport manifests, trip tickets, or other disposal documentation.
- 17.2.2 All documentation requested in Submittals to Owner's Representative, Section 4.1.

III. WORK/CONDUCT REQUIREMENTS

18. Supervision, Personnel and Misconduct

- 18.1 A "competent person" as defined in 29 CFR 1926.1101 must be on-site at all times throughout the duration of the project(s). This competent person, as designated prior to the start of said project(s) must remain the same throughout the duration of the project(s).
- 18.2 The Owner's Consultant IS NOT THE CONTRACTOR'S OUT-MAN. The Contractor must provide one out-man for each enclosure (unless the decontamination chambers are within "talking" distance of each other). The out-man must always remain within talking distance of the enclosure they are assigned to.
- 18.3 A Foreman with competent-person training must remain within the enclosure at all times during the project.
- 18.4 Contractors employees are subject to immediate dismissal if any of the following, but not limited to the following, occurs:
- 18.4.1 Failure to follow proper abatement procedures, including but not limited to respiratory protection and the throwing of asbestos disposal bags outside of the enclosure.
- 18.4.2 Physical threats and violence to the Owner's Consultant or any other person.
- 18.4.3 Property damage or theft.
- 18.4.4 Reckless driving on Owner's property.
- 18.4.5 Discourteous and ill-mannered statements made to the Owner, Owner's employees or Owner's Consultant.
- 18.4.6 Consumption of alcohol on Owner's premises.

19. Site Security/Site Cleanliness

- 19.1 The work area is restricted to only authorized, trained and protected personnel. These personnel may include the Contractor's employees, employees of subcontractors, Owner's employees and Representatives, state and local inspectors, and any other designated individuals. The list of employees who will participate in the project as defined in 2.1.2 of these specifications will be the only employees allowed to enter the work area. Additional employees assigned to this project **must** be cleared through the Owner or the Owner's Consultant. Documentation of all training, medical, and other pertinent requirements are needed before the employees participation.
 - 19.1.1 An employee shall not remain on the Owner's premises if he/she is prohibited from participating in the project as a result of insufficient paperwork or if the Owner's Consultant determines the employee, in any manner, is detrimental to the safe completion of the project.
 - 19.1.2 The Contractor shall record the names and social security numbers of all people on a sign-in sheet who enter the work site, and maintain this record for thirty years.
- 19.2 Entry into the work area by unauthorized individuals shall be strictly prohibited.
- 19.3 Access to the work area shall be through a single worker decontamination system. All other means of access (doors, windows, hallways, etc.) shall be blocked or locked so as to prevent entry to or exit from the work area. The only exceptions for this rule are the waste pass-out airlock which shall be sealed except during the removal of containerized asbestos waste from the work area, and emergency exits in case of fire or accident. Emergency exits shall not be locked from the inside; instead, they shall be sealed with polyethylene sheeting and tape until needed.
- 19.4 The Contractor shall designate one worker to remain outside each enclosure throughout the duration of the project in order to regulate ingress and egress to the work areas as well as to provide needed supplies and equipment. The worker outside the enclosure will be within hearing range at all times. At least one person, at all times, inside the enclosure must have had "competent person" training.
- 19.5 All areas occupied or used in any way by the Contractor (all employees), outside the enclosure(s) but within the building shall be kept in an acceptable condition and thoroughly cleaned at the end of each day, to the satisfaction of the Owner's Consultant. If at any time, food containers or debris is found not properly disposed of, eating on premises shall be terminated.
- 19.6 The Contractor is responsible for maintaining areas outside the building in a condition acceptable to the Owner or the Owner's Consultant. This includes but is not limited to: sanitation, supplies and equipment, and employee driving and substance abuse.

20. Stop Work Orders

- 20.1 If at any time, the Owner or the Owner's Consultant decide that work practices are in violation of the contract specifications or endangering workers, he/she or they will immediately notify the Contractor's on-site Representative of such and operations are to cease until corrective action is taken.
- 20.2 The Contractor shall cooperate fully with the Owner and Owner's Consultant.

IV. AIR MONITORING

21. Sampling Requirements

- 21.1 The Owner's Consultant shall conduct all air sampling for the Owner throughout all phases of the contract.
- 21.2 All non-post-abatement air samples shall be analyzed using the NIOSH 7400 Method. All post-abatement air samples collected in situations involving removal, repair, enclosure, or encapsulation of more than 160 square feet or 260 linear feet of ACBM shall be analyzed under the "Mandatory Transmission Electron Microscopy Method" defined in 40 CFR, Part 763 (AHERA rules). Post abatement air samples collected in situations involving removal, repair, enclosure, or encapsulation of less than 160 square feet or 260 linear feet of ACBM shall be analyzed using the NIOSH 7400 Method, at the discretion of the Owner and/or the Owner's Consultant.

22. Sampling Types

- 22.1 Throughout the abatement and cleaning operations, air sampling will be conducted to ensure that the Contractor is complying with all codes, regulations, and ordinances. The following are representative sampling which may take place at the discretion of the Owner and the Owner's Consultant.
 - 22.1.1 Baseline - Collected in various/numerous locations prior to abatement to determine ambient interior fiber levels.
 - 22.1.2 Contiguous - Collected in various/numerous locations outside of the work area in order to detect elevated fiber levels during abatement.
 - 22.1.3 Work Area - Collected in various locations inside the work area to insure compliance with proper procedures and specifications.
 - 22.1.4 Personal - Collected in the breathing zone of the asbestos abatement personnel according to 29 CFR 1910.101, Appendix A, as amended, of the OSHA regulations. These samples will be placed on employees who are exposed to representative concentrations of airborne asbestos fibers. Personal sampling will ensure that the workmen performing the asbestos abatement projects are not exposed to asbestos contamination exceeding STEL (short term excursion limit) requirements and levels which exceed their respirator protection or otherwise endanger their health. Personal air samples will be collected on individuals as designated by the Owner's Consultant.
 - 22.1.5 Post Abatement - Collected inside and/or outside the work area after the project is completed and the area has been cleaned and dried. This will determine if the job has been done correctly and whether the cleanup process must be repeated. Quantities are determined by all applicable regulations.
 - 22.1.6 Field Blanks - Field blanks are collected to ensure that contamination of cassettes has not occurred. Each set of samples collected will include ten percent (10%) blanks or a minimum of two blanks.



**TROY SCHOOL DISTRICT
Asbestos Abatement Bid Tabulation
November 15, 2017**

Contractors	Bid Bond	Familial Stmt	Iran Stmt	Bid 1 Costello	Bid 1 Martell	Bid 1 Morse	Bid 1 Leonard	Bid 1 Total
Qualified Abatement Services	X	X	X	\$29,250.00	\$29,250.00	\$9,800.00	\$14,400.00	\$82,700.00
Quality Environmental Services, Inc.	X	X	X	\$34,100.00	\$34,100.00	\$9,200.00	\$17,000.00	\$94,400.00
Trust Thermal Abatement	X	X	X	\$34,500.00	\$34,500.00	\$20,000.00	\$13,875.00	\$102,875.00