



STATE OF WASHINGTON
DEPARTMENT OF LABOR AND INDUSTRIES
Prevailing Wage

December 30, 2015

Miriam Israel Moses, Executive Director
REBOUND
2800 First Avenue, Ste. 216
Seattle, WA 98121

Re: Request for Modification to Geothermal Installation Scope

Dear Ms. Moses:

Thank you for your December 22, 2014 email regarding the modification of Industrial Statistician Ann Selover's determination dated May 28, 2013 related to the appropriate scope of work (scope) for certain work related to a closed loop geothermal heating and cooling systems, and more specifically the installation of piping systems for a geothermal heat pump system.

The prior determination found that the work to install and connect high density polyethylene (HDPE) piping for these systems could be classified under either the scope for Plumbers, Pipefitters, and Steamfitters, WAC 296-127-01364, or the scope for Refrigeration Mechanic, WAC 296-127-01367. You believe that this work should only be paid at the Plumbers, Pipefitters, and Steamfitters scope of work.

This is a determination of the Industrial Statistician regarding coverage of the referenced work under Washington's prevailing wage laws and is made pursuant to RCW 39 .12.015. See the enclosed document, "Prevailing Wage Determination Request and Review Process."

In preparing my answer to your request, I have done a careful review of the following:
The process for installing pipe for a geothermal closed loop heating and cooling system;
The scope of work for Plumbers, Pipefitters, and Steamfitters, WAC 296-127-01364;
The scope of work for Refrigeration Mechanic, WAC 296-127-01367; and
The scope of work for Laborers, WAC 296-127-01344.

Based upon this review, I have found that the Refrigeration Mechanic scope of work contains language that clearly applies to the work in question. The introductory paragraph states: "...refrigeration mechanics install industrial, commercial, residential, and marine refrigeration systems..." Geothermal heat pump systems involve two piping structures. One is an evaporative system containing refrigerant and involving a compressor, condenser and evaporator. The other is considerably simpler, circulating an aqueous mixture to transfer heat between the evaporative piping and the earth. The earth provides heat during colder months, and cooling during the warmer months. I find these two piping structures to be elements within the refrigeration "system."

The scope of work description goes on to state in the "The work includes, but is not limited to:" section:

- Lay out, cut, thread, bend and connect pipe to functional components and water or power system of premises.
- Move, lift, and install all compressors, pumps, motors, controls, switches, gauges, valves, condensers, evaporators, and other fixtures and appurtenances included in such systems.

This language directly covers the work required for the installation of piping systems for a geothermal heat pump system.

Additionally, my review has found that in fact the scope of work for Plumbers, Pipefitters and Steamfitters does not have similarly specific language to cover the installation of a geothermal heat pump system, nor does it mention any system other than "...systems installed in structures..." Buildings are structures, but not all structures are buildings.

The language in the scope for Plumbers, Pipefitters and Steamfitters mentions joining pipes, which is a broad and general statement that is less specific in its applicability to this work than the language in the scope for Refrigeration Mechanics.

In your letter, you address distinctions between welding and fusion of pipe. However, the scope for Refrigeration Mechanics is not limited to welding when the work otherwise falls directly within the language of the scope.

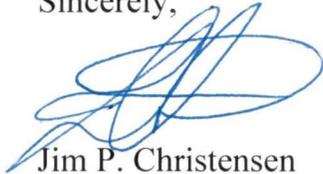
It is therefore my determination the installation of pipe for a geothermal closed loop heating and cooling system is to be compensated at the Refrigeration Mechanic rate, WAC 296-127-01367.

Ms. Miriam Moses
December 30, 2015
Page 3 of 3

This determination is based upon the facts provided. If the facts vary or are different from those stated, the answer may also differ.

I hope this information is helpful. If you have additional questions, please let me know.

Sincerely,



Jim P. Christensen
Industrial Statistician and Prevailing Wage Program Manager

Enclosures

cc: Elizabeth Smith, L&I Assistant Director for Fraud Prevention and Labor Standards
Steven Snorsky, Vice President, Geo Loop Tec Company



STATE OF WASHINGTON
DEPARTMENT OF LABOR AND INDUSTRIES

Prevailing Wage
PO Box 44540 • Olympia Washington 98504-4540
360/902-5335 Fax 360/902-5300

COPY

May 28, 2013

Steven Snorsky, Vice President
Geo Loop Tec Company
85 South Orcas Street
Seattle, WA 98108

Re: Piping Work for Geothermal Heat Pump Systems

Dear Mr. Snorsky:

Thank you for your March 26, 2013 letter to Industrial Relations Agent Beatriz Hart regarding the appropriate scope of work (scope) for certain work related to a closed loop geothermal heating and cooling system, and more specifically the installation of piping systems for a geothermal heat pump system. Your letter responds to Ms. Hart's findings in regard to work performed for City of Seattle Fire Station #6. Following an audit, Ms. Hart found that the work to install and connect high density polyethylene (HDPE) piping was incorrectly classified under the scope for Laborers, [WAC 296-127-01344](#), and should have been classified instead under the scope for Plumbers, Pipefitters, and Steamfitters, [WAC 296-127-01364](#), or the scope for Refrigeration Mechanic, [WAC 296-127-01367](#). You contend that the scope for Laborers is correct, and have asked me to make a formal determination on the issue.

This is a determination of the Industrial Statistician regarding coverage of the referenced work under Washington's prevailing wage laws and is made pursuant to RCW [19.12.015](#). See the enclosed document, "*Prevailing Wage Determination Request and Review Process*."

I previously rendered three determinations (May 26, 2011, August 11, 2011, and August 28, 2012) relating to drilling for geothermal systems. The May 26, 2011 determination was superseded by the later determinations which are enclosed and are also posted on the "[Determinations and Policies](#)" section of our Prevailing Wage web site. In drafting this letter of determination, some of the documents I have reviewed include those determinations and the following:

- Beatriz Hart's letter dated March 26, 2013. The letter describes the information that Ms. Hart collected, including her visit to your facilities on February 8, 2013.
- A number of pictures of your facility and descriptions of the systems observed, provided by Ms. Hart.

- The scope of work descriptions for Laborers, [WAC 296-127-01344](#); Plumbers, Pipefitters, and Steamfitters, [WAC 296-127-01364](#); Refrigeration Mechanic, [WAC 296-127-01367](#); Laborers In Utilities Construction, [WAC 296-127-01340](#); Operating Engineers (power equipment operators), [WAC 296-127-01354](#); and Utilities Construction (underground sewers and water lines), [WAC 296-127-01389](#). (These scope of work descriptions are enclosed and are also available on the Prevailing Wage web site. See <http://www.lm.wa.gov/Trades/Licensing/PrevWage/default.asp>,
- Your March 26, 2013 letter and accompanying documents, including the 2007-2012 Washington and Northern Idaho District Council of Laborers Western Central Washington Master Labor Agreement.
- The enclosed December 17, 2008 determination of former Industrial Statistician David J. Soma relating to geothermal systems.
- Assistant Director José Rodriguez's enclosed letter of redetermination dated February 22, 2013 on the topic of Closed Loop Geothermal Drilling.
- Various web sites demonstrating or otherwise explaining the details of the installation of geothermal heating and cooling systems, including:
<http://www.youtube.com/watch?v=g2evsXsOJ6I>
<http://www.youtube.com/watch?v=kKC2YCG2PUoI>
<http://www.youtube.com/watch?list=PL90AA31E516521EA08&v=FkV17UewzPY&NR=1&feature=endscreen>
<http://www.youtube.com/watch?v=1KqV60vO8A>
<http://www.youtube.com/watch?v=pbFm19MsnAw>
<http://www.welldrillingschool.com/courses/ndt/geothermal.pdf>
<http://www.youtube.com/watch?v=1JXVrtVbCnk&feature=endscreen&NR=1>
<http://opus.mcerf.org/joiningmethod.aspx?id=2133580976575427791>

In my August 28, 2012 determination, I previously addressed this issue, noting that “the work of placing the pipe into the bores or shafts requires payment of the Plumber, Pipefitter, and Steamfitters, [WAC 296-127-01364](#) prevailing rate of wage, and filling the bores or shafts with concrete slurry or grout requires payment at the Laborers, [WAC 296-127-01344](#) prevailing rate of wage.”

Based on the facts presented here it is my determination that installing pipe for a geothermal closed loop heating and cooling system may be compensated under either of two scopes of work: Plumbers, Pipefitters, and Steamfitters, [WAC 296-127-01364](#), and Refrigeration Mechanic, [WAC 296-127-01367](#).

Specific Tasks Addressed – HDPE Pipe Assembly (Heat Welding)

In your letter you describe the relevant work as involving the heat fusion of HDPE pipe sections. You state that “[t]his is the only accepted method of joining pipe in the Ground Source Heat Pump Boring Industry.” Ms. Hart notes that in a visit to your facility you explained that heat fusion was part of the “looping” process. She also provided numerous pictures from her visit to your facility which illustrated a variety of ways in which the fusion is performed. Thank you for facilitating Ms. Hart’s visit and for your help in specifically identifying the processes the pictures represent. I appreciate your efforts in that regard.

Generally, I understand that this pipe assembly process involves the use of a specialized iron to heat the ends of the HDPE pipe to approximately 400-500 degrees Fahrenheit. The workers then either adjoin two ends to each other ("butt fusion") or insert one end into a socket ("socket fusion"). A "sidewall fusion" may also be performed. For the butt fusion a facing machine may also be used. The process creates a permanent joint. In a vertical piping system, the pipe is lowered into a hole that has been drilled. The hole is then grouted for several reasons, including successful heat transfer between the ground and the pipe. Heat fusion may be used to create the "u-bend" to be lowered into the borehole, as well as on the surface to connect the pipes. The systems are pressurized, and the fusion method is intended to maintain high pressure. The system is pressure tested before backfilling.

Plumbers, Pipefitters, and Steamfitters (WAC 296-127-01364)

In your communications with Ms. Hart, and in your determination request letter to me, you indicate that you do not believe the Plumbers, Pipefitters, and Steamfitters classification was acceptable for the work at issue because "plumbers only work indoors."

The work described in the Plumbers, Pipefitters, and Steamfitters scope is not limited to work inside a structure. In its introductory paragraph, the scope states:

For the purpose of the Washington state public works law, chapter 39.12 RCW, plumbers, pipefitters and steamfitters assemble, install, and maintain piping systems, fixtures and equipment for the transportation of water, steam, gas, air, sewage, oil, fuels, liquids, gases, or similar substances.

You will note that nothing in the above language specifies that the work must be performed indoors, and indeed we have applied the scope to a variety of outside work. The detail that follows in the Plumbers, Pipefitters, and Steamfitters scope is preceded by this phrase: "The work includes, *but is not limited to...*" (Emphasis added.) The detailed examples that follow in that scope are there to provide examples of the covered work, and cannot be used to exclude work on piping systems that is consistent with the scope's introductory paragraph.

In further support of your position that the Plumbers, Pipefitters, and Steamfitters scope of work applies only to indoor tasks, you reference a December 17, 2008 determination issued by former Industrial Statistician, David J. Soma that addressed a potential distinction between work that was indoors or outdoors:

The facts provided do not mention where the system is or which classification has to be used for hooking up the pipe system to the heating and cooling control unit. Connecting the piping to the unit is the work of plumbers, pipefitters, and steamfitters (WAC 296-127-01364) if the unit is indoors. If the unit is outdoors, additional information is necessary to determine whose work it is.

As Mr. Soma indicated, although all the indoor work with piping systems must be classified under the Plumbers, Pipefitters, and Steamfitters scope of work, outdoor work with piping

systems has a wider variety of options for classifications than indoor work. The determination does not, however, state or imply that the Plumbers, Pipefitters, and Steamfitters wage rate cannot apply to work performed outside of a structure.

You assert that joining pipe by fusing is different from: joining by means of solder, welding, brazing and other specific joining methods. By limiting your reference to the various methods of joining of pipes specifically listed in the scope of work for Plumbers, Pipefitters, and Steamfitters your conclusion seems to be that those work descriptions do not include the process under consideration here, sealing of pipe sections by fusion. That clearly is not the case. A more complete review of that part of the work description you cite includes the following: “[j]oining pipes by use of screws, bolts, fittings, solder, welding and caulking, *or any other method of making joints in the pipefitting industry.*” [Emphasis added.] Heat fusion is a form of making joints that is common practice within the pipefitting industry, and is included within the Plumbers, Pipefitters, and Steamfitters scope of work and must be compensated at that prevailing wage rate or at the prevailing wage rate for Refrigeration Mechanics (see below).

Refrigeration Mechanic (WAC 296-127-01367)

Additionally, as stated above, fusing and installing such piping may also be compensated at the Refrigeration Mechanic prevailing wage rate. Refrigeration mechanics install systems for cooling, heating, air conditioning, etc. This includes work to lay-out, cut, thread, bend, and connect pipe in such systems, and the method used to fuse the pipe involves a process with specialized tools which constitutes a form of welding, as described under the scope of work for Refrigeration Mechanic. Installation of a heat transfer system such as a closed loop geothermal heating and cooling system is covered by the scope’s language.

Utilities Construction Scopes of Work (WAC 296-127-01340 and WAC 296-127-01389)

In forms filed with the Department, you report paying your crew under the Laborers in Utilities Construction classification, WAC 296-127-01340, for such work. Case law tells us that the nature of the work is the controlling factor in determining application of prevailing wage law. See *Lockheed Shipbuilding Company v. Dept. of Labor and Indus.*, 565 Wn. App. 421, 783 P.2d 1119 (1989). The nature of the work here is the installation of a geothermal heating and cooling system and it is not a utilities system such as the water or sewer mains that a public or private utility might run down a street or road, which is the coverage contemplated by the Laborers In Utilities Construction scope of work. For the same reason, the Utilities Construction (underground sewers and water lines) work description, WAC 296-127-01389, would not be appropriately assigned to the work. Also, pipe fusing and other work to install a geothermal heat/cooling system is not covered under WAC 296-127-01340 or WAC 296-127-01389.

Laborers (WAC 296-127-01344) and Operating Engineers (Equipment Operators) (WAC 296-127-01354)

For the piping system under consideration here, the excavation or backfilling by shovel may be performed at the Laborers rate of wage. The hole boring, and excavation or backfilling by power equipment (such as backhoe, drilling, etc.) must be paid at the Operating Engineers, WAC 296-127-01354 prevailing wage rate.

Plumber Certification Requirements

In your letter you cite [RCW 18.106.010](#), a section of plumber certification law, to support your position that the described work should not be covered under the scope of work for Plumbers, Pipefitters, and Steamfitters. Specifically, you quote the following portion of [RCW 18.106.010](#):

"Plumbing" means that craft involved in installing, altering, repairing and renovating potable water systems, liquid waste systems, and medical gas piping systems within a building.

[RCW 18.106.010\(9\)](#)

This provision in plumber certification law when read with WAC 296-127-01364 in prevailing wage law may give rise to some confusion and incorrect assumptions about piping outside buildings. However, nothing in the prevailing wage scope of work for Plumbers, Pipefitters, and Steamfitters indicates that it is limited to work requiring a plumber certification. Nor is there any reference to [RCW 18.106.010](#) or the requirement for plumber certification in the Refrigeration Mechanic scope of work. For prevailing wage payment purposes, the work description in [WAC 296.127-01364](#) is controlling regarding work payable at the wage rate for Plumbers, Pipefitters, and Steamfitters. And, of course, for plumber certification purposes, [RCW 18.106](#) and its corresponding body of law are controlling.

Collective Bargaining Agreements (CBAs)

Your letter also highlights the provisions of the Washington and Northern Idaho District Council of Laborers Western/Central Washington Master Labor Agreement. The document, which you attached to your determination request letter, makes reference to a Pipe Layer/Tailor, which it notes may work with pressurized and non-pressurized ductile pipe, gravity pipe and "HDPE (fused and non fused)" (page 22). However, while there are situations for which we will consider the contents of a CBA, we do not rely on such private agreements to establish the limits of a prevailing wage scope of work. Additionally, although it is clear under the agreement that Laborers may work with HDPE piping as they may work with other materials, this does not establish that the Laborers prevailing wage scope of work includes fusion and installation of a geothermal heating and cooling system. For our determinations, the primary and controlling authority in determining the applicable rate of wage is our scope of work descriptions.

Finally, your letter suggests that the program previously considered this work to be appropriately classified as the work of Laborers, as indicated by its approval of certain forms. I am not aware of any such decision, and my prior determinations have stated the contrary. Generally, the program is not able to review whether the classifications listed on each form are correct for the work performed since such a review may require a detailed investigation. A disclaimer to this effect is included on approved forms.

Steven Snorsky
May 28, 2013
Page 6 of 6

This determination is based upon the specific facts provided. If the facts vary or are different from as stated, the answer may also differ.

I hope this information is helpful. If you have additional questions, please let me know.

Sincerely,



L. Ann Selover
Industrial Statistician/Program Manager
(360) 902-5330
Ann.Selover@Lni.wa.gov

Enclosures (6)

cc: Elizabeth Smith, L&I Assistant Director for Fraud Prevention and Labor Standards
Jim Ashcraft, L&I Supervisor, Fraud Prevention and Labor Standards
Beatriz Hart, L&I Prevailing Wage Industrial Relations Agent

Prevailing Wage Determination Request and Review Process

RCW 39.12.015 is the basis for requesting a determination, since it provides:

All determinations of the prevailing rate of wage shall be made by the industrial statistician of the department of labor and industries.

If you disagree with a determination the industrial statistician provides, WAC 296-127-060(3) provides for a review process:

(3) Any party in interest who is seeking a modification or other change in a wage determination under RCW 39.12.015, and who has requested the industrial statistician to make such modification or other change and the request has been denied, after appropriate reconsideration by the assistant director shall have a right to petition for arbitration of the determination.

(a) For purpose of this section, the term "party in interest" is considered to include, without limitation:

(i) Any contractor, or an association representing a contractor, who is likely to seek or to work under a contract containing a particular wage determination, or any worker, laborer or mechanic, or any council of unions or any labor organization which represents a laborer or mechanic who is likely to be employed or to seek employment under a contract containing a particular wage determination, and

(ii) Any public agency concerned with the administration of a proposed contract or a contract containing a particular wage determination issued pursuant to chapter 39.12 RCW.

(b) For good cause shown, the director may permit any party in interest to intervene or otherwise participate in any proceeding held by the director. A petition to intervene or otherwise participate shall be in writing, and shall state with precision and particularity:

(i) The petitioner's relationship to the matters involved in the proceedings, and

(ii) The nature of the presentation which he would make. Copies of the petition shall be served on all parties or interested persons known to be participating in the proceeding, who may respond to the petition. Appropriate service shall be made of any response.

If you choose to utilize this review process, you must submit your request within 30 days of the date of the applicable industrial statistician's determination or response to your request for modification or other change. Include with your request any additional information you consider relevant to the review.

Direct requests for determinations, and for modification of determinations via email or letter to the prevailing wage industrial statistician:

Jim P. Christensen
Industrial Statistician/Program Manger
Department of Labor & Industries
Prevailing Wage
P O Box 44540
Olympia, WA 98504-4540
Jim.Christensen@Lni.wa.gov

Prevailing Wage Determination Request and Review Process

Direct requests via email or letter seeking reconsideration (redetermination) by the assistant director to:

Elizabeth Smith, Assistant Director
Department of Labor & Industries
Fraud Prevention and Labor Standards
P O Box 44278
Olympia, WA 98504-4278
Elizabeth.Smith@Lni.wa.gov

Direct petitions for arbitration to:
Joel Sacks, Director
Department of Labor & Industries
P O Box 44001
Olympia, WA 98504-4001

If you choose to utilize this arbitration process, you must submit your request within 30 days of the date of the applicable assistant director's decision on reconsideration (redetermination). Submit an original and two copies of your request for arbitration to the Director personally, or by mail. The physical address for the Director is 7273 Linderson Way, SW, Tumwater, WA 98501.

WAC 296-127-061 also contains the following provisions regarding petitions for arbitration:

In addition, copies of the petition shall be served personally or by mail upon each of the following:

- (a) The public agency or agencies involved,
 - (b) The industrial statistician, and
 - (c) Any other person (or the authorized representatives of such person) known to be interested in the subject matter of the petition.
- (2) The director shall under no circumstances request any administering agency to postpone any contract performance because of the filing of a petition. This is a matter which must be resolved directly with the administering agency by the petitioner or other party in interest.
- (3) A petition for arbitration of a wage determination shall:
- (a) Be in writing and signed by the petitioner or his counsel (or other authorized representative), and
 - (b) Identify clearly the wage determination, location of project or projects in question, and the agency concerned, and
 - (c) State that the petitioner has requested reconsideration of the wage determination in question and describe briefly the action taken in response to the request, and
 - (d) Contain a short and plain statement of the grounds for review, and
 - (e) Be accompanied by supporting data, views, or arguments, and
 - (f) Be accompanied by a filing fee of \$75.00. Fees shall be made payable to the department of labor and industries.

Plumbers, pipefitters, and steamfitters.

For the purpose of the Washington state public works law, chapter 39.12 RCW, plumbers, pipefitters and steamfitters assemble, install, and maintain piping systems, fixtures and equipment for the transportation of water, steam, gas, air, sewage, oil, fuels, liquids, gases, or similar substances.

The work includes, but is not limited to:

- (1) Piping systems installed in structures (e.g., buildings, industrial plants, etc.).
 - (a) The handling and moving of any plumbing, pipefitting and steamfitting materials, supplies, and equipment on the job site.
 - (b) Cutting, threading, and bending pipe.
 - (c) Joining pipes by use of screws, bolts, fittings, solder, welding and caulking, or any other method of making joints in the pipefitting industry.
 - (d) Assembling, installing, and repairing valves, pipe fittings, and pumps.
 - (e) Testing the piping system.
 - (f) Installing and repairing plumbing fixtures, such as sinks, bathtubs, water heaters, and water softeners.
 - (g) Cutting holes in floors and walls for pipes:
 - With point and hammer.
 - Core-drilled.
 - (h) Responsible for all cleanup required in connection with plumbers, pipefitters and steamfitters work.
- (2) Distribution lines (e.g., water mains, sewer mains, oil and gas lines, etc.).
 - (a) The handling and moving of any plumbing, pipefitting and steamfitting materials, supplies, and equipment on the job site.
 - (b) Steel pipe: Welding of pipe joints and joining pipes with screws, bolts, fittings, solder, caulking, or any other method for making joints in the industry.
 - (c) Ductile iron pipe: Joining pipes by using any method for making joints in the industry, when the pipe will be under pressure.
Assembling, installing, and repairing valves and pumps.
 - (d) Testing the piping system.
 - (e) Responsible for all cleanup required in connection with plumbers, pipefitters and steamfitters work.

[Statutory Authority: Chapter 39.12 RCW, RCW 43.22.270 and 43.22.051. WSR 00-15-077, § 296-127-01364, filed 7/19/00, effective 7/19/00.]

Refrigeration mechanic.

For the purpose of Washington state public works law, chapter 39.12 RCW, refrigeration mechanics install industrial, commercial, residential, and marine refrigeration systems involved in cold storage, ice making, cooling, heating, air conditioning, humidifying, dehumidifying or dehydrating and charge (pump gas or fluid in the system), start, test, service, and repair the installed systems.

The work includes, but is not limited to:

- Lay out reference points for the installation of the structural and functional components, using tape, transit, plumb bob, level, and square.
- Lay out and drill holes and cut chases and channels, set and erect belts, inserts, stands, brackets, hangers, supports, sleeves, thimbles, conduits and hoses.
- Lay out, cut, thread, bend and connect pipe to functional components and water or power system of premises.
- Move, lift, and install all compressors, pumps, motors, controls, switches, gauges, valves, condensers, evaporators, and other fixtures and appurtenances included in such systems.
- Bolt, rivet, weld, braze and solder parts to structural and functional components.
- All clean-up work required in connection with refrigeration mechanics' work.
- Excluded is the installation of sheet metal duct work leading to and/or from units described above.

[Statutory Authority: Chapter 39.12 RCW, RCW 43.22.270 and 43.22.051. WSR 00-15-077, § 296-127-01367, filed 7/19/00, effective 7/19/00.]

Laborers.

For the intents and purposes of the Washington state public works law, chapter 39.12 RCW, laborers perform a variety of tasks such as:

- Erect and repair guard rails, median rails, guide and reference posts, sign posts and right of way markers along highways.
- Mix, pour and spread asphalt, gravel and other materials, using hand tools, and mix, pour, spread and rod concrete.
- Lift, carry and hold building materials, tools and supplies.
- Measure distances from grade stakes, drive stakes and stretch tight line.
- Bolt, nail, align and block up under forms.
- Signal operators of construction equipment to facilitate alignment, movement and adjustment of machinery to conform to grade specifications.
- Level earth to fine grade specifications, using pick and shovel.
- Mix concrete, using portable mixer.
- Position, join, align, wrap and seal pipe sections.
- The placement and testing of plastic conduit for electrical cable, when the conduit is buried underground.
- Erect scaffolding, shoring and braces.
- Mop, or spread bituminous compounds over surfaces for protection (outside buildings).
- Spray material such as water, sand, steam, vinyl, or stucco through hoses to clean, coat or seal surfaces.
- Apply caulking compounds by hand or with caulking gun to seal crevices.
- The application of penetrating sealer and primer protective coatings to concrete floors and steps when safe to walk on.
- Installation of plastic panels on the inside of existing window frames for insulation (instead of storm windows). The panels are held in place magnetically (with metal brackets) and with self-taping screws.

The cleaning and grinding of concrete floors and walls by high pressure waterblasting or sandblasting preparatory to the application of waterproofing.

- The removing of rough or defective spots from concrete surfaces, using grinder or chisel and hammer and patching holes with fresh concrete or epoxy compound when not preparatory to sacking (finishing a large surface of patched holes).
- The setting of concrete curb, gutter and sidewalk forms as a composite crew with cement masons.
- The laying of concrete, granite and brick pavers in beds of sand.
- General cleanup required after damage caused by water or fire.

All clean-up work required in connection with the above work. Clean tools, equipment, materials and work areas:

(1) When the cleanup is performed for more than one trade (usually employed by general contractor).

(2) When assisting those trades for which laborers have been specifically designated as tenders, e.g., carpenter tender, cement finisher tender, etc.

[Statutory Authority: Chapter 39.12 RCW, RCW 43.22.270 and 43.22.051. WSR 00-15-077, § 296-127-01344, filed 7/19/00, effective 7/19/00.]