

ARIZONA DEPARTMENT OF TRANSPORTATION



ADVERTISEMENT FOR BIDS SPECIAL PROVISIONS BIDDERS DOCUMENTS

SUBMITTED BY:

(Company or Firm Name)

(Mailing Address)

(City)

(State)

(Zip Code)

(Street Address - If Different From Above)

(City)

(State)

(Zip Code)

Arizona Commercial License No. _____

License Classifications(s) _____

TRACS/Proj. No.:

0000 NA WIN SL71101C TEA-WIN-0(203)T
CITY OF WINSLOW
(The Station at La Posada)

Contracts and Specifications Section
1651 West Jackson, Room 121F
Phoenix, Arizona 85007-3217

NOTICE

TO ALL BIDDERS

Read carefully the complete ADVERTISEMENT FOR BIDS and SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS in the Specifications. Important information is given in both documents which affects the acceptance of your bid proposal. Failure to comply may result in rejection of your bid.

Bids are to be prepared with black ink or typed and any alterations, initials or signatures must be in black ink.

Unit prices must be shown for each item of work in the Bidding Schedule, as well as, the extended bid amount. This applies to all items, including lump sum items.

If goals are established for participation by Disadvantaged Business Enterprises (DBE's), please read carefully the portion of the special provisions which addressed this subject. It is advisable to contact ADOT's Business Engagement and Compliance Office for assistance, particularly when bidding infrequently or for the first time.

It is **NOT** advisable to mail bid proposals. Proposals received in Contracts and Specifications Services, 1651 W. Jackson, Room 121F, Phoenix, Arizona 85007, after the designated time for opening will not be accepted regardless of the reason for not being received on time.

IMPORTANT

PRIOR TO SUBMITTING YOUR BID, PRINT
COMPANY NAME, ADDRESS, CITY, STATE, AND ZIP
IN THE SPACE PROVIDED ON THE COVER OF
YOUR PROPOSAL. PLEASE ENSURE THAT THIS
DATA IS THE SAME AS SHOWN ON THE BIDDING
DOCUMENTS.

ARIZONA DEPARTMENT OF TRANSPORTATION

ADVERTISEMENT FOR BIDS

BID OPENING: FRIDAY, OCTOBER 21, 2016, AT 11:00 A.M. (M.S.T.)

TRACS NO 0000 NA WIN SL71101C
PROJ NO TEA-WIN-0(203)T
TERMINI CITY OF WINSLOW
LOCATION THE STATION AT LA POSADA

ROUTE NO. MILEPOST DISTRICT ITEM NO.
N/A N/A NORTHCENTRAL LOCAL

The amount programmed for this contract is \$980,000. The location and description of the proposed work and the representative items and approximate quantities are as follows:

The proposed project is located in Navajo County, in the City of Winslow, on E. 2nd Street between N. Apache Avenue and N. Snider Avenue. The work includes exterior building renovation, rest room renovation, mechanical and plumbing upgrades, roof replacement, and other related work.

REPRESENTATIVE ITEMS	UNIT	QUANTITY
Concrete Work	L.Sum	1
Masonry	L.Sum	1
Metals	L.Sum	1
Wood And Plastic	L.Sum	1
Thermal And Moisture Protection	L.Sum	1
Doors And Windows	L.Sum	1
Flooring	L.Sum	1
Paint	L.Sum	1
Mechanical	L.Sum	1
Electrical	L.Sum	1
Roof System	L.Sum	1

A site visit will be held from 10:00 am to Noon, on Tuesday, September 20, 2016. The initial meeting location will be in the parking lot, east of the La Posada Hotel. An ADOT representative will be on site to unlock buildings for contractors. All questions shall be sent to William Nanni at wnanni@azdot.gov.

The time allowed for the completion of the work included in this project will be 120 working days.

The Arizona Department of Transportation, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252.42 U.S.C. §§ 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, **Disadvantaged Business Enterprises** will be afforded full and fair opportunity to submit bids in response to this invitation and will not be

discriminated against on the grounds of race, color, or national origin in consideration for an award.

Project plans, special provisions, and proposal pamphlets may be purchased in paper format from Contracts and Specifications Section, 1651 W. Jackson, Room 121F, Phoenix, AZ 85007-3217, (602) 712-7221. The cost is \$27.00, payable at time of order by cash, check, or money order. Please indicate whether a bid proposal package or a subcontractor/supplier set is desired. An additional fee of \$5.00 will be charged for each set of Special Provisions requested which is not accompanied by the purchase of a related set of project plans. Checks should be made payable to the Arizona Department of Transportation. We cannot guarantee mail delivery. No refund will be made for plans or specifications returned.

Contract documents and other project documents are available as electronic files, at no charge, from the Contracts and Specifications website, pursuant to Subsection 102.02 of the specifications. The Contracts and Specifications Current Advertisements website is located at:

<http://www.azdot.gov/business/ContractsandSpecifications/CurrentAdvertisements>.

Documents should be available within one week following the advertisement for bids.

This project is eligible for electronic bidding.

To submit a valid bid, the bidder must (1) have prequalification from the Department as necessary for the project, and (2) be included on the project Plansholder List as a Prime. The Application for Contractor Prequalification shall be filed at least 15 calendar days prior to the bid opening date. The Application may be obtained from the Contracts and Specifications website.

This contract is subject to the provisions of Arizona Revised Statutes Section 42-5075 -- Prime contracting classification; exemptions; definitions.

No award will be made to any contractor who is not a duly licensed contractor in accordance with Arizona Revised Statutes 32-1101 through 32-1170.03.

All labor employed on this project shall be paid in accordance with the minimum wage rates shown in the General Wage Decision. These rates have been determined in accordance with the requirements of the law and issued by the Secretary of Labor for this project. The wage scale is on file in Contracts and Specifications Section and copies may be obtained at all reasonable times.

A proposal guaranty in the form of either a certified or a cashier's check made payable to the State Treasurer of Arizona for not less than ten percent of the amount of the bid or in the form of a surety (bid) bond for ten percent of the amount of the bid shall accompany the proposal.

Surety (bid) bonds will be accepted only on the form provided by the Department and only from corporate sureties authorized to do business in Arizona.

Proposal pamphlets in paper format shall be submitted only in the envelope provided by the Department to:

Arizona Department of Transportation
Infrastructure Delivery and Operations Division
Contracts and Specifications Section
1651 West Jackson Street, Room 121F
Phoenix, Arizona 85007-3217

Sealed bids will be received until the hour indicated and then publicly opened and read. No bids will be received after the time specified.

Engineering Specialist:	William Nanni	(602) 712-6899
Construction Supervisor:	Brenden Foley	(928) 714-2225

STEVE BEASLEY,
Manager
Contracts & Specifications

0000 NA WIN SL71101C
PROJECT ADVERTISED ON: 08/29/2016

SPECIAL PROVISIONS

FOR

ARIZONA PROJECT

0000 NA WIN SL71101C

TEA-WIN-0(203)T

CITY OF WINSLOW

THE STATION AT LA POSADA

RAILROAD DEPOT REHABILITATION

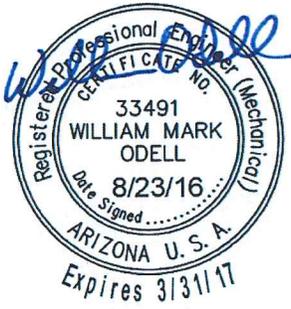
PROPOSED WORK:

The proposed project is located in Navajo County, in the City of Winslow, on E. 2nd Street between N. Apache Avenue and N. Snider Avenue. The work includes exterior building renovation, rest room renovation, mechanical and plumbing upgrades, roof replacement, and other related work.

Contracts and Specifications
W.N.: City of Winslow
8/22/2016

Special Provisions
0000 NA WIN SL71101C
TEA-WIN-0(203)T

PROFESSIONAL ENGINEERS SEALS



(SPC00FA, 06/09/16)

SPECIFICATIONS:

The work embraced herein shall be performed in accordance with the requirements of the following separate documents:

Arizona Department of Transportation, Standard Specifications for Road and Bridge Construction, Edition of 2008 (Pub. # 31-066),

Arizona Department of Transportation, Intermodal Transportation Division, Standard Drawings, listed in the project plans, and available on the Department's website,

Arizona Department of Transportation, Traffic Group, Manual of Approved Signs, available on the Department's website,

Arizona Department of Transportation, Traffic Group, Traffic Control Design Guidelines, Edition of 2010, available on the Department's website,

Manual on Uniform Traffic Control Devices for Streets and Highways, 2009 edition and Arizona Supplement to the 2009 edition, dated January, 2012,

The Proposal Pamphlet and Non-bid Pamphlet which include the following documents:

These Special Provisions,

Required Contract Provisions Federal-Aid Construction Contracts (Form FHWA 1273 Revised May 1, 2012),

Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246), July 1, 1978, Revised November 3, 1980 and Revised April 15, 1981,

Title VI / Non-Discrimination Assurances,
Appendix A
Appendix E,

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246), July 1, 1978, Revised November 3, 1980 and Revised April 15, 1981,

Equal Employment Opportunity Compliance Reports, Federal-Aid Projects, February 1, 1977, Revised July 1, 1978, Revised November 3, 1980, Revised April 15, 1981, Revised September 7, 1983, Revised October 15, 1998, Revised January 1, 2005, Revised August 1, 2005, and Revised March 1, 2015,

Wage Determination Decision,

Bidding Schedule,

Included in the Proposal Pamphlet only:

Proposal,

Surety (Bid) Bond, 12-1303,

Certification With Regard to the Performance of Previous Contracts or Subcontracts Subject to the Equal Opportunity Clause and the Filing of Required Reports, Federal Aid Projects, April, 1969, Rev. July, 2003,

Certification With Respect to the Receipt of Addenda,

BID SUBMISSION:

In submitting a bid, the holder of a Bid Proposal Pamphlet shall completely execute the following documents:

Proposal,

Bidding Schedule,

Surety (Bid) Bond, 12-1303,

Certification With Regard to the Performance of Previous Contracts or Subcontracts Subject to the Equal Opportunity Clause and the Filing of Required Reports, Federal Aid Projects, April, 1969, Rev. July, 2003, and

Certification With Respect to the Receipt of Addenda.

PROPOSAL GUARANTY:

Each bidder is advised to satisfy itself as to the character and the amount of the proposal guaranty required in the Advertisement for Bids.

CONTRACT DOCUMENTS:

The bidder to whom an award is made will be required to execute a Performance Bond and a Payment Bond, each in 100 percent of the amount of the bid, an Insurance Certificate and the Contract Agreement.

A copy of these documents is not included in the Proposal Pamphlet which is furnished to prospective bidders; however, each bidder shall satisfy itself as to the requirements of each document.

The documents, approved by the Department of Transportation, Highways Division, are identified as follows:

Statutory Performance Bond, 12-1301, September, 1992

Statutory Payment Bond, 12-1302, September, 1992

Contract Agreement, 12-0912, August, 2000

Certificate of Insurance, 12-0100, June, 1998

A copy of each document may be obtained by making a request to Contracts and Specifications Services.

COPIES OF PROJECT DOCUMENTS:

Distribution of a limited number of plans and Special Provisions will be made to the successful low bidder, at no charge, following confirmation of bid prices and DBE submittal, if applicable. The distribution will be made on the following basis:

Contract Size (Dollars)	Full Size Plans	1/2 Size Plans	Bound Bid Books	Unbound Bid Books
\$0 - \$20,000,000	2	10	5	10
over \$20,000,000	5	20	5	20

These plans and Special Provisions will be set aside and designated for use by the low bidder along with an equal number held in reserve for the responsible District Office.

Any additional plans or Special Provisions that the low bidder may require beyond the above distribution will be available at the invoice cost of printing by ordering through the Engineer.

MATERIAL AND SITE INFORMATION:

Projects requiring materials, excavation, or site investigation may have additional information available concerning the material investigations of the project site and adjacent projects. This information, when available and applicable, may be examined in the Office of the Bridge Group-Geotechnical Section, located at 1221 N. 21st Avenue, Phoenix, Arizona 85009-3740. The contractor may contact Bridge Group at (602) 712-7481 to schedule an appointment to examine the information. This information will not be attached to the contract documents. Copies of available information may be purchased by prospective bidders.

(EPRISENGL, 06/09/16)

DISADVANTAGED BUSINESS ENTERPRISES:

1.0 Policy:

The Arizona Department of Transportation (hereinafter the Department) has established a Disadvantaged Business Enterprise (DBE) program in accordance with the regulations of the U.S. Department of Transportation (USDOT), 49 CFR Part 26. The Department has received Federal financial assistance from the U.S. Department of Transportation and as a condition of receiving this assistance, the Department has signed an assurance that it will comply with 49 CFR Part 26.

It is the policy of the Department to ensure that DBEs, as defined in Part 26, have an equal opportunity to receive and participate in USDOT-assisted contracts. It is also the policy of the Department:

1. To ensure nondiscrimination in the award and administration of USDOT-assisted contracts;
2. To create a level playing field on which DBEs can compete fairly for USDOT-assisted contracts;
3. To ensure that the DBE program is narrowly tailored in accordance with applicable law;
4. To ensure that only firms that fully meet 49 CFR Part 26 eligibility standards are counted as DBEs;
5. To help remove barriers to the participation of DBEs in USDOT-assisted contracts,
6. To assist in the development of firms that can compete successfully in the market place outside the DBE program; and
7. To promote the use of DBEs in all types of federally-assisted contracts and procurement activities.

It is also the policy of the Department to facilitate and encourage participation of Small Business Concerns (SBCs), as defined herein, in USDOT-assisted contracts. The Department encourages contractors to take reasonable steps to eliminate obstacles to SBCs' participation and to utilize SBCs in performing contracts.

2.0 Assurances of Non-Discrimination:

The contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, sex or national origin in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the state deems appropriate, which may include, but are not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

The contractor, subrecipient, or subcontractor shall ensure that all subcontract agreements contain this non-discrimination assurance.

3.0 Definitions:

- (A) Commercially Useful Function (CUF):** Commercially Useful Function is defined fully in 49 CFR 26.55 which definition is incorporated herein by reference.
- (B) Disadvantaged Business Enterprise (DBE):** a for-profit small business concern which meets both of the following requirements:
- (1) Is at least 51 percent owned by one or more socially and economically disadvantaged individuals or, in the case of any publicly owned business, at least 51 percent of the stock is owned by one or more such individuals; and,
 - (2) Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.
- (C) Joint Check:** a two-party check between a subcontractor, DBE and/or non-DBE, a prime contractor and the regular dealer of material supplies.
- (D) Joint Venture:** an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.
- (E) NAICS Code:** The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the US business economy.
- (F) Non-DBE:** any firm that is not a DBE.
- (G) Race Conscious:** a measure or program is one that is focused specifically on assisting only DBEs, including women-owned DBEs.
- (H) Race Neutral:** a measure or program is one that is, or can be, used to assist all small businesses. For the purposes of this part, race-neutral includes gender-neutrality.
- (I) Small Business Concern:** a business that meets all of the following conditions:

- (1) Operates as a for-profit business
- (2) Operates a place of business primarily within the U.S., or makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials, or labor;
- (3) Is independently owned and operated;
- (4) Is not dominant in its field on a national basis; and
- (5) Does not have annual gross receipts that exceed the Small Business Administration size standards average annual income criteria for its primary North American Industry Classification System (NAICS) code.

(J) Socially and Economically Disadvantaged Individuals: any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who is:

- (1) Any individual who is found to be a socially and economically disadvantaged individual on a case-by-case basis.
- (2) Any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged:
 - (i) "Black Americans," which includes persons having origins in any of the Black racial groups of Africa;
 - (ii) "Hispanic Americans," which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
 - (iii) "Native Americans," which includes persons who are enrolled members of a federally or State recognized Indian tribe, Alaskan Natives or Native Hawaiians;
 - (iv) "Asian-Pacific Americans," which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Republic of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Tuvalu, Nauru, Federated States of Micronesia, or Hong Kong;
 - (v) "Subcontinent Asian Americans," which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
 - (vi) Women;
 - (vii) Any additional groups whose members are designated as socially and economically disadvantaged by the Small Business Administration (SBA), at such time as the SBA designation becomes effective.

4.0 Working with DBEs:

The Department works with DBEs and assists them in their efforts to participate in the highway construction program. All bidders should contact the Department's Business Engagement and Compliance Office (BECO) by phone, through email, or at the address shown below, for assistance in their efforts to use DBEs in the highway construction program of the Department. BECO contact information is as follows:

Arizona Department of Transportation
Business Engagement and Compliance Office
1801 W. Jefferson St., Ste. 101, Mail Drop 154A
Phoenix, AZ 85007
Phone (602) 712-7761
FAX (602) 712-8429
Email: contractorcompliance@azdot.gov
Website: www.azdot.gov/bec

4.01 Mentor-Protégé Program:

The Department has established a Mentor- Protégé program as an initiative to encourage and develop disadvantaged businesses in the highway construction industry. The program encourages prime contractors to provide certain types of assistance to certified DBE subcontractors. ADOT encourages contractors and certified DBE subcontractors to engage in a Mentor-Protégé agreement under certain conditions. Such an agreement must be mutually beneficial to both parties and to ADOT in fulfilling requirements of 49 CFR Part 23. For guidance regarding this program refer to the Mentor-Protégé Program Guidelines available on the BECO website.

The Mentor-Protégé program is intended to increase legitimate DBE activities. The program does not diminish the DBE rules or regulations, and participants may not circumvent these rules.

5.0 Applicability:

The Department has established an overall annual goal for DBE participation on Federal-aid contracts. The Department intends for the goal to be met with a combination of race conscious efforts and race neutral efforts. Race conscious participation occurs where the contractor uses a percentage of DBEs, as defined herein, to meet the contract-specified goal. Race neutral efforts are those that are, or can be, used to assist all small businesses or increase opportunities for all small businesses. The regulation, 49 CFR 26, describes race neutral participation as when a DBE wins a prime contract through customary competitive procurement procedures or is awarded a subcontract on a prime contract that does not carry a DBE contract goal.

The provisions are applicable to all bidders including DBE bidders.

6.0 Certification and Registration:

6.01 DBE Certification:

Certification as a DBE shall be predicated on:

- (1) The completion and execution of an application for certification as a "Disadvantaged Business Enterprise".
- (2) The submission of documents pertaining to the firm(s) as stated in the application(s), including but not limited to a statement of social disadvantage and a personal financial statement.
- (3) The submission of any additional information which the Department or the applicable Arizona Unified Certification (UCP) agency may require to determine the firm's eligibility to participate in the DBE program.
- (4) The information obtained during the on-site visits to the offices of the firm and to active job-sites.

Applications for certification may be filed online with the Department or the applicable UCP agency at any time through the Arizona Unified Transportation Registration and Certification System (AZ UTRACS) website at <http://www.azutracs.com>.

DBE firms and firms seeking DBE certification shall cooperate fully with requests for information relevant to the certification process. Failure or refusal to provide such information is a ground for denial or removal of certification.

ADOT is a member of the AZ Unified Certification Program (AZUCP). Only DBE firms that are certified by the AZUCP are eligible for credit on ADOT projects. A list of DBE firms certified by AZUCP is available on the internet at <http://www.azutracs.com/>. The list will indicate contact information and specialty for each DBE firm, and may be sorted in a variety of ways. However, ADOT does not guarantee the accuracy and/or completeness of this information, nor does ADOT represent that any licenses or registrations are appropriate for the work to be done.

The Department's certification of a DBE is not a representation of qualifications and/or abilities only that the firm has met the criteria for DBE certification as outlined in 49 CFR Part 26. The contractor bears all risks of ensuring that DBE firms selected by the contractor are able to perform the work.

6.02 SBC Registration:

To comply with 49 CFR Part 26.39 ADOT's DBE Program incorporates contracting requirements to facilitate participation by Small Business Concerns (SBCs) in federally assisted contracts. SBCs are for-profit businesses registered to do business in Arizona that meet the Small Business Administration (SBA) size standards for average annual revenue criteria for its primary North American Industry Classification System (NAICS) code.

While the SBC component of the DBE program does not require utilization goals on projects, ADOT encourages contractors to utilize small businesses that are registered in AZ UTRACS on their contracts, in addition to DBEs meeting the certification requirement. The contractor may use the AZ UTRACS website to search for certified DBEs and registered

SBCs that can be used on the contract. However, SBCs that are not DBEs will not be counted toward DBE participation.

SBCs can register online at the AZ UTRACS website. The Department's registration of SBCs is not a representation of qualifications and/or abilities. The contractor bears all risks of ensuring that SBC firms selected by the contractor are able to perform the work.

7.0 DBE Financial Institutions:

The Department thoroughly investigates the full extent of services offered by financial institutions owned and controlled by socially and economically disadvantaged individuals in its service area and makes reasonable efforts to use these institutions. The Department encourages prime contractors to use such institutions on USDOT assisted contracts. However, use of DBE financial institutions will not be counted toward DBE participation.

The Department encourages prime contractors to research the Federal Reserve Board website at www.federalreserve.gov to identify minority-owned banks in Arizona derived from the Consolidated Reports of Condition and Income filed quarterly by banks (FFIEC 031 and 041) and from other information on the Board's National Information Center database.

8.0 Time is of the Essence:

TIME IS OF THE ESSENCE IN RESPECT TO THE DBE PROVISIONS.

9.0 Computation of Time:

In computing any period of time described in this DBE special provision, such as calendar days, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal or State holiday, the period extends to the next day that is not a Saturday, Sunday, or Federal or State holiday. In circumstances where the Department's offices are closed for all or part of the last day, the period extends to the next day on which the Department's offices are open.

10.0 Contractor and Subcontractor Requirements:

10.01 General:

The contractor shall establish a DBE program that will ensure nondiscrimination in the award and administration of contracts and subcontracts.

Agreements between the bidder and a DBE in which the DBE promises not to provide subcontracting quotations to other bidders are prohibited.

10.02 DBE Liaison:

The contractor shall designate a DBE Liaison responsible for the administration of the contractor's DBE program. The name of the designated DBE Liaison shall be included in the DBE Intended Participation Affidavit Summary.

11.0 Bidders/Proposers List and AZ UTRACS Registration Requirement:

Under Title 49 CFR of the Code of Federal Regulations, Part 26.11, DOTs are required to collect certain information from all contractors and subcontractors who seek to work on federally-assisted contracts in order to set overall and contract DBE goals. ADOT collects this information through a Bidders/Proposers List when firms register their companies on the Arizona Unified Transportation Registration and Certification System (AZ UTRACS) web portal at <http://www.azutracs.com/> a centralized database for companies that seek to do business with ADOT. This information will be maintained as confidential to the extent allowed by federal and state law.

Prime contractors and all subcontractors, including DBEs, must be registered in AZUTRACS. Bidders may verify that their firm and each subcontractors is registered using the AZ UTRACS website.

Bidders may obtain additional information at the AZ UTRACS website or by contacting BECO.

Bidders shall create the Bidders/Proposers List in the AZ UTRACS by selecting all subcontractors, service providers, manufacturers and suppliers that expressed interest or submitted bids, proposals or quotes for this contract. The Bidders/Proposers List form must be complete and must include the names for all subcontractors, service providers, manufacturers and suppliers regardless of the bidders' intentions to use those firms on the project.

All bidders must complete the Bidders/Proposers List online at AZ UTRACS whether they are the apparent low bidder or not. A confirmation email will be generated by the system. The bidders shall submit to BECO a copy of the email confirmation no later than 4:00 p.m. on the seventh calendar day following the bid opening. Faxed copies are acceptable.

FAILURE TO SUBMIT THE REQUIRED BIDDERS/PROPOSERS LIST CONFIRMATION EMAIL TO BECO BY THE STATED TIME AND IN THE MANNER HEREIN SPECIFIED SHALL BE CAUSE FOR THE BIDDER BEING DEEMED INELIGIBLE FOR AWARD OF THE CONTRACT.

12.0 DBE Goals:

The Department has not established contract goals for DBE participation in this contract. Contractors are still encouraged to employ reasonable means to obtain DBE participation. Contractors must retain records in accordance with these DBE specifications. The contractor is notified that this record keeping is important to the Department so that it can track DBE participation where only race neutral efforts are employed.

13.0 Payment Reporting:

The contractor shall report on a monthly basis indicating the amounts paid to all subcontractors, of all tiers, working on the project. Reporting shall be in accordance with Subsection 109.06(B)(5) of the specifications.

14.0 Crediting DBE Participation:

14.01 General Requirements:

To count toward DBE participation, the DBE firm must be certified in each NAICS code applicable to the kind of work the firm will perform on the contract. NAICS for each DBE can be found on the AZ UTRACS under the Firm Directory. General descriptions of all NAICS codes can be found at www.naics.com.

The entire amount of a contract that is performed by the DBE's own forces, including the cost of supplies and materials purchased by the DBE for the work on the contract and equipment leased by the DBE will be credited toward DBE participation. Supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate will not be credited toward DBE participation.

The contractor bears the responsibility to determine whether the DBE possesses the proper contractor's license(s) to perform the work.

The Department's certification is not a representation of a DBE's qualifications and/or abilities. The contractor bears all risks that the DBE may not be able to perform its work for any reason.

A DBE may participate as a prime contractor, subcontractor, joint venture partner with either a prime contractor or a subcontractor, or as a vendor of materials or supplies. A DBE joint venture partner shall be responsible for a clearly defined portion of the work to be performed, in addition to meeting the requirements for ownership and control.

The dollar amount of work to be accomplished by DBEs, including partial amount of a lump sum or other similar item, shall be on the basis of subcontract, purchase order, hourly rate, rate per ton, etc., as agreed to between parties.

With the exception of bond premiums, all work must be attributed to specific bid items. Where work applies to several items, the DBE contracting arrangement must specify unit price and amount attributable to each bid item. DBE credit for any individual item of work performed by the DBE shall be the lesser of the amount to be paid to the DBE or the prime contractor's bid price. If the amount bid by the DBE on any item exceeds the prime contractor's bid amount, the prime contractor may not obtain credit by attributing the excess to other items.

Where more than one DBE is engaged to perform parts of an item (for example, supply and installation), the total amount payable to the DBEs will not be considered in excess of the prime contractor's bid amount for that item.

Bond premiums may be stated separately, so long as the arrangement between the prime contractor and the DBE provides for separate payment not to exceed the price charged by the bonding company.

DBE credit may be obtained only for specific work done for the project, supply of equipment specifically for physical work on the project, or supply of materials to be incorporated in the

work. DBE credit will not be allowed for costs such as overhead items, capital expenditures (for example, purchase of equipment), and office items.

If a DBE performs part of an item (for example, installation of materials purchased by a Non-DBE), the DBE credit shall not exceed the lesser of (1) the DBE's contract or (2) the prime contractor's bid for the item, less a reasonable deduction for the portion performed by the Non-DBE.

When a DBE performs as a partner in a joint venture, only that portion of the total dollar value of the contract which is clearly and distinctly performed by the DBE's own forces can be credited.

The contractor may credit second-tier subcontracts issued to DBEs by non-DBE subcontractors. Any second-tier subcontract to a DBE must meet the requirements of a first-tier DBE subcontract.

A prime contractor may credit the entire amount of that portion of a construction contract that is performed by the DBE's own forces. The cost of supplies and materials obtained by the DBE for the work of the contract can be included so long as that cost is reasonable. Leased equipment may also be included. No credit is permitted for supplies purchased or equipment leased from the prime contractor or its affiliate(s).

When a DBE subcontracts a part of the work of its contract to another firm, the value of the subcontract may be credited towards DBE participation only if the DBE's subcontractor is itself a DBE and performs the work with its own forces. Work that a DBE subcontracts to a non-DBE firm does not count towards DBE participation.

A prime contractor may credit the entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a USDOT-assisted contract, provided the fees are reasonable and not excessive as compared with fees customarily allowed for similar services.

14.02 Effect of Loss of DBE Eligibility:

If a DBE is deemed ineligible (decertified) or suspended by the Department in accordance with 49 CFR 26.87 and 26.88, the DBE may not be considered to count toward DBE participation on a new contract, but may be considered to count toward DBE participation under a subcontract that was executed before the DBE suspension or decertification is effective.

When a DBE firm or a DBE prime contractor loses its DBE eligibility and a subcontract or contract has not been executed before a decertification notice is issued to the DBE firm by its certifying agency, the ineligible firm does not count toward DBE participation. When a subcontract is executed with the DBE firm before the Department notified the firm of its ineligibility, the contractor may continue to receive DBE participation credit for the firm's work on the contract.

14.03 Notifying the Contractor of DBE Certification Status:

Each DBE contract of any tier shall require any DBE subcontractor or supplier that is either decertified or certified during the term of the contract to immediately notify the contractor and all parties to the DBE contract in writing, with the date of decertification or certification. The contractor shall require that this provision be incorporated in any contract of any tier in which a DBE is a participant.

14.04 Police Officers:

DBE credit will not be permitted for procuring DPS officers. For projects on which officers from other agencies are supplied, DBE credit will be given only for the broker fees charged, and will not include amounts paid to the officers. The broker fees must be reasonable.

14.05 Commercially Useful Function:

A prime contractor can credit expenditures to a DBE subcontractor only if the DBE performs a commercially useful function (CUF) on the contract.

A DBE performs a CUF when it is responsible for execution of the work of a contract and carries out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself that it uses on the project. To determine whether a DBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.

A DBE will not be considered to perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, the Department will examine similar transactions, particularly those in which DBEs do not participate.

If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, or if the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, the Department will presume that the DBE is not performing a commercially useful function.

When a DBE is presumed not to be performing a commercially useful function as provided above, the DBE may present evidence to rebut this presumption. The Department will determine if the firm is performing a CUF given the type of work involved and normal industry practices.

The Department will notify the contractor, in writing, if it determines that the contractor's DBE subcontractor is not performing a CUF. The contractor will be notified within seven calendar days of the Department's decision.

Decisions on CUF may be appealed to the State Engineer. The appeal must be in writing and personally delivered or sent by certified mail, return receipt requested, to the State Engineer. The appeal must be received by the State Engineer no later than seven calendar days after the decision of BECO. BECO's decision remains in effect unless and until the State Engineer reverses or modifies BECO's decision. The State Engineer will promptly consider any appeals under this subsection and notify the contractor of the State Engineer's findings and decisions. Decisions on CUF matters are not appealable to USDOT.

The Department will conduct project site visits on the contract to confirm that DBEs are performing a CUF. The contractor shall cooperate during the site visits and the Department's staff will make every effort not to disrupt work on the project.

14.06 Trucking:

The Department will use the following factors in determining whether a DBE trucking company is performing a commercially useful function. The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract.

The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract on every day that credit is to be given for trucking.

The contractor will receive credit for the total value of transportation services provided by the DBE using trucks it owns, insures and operates, and using drivers it employs.

The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services.

The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks with drivers from a non-DBE is entitled to credit for the total value of the transportation services provided by non-DBE leased trucks with drivers not to exceed the value of transportation services on the contract provided by DBE-owned trucks or leased trucks with DBE employee drivers. Additional participation by non-DBE owned trucks with drivers receives credit only for the fee or commission paid to the DBE as a result of the lease agreement.

Example: DBE Firm X uses two of its own trucks on contract. It leases two trucks from DBE Firm Y and six trucks from non-DBE firm Z. DBE credit would be awarded for the total value of transportation services provided by Firm X and Firm Y, and may also be awarded for the total value of transportation services provided by four of the six trucks provided by Firm Z. In all, full credit would be allowed for the participation of eight trucks. DBE credit could be awarded only for the fees or commissions pertaining to the remaining trucks Firm X receives as a result of the lease with Firm Z.

The DBE may lease trucks without drivers from a non-DBE truck leasing company. If the DBE leases trucks from a non-DBE leasing company and uses its own employees as drivers, it is entitled to credit for the total value of these hauling services.

Example: DBE Firm X uses two of its own trucks on a contract. It leases three additional trucks from non-DBE Firm Z. Firm X uses its own employees to drive the trucks leased from Firm Z. DBE credit would be awarded for the total value of the transportation services provided by all five trucks.

For purposes of this section, a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE. DBE participation will be allowed only for those lease costs related to the time each truck is devoted to the project.

DBE credit for supplying paving grade asphalt and other asphalt products will only be permitted for standard industry hauling costs, and only if the DBE is owner or lessee of the equipment and trucks. Leases for trucks must be long term (extending for a fixed time period and not related to time for contract performance) and must include all attendant responsibilities such as insurance, titling, hazardous waste requirements, and payment of drivers.

14.07 Materials and Supplies:

The Department will credit expenditures with DBEs for material and supplies as follows. If the materials or supplies are obtained from a DBE manufacturer, 100 percent of the cost of the materials or supplies is credited. A manufacturer is defined as a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract, and of the general character described by the specifications.

If the materials or supplies are purchased from a DBE regular dealer, 60 percent of the cost of the materials or supplies is credited. A DBE regular dealer is defined as a firm that owns, operates, or maintains a store or warehouse or other establishment in which the materials, supplies, articles, or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. A firm may be a DBE regular dealer in such bulk items as petroleum products, steel, cement, stone or asphalt without owning, operating, or maintaining a place of business, as provided above, if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement, and not on an ad-hoc or contract-by-contract basis. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of this paragraph and the paragraph above.

With respect to materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer, the Department will credit the entire amount of the fees or commissions charged by the DBE for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, toward DBE goals, provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services. The cost of the materials and supplies themselves may not be counted toward DBE participation.

The Department will credit expenditures with DBEs for material and supplies (e.g. whether a firm is acting as a regular dealer or a transaction expediter) towards the DBE participation on a contract-by-contract basis. The fact that a DBE firm qualifies under a classification (manufacturer, regular dealer or supplier) for one contract does not mean it will qualify for the same classification on another contract.

15.0 Joint Checks:

15.01 Requirements:

A DBE subcontractor and a material supplier (or equipment supplier) may request permission for the use of joint checks for payments from the prime contractor to the DBE subcontractor and the supplier. Joint checks may be issued only if all the conditions in this subsection are met.

1. The DBE subcontractor must be independent from the prime contractor and the supplier, and must perform a commercially useful function. The DBE subcontractor must be responsible for negotiating the price of the material, determining quality and quantity, ordering the materials, installing (where applicable), and paying for the material. The DBE subcontractor may not be utilized as an extra participant in a transaction, contract, or project in order to obtain the appearance of DBE participation.
2. The use of joint checks will be allowed only if the prime contractor, DBE subcontractor, and material supplier establish that the use of joint checks in similar transactions is a commonly recognized business practice in the industry, particularly with respect to similar transactions in which DBE's do not participate.
3. A material or supply contract may not bear an excessive ratio relative to the DBE subcontractor's normal capacity.
4. There may not be any exclusive arrangement between one prime and one DBE in the use of joint checks that may bring into question whether the DBE is independent of the prime contractor.
5. Any arrangement for joint checks must be in writing, and for a specific term (for example, one year, or a specified number of months) that does not exceed a reasonable time to establish a suitable credit line with the supplier.
6. The prime contractor may act solely as the payer of the joint check, and may not have responsibility for establishing the terms of the agreement between the DBE subcontractor and the supplier.

7. The DBE must be responsible for receiving the check from the prime contractor and delivering the check to the supplier.
8. The prime contractor cannot require the DBE subcontractor to use a specific supplier, and the prime contractor may not participate in the negotiation of unit prices between the DBE subcontractor and the supplier.

15.02 Procedure and Compliance:

1. The Business Engagement and Compliance Office must approve the agreement for the use of joint checks in writing before any joint checks are issued. The prime contractor shall submit a DBE joint check request form, available from the BECO website, along with the joint check agreement, to BECO through email within seven calendar days from the time the subcontract is executed.
2. After obtaining authorization for the use of joint checks, the prime contractor, the DBE, and the supplier must retain documentation to allow for efficient monitoring of the agreement.
3. Copies of canceled checks must be submitted, with the payment information for the period in which the joint check was issued, electronically through email to BECO, and made available for review at the time of the onsite CUF review. The prime contractor, DBE, and supplier each have an independent duty to report to the Department in the case of any change from the approved joint check arrangement.
4. Any failure to comply will be considered by the Department to be a material breach of this contract and will subject the prime contractor, DBE, and supplier to contract remedies and, in the case of serious violations, a potential for termination of the contract, reduction or loss of prequalification, debarment, or other remedies which may prevent future participation by the offending party.

16.0 Certification of Final DBE Payments:

DBE participation on the contract is measured by actual payments made to the DBEs. The contractor shall submit the "Certification of Final DBE Payments" form for each DBE firm working on the contract. This form shall be signed by the contractor and the relevant DBE, and submitted to the Engineer no later than 30 days after the DBE completes its work.

The contractor will not be released from the obligations of the contract until the "Certification of Final DBE Payments" forms are received and deemed acceptable by the Engineer and BECO.

17.0 False, Fraudulent, or Dishonest Conduct:

In addition to any other remedies or actions, the Department will bring to the attention of the US Department of Transportation any appearance of false, fraudulent, or dishonest conduct in connection with the DBE program, so that USDOT can take steps such as referral to the Department of Justice for criminal prosecution, referral to the USDOT Inspector General for possible initiation of suspension and debarment proceedings against the offending parties or application of "Program Fraud and Civil Penalties" rules provided in 49 CFR Part 31.

GENERAL REQUIREMENTS:

Availability of Documents:

Project documents will be available as shown below:

Documents	Paper Format	Electronic Format
Project Plans	X	X
Special Provisions	X	X
Proposal Pamphlet	X	X
Additional Documents (if available)		
Cross Sections		X
Earthwork Quantity Sheets		X
Other Reports		X
Existing Ground Digital Terrain Model (DTM)		X
Design Digital Terrain Model (DTM)		X

Documents in Electronic Format:

Project documents in electronic format are available on the Contracts and Specifications website.

In the case of any conflict or discrepancy between the project plans, specifications, or proposal pamphlet in paper and electronic format, the paper document shall govern.

The project plans are provided in PDF format. The Department makes no representation or warranties as to the compatibility, usability, or readability of the PDF plans with any system, software, hardware, or application package other than that on which the files were originally saved. The contractor bears the sole risk of any modifications, manipulations, or alterations to the plans.

The special provisions and proposal pamphlet are provided in PDF format. The Department makes no representation or warranties as to the compatibility, usability, or readability of the PDF documents with any system, software, hardware, or application package other than that on which the files were originally saved. The contractor bears the sole risk of any modifications, manipulations, or alterations to the special provisions and proposal pamphlet.

The cross sections, earthwork quantity sheets, and other reports, if applicable, are provided only in PDF format. They are provided for information purposes and contractor convenience only. They are not part of the contract documents. The contractor's use of the information in the cross sections, earthwork quantity sheets, and other reports is at the contractor's sole risk. The Department makes no representation or warranties as to the compatibility, usability, or readability of the PDF documents with any system, software, hardware, or application package other than that on which the files were originally saved. The contractor bears the sole risk of any modifications, manipulations, or alterations to the documents.

The existing ground DTM and the design DTM, if applicable, are provided as DGN files. They are provided for information purposes and contractor convenience only. The DTMs are not part of the contract documents. The contractor's use of the information in the DTMs is at the contractor's sole risk. The Department makes no representation or warranties as to the compatibility, usability, or readability of the DTMs with any system, software, hardware, or application package other than that on which the files were originally prepared. The version of Microstation used to save the DTMs is indicated at <http://www.azdot.gov/business/engineering-and-construction/CADD>.

The Department is providing the electronic project files to bidders for informational purposes in conjunction with work or services to be provided to the Department under this project. Any use of the electronic files for any purposes other than for this project is prohibited.

Cargo Preference Act:

1.0 Description

The Federal Highway Administration (FHWA) in partnership with the Federal Maritime Administration has mandated the implementation of 46 CFR 381 making the requirements of the Cargo Preference Act (CPA) applicable to the Federal Aid Highway Program.

The requirements apply to items transported by ocean vessel.

The requirements of 46 CFR 381 apply to materials or equipment acquired for a specific federal-aid highway project. In general, the requirements are not applicable to goods or materials that come from inventories independent of FHWA-funded contracts.

Information related to the CPA is presented in "Cargo Preference Requirements – Questions and Answers" available from the FHWA at <https://www.fhwa.dot.gov/construction/cqit/cargo/qa.cfm>.

2.0 Contract Requirements

The contractor shall comply with the requirements of the Cargo Preference Act 46 CFR 381.7(a)-(b). By executing a construction contract for this project, the contractor agrees:

- (1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- (2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in the paragraph above to both the Engineer and to the Division of

National Cargo, Office of Market Development, Maritime Administration,
Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

Bidders/Proposers List and AZ UTRACS Registration Requirements:

Prime contractors and all subcontractors, including DBEs, must be registered in AZ UTRACS.

Bidders shall create the Bidders/Proposers List in the AZ UTRACS by selecting all subcontractors, service providers, manufacturers and suppliers that expressed interest or submitted bids, proposals or quotes for this contract.

All bidders must complete the Bidders/Proposers List online at AZ UTRACS whether they are the apparent low bidder or not. A confirmation email will be generated by the system. The bidders shall submit a copy of the email confirmation to BECO no later than 4:00 p.m. on the seventh calendar day following the bid opening. Faxed copies are acceptable.

FAILURE TO SUBMIT THE REQUIRED BIDDERS/PROPOSERS LIST CONFIRMATION EMAIL TO BECO BY THE STATED TIME AND IN THE MANNER HEREIN SPECIFIED SHALL BE CAUSE FOR THE BIDDER BEING DEEMED INELIGIBLE FOR AWARD OF THE CONTRACT.

Additional information regarding the Bidders List and AZ UTRACS Registration can be found in the Disadvantaged Business Enterprises Specification herein and by contacting the Business Engagement Compliance Office (BECO).

Environmental Mitigation Measures:

The following project-specific mitigation measures are required to address key environmental issues and other concerns that were identified as part of the plan development process. These mitigations will be followed at no additional cost to the Department. These mitigation measures are not subject to change without prior written approval from the Federal Highway Administration.

- If suspected hazardous materials are encountered during construction, work shall cease at that location and the Engineer will be notified. The Engineer will contact the Arizona Department of Transportation Environmental Planning Group hazardous materials coordinator (602.920.3882 or 602.712.7767) immediately, and make arrangements for proper treatment of those materials.
- An approved contractor shall develop and implement a lead-based paint abatement plan for the removal of the lead based paint, Toxicity Characteristic Leaching Procedure testing of the generated waste stream, and proper disposal of the waste stream derived from the removal of the interior paint on bathroom walls within the project limits. The contractor shall follow all applicable local, state and federal codes and regulations.

- The contractor shall submit a lead-based paint removal and disposal plan for the removal of paint on interior bathroom walls within the project limits to the Engineer and the Arizona Department of Transportation, Environmental Planning Group Hazardous Materials Coordinator (602.712.7767 or 602.920.3882) for review and approval at least 10 working days prior to bathroom renovation activities.
- No bathroom renovation activities shall occur until the lead-based paint abatement plan is approved by the Arizona Department of Transportation, Environmental Planning Group Hazardous Material Coordinator and implemented.
- Visible fugitive dust emissions from paint removal shall be controlled through wet or dry (e.g. vacuum) means during the removal process. If the liquid waste stream generated by a water blasting obliteration method passes the Toxicity Characteristic Leaching Process analysis, it may be used as a dust palliative or for compaction on the project. If the water is not used on the project, it must be properly disposed of, in accordance with all applicable Federal State and Local regulations.
- If previously unidentified cultural resources are encountered during activity related to the construction of the project, the contractor shall stop work immediately at that location and shall take all reasonable steps to secure the preservation of those resources. The Engineer will contact the Arizona Department of Transportation Environmental Planning Group Historic Preservation Team, (602.712.4636 or 602.712.7767) immediately, and make arrangements for proper treatment of those resources.
- All work and staging shall be performed on the project property.

(101ABRV, 02/04/16)

SECTION 101 DEFINITIONS AND TERMS:

101.01 Abbreviations: of the Standard Specifications is modified to add:

ARPA	Arizona Rock Products Association
IFI	International Fasteners Institute
ISO	International Organization for Standardization
ISSA	International Slurry Surfacing Association
NICET	National Institute for Certification in Engineering Technologies
NEC	National Electrical Code
NRMCA	National Ready Mixed Concrete Association
NSPS	National Society of Professional Surveyors

PPI	Plastic Pipe Institute
SSPC	Society for Protective Coatings

(101DEFN, 02/22/16)

SECTION 101 DEFINITIONS AND TERMS:

101.02 Definitions:

Bidding Schedule: of the Standard Specifications is revised to read:

The prepared schedule containing the estimated quantities of the pay items for which unit bid prices are invited.

Working Day: of the Standard Specifications is revised to read:

A day, exclusive of Saturdays, Sundays and State-recognized holidays, beginning at midnight, extending for a twenty-four hour period, and ending at midnight. Any Saturday, Sunday, or State-recognized holiday on which the contractor has been approved to work will also be counted as a working day. Working days on which weather conditions do not permit work on the project to proceed, as determined by the Engineer, will not be charged.

(102PREQ, 02/22/16)

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS

102.02 Prequalification of Bidders: the title and text of the Standard Specifications is revised to read:

102.02 Prerequisites for Bidding:

(A) General:

To submit a valid bid, the bidder must:

- (1) have prequalification from the Department as necessary for the project, in accordance with paragraph (B) of this Subsection, and
- (2) be included on the project Plansholder List as a Prime in accordance with paragraph (C) of this Subsection.

(B) Prequalification of Bidders:

Prior to submitting a bid, the bidder will (unless waived by the Department) be required to be prequalified with the Department to bid on the project. The submission of Prequalification

information and determination of Prequalification shall be in accordance with the requirements of the Rules for Prequalification of Contractors as approved and adopted by the Department.

(C) Plansholder List:

There are two ways for a bidder to be included on the project Plansholder List as a Prime. It is the bidder's responsibility to ensure that it is on the Plansholder List as a Prime prior to submitting a bid.

If a bidder is issued a proposal pamphlet in paper format by the Department, the Department will place the bidder on the project Plansholder List as a Prime.

Firms can register electronically requesting placement on the project Plansholder List as either a Prime or Subcontractor/Vendor as follows:

- (a) Go to the C&S Website.
- (b) Select "Current Advertisements".
- (c) Identify the project of interest.
- (d) Click on the "Register" icon.
- (e) Select the "Bidder" or "Subcontractor/Vendor" radio button.
- (f) Complete all required fields.
- (g) Click "Save". This submits the request to the Department.
- (h) If all required information is provided, the "ADOT C&S Advertisement Registration Confirmation Screen" will appear. An email will also be sent to the email address provided acknowledging the request.

Requests to be included on the Plansholder List as a Prime will be evaluated by the Department to determine whether the bidder is prequalified for the project. The Department cannot guarantee that requests to be on the Plansholder List will be considered if the request is submitted less than five working days prior to the bid opening. The Department will send an email to the email address provided notifying the contractor of the results of their request.

The Department's email will state whether the request was approved or denied. More information regarding the Department's decision may be obtained by contacting the Contracts and Specifications Section.

If an individual from a firm submits a duplicate request to be placed on the Plansholder List, the request will be denied. The Department will register the contact person listed on the duplicate request to receive email notices of updates to the project. The Department will

send an email to the email address provided notifying the contractor of the results of their request.

(D) Registration for Notifications:

Firms on the Plansholder List as a Prime or a Subcontractor/Vendor will receive notification of any changes to the project. Other interested parties can register electronically to receive email notification of any changes to the project as follows:

- (a) Go to the C&S Website.
- (b) Select "Current Advertisements".
- (c) Identify the project of interest.
- (d) Click on the "Register" icon.
- (e) Select the "Other" radio button.
- (f) Select the "Yes" radio button in response to "Are you interested in registering to be notified about any changes made to this advertisement?"
- (g) Complete all required fields.
- (h) Click "Save". This submits the request to the Department.
- (i) If all required information is provided, the "ADOT C&S Advertisement Registration Confirmation Screen" will appear. An email will also be sent to the email address provided acknowledging the request.

All parties registering to receive notifications will be sent an email when changes are made to the project.

(102NOBID, 09/19/12)

SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS:

102.03 Suspension from Bidding: of the Standard Specifications is revised to read:

The Department may suspend any person and any subsidiary or affiliate of any person from further bidding to the Department and from being a subcontractor or a supplier or otherwise participating in the work:

- (A) If that person or any officer, director, employee or agent of that person is convicted, in this State, or any other jurisdiction, of a crime involving any of the following elements or actions:
- (1) Entering into any contract, combination, conspiracy or other unlawful act in restraint of trade or commerce;
 - (2) Knowingly and willfully falsifying, concealing, or covering up a material fact by trick, scheme, or device;
 - (3) Making false, fictitious, or fraudulent statements or representations;
 - (4) Making or using a false writing or document knowing it to contain a false, fictitious, or fraudulent statement or entry;
 - (5) Misrepresentation or false statement on any application for bonding;
 - (6) Misrepresentation or false statement on any application for prequalification; or
- (B) If the Department makes a finding of any of the above or finds that the contractor is not a Responsible Bidder or a Responsible Contractor.
- (C) If the Department determines that a contractor, subcontractor, or supplier has repeatedly or willfully failed to comply with federal or state immigration laws.

Under this subsection, a person means any individual, partnership, joint venture, corporation, association or other entity formed for the purpose of doing business as a contractor, subcontractor or supplier.

The signature of the bid proposal by a bidder constitutes the bidder's certification, under penalty of perjury under the laws of the United States, that the bidder, or any person associated therewith in the capacity of owner, partner, director, officer, principal investor, project director, manager, auditor, or any position involving the administration of federal funds, has not been, or is not currently, under suspension, debarment, voluntary exclusion or been determined ineligible by any federal agency within the past three years. Signature of the bid proposal also certifies, under penalty of perjury under the laws of the United States, that the bidder does not have a proposed debarment pending. In addition, signature of the bid proposal certifies that the bidder has not been indicted, convicted, or had a civil judgment rendered against (it) by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.

Any exceptions to the above paragraph shall be noted and fully described on a separate sheet and attached to the bid proposal.

(102PRPMT, 02/22/16)

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS:

102.04 Contents of Proposal Pamphlet: the first paragraph of the Standard Specifications is revised to read:

The proposal pamphlet will state the location and description of the contemplated construction and will show the approximate estimate of the various quantities and kinds of work to be performed or materials to be furnished and will have a schedule of items for which unit bid prices are invited. The proposal pamphlet will state the time in which the work must be completed, the type and amount of the proposal guaranty and the date, time and place of the opening of proposals. The pamphlet will also include any Special Provisions or requirements which vary from or are not included in the Standard Specifications. Additional contract documents applicable to the specific project are listed in the Special Provisions.

(102ISSPSL, 02/22/16)

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS:

102.05 Issuance of Proposals: of the Standard Specifications is revised to read:

The Department reserves the right to refuse to issue proposal documents or to accept bids for any of the following reasons:

- (A) Lack of competency or adequate machinery, plant and other equipment, as revealed by the financial statement and experience questionnaires required under Subsection 102.02.
- (B) Incomplete work which, in the judgment of the Department, might hinder or prevent the prompt completion of additional work if awarded.
- (C) Failure to pay or settle satisfactorily all bills due for work on other contracts.
- (D) Failure to comply with any qualification regulations of the Department.
- (E) Default under previous contracts.
- (F) Unsatisfactory performance on previous work.
- (G) Entering into any contract, combination, conspiracy, or other unlawful act in restraint of trade or commerce.
- (H) Knowingly and willfully falsifying, concealing, or covering up a material fact by trick, scheme, or device.

- (I) Making false, fictitious, or fraudulent statements or representations.
- (J) Making or using a false writing or document knowing it to contain a false, fictitious, or fraudulent statement or entry.
- (K) Misrepresentation or false statement on any application for bonding.
- (L) Misrepresentation or false statement on any application for prequalification.
- (M) Lack of sufficient ability or integrity to complete the contract.

(102EXAM, 02/22/16)

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS

102.07 Examination of Plans, Specifications and Site of Work: the second paragraph of the Standard Specifications is revised to read:

A set of plans, special provisions, and the proposal pamphlet will be on file at Contracts and Specifications, 1651 W. Jackson, Room 121F, Phoenix.

Project plans, special provisions, proposal pamphlets, and other project documents, if available, will be provided in electronic format, at no charge, on the Contracts and Specifications website. Any interested party can access the advertised project documents.

(102LOBY, 10/01/90)

SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS:

102.09 Non-Collusion Certification: of the Standard Specifications is modified to add:

(A) Lobbying:

The bidder certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federally appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract grant, loan, or cooperative agreement.

- (2) If any funds other than Federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions. Copies of Form-LLL, "Disclosure Form to Report Lobbying", are available at ADOT Contracts and Specifications Services, 1651 W. Jackson, Room 121F, Phoenix, AZ 85007.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The bidder also agrees, by submitting his or her bid or proposal, which he or she shall require that the language of this certification be included in all subcontracts and lower tier subcontracts which exceed \$100,000 and that all such subcontractors and lower tier subcontractors shall certify and disclose accordingly.

The Department will keep the prime contractors' certifications on file as part of their original bid proposals. Each prime contractor shall keep individual certifications from all subcontractors and lower tier subcontractors on file. Certifications shall be retained for three years following completion and acceptance of any given project.

Disclosure forms for the prime contractor shall be submitted to the Engineer at the pre-construction conference. Disclosure forms for subcontractors and lower tier subcontractors shall be submitted to the Engineer by the prime contractor along with the submittal of each subcontract or lower tier subcontract, as required under Subsection 108.01, when said subcontracts exceed \$100,000.00. During the performance of the contract the prime contractor and any affected subcontractors shall file revised disclosure forms at the end of each calendar year quarter in which events occur that materially affect the accuracy of any previously filed disclosure form. Disclosure forms will be submitted by the Engineer to the Federal Highway Administration for further processing.

(102IRPSL, 02/22/16)

SECTION 102 BIDDING REQUIREMENTS AND CONDITIONS:

102.10 Irregular Proposals: Item (B) of the Standard Specifications is revised to read:

- (B) Proposals will be considered irregular and will be rejected for any of the following reasons:
- (1) If the bidder is not on the project Plansholder List as a Prime.
 - (2) If the proposal, bid bond or bidding schedule is on a form other than that furnished by the Department.
 - (3) If the bidder or surety fails to provide a proposal guaranty as specified in Subsection 102.12.
 - (4) If the bidder fails to sign the proposal when submitting a bid in the paper format.
 - (5) If the bidding schedule does not contain a unit price for each pay item listed except in the case of authorized alternate pay items.
 - (6) If the bidder fails to meet the required goal for Disadvantaged Business Enterprises (DBE) established in the Special Provisions or show good faith effort as determined by the Department.
 - (7) If the bidder submits a proposal in both the electronic format and in the paper format.

(103RSBTY, 02/22/16)

SECTION 103 AWARD AND EXECUTION OF CONTRACT:

103.03 Responsibility: the third paragraph of the Standard Specifications is revised to read:

Non-responsibility may also be found for any of the following reasons:

- (A) Anti-competitive acts;
- (B) Lack of competency and adequate machinery, plant and other equipment, as revealed by the financial statement and experience questionnaires required under Subsection 102.02;

- (C) Incomplete work which, in the judgment of the Department, might hinder or prevent the prompt completion of additional work if awarded;
- (D) Failure to pay or settle satisfactorily all bills due for work on other contracts;
- (E) Failure to comply with any qualification regulations of the Department;
- (F) Default under previous contracts;
- (G) Unsatisfactory performance on previous work;
- (H) Knowingly and willfully falsifying, concealing, or covering up a material fact by trick, scheme, or device;
- (I) Making false, fictitious, or fraudulent statements or representations;
- (J) Making or using a false writing or document knowing it to contain a false, fictitious, or fraudulent statement or entry;
- (K) Lack of a proper contractor's license; or
- (L) Lack of sufficient ability or integrity to complete the contract.

(103AWARD, 12/14/09)

SECTION 103 - AWARD AND EXECUTION OF CONTRACT:

103.04 **Award of Contract:** the first paragraph of the Standard Specifications is modified to add:

When a contract is funded, either wholly or in part, by federal funds, an award of contract may be made contingent upon the successful bidder obtaining an appropriate license from the State Registrar of Contractors, in accordance with Arizona Revised Statutes 32-1101 through 32-1170.03. The license must be obtained within 60 calendar days following opening of bid proposals. No adjustment in proposed bid prices or damages for delay will be allowed as a result of any delay caused by the lack of an appropriate license.

Failure to acquire the necessary licensing within the specified period of time shall result in either award to the next lowest responsible bidder, or re-advertisement of the contract, as may be in the best interests of the Department.

Licensing information is available from:

Registrar of Contractors
3838 N. Central
Suite 400
Phoenix, AZ 85012
Phone: (602) 542-1525

(104STORM, 11/01/95)

SECTION 104 - SCOPE OF WORK:

104.11 **Damage by Storm, Flood or Earthquake:** Item (D), Idled Equipment and Remobilization, of the Standard Specifications is hereby deleted.

104.11 **Damage by Storm, Flood or Earthquake:** Items (E) and (F) of the Standard Specifications are revised to read:

(D) Payment for Repair Work:

The State will pay the cost of the repair work as determined in Subsection 109.04.

(E) Termination of Contract:

If the Department elects to terminate the contract, the termination and the determination of the total compensation payable to the contractor shall be governed by the provisions of Subsection 108.11, Termination of Contract for Convenience of the Department.

(104ENVIR, 03/17/08)

SECTION 104 - SCOPE OF WORK:

104.12 **Environmental Analysis:** of the Standard Specifications is revised to read:

The contractor shall prepare an environmental analysis for approval by the Engineer, under any of the following conditions:

- (A) If the contractor elects to provide material, in accordance with Section 1001, from a source that involves excavation.
- (B) If the contractor elects to use any site to set up a plant for the crushing or processing of base, surfacing, or concrete materials. The contractor may request an exemption from this requirement to provide an environmental analysis if all of the following conditions apply:
 - (1) the site is exclusively used for the processing of materials,
 - (2) the site will not be used for excavation of borrow material,
 - (3) the site was developed as a processing area on or before January 1, 1999,
 - (4) the site is currently operating as a processing area, and
 - (5) the plant is located within that portion of the site that was disturbed prior to January 1, 1999.

- (C) If the contractor requests that the Engineer approve access to controlled access highway at points other than legally established access points.

The contractor may incorporate an existing environmental analysis approved after January 1, 1999, provided that the analysis is updated as necessary to be in compliance with current regulations and with the contractor's planned activities.

Regulatory changes, specification changes, or other reasons may preclude the approval of a materials source. The contractor acknowledges that the Department may refuse to approve a material source even if the Department had approved the source for other projects.

The environmental analysis shall include all areas of proposed excavation, crushing, processing, and haul roads. For the purposes of Subsection 104.12, a haul road is defined as any road on material excavation, processing, or crushing sites, and any road between the respective site and a public highway that may be used by the contractor.

The contractor shall promptly advise the Engineer that it is preparing the environmental analysis and shall submit it upon completion. The contractor should anticipate needing a minimum of 30 calendar days to prepare the environmental analysis. The contractor shall allow a minimum of 45 calendar days after submittal, or subsequent resubmittal, to the Department for the Department to review the environmental analysis and to consult with the appropriate jurisdictions and/or agencies. At the end of the review period, the Engineer will notify the contractor whether or not the environmental analysis is acceptable.

If the approval of the environmental analysis causes a delay to a controlling activity of the project, the contractor may seek, and the Engineer may grant, an extension of time in accordance with the terms of Subsection 108.08. The time extension shall not exceed 30 working days for a working-day contract, or 45 calendar days for a calendar-day project. The time extension will not be considered unless the contractor can show evidence of due diligence in pursuing the environmental analysis. No time extension will be granted for a fixed completion date contract.

The Environmental analysis shall address all environmental effects, including, but not limited to, the following:

- (1) The location of the proposed source and haul road, and the distance from the source to either an existing highway or an established alignment of a proposed Federal, State or County highway along with vicinity maps, sketches or aerial photographs.
- (2) The ownership of the land.
- (3) The identity and location of nearby lakes, streams, parks, wildlife refuges or other similar protected areas.
- (4) The former use, if known, of the source, and haul road and their existing condition.

- (5) The identification of present and planned future land use, zoning, etc., and an analysis of the compatibility of the removal of materials with such use.
- (6) The anticipated volume of material to be removed; the width, length and depth of the excavation; the length and width of the haul road, and other pertinent features and the final condition in which the excavated area and haul road will be left, such as sloped sides, topsoil replaced, the area seeded, etc.
- (7) The archaeological survey of the proposed source prepared by a person who meets the Secretary of the Interior's Professional Qualification Standards (48 FR 44716) and possesses a current permit for archaeological survey issued by the Arizona State Museum (ASM). The survey shall be prepared in a State Historic Preservation Office standardized format. The survey shall identify all historic properties within the area of potential effect (APE), as defined by the National Historic Preservation Act (36 CFR 800.4). This includes the materials source, processing area, and the haul road. Additionally, the survey report shall identify the effects of the proposed source on any historic properties within the APE, and recommend measures to avoid, minimize, or mitigate those effects.
- (8) If the proposed source, or haul road will utilize Prime and Unique Farm land or farm land of statewide importance, a description of such remaining land in the vicinity and an evaluation whether such use will precipitate a land use change.
- (9) A description of the visual surroundings and the impact of the removal of materials on the visual setting.
- (10) The effect on access, public facilities and adjacent properties, and mitigation of such effects.
- (11) The relocation of business or residences.
- (12) Procedures to minimize dust in pits and on haul roads and to mitigate the effects of such dust.
- (13) A description of noise receptors and procedures to minimize impacts on these receptors.
- (14) A description of the impact on the quality and quantity of water resulting from the materials operation shall be provided. The potential to introduce pollutants or turbidity to live streams and/or nearby water bodies shall be addressed. Measures to mitigate potential water quality impacts shall be coordinated through the Environmental Protection Agency (EPA) for sites located on tribal land, and the Arizona Department of Environmental Quality (ADEQ) for sites located on non-tribal land.

- (15) A description of the impact on endangered or threatened wildlife and plants and their habitat. The analysis of potential impact to plants and wildlife shall be coordinated through the Arizona Game and Fish Department and U.S. Fish and Wildlife Service. Compliance with the Arizona Native Plant Law shall be coordinated through the Arizona Commission of Agriculture and Horticulture.
- (16) A discussion of the effects of hauling activities upon local traffic and mitigating measures planned where problems are expected.
- (17) A description of the permits required, such as zoning, health, mining, land use, flood plains (see Section 404 of the Clean Water Act), etc.
- (18) The effect of removing material and/or stockpiling material on stream flow conditions and the potential for adverse impacts on existing or proposed improvements within the flood plain which could result from these activities. Measures to mitigate potential water quality impacts shall be coordinated through the Environmental Protection Agency (EPA) for sites located on tribal land, and the Arizona Department of Environmental Quality (ADEQ) for sites located on non-tribal land.

Guidance in preparing the environmental analysis is available on the Department's Internet Website through the Environmental Planning Group, or by calling Environmental Planning Group at 602-712-7767.

(105PLNS, 10/18/10)

SECTION 105 CONTROL OF WORK:

105.03 Plans and Working Drawings: the thirteenth paragraph of the Standard Specifications is revised to read:

All working drawings or prints shall be 22 inches in height and 34 inches in length. There shall be 1 1/4-inch margins on the left and right sides, and 3/4-inch margins on the top and bottom. A blank space, four inches wide by three inches high, shall be left inside the margin in the lower right hand corner. All drawings shall be made in such a manner that clear and legible copies can be made from them. When half-size copies are required, they shall be provided on standard 11 by 17 inch sheets.

(106QCMAT, 05/03/16)

SECTION 106 CONTROL OF MATERIAL:

106.04(A) General: the fourth and fifth paragraphs of the Standard Specifications are revised to read:

The sampling, testing, and acceptance of materials shall be in accordance with the requirements of the specifications, in conjunction with the following:

- The ADOT Materials Testing Manual.
- The ADOT Materials Practice and Procedure Directives Manual.
- Applicable Federal, AASHTO, or ASTM specifications or test designations.
- Applicable specifications or test designations of other nationally recognized organizations.

Unless otherwise specified, whenever a reference is made to an Arizona Test Method or an ADOT Materials Practice and Procedure Directive, it shall mean the test method or practice and procedure directive in effect on the bid opening date.

Any reference to the ADOT Materials Policy and Procedure Directives elsewhere in the contract documents shall be understood to mean ADOT Materials Practice and Procedure Directives.

106.04(B) Contractor Quality Control: the second paragraph of the Standard Specifications is revised to read:

Certain construction items may require additional quality control measures, as specified in Subsection 106.04(C). When so specified, the contractor shall provide all the personnel, equipment, materials, supplies, and facilities necessary to obtain samples and perform the tests listed in the applicable section and as given in Subsection 106.04(C). Specific contractor quality control requirements will be shown in the applicable construction items. Payment for such additional work shall be in accordance with the Special Provisions, and will be included in Bidding Schedule Item 9240170.

When the specifications do not require specific contractor quality control measures, the provisions given in Section 106.04(C) do not apply. Bid Item 9240170 will not be included in the Bidding Schedule.

106.04(C)(2) Quality Control Laboratory: the first paragraph is revised to read:

All field and laboratory sampling and testing shall be performed by a laboratory or laboratories approved by the Department. The requirements for approval of laboratories are specified in ADOT Materials Policy and Procedure Directive No. 19, "ADOT System for the Evaluation of Testing Laboratories". Approved laboratories, and the test methods for which they are approved to perform, are listed in the "ADOT Directory of Approved Materials Testing Laboratories". Approved test methods listed in the "ADOT Directory of Approved Materials Testing Laboratories" do not include field sampling and testing procedures. When field sampling and testing procedures are performed, the appropriate valid Arizona Technical Testing Institute (ATTI) and/or American Concrete Institute (ACI) certification(s) are required. ADOT Materials Policy and Procedure Directive No. 19, "ADOT System for

the Evaluation of Testing Laboratories” and the “ADOT Directory of Approved Materials Testing Laboratories” may be obtained on the internet from the ADOT Materials Quality Assurance Section website.

106.04(C)(6) Weekly Quality Control Reports: of the Standard Specifications is revised to read:

The contractor shall submit Weekly Quality Control Reports to the Engineer. The weekly reports shall be complete and accurate, and shall state the types of work which have been performed during the report period. The report shall also include the process control measures taken to assure quality. The report shall provide sample identification information for materials tested during the report period, including sample number, date sampled, sample location, first and last name of person obtaining sample, and original source of material. The report shall also provide the results for all required tests and any retests, corrective actions, and other information relevant to quality control. The report shall include daily diaries for each day of testing, a weekly summary, the ADOT TRACS number, and the testing laboratory’s project identification number.

Except as stated in the following paragraph, the weekly quality control report shall be prepared using standard forms provided by the Department. The standard forms are available on the Department’s website at www.azdot.gov. After accessing the Department’s website, select “Business”, “Engineering and Construction”, “Construction and Materials”, “Contractor Information”, “Forms and Documents”, and then “Weekly Quality Control Forms”. Except for the daily diaries, all documentation and information required on the forms shall be typed. Daily diaries may be hand-written if acceptable to the Engineer. The weekly report shall be submitted to the Engineer in paper form with a transmittal letter signed by the contractor’s quality control manager.

In lieu of using the standard weekly quality control forms available on the Department’s website, the contractor or testing laboratory may prepare the weekly report using proprietary or other software, if acceptable to the Engineer, provided that all required information is included, the format is comparable to the Department’s standard format, and the report is submitted in paper form with the required transmittal letter.

The report period shall end at midnight of each Friday, and the report shall be submitted to the Engineer no later than 5:00 p.m. of the following Wednesday. The Engineer will verify that the report is timely, complete, and accurate.

Reports that are not submitted by the above-referenced deadline shall be considered delinquent. Reports that are submitted by the above-referenced deadline, but are not complete and accurate, shall also be considered delinquent. In either case monies shall be deducted from the contractor’s monthly estimate in accordance with the requirements for Contractor Quality Control, as specified in these special provisions.

(106CERT, 09/14/12)

SECTION 106 CONTROL OF MATERIAL:

106.05 Certificates: of the Standard Specifications is revised to read:

(A) General:

The contractor shall submit to the Engineer an original or copy of either a Certificate of Compliance or a Certificate of Analysis, as required, prior to the use of any materials or manufactured assemblies for which the specifications require that such a certificate be furnished.

Certificates shall be specifically identified as either a "Certificate of Compliance" or a "Certificate of Analysis".

The Engineer may permit the use of certain materials or manufactured assemblies prior to, or without, sampling and testing if accompanied by a Certificate of Compliance or Certificate of Analysis, as herein specified. Materials or manufactured assemblies for which a certificate is furnished may be sampled and tested at any time, and, if found not in conformity with the requirements of the plans and the specifications, will be subject to rejection, whether in place or not.

Certificates of Compliance and Certificates of Analysis shall comply with the requirements specified herein, the ADOT Materials Testing Manual, and applicable ADOT Materials Policy and Procedure Directives.

(B) Certificate of Compliance:

A Certificate of Compliance shall be submitted on the manufacturer's or supplier's official letterhead, and shall contain the following information:

- (1) The current name, address, and phone number of the manufacturer or supplier of the material.
- (2) A description of the material supplied.
- (3) Quantity of material represented by the certificate.
- (4) Means of material identification, such as label, lot number, or marking.
- (5) A statement that the material complies in all respects with the requirements of the cited specifications. Certificates shall state compliance with the cited specification, such as AASHTO M 320, ASTM C 494; or specific table or subsection of the Arizona Department of Transportation Standard Specifications or Special Provisions. Certificates may cite both, if applicable.

- (6) A statement that the individual identified in item seven below has the legal authority to bind the manufacturer or the supplier of the material.
- (7) The name, title, and signature of the responsible individual. The date of the signature shall also be given.

Each of the first six items specified above shall be completed prior to the signing of the certificate as defined in item seven. No certificate will be accepted that has been altered, added to, or changed in any way after the authorized signature has been affixed to the original certificate. However, notations of a clarifying nature, such as project number, contractor, or quantity shipped are acceptable, provided the basic requirements of the certificate are not affected.

A copy or facsimile reproduction of the original certificate will be acceptable; however, the original certificate shall be made available upon request.

(C) Certificate of Analysis:

A Certificate of Analysis shall include all the information required for a Certificate of Compliance and, in addition, shall include the results of all tests required by the specifications.

(106APL, 02/10/12)

SECTION 106 - CONTROL OF MATERIAL:

106.14 Approved Products List: of the Standard Specifications is revised to read:

The Approved Products List is a list of products which have been shown to meet the requirements of these Standard Specifications. The Approved Products List is maintained by the Department and updated monthly. Copies of the most current version are available on the internet from the ADOT Research Center, through its Product Evaluation Program.

The contractor shall verify that any products chosen for use from the Approved Products List are selected from the version which was most current at the time of the bid opening.

Unless otherwise specified in the Special Provisions, products not appearing on the Approved Products List at the time of the bid opening may be used if they meet the requirements of the plans and specifications.

When the Special Provisions limit product selection to only those listed on the Approved Products List, other products will not be evaluated or approved.

(106DMAT, 2/15/11)

SECTION 106 - CONTROL OF MATERIALS: of the Standard Specifications is modified to add:

106.15 Domestic Materials and Products:

Steel and iron materials and products used on all projects shall comply with the current "Buy America" requirements of 23 CFR 635.410.

All manufacturing processes to produce steel and iron products used on this project shall occur in the United States. Raw materials used in manufacturing the steel and iron products may be foreign or domestic. Steel or iron not meeting these requirements may be used in products on this project provided that the invoiced cost to the contractor for such steel products incorporated into the work does not exceed either one-tenth of one percent of the total (final) contract cost or \$2,500, whichever is greater.

Any process which involves the application of a coating to iron or steel shall occur in the United States. These processes include epoxy coating, galvanizing, painting, or any other coating which protects or enhances the value of covered material.

The requirements specified herein shall only apply to steel and iron products permanently incorporated into the project. "Buy America" provisions do not apply to temporary steel items, such as sheet piling, temporary bridges, steel scaffolding and falsework, or to materials which remain in place at the contractor's convenience.

The contractor shall furnish the Engineer with Certificates of Compliance, conforming to the requirements of Subsection 106.05, which state that steel or iron products incorporated in the project meet the requirements specified. Certificates of Compliance shall also certify that all manufacturing processes to produce steel or iron products, and any application of a coating to iron or steel, occurred in the United States.

Convict-produced materials may not be used unless the materials were produced prior to July 1, 1991 at a prison facility specifically producing convict-made materials for Federal-aid construction projects.

(107INS, 7/10/12)

SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC:

107.14 Insurance: the first paragraph of the Standard Specifications is revised to read:

Prior to the execution of the contract, the contractor shall file with the Department a certificate or certificates of insurance evidencing insurance as required by this contract has been placed with an insurer authorized to transact insurance in the State of Arizona pursuant to ARS Title 20, Chapter 2, Article 1, or with a surplus lines insurer approved and

identified by the Director of the Department of Insurance pursuant to ARS Title 20, Chapter 2, Article 5.

All insurers shall have an "A.M. Best" rating of A- VII or better.

The State of Arizona in no way warrants that the above-required minimum insurer rating is sufficient to protect the contractor from potential insurer insolvency.

The contractor's submission of the required insurance certificates constitutes a representation to the Department that:

1. The contractor has provided a copy of these specifications to every broker who has obtained or filed a certificate of insurance and has communicated the necessity of compliance with these specifications to the broker; and
2. To the best of the contractor's knowledge, each certificate of insurance and each insurance coverage meets the requirements of these specifications.

The contractor shall provide the Department with certificates of insurance (ACORD form or equivalent acceptable to the State of Arizona) as required by the contract. The certificates for each insurance policy shall be signed by a person authorized by that insurer.

(107SWRSP, 01/28/03)

SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC:

107.15 Contractor's Responsibility for Utility Property and Services: of the Standard Specifications is revised to read:

(A) General:

The contractor's attention is directed to the requirements of Arizona Revised Statutes Section 40-360.21 through .29 requiring all parties excavating in public streets, alleys or utility easements to first secure the location of all underground facilities in the vicinity of the excavation.

The contractor shall review copies of existing ADOT permits, subject to availability, prior to start of construction, to assist the contractor in determining the location of any utilities, which the Department may have record of and which are not otherwise shown in the contract documents. Utility locations obtained from the Department are for information only and shall not relieve the contractor of responsibility for identifying, locating and protecting any existing utility lines. Copies of permits may be obtained from the ADOT Area Permit Supervisor in the District in which a project is located.

The contractor shall contact the owners of the various utilities prior to the start of construction and shall obtain from them any information pertaining to existing utilities that will either supplement information shown on the project plans or will correct any such information that may be incorrect. The contractor shall furnish the Engineer with evidence

that the contractor has contacted the utility companies. Such evidence shall be submitted at the preconstruction conference, and shall include a copy of the information received from each utility as a result of such contacts.

If the contractor learns from either the owner of the utility or from any other source of the existence and location of properties of railway, telegraph, telephone, fiber optics cable, water, sewer, septic tanks or systems, electric, gas and cable television companies either omitted from or shown incorrectly on the project plans, the contractor shall immediately notify the Engineer and shall not disturb the utilities. Relocation or adjustment of such utilities, if deemed necessary, will be either performed by others or shall be performed by the contractor in accordance with the provisions of Subsection 104.02.

The contractor shall cooperate with the owners of any underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication of rearrangement work may be reduced to a minimum and that services rendered by these parties will not be unnecessarily interrupted.

Temporary or permanent relocation or adjustment of any utility line or service connection desired by the contractor for its convenience shall be its responsibility. The contractor shall obtain the approval of both the Engineer and the utility company and upon approval shall make all necessary arrangements with the utility company and shall bear all costs in connection with such relocation or adjustment. The contractor shall also submit a Sewer Discharge Prevention Plan, as specified in Subsection 107.15(C)(1), describing each anticipated relocation or adjustment involving existing sanitary sewer lines. No work on a particular facility shall begin until all approvals for that facility have been received.

(B) Contractor Qualifications for Water and Sewer Lines:

Breakage of active sanitary sewer lines may result in the potential spread of disease, contamination of the site and any adjacent bodies of water, and other hazards to the public. Substantial cleanup costs may be associated with such breakage, as well as possible major civil and/or criminal penalties. Therefore, the Engineer will closely consider the qualifications of any personnel proposed by the contractor to oversee or perform work involving active sanitary sewer lines. The contractor shall not assume that the personnel assigned to perform such work will be acceptable to the Department merely because they meet the experience requirements listed herein.

The contractor, or the subcontracting firm assigned to perform the water and sewer work, shall have a minimum of five years of experience in the installation and construction of underground large diameter (18-inch or above) water and sewer improvements.

In addition, the key personnel assigned by the contractor to perform any work on water or sewer lines, whether from the prime contractor or a subcontracting firm, shall also have at least five years of experience in the installation and construction of underground large diameter (18-inch or above) water and sewer improvements. A minimum of two such people shall be designated by the contractor. The designated personnel may have the title of foreman or superintendent; however, at least one of these people shall be present at all times at the location of any work being performed at or near an active sanitary sewer line.

For both the firm and the key personnel, the experience shall include working with and around water and sewer utility lines that are in service. The contractor shall submit the following documentation to the Engineer for review and approval:

- (1) A list indicating that the designated key project personnel have at least five years of applicable experience, as specified above. The list shall be accompanied with resumes for each of the key people. The resumes shall include the following information, and demonstrate compliance with the specified requirements:
 - (a) Detailed relevant experience for a minimum of two projects, including project description, date of work, actual work performed by the individual, and references (a minimum of one for each project).
 - (b) Level of applicable formal training.
 - (c) Number of years of relevant experience in performing like construction.
- (2) A list of water and sewer construction projects completed by the firm performing the water or sewer work, as specified above, indicating a minimum of five years of applicable experience. Include the dates of work, type of work, description of the project, amount of work performed by the contractor/subcontractor, and the name and phone number of a contact with the owning company or agency for which the work was completed.
- (3) List of equipment that will be used for this project. The list shall include, as a minimum, equipment type, date of manufacture, and if contractor-owned or rented.
- (4) A list of all violations and citations in the past five years of applicable water and wastewater laws and statutes for both the prime contractor and the subcontractor responsible for the utility work.

The contractor shall submit this documentation to the Engineer for approval at least 21 calendar days prior to any anticipated work involving active sanitary sewer lines, whether new or existing.

(C) Protection of Existing Utility Lines:

At points where the contractor's operations are adjacent to right-of-way properties or easements for railway, telegraph, telephone, water, sewer, electric, gas and cable television companies, hereinafter referred to as utilities, or are adjacent to other facilities and property, damage to which might result in considerable expense, loss, inconvenience, injury or death, work shall not be commenced until all arrangements necessary for the protection thereof have been made.

The exact locations and depths of all utilities that are underground or the location of those on or near the surface of the ground which are not readily visible shall be determined. Such

locations shall be marked in such a manner so that all workmen or equipment operators will be thoroughly apprised of their existence and location. It will be the contractor's responsibility to see that every effort possible has been made to acquaint those actually involved in working near utilities not only with the type, size, location and depth, but with the consequences that might follow any disturbance. No trenching or similar operation shall be commenced until the Engineer is satisfied that every possible effort has been taken by the contractor to protect utilities.

The contractor shall coordinate with others working near new or existing sewer lines or other utilities on the procedures to be followed to prevent damaging of these utilities.

(1) Sewage Discharge Prevention Plan (SDPP):

For any work which may impact active sanitary sewer pipes, whether new or existing, the contractor shall prepare a Sewage Discharge Prevention Plan (SDPP) which shall describe the contractor's procedures and work plan for such lines. The Sewage Discharge Prevention Plan shall also describe the precautions that the contractor shall take to prevent unplanned breakage or spills, and the procedure which the contractor shall follow if breakage or a spill occurs.

The contractor's method of work described in the SDPP shall ensure that any work done in or near any active sewer line is performed in a safe and controlled manner resulting in no accidental discharges. As a minimum, the contractor's equipment and procedures shall be appropriate for the intended work, and shall conform to standard industry practices.

The SDPP shall include information, as specified below, for all portions of the project which involve the following work activities, and for any other element of work which may involve contact with an active sanitary sewer line:

- Interrupt, divert, relocate, plug, or abandon a sewer line or service connection, or
- Brace, or tie into a sewer line or service connection.

Construction activities in the vicinity of active sanitary sewer lines or service connections shall also be included in the SDPP if any of the following conditions exist:

- (1) Any work crossing beneath the pipe, at any angle, regardless of vertical separation.
- (2) Any work crossing over the pipe, at any angle, within two feet of the top of pipe.
- (3) Work located parallel to the pipe within the following areas:
 - (a) For the area from the bottom of the pipe to two feet above the top of the pipe, any work within two feet horizontally of the pipe wall.

- (b) For the area below the bottom of the pipe, any work located below an imaginary line beginning at the pipe springline and progressing downward at a slope of 1.5 feet vertically to 1.0 feet horizontally.

The contractor's Sewage Discharge Prevention Plan shall address each of the items tabulated below, as applicable, for every location where construction activity will involve an active sanitary sewer line.

(2) Required Elements of the Sewage Discharge Prevention Plan:

The following elements shall be addressed in the SDPP:

- (a) Describe the proposed work in general, including the reasons for the work, scope, objectives, locations, dates, and estimated times the work will be conducted. Include project plan sheets detailing the proposed work, and indicating the peak flowrates of active sewer lines, determined as specified.
- (b) For all existing sanitary sewer pipes, determine whether the lines are active or abandoned, and the peak flowrates of lines in service, as provided by the owner of the utility.
- (c) List the key personnel (crew foreman, superintendent, and manager) and field office that are proposed to perform the work (include phone numbers).
- (d) Describe the work in step-by-step detail for each location, including excavation plans and how both the new and existing structures and utilities will be identified and protected.
- (e) Provide a detailed listing of any hardware, fittings, pipe plugs, flex couplings, tools, and materials needed to accomplish the work, and note the status of these items (on-hand, to-be-fabricated, on-order with expected delivery date, etc.). Include any manufacturer's specifications or recommendations, especially for any pipe plugs, sewer line fittings, and patching materials.
- (f) List all major equipment to be used to perform the work. Include in this item any pumps that will be used to perform the work and the rated capacity of the pumps at the anticipated suction head.
- (g) List all equipment to be used in the event of an unplanned release and specify how the equipment will be used. The locations of standby pumps shall be specified in this item. The plan shall indicate that all standby equipment to be used in the event of an unplanned discharge can be delivered to the site and put into service within two hours of identification of any unplanned flow.
- (h) List the safety equipment to be used, and describe any unique safety procedures. Cite the applicable OSHA standards covering the work.

- (i) Describe any contingency plans the contractor will implement in the event of unplanned releases and/or damage to existing facilities. List all personnel and subcontractors that will be responsible for responding to unplanned releases or damaged lines. Provide qualifications for all such personnel and subcontractors, including education, formal training, and relevant experience.
- (j) Describe how the public will be protected during the work, and include or cite any applicable traffic control plans.
- (k) Describe the quality control procedures that will be used in the field.
- (l) Discuss how temporary plugs or flow control devices will be secured, monitored, and removed.

The SDPP shall be in written form, and shall include any diagrams or sketches necessary for clarity. When possible, diagrams and sketches should be shown using the applicable project plan sheets.

The contractor shall modify the SDPP as necessary throughout the project to include any new or revised information relevant to the items listed above. The contractor shall resubmit the revised SDPP to the Engineer for approval in each case.

(3) Sewage Discharge Prevention Plan Approval:

The SDPP shall be submitted to the Engineer at least 21 calendar days before any work involving an active sewer line is to be done. The Engineer will review the plan, solicit comments from the owner/operator of the sewer line, and return the plan to the contractor within 14 calendar days from original submittal.

No work involving active sanitary sewer lines shall be done until a final SDPP meeting all the requirements specified in Subsection 107.15(C)(2) has been approved by the Engineer.

Approval of the contractor's Sewage Discharge Prevention Plans, personnel, or construction methods and operation shall not relieve the contractor from its responsibility to safely perform the work included in this contract, nor from its liability for damage resulting, either directly or indirectly, from its work performed under this contract.

(D) Service Connections:

(1) General:

In the event of interruption to water, sewer, or utility services as a result of accidental breakage or as a result of lines being exposed or unsupported, the contractor shall promptly notify the proper authority and shall cooperate with the said authority in the restoration of service. When service is interrupted, repair work shall be continuous until the service is restored. No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.

(2) Unidentified Water and Sewer Connections:

The contractor shall protect unidentified, undamaged water or sewer service connections encountered during excavation. The contractor shall immediately notify the Engineer when an unidentified service connection is encountered.

The contractor shall immediately repair unidentified water or sewer service connections that are damaged during excavation. Any damaged service connections shall be reported to the Engineer, including all remedial actions taken.

(E) Repairing Damaged Lines:

When the operations of the contractor result in damage to any utility line or service connection, the location of which has been brought to the contractor's attention, the contractor shall assume full responsibility for such damage.

Should an unplanned breakage occur in an active sewer line as a result of the contractor's operations, the contractor shall immediately notify the Engineer, and begin repairs to halt any flows and restore normal service, in accordance with the procedures described in the approved Sewage Discharge Prevention Plan. The contractor shall also immediately notify the affected utility company and the appropriate regulatory agencies. The contractor shall be responsible for repairing the damaged pipe, restoring any interruptions in service, and cleaning up the affected areas within 24 hours of the beginning of the spill. Sewage discharge damage assessments, as specified in Subsection 107.15(F), will be charged to the contractor for any unplanned breakage which results in a discharge.

The contractor shall be responsible to repair any breakage, in accordance with requirements of the broken line's owner/operator, and clean up the site per applicable codes and regulations of the Environmental Protection Agency, OSHA, Arizona Department of Environmental Quality (ADEQ), and all other agencies' specifications, at no additional cost to the Department.

(F) Sewage Discharge Damage Assessments:

The Department will assess liquidated damages in accordance with the Table 1 below for each 24-hour period, or portion thereof, for each unplanned breakage that occurs in an active sanitary sewer line as a result of the contractor's operation. The rate of liquidated damages assessed is based on the type and quantity of effluent discharged as determined by the Engineer.

These liquidated damages do not relieve the contractor from any of its responsibilities under the contract, including any liquidated damages that may be assessed under Subsection 108.09 for late completion of the project.

Liquidated damages assessed by the Department will be independent of any penalties imposed by others.

The contractor acknowledges that Regulatory agencies may assess or impose civil or criminal penalties on the contractor resulting from sewer discharges.

The Department will not be responsible for any civil or criminal penalties, fines, damages, or other charges imposed on the contractor by any regulatory agency or court for sewage discharges that are a result, directly or indirectly, of the contractor's work performed under this contract.

Table 1		
Liquidated Damages (each 24 hour period, or portion thereof)		
Volume of Discharge	Raw Sewage or Industrial Wastewater	Treated Effluent
Less than 10,000 gallons	\$5,000.00	\$1,000.00
10,000-99,999 gallons	\$10,000.00	\$2,000.00
100,000-1 million gallons	\$25,000.00	\$3,000.00
Greater than 1 million gallons	\$40,000.00	\$5,000.00

Liquidated damages shall be assessed for each 24 hour period, or portion thereof, until the contractor has completed all of the following tasks:

- (A) Stopped the discharge.
- (B) Repaired the damaged pipe.
- (C) Restored normal service.
- (D) Fully cleaned and disinfected the site to the satisfaction of the Engineer.

REDUCTION OF LIQUIDATED DAMAGES: Upon completion of tasks A, B, and C above, and prior to completion of Task D, the liquidated damages assessed for the current 24-hour period shall be at the rate shown in Table 1. However, for each subsequent 24-hour period, the assessment will be one half of the rate shown in Table 1.

Damages will continue at the reduced rate until the site has been fully cleaned and disinfected to the satisfaction of the Engineer.

As an example, the amounts assessed each 24-hour period for an unplanned discharge of 20,000 gallons of raw sewage, in which the contractor completes tasks A, B, and C within the second 24-hour period but does not complete full cleanup until the third 24-hour period, will be as follows:

First 24-hour period: \$10,000.00

Second 24-hour period: \$10,000.00

Third 24-hour period: \$5,000.00

For this example, the total liquidated damage assessment will be \$25,000.00 (\$10,000 + \$10,000 + \$5,000).

(107UTIL, 05/03/16)

SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC:

107.15 Contractor's Responsibility for Utility Property and Services: of the Standard Specifications is modified to add:

The contractor shall be ADOT's Blue Stake field locator, and perform all requirements as prescribed in A.R.S. 40-360.21 through .29, for all underground facilities that have been installed by the contractor on the current project, until the project is accepted by ADOT.

At least two working days prior to commencing excavation, the contractor shall call BLUE STAKE CENTER, between the hours of 7:00 a.m. and 4:30 p.m., Monday through Friday for information relative to the location of buried utilities. The number to be called is as follows:

Projects Outside Maricopa County (800) 782-5348

Copies of existing ADOT permits, subject to availability, may be obtained from the ADOT Area Permit Supervisor as listed below:

NORTHCENTRAL DISTRICT

(928) 779-7520 1801 S. Milton Rd.
(928) 774-1491 Flagstaff, AZ 86001

There is railroad presence within ½ miles of the project limits.

The following agencies and utility companies have facilities in the area but are not anticipated to be in conflict:

**Cable One
Scott Lambert
1341 Thornton
Show Low, AZ 85901
(928) 537-3321**

Cable One has facilities outside the project limits and no immediate conflict exists.

**Unisource
Curtis Asselstine
1480 N. 16th Street
Show Low, AZ 85901
(928) 532-3829**

Unisource has facilities outside the project limits and no immediate conflict exists. The gas meter as proposed may not be acceptable to UNS Gas Rules of Service. A field inspection is necessary to determine meter placement. A commercial application filled out by property owner will help facilitate this process (work to be performed by others).

**APS
Raelene Stanton
319 N. Kinsley Ave.
Winslow, AZ 86047
(928) 773-6312**

Arizona Public Service has facilities outside the project limits and no immediate conflict exists.

**Century Link
Carole Wilson
112 N. Beaver St.
Flagstaff, AZ 86001
(928) 779-4940 / (928) 779-4773**

Century Link has facilities outside the project limits and no immediate conflict exists.

**City of Winslow
Allen Rosenbaum
21 Williamson Ave.
Winslow, AZ 86047
(928) 289-4011**

The City of Winslow has facilities outside the project limits and no immediate conflict exists.

**BNSF Railway
Matthew Keim
740 E. Carnegie Drive
San Bernardino, CA 82408**

BNSF Railway has facilities less than a half mile outside the project limits and no immediate conflict exists. A Temporary Occupancy Permit (TOP) is required before working within BNSF Right of Way. BNSF own the railroad cross just outside of the project area. This project will involve work near RR within BNSF Right of Way. The contractor shall give BNSF a (30) day notice before work starts near BNFS Right of Way.

The following BNSF personnel shall be contacted minimum of (30) days before any activities near BNSF ROW:

Richard Barnitz
Project Engineer
(505)767-6826
richard.barnitz@bnsf.com

BNSF Emergency Number (if no BNSF personnel present) 1-800-832-5452.

The contractor shall reference the following information when communicating with the BNSF:

Location Info:

DOT 025100B
Rail Mile 285.67 LS 7206 in Winslow, AZ

It shall be the contractor's responsibility to determine the exact location of the utilities prior to any construction operations and to notify the above mentioned utility companies at least two (2) working days prior to commencing any work on the project.

If additional work is added to the contract, it shall be the contractor's responsibility to determine if there are utility conflicts.

(107FINA, 09/19/12)

SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC:

107.19 Federal Immigration and Nationality Act: of the Standard Specifications is revised to read:

(A) General:

The contractor and all subcontractors shall comply with all federal, state and local immigration laws and regulations, as set forth in Arizona Executive Order 2005-30, relating to the immigration status of their employees who perform services on the contract during the duration of the contract. The State shall retain the right to perform random audits of contractor and subcontractor records or to inspect papers of any employee thereof to ensure compliance.

The contractor shall include the provisions of Subsection 107.19 in all its subcontracts.

In addition, the contractor shall require that all subcontractors comply with the provisions of Subsection 107.19, monitor such subcontractor compliance, and assist the Department in any compliance verification regarding any subcontractor.

(B) Compliance Requirements for A.R.S. § 41-4401, Government Procurement, E-Verify Requirement; Sanctions:

By submission of a bid, the contractor warrants that the contractor and all proposed subcontractors are and shall remain in compliance with:

- (1) All federal, state and local immigration laws and regulations relating to the immigration status of their employees who perform services on the contract, and
- (2) A.R.S. Section 23-214, Subsection A (That subsection reads: "After December 31, 2007, every employer, after hiring an employee, shall verify the employment eligibility of the employee through the E-Verify program.").

A breach of a warranty regarding compliance with immigration laws and regulations shall be deemed a material breach of the contract, and the contractor and subcontractors are subject to sanctions specified in Subsection 107.19(D).

Failure to comply with a State audit process to verify the employment records of contractors and subcontractors shall be deemed a material breach of the contract, and the contractor and subcontractors are subject to sanctions specified in Subsection 107.19(D).

(C) Compliance Verification:

The State may, at any time and at its sole discretion, require evidence of compliance from the contractor or subcontractor.

Should the State request evidence of compliance, the contractor shall complete and return the State Contractor Employment Record Verification Form and Employee Verification Worksheet, provided by the Department, no later than 21 days from receipt of the request for such information.

Listing of the compliance verification procedure specified above does not preclude the Department from utilizing other means to determine compliance.

The State retains the legal right to inspect the papers of any employee who works on the contract to ensure that the contractor or subcontractor is complying with the warranty specified in Subsection 107.19(B).

(D) Sanctions for Non-Compliance:

For purposes of this paragraph, non-compliance refers to either the contractor's or subcontractor's failure to follow immigration laws or to the contractor's failure to provide records when requested. Failure to comply with the immigration laws or to submit proof of compliance constitutes a material breach of contract. At a minimum, the Department will reduce the contractor's compensation by \$10,000 for the initial instance of non-compliance by the contractor or a subcontractor. If the same contractor or subcontractor is in non-compliance within two years from the initial non-compliance, the contractor's compensation will be reduced by a minimum of \$50,000 for each instance of non-compliance. The third instance by the same contractor or subcontractor within a

two-year period may result, in addition to the minimum \$50,000 reduction in compensation, in removal of the offending contractor or subcontractor, suspension of work in whole or in part or, in the case of a third violation by the contractor, termination of the contract for default.

In addition, if a contractor is in non-compliance three times within a two-year period, the Department will revoke the contractor's prequalification for a minimum of one year. Subcontractors and suppliers who are in non-compliance three times within a two-year period will be prohibited from participating in Department contracts for a minimum of one year.

Subcontractors who are in non-compliance three times within a two-year period, and who are prequalified with the Department as prime contractors, will also have such prequalifications revoked for a minimum of one year.

After the minimum one-year suspension, contractors, subcontractors, and suppliers may be considered eligible to participate in Department contracts, but only after successful demonstration, to the satisfaction of the Department, that their hiring practices comply with the requirements specified herein. If considered eligible, contractors shall be required to re-apply for prequalification and be accepted prior to bidding on Department contracts. Subcontractors interested in bidding on Department contracts as prime contractors shall also be required to re-apply for prequalification and be accepted prior to bidding. For purposes of considering suspension: (1) non-compliance by a subcontractor does not count as a violation by the contractor, and (2) the Department will count instances of non-compliance on other Department contracts.

The sanctions described herein are the minimum sanctions; in case of major violations the Department reserves the right to impose any sanctions up to and including termination, revocation of prequalification, and prohibition from participation in Department contracts, regardless of the number of instances of non-compliance.

Contractors, subcontractors, and suppliers may appeal the sanctions to the State Engineer. That appeal must be in writing and personally delivered or sent by certified mail, return receipt requested, to the State Engineer. The appeal must be received by the State Engineer no later than seven calendar days after the Department's determination. The State Engineer shall promptly consider any appeals and notify the interested party of the State Engineer's findings and decision. The State Engineer's decision shall be considered administratively final.

Any delay resulting from a compliance verification or a sanction under this subsection is a non-excusable delay. The contractor is not entitled to any compensation or extension of time for any delays or additional costs resulting from a compliance verification or a sanction under subsection 107.19.

An example of the minimum sanctions under this subsection is presented in the following table:

Offense by:			Minimum Reduction in Compensation
Contractor	Subcontractor A	Subcontractor B	
First			\$10,000
	First		\$10,000
	Second		\$50,000
		First	\$10,000
	Third		\$50,000 *
* Will, in addition, result in removal of the subcontractor, prohibition from participating in Department contracts, and revocation of any Department prequalifications that the subcontractor may have obtained.			

(108SUBLT, 02/22/16)

SECTION 108 PROSECUTION AND PROGRESS:

108.01 Subletting of Contract: the fifth paragraph of the Standard Specifications is revised to read:

The Department may also refuse to approve any entity as a subcontractor or supplier for any of the reasons for which it could refuse to allow an entity to submit a bid, suspend the entity from bidding, or declare the entity non-responsible.

108.01 Subletting of Contract: the sixth paragraph of the Standard Specifications is modified to add:

(G) Verification that an alternative dispute resolution process to resolve payment and prompt payment disputes is included in each subcontract. The alternative dispute resolution process shall include a means of prompt escalation beyond the project level and provide the opportunity to hire a mediator.

108.01 Subletting of Contract: the seventh paragraph of the Standard Specifications is revised to read:

The Engineer will not consent to subletting of any portion of the contract until:

- (a) The Engineer receives a copy of the subcontract or lower tier subcontract, and
- (b) The AZUTRACS Registration Number for the subcontractor has been provided.

The contractor’s schedule shall allow seven calendar days for the Department’s subcontract review of each subcontract.

The Engineer’s consent shall in no way be construed to be an endorsement of the subcontractor or its ability to complete the work in a satisfactory manner.

If a subcontractor, of any tier, begins work on the contract prior to the contractor submitting the required documentation and receiving consent from the Engineer, the Department will withhold \$1,000 from monies due or becoming due the contractor as liquidated damages. The liquidated damages will be withheld for each subcontractor, of any tier, that starts work without the consent of the Engineer. These liquidated damages shall be in addition to all other retention or liquidated damages provided for elsewhere in the contract.

If a subcontractor, of any tier, is found working on the project without an approved contract the Engineer will immediately stop work on the subcontract. Work shall not resume until all required documentation is submitted and approved by the Engineer. The contractor shall not be entitled to additional compensation or an extension of contract time for any delays to the work because of the contractor's failure to submit the required documentation.

(108PRCN, 05/03/16)

SECTION 108 PROSECUTION AND PROGRESS:

108.03 Preconstruction Conference: the seventh paragraph of the Standard Specifications is revised to read:

The contractor shall submit a traffic control plan in accordance with Subsection 701-1. The contractor shall designate an employee who is competent and experienced in traffic control to implement and monitor the traffic control plan. The qualifications of the designated employee must be satisfactory to the Engineer. Such designated employee shall have successfully completed a recognized traffic control supervisor training program. The traffic control supervisor training provided by the American Traffic Safety Services Association (A.T.S.S.A.) or the International Municipal Signal Association (IMSA) shall be acceptable. Training through other programs must be approved in advance by the Engineer. The contractor shall submit proof that the proposed individual has completed an approved training program at the preconstruction conference. The training shall be current, and must be valid throughout the duration of the project. In order to remain current with the Department, the traffic control supervisor training shall be completed or renewed every four years.

108.03 Preconstruction Conference: the fifth paragraph of the Standard Specifications is hereby deleted.

(108TIME, 10/12/01)

SECTION 108 - PROSECUTION AND PROGRESS:

108.08 Determination and Extension of Contract Time: the first paragraph of the Standard Specifications is revised to read:

The time allowed for the completion of the work included in the contract will be 120 working days, and will be known as the "Contract Time."

(108FCWT, 7/01/14)

SECTION 108 - PROSECUTION AND PROGRESS:

108.09 Failure to Complete the Work on Time: the Schedule of Liquidated Damages table of the Standard Specifications is revised to read:

SCHEDULE OF LIQUIDATED DAMAGES			
Original Contract Amount		Liquidated Damages Per Day	
From More Than:	To and Including:	Calendar Day or Fixed Date:	Working Day:
\$ 0	\$ 100,000	\$ 430	\$ 600
100,000	500,000	640	900
500,000	1,000,000	1,000	1,400
1,000,000	2,000,000	1,290	1,800
2,000,000	5,000,000	1,860	2,600
5,000,000	10,000,000	2,710	3,800
10,000,000	20,000,000	2,790	3,900
20,000,000	30,000,000	3,570	5,000
30,000,000	60,000,000	5,500	7,700
60,000,000	90,000,000	9,430	13,200
90,000,000	-----	9,430	13,200

(109FORCE, 02/20/08)

SECTION 109 - MEASUREMENT AND PAYMENT:

109.04(D)(3)(a) Rental Rates (Without Operators): of the Standard Specifications is modified to add:

The Rental Rate Blue Book adjustment factor (F) will be 0.933.

(109RET, 06/09/16)

SECTION 109 MEASUREMENT AND PAYMENT:

109.06(A) Partial Payments: the first paragraph of the Standard Specifications is revised to read:

If satisfactory progress is being made, the contractor will receive a payment each month based on the amount of work completed during the preceding month. The Department will prepare a draft monthly estimate for review by the contractor. The contractor shall work with the Engineer to finalize the monthly estimate. When the Engineer and the contractor have reached agreement, the final monthly estimate will be prepared and signed by the contractor and the Engineer. The contractor's signature constitutes a certification that the

work was satisfactorily performed, meets the specifications, and the quantities reported are accurate regardless of whether the work was performed by the contractor or a subcontractor. The Engineer will submit signed monthly estimate for payment.

Except as herein provided, the Department will not retain monies from the monthly payments.

109.06(B) Subcontractor Payments: of the Standard Specifications is revised to read:

(1) Retention:

If the prime contract does not provide for retention, the contractor and each subcontractor of any tier shall not withhold retention on any subcontract. If the prime contract provides for retention, the prime contractor and each subcontractor of any tier shall not retain a higher percentage than the Department may retain under the prime contract.

(2) No Set-offs Arising from Other Contracts:

If a subcontractor is performing work on multiple contracts for the same contractor or subcontractor of any tier, the contractor or subcontractor of any tier shall not withhold or reduce payment from its subcontractors on the contract because of disputes or claims on another contract.

(3) Partial Payment:

The contractor and each subcontractor of any tier shall make prompt partial payments to its subcontractors within seven days of receipt of payment from the Department. Notwithstanding any provision of Arizona Revised Statutes Section 28-6924, the parties may not agree otherwise.

(4) Final Payment:

The contractor and each subcontractor of any tier shall make prompt final payment to each of its subcontractors. The contractor and each subcontractor of any tier shall pay all monies, including retention, due to its subcontractor within seven days of receipt of payment. Notwithstanding any provision of Arizona Revised Statutes Section 28-6924, the parties may not agree otherwise.

(5) Payment Reporting and Sanctions:

For the purposes of this subsection "Reportable Contracts" means any subcontract, of any tier, DBE or non-DBE, by which work shall be performed on behalf of the contractor and any contract of any tier with a DBE material supplier.

The requirements of this subsection apply to all Reportable Contracts.

Payment Reporting for all Reportable Contracts shall be done through the Department's web-based DBE System. The DBE System can be accessed from the Department's BECO website. No later than fifteen calendar days after the preconstruction conference, the contractor shall log into the Department's web-based DBE system and enter or verify the name, contact information, and subcontract amounts for Reportable Contracts on the project. As Reportable Contracts are approved over the course of the contract, the contractor shall enter them in the system. Reportable contracts shall be entered into the system no later than five calendar days after approval by the Department.

The contractor shall report on a monthly basis indicating the amounts actually paid and the dates of each payment under any Reportable Contract on the project. In addition, the contractor shall require that all participants in any Reportable Contract electronically verify receipt of payment on the contract by the last day of the month and the contractor shall actively monitor the Department's DBE System to ensure that the verifications are input. The contractor shall proactively work to resolve any payment discrepancies in the DBE System between payment amounts it reports and payment confirmation amounts reported by others.

The contractor shall ensure that all Reportable Contract activity is reported to the Department. This includes all lower-tier Reportable Contracts.

The contractor shall maintain records for each payment explaining the amount requested by the subcontractor, and the amount actually paid pursuant to the request, which may include but are not limited to, estimates, invoices, pay requests, copies of checks or wire transfers, and lien waivers in support of the monthly payments in the ADOT DBE System.

The contractor shall provide information for payments made on all Reportable Contracts during the previous month by the 15th day of the current month. In the event that no payments were made during a given month, the contractor shall identify that by entering a dollar value of zero. If the contractor does not pay the full amount of any invoice from a subcontractor, the contractor shall note that and provide the reasons in the comment section of the Monthly Payment Audit of the ADOT DBE System.

For each Reportable Contract on which the contractor fails to submit timely and complete payment information the Department will retain \$1,000.00 as liquidated damages, from the monies due to the contractor. Liquidated damages will be deducted each month for each Reportable Contract on which the contractor fails to submit payment information until the contractor provides the required information as described herein. After 90 consecutive days of non-reporting, the liquidated damages will increase to \$2,000.00 for each subsequent month, for each Reportable Contract on which the contractor fails to report until the information is provided. These liquidated damages shall be in addition to all other retention or liquidated damages provided for elsewhere in the contract.

The contractor shall ensure that a copy of this Subsection is included in every Reportable Contract of every tier.

(6) Completion of Work:

A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished, documented, and accepted by the Department.

(7) Disputes:

If there is a discrepancy between what is reported by the contractor in the ADOT DBE System and what the subcontractor indicates an alert email will automatically be sent to the contractor. The email will be sent to the email address provided by the contractor in the Department's DBE System. It is the contractor's responsibility to ensure that the email address in the DBE System is kept current.

The contractor shall provide a verifiable explanation of the discrepancy in the DBE System as early as practicable but in no case later than seven days after the date of the alert email.

The Engineer will determine whether the contractor has acted in good faith concerning any such explanations. The Department reserves the right to request and receive documents from the contractor and all subcontractors of any tier, in order to determine whether prompt payment requirements are met.

The contractor shall implement and use the dispute resolution process outlined in the subcontract, as described in Subsection 108.01, to resolve payment disputes.

(8) Non-compliance:

Failure to make prompt partial payment, or prompt final payment including any retention, within the time frames established above, will result in remedies, as the Department deems appropriate, which may include but are not limited to:

- (a) Liquidated Damages: These liquidated damages shall be in addition to all other retention or liquidated damages provided for elsewhere in the contract.
 - (i) The Department will withhold two times the disputed dollar amount not paid to each subcontractor.
 - (ii) If full payment is made within 30 days of the Department's payment to the contractor, the amount withheld by the Department will be released.
 - (iii) If full payment is made after 30 days of the Department's payment to the contractor, the Department will release 75 percent of the funds withheld. The Department will retain 25 percent of the monies withheld as liquidated damages.

- (b) Additional Remedies. If the contractor fails to make prompt payment for three consecutive months, or any four months over the course of one project, or if the contractor fails to make prompt payment on two or more

projects within 24 months, the Department may, in addition, invoke the following remedies:

- (i) Withhold monthly progress payments until the issue is resolved and full payment has been made to all subcontractors, subject to the requirements of paragraph (a) above,
- (ii) Terminate the contract for default in accordance with Subsection 108.10, and/or
- (iii) Disqualify the contractor from future bidding, temporarily or permanently, depending on the number and severity of violations.

In determining whether liquidated damages will be assessed, the extent of the liquidated damages, or additional remedies assessed, the State Construction and Materials Engineer will consider whether there have been other violations on this or other contracts, whether the failure to make prompt payment was due to circumstances beyond the contractor's control, and other circumstances. The contractor may, within 15 calendar days of receipt of the decision of the State Construction and Materials Engineer, escalate the decision to the State Engineer. If the contractor does not escalate the decision of the State Construction and Materials Engineer, in writing to the State Engineer, within 15 calendar days of receipt of the decision, the contractor will be deemed to have accepted the decision and there will be no further remedy for the contractor. If the contractor escalates the decision to the State Engineer, and the contractor does not agree with the State Engineer's decision, the contractor may initiate litigation, arbitration or mediation pursuant to Subsection 105.21(D) and (E) of the Standard Specifications.

109.06(C) Payroll Submittals: of the Standard Specifications is revised to read:

The contractor shall submit payrolls electronically through the internet to the Department's web-based certified payroll tracking system. This requirement shall also apply to every lower-tier subcontractor that is required to provide certified payroll reports.

If, by the 15th of the month, the contractor has not submitted its payrolls for all work performed during the preceding month, the Engineer will provide written notification of the discrepancies to the contractor. For each payroll document that the contractor fails to submit within 10 days after the written notification, the Department will retain \$2,500.00 from the progress payment for the current month. The contractor shall submit each complete and correct payroll within 90 days of the date of written notification. If the payroll is complete and correct within the 90-day time frame, the Department will release the \$2,500.00 on the next monthly estimate. For each payroll that is not acceptable until after the 90-day time frame, the Department will only release \$2,000.00 of the \$2,500.00 retained. The Department will retain \$500.00 as liquidated damages. Such \$500.00 retentions will not relieve the contractor of its responsibility to provide each required payroll, complete and correct, as specified above. These liquidated damages shall be in addition to all other retention or liquidated damages provided for elsewhere in the contract.

109.07 Partial Payment for Material on Hand: the fifth paragraph of the Standard Specifications is hereby deleted.

(201CLGB, 10/18/10)

SECTION 201 - CLEARING AND GRUBBING:

201-3.02 Removal and Disposal of Materials: the second and third paragraphs of the Standard Specifications are revised to read:

In the disposal of all tree trunks, stumps, brush, limbs, roots, vegetation and other debris, the contractor shall comply with the requirements of Title 49, Chapter 3, of the Arizona Revised Statutes, and with the Rules and Regulations for Air Pollution Control, Title 18, Chapter 2, Article 6, adopted by the Arizona Department of Environmental Quality pursuant to the authority granted by the Arizona Administrative Code.

Burning will be permitted only after the contractor has obtained a permit from the Arizona Department of Environmental Quality and from any other Federal, State, County or City Agency that may be involved.

SECTION 202 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS:

202-5 Basis of Payment: the first paragraph of the Standard Specifications is revised to read:

Payment for the accepted quantities of removal of structures and obstructions will be made by lump sum or by specific removal items or by a combination of both. Payment for removal of structures and obstructions not listed in the bidding schedule, but necessary to perform the construction operations designated on the project plans or specified in the Special Provisions shall be considered as included in the prices of contract items.

When saw cutting is not included as a contract pay item, full compensation for any saw cutting necessary to perform the construction operations designated on the plans shall be considered as included in the price of contract items.

ITEM 2020366 - REMOVE LEAD-BASED PAINT MATERIALS:

ITEM 2020370 - DISPOSE OF LEAD-BASED PAINT MATERIALS (FORCE ACCOUNT):

1.0 Description:

The work under these items shall consist of removing and appropriately disposing of lead-based paint materials in accordance with the requirements described herein.

The Department has tested the peach color paint on the restroom walls, approximately 60 square feet. The work under this item covers the removal of lead based paint.

2.0 Lead Abatement Subcontractor:

The contractor shall select a lead abatement subcontractor that has the ability to remove, manage and dispose of lead based materials. All individuals performing lead abatement related work on this contract shall possess at least one of the following certifications:

- EPA Lead Supervisor for lead abatement, or
- EPA Lead Worker Certification for all lead abatement workers/laborers.

The certification shall be current, and must be valid throughout the duration of the project. At least one individual with EPA Lead Supervisor certification shall be on-site when lead abatement work is being performed.

The lead abatement subcontractor shall have three years of documented experience performing related work in the State of Arizona.

The contractor shall submit documentation of the lead abatement subcontractor's certifications for all employees to be working on the project and the qualifications of the firm at the preconstruction conference. The contractor's documentation of qualifications shall provide details indicating the types of relevant experience, and shall provide the number of months of each type of experience to be considered for approval.

The Engineer will approve or reject the abatement subcontractor within 10 calendar days after receipt of documentation of experience and certifications.

The contractor will not be allowed an extension in contract time for any delays to the work because of the failure of the contractor's lead abatement subcontractor to meet the Department's qualifications.

3.0 Removal Plan:

The lead abatement subcontractor shall be responsible for preparation of a comprehensive removal and disposal plan (hereinafter referred to as the removal plan) for removal, handling, storage, testing, and disposal of the lead-based paint materials. The removal plan shall also specify the proposed storage container, and the proposed location at which the removed lead-based paint material is to be stored during testing. The removal plan shall include environmental and safety measures to comply with federal, state and local requirements for the removal and disposal of regulated material.

The contractor shall submit the removal plan to the Engineer for review a minimum of 10 working days prior to any work that will disturb the lead-based paint material.

The Engineer will determine if the removal plan addresses all the required elements, and will return it as approved or disapproved within 10 calendar days after receipt. The restroom paint shall not be disturbed in any way until the removal plan has been approved in writing by the Engineer.

4.0 Compliance Responsibility:

All work involved with the removal, handling, temporary storage, testing, and disposal of the lead-based paint materials shall be performed by the contractor's lead abatement subcontractor.

However, the contractor shall be fully responsible for the work, and for the proper disposal of the removed lead-based paint materials as specified herein, all in accordance with the applicable federal, state, and local standards, regulations and requirements, including 29 CFR, Lead Exposure in Construction, Interim Final Rule. The contractor shall bear the responsibility for any non-compliance, and shall hold the Department, its agents, officials, and employees harmless from all liability which may result from non-compliance with such applicable Federal, State and Local standards, regulations and requirements.

5.0 Construction Requirements:

The contractor shall supply potable water for their employees to wash their hands after handling the lead-based paint materials, prior to eating, drinking, or tobacco use of any kind.

The lead-abatement subcontractor shall remove the lead-based paint materials in accordance with the approved removal plan. The lead-based paint materials shall not be abraded in any way including, but not limited to, grinding, sanding, or heating.

The removed lead-based paint materials shall be placed in the approved storage container (barrel, roll-off, etc.) The lead abatement subcontractor shall perform the Toxicity Characteristic Leaching Procedure (TCLP) analysis on the removed lead-based paint materials. The storage container may be temporarily stored at an ADOT Maintenance facility until the final disposal determination is made. Should the lead abatement subcontractor choose to store the container at an ADOT Maintenance facility, the removal plan shall specify which facility, and the contractor shall contact the facility supervisor to schedule delivery of the container with the removed lead-based paint materials.

After completion of the TCLP analyses, the lead abatement subcontractor shall supplement the removal plan with specific requirements for disposal of the lead-based paint materials. The contractor shall submit the revised removal plan to the Engineer for approval within 10 working days of completion of all TCLP analyses, and before disposal of the lead-based paint material.

If the TCLP analyses indicate that the lead-based paint material must be disposed of at a hazardous waste facility, the cost of disposal will be paid under the force account item included in the bid schedule for disposal.

If the TCLP analyses indicate that the lead-based paint material may be disposed of as a non-hazardous construction waste, the disposal shall be included in the cost of this item.

The contractor shall also provide a letter and manifest certifying that the lead abatement subcontractor has disposed of the lead-based paint material in accordance with the final

removal plan. Such letter and manifest shall be submitted to the Engineer within 10 working days of final disposal.

The contractor shall not store the lead-based paint materials beyond the duration of the contract time. Notice of substantial completion, as specified in Subsection 105.19, will not be given until the lead-based paint materials are removed from the temporary storage site and properly disposed of in accordance with the removal plan, and the Engineer has received the above-referenced certification letter and manifest.

A time extension will not be granted due to the contractor's failure to comply with the requirements specified herein.

6.0 Method of Measurement:

Removal of lead-based paint materials from the restroom walls will be measured on a lump sum basis.

Disposal of lead-based paint materials at a hazardous waste facility will be measured on a force account basis.

7.0 Basis of Payment:

Payment for removal of lead-based material from the restroom walls will be made at the contract lump sum price, which price shall be full compensation for the work, including development of the removal plan, removal, handling, temporary storage, testing, and, if allowed, disposal of the lead-based paint material as a non-hazardous construction waste.

If the TCLP analyses indicate that the lead-based paint material must be disposed of at a hazardous waste facility, the cost of disposal will be paid under Item 2020370 - Dispose Of Lead-Based Paint Materials (Force Account).

For the force account work, the abatement subcontractor shall complete and submit the Subcontractor Force Account Weekly Data Sheet, available on the Department's Construction Group website. For work performed by the abatement subcontractor, the data sheet shall include the abatement subcontractor's itemized costs for labor, materials and equipment. The payment for the abatement subcontractor's labor, materials and equipment will be calculated in accordance with Subsection 109.04(D) of the Standard Specifications, as shown on the data sheet.

Additional costs of disposal of the lead-based paint materials will be paid based on an invoice, hereinafter called the Hazardous Waste Facility Invoice. A sum equal to five percent of the Hazardous Waste Facility Invoice amount will be added to the Hazardous Waste Facility Invoice amount to calculate Direct Charges.

$$\text{Direct Charges} = \text{Hazardous Waste Facility Invoice} \times 1.05$$

The contractor will be allowed a supplemental markup of five percent of the subcontractor's costs. A Sub-total will be calculated as follows:

$$\text{Sub-total} = \text{Lead Abatement Subcontractor Costs} \times 1.05$$

The Lead Abatement Subcontractor Costs are its labor, materials, equipment and direct charges.

An amount equal to 65 percent of the Sub-total, as determined above, and multiplied by the applicable sales tax rate, will be added to the Sub-total.

Finally, an amount will be added as an allowance for the Performance and Payment Bond, calculated as follows:

$$\text{Bond allowance} = 0.005 \times [\text{Sub-total} + (0.65 \times \text{Sub-total} \times \text{sales tax rate})].$$

The total contractor payment (TCP) will be as follows:

$$\text{TCP} = (\text{Sub-total}) + (0.65 \times \text{Sub-total} \times \text{sales tax rate}) + (\text{Bond allowance}).$$

(207DSP, 02/20/08)

SECTION 209 FURNISH WATER: of the Standard Specifications is hereby deleted.

SECTION 207 BLANK: of the Standard Specifications is revised to read:

SECTION 207 DUST PALLIATIVE:
207-1 Description:

The work under this section shall consist of applying all water required for the control of dust as considered necessary for the safety and convenience of the traveling public, and for the reduction of the dust nuisance to adjacent property.

207-2 Blank

207-3 Construction Requirements:

The use of pressure pumps and spray bars on all sprinkling equipment used for the application of dust palliative will be required. The use of gravity flow spray bars and splash plates will not be permitted.

Water applied for dust control shall be as approved or directed by the Engineer. The contractor shall provide appropriate equipment for effective control of dust.

207-4 Method of Measurement and Basis of Payment:

No measurement will be made for application of dust palliative, including furnishing water and all necessary equipment and labor, the cost being considered as included in contract items.

(901MOBE, 09/18/12)

SECTION 901 MOBILIZATION:

901-5 Basis of Payment: of the Standard Specifications is revised to read:

Payment for mobilization, measured as provided above, will be made at the contract lump sum price, which shall be full compensation for supplying and furnishing all materials, facilities and services and performing all the work involved as specified herein.

Partial payments under this item will be made in accordance with the following provisions. Reference herein to the adjusted contract shall mean the original contract amount exclusive of mobilization:

The first payment of the lump sum price for mobilization will be paid after the Preconstruction Conference provided that all submissions required under Subsection 108.03 are submitted by the contractor at the Preconstruction Conference to the satisfaction of the Engineer. The amount paid for the first partial payment will be in accordance with Table 901-1.

The second payment of the lump sum price for mobilization will be made when the Engineer has determined that a significant amount of equipment has been mobilized to the project site which will be used to perform portions of the contract work. The amount paid for the second partial payment will be in accordance with Table 901-1.

The third payment of the lump sum price for mobilization will be made on the first estimate following completion of five percent of the adjusted contract. Such percentage determination will not include partial payments for material on hand. The amount paid for the third payment will be in accordance with Table 901-1.

The fourth payment of the lump sum price for mobilization will be made on the first estimate following completion of 10 percent of the adjusted contract. Such percentage determination will not include partial payments for material on hand. The amount paid for the fourth payment will be in accordance with Table 901-1.

The total sum of all payment shall not exceed the original contract lump sum price for mobilization, regardless of the fact that the contractor may have, for any reason, shut down its work on the project or moved its equipment away from the project and back again.

TABLE 901-1 AMOUNT ALLOWED FOR MOBILIZATION DURING THE LIFE OF THE CONTRACT		
Contract Amount: \$	% Of Contra ct	Basis Of Payment
0 - 5,000,000	12% *	25% of the lump sum price for mobilization or 3% of the original contract amount, whichever is less.
5,000,000 +	10% *	25% of the lump sum price for mobilization or 2.5% of the original contract amount, whichever is less.
* If the price bid for mobilization exceeds this percentage, any excess will be paid to the contractor upon completion of the contract.		

The adjustment provisions in Section 104 and the retention of funds provisions in Section 109 shall not apply to the item of mobilization.

When other contract items are adjusted as provided in Section 104, and if the costs applicable to such items of work include mobilization costs, such mobilization costs will be considered as recovered by the contractor in the lump sum price paid for mobilization, and will be excluded from consideration in determining compensation under Section 104.

When mobilization is not included as a contract item, full compensation for any necessary mobilization required will be considered as included in the prices paid for the various contract items involved and no additional compensation will be made.

SECTION 920 – BLANK: the title and text of the Standard Specifications is revised to read:

SECTION 920 – ARCHITECTURAL TREATMENT AND SITE WORK:

SECTION 920-2.01 – JOINT SEALANTS:

PART 1 – GENERAL

1. Summary:

Section Includes:

- Nonsag gunnable joint sealants.
- Self-leveling pourable joint sealants.
- Joint backings and accessories.

2. Reference Standards:

ASTM C834 - Standard Specification for Latex Sealants; 2010.

ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2014.

ASTM C1193 - Standard Guide for Use of Joint Sealants; 2013.

ASTM C1248 - Standard Test Method for Staining of Porous Substrate by Joint Sealants; 2008 (Reapproved 2012).

ASTM C1330 - Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid-Applied Sealants; 2002 (Reapproved 2013).

SCAQMD 1168 - South Coast Air Quality Management District Rule No.1168; current edition; www.aqmd.gov.

3. Submittals:

Product Data for Sealants: Submit manufacturer's technical data sheets for each product to be used, that includes the following:

- Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
- List of backing materials approved for use with the specific product.
- Substrates that product is known to satisfactorily adhere to and with which it is compatible.
- Substrates the product should not be used on.
- Product Data for Accessory Products: Submit manufacturer's technical data sheet for each product to be used, including physical characteristics, installation instructions, and recommended tools.
- Preconstruction Laboratory Test Reports: Submit at Preconstruction Meeting.

4. Quality Assurance:

Preconstruction Laboratory Testing: Arrange for sealant manufacturer(s) to test each combination of sealant, substrate, backing, and accessories.

Adhesion Testing: In accordance with ASTM C794.

Compatibility Testing: In accordance with ASTM C1087.

Allow sufficient time for testing to avoid delaying the work.

Deliver to manufacturer sufficient samples for testing.

Report manufacturer's recommended corrective measures, if any, including primers or techniques not indicated in product data submittals.

Testing is not required if sealant manufacturer provides data showing previous testing, not older than 24 months, that shows satisfactory adhesion, lack of staining, and compatibility.

PART 2 – PRODUCTS

1. Manufacturers:

Nonsag Sealants: Permits application in joints on vertical surfaces without sagging or slumping.

The following manufacturers have been approved for use on the project:

BASF Construction Chemicals-Building Systems: www.buildingsystems.basf.com

Dow Corning Corporation: www.dowcorning.com

Sherwin-Williams Company: www.sherwin-williams.com

Or approved equal.

Selfleveling Sealants: Pourable or self-leveling sealant that has sufficient flow to form a smooth, level surface when applied in a horizontal joint.

The following manufacturers have been approved for use on the project:

BASF Construction Chemicals-Building Systems: www.buildingsystems.basf.com

Dow Corning Corporation: www.dowcorning.com

Sherwin-Williams Company: www.sherwin-williams.com

Or approved equal.

1. Joint Sealants – General:

Sealants and Primers: Provide products having lower volatile organic compound (VOC) content than indicated in South Coast Air Quality Management District (SCAQMD); Rule 1168.

2. Nonsag Joint Sealants:

Non-Staining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.

Movement Capability: Plus 100 percent, minus 50 percent.

Non-Staining To Porous Stone: Non-staining to light-colored natural stone when tested in accordance with ASTM C1248.

Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.

Mildew-Resistant Silicone Sealant: ASTM C920, Grade NS, Uses M and A; single component, mildew resistant; not expected to withstand continuous water immersion or traffic.

Color: Clear.

Polyurethane Sealant: ASTM C920, Grade NS, Uses M and A; single or multicomponent; not expected to withstand continuous water immersion or traffic.

Movement Capability: Plus and minus 25 percent.

Acrylic Emulsion Latex: Water-based; ASTM C834, single component, non-staining, non-bleeding, non-sagging; not intended for exterior use.

3. Self-Leveling Sealants:

Accessories:

Backer Rod: Cylindrical cellular foam rod with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by backing and sealant manufacturers for specific application.

Type for Joints Not Subject to Pedestrian or Vehicular Traffic: ASTM C1330; Type O –

Open Cell Polyurethane.

Open Cell: 40 to 50 percent larger in diameter than joint width.

Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.

Masking Tape: Self-adhesive, nonabsorbent, non-staining, removable without adhesive residue, and compatible with surfaces adjacent to joints and sealants.

PART 3 – EXECUTION

1. Examination:

Verify that joints are ready to receive work.

Verify that backing materials are compatible with sealants.

Verify that backer rods are of the correct size.

2. Preparation:

The contractor shall remove loose materials and foreign matter that could impair adhesion of sealant.

The contractor shall clean joints, and prime as necessary, in accordance with manufacturer's instructions.

The contractor shall perform preparation in accordance with manufacturer's instructions and ASTM C1193.

The contractor shall mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.

3. Joint Sealant Applications:

Scope:

Exterior Joints: Seal open joints, whether or not the joint is indicated on the drawings, unless specifically indicated not to be sealed. Exterior joints to be sealed include, but are not limited to, the following items:

- Wall expansion and control joints.
- Joints between door, window, and other frames and adjacent construction.
- Joints between different exposed materials.
- Openings below ledge angles in masonry.
- Other joints indicated below.
- Interior Joints: Do not seal interior joints unless specifically indicated to be sealed.
- Interior joints to be sealed include, but are not limited to, the following items.
- Joints between door, window, and other frames and adjacent construction.

The contactor shall not seal the following types of joints:

- Intentional weepholes in masonry.
- Joints indicated to be treated with manufactured expansion joint cover or some other type of sealing device.
- Joints where sealant is specified to be provided by manufacturer of product to be sealed.
- Joints where installation of sealant is specified in another section.
- Joints between suspended panel ceilings/grid and walls.
- Exterior Joints: Use nonsag non-staining silicone sealant, unless otherwise indicated.
- Interior Joints: Use nonsag polyurethane sealant, unless otherwise indicated.
- Wall and Ceiling Joints in Non-Wet Areas: Acrylic emulsion latex sealant.
- Joints between Fixtures in Wet Areas and Floors, Walls, and Ceilings: Mildew-resistant silicone sealant; clear.
- Interior Wet Areas: restrooms; fixtures in wet areas include plumbing fixtures, countertops, cabinets, and other similar items.

4. Installation:

The contractor shall perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.

The contractor shall perform installation in accordance with ASTM C1193.

The contractor shall install bond breaker backing tape where backer rod cannot be used.

The contractor shall install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.

The contractor shall not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.

Nonsag Sealants: The contractor shall tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

4. Field Quality Control:

The contractor shall perform field quality control inspection/testing as specified in PART 1 under QUALITY ASSURANCE article.

The contractor shall remove and replace failed portions of sealants using same materials and procedures as indicated for original installation.

SECTION 920-3.01 – STEEL DOOR AND FRAMES: PART 1 – GENERAL

1. Summary:

Section Includes:

Non-fire-rated steel doors and frames.
Thermally insulated steel doors.

2. Reference Standards:

ANSI A250.8 - SDI-100 Recommended Specifications for Standard Steel Doors and Frames; 2003 (R2008).

ANSI A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames; 1998 (R2011).

ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2013.

ASTM C1363 - Standard Test Method for Thermal Performance of Building Assemblies by Means of a Hot Box Apparatus; 2011.

BHMA A156.115 - Hardware Preparation in Steel Doors and Steel Frames; 2006.

NAAMM HMMA 840 - Guide Specifications for Installation and Storage of Hollow Metal Doors and Frames; The National Association of Architectural Metal Manufacturers; 2007.

NAAMM HMMA 861 - Guide Specifications for Commercial Hollow Metal Doors and Frames; The National Association of Architectural Metal Manufacturers; 2006.

3. Submittals:

Shop Drawings: The contractor shall provide details of each opening, showing elevations, glazing, frame profiles, and identifying location of different finishes, if any.

4. Quality Assurance:

Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

PART 2 – PRODUCTS

1. Manufacturers:

The following manufacturers have been approved for use on the project:

- Assa Abloy.: www.assaabloydss.com.
- Republic Doors: www.republicdoor.com.
- Steelcraft, an Allegion brand: www.allegion.com/us.
- Or approved equal.

2. Doors and Frames:

Requirements for All Doors and Frames:

- Door Top Closures: Flush with top of faces and edges.
- Door Edge Profile: Beveled on both edges.
- Door Texture: Smooth faces.
- Hardware Preparation: In accordance with BHMA A156.115, with reinforcement welded in place, in addition to other requirements specified in door grade standard.

- Galvanizing for Units in Wet Areas: Components hot-dipped zinc-iron alloy-coated (galvannealed) in accordance with ASTM A653/A653M, with manufacturer's standard coating thickness
- Finish: Factory primed, for field finishing.

Combined Requirements: If a particular door and frame unit is indicated to comply with more than one type of requirement, comply with all the specified requirements for each type; for instance, an exterior door that is also indicated as being sound-rated must comply with the requirements specified for exterior doors and for sound-rated doors; where two requirements conflict, comply with the most stringent.

3. Steel Doors:

Exterior Doors:

- Core: Polystyrene.
- Thickness: 1-3/4 inch.
- Insulating Value: U-value of 0.50, when tested in accordance with ASTM C1363.
- Weatherstripping: Integral, recessed into door edge or frame.

4. Steel Frames:

General:

Comply with the requirements of grade specified for corresponding door.
ANSI A250.8 - SDI-100, Level 1 Door Frames:

- 16 gage, 0.053 inch, minimum thickness.
- Finish: Same as for door.
- Frames Wider than 48 Inches: Reinforce with steel channel fitted tightly into frame head, flush with top.
- Exterior Door Frames: Face welded, seamless with joints filled.
- Weatherstripping: Integral, recessed into door edge or frame.

5. Accessory Materials:

Double Doors: Astragals.

Exterior Doors: Steel, Z-shaped.

6. Finish Materials:

Primer: Rust-inhibiting, complying with ANSI A250.10, door manufacturer's standard.

PART 3 – EXECUTION

1. Examination:

Verify existing conditions before starting work.

Verify that opening sizes and tolerances are acceptable.

2. Installation:

The contractor shall install in accordance with the requirements of the specified door grade standard and NAAMM HMMA 840.

The contractor shall coordinate frame anchor placement with wall construction.

The contractor shall coordinate installation of hardware.

3. Tolerances:

Maximum Diagonal Distortion: 1/16 in measured with straight edge, corner to corner.

4. Adjusting:

The contractor shall adjust for smooth and balanced door movement.

5. Schedule:

The contractor shall refer to the Door Schedule on the drawings.

SECTION 920-4.01 – WOOD DOOR AND ACCESSORIES:

PART 1 – GENERAL

1. Summary:

Wood doors, stile and rail design.

Panels of wood and glass.

2. Reference Standards:

AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2009.

3. Submittals:

Shop Drawings: Illustrate door opening criteria, elevations, sizes, types, swings.

4. Quality Assurance:

Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

5. Delivery, Storage, and Handling:

The contractor shall package, deliver, and store doors in accordance with quality standard specified.

The contractor shall protect doors with resilient packaging sealed with heat shrunk plastic. The contractor shall not store doors in damp or wet areas; or in areas where sunlight might bleach veneer. The contractor shall seal top and bottom edges with tinted sealer if stored more than one week. The contractor shall break seal on site to permit ventilation.

PART 2 – PRODUCTS

1. Doors:

Quality Level: Custom Grade, Standard Duty performance, in accordance with AWI/AWMAC/WI (AWS).

Exterior Doors: 1-3/4 inches thick unless otherwise indicated; solid lumber construction; mortise and tenon joints; water repellent treated; 1/4 inch thick fully tempered float glass in 1/2 lite. Transparent finish.

Interior Doors: 1-3/4 inches thick unless otherwise indicated; solid lumber construction; mortise and tenon joints. Transparent finish.

Red Oak, HPVA Grade A, plain sliced (flat cut), with plank match.

Glazed Openings:

- Heat-Strengthened and Fully Tempered Glass: ASTM C1048.
- Glazing: Single vision units, 1/4 inch glass.
- Panel or Glass Retention Molding: Wood of same species as door facing, molded stop applied one-side, mitered corners.

PART 3 – EXECUTION

1. Examination:

The contractor shall verify existing conditions before starting work.

The contractor shall verify that opening sizes and tolerances are acceptable.

The contractor shall not install doors in frame openings that are not plumb or are out of tolerance for size or alignment.

2. Door Construction:

At exterior doors, the contractor shall provide aluminum flashing at the top and bottom rail for full thickness and width of door.

The contractor shall cut and configure exterior door edge to receive recessed weatherstripping devices.

The contractor shall provide edge clearances in accordance with referenced quality standards.

3. Installation:

The contractor shall install doors in accordance with manufacturer's instructions and specified quality standards.

The contractor shall adjust width of non-rated doors by cutting equally on both jamb edges.

The contractor shall trim door height by cutting bottom edges to a maximum of 3/4 inch.

All hardware shall be machine cut.

The contractor shall coordinate installation of doors with installation of frames and hardware.

The contractor shall coordinate installation of glazing.

4. Tolerances:

The contractor shall conform to specified quality standard for fit, clearance, and joinery tolerances.

5. Adjusting:

The contractor shall adjust doors for smooth and balanced door movement.

6. Schedule:

The contractor shall refer to the Door Schedule on the drawings.

SECTION 920-5.01 – GLASS SWING DOORS:

PART 1 – GENERAL

1. Summary:

Work included: furnish all necessary materials, labor and equipment for the complete installation of tempered glass swing doors, as shown on drawings and specified herein.
Work not included: structural support, interior closures, trim.

2. Manufacturers:

The following manufacturers have been approved for use on the project:

- Oldcastle Building Envelope: www.oldcastlebe.com.com.
- C.R. Laurence Co. Inc.: www.crl-arch.com.
- Avanti Systems USA: www.avantisystemsusa.com/us.
- Or approved equal.

PART 2 PRODUCTS

1. Rails:

Top and bottom rails shall be selected from the options provided in this section. Rail sections shall be of extruded aluminum of 6063-T5 alloy and temper and dry-glazed. Dry-glazed rail may be a pressure assembly utilizing a fitted EPDM (ethylene propylene diene terpolymer) gasket, or mechanical rail assemblies utilizing torqued fasteners and gaskets to affix glass to the rail. Dry-glazed rails shall use precision-fit end caps in the finish to match the rail.

2. Glass:

Glass shall be 3/4" thick, fully tempered, clear.

Glass shall conform to requirements set forth by ASTM Specifications C1036 and C1048 for fabrication and tempering. All exposed edges will be flat-polished to a reflective appearance similar to the glass surface.

3. Finishes:

All exposed surfaces will be free of scratches and other serious blemishes.

Rail finishes for extruded aluminum, shall be an Architectural Class II clear anodic coating conforming with Aluminum Association standards.

4. Hardware:

Hardware for tempered glass swing doors shall be furnished by the glass door supplier. Hardware shall be the glass manufacturer's standard as follows:

1. Handles: OBE-8 Push-Pull
2. Pivots: Top Offset Pivot
3. Door Closers: Overhead Closer
4. Locking Hardware: LL05 Bottom Rail Lock w/ Round Bolt

If lock cylinders for doors are to be master-keyed, it is suggested that cylinders be included under the "Finish Hardware" section of specifications.

Doors corner fittings shall be top and bottom on the pivot corners plus a lock fitting on active side of the door. Usually on the bottom near or at the corner.

5. Metal Finishes:

Aluminum finishes shall be in accordance with the Aluminum Association Designation System for Aluminum Finishes, for all aluminum door rails and patch fitting covers.

6. Push Pulls / Standard:

Push Pulls shall be 1" diameter, 10" to 12" vertical.

PART 3 EXECUTION

1. Installation:

Doors shall be installed by qualified installers in a workmanlike manner in accordance with industry standards. All items under this specification will be set in correct locations as shown on the plans, and shall be level, square and plumb.

SECTION 920-6.01 – COLD FORMED METAL FRAMING:

PART 1 – GENERAL

1. Summary:

Formed steel stud exterior wall and interior wall framing.

Exterior wall sheathing.

Water-resistive barrier over sheathing.

2. Reference Standards:

AISI SG02-1 - North American Specification for the Design of Cold-Formed Steel Structural Members; American Iron and Steel Institute; 2001 with 2004 supplement. (replaced SG-971)

ANSI A208.1 - American National Standard for Particleboard; 2009.

ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.

ASTM C955 - Standard Specification for Load-Bearing (Transverse and Axial) Steel Studs, Runners (Tracks), and Bracing or Bridging for Screw Application of Gypsum Panel Products and Metal Plaster Bases; 2011c.

PS 1 - Structural Plywood; 2009.

3. Administrative Requirements:

Work shall be coordinated with other trades that are to be installed in or adjacent to the metal framing system.

4. Submittals

Shop Drawings shall indicate component details, framed openings, bearing, anchorage, loading, welds, and type and location of fasteners, and accessories or items required of related work.

Manufacturer's Installation Instructions shall indicate special procedures and conditions requiring special attention.

PART 2 PRODUCTS

1. Framing System:

The contractor shall provide primary and secondary framing members, bridging, bracing, plates, gussets, clips, fittings, reinforcement, and fastenings as required to provide a complete framing system.

2. Framing Materials:

Studs shall be in accordance with the requirements of ASTM C955. Studs shall be formed to channel, "C", or "Sigma" shape with punched web;

Tracks shall be in accordance with the requirements of ASTM C955. U-shaped track shall match nominal width and compatible height of studs.

3. Wall Sheathing:

Wall Sheathing: Plywood; PS 1, Grade C-D, Exposure I.

4. Accessories:

Water-Resistive Barrier:

Tyvek Homewrap: www.dupont.com.

Typar Housewrap: www.typar.com

Tamlyn Wrap: www.tamlynwrap.com

Or approved equal.

Fasteners:

Fasteners shall be Self-Drilling, Self-Tapping Screws, Bolts, Nuts and Washers. Fasteners shall be hot dip galvanized in accordance with the requirements of ASTM A153/A153M.

Anchorage Device shall be powder actuated.

PART 3 EXECUTION

1. Examination:

The contractor shall verify that substrate surfaces are ready to receive new work.

2. Installation of Studs:

The contractor shall install components in accordance with manufacturers' instructions and ASTM C1007 requirements.

3. Wall Sheathing:

The contractor shall secure wall sheathing with long dimension perpendicular to wall studs, with ends over firm bearing and staggered, using self-tapping screws.

The contractor shall place water-resistive barrier horizontally over wall sheathing, weather lapping edges and ends.

SECTION 920-7.01 – METAL PANELS FOR WALLS:

PART 1 – GENERAL

1. Summary:

Manufactured metal panels for walls, with related flashings and accessory components.

2. Reference Standards:

ASTM A606-4 Standard Specification for Weathering Steel Sheet.

3. Submittals:

Samples: The contractor shall submit two samples of wall panel, 36 inch by 16 inch in size illustrating finish color, sheen, and texture.

4. Quality Assurance:

Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of experience.

5. Mock-Up:

The contractor shall construct a metal panel mock-up. The mock up shall be 6 feet long by 4 feet wide; including the panel system, attachments to building frame, associated vapor retarder and air seal materials, weep drainage system, sealants and seals, and required insulation.

The location of the mock-up shall be as determined by the Engineer.

Upon approval the mock-up may be used as part of the work.

6. Delivery, Storage, and Handling:

The contractor shall protect panels from accelerated weathering by removing or venting sheet plastic shipping wrap.

The contractor shall prevent contact with materials that may cause discoloration or staining of products.

PART 2 PRODUCTS

1. Manufacturers

The following manufacturers have been approved for use on the project:

- Western States Metal Roofing; Product RustWall Panel.
- AEP Span; Product: Flush Panel.
- Metal Sales Manufacturing Corp.; Product TLC-1
- Or approved equal.

2. Manufactured Metal Panels:

Exterior wall panels shall be horizontal, flush wall panels.

A. Material: A606-4 steel sheet, minimum 22 gage thick.

Panel Width: 12 inches.

Panel Length: 48 inches

Panel Depth: 1".

Color: Natural steel, allowed to rust.

Internal and external corners shall be the same material and finish as exterior sheets. Corners shall be shop cut and factory mitered to required angles.

Trim shall be same material, thickness and finish as exterior sheets.

Wall panel anchors shall be stainless steel.

3. Accessories

Gaskets shall be manufacturer's standard type, suitable for use with system and permanently resilient.

Sealants:

- Exposed Sealant shall be elastomeric; silicone, polyurethane, or silyl-terminated polyether/polyurethane.
- Concealed sealant shall be non-curing butyl sealant or tape sealant.

Fasteners shall be manufacturer's standard type to suit application, and stainless steel with soft neoprene washers. Fastener cap shall have the same color as exterior panel.

PART 3 EXECUTION

1. Examination:

The contractor shall verify that building framing members are ready to receive panels.

The contractor shall verify that water-resistive barrier has been installed over substrate completely and correctly.

2. Installation:

The contractor shall install panels on walls in accordance with manufacturer's instructions.

The contractor shall fasten panels to structural supports; aligned, level, and plumb.

The contractor shall use concealed fasteners unless otherwise approved by the Engineer.

The contractor shall seal and place gaskets to prevent weather penetration.

The work shall maintain a neat appearance.

Cleaning

The contractor shall remove site cuttings from finish surfaces.

SECTION 920-8.01 – WATER-RESISTIVE BARRIER:

PART 1 – GENERAL

1. Summary:

Water-Resistive Barrier: Under exterior wall cladding, over sheathing or other substrate; not air tight or vapor retardant.

Air Barriers: Materials that form a system to stop passage of air through exterior walls, joints between exterior walls and roof, joints around frames of openings in exterior walls.

2. Reference Standards:

ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2014.

ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials; 2013.

ASTM E2178 - Standard Test Method for Air Permeance of Building Materials; 2013.

PART 2 PRODUCTS

1. Air Barrier Materials (Water Vapor Permeable and Water-Resistive)

Air Barrier Sheet shall be mechanically fastened:

Air permeance shall be 0.004 cubic feet per minute per square foot maximum, when tested in accordance with ASTM E2178.

Water vapor permeance shall be 5 perms minimum, when tested in accordance with ASTM E96/E96M Procedure A (desiccant method).

Ultraviolet and weathering resistance shall be approved in writing by the manufacturer for minimum of 6 months weather exposure.

Surface burning characteristics shall have a flame spread index of 25 or less, and smoke developed index of 50 or less, when tested in accordance with ASTM E84.

Seam and perimeter tape shall be polyethylene self-adhering type, mesh reinforced, 2 inches wide, compatible with sheet material; unless otherwise specified.

2. Products:

The following manufacturers have been approved for use on the project:

- DuPont Building Innovations; Tyvek Commercial Wrap: www.dupont.com.
- Fiberweb, Inc; Typar MetroWrap: www.typar.com.
- VaproShield, LLC; WrapShield: www.vaproshield.com.
- Or approved equal..

3. Accessories

Sealants, Tapes, and Accessories for Sealing Weather Barrier and Sealing Weather Barrier to Adjacent Substrates shall be as specified or as recommended by weather barrier manufacturer.

PART 3 EXECUTION

1. Installation

The contractor shall install materials in accordance with manufacturer's instructions.

The contractor shall install continuous air tight barrier over exterior wall surfaces with sealed seams and with sealed joints to adjacent surfaces.

Mechanically Fastened Sheets - On Exterior:

The contractor shall install sheets shingle-fashioned to shed water. Seams shall be horizontal.

The contractor shall overlap seams at locations other than corners as recommended by manufacturer. Seams shall be at least 6 inches minimum.

The contractor shall overlap at outside and inside corners as recommended by manufacturer. Corner seams shall be least 12 inches minimum.

For applications specified to be air tight, the contractor shall seal seams, laps, penetrations, tears, and cuts with self-adhesive tape; use only large-headed, gasketed fasteners recommended by the manufacturer.

The contractor shall install air barrier and vapor retarder UNDER jamb flashings.

The contractor shall install head flashings under weather barrier.

At openings to be filled with frames having nailing flanges, the contractor shall wrap excess sheet into opening; at head, and seal sheet over flange and flashing.

2. Openings and Penetrations in Exterior Weather Barriers:

The contractor shall install flashing over sills, covering entire sill frame member, extending at least 5 inches onto weather barrier and at least 6 inches up jambs; mechanically fasten stretched edges.

At openings to be filled with frames having nailing flanges, the contractor shall seal head and jamb flanges using a continuous bead of sealant compressed by flange and cover flanges with at least 4 inches wide. The contractor shall not seal sill flange.

At openings to be filled with non-flanged frames, the contractor shall seal weather barrier to all sides of opening framing, using flashing at least 9 inches wide, covering entire depth of framing.

At head of openings, the contractor shall install flashing under weather barrier extending at least 2 inches beyond face of jambs. The contractor shall seal weather barrier to flashing.

At interior face of openings, the contractor shall seal gap between window/door frame and rough framing, using joint sealant over backer rod.

At service and other penetrations the contractor shall form flashing around penetrating item and seal flashing to weather barrier surface.

3. Field Quality Control

The contractor shall not cover installed weather barriers until required inspections have been completed.

4. Protection

The contractor shall not leave materials exposed to weather longer than recommended by the manufacturer.

SECTION 920–9.01 – THERMAL BARRIER: PART 1 – GENERAL

1. Summary:

Provide continuity of thermal barrier at building enclosure elements.
Provide continuity of vapor and air barrier at building enclosure elements.

2. Environmental Requirements:

The contractor shall not install insulation during inclement weather or when surfaces are moist.

PART 2 – PRODUCTS

1. Manufacturers:

The following manufacturers have been approved for use on the project:

- Johns Manville, Denver, CO.
- United States Gypsum Co., Chicago, IL.
- Owens Corning Fiberglas Corp., Toledo, OH.
- Fibrex Co., Aurora, IL.
- Certainteed Corp., Valley Forge, PA.
- Celotex Corporation, Tampa, FL.
- Amoco Foam Products Co.
- Tex-Styrene Inc.
- Dow Chemical
- W. R. Grace.
- Or approved equal.

2. Batt (Thermal) Insulation - Kraft Faced, Insulation Type 1:

Insulation shall be glass fiber composition faced with integral kraft paper-faced vapor barrier, minimum 1 pound per cubic foot density, meeting following standards:

- ASTM E 84: Flame spread 25 maximum; smoke developed 50 maximum.
- ASTM C 518: R value of 3.2 per inch of thickness.
- ASTM C 665: Type III.

3. Acoustical Semi-Rigid, Insulation Type 2

Mineral fiber composition shall be un-faced, semi-rigid, and meet the following standards:

- ASTM E 84: FHC 15/10 maximum.
- ASTM C 518: R value of 4.0 per inch of thickness.
- ASTM C 665: Type I.

Following products are acceptable:

- Sound Attenuating Fire Blankets (SAFB) by U.S. Gypsum Co.
- Sound Control Blankets by Fibrex Co.
- OEM Acoustical Board by Certainteed.
- Or approved equal.

4. Accessories

Joint tape shall be pressure sensitive type, as recommended by insulation manufacturer. Insulation Adhesive shall be as recommended by insulation manufacturer.

PART 3 – EXECUTION

1. Batt and Blanket Installation:

The contractor shall install insulation either friction fit, using adhesive, or mechanical fasteners in accordance with manufacturer's recommendations after mechanical and electrical services have been installed.

The contractor shall fit insulation tight within stud spaces, above soffits, behind fascias, and tight to and behind mechanical and electric services within plane of insulation, leaving no gaps or voids. The contractor shall butt insulation tightly.

The contractor shall cut and fit tightly around items penetrating insulation, at stagger and butt joints, or the cavity of a cavity wall system.

Within metal stud or joist systems the contractor shall install insulation full height and width in such manner that voids or openings do not occur. Insulation is required for full width between studs, including cavity of each stud. The contractor shall not allow insulation to obstruct vents.

The contractor shall cut and trim insulation neatly, to fit spaces. The contractor shall cut insulation oversize to ensure tight butt joints when installed. The contractor shall cut insulation to fit around protrusions and irregularly shaped projections. The contractor shall use batts free of ripped backs or edges.

Batt Insulation with Vapor Barrier Membrane:

The contractor shall install insulation with factory applied membrane facing "warm in winter" side of building spaces. If in doubt, confirm location with the Engineer.

The contractor shall lap ends and side flanges of membrane over framing members. The contractor shall fasten in place at maximum 6 inches on center or tape in place.

Tape seal butt ends; lap side flanges and ends. The contractor shall not tear membrane.

The contractor shall install sound attenuating blankets above ceilings and in stud cavities. The contractor shall butt the sound attenuating blankets tightly.

2. Schedules

Exterior Walls and Soffits shall receive Type 1, R-value 19 minimum insulation.

Interior Walls shall receive acoustical Insulation, Type 2.

SECTION 920–10.01 – FOAM INSULATION:

PART 1 – GENERAL

1. Summary:

Open Cell Spray Foam Insulation.

2. References:

ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

3. Requirements:

Conform to applicable code for flame and smoke, concealment, and over coat requirements.

4. Submittals:

- Product Data: Manufacturer's data sheets on each product shall be used, including:
 - Preparation instructions and recommendations.
 - Storage and handling requirements and recommendations.
 - Installation methods.
- Manufacturer's Certificates: Certify products meet or exceed specified requirements.

5. Quality Assurance:

Manufacturer Qualifications: Manufacturer shall have a minimum of ten years experience manufacturing products in this section and shall provide all products listed.

Contractor Qualifications: Products listed in this section shall be installed by a single contractor with at least five years experience successfully installing insulation on projects of similar type and scope as specified in this section.

The contractor shall provide a mock-up of installed insulation for evaluation of surface preparation techniques and application workmanship. Approved mock up area can be used as part of the project.

The contractor shall not cover foam insulation until installed insulation is approved by the Engineer.

6. Delivery, Storage, and Handling:

The contractor shall deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification.

The contractor shall store materials in dry locations with adequate ventilation, protected from freezing rain, direct sunlight and excess heat and in such a manner to permit easy access for inspection and handling. Insulation shall be stored at temperature between 55 and 80 degrees F.

The contractor shall handle materials with care to avoid damage.

7. Weekly Progress Meetings:

Foam insulation work shall be reviewed a minimum of two weeks before foam insulation installation.

8. Sequencing:

The contractor shall have foam insulation on site in time to prevent interruption of construction progress.

9. Project Conditions:

The contractor shall maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by insulation manufacturer for optimum results.

The contractor shall not install products under environmental conditions outside manufacturer's absolute limits.

The contractor shall not apply insulation when substrate temperatures are under 40 degrees F prior to installation.

Surfaces shall be dry prior to application of spray foam.

To avoid overspray, foam insulation shall not be applied when conditions are windy.

PART 2 – PRODUCTS

1.Manufacturers:

The following manufacturers have been approved for use on the project:

- CertainTeed Corp., Insulation Group
- FOAM-LOK 500 Open Cell Spray Foam Insulation, by Lapolla Industries, Inc.
- Classic LD-C-50 Open Cell Spray Foam Insulation, By Icynene, Inc.
- Or approved equal.

2.Spray Foam Insulation

Insulation shall be a polyurethane water-blown type open cell foam.

Physical and Mechanical Properties shall be as follows:

- Core Density: 0.45-0.55 pcf when tested in accordance with ASTM D 1622.
- Thermal Resistance: 3.6 when tested in accordance with ASTM C 518 at 75 degrees F, (h-ft²- degrees F)/Btu.
- Open Cell Content: Greater than 95 percent when tested in accordance with ASTM D 2842.
- Compressive Strength: Greater than 2.4 psi when tested in accordance with ASTM D 1621.
- Tensile Strength: 5.2 psi when tested in accordance with ASTM D 1623.
- Water Absorption: Less than 30 percent by volume when tested in accordance with ASTM D 2842.
- Dimensional Stability: Less than 12 percent by volume when tested in accordance with ASTM D 2126 at 75 degrees F/95 percent RH, 28 Days.
- Water Vapor Transmission: 33 perm/inch when tested in accordance with ASTM E 96.
- Air Permeability: 0.013 when tested in accordance with ASTM E 283 at 5-1/2 inch thickness.
- Fungi Resistance: Pass, with no growth when tested in accordance with ASTM C 1338.

Fire performance shall be as follows:

Flame Spread Index shall be less than 25 when tested in accordance with ASTM E 84.

Smoke Index shall be less than 350 when tested in accordance with ASTM E 84.

Thermal Performance shall be tested in accordance with ASTM C 518 and/or ASTM C 177 at 75 degrees F mean temperature.

Thickness 1 inch, R-Value 3.6 (h-ft²-degreesF)/Btu.

Thickness 1-12 inches, R-Value 5.4 (h-ft²-degreesF)/Btu.

Thickness 2 inches, R-Value 7.2 (h-ft²-degreesF)/Btu.

Thickness 2-12 inches, R-Value 9.0 (h-ft²-degreesF)/Btu.

Thickness 3 inches, R-Value 10.8 (h-ft²-degreesF)/Btu.

Thickness 3-12 inches, R-Value 12.6 (h-ft²-degreesF)/Btu.

Thickness 4 inches, R-Value 14.4 (h-ft²-degreesF)/Btu.

Thickness 4-12 inches, R-Value 16.2 (h-ft²-degreesF)/Btu.

Thickness 5 inches, R-Value 18.0 (h-ft²-degreesF)/Btu.

Thickness 5-12 inches, R-Value 19.8 (h-ft²-degreesF)/Btu.

Thickness 6 inches, R-Value 21.6 (h-ft²-degreesF)/Btu.

Thickness 11 inches, R-Value 40.7 (h-ft²-degreesF)/Btu.

PART 3 – EXECUTION

1. Examination:

The contractor shall not begin installation until substrates have been properly prepared per manufacturers requirements.

The contractor shall verify that all exterior and interior wall, partition, and floor/ceiling assembly construction has been completed to the point where the insulation may correctly be installed.

The contractor shall verify that substrate and cavities are dry and free of any foreign material that will impede application.

The contractor shall verify that mechanical and electrical services in ceilings, walls and floors have been installed and tested and, if appropriate, verify that adjacent materials are dry and ready to receive insulation.

2. Preparation:

The contractor shall clean surfaces thoroughly prior to installation.

The contractor shall prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

The contractor shall mask and protect adjacent surfaces from overspray or dusting.

3. Installation:

The contractor shall install insulation in accordance with manufacturer's instructions.

Insulation shall be installed according to applicable local codes.

The contractor shall apply insulation by spray method, to uniform monolithic density without voids.

The contractor shall apply insulation to achieve thermal resistance R-Value of R-40.

The contractor shall apply insulation to seal voids at truss ends to prevent wind scouring of ceiling insulation.

The contractor shall apply insulation to fill voids around accessible service and equipment penetrations.

The contractor shall not install spray foam insulation in areas where it will be in contact with equipment or materials with operating temperatures of 180 degrees F or greater.

The contractor shall apply insulation in unvented roof spaces.

4. Field Quality Control

Inspection will include verification of insulation and density verifying the required depth, type and that no gaps exist.

5. Protection

The contractor shall protect installed products until completion of project.

The contractor shall touch-up, repair or replace damaged products before substantial completion.

SECTION 920–11.01 – STRUCTURAL INSULATED PANELS:

PART 1 – GENERAL

1. Summary:

Structural insulated panels for roofs.

2. Reference Standards:

ASTM C177 - Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus; 2013.

ASTM C518 - Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus; 2010.

ASTM D1621 - Standard Test Method for Compressive Properties of Rigid Cellular Plastics; 2010.

ASTM E84 - Surface burning characteristics for the rigid insulation core.

ASTM E84 - Surface burning characteristics conducted for the interior and exterior surfaces of the finished panel.

PS 2 - Performance Standard for Wood-Based Structural-Use Panels; National Institute of Standards and Technology, U.S. Department of Commerce; 2010.

3. Administrative Requirements:

Structural insulated panel work shall be reviewed at the weekly progress meeting a minimum of one week before the start of installation. All affected trades shall attend the meeting.

4. Submittals:

The contractor shall provide structural insulated panel manufacturer's product literature including structural properties, design load capacities and installation instructions.

Shop Drawings shall contain fully dimensioned fabrication and installation details for structural insulated panels. Shop drawings shall indicate dimensions, materials, connections and arrangement of joints. Shop drawings shall include anchorage, size and type of fasteners, and accessories.

Shop drawings shall include calculations that indicate compliance with the applicable building code and the structural insulated panel manufacturer's requirements.

Shop drawings shall include a seal of a Professional Structural Engineer registered in Arizona on drawings and calculations.

Shop drawings shall include selections from prescriptive design tables that indicate compliance with the applicable building code and the structural insulated panel manufacturer's requirements.

The contractor shall submit manufacturer warranty and ensure that forms have been completed in accordance with section 106.13 of the Standard Specifications.

5. Delivery, Storage and Handling

The contractor shall deliver structural insulated panels in manufacturer's packaging, if any, and with manufacturer labels and markings intact.

The contractor shall keep the structural insulated panels dry by covering the panels with waterproof covering during transportation and storage.

The contractor shall protect edges of wood construction panels and foam cores.

The contractor shall fully support structural insulated panels off the ground.

The contractor shall not lift structural insulated panels by wood construction panel layer.

PART 2 – PRODUCTS

1. Manufacturers:

The following manufacturers have been approved for use on the project:

- RAY-CORE, INC.; www.raycore.com.
- Insulspan, Inc.; www.insulspan.com.
- Premier SIPs; www.premiersips.com.
- Or approved equal.

2. Structural Insulated Panels:

Structural Insulated Panels: Provide structural insulated panels capable of withstanding design loads including dead load, live load, wind load and seismic load.

Structural Insulated Roof Panel shall be oriented strand board construction panel laminated to both sides of rigid polyurethane insulation board.

3. Materials:

Oriented Strand Board: 4 feet by 8 feet., 7/16 inch thick, APA Exposure 1, DOC PS-2 span rating 24/16, minimum.

Polyurethane-Modified Polyisocyanurate Foam Insulation: Compressive Strength: ASTM C1289, Type V; 16 psi (110 kPa), minimum, when tested according to ASTM D1621.

Thermal Resistance (R-value of 38): 9.0 deg F hr sq ft/Btu, minimum, at 75 deg F mean temperature when tested at 2 inch thickness in accordance with ASTM C518 or ASTM C177.

Overall Thickness: 6 inches, nominal.

Edge Treatment: Square edge.

PART 3 – EXECUTION

1. Examination:

The contractor shall examine framing and other surfaces to receive structural insulated panels. The contractor shall verify conditions are suitable for panel installation. The contractor shall report unsatisfactory conditions to the Engineer. The contractor shall not proceed with structural insulated panel work until any unsatisfactory conditions corrected.

2. Preparation:

The contractor shall coordinate installation of rough carpentry members.

3. Installation:

The contractor shall install structural insulated panels in accordance with manufacturer's instructions.

The contractor shall comply with manufacturer's written recommendation for number, size and placement of fasteners.

The contractor shall join structural insulated panel edges according to manufacturer's written recommendation.

Restrictions:

The contractor shall not over cut oriented strand board or plywood face when field-cutting openings.

The contractor shall not install electrical chases inside structural insulated panels.

The contractor shall not install plumbing inside structural insulated panels without consulting manufacturer and obtaining written recommendations.

The contractor shall protect structural insulated panel core from solvents and solvent vapors.

The contractor shall prevent damage to structural insulated panels.

When structural insulated panels have oriented strand board or plywood on one side only, the contractor shall install panel with wood face on exterior of structure.

The contractor shall repair or replace damaged panels at no additional cost to the Department.

4. Protection:

The contractor shall not leave panels exposed to moisture. The contractor shall remove wet panels or allow to dry completely before installation of sealants, tape, weather barrier and roofing materials.

The contractor shall protect installed structural insulated panels from subsequent construction operations.

The contractor shall cover top and edges of unfinished panel work. Protect from weather and prevent accumulation of water in cores.

SECTION 920-12.01 – RIGID BOARD INSULATION:

PART 1 – GENERAL

1. Summary:

Extruded polystyrene rigid board insulation for conventional roof membrane assemblies.

2. Related Sections

Section 920-13.01- Thermoplastic Membrane Roofing.

3. References

ASTM C578-[06]: Standard Specification for Rigid, Cellular Polystyrene Insulation.

4. Shop Drawings

Shop Drawing shall indicate degree of slope and layout of sloping boards and fill boards on roof surfaces. Roof shop drawings shall ensure positive drainage to roof drains.

5. Submittals

Manufacturer's installation instructions shall indicate procedures for preparation and installation specific to the work of this section.

6. Quality Assurance

The contractor shall obtain each type of insulation material from a single manufacturer.

7. Delivery, Storage and Handling

The contractor shall handle products carefully, ensuring board corners are not broken and boards are not damaged.

The contractor shall not store product in direct sunlight. If stored outdoors, the contractor shall cover product with light-colored opaque tarpaulins to protect from solar radiation.

The contractor shall store products away from construction activity and sources of ignition.

The contractor shall protect products from damage during handling, installation and at point of installation.

8. Environmental Requirements

Apply insulation only when surfaces and ambient temperatures are within manufacturer's prescribed limits.

PART 2 – PRODUCTS

1. Materials:

Rigid board insulation requirements shall be as described below:

- Rigid Board Insulation shall be extruded polystyrene board conforming to the requirements of ASTM C578, Type IV, rigid, closed cell type, with integral high density skin.
- Thermal Resistance (ASTM C518): typical 5 year aged value of R-5 per 1 inch of thickness.
- Board Size shall be 4' x 8'.
- Board Thickness shall be as indicated on Drawings.
- Compressive Strength (ASTM D1621) shall be 25 psi minimum.
- Water Absorption (ASTM D2842): 0.7% by volume maximum.
- Edges shall be square.
- Water Vapor Permeance (ASTM E96/96M) shall be maximum 1.1 perms.
- Flame Spread/Smoke Developed Values (ASTM E84) shall be 5/165.

The following manufacturers have been approved for use on the project:

- STYROFOAM™ Brand DECKMATE™ Plus by The Dow Chemical Company.
- THERMAPINK IV (incl. tapered), by Owens Corning Insulation Systems, LLC.
- ISO 95+ GL Insulation (incl. tapered), by Firestone Building Products.
- Or approved equal.

Thermal barrier shall be 1/4 inch thick silicone treated gypsum core, glass mat [with non-asphaltic coating] both faces, fire rated Type X board meeting UL Class A; Dens-Deck by G-P Gypsum.

Adhesive: As recommended by the Manufacturer.

PART 3 – EXECUTION

1. Examination:

The contractor shall verify that the insulation boards and adjacent materials are compatible.

The contractor shall verify that substrate is sound, clean, and free of oil, grease, and materials or substances that may impede adhesive bond.

The contractor shall verify roof has adequate slope to ensure positive drainage.

2. Installation:

The contractor shall apply full bed of adhesive of a type and rate as recommended by the insulation board manufacturer. The contractor shall spread only enough adhesive to install four boards at a time. The contractor shall press boards in place to ensure complete bond with substrate. The contractor shall apply adhesive fully around protrusions.

The contractor shall apply insulation boards parallel to roof perimeter long edges.

The contractor shall stagger end joints.

The contractor shall lay insulation boards with edges in moderate contact without forcing.

The contractor shall cut insulation to fit neatly to perimeter blocking and around penetrations through roof.

The contractor shall lay a second layer of insulation with joints staggered from first layer.

The contractor shall cut boards to slope for a distance of 24 inches back from roof drains for positive drainage.

The contractor shall apply no more insulation than can be covered with roofing membrane in same day.

The contractor shall keep insulation minimum 3 inches from heat emitting devices.

SECTION 920-13.01 – THERMOPLASTIC MEMBRANE ROOFING:

PART 1 – GENERAL

1. Summary:

Adhered thermoplastic polyolefin (TPO) roofing system.

2. Definitions:

Roofing Terminology: Definitions in ASTM D 1079 and glossary in NRCA's "The NRCA Roofing and Waterproofing Manual" apply to work under this Section.

3. Action Submittals:

Product data shall be submitted for each type of product.

Shop drawings for roofing system shall include plans, elevations, sections, details, and attachments to other work.

Samples for verification shall be submitted for the following products:

- Sheet roofing, of color required.

4. Informational Submittals:

The contractor shall submit Research/Evaluation reports for components of roofing system, from ICC-ES.

The contractor shall submit sample warranties for manufacturer's special warranties.

5. Quality Assurance:

The contractor shall qualify as approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product and that is eligible to receive the manufacturer's special warranty.

6. Warranty:

The contractor shall submit manufacturer warranty and ensure that forms have been completed in accordance with section 106.13 of the Standard Specifications.

Warranty Period: 10 years from date of Substantial Completion.

PART 2 – PRODUCTS

1. Manufacturers:

The following manufacturers have been approved for use on the project:

Basis-of-Design Product: Subject to compliance with requirements, provide GAF EverGuard TPO 60 mil. Single-Ply Roofing Membrane; GAF Materials Corporation, or comparable product by one of the following:

- Carlisle SynTec Incorporated.
- Firestone Building Products.
- Flex Roofing Systems.
- GenFlex Roofing Systems.

Johns Manville.

Source Limitations: Obtain components for roofing system from same manufacturer as membrane roofing.

2. Performance Requirements

Accelerated Weathering: Roofing system shall withstand 2000 hours of exposure when tested according to ASTM G 152, ASTM G 154, or ASTM G 155.

Impact Resistance: Roofing system shall resist impact damage when tested according to ASTM D 3746 or ASTM D 4272.

Roofing System Design shall be tested by a qualified testing agency to resist the following uplift pressures:

Corner Uplift Pressure: 68 lbf/sq. ft.

Perimeter Uplift Pressure: 68 lbf/sq. ft.

Field-of-Roof Uplift Pressure: 68 lbf/sq. ft.

Solar Reflectance Index shall not be less than 78 when calculated according to ASTM E 1980, based on testing identical products by a qualified testing agency.

Energy Performance: Roofing system shall have an initial solar reflectance index of not less than 0.70 and an emissivity of not less than 0.75 when tested according to CRRC-1.

3. TPO Roofing:

Fabric-Reinforced TPO Sheet shall conform to the requirements of ASTM D 6878, and shall be internally fabric- or scrim-reinforced, uniform, flexible fabric-backed TPO sheet.

Thickness shall be 60 mils, nominal.

Exposed face color shall be white.

4. Auxiliary Roofing Materials:

Auxiliary materials shall be as recommended by roofing system manufacturer for intended use and compatible with roofing.

Sheet flashing shall be manufacturer's standard unreinforced TPO, 55 mils thick, minimum, of same color as TPO sheet.

Bonding adhesive shall be manufacturer's standard water based.

Slip Sheet shall be manufacturer's standard, of thickness required for application.

Miscellaneous Accessories: Provide metal termination bars, metal battens, pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, lap sealants, termination reglets, and other accessories.

5. Substrate Boards:

Substrate Board shall conform to the requirements of ASTM C 1177/C 1177M, glass-mat, water-resistant gypsum substrate, 1/2 inch thick.

The following manufacturers have been approved for use on the project:

Georgia-Pacific Gypsum LLC;
DensDeck Prime,
CertainTeed Corporation,
USG Corporation.
Or approved equal.

Adhesive: As recommended by Manufacturer.

PART 3 – EXECUTION

1. Roofing:

The contractor shall install roofing system according to roofing system manufacturer's written instructions.

The contractor shall complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at the end of the workday or when rain is forecast. The contractor shall remove and discard temporary seals before beginning work on adjoining roofing.

2. Substrate Board Installation:

The contractor shall install substrate board with long joints in continuous straight lines, perpendicular to roof slopes with end joints staggered between rows. The contractor shall tightly butt substrate boards together.

The contractor shall fasten substrate board to top flanges of steel deck to resist uplift pressure at corners, perimeter, and field of roof according to roofing system manufacturers' written instructions.

3. Adhered Roofing Installation

The contractor shall adhere roofing over area to receive roofing according to roofing system manufacturer's written instructions. The contractor shall unroll roofing and allow to relax before retaining.

The contractor shall accurately align roofing, and maintain uniform side and end laps of minimum dimensions required by manufacturer. The contractor shall stagger end laps.

The contractor shall apply bonding adhesive to substrate and underside of roofing at rate required by manufacturer, and allow to partially dry before installing roofing. The contractor shall not apply to splice area of roofing.

In addition to adhering, the contractor shall mechanically fasten roofing securely at terminations, penetrations, and perimeter of roofing.

The contractor shall clean seam areas, overlap roofing, and hot-air weld side and end laps of roofing and sheet flashings according to manufacturer's written instructions, to ensure a watertight seam installation.

The contractor shall test lap edges with probe to verify seam weld continuity. The contractor shall apply lap sealant to seal cut edges of sheet.

The contractor shall verify field strength of seams a minimum of twice daily, and repair seam sample areas.

The contractor shall repair tears, voids, and lapped seams in roofing that do not comply with requirements.

The contractor shall spread sealant bed over deck-drain flange at roof drains, and securely seal roofing in place with clamping ring.

4. Base Flashing Installation:

The contractor shall install sheet flashings and preformed flashing accessories, and adhere to substrates according to roofing system manufacturer's written instructions.

Apply bonding adhesive to substrate and underside of sheet flashing at required rate, and allow to partially dry. Do not apply to seam area of flashing.

Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.

Clean seam areas, overlap, and firmly roll sheet flashings into the adhesive. Hot-air weld side and end laps to ensure a watertight seam installation.

Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.

5. Protecting and Cleaning:

The contractor shall protect roofing system from damage and wear during remainder of construction period.

When remaining construction does not affect or endanger roofing, the contractor shall inspect roofing for deterioration and damage, describing its nature and extent in a written report, and submit copies to the Engineer.

The contractor shall correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of final acceptance and according to warranty requirements at no additional cost to the Department.

The contractor shall clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

SECTION 920-14.01 – METAL ROOF PANELS:

PART 1 – GENERAL

1. Summary:

Architectural roofing system of preformed steel panels.

Fastening system.

Accessories and miscellaneous components.

2. Reference Standards:

ASTM A606-4 Standard Specification for Weathering Steel Sheet.

ASTM D226/D226M - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing; 2009.

IAS AC472 - Accreditation Criteria for Inspection Programs for Manufacturers of Metal Building Systems; 2012.

3. Submittals:

Manufacturer's data sheets on each product shall be used including:

- Storage and handling requirements and recommendations.
- Installation methods.

Shop Drawings shall include layouts of roof panels, details of edge and penetration conditions, spacing and type of connections, flashings, underlayments, and special conditions.

The contractor shall show work to be field-fabricated or field-assembled.

The contractor shall submit samples of minimum size 12 inches square, representing actual roofing metal, thickness, profile, color, and texture, including typical panel joint.

The contractor shall provide documentation showing metal roof panel fabricator is accredited under IAS AC472.

4. Delivery, Storage, and Handling:

The contractor shall store roofing panels on project site as recommended by manufacturer.

PART 2 PRODUCTS

1. Manufacturers:

The following manufacturers have been approved for use on the project:

- ATAS International, Inc: www.atas.com.
- Metal Sales Manufacturing Corp.: www.metalsales.us.com.
- Western States Metal Roofing: www.corten.com
- Or approved equal.

2. Architectural Metal Roof Panels:

The contractor shall provide a complete engineered system complying with specified requirements and capable of remaining weathertight while withstanding anticipated movement of substrate and thermally induced movement of roofing system.

Metal panels shall be factory-formed panels.

Steel Panels:

- Western States Metal Roofing, Weathering Steel A606 Type 4, 22 ga., 16" wide panels, SS675 Standing Seam without battens.
- Metal Sales, Vertical Seam, 22 ga., 16" wide panels, A606.
- ATAS, Dutch Seam, 22 ga., 16" wide panels, A606.
- Or approved equal.

Steel Thickness: Minimum 0.023 inch.

Profile: Batten seam, with separate snap-on battens of same metal as panels; and concealed fastener system.

Texture: Smooth.

Length: Maximum possible length to minimize lapped joints. Where lapped joints are unavoidable, space laps so that each sheet spans over three or more supports.

Width: Maximum panel coverage of 16 inches.

3. Attachment Accessories and Miscellaneous Items:

The contractor shall provide flashings, downspouts, trim, moldings, closure strips and caps of the same material, thickness, and finish as used for the roofing panels. Items completely concealed after installation may optionally be made of stainless steel.

Rib and Ridge Closures: Provide prefabricated, close-fitting components of steel with corrosion resistant finish.

Underlayment for Wood Substrate shall be ASTM D226/D226M roofing felt, perforated type; covered by water-resistant rosin-sized building paper.

Sealants:

Exposed Sealant: Elastomeric; silicone, polyurethane, or silyl-terminated polyether/polyurethane.

Concealed Sealant: Non-curing butyl sealant or tape sealant.

4. Fabrication

Panels and accessory items shall be manufactured at the factory, using manufacturer's standard processes as required to achieve specified appearance and performance requirements.

PART 3 EXECUTION

1. Examination

The contractor shall not begin installation of preformed metal roof panels until substrates have been properly prepared.

2. Preparation

The contractor shall broom clean wood sheathing prior to installation of roofing system.

The contractor shall coordinate roofing work with provisions for roof drainage, flashing, trim, penetrations, and other adjoining work to assure that the completed roof will be free of leaks.

The contractor shall separate dissimilar metals by applying a bituminous coating, self-adhering rubberized asphalt sheet, or other permanent method approved by roof panel manufacturer.

Where metal will be in contact with wood or other absorbent material subject to wetting, the contractor shall seal joints with sealing compound and apply one coat of heavy-bodied bituminous paint.

3. Installation

The contractor shall install roofing system in accordance with approved shop drawings and panel manufacturer's instructions and recommendations, as applicable to specific project conditions. The contractor shall anchor all components of roofing system securely in place while allowing for thermal and structural movement.

The contractor shall minimize field cutting of panels. Where field cutting is absolutely required, use methods that will not distort panel profiles. Use of torches for field cutting is absolutely prohibited.

The contractor shall install all components required for a complete roofing assembly, including flashings, gutters, downspouts, trim, moldings, closure strips, preformed crickets, caps, equipment curbs, rib closures, ridge closures, and similar roof accessory items.

The contractor shall install roofing felt and building paper slip sheet on roof deck before installing preformed metal roof panels. Secure by methods acceptable to roof panel manufacturer, minimizing use of metal fasteners. Apply from eaves to ridge in shingle fashion, overlapping horizontal joints a minimum of 2 inches and side and end laps a minimum of 3 inches. Offset seams in building paper and seams in roofing felt.

The contractor shall install panels in strict accordance with manufacturer's instructions, minimizing transverse joints except at junction with penetrations.

4. Cleaning

The contractor shall clean exposed sheet metal work at completion of installation. The contractor shall remove grease and oil films, excess joint sealer, handling marks, and debris from installation, leaving the work clean and unmarked, free from dents, creases, waves, scratch marks, or other damage to the finish.

5. Protection

The contractor shall not permit storage of materials or roof traffic on installed roof panels. The contractor shall provide temporary walkways or planks as necessary to avoid damage to completed work. The contractor shall protect roofing until completion of project.

The contractor shall touch-up, repair, or replace damaged roof panels or accessories before final acceptance and not additional cost to the Department.

SECTION 920-16.01 – CEMENT PLASTER: PART 1 – GENERAL

1. Summary:

Portland cement plaster for installation over metal lath, masonry, concrete, and solid surfaces.

2. Reference Standards:

ASTM C150/C150M - Standard Specification for Portland Cement; 2012.

ASTM C926 - Standard Specification for Application of Portland Cement-Based Plaster; 2014a.

PCA EB049 - Portland Cement Plaster/Stucco Manual; Portland Cement Association; 2003.

3. Submittals:

The contractor shall provide data on plaster materials, characteristics and limitations of products specified.

4. Field Conditions:

The contractor shall maintain minimum ambient temperature of 50 degrees F during installation of plaster and until cured.

PART 2 – PRODUCTS:

1. Portland Cement Plaster Assemblies:

Exterior Stucco: Portland cement plaster system, made of finish, brown, and scratch coat and reinforcing mesh.

2. Plaster Materials:

Portland cement, aggregates, and other materials shall be in accordance with ASTM C926.

Premixed Plaster for Stucco Scratch, Brown, and Finish Coats shall comply with material requirements of ASTM C926.

3. Plaster Mixes:

Two-coat application shall be used over solid bases mixed and proportioned in accordance with ASTM C926.

Three-coat application shall be used over metal lath mixed and proportioned in accordance with ASTM C926.

The contractor shall mix only as much plaster as can be used prior to initial set.

The contractor shall mix materials dry, to uniform color and consistency, before adding water.

The contractor shall protect mixtures from freezing, frost, contamination, and excessive evaporation.

The contractor shall not retemper mixes after initial set has occurred.

PART 3 – EXECUTION

1. Examination

The contractor shall verify the suitability of existing conditions before starting work.

The contractor shall verify lath is flat, secured to substrate, and joint and surface perimeter accessories are in place.

2. Preparation

The contractor shall dampen masonry surfaces to reduce excessive suction.

The contractor shall roughen smooth concrete surfaces and apply bonding agent in accordance with manufacturer's instructions.

3. Plastering

The contractor shall apply plaster in accordance with ASTM C926.

The contractor shall moist cure base coats.

The contractor shall apply second coat immediately following initial set of first coat.

The contractor shall after curing, dampen previous coat prior to applying finish coat.

The contractor shall finish texture smooth trowel to a consistent and smooth finish.

The contractor shall finish texture: Match adjacent existing surface to a consistent finish.

The contractor shall avoid excessive working of surface. The contractor shall delay troweling as long as possible to avoid drawing excess fines to surface.

The contractor shall moist cure finish coat for minimum period of 48 hours.

SECTION 920-19.01 – TILING:

PART 1 – GENERAL

1. Summary:

Tile for floor applications.

Tile for wall applications.

Cementitious backer board as tile substrate.

Ceramic trim.

2. Reference Standards

ANSI A108/A118/A136.1 - American National Standard Specifications for the Installation of Ceramic Tile - Version; 2013.1.

ANSI A108.11 - American National Standard Specifications for Interior Installation of Cementitious Backer Units; 2013.1.

ANSI A118.6 - American National Standard Specifications for Standard Cement Grouts for Tile Installation; 2013.1.

ANSI A118.9 - American National Standard Specifications for Test Methods and Specifications for Cementitious Backer Units; 2013.1.

ANSI A118.12 - American National Standard Specifications for Crack Isolation Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation; 2013.1.

TCNA (HB) - Handbook for Ceramic, Glass, and Stone Tile Installation - Version; 2013.1.

3. Weekly Progress Meetings:

Tile work shall be reviewed one weeks before tile installation.

4. Submittals:

The contractor shall provide manufacturers' data sheets on tile, mortar, grout, and accessories, including instructions for using grouts and adhesives.

The contractor shall furnish the following:

Extra Tile: 1 percent of each size, color, and surface finish combination.

5. Quality Assurance

The contractor shall maintain one copy of and ANSI A108/A118/A136.1 and TCNA (HB) on site.

6. Delivery, Storage, and Handling:

The contractor shall protect adhesives from freezing or overheating in accordance with manufacturer's instructions.

7. Field Conditions:

The contractor shall maintain ambient and substrate temperature of 50 degrees F during installation of mortar materials.

PART 2 PRODUCTS:

1. Tile:

All products of each type shall be by the same manufacturer. The following manufacturers have been approved for use on the project:

- Arizona Tile,
- Wausau Tile,
- Trend,
- Nurazzo,
- Ann Sacks,
- Vogue Bay.

Wainscot Tile:

Men's Restroom:

- A. Wausau 12 x 12 WA-704.
- B. Trend-Terrazzo 16 x 16, Midnight Green.
- C. Nurazzo-Chrystal Collection 24 x 24, Mountainside.
- D. Or approved equal.

Women's Restroom:

- A. Wausau 12 x 12 WA-701.
- B. Trend-Terrazzo 16 x 16, Chiaro Ambra.
- C. Nurazzo-Chrystal Collection 24 x 24, Sand Dune.
- D. Or approved equal.

Floor Tile:

- A. Arizona Tile-Alloy Zinco 24 x 24 Titanio, polished.
- B. Ann Sacks-Ozone 12 x 24 porcelain-Metalic Chrome
- C. Vogue Bay-Everquartz 24 x 24 porcelain-Gunmetal, polished.
- D. Or approved equal.

2. Trim and Accessories:

Trim shall match bullnose, cove base, and cove ceramic shapes in sizes coordinated with field tile.

Trim shall be from the same manufacturer as for tile.

3. Setting Materials:

The contractor shall provide setting materials made by the same manufacturer as grout.

4. Grouts:

Standard Grout shall conform to the requirements of ANSI A118.6 standard cement grout.

The contractor shall use this type of grout where indicated and where no other type of grout is indicated.

The contractor shall use sanded grout for joints 1/8 inch wide and larger. The contractor shall use unsanded grout for joints less than 1/8 inch wide.

5. Accessory Materials:

Concrete Floor Slab Crack Isolation Membrane shall conform to the requirements below:

Material shall comply with ANSI A118.12; not intended as waterproofing.

Thickness shall be 20 mils, maximum.

Crack Resistance: No failure at 1/16 inch gap, minimum.

Backer Board shall be cementitious type complying with ANSI A118.9; high density, glass fiber reinforced, 1/2 inch thick; 2 inch wide coated glass fiber tape for joints and corners.

PART 3 EXECUTION

1. Examination

The contractor shall verify that sub-floor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive tile.

The contractor shall verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive tile.

The contractor shall verify that sub-floor surfaces are dust-free and free of substances that could impair bonding of setting materials to sub-floor surfaces.

2. Preparation

The contractor shall protect surrounding work from damage.

The contractor shall vacuum clean surfaces and damp clean.

The contractor shall seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances.

The contractor shall install backer board in accordance with ANSI A108.11 and board manufacturer's instructions.

The contractor shall tape joints and corners, and cover with skim coat of setting material to a feather edge.

3. Installation - General

The contractor shall lay tile to pattern indicated. The contractor shall not interrupt tile pattern through openings.

The contractor shall cut and fit tile to penetrations through tile, leaving sealant joint space. The contractor shall form corners and bases neatly, and align floor joints.

The contractor shall place tile joints uniform in width, subject to variance in tolerance allowed in tile size. The contractor shall make grout joints without voids, cracks, excess mortar or excess grout, or too little grout.

The contractor shall form internal angles square and external angles bullnosed.

The contractor shall keep control and expansion joints free of mortar, grout, and adhesive.

The contractor shall prior to grouting, allow installation to completely cure; minimum of 48 hours.

The contractor shall grout tile joints unless otherwise indicated. The contractor shall use standard grout unless otherwise indicated.

The contractor shall at changes in plane and tile-to-tile control joints. The contractor shall use tile sealant instead of grout, with either bond breaker tape or backer rod as appropriate to prevent three-sided bonding.

The contractor shall apply sealant to junction of tile and dissimilar materials and junction of dissimilar planes.

4. Installation - Floors - Thin-Set Methods

The contractor shall install tile over interior concrete substrates in accordance with TCNA (HB) Method F113, dry-set or latex-Portland cement bond coat, with standard grout, unless otherwise indicated.

5. Installation - Wall Tile

The contractor shall install tile over cementitious backer units on studs in accordance with TCNA (HB) Method W244.

6. Cleaning

The contractor shall clean tile and grout surfaces.

7. Protection

The contractor shall not permit traffic over finished floor surface for 4 days after installation.

SECTION 920-20.01 – ALUMINUM FRAMED STOREFRONT:

PART 1 – GENERAL

1. Summary:

Aluminum-framed storefront, with vision glass.

2. Administrative Requirements

The contractor shall coordinate work of other components that comprise the exterior enclosure with aluminum storefront framing.

Aluminum framed storefront work shall be reviewed a minimum of one week before aluminum framed storefront installation.

3. Submittals

Shop Drawings shall indicate system dimensions, framed opening requirements and tolerances. Shop drawings shall also show affected related work such as, expansion and contraction joint location and details, and field welding required.

4. Delivery, Storage, And Handling

The contractor shall handle products of this section in accordance with AAMA CW-10.

The contractor shall protect finished aluminum surfaces with wrapping.

The contractor shall not use adhesive papers or sprayed coatings that bond to aluminum when exposed to sunlight or weather.

PART 2 – PRODUCTS

1. Storefront

Aluminum-Framed storefront shall consist of factory fabricated, factory finished aluminum framing members with infill, and related flashings, anchorage and attachment devices described below:

Sealed Insulating Glass Units: Vision glass, double glazed.

Outboard Lite: Fully tempered float glass, 1/4 inch (6 mm) thick.

Tint: Clear.

Coating: Low-E (solar control type), on #2 surface.

Inboard Lite: Fully tempered float glass, 1/4 inch (6 mm) thick.

Tint: Clear.

Total Thickness: 1 inch (25 mm).

Glazing Method: Exterior butt glazed.

Glazing rabbet shall be for a 1 inch insulating glazing.

Glazing position shall be centered (front to back).

Vertical mullion dimension shall be 2 inches.

Finish shall be Class I color anodized.

The contractor shall factory finish all surfaces that will be exposed in completed assemblies.

The contractor shall coat concealed metal surfaces that will be in contact with cementitious materials or dissimilar metals with bituminous paint.

Joints and corners shall be flush, hairline, weatherproofed, accurately fitted and secured and prepared to receive anchors and hardware. Fasteners and attachments shall be concealed from view; reinforced as required for imposed loads.

System internal drainage shall drain by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system shall drain to the exterior.

The contractor shall provide for expansion and contraction within system components caused by cycling temperature range of 170 degrees F over a 12 hour period without causing detrimental effect to system components, anchorages, and other building elements.

The contractor shall allow for movement between storefront and adjacent construction, without damage to components or deterioration of seals.

The contractor shall minimize space between framing members and adjacent construction while allowing expected movement.

2. Components

Aluminum Framing Members shall consist of tubular aluminum sections, thermally broken with interior section insulated from exterior, drainage holes and internal weep drainage system.

Glazing stops shall be flush.

3. Materials

Extruded Aluminum shall conform to the requirements of ASTM B221 (ASTM B221M).

Fasteners shall be stainless steel.

Glazing gaskets shall be selected to achieve weather, moisture, and air infiltration requirements.

4. Finishes:

Clear anodic coating shall not be less than 0.7 mils thick.

PART 3 – EXECUTION:

1. Installation:

The contractor shall install wall system in accordance with manufacturer's instructions.

The contractor shall attach aluminum storefront framing to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.

The contractor shall provide alignment attachments and shims to permanently fasten system to building structure.

The contractor shall align assembly plumb and level, free of warp or twist. The contractor shall maintain assembly dimensional tolerances, aligning with adjacent work.

The contractor shall provide thermal isolation where components penetrate or disrupt building insulation.

The contractor shall install sill flashings. The contractor shall turn up ends and edges and seal to adjacent work to form water tight dam.

Where fasteners penetrate sill flashings, the contractor shall make watertight by seating and sealing fastener heads to sill flashing.

The contractor shall coordinate attachment and seal of perimeter air and vapor barrier materials.

The contractor shall pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.

The contractor shall touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired, at no additional cost to the Department.

2. Cleaning

The contractor shall remove protective material from pre-finished aluminum surfaces.

The contractor shall wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths. The contractor shall take care to remove dirt from corners. The contractor shall wipe surfaces clean.

The contractor shall remove excess sealant by method acceptable to sealant manufacturer.

SECTION 920-21.01 – PIPE AND TUBE RAILING:

PART 1 – GENERAL

1. Summary:

Wall mounted handrails.
Stair railings and guardrails.

2. Reference Standards:

ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design; 2010.

ASTM A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes; 2013.

ASTM E985 - Standard Specification for Permanent Metal Railing Systems and Rails for Buildings; 2000 (Reapproved 2006).

3. Submittals:

Shop Drawings shall indicate profiles, sizes, connection attachments, anchorage, size and type of fasteners, and accessories.

PART 2 – PRODUCTS

1. Railings - General Requirements

The contractor shall design, fabricate, and test railing assemblies in accordance with the most stringent requirements of ASTM E985 and applicable local code.

The contractor shall allow for expansion and contraction of members and building movement without damage to connections or members.

Dimensions for all types of rails shall be as shown on the drawings.

Top Rails and Wall Rails shall be 1-1/2 inches diameter, round.

The contractor shall provide anchors and other components as required to attach to structure, made of same materials as railing components unless otherwise indicated; where exposed fasteners are unavoidable provide flush countersunk fasteners.

For anchorage to concrete, the contractor shall provide inserts to be cast into concrete, for bolting anchors.

For anchorage to masonry, the contractor shall provide brackets to be embedded in masonry, for bolting anchors.

For anchorage to stud walls, the contractor shall provide backing plates, for bolting anchors.

The contractor shall provide welding fittings to join lengths, seal open ends, and conceal exposed mounting bolts and nuts, including but not limited to elbows, T-shapes, splice connectors, flanges, escutcheons, and wall brackets.

2. Steel Railing System:

Steel tube shall conform to the requirements of ASTM A500/A500M, Grade B cold-formed structural tubing.

Welding fittings shall be factory or shop-welded from matching pipe or tube; seams shall be continuously welded; joints and seams shall be ground smooth.

3. Fabrication:

The contractor shall accurately form components to suit specific project conditions and for proper connection to building structure.

Components shall be fit and shop-assemble in largest practical sizes for delivery to site.

Components shall be fabricate with joints tightly fitted and secured. Spigots and sleeves shall be provided to accommodate site assembly and installation.

Welded Joints:

Exterior Components: The contractor shall continuously seal joined pieces by intermittent welds and plastic filler. The contractor shall drill condensate drainage holes at bottom of members at locations that will not encourage water intrusion.

Interior Components: The contractor shall continuously seal joined pieces by intermittent welds and plastic filler.

The contractor shall grind exposed joints flush and smooth with adjacent finish surface. The contractor shall make exposed joints butt tight, flush, and hairline. The contractor shall ease exposed edges to small uniform radius.

PART 3 – EXECUTION

1. Examination:

The contractor shall verify that field conditions are acceptable and are ready to receive work.

2. Preparation:

The contractor shall clean and strip primed steel items to bare metal where site welding is required.

3. Installation:

The contractor shall install in accordance with manufacturer's instructions.

The contractor shall install components plumb and level, accurately fitted, free from distortion or defects, with tight joints.

The contractor shall install railings in compliance with ADA Standards for accessible design at applicable locations.

The contractor shall anchor railings securely to structure.

The contractor shall conceal anchor bolts and screws whenever possible. Where not concealed, the contractor shall use flush countersunk fastenings.

SECTION 920-22.01 – ROOF DRAINS:

PART 1 – GENERAL

1. Summary:

- A. Roof drains.

2. Reference Standards:

- A. ASME A112.6.4 - Roof, Deck, and Balcony Drains; The American Society of Mechanical Engineers; 2003.

3. Submittals:

- A. Product Data: Provide component sizes, rough-in requirements, service sizes, and finishes.

4. Quality Assurance:

- A. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with not less than three years documented experience.

5. Delivery, Storage, And Handling:

- A. The contractor shall accept specialties on site in original factory packaging. The contractor shall inspect drains for damage. Damaged drains shall be replaced at no additional cost to the Department.

PART 2 – PRODUCTS:

1. Drains:

The following manufacturers have been approved for use on the project:

- Jay R. Smith Manufacturing Company; Model 1850 (4" pipe): www.jayrsmith.com.
- Josam Company; Model 22204 (4" pipe): www.josam.com.
- Zurn Industries, Inc; Model Z164 (4" pipe): www.zurn.com.
- Or approved equal.

Combination Roof Drain & Overflow Roof Drain requirements:

- Assembly shall conform to the requirements of ASME A112.6.4.
- Body shall be lacquered cast iron with sump.
- Strainer shall be cast-iron dome with vandal proof screws.
- Accessories shall be coordinated with manufacturer based on roofing type:

Non-puncturing clamp ring with integral gravel stop and cast iron dome, double drain receiver and clips and cast iron dome.

Roof Drain Leader:

- Roof drain and overflow drain leader shall be 4 inches.
- Pipe shall be standard weight no-hub cast iron with 24 ga. Type 304 SS couplings and neoprene gaskets.
- Downspout Nozzles:
Bronze round with straight bottom section.
Escutcheon plate with expansion anchor.

PART 3 – EXECUTION

1. Installation:

The contractor shall install roof drains in accordance with manufacturer's instructions.

SECTION 920-23.01 – GLASS TOILET PARTITIONS:

PART 1 – GENERAL

1. Summary:

Glass toilet enclosures and related hardware.

2. Submittals

The contractor shall include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

Shop Drawings for toilet compartments shall include plans, elevations, sections, details, and attachments to other work mentioned below:

1. Elevations shall be at 1/4-inch scale.
2. Detail sections of fittings.
3. Show locations of cutouts for compartment-mounted toilet accessories.
4. Show locations of reinforcements for compartment-mounted grab bars.
5. Show locations of centerlines of toilet fixtures.
6. Show overhead support or bracing locations.

Samples for Verification: For the following products, in manufacturer's standard sizes unless otherwise indicated:

- 1) Each type of material, color, and finish required for units, prepared on 6-inch-square Samples of same thickness and material indicated for work showing the edge conditions.
- 2) Each type of hardware and accessory.

3. Closeout submittals

Maintenance Data: For toilet compartments to include in maintenance manuals.

4. Quality assurance

Comply with applicable provisions in the "Americans with Disabilities Act (ADA) and ICC/ANSI A117.1 for toilet compartments designated as accessible.
Components and Installation are to be in accordance with state and local building codes.
All components and fittings are furnished by the same manufacturer.

5. Project conditions

Field Measurements: Verify actual locations of toilet fixtures, walls, columns, ceilings, and other construction contiguous with toilet compartments by field measurements before fabrication. Show recorded measurements on shop drawings. Coordinate fabrication schedule with construction progress to avoid delay of the work and possible damage to the finished product.

PART 2 - PRODUCTS

1. Acceptable manufacturers

- A. C.R. Laurence Co., Inc. Frameless All-Glass Restroom Partition System.
- B. Thrislington-Oasis Stainless glass cubicle.
- C. Vanesta-Aqueous glass partitions.
- D. Or approved equal.

2. Materials -structural glass partitions hardware

Stainless Steel Hinges
Stainless Steel Posts
Stainless Steel Wall Brackets
Stainless Steel Slide-Bolt Lock
Stainless Steel Stop Plate
5/8" Thick Tempered Glass, Obscure Glass

Standard height for doors and panels is 55 inches.

Toilet-Enclosure Style: Floor and wall anchored

Door, and Panel Construction: Tempered Glass, not less than 5/8 inch thick, with polished edges, and with homogenous color and pattern throughout material.

3)Integral Hinges: Configure doors and panels to receive integral hinges.

4)Color and Pattern: One color and pattern in each room as selected by Architect from manufacturer's full range.

5)Wall Brackets to match style of Hinge

3. Accessories

Hardware and Accessories: Manufacturer's heavy-duty operating hardware and accessories. Brushed Stainless finish.

- 1) Material: Brushed Stainless Steel.
- 2) Hinges: By Manufacturer
- 3) Latch and Keeper: Slide Bolt
- 4) Door Pull: Glass Back-to-Back Pull Handle or Knob.

Anchorage and Fasteners: Manufacturer's standard exposed fasteners of stainless steel, finished to match the items they are securing. For concealed anchors, use stainless steel, hot-dip galvanized steel, or other rust-resistant, protective-coated steel.

4. Fabrication

Floor and Wall Anchored Units: Provide manufacturer's standard corrosion-resistant anchoring assemblies.

Door Size and Swings: Unless otherwise indicated, provide a minimum 32 inch wide, clear opening for compartments designated as accessible. NOTE: Doors are to be in-swing only.

PART 3 – EXECUTION

1. Installation:

General: Comply with manufacturer's written installation instructions. Install units rigid, straight, level, and plumb. Secure units in position with manufacturer's recommended anchoring devices.

Floor-Anchored Units: Secure posts to supporting construction and level, plumb, and tighten. Hang doors and adjust so doors are level and aligned with panels when doors are in closed position.

2. Adjusting:

Hardware Adjustment: Adjust and lubricate hardware according to hardware manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to return doors to fully closed position.

SECTION 920-24.01 – RESTROOM ACCESSORIES:

PART 1 – GENERAL

1. Summary:

Accessories for toilet rooms.
Electric hand dryers.
Grab bars.

2. Reference Standards

36 CFR 1191 - Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines; current edition.

ASTM B456 - Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium; 2011e1.

3. Administrative Requirements

The contractor shall coordinate the work with the placement of internal wall reinforcement and reinforcement of toilet partitions to receive anchor attachments.

4. Submittals

The contractor shall submit data on accessories describing size, finish, details of function, and attachment methods.

The contractor shall indicate special procedures and conditions requiring special attention specified by manufacturer's installation instructions:

PART 2 PRODUCTS

1. Materials:

Accessories shall be shop assembled, free of dents and scratches and packaged complete with anchors and fittings, steel anchor plates, adapters, and anchor components for installation.

2. Finishes:

Stainless steel shall have a No. 4 brushed finish, unless otherwise noted.

Chrome/Nickel Plating shall be in accordance with ASTM B456, SC 2, satin finish, unless otherwise noted.

3. Toilet Room Accessories:

The following manufacturers have been approved for use on the project:

Toilet Paper Dispenser: Double roll, surface-mounted, satin nickel.

- A. Double Tissue Holder #4293A manufactured by Gatco.
- B. Bradley-jumbo roll Model 5424.
- C. Venesta Midi-jumbo toilet roll disp. -0302518
- D. Or approved equal.

Electric Hand Dryers:

- A. Dyson Airblade Tap Combination Electric Hand Dryer manufactured by Dyson Inc., (Hand dryer is integral to faucet)
- B. Toto-Clean Dry concealed hand dryer-HDR 10 SS
- C. Venesta-Elite warm air hand dryer/recessed/0302047
- D. Or approved equal.

Soap Dispenser:

- A. Delta #RP50781 manufactured by Delta Faucet Company.
- B. Bradley 6326 lav.mounted 6" spout SS.
- C. Venesta-Cylindrical soap dispenser.
- D. Or approved equal.

Grab Bars: Stainless steel, nonslip grasping surface finish.

Standard Duty Grab Bars:

Length and Configuration: As indicated on drawings.

- A. Gatco #856-36" & 42" Latitude2 Chrome.
- B. Delta Commercial Concealed mounting-36" & 42".
- C. Venesta Grab rail/Satin alum. 36" & 42"
- D. Or approved equal.

PART 3 EXECUTION

1. Examination:

The contractor shall verify existing conditions before starting work.

The contractor shall verify exact location of accessories for installation.

For electrically-operated accessories, the contractor shall verify that electrical power connections are ready and in the correct locations.

2. Installation:

The contractor shall install accessories in accordance with manufacturers' instructions in locations indicated on the drawings.

The contractor shall install accessories plumb and level, securely and rigidly anchored to substrate.

Mounting Heights shall be as required by accessibility regulations, unless otherwise indicated.

3. Protection:

The contractor shall protect installed accessories from damage due to subsequent construction operations.

SECTION 920-25.01 – PLUMBING SYSTEM:

PART 1 – GENERAL

1. Summary:

Work under this section includes coordinating and furnishing all labor and material necessary to install a complete plumbing system as shown and specified and in accordance with the codes. Contractor shall pay for all permits, meters, fees, city inspections, legal notices, etc., as required.

2. Submittals:

The contractor shall submit 8 copies of shop drawings at the preconstruction meeting. The contractor shall submit record drawings to the Engineer at end of project.

The contractor shall provide maintenance manual and instruct the Engineer in the proper operation and maintenance of the equipment.

3. Guarantee:

Guarantee shall be in accordance with subsection 106.13 of the Standard Specifications.

4. Coordination:

The contractor shall install materials and equipment at proper time to keep pace with the general construction and the work of other trades.

PART 2 – MATERIAL:

1. Piping:

a. Water Piping

Copper: Type "L" hard drawn, conforming to ASTM B88, for all water pipe not set under concrete or in the ground.

Copper: Type "K" soft drawn, conforming to ASTM B88, for water pipe set in or under concrete or in the ground. Provide plastic sleeve for each piping penetration through concrete slab.

Fittings shall be wrought copper conforming to ANSI B16.22.

b. Sanitary Waste and Vent Piping

Cast Iron: Standard weight, no-hub cast iron soil and vent pipe, coated inside and out, conforming to CISPI 301, for all soil and waste lines in or under concrete and for all vent lines 2" and larger.

Galvanized Iron: Standard weight, Schedule 40 galvanized iron conforming to ASTM A120 for all vent lines 2-1/2" or smaller.

Plastic: Schedule 40 PVC piping conforming to ASTM D-2665-88, Fittings: Drainage fittings to match pipe.

c. Natural Gas Piping

Steel piping: Schedule 40 black steel conforming to ASTM A53, Grade A, seamless welded pipe.

Fittings for steel pipe, 2" size and smaller shall be extra-heavy black malleable iron conforming to USAS B16.3, 150 psi Safe Working Pressure (SWP).

Fittings, for steel pipe, 2-1/2" size and larger: black steel seamless welding fittings conforming to USAS B16.9 and ANSI B16.25, 150 psi SWP.

Unions for steel pipe: Black malleable iron, screwed connections, ground iron-to-bronze seat, conforming to ASTM A47, 250 psi SWP.

Flanges for steel pipe: Black forged steel with weld neck flanges conforming to USAS B16.5, 150 SWP.

d. Pipe Hangers and Supports

Install Mason #500 Trisolators (Bell and Gossett, Sioux Chief approved alternate manufacturers) on uninsulated copper lines at all hangers and wall penetrations.

e. Pipe Insulation

For domestic cold, hot and hot water return piping routed in attic space, provide insulation as follows:

- Fiberglass premolded insulation with all-service jacket, minimum density of 3.5 pcf. Provide an additional 8-ounce canvas jacket with Arabol finish around all exposed pipe insulation.
- Cover fittings and valves (except unions) with insulation cement worked on in two applications to a smooth, hard surface, flush with pipe covering.
- Provide 8" long, 20 gauge, galvanized iron metal insulation guards at locations of hanger rods and supports.
- Provide 12" long rigid insulation blocks on bottom half of pipe 1" and larger at hangers. Insulation wall thickness shall be 1".

2. Valves:

Check Valves: Stockham B-309 (Cash Acme, Watts, or approved equal), 125# SWP, solder joint for all valves up to 2" diameter, with body and caps conforming to ASTM B-62, cast bronze composition and swing type disc. Stockham G-931 (Cash Acme, Watts approved alternate manufacturers), iron body, bronze mounted with body and caps conforming to ASTM A-126, Class B cast iron flanged ends, swing type service for all valves larger than 2" in diameter.

Ball Valves: Stockham (Cash Acme, Watts, , or approved equal) S-216-BR-RS for all valves up to 2" in diameter, with solder end joints with extended solder cups shall be 600 psi CWP, cast brass body, replaceable Teflon seats, conventional port, blowout-proof stems, and chrome-plated brass ball.

Gas valves, 2" and smaller: Resun R-1430 (Watts, Rockwell-Nordstrom #142, or approved equal) lubricated plug valve with #555 lubricant for natural gas service with UL or AGA rating.

Gas valves 2-1/2" and larger: Resun (Watts, Rockwell-Nordstrom #143, or approved equal) lubricated plug valve with #555 lubricant for natural gas service with UL or AGA rating.

Gas valves at equipment connection: Milwaukee BB2-100 Butterball (Mueller, Watts approved alternate manufacturers), bronze body, threaded ends, for sizes 1/2" through 2".

Gas Pressure Regulating Valves: Fisher (Equimeter, Sensus, or approved equal) diaphragm actuated pressure regulator suitable for natural gas service. Orifice to be sized to regulate cubic feet per hour at inlet and outlet pressures as scheduled on the drawings or as required by the system.

3. Cleanouts:

Concrete and Tile Floors: J.R. Smith 4023 (Watts, Zurn approved alternate manufacturers), with scoriated nickel-bronze top.

Cleanouts (exposed vertical piping): J.R. Smith 4512 (Watts, Zurn approved alternate manufacturers) cast iron branch cleanout tee with bronze plug.

Interior Finished Walls: J.R. Smith 4532. (Watts, Zurn approved alternate manufacturers)

Exterior Surface Cleanouts: J.R. Smith 4253 (Watts, Zurn approved alternate manufacturers). Provide 18" x 18" x 6" concrete pad at landscape areas; provide concrete ring below grade at asphalt areas.

The contractor shall provide all cleanouts with heavy threaded bronze plugs. The contractor shall coordinate all cleanout locations with architect and locate in non-visible locations.

4. Plumbing Fixtures:

Use polished chrome-plated, adjustable brass P-traps with wall escutcheons at all exposed locations. Use polished chrome-plated faucets with removable trim, brass body and brass handles. Fixtures and supply fitting shall be of one manufacturer. Provide diaphragm type, polished chrome-plated flush valves with integral vacuum breakers and screwdriver stops. Provide fixture stops or valves ahead of all equipment or fixtures.

After fixtures are set in place and secured to walls, caulk all around between fixtures and wall with white silicone caulking compound. See Plumbing Fixture List on Plumbing Drawings for general fixture specification.

Restroom Sinks:

- A. Laufen Set Living Square, Countertop Basin / Cuttable. Model:1643.54
- B. EKO-4' counter with incline integral sink-Ekopure-verify color. Integral sink.
- C. Hastings-ceramic wall hung basin-Normal 100 basin-white.
- D. Or approved equal.

Restroom Faucet:

- A. Dyson Airblade Tap Combination Electric Hand Dryer and Water Tap Units manufactured by Dyson Inc.
- B. Grohe Ecosmarte-Cosmopolitan E #36328 Starlight finish.
- C. Toto-Axion Eco Power-TEL5LK10R#BN.
- D. Or approved equal.

Restroom Toilets:

- A. American Standard 2386.012 One-Piece High-Efficiency Toilet..
- B. Toto Carlyle II-one piece toilet-MS614114CEFG#0-Cotton.
- C. Duravit-Durastyle-one piece toilet-215701.
- D. Or approved equal.

Restroom Urinal:

- A. American Standard 6205.010 1.0GPF Washout Urinal.
- B. Toto-UT105U#01.

- C. Duravit #083432.
- D. Or approved equal.

Domestic Water Heaters:

The contractor shall provide water heater of size, capacity, and make as scheduled on the plans. Heaters shall be fully warranted for a minimum of three full years after final acceptance of the building.

The contractor shall furnish heaters with the following accessories:

- ASME combination temperature and pressure relief valve rated in excess of heater input. The contractor shall run full size drain to terminate as shown on drawings.
- Automatic thermostat actuated controls with 100% shutoff.
- Tank drain.
- Dual high-limit controls.
- Brass nipples for pipe connections.
- Heater shall be factory insulated and sheet metal jacketed.

PART 3 – EXECUTION:

1. Tests and Inspections:

The work shall be tested and approved before covering as directed by Engineer.

All leaking joints shall be repaired and retested at no additional cost to the Department.

The contractor shall test the water system at 150 psi hydrostatic pressure and held for four hours.

The contractor shall fill the sanitary waste and vent system with water to the highest point in the system and let stand without loss for two hours.

The contractor shall test the natural gas system at 50 psi pneumatic for four hours with no pressure loss.

Sterilization (Domestic Water System): After tests have been completed, the contractor shall flush the entire domestic water distribution system with water until all entrained dirt and mud have been removed, and shall be sterilized with solutions of either liquid chlorine conforming to Federal Specification BB-B-120 or hypochlorite conforming to Fed. Spec. O-C-114, Type II, Grade G, or Fed. Spec. O-S-602, Grade A or B. The chlorinating material shall provide a dosage of not less than 50 parts per million and shall be introduced into the system in an approved manner, and retained in the system for 8 hours before flushing.

2. Flashing, Sleeves and Escutcheon Plates:

The contractor shall supply flashing for all vent pipe and other types of piping through roof to be installed with roofing. The contractor shall field flash vents with sheet lead weighing not less than 4 pounds per square foot or equal. Extend flashing into roofing at least 10" from vent and turn flashing over and down into vent opening.

The contractor shall use 20 gauge galvanized steel sleeves around pipes passing through masonry walls and concrete slabs; for water piping only provide plastic sleeve for each piping penetration through concrete slab.

The contractor shall install cast brass split ring escutcheons with setscrew at all locations where exposed pipes pass through walls, floors and/or ceilings. The contractor shall provide polished chrome-plated escutcheons in finished rooms, all others polished brass.

The contractor shall bury all underground water piping a minimum of 24" below finished grade. The contractor shall install copper lines below concrete floors so that no joints occur below floor and wrap with 20 mils of polyethylene tape with a minimum of 50% overlap.

3. Gas Piping Installation:

The contractor shall install natural gas piping in in the building above ground where indicated on the plans. The contractor shall not install gas piping in or under concrete floors or inside masonry walls.

The contractor shall supervise the proper installation of the gas meter and pressure regulator by the utility contractor. The contractor shall extend gas lines from the meter and pressure regulator(s) to all equipment and connections requiring gas.

The contractor shall install gas pipe with suitable dirt legs at equipment locations. The contractor shall install accessible valve and union at each equipment location.

The contractor shall coordinate location of valved outlets for mechanical equipment with the Engineer and affected trades. The contractor shall install chrome-plated escutcheon plates at all wall penetrations exposed to view.

The contractor shall plug each gas outlet, including valves, with threaded plug cap immediately after installation and retain until installation is complete.

The contractor shall install shutoff valve outside at entry into building.

Aboveground piping shall be electrically bonded and grounded as required by NFPA 54.

The contractor shall coordinate piping installation with mechanical ductwork, fire sprinkler piping, conduits, etc.

Welding procedure shall be by a qualified welder per CFR 192.225. The contractor shall furnish the Engineer with welder's qualifications and no welding shall be done until

authorized. Welds shall be inspected with records maintained and furnished to the Engineer.

SECTION 920-26.01 – MECHANICAL SYSTEM:

General Requirements:

General provisions which make specific reference to electrical division only are included herein for clarity. The contractor shall examine and become familiar with all contract documents and coordinate the mechanical work accordingly.

Intent:

It is the intention of the specifications and drawings to call for finished work, tested and ready for operation. Any apparatus, appliance, material or work not shown on the drawings, but mentioned in the specifications or vice versa, or any incidental accessories necessary to make the work complete and ready for operation, even if not particularly specified, shall be provided as included in the cost of contract item. Shall there appear to be discrepancies or questions of intent in the contract documents, refer the matter to the Engineer for his decision before ordering any materials or equipment or before the start of any related work. The decision of the Engineer shall be final, conclusive and binding.

Drawings and Data:

Drawings are generally diagrammatic and are intended to convey scope of work and to indicate general arrangement of equipment, ducts, conduits, piping and fixtures. They are not intended to show every offset or fittings or every structural difficulty that may be encountered during installation of the work. Location of all items not definitely fixed by dimensions are approximate only. Exact locations necessary to secure best conditions and results shall be determined at project site and shall have approval of the Engineer before being installed. Do not scale drawings. If so directed by the Engineer, without extra charge, make reasonable modifications in layout as needed to prevent conflict with work of other trades or for proper execution of work.

Codes:

Codes, ordinances, standards and statues take precedence when they are more stringent or conflict with drawings or specifications.

Following industry standards, specifications and codes are minimum requirements:

- A. Applicable city, county, and state mechanical, electrical, gas, plumbing, health and sanitary codes, laws and ordinances.
- B. 2006 international mechanical code with local amendments.

General:

Materials and equipment standard products of a reputable manufacturer regularly engaged in manufacture of the specified items. Where more than one unit is required of any item, furnished by the same manufacturer, except where specified otherwise. Install material and equipment in accordance with manufacturer's recommendations. Should variance between plans and specifications occur with these, contact the Engineer immediately so that variations in installation can be known by all parties concerned.

Execution:

The contractor shall protect existing active services (water, gas, sewer, electric) when encountered, against damage from construction work. The contractor shall not prevent or disturb operation of active services which are to remain. If work makes temporary shutdowns of services unavoidable, The contractor shall consult with the Engineer as to dates, procedures, and estimated duration of at least 10 working days in advance of date when work is to be performed. The contractor shall arrange work for continuous performance to assure that existing operating services will be shut down only during the time required to make necessary connections. If a system cannot shut down, the contractor shall install temporary bypasses or jumpers until connections are complete. Costs incurred by above shutdowns, including bypass or jumper installations, for work performed under this section shall be done at no additional cost to the Department. Where connections or disruptions are made to existing systems, the contractor shall reactivate, refill, and recharge all components and restore systems to operating conditions at time of disruption.

Guarantee:

Guarantee shall be in accordance with subsection 106.13 of the Standard Specifications.

Provide extended five (5) year factory parts & labor warranty on all air conditioning compressors.

Air conditioning, Heating and Ventilating:

Scope:

Work under this section includes furnishing all labor, materials and equipment necessary for the remodeling, installation and placing into operation the heating, ventilating and air conditioning work as specified herein and indicated on the drawings.

Verification of Dimensions:

Scaled and figured dimensions are approximate only. Before proceeding with work, the contractor shall carefully check and verify at the site, and be responsible for properly fitting equipment and materials together and to the structure in spaces provided. Drawings are essentially diagrammatic and many offsets, bends, special fittings and exact locations are not indicated. Carefully study drawings and premises in order to determine best methods,

exact locations, routes and building obstructions, preserve headroom, and keep openings and passageways clear.

Cutting and Patching:

The contractor shall cut existing work and patch as necessary to properly install the new work. Avoid excessive cutting and do not cut structural members without permission from the Engineer.

Regulations, Permits & Inspections:

Comply with all applicable codes, rules and regulations. All materials, equipment and work must conform to the international mechanical code. The contractor shall obtain and pay for all required permits and licenses. When required by code, all work must be inspected and approved by the Engineer and local authorities.

Ductwork:

All ductwork fabricated as per latest international mechanical code requirements and SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA) manual. Ductwork shall be constructed of new hot-dipped galvanized sheet metal ASTM A-120 for each side, with 1", 1 1/2 lb. Density duct liner. The contractor shall tape all cross-joints in sheet metal duct with hardcast. Take-off fittings shall be conical spin-in with quadrant damper. Turning vanes shall be installed in all mitered elbows.

Duct insulation: acceptable manufacturers: CSG, Johns-Mansville. Owners corning, or approved equal.

Flexible Duct:

Flexible duct may be used for final connection to air distribution devices, but shall not exceed 6 feet in length. Flexible duct shall have a minimum r-5 insulation value.

Underground Duct Systems:

Underground duct systems shall be constructed of approved concrete, clay, metal or plastic. Maximum duct temperatures for plastic shall not exceed 150°. Metal ducts shall be protected from corrosion in an approved manner, or be completely encased in concrete not less than 2" thick. Nonmetallic ducts shall be installed in accordance with the manufacturer's installation instructions.

Plastic pipe and fitting material shall conform to cell classification 12454-b of astm d 1248 or astm d 1784 and external loading properties of astm d 2412.

All underground ducts shall slope to an accessible point for drainage.

Where encased in concrete, ducts shall be sealed and secured prior to pouring any concrete.

Metallic ducts having an approved protective coating and nonmetallic ducts shall be installed in accordance with manufacturer's installation instructions.

Duct Insulation:

Duct sizes on plans are "clear inside." The contractor shall increase sheet metal sizes accordingly for lined ductwork. Adhesive and insulating materials shall have composite fire and smoke hazard ratings maximum 25 for flame spread and 50 for smoke developed. Adhesives shall be waterproof.

Lined ductwork - semi-rigid glass fiber insulation, 1 1/2 pcf, 1 1/2" thick, thermal conductivity at 75°. Maximum 0.17 btu/in./sq. Ft./deg./hr. Minimum "r-value" shall be 6.0.

Wrapped ductwork - fiber glass blanket with frk vapor retarding facing. 1 1/2 pcf, 2" thick, with a minimum installed "r-value" of 6.0. (assumes 25% compression)

Acceptable Manufacturers:

The following is a list of manufacturers whose equipment and hvac materials are acceptable, subject to conformance with contract documents. Verify that the equipment will meet all capacities space allocations, and that the weights will not exceed structural design loads.

- Air Conditioning Units: Trane, Carrier, Goodman or approved equal.
- Mini-Split Heat Pumps: Mitsubishi, Trane, Fujitsu, or approved equal.
- Grilles, registers, diffusers: Krueger, Metal-Aire, Titus, Price or approved equal.
- Flexible duct: ATCO. Genflex, Thermaflex, or approved equal.
- Exhaust fans: Greenheck, Loren Cook and Penn Ventilator, or approved equal.
- Duct and pipe insulation: Knauf, Owens-Corning, Manville, Certain-Teed, or approved equal.

Exhaust Fans:

Size, capacities, and type shall be as indicated on the Plans. The contractor shall furnish complete with factory curbs/roof caps, barometric damper, speed control, disconnect, starter (if required), and birdscreen. The contractor shall furnish roof mounted fans with insulated roof curb; provide ceiling mounted fans with wall/roof cap.

Air System Balancing:

Air systems and air distribution test and balance: the contractor shall include in his bid the services of an independent air balance and testing agency. The testing agency shall be one which specializes in the balancing and testing of heating, ventilation and air conditioning systems to balance, adjust and test air moving equipment and air distributing or exhausting systems as herein specified. All work shall be done under direct supervision of a registered professional heating and ventilating engineer or AABC or NEBB certified company. The contractor shall provide certified report.

(923CBOJT, 04/14/15)

ITEM 9230002 - CONTRACTOR BASED ON-THE-JOB TRAINING:

1.0 Description:

1.01 Purpose:

The contractor shall provide on-the-job training (OJT) aimed at moving minorities, women, economically disadvantaged, and veteran trainees into journey-level positions in various types of construction trades or job classifications through a contractor-based OJT program. The contractor-based approach assigns contractors annual training goals for a specific number of trainees and hours. The contractor is provided the flexibility to meet the annual trainee and training hour goals on any transportation projects in the United States throughout the year, rather than on a project-by-project basis. Contractors may include ADOT and non-ADOT projects as long as more than 40 percent of the training hours are completed on ADOT projects.

Training of minorities and women toward journey-level status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority, women, economically disadvantaged, and veteran trainees to the extent that such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that it has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

1.02 Program Summary:

The Department has established a Contractor Based On-The-Job Training Pilot Program for a one year period from July 1, 2015 to June 30, 2016. All successful bidders will automatically be placed in the Pilot Program beginning on July 1, 2015. Standard OJT requirements associated with individual projects will no longer be applied at the project level for new projects. OJT requirements will be applicable on an annual basis for each contractor performing work on ADOT projects. During the OJT Pilot Program each contractor meeting the threshold described in Subsection 1.04 of this Training Special Provision will be required to provide training for one trainee for a minimum of 1000 hours. The 1000 hours may be completed by one or more trainees; if a trainee reaches program completion before completion of the 1000 hours then an additional enrolled_trainee may be used to complete the remaining training hours. For example, if a trainee reaches program completion after 700 hours, the contractor is required to provide an additional 300 hours of training to an enrolled trainee in order to meet its annual OJT goal.

Contractors may also assign OJT Trainees to be trained by subcontractors on any project with ADOT approval. However, the contractor will only receive credit towards its annual goal for hours earned by its own OJT Trainees. The contractor's OJT Trainees must be employed by the contractor and be enrolled in an approved training program as described in Subsection 2.01 of this Training Special Provision.

Hours earned by a subcontractor's OJT Trainees on a project will be credited to that subcontractor's annual training goal and the contractor shall reimburse the subcontractor in accordance with Subsection 2.02 of this Training Special Provision.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journey-level status or in which they have been employed at journey-level status. The contractor shall satisfy this requirement by including appropriate questions in the employment application or by other suitable means. Regardless of the method used, the contractor's records shall document the findings in each case.

The trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journey-level status individuals in the various classifications. The ratio of apprentices and OJT Trainees to journey persons shall not be greater than permitted by the terms of the approved training program being utilized. When a specific ratio is not provided, the ratio of apprentices and OJT Trainees to journey persons expected to be on the contractor's work force during normal operations shall fall between 1:10 and 1:4, pursuant to 23 CFR 230.111(c)(10).

1.03 Definitions:

"OJT Trainee" herein refers to (a) a minority, female, veteran or economically disadvantaged individual enrolled in either a State of Arizona registered apprenticeship program or ADOT's OJT program and (b) any other individual ADOT approves for enrollment in such an apprenticeship or OJT program and for credit toward the OJT Goals.

"Program Completion" herein refers to the point in time when a trainee in the ADOT OJT Program has completed the required number of levels and hours of training within a calendar year for a designated craft classification or a registered Apprenticeship program, or has achieved journey-level status.

"Journey-Level Status" applies to a person who has completed a registered apprenticeship program or is an experienced worker, not a trainee, and is fully qualified and able to perform all of the duties of a specific trade without supervision.

"Economically Disadvantaged Persons" applies to a person who:

- Receives, or is a member of a family and/or household, which receives cash payments under a Federal, State, or local income-based public assistance program.
- Is a member of a family and/or household that receives (or has been determined within the 6-month period prior to registration for the program involved to be eligible to receive) Food Stamps/EBT card under the Food Stamp Act of 1977.
- Is a foster child on behalf of whom State or local government payments are made.
- Does not have a high school diploma or GED.
- Is from a family whose total annual household income is below the federal poverty limits. See Appendix A of the *OJT Guidelines and Procedures* document found at <http://azdot.gov/business/business-engagement-and-compliance/on-the-job-training-program/ojt-contract-compliance>.

1.04 Annual Training Goal:

During the OJT Pilot Program, each contractor that was awarded ADOT federally funded construction contracts, as a prime contractor, for \$2,000,000 or more between October 1, 2013 and September 30, 2014 will be assigned an annual OJT goal to train a minimum of one trainee for a minimum of 1000 hours. The trainee shall receive training in the same construction trade or job classification from July 1, 2015 to June 30, 2016 with the aim of eventually achieving journey-level status. If the contractor is not awarded an ADOT federally funded contract during the pilot program period, they will not be required to meet the assigned annual OJT goal.

If a contracting firm is not assigned an annual OJT goal, it is not required to provide on-the-job training on ADOT projects regardless of whether OJT hours are included in the project bid schedule. If the contractor chooses to provide training to a registered OJT trainee on an ADOT federal-aid project although they do not meet the above criteria, the contractor will be reimbursed as described in Subsection 2.02 of this Training Special Provision.

The contractor shall make every possible effort to provide additional trainees with training and shall see that all trainees are afforded every opportunity to participate in as much training as is practically possible to provide. Contractors will not be required to meet OJT goals on individual contracts, but must meet the assigned annual training goal for the assigned number of OJT Trainees and hours by the end of the year.

Since not every OJT Trainee that enrolls in the program will complete the program, the contractor is encouraged to enroll sufficient numbers of OJT Trainees (well beyond the number of its annual training goal) to help ensure that it will meet its annual OJT goal if some OJT Trainees drop out of the program during the year. The contractor must carefully screen, hire, and support trainees that are likely to meet or exceed the 1000 hours of OJT during the calendar year, eventually earn journey-level status, and be retained as part of its workforce.

2.0 Requirements:

2.01 Approved Training Programs:

For this Contractor-Based OJT Program, the ADOT Business Engagement & Compliance Office (BECO) will only recognize two types of contractor based training programs. The programs are:

- The Department's OJT Program as approved by FHWA and described at <http://azdot.gov/business/business-engagement-and-compliance/on-the-job-training-program/ojt-contract-compliance> or
- Registered Apprenticeship and OJT programs registered with the Bureau of Apprenticeship, U.S. Department of Labor and/or the State of Arizona.

Contractors must use one or both of these programs. The contractor shall indicate which OJT program it is using for each trainee on his/her Trainee Enrollment form. It is the

intention of these provisions that training be provided in the construction crafts rather than for office support positions. Some off-site training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

All training programs shall be administered in a manner consistent with the equal employment obligations of federal-aid highway construction contracts. The Department reserves the right to request documentation that the contractor's training program fulfills these obligations. Contractors shall ensure that each trainee does not exceed the maximum number of training hours required for the completion of the selected training program unless prior approval is received from the Engineer.

2.02 Reimbursement:

The contractor will be reimbursed \$3.00 per hour of training provided to a trainee on an ADOT federal-aid project up to the maximum number of hours approved for reimbursement on the project and shown in the project bid schedule. Reimbursement will not be made for a trainee's hours that exceed the maximum number of training hours required for the completion of his/her training program. In addition, the contractor will not be reimbursed for hours in excess of the maximum training hours shown on the project bid schedule unless written approval is received in advance from the Engineer.

The maximum number of hours approved for reimbursement on each ADOT federal-aid contract will be calculated by the Department, based on the engineer's estimate for the project and the contract time.

The trainee will be paid the appropriate trainee Davis-Bacon wage rates for training classifications/crafts on federally-funded projects. The contractor shall compensate OJT Trainees according to pay levels and percentages outlined in the ADOT Training Program Manual found at <http://azdot.gov/business/business-engagement-and-compliance/on-the-job-training-program/ojt-contract-compliance>.

Contractors shall reimburse subcontractors for the subcontractor's trainees on ADOT federally funded projects at least 75-percent of the amount paid to the contractor by the Department per training hour.

2.03 Submittals:

The contractor shall complete and submit the following to BECO:

- *OJT Program Trainee Enrollment Form* for approval for each proposed minority, female, veteran, economically disadvantaged, and other OJT Trainee throughout the year as each individual is hired. The form shall be submitted to BECO within the first week of hire if working on an ADOT project. If the contractor is working on an ADOT project, the form shall also be submitted to the Engineer.

In addition, if the contractor is working on an ADOT construction project, the contractor shall submit the *OJT Program Trainee Enrollment Forms* of all current trainees to the Engineer at the Preconstruction Conference.

- Contractors shall enter trainee hours worked on ADOT construction projects on a weekly basis into the web-based Labor Compliance System, LCPtracker. Trainee hours not entered into LCPtracker by the 15th of each month for the preceding month will be considered delinquent. Trainee hours on non-ADOT contracts shall be entered into LCPtracker on a monthly basis.
- *OJT Monthly Progress Report Form* shall be submitted for each month by the 15th of the following month.
- *OJT Monthly Trainee Progress Report Form* shall be submitted for each trainee for each month by the 15th of the following month.
- *OJT Trainee Termination/Completion Form* when an OJT Trainee completes 1000 or more hours in the same construction trade or job classification within a calendar year, achieves journey-level status, terminates employment with the contractor, or withdraws from the OJT program.
- *OJT Annual Summary Report Form* by July 15, 2016 for the Pilot Program as described in Subsection 4.02 of this Training Special Provision.

The contractor's June monthly reports and uploads into LCPtracker submitted after July 31st will not be accepted or considered towards goal attainment for the previous calendar year.

All forms and Guidelines and Procedures for the Contractor-Based OJT program are available online at <http://azdot.gov/business/business-engagement-and-compliance/on-the-job-training-program/ojt-contract-compliance>.

The contractor shall retain the training records for all OJT Trainees for a period of five years following the completion of the trainee's work on contracts documenting his performance under this Training Special Provision. Such records shall be available at reasonable times and places for inspection or review by ADOT and the Federal Highway Administration.

The contractor is required to meet the assigned annual OJT goal if they are awarded federally funded ADOT construction contract(s) during the year. In anticipation of obtaining an ADOT contract, contractors are encouraged to begin registering trainees with the Department using the OJT Program Trainee Enrollment Form at the beginning of the year. In order to count training hours toward the goal, the trainee must be registered with the Department and their hours must be entered monthly into the LCPtracker system as described in this specification.

2.04 OJT Liaison:

The contractor shall designate an OJT Liaison that shall be responsible for monitoring and administering its OJT Program and monitoring the trainees' progress. The OJT Liaison shall serve as the point of contact for the Department regarding information, documentation, and conflict resolution relating to the contractor's OJT program. The contractor shall furnish each trainee a copy of the Training Program, monthly reports that reflect their training hours accumulated to date and other documentation related to the training program. The contractor shall further make every reasonable effort to provide training that develops the skills outlined in the training program. The contractor shall furnish each trainee, upon successful completion of their training program, a certificate showing the type and length of training satisfactorily completed.

2.05 Training Hours:

Credit towards the contractor's annual training goal shall be earned as follows:

- Credit will be allowed towards the contractor's annual goal for the year in which the trainee entered training.
- Credit will be allowed for each trainee employed on a project, pending official enrollment, for all documented hours completed.
- Credit will be allowed for a terminated trainee if the contractor demonstrated a good faith effort to meet the goal and the trainee completed more than 90% of the training hours required for the year.

Credit will not be allowed when the contractor fails to provide the required training or does not make a satisfactory good faith effort to meet the requirements of the program.

2.06 Program Completion:

A trainee will be considered to have completed the program once the trainee completes the required number of levels and hours of training for the same craft or classification within a year, completes a registered apprenticeship program, or achieves journey-level status as determined by the contractor. Once a trainee completes a specific training level for a classification, the contractor will not be permitted to resubmit that trainee for enrollment or reimbursed at that same level, unless approved in advance by the Engineer.

Upon completion of the program, the contractor shall notify BECO so that a Certificate of Completion can be issued to the trainee showing the type and length of training satisfactorily completed.

3.0 Good Faith Efforts:

Whenever a contractor requests ADOT approval of someone other than a minority, economically disadvantaged individual, woman, or veteran for credit towards its annual

training goal, the contractor shall submit documented evidence of its Good Faith Efforts to fill that trainee position with a minority, female, veteran, or economically disadvantaged individual. Documentation of Good Faith Efforts shall be made by completing and submitting the Good Faith Effort form and supporting documentation to BECO.

Good Faith Efforts are those efforts designed to achieve equal opportunity through positive, proactive, and continuous result-oriented measures (23 CFR 230.409(g)(4)). Good Faith Efforts should be made as trainee hiring opportunities arise. More information on Good Faith Efforts is available in the *OJT Guidelines and Procedures* document available on BECO's website.

4.0 ADOT Program Monitoring:

4.01 Site Visits:

BECO may conduct periodic site visits to a contractor's worksite to review OJT Program compliance, as part of a FHWA required Contractor Compliance Program Review process. The site reviews may include, among other activities, interview of trainees, the contractor, and its employees. The contractor shall cooperate in the review and make its employees available. The contractor's OJT Liaison shall be available to meet with BECO staff as well as be available to respond to periodic emails and phone calls from BECO to check on the progress of OJT Trainees. BECO will make every effort to ensure minimal disruption to a contractor's work.

4.02 Determination of Compliance:

An OJT Annual Summary Report Form for the previous 12 months (July 1, 2015 to June 30, 2016) shall be submitted to BECO by July 15, 2016 for the Pilot Program. The report shall provide an accurate account of all trainee hours; identifying each trainee by name, ethnicity, and gender and identifying each project and/or contract, listing the contracting agency, whether they are ADOT projects/contracts, whether they are federally funded projects/contracts, and the trainee hours attributed thereto. The report shall include written explanation and documentation of Good Faith Efforts, if the contractor fails to meet its goal.

BECO will review the contractor's OJT Monthly and Annual Reports and Good Faith Effort documentation. BECO will determine whether the contractor has met the assigned annual training goal or made a good faith effort to do so. BECO will communicate its decisions in writing to the contractor.

If a contractor has neither attained its goal nor submitted adequate Good Faith Efforts documentation, ADOT will issue a Show Cause Notice outlining its findings of non-compliance. Within 30 days of receiving the Show Cause Notice, the contractor may submit a written response to the Show Cause Notice providing argument and evidence in opposition to the Department's findings of non-compliance.

If a contractor fails to submit a written response to the Show Cause Notice within the specified period or the written response to the Show Cause Notice does not cause ADOT to

change its findings of non-compliance, ADOT will issue its Final Notice to the Contractor regarding the non-compliance.

ITEM 9240051 – MISCELLANEOUS WORK (CONCRETE WORK):

Description:

The work under this item consists of furnishing all materials and constructing slabs, footings, walls, beams, mechanical duct vaults and pads, stairs, and infill of floors to the forms, shapes and dimensions shown on the plans and to the lines and grades established by the Engineer and in accordance with the requirements of these specifications.

Materials and Construction Requirements:

Materials and construction shall conform to the requirements of Section 920 of these Special Provisions and as shown on the plans.

Portland Cement Concrete shall conform to the requirements of Section 1006 of the Standard Specifications for Class S concrete, with a strength as shown on sheet S1.0 of the plans.

Reinforcing steel shall conform to the requirements of Section 1003 of the Standard Specifications.

Method of Measurement:

Concrete Work will be measured as a single, complete unit of work.

Basis of Payment:

The accepted quantities for Concrete Work, measured as provided above, will be paid for at the contract lump sum price, which price shall be full compensation for the work, complete in place, including wall and bench footings, slabs, cast in place walls, stairs, site walls, floor patching, and reinforcing steel.

Partial payments will be made in accordance with the requirements of Subsection 109.06 of the specifications.

ITEM 9240052 – MISCELLANEOUS WORK (MASONRY WORK):

Description:

The work under this item consists of furnishing all materials and constructing masonry walls, restroom tiling, flagstone benches to the forms, shapes and dimensions shown on the plans and to the lines and grades established by the Engineer and in accordance with the requirements of these specifications.

Materials and Construction Requirements:

Materials and construction shall conform to the requirements of Section 920 of these Special Provisions and as shown on the plans.

Reinforcing steel shall conform to the requirements of Section 1003 of the Standard Specifications.

Flagstone: Sandstone, 4" thickness, honed surface textures, dark brown color.

Method of Measurement:

Masonry Work will be measured as a single, complete unit of work.

Basis of Payment:

The accepted quantities for Masonry Work, measured as provided above, will be paid for at the contract lump sum price, which price shall be full compensation for the work, complete in place, including trellis site wall, masonry and sandstone seats for flagstone benches, reinforcing steel, and structural steel used for steel lintels..

Partial payments will be made in accordance with the requirements of Subsection 109.06 of the specifications.

ITEM 9240053 – MISCELLANEOUS WORK (METAL WORK):

Description:

The work under this item consists of furnishing all materials and constructing metal panels for roof and walls, aluminum and cold formed metal framing, and hand rails as shown on the plans and in accordance with the requirements of these specifications.

Materials and Construction Requirements:

Materials and construction shall conform to the requirements of Section 920 of these Special Provisions and as shown on the plans.

Method of Measurement:

Metal Work will be measured as a single, complete unit of work.

Basis of Payment:

The accepted quantities for Metal Work, measured as provided above, will be paid for at the contract lump sum price, which price shall be full compensation for the work, complete in place.

Partial payments will be made in accordance with the requirements of Subsection 109.06 of the specifications.

ITEM 9240054 – MISCELLANEOUS WORK (WOOD AND PLASTIC WORK):

Description:

The work under this item consists of furnishing all materials and constructing wood gates, ticket counters, walls, and miscellaneous carpentry as shown on the plans and in accordance with the requirements of these specifications.

Materials and Construction Requirements:

Materials and construction shall conform to the requirements of Section 920 of these Special Provisions and as shown on the plans.

Method of Measurement:

Wood and Plastic Work will be measured as a single, complete unit of work.

Basis of Payment:

The accepted quantities for Wood and Plastic Work, measured as provided above, will be paid for at the contract lump sum price, which price shall be full compensation for the work, complete in place, including plywood and gypsum board for walls.

ITEM 9240055 – MISCELLANEOUS WORK (THERMAL AND MOISTURE PROTECTION):

Description:

The work under this item consists of furnishing all materials and constructing membrane roofing, installing all types of insulation, roof flashings and coping caps, scuppers and roof drains, ice and water shields, and vapor barriers beneath floor slab as shown on the plans and in accordance with the requirements of these specifications.

Materials and Construction Requirements:

Materials and construction shall conform to the requirements of Section 920 of these Special Provisions and as shown on the plans.

Method of Measurement:

Thermal and Moisture Protection will be measured as a single, complete unit of work.

Basis of Payment:

The accepted quantities for Thermal and Moisture Protection, measured as provided above, will be paid for at the contract lump sum price, which price shall be full compensation for the work, complete in place.

ITEM 9240056 – MISCELLANEOUS WORK (DOORS AND WINDOWS):

Description:

The work under this item consists of furnishing all materials and constructing doors, windows, wood gate, and furring existing doors as shown on the plans and in accordance with the requirements of these specifications.

Materials and Construction Requirements:

Materials and construction shall conform to the requirements of Section 920 of these Special Provisions and as shown on the plans.

Method of Measurement:

Doors and Windows will be measured as a single, complete unit of work.

Basis of Payment:

The accepted quantities for Doors and Windows, measured as provided above, will be paid for at the contract lump sum price, which price shall be full compensation for the work, complete in place, including blackout window inserts, furring of existing doors, and all hardware.

ITEM 9240059 – MISCELLANEOUS WORK (MECHANICAL/PLUMBING WORK):

Description:

The work under this item shall consist of removing, furnishing, and installing all materials, equipment, tools and labor necessary to renovate the museum rooms as shown on the mechanical and plumbing plans including the HVAC system, plumbing system, restroom fixtures and any related work in accordance with the details and at the locations shown on the plans and the requirements of these specifications.

Materials and Construction Requirements:

Materials and construction shall conform to the requirements of Section 920 of these Special Provisions and as shown on the plans.

Method of Measurement:

Restroom Renovation Mechanical/Plumbing will be measured as a single, complete unit of work.

Basis of Payment:

The accepted quantities for Restroom Renovation Mechanical/Plumbing, measured as provided above, will be paid for at the contract lump sum price, which price shall be full compensation for the work, complete in place.

Partial payments will be made in accordance with the requirements of Subsection 109.06 of the specifications.

ITEM 9240060 – MISCELLANEOUS WORK (ELECTRICAL WORK):

Description:

The work under this item shall consist of furnishing all materials, equipment, tools and labor necessary to renovate the electrical system as shown on the electrical plans including disconnecting electrical equipment to facilitate the installation of all new electrical components as shown on the plans and described in these special provisions.

Materials and Construction Requirements:

Materials and construction shall conform to the requirements of Section 920 of these Special Provisions and as shown on the plans.

Method of Measurement:

The Electrical Work will be measured for payment by the lump sum as a single complete unit of work.

Basis of Payment:

The accepted quantities for Electrical Work, measured as provided above, will be paid for at the contract lump sum price, which price shall be full compensation for the work, complete in place.

ITEM 9240061 – MISCELLANEOUS WORK (ROOF SYSTEM):

Description:

The work under this item shall consist of furnishing all materials, equipment, tools and labor necessary to construct a new roof including prefabricated wood trusses, steel and wood beams, wood ledgers, wood posts, wood blocking, plywood sheathing, steel decking,

bearing plates, and all connection materials, as shown on the plans and described in these special provisions.

Materials and Construction Requirements:

Materials and construction shall conform to the requirements of Section 920 of these Special Provisions and as shown on the plans.

Method of Measurement:

The Roof System will be measured for payment by the lump sum as a single complete unit of work.

Basis of Payment:

The accepted quantities for Roof System, measured as provided above, will be paid for at the contract lump sum price, which price shall be full compensation for the work, complete in place.

(1001MATL, 12/14/09)

SECTION 1001 MATERIAL SOURCES: of the Standard Specifications is revised to read:

1001-1 Description:

The work under this section shall consist of the procuring of borrow, topsoil, subbase and base materials, mineral aggregates for concrete structures, surfacing, and landscape plating, from sources either designated on the project plans or in the Special Provisions or from other sources.

1001-2 General:

The contractor shall determine for itself the type of equipment and work required to produce a material meeting the specifications.

Sites from which material has been removed shall, upon completion of the work, be left in a neat and presentable condition. Where practicable, borrow pits, gravel pits, and quarry sites shall be located so that they will not be visible from the highway.

The contractor shall provide an Environmental Analysis, as specified in Subsection 104.12, for any source proposed for use regardless of whether an approved Environmental Analysis exists for the site.

In accordance with Subsection 104.12, the contractor may incorporate an existing Environmental Analysis approved after January 1, 1999, provided that the analysis is updated as necessary to be in compliance with current regulations and with the contractor's planned activities.

It shall be the responsibility of the contractor to conduct any necessary investigations, explorations, and research, on-site and otherwise, before and after submitting the bid proposal, to satisfy itself that the specified quantity and/or quality of material exists in any proposed material source.

The Department makes no representation regarding quality or quantity of materials in any source.

1001-2.01 Material Sources in Flood Plains:

Any material source located in a flood plain and proposed for use on the project shall be reviewed by the appropriate agency having flood plain management jurisdiction for the area in which the proposed source is located. The contractor shall obtain a letter from the governing flood plain agency addressed to the Engineer, certifying that the location of the proposed source conforms to the requirements of the floodplain management agency.

Contractors seeking a flood plain material source are cautioned that Section 404 of the Clean Water Act may prevent use of the source unless an appropriate permit is first obtained from the U.S. Army Corps of Engineers.

Except for surplus material from agency-administered flood control management projects, borrow material shall not be obtained from any area situated in the 100-year flood plain of any stream or watercourse, and located within one mile upstream and two miles downstream of any highway structure or surfaced roadway crossing. Surplus material from agency-administered flood control management projects may be used as borrow material only if the contractor submits written evidence to the Engineer that the flood control agency project was fully designed and funded prior to the date of advertisement for bids on the Department project.

Material sources in flood plains located on Native American Indian Reservations will be considered for use based on an individual analysis. The analysis shall include a review of applicable land use plans, flood plain management plans, environmental plans, applicable laws and regulations pertaining to Indian Reservations, and an engineering analysis of the effects on any highway facility or structure. The contractor shall obtain from the Native American Tribal Council all permits, licenses, and approvals and present to the Department for review. The Department will review each request on a case by case basis.

1001-2.02 Information Available:

The Department's Materials Group maintains a listing of materials sources for which a completed Environmental Analysis is available and the landowner has allowed the source to be placed on the list. In addition, Materials Group maintains files for those sites for which the Department holds an easement, license, permit, lease, or other right, as well as a General Plan of Operation and Restoration. The contractor may contact the Materials Group at (602) 712-7231 for information and may review the files located at 1221 N. 21st Avenue, Phoenix, Arizona 85009-3740.

Contractors are advised that an agency having jurisdiction over the source, such as the Forest Service, Bureau of Land Management, Bureau of Reclamation, the State Land Department, etc., or the owner, as a condition to the use of the source, may have imposed certain obligations. The contractor who uses such a source shall assume full contractual responsibility for any and all of these obligations imposed either by the agency having jurisdiction or by the owner. Contractors considering such a source shall make themselves fully aware of any and all requirements imposed by the Department and the landowners.

The contractor may propose the use of these or other sources, provided that all requirements of the specifications have been met.

It shall be the responsibility of the contractor to comply with the provisions of the Environmental Analysis and with current laws, rules, and regulations.

The Department makes no representation regarding quality or quantity of materials in any source.

It shall be the responsibility of the contractor to conduct any necessary investigations, explorations and research, on-site and otherwise, to satisfy itself that the specified quantity and/or quality of material exists in any material source.

1001-2.03 Usage of Materials:

Approval of the use of any source shall be limited to the specific contract and purpose for which the use of the source was obtained.

1001-2.04 Royalty Charges:

If the Engineer approves a source for which the Department holds an easement, license, permit, lease, or other right with the landowner or controlling agency that includes requirements for the payment of royalties, the amount of the royalty charges and the name and address of the party to whom royalties are to be paid will be available from the Materials Group, 1221 N. 21st Avenue, Phoenix, Arizona 85009-3740.

Prior to the time of final payment, the contractor shall furnish the Engineer with evidence that all royalty charges have been paid. Such evidence shall consist of a waiver, release, or other written acknowledgement from the owner that all of the contractor's obligations to the owner have been met. In the event that royalty charges have not been paid, the Department reserves the right to make such payment and to deduct the amount of such payment from monies due the contractor.

The final billing and payment for material extracted from sources under the jurisdiction of the State Land Department will include a small administrative charge based on the total amount of royalties due for materials removed.

Upon receipt of the final billing from the Department of Transportation, the contractor shall mail a check, payable to the State Land Department, addressed as follows:

Arizona Department of Transportation
Field Reports Section
206 South 17th Avenue
Phoenix, Arizona 85007

1001-2.05 Performance Bonds:

If sources are under the jurisdiction of either the State Land Department or the Bureau of Land Management, the contractor shall secure a performance bond. A fully executed copy of the bond shall be furnished to the Engineer along with evidence that a fully executed copy has been sent to the State Land Department or the Bureau of Land Management.

The form of the Performance Bond will be available from the Materials Group, 1221 N. 21st Avenue, Phoenix, Arizona 85009-3740. For pits under the jurisdiction of the Bureau of Land Management, the surety shall be a company listed under "Surety Companies Acceptable on Federal Bonds." This list is published annually as of July 1 in the Federal Register.

Performance bonds shall be conditioned upon the compliance with the requirements of the State Land Department and the Bureau of Land Management and the requirements of the specifications for the clearing of pit sites, the removal of material and the cleaning up of pit sites.

Copies of fully executed performance bonds shall be mailed as follows:

State Land Commission
State Land Department
1624 West Adams Street
Phoenix, Arizona 85007

Bureau of Land Management
Manager, Land Office
222 North Central Avenue
Phoenix, Arizona 85004

1001-2.06 Sampling and Testing:

The results of any sampling and testing accomplished by the Department will be available from the Materials Group, 1221 N. 21st Avenue, Phoenix, Arizona 85009-3740.

1001 – 2.07 Plan of Operation and Restoration:

The contractor shall determine whether the Department holds an easement, license, permit, lease or other right, for any proposed material source. For such sites, a project-specific Plan of Operation and Restoration will be required. The contractor shall obtain a copy of the related document and the Department's General Plan of Operation and Restoration for the proposed site from the Materials Group. The contractor shall prepare and submit to the Engineer a project-specific Plan of Operation and Restoration which shall follow the format of the Department's General Plan of Operation and Restoration, and shall take into account the requirements of the Environmental Analysis, as well as any restrictions placed on the use of the source by the landowner or agency.

The proposed source will not be approved without an approved project-specific Plan of Operation and Restoration. Approval of the contractor's project-specific plan does not constitute approval of the use of the source.

The contractor shall identify and provide a person in charge of the operation. That person shall maintain copies onsite of the Department's General Plan of Operation and Restoration, the contractor's approved project-specific Plan of Operation and Restoration, the current Environmental Analysis, and the license and permits issued to the Department by the landowner or agency.

1001-3 Proposed Source:

1001-3.01 Approval Requirements:

(A) General:

The contractor shall promptly advise the Engineer as to the source that it proposes to use.

The contractor acknowledges that all the conditions set forth in this subsection shall be met prior to the source being approved for use.

Other than sampling and testing, the requirements of this subsection shall be completed prior to initiation of any activities that disturb the existing conditions at the proposed source.

The contractor further acknowledges that no additional compensation will be made on account of any delays in preparing or modifying the Environmental Analysis, obtaining approval for the use of a source, or the failure to obtain approval of a source. An extension of contract time may be granted only in accordance with Subsections 104.12 or 1001-3.01(B)(4).

Regulatory changes, specification changes, or other reasons may preclude the approval of a materials source. The contractor acknowledges that the Department may refuse to approve a material source even if the Department had approved the source for other projects.

If all of the requirements for approval of a materials source have been accomplished for the project, and the Engineer has approved the source for use on the project and, subsequent to that approval, the Environmental Analysis is rescinded, the contractor may request a revision to the contract in accordance with Subsection 104.02 and 108.08. In reviewing the contractor's request, the Department will take into account the following factors. Additional factors may be considered.

- (1) Whether the contractor was in compliance with the requirements of the Environmental Analysis and, if applicable, the site-specific Plan of Operations and Restoration.
- (2) Whether the reasons for rescinding the approval were reasonably foreseeable.

- (3) Whether the action taken was the result of regulatory changes.
- (4) Whether deficiencies unrelated to the Environmental Analysis may have rendered the source unacceptable.
- (5) Whether rescinding the approval was the sole cause of any impact to controlling activities on the project.

(B) Specific Conditions For Approval:

The use of a source will require written approval by the Engineer. No approval will be given until the contractor has complied with the following conditions:

- (1) The contractor has submitted an Environmental Analysis, as specified in Subsection 104.12, of the source proposed for use and the Department has reviewed the analysis and satisfied itself that the use of such source will not have an adverse social, economic or environmental impact. The requirements of Subsection 1001-3.01 shall be completed prior to initiation of any activities that disturb the existing conditions at the proposed source, except for exploring test areas as specified in Subsection 1001-3.02.
- (2) The contractor has furnished the Engineer with evidence that he has secured the rights to the source, including ingress and egress.
- (3) The Department has determined that the material from the proposed source not only meets the requirements, but is also compatible with the established project design criteria developed by the ADOT Materials Group and based on the soil support value of the embankment; and the sampling and testing as herein specified has been satisfactorily completed.
- (4) The contractor has furnished a fully executed copy of the Performance Bond as specified in Subsection 1001-2.05.
- (5) When required, the contractor has submitted, and the Department has approved, the site-specific plan of operations and restoration as specified in Subsection 1001-2.07.

The contractor shall also notify the Arizona Department of Agriculture, in accordance with the Arizona Native Plant Law, at least 30 days prior to any clearing operations of less than 40 acres on private land, 60 days prior to clearing operations of 40 or more acres on private land, and 60 days prior to any clearing of state land, regardless of size. If the Engineer is convinced that the contractor has made every effort to comply with the provisions of the Arizona Native Plant Law in contacting the Department of Agriculture, the Engineer will increase the number of contract days by the amount of time required for action by the Department of Agriculture. The increase will not exceed 45 calendar days and will be concurrent with any increase allowed for the preparation of the Environmental Analysis.

(C) Historical and Cultural Resources:

If the Department determines that the proposed use will have major adverse impact on cultural or historic resources, the Department will not allow the use of the source.

(D) Permit from Navajo Nation:

For projects located on the Navajo Reservation, the Navajo Nation has adopted a permitting system for any sources, regardless of whether on or off the Navajo reservation, which are to supply material for projects located within its boundaries. No material source will be approved until the contractor submits a copy of the permit from the Navajo Nation allowing materials from the proposed source to be used on the project. For information concerning the permit, the contractor shall contact the Navajo Nation Historic Preservation Office.

1001-3.02 Testing Requirements:

The contractor shall furnish equipment and personnel and shall obtain representative samples of the material under the supervision of the Engineer. At the option of the contractor, the material shall be tested by either the Department or by a testing laboratory approved by the Department. The cost of all sampling and testing done for the purpose of attaining approval of any source, including the cost of supervision by the Engineer, shall be borne by the contractor.

If testing is performed by a testing laboratory, the contractor shall arrange for the samples to be delivered to the testing laboratory. Tests shall be performed using appropriate test procedures referred to in the sections of the specifications in which the specific material requirements are described.

The contractor shall make the arrangements necessary to see that the testing laboratory submits the results of the tests to ADOT Materials Group. The contractor shall submit to ADOT Materials Group sufficient quantity of material from the samples taken so that ADOT Materials Group may test the materials, at the Department's expense, and verify the results.

Exploratory sampling and testing activities conducted prior to the Department's approval shall be limited so as to cause the minimum amount of vegetation removal and surface disturbance required to obtain representative samples. The contractor shall not produce material, mobilize crushing equipment or clear a worksite prior to approval of the Environmental Analysis.

The contractor may request an exemption from the testing requirements specified in this subsection upon presentation of evidence to the satisfaction of the Engineer that the material that will be produced on the project is sufficiently similar to material that has been previously acceptable to the Department on projects with similar materials specifications.

No approval of the source shall be assumed, nor will it be made, until the Department has determined that the material meets the specified requirements.

The contract time will not be adjusted because of any time required by either the contractor or the Department to sample and test the material and to determine the quality of the material.

1001-4 Special Access:

The contractor may make a request to the Engineer to approve special access to a controlled access highway if special access is not shown on the project plans.

The request by the contractor shall be accompanied by an Environmental Analysis and by documents which specify the point(s) of access, the acquisition of right-of-way, the manner in which access will be attained, the traffic control plan, and crossovers, along with all other appropriate data which will allow the Engineer to evaluate its request. If the request is approved, a supplemental agreement shall be entered into.

All costs associated with the special access requested by the contractor shall be borne by the contractor, including, but not limited to, cattle guards, fences, gates and restoration work.

When access is not being utilized, gates shall be closed and locked. Upon completion of all operations, the area within the right-of-way that has been disturbed shall be restored to the condition existing prior to the contractor's operations.

The decision by the Engineer to deny a request by the contractor will be considered to be final.

1001-5 Operations at Source:

1001-5.01 General Requirements:

The contractor shall conduct its operations in such a manner as to preserve available materials in excess of project requirements.

The contractor shall notify the Engineer in advance of operations at the source. Notice shall be given before and after clearing and grubbing, and before and after cleaning up.

1001-5.02 Clearing and Grubbing:

Before beginning stripping, the contractor shall clear and grub the source as necessary to prevent the contamination of materials to be used in the work. Clearing and grubbing shall be in accordance with the requirements of Section 201, except that the resulting surface need not be leveled and vegetable matter need not be separated from any overburden which the Engineer determines to be unsuitable for any future use and which is to be wasted. Clearing and grubbing shall be limited to the area expected to be excavated and areas used for processing and stockpiling.

In the disposal of all tree trunks, stumps, brush, limbs, roots, vegetation and other debris removed, the contractor shall comply with the requirements of the Arizona Revised Statutes

Title 49 Chapter 3 – Air Quality; and with the Arizona Administrative Code Title 18 Chapter 2 – Department of Environmental Quality – Air Pollution Control.

Burning will be permitted only after the contractor has obtained a permit from the Arizona Department of Environmental Quality, and from any other Federal, State, County or City Agency that may be involved.

When stripping is required, overburden shall be removed to the extent necessary to remove all undesirable materials and shall, at all times, be kept stripped at least five feet beyond the working face of the area being excavated.

The contractor shall comply with the requirements of the landowner or agency having jurisdiction over the land.

1001-5.03 Extraction of Materials:

Materials shall be removed from the source in a workmanlike manner and, when required, in accordance with the contractor's project-specific Plan of Operation and Restoration. In order to produce acceptable material in the amount and gradation required, it may be necessary for the contractor to do any or all of the following, along with any other similar operations usually associated with the extraction, processing and production of the particular material being produced:

- Move materials from one area to another.
- Perform additional screening.
- Remove, wash and waste material.
- Blend materials.
- Revise crushing methods.
- Remove deleterious materials such as clay balls, roots and sticks.

If the Engineer determines that the material in a source is stratified, all material except borrow shall be removed for the full depth in such a manner as to produce a uniform blend of the material. Placing the material from different areas and depths into a surge pile and removing material from the surge pile by cutting through the pile will be acceptable provided that a uniformly blended material is obtained.

Material sources located in drainage channels such as washes, riverbeds, etc., may experience seasonal variations in the depth of ground water. In order to produce the quantity of material estimated to be available, the contractor may be required to work below the water table.

1001-6 Fences and Cattle Guards:

Where the haul roads to material sources cross existing fence lines in areas where there is livestock of any kind, temporary cattle guards shall be installed by the contractor at each crossing.

The livestock operator or owner shall be contacted prior to the beginning of any operations and effective measures shall be taken and means provided by the contractor to prevent livestock from straying.

In operations where conditions will exist that are dangerous to livestock of any kind, temporary cattle guards and fence shall be installed around the pit area by the contractor to protect livestock.

Temporary cattle guards and fence installed by the contractor shall be removed and existing fence disturbed shall be replaced or reconstructed and all fence shall be left in as good condition as it was prior to the beginning of work.

1001-7 Cleaning Up:

All overburden and other undesirable materials removed and all piles of waste materials resulting from operations in the source shall be handled in accordance with the requirements of the landowner or agency having jurisdiction over the land, the Environmental Analysis, the project-specific Plan of Operation and Restoration, if applicable, and all laws, rules and regulations. All debris shall be removed and disposed of and, if directed, all open test holes shall be filled. Unless otherwise required, the sides of sources shall be sloped and smoothed so that livestock can enter and leave the excavated area safely. Unless otherwise required, all haul roads shall be obliterated and, as far as practicable, the ground left in as good condition as it was prior to hauling.

1001-8 Method of Measurement and Basis of Payment:

Except as may be otherwise specifically provided for in this section or elsewhere, no measurement or direct payment will be made for any costs involved in the procuring of materials. Such costs shall be considered as included in the cost of contract items.

(1003REBAR, 01/26/16)

SECTION 1003 REINFORCING STEEL:

1003-1 General Requirements: the first paragraph of the Standard Specifications is revised to read:

Reinforcing steel shall be furnished in the sizes, shapes, and lengths shown on the plans and in conformance with the requirements of the specifications.

Certificates of Compliance conforming to the requirements of Subsection 106.05 shall be submitted for epoxy coated reinforcing bars, as well as uncoated reinforcing bars, wire, and welded wire fabric. In addition, for epoxy coated reinforcing bars, Certificates of Compliance shall be required from the coating manufacturer and Certificates of Analysis shall be required from the coating applicator.

1003-2 Reinforcing Bars: the first paragraph of the Standard Specifications is revised to read:

Except when used for wire ties or spirals, steel bars used as reinforcement in concrete shall be deformed and shall conform to the requirements of ASTM A 615. Unless otherwise specified, steel bars meeting the requirements of ASTM A 706 may be substituted for ASTM A 615 steel bars. When ASTM A 706 bars are used, tack welding of the reinforcement will not be permitted unless approved in writing by the Engineer.

1003-3 Wire: of the Standard Specifications is revised to read:

Steel wire used as spirals or ties for reinforcement in concrete shall conform to the requirements of ASTM A 82.

1003-5.02 Epoxy for Coating: the first paragraph of the Standard Specifications is revised to read:

A list of powdered epoxy resins which have passed prequalification tests, as described in ASTM A 775, "Epoxy-Coated Steel Reinforcing Bars", and which may be used if the material is applied and cured in the same manner as that used to coat the test bars in the original powder prequalification test may be found on the Department's Approved Products List. Copies of the most current version are available on the internet from the ADOT Research Center through its Product Evaluation Program.

1003-5.02 Epoxy for Coating: the fifth paragraph of the Standard Specifications is revised to read:

The contractor shall furnish a Certificate of Compliance from the coating manufacturer, conforming to the requirements of Subsection 106.05. The Certificate of Compliance shall properly identify the batch and/or lot number, material, quantity of batch, date of manufacture, name and address of manufacturer, and a statement that the material is the same composition as the initial sample prequalified for use. The certificate shall also state that production bars and prequalification bars have been identically prepared and applied with epoxy powders.

1003-5.03 Application of Coating: the second paragraph of the Standard Specifications is revised to read:

The surface to be coated shall be blast cleaned in accordance with the requirements of the Society for Protective Coatings, Surface Preparation Standard SSPC-SP10, Near White Blast Cleaning.

1003-5.03 Application of Coating: the fifth paragraph of the Standard Specifications is revised to read:

The epoxy coating shall be applied as a smooth uniform coat. After curing, the coating thickness shall be ten ± two mils. Coating thickness shall be controlled by taking measurements on a representative number of bars from each production lot. Coating

thickness measurements shall be conducted by the method outlined in the Society for Protective Coatings Paint Application Standard SSPC-PA2.

1003-5.03 Application of Coating: the ninth and tenth paragraphs of the Standard Specifications are revised to read:

The contractor shall furnish a Certificate of Analysis from the coating applicator, conforming to the requirements of Subsection 106.05, with each shipment of coated steel. In addition to the requirements of Subsection 106.05, the Certificate of Analysis shall state that the coated items and coating material have been tested in accordance with the requirements of this subsection and that the entire lot is in a fully-cured condition.

The coating applicator shall be responsible for performing quality control and tests. This will include inspection and testing to determine compliance with the requirements of this subsection for the coating thickness, continuity of coating, coating cure, and flexibility of coating.

(1006PCC, 10/03/14)

SECTION 1006 PORTLAND CEMENT CONCRETE:

1006-1 General Requirements: of the Standard Specifications is revised to read:

Portland cement concrete shall consist of a mixture of hydraulic cement, fine aggregate, coarse aggregate, and water. It may also contain air-entraining admixtures, chemical admixtures, and supplementary cementitious materials.

The contractor shall determine the mix proportions and shall furnish concrete which conforms to the requirements of the specifications. All concrete shall be sufficiently workable, at the slump proposed by the contractor within the specified range, to allow proper placement of the concrete without harmful segregation, bleeding, or incomplete consolidation. It shall be the responsibility of the contractor to proportion, mix, place, finish, and cure the concrete properly in accordance with the requirements of the specifications.

1006-2.01 Hydraulic Cement: the second through the fifth paragraphs of the Standard Specifications are revised to read:

Portland cement shall conform to the requirements of ASTM C 150 for Type II, III, or V, and shall be low alkali cement containing not more than 0.60 percent total alkali (Na₂O equivalent).

Portland-pozzolan cement shall conform to the requirements of ASTM C 595 for blended hydraulic cement with moderate sulfate resistance, Type IP (MS).

Cementitious material is defined as an inorganic material or a mixture of inorganic materials that sets and develops strength by chemical reaction with water by formation of hydrates and is capable of doing so under water. In this specification, cementitious materials are defined as: hydraulic cement (Portland cement or Portland-pozzolan cement) and supplementary cementitious material (Fly Ash, Natural Pozzolan, or Silica Fume).

Hydraulic cement shall be approved prior to its use in accordance with ADOT Materials Policy and Procedure Directive No. 13, "Certification and Acceptance of Hydraulic Cement, Fly Ash, Natural Pozzolan, Silica Fume, and Lime".

1006-2.02 Water: the first sentence of the first paragraph of the Standard Specifications is revised to read:

The water used shall be free of injurious amounts of oil, acid, alkali, clay, vegetable matter, silt, or other harmful matter.

1006-2.03(A) General Requirements: the first paragraph of the Standard Specifications is revised to read:

When concrete is to be placed at elevations above 4,500 feet, the fine aggregate and the coarse aggregate shall be subjected to five cycles of the sodium sulfate soundness test, and the weighted percentage loss determined separately for each, in accordance with the requirements of AASHTO T 104. The weighted percentage loss determined for each shall not exceed 10 percent. Tests for soundness may be waived when aggregates from the same source have been approved and the approved test results apply to the current production from that source.

1006-2.03(A) General Requirements: the second paragraph of the Standard Specifications is hereby deleted:

1006-2.03(A) General Requirements: the fifth paragraph of the Standard Specifications is revised to read:

When aggregates are stored on the ground, the sites for the stockpiles shall be level and clear of all vegetation. The bottom one-foot layer of aggregate shall not be disturbed or used.

1006-2.03(A) General Requirements: "Lightweight particles" in the table of the ninth paragraph of the Standard Specifications is revised to read:

Lightweight particles (Specific gravity less than 2.0)	AASHTO T 113 (See Note)
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1006-2.03(B) Fine Aggregate: "Lightweight particles" in the table of the second paragraph of the Standard Specifications is revised to read:

Lightweight particles (Specific gravity less than 2.0)	AASHTO T 113 (Except that the percent of lightweight particles shall be reported to the nearest 0.01%.)	1.25% (0.25% Max. Coal and Lignite*)
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1006-2.03(B) Fine Aggregate: the last paragraph of the Standard Specifications is revised to read:

Fine aggregate shall be made into mortar and subjected to testing under AASHTO T 71, except that the mortar shall develop a compressive strength at seven and 28 days of not less than 90 percent of that developed by a mortar prepared in the same manner with the same Type II cement and graded sand conforming to the requirements of ASTM C 778.

1006-2.03(C) Coarse Aggregate: "Lightweight particles" in the table of the second paragraph of the Standard Specifications is revised to read:

Lightweight particles (Specific gravity less than 2.0)	AASHTO T 113 (Except that the percent of lightweight particles shall be reported to the nearest 0.01%.)	1.25% (0.25% Max. Coal and Lignite*)
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1006-2.04(A) General Requirements: the first paragraph of the Standard Specifications is hereby deleted.

1006-2.04(B) Air-Entraining Admixtures: the first paragraph of the Standard Specifications is revised to read:

Air-entraining admixtures shall conform to the requirements of ASTM C 260.

Air-entraining admixtures shall be approved prior to their use in accordance with ADOT Materials Policy and Procedure Directive No. 2, "Certification and Acceptance of Chemical and Air-Entraining Admixtures for Portland Cement Concrete".

1006-2.04(C) Chemical Admixtures: the first paragraph of the Standard Specifications is revised to read:

Chemical admixtures shall conform to the requirements of ASTM C 494.

Chemical admixtures shall be approved prior to their use in accordance with ADOT Materials Policy and Procedure Directive No. 2, "Certification and Acceptance of Chemical and Air-Entraining Admixtures for Portland Cement Concrete".

1006-2.04(D)Supplementary Cementitious Material (Fly Ash, Natural Pozzolan, and Silica Fume): the first paragraph of the Standard Specifications is revised to read:

Supplementary cementitious materials may be used in addition to hydraulic cement. Supplementary cementitious materials shall be approved prior to their use in accordance with ADOT Materials Policy and Procedure Directive No. 13, "Certification and Acceptance of Hydraulic Cement, Fly Ash, Natural Pozzolan, Silica Fume, and Lime".

1006-2.04(D)Supplementary Cementitious Material (Fly Ash, Natural Pozzolan, and Silica Fume): the last two paragraphs of the Standard Specifications are revised to read:

When a supplementary cementitious material with a calcium oxide content greater than 15 percent is proposed, the hydraulic cement/supplementary cementitious material blend shall be tested for sulfate expansion in accordance with ASTM C 1012. The maximum expansion shall be 0.10 percent at six months.

When either moderate or high sulfate resistant concrete is specified in the Special Provisions, the proposed hydraulic cement/supplementary cementitious material blend shall be tested for sulfate expansion in accordance with ASTM C 1012. When moderate sulfate resistance is specified, the maximum expansion shall be 0.10 percent at six months. When high sulfate resistance is specified, the maximum expansion shall be 0.05 percent at six months or 0.10 percent at one year.

1006-2.05 Concrete Curing Materials: the second paragraph of the Standard Specifications is revised to read:

Acceptance of concrete curing materials shall be as specified in ADOT Materials Policy and Procedure Directive No. 3, "Curing Compounds".

1006-3.01 Design Criteria: Table 1006-A of the Standard Specifications is revised to read:

TABLE 1006-A				
Classes of Concrete	Minimum 28-Day Compressive Strength Required: psi (See Note 1)	Cementitious Material Content: Lbs per Cu Yd Minimum - Maximum (See Notes 2, 3, and 4)	Maximum Water/Cementitious Material Ratio (w/cm): Lb./Lb.	Slump Range: Inches

B	2,500	470 – 658	None	
S	2,500	520 – 752	0.55	(See Note 6)
	3,000 (See Note 5)			
	3,500			
	4,000			
	4,500	564 – 752	0.50	
	Greater than 4,500	564 - 800	0.45	
P	4,000	564 – 658	None	0 – 4.5
H	High performance concrete as specified in project special provisions.			

Note 1: Testing for compressive strength of cylinders for all classes of concrete shall be in accordance with the requirements of Arizona Test Method 314.

Note 2: A supplementary cementitious material (fly ash, natural pozzolan, or silica fume) conforming to the requirements of Subsection 1006-2.04(D) may be used, as specified in paragraphs (a) through (f) below.

(a) When Portland cement is used, a maximum of 25 percent, by weight of the cementitious material, may be an approved fly ash or natural pozzolan, except as specified in paragraphs (d), (e), and (f) below.

(b) When Portland-pozzolan cement [Type IP (MS)] is used, fly ash or natural pozzolan is not allowed, except as specified in paragraphs (d), (e), and (f) below.

(c) When silica fume is used, a maximum of 10 percent, by weight of either Portland cement or Portland-pozzolan cement, may be used.

(d) When a compressive strength greater than 4,500 psi is required, supplementary cementitious material may be added in excess of the maximum cementitious material content. Fly ash or natural pozzolan may exceed 25 percent, by weight of the cementitious material, if approved by the Engineer.

(e) When increased sulfate resistance is specified, the required amount of fly ash or natural pozzolan shall be incorporated into the concrete and may exceed 25 percent, by weight of the cementitious material.

(f) For Class S concrete used in bridge decks, a minimum of 20 percent, by weight of the cementitious material, must be an approved Class F fly ash or natural pozzolan, unless otherwise approved by the Engineer.

Note 3: For any concrete mix, other than for precast and/or prestressed bridge members, with a Portland cement content greater than 545 pounds per cubic yard, one of the options specified in paragraphs (a) through (e) below for the mitigation of a potential alkali silica reaction (ASR) shall be used:

(a) A minimum of 20 percent Class F fly ash or natural pozzolan, by weight of the cementitious material, shall be used. The Class F fly ash or natural pozzolan shall have a calcium oxide content of 15 percent or less.

(b) Instead of using Portland cement, Type IP (MS) Portland-pozzolan cement with a Class F fly ash or natural pozzolan content of at least 20 percent, by weight of the cementitious material, shall be used. The Class F fly ash or natural pozzolan shall have a calcium oxide content of 15 percent or less.

(c) Limit the total alkali (Na_2O equivalent) to a maximum of 3.00 pounds per cubic yard of concrete, when calculated as follows:

$$\left[\begin{array}{l} \text{Pounds of total} \\ \text{alkali per cubic} \\ \text{yard of concrete} \end{array} \right] = \frac{\left(\begin{array}{l} \text{Pounds of Portland} \\ \text{cement per cubic} \\ \text{yard of concrete} \end{array} \right) \times \left(\begin{array}{l} \text{Na}_2\text{O equivalent (\%)} \\ \text{in Portland cement} \end{array} \right)}{100}$$

(d) Introduce a lithium nitrate admixture, which has been approved by the Engineer, at a minimum dosage of 0.55 gallons of 30 percent lithium nitrate solution per pound of total alkali (Na_2O equivalent) per cubic yard of concrete. The required amount of lithium nitrate is calculated as follows:

$$\left[\begin{array}{l} \text{Required gallons} \\ \text{of 30 percent} \\ \text{lithium nitrate} \\ \text{solution} \end{array} \right] = \frac{\left(\begin{array}{l} \text{Pounds of} \\ \text{Portland cement} \\ \text{per cubic yard} \\ \text{of concrete} \end{array} \right) \times \left(\begin{array}{l} \text{Na}_2\text{O equivalent (\%)} \\ \text{in Portland cement} \end{array} \right)}{100} \times (0.55)$$

(e) The coarse aggregate and the fine aggregate shall be tested separately in accordance with ASTM C 1260 to determine the potential for alkali silica reaction (ASR). When aggregates show the potential for ASR, as indicated by expansions of 0.10% or greater at 16 days after casting, sufficient mitigation for the expansion shall be determined in accordance with ASTM C 1567. The use of fly ash or natural pozzolan may exceed 25 percent, by weight of the cementitious material.

Note 4: Unless otherwise specified, the cementitious material content shall be as shown.

Note 5: Unless otherwise shown on the plans.

Note 6: The proposed slump shall be chosen by the contractor. Concrete at the proposed slump shall be sufficiently workable to allow proper placement without harmful segregation, bleeding, or incomplete consolidation.

1006-3.01 Design Criteria: the second, third, and fourth paragraphs of the Standard Specifications are revised to read:

Air-entraining admixtures will be required for all classes of concrete placed at an elevation of 3,000 feet or above. The air content of the concrete mixture shall not be less than four percent nor more than seven percent by volume. However, no air-entrainment will be required for minor precast structures, precast pipe, and precast, prestressed structural members supporting a concrete deck slab or impervious overlay. Also, no air-entrainment will be required for any precast items constructed using the dry pack or no-slump method.

For elevations below 3,000 feet, air-entraining admixtures may be used at the option of the contractor. If air-entraining admixtures are used, the air content of the concrete mixture shall not exceed seven percent by volume.

Concrete that fails to conform to the air content requirements listed above for the respective elevation as determined by the Engineer, shall be rejected prior to placement.

1006-3.01 Design Criteria: the first and second sentences of the sixth paragraph of the Standard Specifications are revised to read:

The coarse aggregate size designation for Class S or Class B concrete shall be chosen by the contractor and approved by the Engineer and shall conform to the size designation and grading requirements of AASHTO M 43. In choosing the size designation, the maximum size of coarse aggregate shall not be larger than one fifth of the narrowest dimension between the sides of adjacent forms, or two thirds of the minimum clear spacing between reinforcing bars, or two thirds of the minimum clear spacing between reinforcing bars and the sides of adjacent forms, or one third of the depth of the slab, whichever is least.

1006-3.01 Design Criteria: the first sentence of the seventh paragraph of the Standard Specifications is revised to read:

Coarse aggregate for Class P concrete used to construct Portland cement concrete pavement without load transfer dowels shall be separated into two or more stockpiles.

1006-3.02 Design Procedures: the first paragraph of the Standard Specifications is revised to read:

At least two weeks prior to the appropriate concreting operation, the contractor shall furnish a mix design for each class of concrete and each strength of Class S concrete for review and approval. More than one mix design for each class of concrete and each strength of Class S concrete may be submitted for approval provided specific items and locations of intended uses accompany the mix design. The contractor shall substantiate each mix design by furnishing test data and providing all details of the mixtures proposed for use. Mix designs, for other than precast or prestressed concrete, shall be prepared by or under the direction of, and signed by, a registered professional engineer, a NICET Level III or higher certified technician in the concrete subfield, a NRMCA Level 3 Certified Concrete Technologist, or an ACI certified Concrete Laboratory Testing Technician Level 2 or Grade II. Mix designs for precast or prestressed concrete shall be prepared by or under the direct supervision of, and signed by, either one of the individuals listed above or a PCI Quality Control Technician/Inspector Level II or higher. Individuals preparing and submitting mix designs shall have experience in the development of mix designs and mix design testing for the respective type of concrete.

1006-3.02 Design Procedures: the second and third paragraphs of the Standard Specifications are revised to read:

The complete solid volume mix designs submitted for approval shall include all weights and volumes of all ingredients. The brand, type, and source of hydraulic cement and admixtures, the coarse aggregate size number designation, source of aggregates, the specific gravities of all ingredients, the proposed slump, the water/cementitious material ratio, a product code to identify the mix design, and the intended use of each mix design shall be an integral part of each mix design.

The use of new and previously used mix designs, and the requirements for trial batches, will be as required by ADOT Materials Policy and Procedure Directive No. 15, "Submittal and Approval of Portland Cement Concrete Mix Designs".

1006-4.01 General Requirements: of the Standard Specifications is revised to read:

The contractor may obtain concrete for each class of concrete and for each strength of Class S concrete from a source approved by the Engineer in lieu of establishing a batch plant at the project site.

For each class of concrete and each strength of Class S concrete, except for Class P concrete produced in a batch plant at the site and used exclusively for Class P work, the contractor shall furnish a delivery ticket for each batch of concrete. The minimum information to be shown on each delivery ticket shall be the date, time batched, truck identification number, name or identification of batch plant, name of contractor, name and location of project, the quantity of concrete, the batch weights/volumes or mix design product code, the amount of permissible additional water to meet the design water/cementitious material ratio, and the number of revolutions that the concrete has been mixed at mixing speed in a truck mixer. An authorized representative of the contractor shall be responsible for each delivery ticket and shall sign each delivery ticket

accepting the contractor's responsibility for the concrete. The representative shall immediately furnish the delivery ticket to the Engineer.

When requested by the Engineer, the contractor shall supply a separate record for each batch of concrete which shows the batch weight/volume of each individual ingredient.

1006-4.02(A) Hydraulic Cement: the last sentence of the first paragraph of the Standard Specifications is hereby deleted:

1006-4.03(A) General Requirements: the last sentence of the first paragraph of the Standard Specifications is revised to read:

Concrete may be mixed in a mobile mixer at the site for Class S or Class B concrete, provided written permission of the Engineer is granted.

1006-4.03(B) Mixing in a Stationary Mixer: the last sentence of the third paragraph of the Standard Specifications is revised to read:

The mixing time shall be not less than 60 seconds for one cubic yard and shall be increased 15 seconds for each additional cubic yard or fraction thereof for Class S or Class B concrete.

1006-4.03(C) Mixing in Truck Mixers: the first sentence of the last paragraph of the Standard Specifications is revised to read:

If additional mixing water is required to maintain the mix design water/cementitious material ratio, the concrete shall be mixed by a minimum of 30 revolutions of the drum at mixing speed after the water has been added, prior to discharge of any concrete for placement.

1006-4.03(D) Mixing in Mobile Mixers: of the Standard Specifications is revised to read:

Concrete mixing in mobile mixers for Class S or Class B concrete shall be performed in accordance with the requirements of AASHTO M 241.

1006-4.04 Consistency: the second paragraph of the Standard Specifications is revised to read:

The contractor shall furnish Class S and Class B concrete having the slump shown on the approved mix design, with a permissible variation of \pm one inch when the slump shown on the approved mix design is four inches or less, and a permissible variation of \pm 1½ inches when the slump shown on the approved mix design is greater than four inches. However, when an approved high range water reducing chemical admixture (ASTM C 494, Type F or Type G) conforming to the requirements of Subsection 1006-2.04 is used, the permissible variation will be \pm two inches, regardless of the slump shown on the approved mix design.

1006-5 Weather Limitations: the title of the Standard Specifications is revised to read:

1006-5 Concrete Temperature and Weather Limitations:

1006-5.01 General Requirements: of the Standard Specifications is revised to read:

The temperature of the concrete mixture immediately before placement shall not be less than 50 degrees F nor greater than 90 degrees F. Concrete that fails to conform to this temperature requirement shall be rejected prior to placement.

Under rainy conditions, placing of concrete shall be stopped before the quantity of surface water is sufficient to cause a flow or wash of the concrete surface or have a detrimental effect on the finished concrete and acceptance parameters.

Placing of concrete shall immediately cease if the hauling vehicles or any equipment or pedestrian traffic tracks mud on the prepared base or changes the allowable subgrade dimensional tolerances for Class P concrete and slabs placed on subgrade for Class S or Class B concrete.

1006-5.02 Hot Weather Concreting: of the Standard Specifications is revised to read:

Forms, subgrade, and reinforcing steel shall be sprinkled with cool water just prior to the placement of concrete.

Mix water may be cooled by refrigeration, liquid nitrogen, or well-crushed ice of a size that will melt completely during the mixing operation. If crushed ice is used, it shall be substituted for part of the mix water on a pound for pound basis.

1006-5.03 Cold Weather Concreting: of the Standard Specifications is revised to read:

Concrete shall not be placed on or against ice-coated forms, reinforcing steel, structural steel, conduits, or construction joints; nor on or against snow, ice, or frozen earth materials. Immediately prior to placing concrete, the temperature of forms, reinforcing steel, earthen material, or any other material that will come in contact with the freshly placed concrete shall be a minimum temperature of 40 degrees F. If artificial heat is used to adjust the temperature of the items that will come in contact with the freshly mixed concrete, the temperature of these items shall not exceed 10 degrees F greater than that of the concrete being placed.

Concrete operations shall be discontinued when a descending ambient temperature in the shade and away from artificial heat falls below 40 degrees F. Concrete operations shall not be resumed until an ascending ambient temperature in the shade and away from artificial heat exceeds 35 degrees F unless otherwise approved by the Engineer.

Mixing and placing concrete shall continue no later in any day than that time which will allow sufficient time to place and protect the concrete already poured before the ambient temperature drops to 35 degrees F.

Concrete shall be protected in a manner to maintain all concrete surface temperatures at not less than 50 degrees F for a period of 72 hours after placement and at not less than 40 degrees F for an additional 96 hours.

The contractor may use equipment to heat the aggregates or water, or both, prior to mixing. If aggregates are heated, the minimum temperature of the heated aggregate shall be 60 degrees F and the aggregates shall have no chunks of ice or frozen aggregate present. Equipment used to heat the aggregates shall be such that consistent temperatures are obtained throughout the aggregate within each batch and from one batch to another. Water shall not be heated in excess of 150 degrees F unless the water is mixed with the aggregate prior to the addition of cement to the batch. During the heating or mixing process, cement shall not be added to water and aggregate combinations which exceed 100 degrees F.

When weather forecasts indicate a probability that ambient temperatures will fall below 35 degrees F during the placement or curing periods, the contractor shall submit a cold weather concreting plan to the Engineer for approval prior to concrete placement. The cold weather concreting plan shall detail methods and equipment which will be used to ensure that the required concrete temperatures are maintained. The contractor shall provide adequate cold weather protection in the form of insulation and/or heated enclosures to protect the concrete after placement. For bridge decks and suspended structures, the cold weather concreting plan shall include protection measures for both the top and bottom surfaces of the concrete. This protection shall maintain concrete surface temperatures as specified above at all locations in the structure. When artificial heating is required, the heating units shall not locally heat or dry the surface of the concrete.

When a cold weather concreting plan is required, the Engineer may require concrete temperatures to be measured and continuously recorded by the use of temperature sensing devices during the entire curing period. The contractor shall provide the temperature sensing devices and recording instruments. The contractor shall install temperature sensing devices near the surface of the concrete at locations and depths designated by the Engineer. When concrete is placed on a bridge deck or suspended structure, both the bottom surface and the top surface shall be monitored with temperature sensing devices. Temperature sensing devices and recording instruments shall be approved by the Engineer. The contractor shall continuously monitor the concrete temperature and provide the recorded data to the Engineer at any time upon request.

If the surface concrete temperature at any location in the structure falls below 35 degrees F during the curing period, the Engineer may direct the contractor to core the areas in question at the locations indicated by the Engineer. The contractor shall submit the cores to a petrographer for examination in accordance with ASTM C 856. Concrete damaged by frost, as determined by the petrographer, shall be removed and

replaced at no additional cost to the Department. All costs associated with coring, transmittal of cores, and petrographic examination shall be borne by the contractor regardless of the outcome of the petrographic examination.

The placing of concrete will not be permitted until the Engineer is satisfied that all the necessary protection equipment and materials are on hand at the site and in satisfactory working condition.

Concrete requiring cold weather protection shall have such protection removed at the end of the required curing period in such a manner that will permit a gradual drop in the concrete temperatures.

1006-7.01 General: the second paragraph of the Standard Specifications is revised to read:

Rejection of concrete will also occur due to insufficient compressive strength. Concrete compressive strength requirements consist of the specified strength which the concrete shall attain before various loads or stresses are applied and a minimum strength at 28 days.

1006-7.01 General: the last sentence of the third paragraph of the Standard Specifications is revised to read:

Sampling and testing for compressive strength will be performed on all classes of concrete furnished, including each strength specified on the project plans for Class S concrete.

1006-7.02 Sampling and Testing of Concrete: the first sentence of item (1) of the second paragraph of the Standard Specifications is revised to read:

- (1) Concrete for Class S or Class B shall be sampled only once during discharge in the middle portion of the batch.

1006-7.02 Sampling and Testing of Concrete: of the Standard Specifications is modified to add:

If approved by the Engineer, and unless otherwise specified, Arizona Test Method 318 may be used to estimate concrete strength by the maturity method. The maturity method shall not substitute for compressive strength acceptance testing (28-day test cylinder breaks). The contractor shall submit a written request to the Engineer prior to using the maturity method. If its use is approved by the Engineer, the contractor shall be responsible to develop the strength-maturity relationship and shall also be responsible to provide the maturity meter(s) and digital data loggers necessary, as well as performing all required testing, all at no additional cost to the Department.

1006-7.03(A) Class S and Class B Concrete: of the Standard Specifications is revised to read:

For Class S concrete with a compressive strength requirement less than 4000 psi, a sample of concrete for the required tests, as specified in Subsection 1006-7.02, will be taken on a daily basis for each 100 cubic yards, or fraction thereof, of continuously placed concrete from each batch plant. For Class S concrete with a compressive strength requirement equal to or greater than 4000 psi, a sample of concrete for the required tests, as specified in Subsection 1006-7.02, will be taken on a daily basis for each 50 cubic yards, or fraction thereof, of continuously placed concrete from each batch plant. For Class B concrete, a sample of concrete for the required tests, as specified in Subsection 1006-7.02, will be taken for each 100 cubic yards placed from each batch plant. For Class S or Class B concrete placed at elevations of 3,000 feet or above, air content testing shall be performed for each 50 cubic yards placed, regardless of the compressive strength requirement. An additional sample or samples for any of the required tests may be taken at an interval of less than the sampling frequency specified above, at the discretion of the Engineer, on any batch or load of concrete. A sample for the required tests on daily placements of 10 cubic yards or less may be taken at the discretion of the Engineer.

1006-7.03(B) Class E Concrete: of the Standard Specifications is revised to read:
1006-7.03(B) BLANK

1006-7.06(A) Class P Concrete: the fourth sentence of the second paragraph of the Standard Specifications is revised to read:

Cores must be obtained under the observation of an ADOT representative and delivered to the Engineer in time to allow complete testing within 48 days of placement. Testing shall be performed by the Department.

1006-7.06(B) Class S and Class B Concrete: the second paragraph of the Standard Specifications is revised to read:

Concrete failing to meet at least 85 percent of the 28-day compressive strength for specified strengths of 3,000 pounds per square inch and below, 90 percent for a specified strength of 3,500 pounds per square inch, or 95 percent for specified strengths of 4,000 pounds per square inch and above, or any concrete failing to meet the other requirements of Subsection 1006-7.01, will be rejected and removed at no additional cost to the Department and replaced with concrete which meets the specified requirements, unless the contractor can submit evidence that will indicate to the Engineer that the strength and quality of the concrete is such that the concrete should be considered acceptable and be allowed to remain in place.

1006-7.06(B) Class S and Class B Concrete: the third sentence of the last paragraph of the Standard Specifications is revised to read:

All cores shall be obtained and tested in accordance with the requirements of Arizona Test Method 317. Testing shall be performed by the Department.

1006-7.06(C) Class E Concrete: of the Standard Specifications is revised to read:
1006-7.06(C) BLANK

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. **Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualified minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more — as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contract). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS
EXECUTIVE ORDER 11246, July 1, 1978

(Revised November 3, 1980)

1. As used in these specifications:

a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;

b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

c. "Employer Identification Number" means the Federal Social Security Number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

d. "Minority" includes:

(i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

(ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);

(iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

(iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership or participation or community identification).

2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown plan. Each Contractor or Subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each

construction trade in which it has employees in the covered area

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications. Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such site or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or women sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on the job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations: by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and

Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

Revised 04-15-81

female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative actions obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is under utilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any Subcontract with any person or firm

debarred from Government Contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as an imitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

Title VI/Non-Discrimination Assurances**APPENDIX A**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, the *Federal Highway Administration*, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performance by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the *Federal Highway Administration* to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the *Federal Highway Administration*, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the *Federal Highway Administration* may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with request to any subcontract or procurement as the Recipient or the *Federal Highway Administration* may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

Title VI/Non-Discrimination Assurances**APPENDIX E**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1687 *et seq.*).

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
(EXECUTIVE ORDER 11246)

JULY 1, 1978 (Revised November 3, 1980)

(Revised April 15, 1981)

1. The bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

	Minority	Female
Tucson and balance of Pima County	24.1	6.9
Cochise, Graham, Greenlee and Santa Cruz Counties	27.0	6.9
Phoenix and balance of Maricopa County	15.8	6.9
Apache, Coconino, Gila, Mohave, Navajo, Pinal, Yavapai and Yuma Counties	19.6	6.9

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in all areas where he has Federal or federally assisted work.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3 (a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

EQUAL EMPLOYMENT OPPORTUNITY
COMPLIANCE REPORTS

(Project, Training and Annual)

Federal-Aid Projects

February 1, 1977; Revised July 1, 1978; Revised November 3, 1980
Revised April 15, 1981; Revised September 7, 1983
Revised October 15, 1998; Revised August, 1, 2005;
Revised March 1, 2015

ANNUAL REPORT:

For each contract in the amount of \$10,000 or more, and for each subcontract, regardless of tier not including material suppliers, in the amount of \$10,000 or more, the contractor and each subcontractor regardless of tier shall submit an annual Equal Employment Opportunity (EEO) Report containing all the information required on Form FHWA-1391. Contractors and subcontractors are required to submit the required information through the LCPtracker system, a labor compliance software monitoring certified payroll and prevailing wage.

The staffing figures to be reported should represent the project workforce on board in all or any part of the last payroll period preceding the end of July.

The report shall be submitted no later than September 1.

	Rates	Fringes
CARPENTER		
Gila, Graham, Greenlee, La Paz & Navajo.....	\$ 21.71	3.82
CEMENT MASON.....	\$ 17.74	3.59
ELECTRICIAN.....	\$ 24.43	5.38
IRONWORKER, Rebar		
Santa Cruz county.....	\$ 21.75	13.59
LABORER		
Asphalt Raker.....	\$ 14.97	5.88
Concrete Worker.....	\$ 13.38	4.50
Fence Builder.....	\$ 12.20	3.84
Flagger.....	\$ 12.31	3.96
General/Cleanup.....	\$ 12.78	2.50
Guard Rail Installer.....	\$ 12.20	3.84
Landscape Laborer.....	\$ 11.02	
Water Blaster.....	\$ 14.90	2.90
OPERATOR: Power Equipment		
Backhoe < 1 cu yd.....	\$ 17.76	3.89
Compactor Self Propelled (with blade-grade operation..)	\$ 22.53	6.57
Compactor Small Self Propelled (with blade- backfill, ditch operation)..	\$ 22.29	6.31
Concrete Pump.....	\$ 20.31	6.48
Crane (under 15 tons).....	\$ 22.98	4.26
Drilling Machine (including wells).....	\$ 21.79	4.10
Grade Checker.....	\$ 23.41	6.54
Hydrographic Seeder.....	\$ 19.73	5.40
Mass Excavator.....	\$ 23.33	6.98
Milling Machine/Rotomill....	\$ 21.87	6.84
Power Sweeper.....	\$ 19.33	4.85
Roller (all types asphalt)..	\$ 17.46	5.58
Roller (excluding asphalt)..	\$ 19.23	5.09
Scraper (pneumatic tire)....	\$ 22.41	6.90
Screed.....	\$ 20.90	6.72
Skip Loader (all types 3 < 6 cu yd).....	\$ 20.91	7.35
Skip Loader (all types 6 < 10 cu yd).....	\$ 22.24	6.83
Skip Loader < 3 cu yd.....	\$ 17.97	6.60
Tractor (dozer, pusher- all).....	\$ 22.53	6.47
Tractor (wheel type).....	\$ 24.62	7.57
PAINTER.....	\$ 13.94	2.56
TRUCK DRIVER		
2 or 3 axle Dump or Flatrack.....	\$ 16.17	4.24

Oil Tanker Bootman.....	\$ 21.94	
Pickup.....	\$ 12.88	1.73
Water Truck < 2500 gal.....	\$ 19.59	5.90
Water Truck > 3900 gal.....	\$ 18.70	4.79
Water Truck 2500 < 3900 gal.....	\$ 17.13	

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and

non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.

Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

General Decision Number: AZ160028 01/22/2016 AZ28

Superseded General Decision Number: AZ20150028

State: Arizona

Construction Type: Building
BUILDING CONSTRUCTION, Includes Building Construction on Treatment Plants and on Industrial Sites (Chemical/Processing/Manufacturing Plants, Power Plants, Refineries, Nuclear Plants, Etc.)

County: Navajo County in Arizona.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/08/2016
1	01/15/2016
2	01/22/2016

* BRAZ0003-009 01/01/2016

	Rates	Fringes
BRICKLAYER.....	\$ 24.60	6.43

ZONE PAY:

(Radius miles from the intersection of Central Ave. and Washington St., Phoenix, AZ)

- Zone A: 0-60 miles- Base Rate
- Zone B: 61-75 miles- Base Rate plus \$2.00 per hour
- Zone C: 75-100 miles- Base Rate plus \$3.00 per hour
- Zone D: 101-200 miles- Base Rate plus \$3.50 per hour
- Zone E: Over 200 miles- Base Rate plus \$6.50 per hour

CARP0408-001 09/30/2013

Rates Fringes

CARPENTER.....\$ 23.75 9.24

CARP1327-001 01/01/2014

	Rates	Fringes
CARPENTER (Drywall Hanging Only).....	\$ 19.75	6.46

ELEC0518-011 08/01/2014

(South and East of boundary beginning at a point where Clear Creek crosses the Coconino-Navajo County Line, extending North-easterly along Clear Creek and North-easterly to Cottonwood Wash, along Cottonwood Wash North-easterly to intersection with Navajo Reservation, East along Navajo Reservation Boundary line to intersection with Navajo/Apache County lines)

	Rates	Fringes
ELECTRICIAN (Includes Alarm Installation and Low Voltage Wiring).....	\$ 27.00	10.31

ELEC0640-010 07/01/2015

(Remaining Part)

	Rates	Fringes
ELECTRICIAN (Includes Alarm Installation and Low Voltage Wiring).....	\$ 27.00	9.53

ENGI0428-003 06/01/2015

	Rates	Fringes
POWER EQUIPMENT OPERATOR (CRANE)		
(2) under 15 tons.....	\$ 23.09	9.55
(3) 15 tons to 100 tons, Tower Crane.....	\$ 27.44	9.55
(4) 100 tons and over.....	\$ 28.50	9.55

IRON0075-002 08/01/2015

	Rates	Fringes
IRONWORKER, REINFORCING AND STRUCTURAL.....	\$ 26.00	21.77

Zone 1: 0 to 50 miles from City Hall in Phoenix or Tucson
Zone 2: 050 to 100 miles - Add \$4.00
Zone 3: 100 to 150 miles - Add \$5.00
Zone 4: 150 miles & over - Add \$6.50

LABO0383-005 11/01/2013

	Rates	Fringes
LABORER (MASON TENDER-BRICK).....	\$ 18.63	4.35

PAIN0086-006 04/01/2013

	Rates	Fringes
DRYWALL FINISHER/TAPER		
ZONE A.....	\$ 19.00	5.03
ZONE B.....	\$ 22.50	5.03

ZONE PAY:

ZONE A: Free Zone: A distance of 0 to 100 miles from the old Phoenix courthouse.

ZONE B: A distance of 101 miles and over from the old Phoenix courthouse: \$3.50 per hour over ZONE A

ROOF0135-001 06/01/2014

	Rates	Fringes
ROOFER (Includes Installation of Metal Roofs).....	\$ 14.97	4.69

SUAZ2012-016 05/30/2012

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 17.71	2.60
FLOOR LAYER: Hardwood and Resilient Flooring.....	\$ 17.98	6.50
GLAZIER.....	\$ 15.98	0.79
LABORER: Common or General.....	\$ 11.98	3.13
LABORER: Landscape & Irrigation.....	\$ 9.31	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 16.05	1.49
OPERATOR: Backhoe.....	\$ 14.00	1.80
PAINTER: Brush, Roller and Spray.....	\$ 16.13	0.00
PIPEFITTER.....	\$ 22.21	6.12
PLUMBER.....	\$ 19.63	2.83
SHEET METAL WORKER.....	\$ 18.68	4.91

SPRINKLER FITTER (Fire Sprinklers).....	\$ 16.48	2.94
TILE SETTER.....	\$ 15.93	0.45

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average

calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

ARIZONA DEPARTMENT OF TRANSPORTATION
 INTERMODAL TRANSPORTATION DIVISION
 CONTRACTS AND SPECIFICATIONS SECTION

BID SCHEDULE

CONTRACT # 2016062

TRACS No.	Project No.	Item	County	District	Gross Length	Net Length	Prepared By:
0000 NA WIN SL71101C	WIN-0-(203)T	LOCAL	NAVAJO	NORTHCENTRAL	0	0	William Nanni
Highway Termini		Location			Work Description		
• CITY OF WINSLOW		• THE STATION AT LA POSADA			• SYSTEM ENHANCEMENT-OTHER ENHANCEMENTS		

BID SCHEDULE

0000 NA WIN SL71101C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
2020366	REMOVE LEAD-BASED PAINT MATERIALS	L.SUM	1		
2020370	DISPOSE OF LEAD-BASED PAINT MATERIALS (FORCE ACCOUNT)	L.SUM	1	\$2,000.00	\$2,000.00
9010001	MOBILIZATION	L.SUM	1		
9240051	MISCELLANEOUS WORK (CONCRETE WORK)	L.SUM	1		
9240052	MISCELLANEOUS WORK (MASONRY WORK)	L.SUM	1		
9240053	MISCELLANEOUS WORK (METAL WORK)	L.SUM	1		
9240054	MISCELLANEOUS WORK (WOOD AND PLASTIC WORK)	L.SUM	1		
9240055	MISCELLANEOUS WORK (THERMAL AND MOISTURE PROTECTION)	L.SUM	1		
9240056	MISCELLANEOUS WORK (DOORS AND WINDOWS)	L.SUM	1		
9240059	MISCELLANEOUS WORK (MECHANICAL/PLUMBING WORK)	L.SUM	1		
9240060	MISCELLANEOUS WORK (ELECTRICAL WORK)	L.SUM	1		

BID SCHEDULE

0000 NA WIN SL71101C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
9240061	MISCELLANEOUS WORK (ROOF SYSTEM)	L.SUM	1		

BID TOTAL :

PROPOSAL

TO THE ARIZONA DEPARTMENT OF TRANSPORTATION:

Gentlemen:

The following Proposal is made for constructing project

0000 NA WIN SL71101C TEA-WIN-0(203)T
CITY OF WINSLOW
(The Station at La Posada)

in the State of Arizona.

The following Proposal is made on behalf of _____

and no others.

(NAME OF COMPANY, FIRM, OR CORPORATION)

The undersigned hereby certifies that (s)he has been duly authorized to submit a proposal on behalf of the company, firm, or corporation mentioned above; and further certifies, pursuant to Subsection 112(c) of Title 23, United States Code and Title 44, Chapter 10, Article 1 of the Arizona Revised Statutes, that neither (s)he nor anyone associated with the company, firm, or corporation mentioned above has, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such project and furthermore that no member or employee of the Arizona Department of Transportation is personally or financially interested, directly or indirectly, in the Proposal, or in any purchase or sale of any materials or supplies for the work to which it relates, or in any portion of the profits thereof.

The undersigned certifies that the approved Plans, Standard Specifications, Special Provisions and forms of Contract and Bond authorized by the Arizona Department of Transportation and constituting essential parts of this proposal, have been carefully examined, and also that the site of the work has been personally inspected. The undersigned declares that the amount and nature of the work to be done is understood and that at no time will misunderstanding of the Plans, Specifications, Special Provisions, or conditions to be overcome, be plead. On the basis of Plans, Specifications, Special Provisions, and the forms of Contract and Bond proposed for use, the undersigned proposes to furnish all the necessary equipment, materials, machinery, tools, apparatus, and other means of construction, and labor to do all the work in the manner specified, and to accept, as full compensation therefor, the sum of the various products obtained by multiplying each unit price, herein bid for the work or materials, by the quantity thereof actually incorporated in the complete project, as determined by the State Engineer. The undersigned understands that the quantities mentioned herein are approximate only and are subject to increase or decrease and hereby proposes to perform all quantities of work as either increased or decreased, in accordance with the provisions of the Specifications, at the unit price bid in the Bidding Schedule.

The undersigned further proposes to perform all extra work that may be required on the basis provided in the Specifications and to give such work personal attention and to secure economical performance.

The undersigned further proposes to execute the Contract Agreement and furnish satisfactory Bond within ten calendar days from the date of Notice of Award, time being of the essence. The undersigned further proposes to begin work as specified in the contract attached hereto, and to complete the work on or before expiration of the contract time as defined in the Specifications, and maintain at all times a Payment Bond and a Performance Bond, approved by the State Engineer, in an amount equal to one hundred (100) percent of the total bid. These bonds shall serve not only to guarantee the completion of the work on the part of the undersigned, but also to guarantee the excellence of both workmanship and material and the payment of all obligations incurred, until the work is finally accepted and the provisions of the Plans, Standard Specifications and Special Provisions fulfilled.

A Proposal Guaranty in the amount and character named in the Advertisement for Bids is enclosed, which Proposal Guaranty is submitted as a guaranty of the good faith of the bidder, and that the bidder will enter into written contract, as provided, to do the work, if successful in securing the award thereof, and it is hereby agreed that if at any time other than as provided in the Proposal there should be failure on the part of the undersigned to execute the Contract and furnish satisfactory Bond as herein provided, the State of Arizona, in either of such events, shall be entitled and is hereby given the right to retain the said Proposal Guaranty as liquidated damages.

If by a Corporation:

(Seal)

Corporate Name: _____

Corporate Mailing Address: _____ Zip Code: _____

Incorporated under the laws of the State of: _____

By (Signature): _____ Date: _____

President: _____

Secretary: _____

Treasurer: _____

If by a Firm or Partnership:

Firm or Partnership Mailing Name: _____

Firm or Partnership Address: _____

By (Signature): _____ Date: _____

Name and Address of Each Member: _____

If by an Individual:

Signature: _____ Date: _____

Mailing Address: _____

ARIZONA DEPARTMENT OF TRANSPORTATION
SURETY (BID) BOND
(Penalty of this bond must not be less than 10% of the bid amount)



KNOW ALL MEN BY THESE PRESENTS, THAT _____

as Principal, hereinafter called the Principal, and _____

a corporation duly organized under the laws of the state of _____ hereinafter called the Surety, holding a certificate of authority to transact surety business in this State issued by the Director of the Department of Insurance, are held and firmly bound unto the Arizona Department of Transportation, as Obligee, hereinafter called the Obligee, in the sum of Ten Percent (10%) of the amount of the bid of Principal, submitted by Principal to the Arizona Department of Transportation for the work described below, for the payment of which sum well and truly to be made, the said Principal and the said Surety bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is herewith submitting its proposal for TRACS/Project No.

0000 NA WIN SL71101C TEA-WIN-0(203)T
CITY OF WINSLOW
(The Station at La Posada)

NOW THEREFORE, if the Obligee, acting by and through its Transportation board, shall accept the proposal of the Principal and the Principal shall enter into contract with the Obligee in accordance with the terms of such proposal, and give such bonds and certificates of insurance as may be specified in the contract documents with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter into such contract and give such bonds and certificates of insurance, if the Principal shall pay to the Obligee the difference not to exceed the penalty of the bond between the amount specified in the proposal and such larger amount for which the obligee may in good faith contract with another party to perform the work covered by the proposal then this obligation is void. Otherwise it remains in full force and effect.

IN WITNESS WHEREOF, we hereunto set our hands and seals:

Principal

By

Title

Surety

By Attorney-in-Fact

Address Attorney-in-Fact

Subscribed and sworn before me
this _____ day of _____, 20 _____.

My Commission expires: _____

Notary Public

**CERTIFICATION WITH REGARD TO THE PERFORMANCE OF
PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE
EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS
APRIL, 1969**

The bidder _____, proposed subcontractor _____, hereby certifies that he has _____, has not _____, participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that he has _____, has not _____, filed with the Joint Reporting committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

(Company)

By: _____

(Title)

Date: _____

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7b (1),) and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5 (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Information concerning Standard Form 100 (EEO-1) is available from:

Joint Reporting Committee
P.O. Box 19100
Washington, D.C. 20036-9100

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

0000 NA WIN SL71101C TEA-WIN-0(203)T
CITY OF WINSLOW
(The Station at La Posada)

R7/03

**CERTIFICATION WITH RESPECT TO THE
RECEIPT OF ADDENDA**

In the submission of a bid and by the signing of the Proposal, this will certify that the following numbered addenda issued on this project have been brought to my personal attention and furthermore that I understand and agree that those will be made a part of the Contract.

Addendum No. _____, _____, _____, _____, _____

PRINT NAME OF CONTRACTOR

SIGNATURE

TITLE

DATE

0000 NA WIN SL71101C TEA-WIN-0(203)T
CITY OF WINSLOW
(The Station at La Posada)