

CONSTRUCTION SPECIFICATIONS

September 19, 2014

Project #: 14-02-TR

Bid #: 14-0459

Bid Opening Date: October 14, 2014 @ 2:00pm CST

Duluth City Hall Interior Renovations Phase 1: First Floor Duluth, MN

City of Duluth

Property and Facilities Management
1532 W Michigan Street
Duluth, MN 55806
(218) 730-4434



Project Name: Duluth City Hall Interior Renovations
Phase 1: First Floor
411 West First Street, Duluth, MN

PROJECT NUMBER: 14-02-TR

Date: September 19, 2014

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

Name		Registration Number
Robert Fern		20088

ARCHITECT: John Ivey Thomas Associates, Inc.
413 East Superior Street
Duluth, Minnesota 55802
(218)722-8271

TABLE OF CONTENTS

Project: Duluth City Hall Interior Renovations – Phase 1: First Floor
Project Number: 14-02-TR
Bid Number: 14-0459
Date: September 19, 2014

Project Identification & Certification Table of Contents

BIDDING REQUIREMENTS

Invitation to Bid
Instructions to Bidders
Bid Proposal Form
Affidavit of Non-Collusion
Equal Employment Opportunity (EEO) Statement
IC-134
Performance Bond
Payment Bond
Insurance and Indemnity Requirements

CONDITIONS OF THE CONTRACT

General Conditions
Supplementary General Conditions
Wage Rates
Project Labor Agreement Example
Construction Contract Example

DIVISION 01 - GENERAL REQUIREMENTS

01 11 00 Summary of Work
01 23 00 Alternates
01 31 00 Project Coordination
01 33 00 Submittals
01 33 23 Shop Drawings, Product Data, Samples
01 50 00 Temporary Facilities & Controls
01 70 00 Contract Closeout Procedures
01 74 00 Final Cleaning
01 78 36 Warranties, Bonds, and Guarantees
01 78 39 Project Record Documents

TECHNICAL SPECIFICATIONS

DIVISION 2: EXISTING CONDITIONS

02 40 00 Demolition

DIVISION 5: METALS

05 40 00 Light Gauge Framing

05 50 00 Miscellaneous Metals

DIVISION 6: WOOD, PLASTICS, AND COMPOSITES

06 10 00 Rough Carpentry

06 20 00 Millwork and Finish Carpentry

DIVISION 7: THERMAL AND MOISTURE PROTECTION

07 84 00 Fire Stopping

07 90 00 Caulking and Sealants

DIVISION 8: OPENINGS

08 11 00 Hollow Metal Doors and Frames

08 14 00 Wood Doors

08 42 29 Sliding Automatic Entrances

08 70 00 Finish Hardware

08 80 00 Glazing

08 87 33 Decorative Film

DIVISION 9: FINISHES

09 21 00 Plaster Patching

09 29 00 Gypsum Drywall Work

09 30 00 Tile

09 40 00 Floor Repair and Leveling

09 50 00 Acoustical Ceilings

09 65 13 Resilient Base

09 65 19 Resilient Flooring

09 68 00 Carpet

09 72 00 Presentation Dry Erase Wallcovering

09 90 00 Painting

DIVISION 10: SPECIALTIES

10 14 00 Signage

10 44 00 Fire Extinguishers and Cabinets

DIVISION 12: FURNISHINGS

12 24 00 Window Shades

12 35 70 Custom Casework/Millwork

12 36 23 Plastic Laminate Work

12 36 60 Solid Surface Countertops

DIVISION 21: Fire Suppression

21 10 00 Fire Protection/Sprinkler Work

DIVISION 22: PLUMBING – Specification on plans.

DIVISION 23: HVAC – Specification on plans.

DIVISION 26: ELECTRICAL – Specification on plans.

DRAWINGS

Architectural:

T1	Title Sheet
A1	Demo Plan – South First Floor
A1.1	Floor Plan – South First Floor
A2	Demo Plan – North First Floor
A2.1	Floor Plan – North First Floor
A3	Ground Floor Plans & Interior Elevations
A3.1	Details/Sections
A4.1	Schedules, Skywalk Plan & Frame Types

Mechanical:

M0.0	Mechanical Title Sheet & Specifications
M2.1	First Floor HVAC Demo Plan – South
M2.2	First Floor HVAC Demo Plan – North
M3.1	Ground Floor Plumbing and HVAC Plan – South
M3.2	Ground Floor Plumbing and HVAC Plan – North
M4.1	First Floor Plumbing, HVAC, and Fire Protection Plan – South
M4.2	First Floor Plumbing, HVAC, and Fire Protection Plan – North

Electrical:

E1.1	Title Sheet and Specifications
E2.1	South First Floor Demo Plan
E2.2	North First Floor Demo Plan
E3.0	Ground Floor Power & Systems Plan
E3.1	South First Floor Lighting, Power & Systems Plan
E3.2	North First Floor Lighting, Power & Systems Plan
E4.0	Schedules and Details
E4.1	Schedules and Details

END OF DOCUMENT

**CITY OF DULUTH
INVITATION TO BID**

PROJECT NAME/DESCRIPTION: Duluth City Hall Interior Renovations, Phase 1: First Floor

PROJECT NUMBER: 14-02-TR

BID NUMBER: 14-0459

Sealed bids will be received by the City Purchasing Agent in and for the Corporation of the City of Duluth, Minnesota in Room 100 City Hall, Duluth, Minnesota 55802, (218) 730-5340 at 2:00 p.m., local time on Tuesday, October 14, 2014, for the Duluth City Hall Interior Renovations, Phase 1: First Floor; immediately thereafter, bids will be taken to Room 106A City Hall where they will be publicly opened and read aloud.

NOTICE TO BIDDERS:

- 1. A Project Labor Agreement (PLA) will be required for any bid that is over or could virtually go over \$150,000.**
- 2. Unless a Certificate of Exemption is provided, any out-of-state bidder receiving a bid award will have 8% retained from invoice payments on any contracts over \$50,000. Submit a signed copy from the State of Minnesota when submitting Payment and Performance Bonds. This form may be found at the following web address:
http://www.revenue.state.mn.us/Forms_and_Instructions/sde.pdf**
- 3. A mandatory pre-bid meeting and walk-thru of the site will take place on Tuesday, September 30, 2:00 PM. Meet at the elevators, First Floor City Hall.**

This advertisement is also available on the City of Duluth website at http://www.duluthgov.info/db_frames/bid_information.cfm

ONLY IF REQUIRED – Each bidder must review the 2014 edition of the City of Duluth Public Works/Utilities Department – Engineering Division Standard Construction Specifications on the city website (www.duluthmn.gov) as these Specifications are incorporated by reference and deemed to be a part of this project as if fully incorporated and set forth herein.

In general, this project consists of: Removal of existing asphalt parking lot and driveway and replacement with new compacted subgrade, geotextile fabric, 12" granular, 8" aggregate, and two (2) courses of 2" asphalt per drawings and specifications.

Proposal forms, contract documents, plans and specifications as prepared by the firm of John Ivey Thomas Associates are on file at the following offices: City Purchasing Office; City Architect's Office; Duluth Builder's Exchange; McGraw Hill Construction; Minnesota Builder's Exchange; Reed Construction Data, and the office of John Ivey Thomas Associates, 413 East Superior Street, Duluth, MN 55802.

Copies of these plans and specifications may be obtained from Sheldon Plan Room, 124 E Superior St, Duluth, MN 55802. Copies of bidding documents may be obtained by purchase from Sheldon's.

A certified check or bank draft payable to the order of the City of Duluth, negotiable U.S. Government Bonds (at par value), or a satisfactory bid bond executed by the bidder and acceptable surety, in an amount equal to five percent (5%) of the total bid, shall be submitted with each bid.

The Contractor will comply with all local, state and federal laws, rules and regulations applicable to this contract and to the work to be done and items supplied hereunder. All building permits are the responsibility of the Contractor to acquire and pay through the Building Safety Division.

Attention is called to the fact that not less than the minimum salaries, wages and benefits as set forth in the contract documents must be paid on this project. The contractor must take affirmative action to ensure that the employees and applicants for employment are not discriminated against because of their race, color, creed, sex or national origin and must meet the affirmative action goals. Contractors are encouraged to subcontract with disadvantage business enterprises when possible.

The City of Duluth reserves the right to reject any or all bids or to waive any informalities in the bidding. Bids may be held by the City of Duluth for a period not to exceed thirty (30) days from the date of opening the bids for the purpose of reviewing the bids and investigating the qualifications of the bidders, prior to awarding the contract.

The City of Duluth is an Equal Opportunity Employer. Contractor shall comply with all applicable Equal Employment Opportunity laws and regulations.

CITY OF DULUTH

Dennis Sears
Purchasing Agent

INSTRUCTIONS TO BIDDERS

1. Use of Separate Bid Forms. These contract documents include a complete set of bidding and contract forms which are for the convenience of bidders and are not to be detached from the contract document, filled out, or executed. Separate copies of bid forms are furnished for that purpose.
2. Interpretations or Addenda. No oral interpretation will be made to any bidder as to the meaning of the contract documents or any part thereof. Every request for such an interpretation shall be made in writing and emailed to *Robert Fern, John Ivey Thomas Associates: jitassoc@cpinternet.com*. Any inquiry received seven or more days prior to the date fixed for opening of bids will be given consideration. Every interpretation made to a bidder will be in the form of an addendum to the contract documents, and when issued, will be on file in the offices of the Purchasing Agent and City Architect at least five days before bids are opened. In addition, all addenda will be emailed to each person holding contract documents, but it shall be the bidder's responsibility to make inquiry as to the addenda issued. All such addenda shall become part of the contract, and all bidders shall be bound by such addenda, whether or not received by the bidders.
3. Inspection of Site. Each bidder should visit the site of the proposed work and become fully acquainted with the existing conditions there relating to construction and labor, and should fully understand the facilities involved, the difficulties, and the restrictions attending the performance of the contract. The bidder should thoroughly examine and become familiar with the drawings, technical specifications, and all other contract documents. The contractor, by the execution of the contract, shall in no way be relieved of any obligation under it due to failure to receive or examine any form or legal instrument or to visit the site and become acquainted with the conditions there existing; and the City of Duluth will be justified in rejecting any claim based on facts regarding the failure to do so.
4. Alternative Bids. No alternative bids will be considered unless alternative bids are specifically requested by the technical specifications.
5. Bids.
 - a. All bids must be submitted on forms supplied by the City of Duluth Purchasing Agent and shall be subject to all requirements of the contract documents, including the drawings, and these Instructions to Bidders. All bids must be regular in every respect; and no interlineations, excisions, or special conditions shall be made or included in the bid form by the bidder.
 - b. Bid documents including the bid and the bid guaranty shall be enclosed in an envelope which shall be sealed and clearly labeled with the project number, if any, name of bidder, and date and time of bid opening, in order to guard against premature opening of the bid. If proposal is mailed, this envelope shall be placed in another envelope which shall be sealed and labeled with project number, if any, name of bidder, and date and time of bid opening -- and addressed to City of Duluth Purchasing Agent, 100 City Hall, Duluth, Minnesota 55802.
 - c. The City of Duluth may consider as irregular any bid on which there is an alteration of or departure from the bid form hereto attached, and at its option may reject the same.
 - d. If the project is awarded, it will be awarded by the City of Duluth to the lowest responsible bidder assuming that the bids are within funds available based on the lowest base bid and or in combination with selected alternates (if any). The alternates will be accepted in numerical priority order, as shown on the bid form. By the award of the contract, it is assumed that the work will be completed within the time-frame as specified within the contract documents.

e. Each bidder shall include in the bid the following information:

Principals -- Names
Social Security Numbers
Home Addresses, including city, state, & zip code

Firm -- Name
Treasury Number
Address
City, State & Zip Code

Mechanical & Electrical Subcontractors -- Names of firms that will do the mechanical and electrical work and the amounts of the mechanical and electrical sub-bids, if applicable and when (where indicated on Bid Proposal Form).

6. Bid Guaranty.

a. The bid must be accompanied by a bid guaranty which shall not be less than five percent (5%) of the amount of the bid. At the option of the bidder, the guaranty may be a certified check, bank draft, negotiable U.S. Government bond (at par value), or a bid bond. No bid will be considered unless it is accompanied by the required guaranty. Certified check or bank draft must be made payable to the order of the City of Duluth, Minnesota. Cash deposits will not be accepted. The bid guaranty shall insure the execution of the agreement and the furnishing of the surety bond or bonds by the successful bidder, all as required by the contract documents.

b. Revised bids submitted before the opening of bids, whether forwarded by mail or telegram, if representing an increase in excess of two percent (2%) of the original bid, must have bid guaranty adjusted accordingly; otherwise, the bid will not be considered.

c. Certified checks or bank drafts, or the amount thereof, bid bonds, and negotiable U.S. Government bonds of unsuccessful bidders, will be returned as soon as practical after the opening of bids.

7. Collusive Agreements

a. The successful bidder on each City of Duluth construction project shall be required to execute a City of Duluth non-collusive affidavit to the effect that he has not entered into a collusive agreement with any other person, firm, or corporation in regard to any bid submitted.

b. Before executing any subcontract, the successful bidder shall submit the name of any proposed subcontractor for prior approval, and an affidavit substantially in the form provided in Section 103 of General Conditions hereof.

8. Unit Prices. The unit price for each of the several items in the proposal of each bidder shall include its prorata share of overhead so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price bid represents the total bid. Any bid not conforming to this requirement may be rejected as informal. The special attention of all bidders is called to this provision; for should conditions make it necessary to revise the quantities, no limit will be fixed for such increased or decreased quantities nor extra compensation allowed, provided the net monetary value of all such additive and subtractive changes in quantities of such items of work (i.e., difference in cost) shall not increase or decrease the original contract price by more than twenty-five percent (25%), except for work not covered in the drawings and technical specifications as provided for in Section 109 hereof.

9. Corrections. Erasures or other changes in the bids must be explained or noted over the signature of the bidder.

10. Time for Receiving Bids.

a. Bids received prior to the advertised hour of opening will be securely kept, sealed. The officer whose duty it is to open them will decide when the specified time has arrived, and no bid received thereafter will be considered.

11. Opening of Bids. At the time and place fixed for the opening of bids, the City Purchasing Agent will cause to be opened and publicly read aloud every bid received within the time set for receiving bids, irrespective of any irregularities therein. Bidders and other persons properly interested may be present, in person or by representative.

12. Withdrawal of Bids. Bids may be withdrawn by request of the bidder prior to bid opening. The bid guaranty of any bidder withdrawing a bid will be returned promptly.

13. Award of Contract: Rejection of Bids.

a. The contract will be awarded to the responsible bidder submitting the lowest bid complying with the conditions of the Invitation to Bid. The City of Duluth, however, reserves the right to reject any and all such bids and to waive any informality in bids received whenever such rejection or waiver is in its interest.

b. The City of Duluth reserves the right to consider as unqualified to do the work of general construction, any bidder who does not habitually perform with his own forces the major portions of the work involved in construction of the improvements embraced in the contract documents.

14. Execution of Agreement: Performance and Payment Bond.

a. Subsequent to the award and within ten (10) days after the prescribed forms are presented for signature, the successful bidder shall execute and deliver to the City of Duluth an agreement in the form as furnished by the City, in such number of copies as the City of Duluth may require.

b. Having satisfied all conditions of award as set forth elsewhere in these documents, the successful bidder shall, within the period specified in paragraph "a" above, furnish:

1) A performance bond for the use and benefit of the City of Duluth to complete the contract according to its terms, and conditioned on saving the City of Duluth harmless from all costs and charges that may accrue on account of completing the specified work; and

2) A payment bond for the use and benefit of all persons furnishing labor and materials for the performance of the contract conditioned upon the payment, as they become due, of all just claims for labor and materials.

Both the performance bond and the payment bond shall be in a penal sum of not less than the amount of the contract awarded. Such bonds shall be in the same form as that included in the contract documents and shall bear the same date as, or a date subsequent to, that of the agreement. A current power of attorney for the person who signs for any surety company shall be attached to such bonds.

c. The failure of the successful bidder to execute such agreement to supply the required bond or bonds within ten (10) days after the prescribed forms are presented for signature, or within such extended period as the City of Duluth may grant, based on reasons determined sufficient by the City of Duluth, shall constitute a default, and the City of Duluth may either award the contract to the next lowest responsible bidder or re-advertise for bids, and may charge against the bidder the difference between the amount of the bid and the amount for which a contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the bid bond. If a more favorable bid is received by re-advertising, the defaulting bidder shall have no claim against the City of Duluth for a refund.

15. Wages and Salaries.

a. Attention of bidders is particularly called to the requirements concerning the payment of not less than the prevailing wage and salary rates specified in the contract documents and the conditions of employment with respect to certain categories and classifications of employees.

b. The rates of pay set forth under General Conditions are the minimums to be paid during the life of the contract. It is therefore the responsibility of bidders to inform themselves as to local labor conditions, such as the length of work day and work week, overtime compensations, health and welfare contributions, labor supply, and prospective changes or adjustments of rates.

16. Equal Employment Opportunity. Attention of bidders is particularly called to the requirement for ensuring that employees and applicants for employment are not discriminated against because of their race, color, religion, sex, or national origin. (See Supplementary General Conditions, Part II, Section II).

17. Employment and Business. Attention of bidders is particularly called to the requirement that, to the greatest extent feasible, opportunities for training and employment made possible by this project shall be given to lower income residents of the City of Duluth. Additionally, efforts should be made, if any work is subcontracted, to award subcontracts to concerns located in or owned in substantial part by persons residing in the City of Duluth.

18. Sales and Use Taxes. It is assumed that, in the preparation of his proposal, the bidder has taken into consideration his liability from any sales, use, or excise tax that might be assessed in the purchase of, storage, use, or consumption of any materials, services, or supplies for performance of the contract work. Any such tax paid by the contractor will be considered as his expense, for which no direct compensation will be made by the City to the contractor over and above the accepted bid.

19. Pre-Bid/Pre-Construction Meetings.

a. Fourteen (14) days prior to bid date, a pre-bid meeting will be held (see Bid Form for time and place). All prime bidders are requested to attend. All bidders will be allowed to make inquiries regarding the contract documents. All formal decisions will be documented by addendum. Failure of any prime bidders to attend this meeting could jeopardize the contract award.

b. Approximately seven (7) days after City Council approval of contract award, the successful bidder is required to attend a pre-construction meeting. At this meeting, the successful bidder will present his construction schedule, cost breakdown, required submittals, etc.

20. Equal Employment Opportunity (EEO) Affirmative Action Police Statement and Compliance Certificate.

a. The successful bidder on each City of Duluth construction project shall be required to execute a certificate substantially in the form herein provided.

b. Before executing any subcontract in excess of \$2,500, the successful bidder shall require the subcontractor to execute a form similar in nature to the form herein provided.

**Duluth City Hall Interior Renovations, Phase 1: First Floor
Duluth, MN**

The undersigned, having become familiar with the existing conditions on the project affecting the cost of the work, and with the Contract Documents which include the Invitation to Bid, the Contract Agreement Form, the Non-Collusion Affidavit, any/all Addenda, General Conditions (parts I & II), the Special Conditions, Technical Specifications, Drawings (as listed in the schedule of drawings), EEO Affirmative Action Policy Statement & Compliance Certificate, and Form of Surety Bond or Bond as prepared by the City of Duluth and on file in the office of the City Architect and City Purchasing Agent, and hereby proposes to furnish all supervision, technical personnel, labor, materials, machinery, tools, appurtenances, equipment & services, including utilities and transportation services required to complete this project in a timely manner.

LUMP SUM BASE BID: \$ _____
Bidder agrees to perform work as describe in the Specification and/or shown on the plans for a Sum of:

(In words - See Additional Page(s) as required)

ADD ALTERNATE #1: \$ _____
As described in Section 01 23 00.

(In words - See Additional Page(s) as required)

DEDUCT ALTERNATE #2: \$ _____
As described in Section 01 23 00.

(In words - See Additional Page(s) as required)

Initial: _____

Completion Time:

The undersigned hereby affirms & agrees, if awarded a contract, to begin work immediately upon receipt of Notice to Proceed and to substantially complete the work within the time schedule indicated in Contractor's completion shedule.

Security in the sum of \$ _____ in the form of _____ is submitted herewith in accordance with the Instructions to Bidders, payable without condition to the City of Duluth which is agreed shall be retained as liquidated damages for the delay and extra expense caused the Owner if the undersigned fails to execute the contract and furnish bonds required by the contract documents.

Signed: _____ for

a partnership (or)

_____ a corporation incorporated under the laws of the State of _____.

President: _____ Vice President: _____

Secretary: _____ Treasurer: _____

Address(es): _____

_____, being duly sworn, deposes and says that there are no other persons comprising above company or firm than the above names, and that there are no persons or corporations interested in the forgoing proposals, either as principal or subcontractor, other than the above names; also that the proposals are made without any connection with any person or persons acting in any official capacity whatever for the City of Duluth is directly or indirectly interested therein, or any portion of the profit thereof.

Subscribed and Sworn to before me this _____ day of _____ A.D., _____,

_____ Notary Public.

Stamp/Seal

Addendum Receipt Acknowledgments:

Addendum #: _____	Dated: _____	_____ (initial)
Addendum #: _____	Dated: _____	_____ (initial)
Addendum #: _____	Dated: _____	_____ (initial)
Addendum #: _____	Dated: _____	_____ (initial)
Addendum #: _____	Dated: _____	_____ (initial)

Initial: _____

PURCHASE ORDER TERMS AND CONDITIONS

1. **ACCEPTANCE** ACCEPTANCE OF THIS ORDER BY SELLER IS EXPRESSLY LIMITED TO THE TERMS AND CONDITIONS CONTAINED IN THIS ORDER. ANY TERM OR CONDITION STATED BY THE SELLER IN ANY PRIOR PROPOSAL, OR SELLER'S ACKNOWLEDGEMENT FORM, OR IN OTHERWISE ACKNOWLEDGING OR ACCEPTING THIS ORDER IS DEEMED BY BUYER TO BE A MATERIAL ALTERATION OF THIS ORDER AND IS HEREBY OBJECTED TO BY BUYER. ANY SUCH TERM OR CONDITION SHALL BE TOTALLY INAPPLICABLE TO THIS ORDER UNLESS SPECIFICALLY AGREED TO IN A WRITING SIGNED BY AN AUTHORIZED REPRESENTATIVE OF BUYER. ACCEPTANCE OF THE GOODS OR SERVICES COVERED BY THIS ORDER WILL NOT CONSTITUTE ACCEPTANCE BY BUYER OF SELLER'S TERMS AND CONDITIONS. ANY OF THE FOLLOWING ACTS BY SELLER SHALL CONSTITUTE ACCEPTANCE OF THIS ORDER AND ALL OF ITS TERMS AND CONDITIONS SIGNING AND RETURNING A COPY OF THIS ORDER; DELIVERY OF ANY OF THE GOODS ORDERED; INFORMING THE BUYER IN ANY MANNER OF COMMENCEMENT OF PERFORMANCE; OR RETURNING SELLER'S OWN FORM OF ACKNOWLEDGEMENT.
2. **PRICE.** If price (either fixed price or hourly rate[s] in case of a time and material order) and/or delivery is not specified by Buyer on the face of this order, Seller shall immediately submit its best price, delivery date and/or schedule which shall be subject to Buyer's approval and acceptance. Seller warrants that the prices and other terms for the articles sold to Buyer under this order are not less favorable than those extended to all other customers for the same or like articles in equal or less quantities. In the event Seller reduces its price for such articles during the term of this order, Seller agrees to reduce the prices hereof accordingly. If this order is on a time and material basis, the following shall apply; price shall be (a) material at Seller's cost, less scrap, without any charge for handling or otherwise, plus (b) time at agreed hourly rate(s), if both engineering work and manufacturing work are involved, separate hourly rates shall be specified for each thereof. No overtime shall be employed in the performance of this order without Buyer's prior consent and unless separate overtime hourly rate(s) have been specified and agreed upon. No substantial portion of the order shall be subcontracted by Seller without Buyer's written consent. Seller shall maintain adequate accounting records in accordance with generally accepted accounting practice to substantiate all costs, which records shall be open to examination by Buyer at all reasonable times.
3. **PACKING AND SHIPPING.** If Goods are to be delivered under this order, the cost and fee negotiated for this order are deemed to include all packaging and/or storage cost. All Goods shall be packaged, marked, and otherwise prepared in accordance with good commercial practices to obtain lowest shipping rates. On containers, Seller shall mark handling and loading instructions, shipping information, order number, item and account number, shipment data, and names and addresses of Seller and Buyer. An itemized packing list shall accompany each shipment. Overshipments shall be returned to Seller at Seller's risk and expense. Early shipments may, at option of Buyer, be returned to Seller at Seller's risk and expense or may be retained by Buyer and Buyer shall not be liable for payment until the time originally scheduled hereon.
4. **F.O.B. AND RISK OF LOSS.** Unless otherwise specified on the face of this order, the F.O.B. point shall be Buyer's location designated on the face of this order. If transportation is F.O.B. Seller's location, Seller shall bear all risk of loss or damage to the Goods until delivery of the Goods to the carrier. If transportation is F.O.B. Buyer's location, Seller shall bear all risk of loss or damage to the Goods until delivery of the Goods to Buyer's location.
5. **INVOICING.** All invoices shall be rendered in duplicate unless otherwise specified and shall be rendered within 24 hours after each shipment. Taxes, freight and similar charges shall be shown separately. Each invoice shall be accompanied by bill of lading or express receipt. Payments shall be subject to adjustment for errors, shortages, rejections and other causes. Discount period, if any, shall commence on the date invoice is received or goods are received, whichever is later. Buyer secures blanket coverage on all inbound freight. Invoice charges for additional insurance will not be honored unless otherwise specified.
6. **INSPECTION.** All material and workmanship shall be subject to inspection and test by Buyer, both at plant of Seller and of Buyer. Payment shall be subject to final inspection at Buyer's plant. Buyer shall have the right to reject all goods not conforming to specifications or containing defective material or workmanship. Rejected goods shall be returned at Seller's expense and risk, including transportation both ways, promptly after notification of rejection. Buyer may elect to retain defective goods and to remedy defects and deduct cost of remediating same from amount due Seller. Seller warrants that goods shall be produced under a quality control system that provides at a minimum for the prevention and ready detection of discrepancies and for timely and positive corrective action. Seller warrants that he has or is able to obtain the best facilities necessary to meet the technical and regulatory requirements specified. Seller warrants that quality control records are maintained on file for a minimum of one year from date of shipment or as otherwise specified by contract. Buyer reserves the right, upon 72 hours notice, to audit the Seller's facilities and inspection records in connection with this order.
7. **WARRANTY.** In addition and without prejudice to all other warranties expressed or implied by law, Seller warrants that all material or goods covered by this order shall conform to drawings, specifications and other defects. All warranties, both expressed and implied, also constitute conditions and shall survive inspection, acceptance and payment and shall inure to the benefits of Buyer and its customers. Without limitation of any rights by reason of any breach of warranty or otherwise, material or goods which are not as warranted may at any time be returned to Seller at Seller's expense for credit, correction or replacement as Buyer may direct.
8. **COMPLIANCE WITH LAWS.** Seller shall comply with all federal, state, and local laws, ordinances, rules and regulations in the manufacture and sale of the Goods and performance of the Services, including but not limited to the Occupational Safety and Health Act, the Truth in Negotiation Act, the Resources Conservation and Recovery Act and all applicable requirements of the Fair Labor Standards Act. Seller will defend and hold Buyer harmless from any loss, damages, or costs arising from or caused in any way by any actual or alleged violation of any federal, state, or local law, condition, rule, or regulation, or failure by the Seller to (i) have any chemical substances sold hereunder included in the list of approved chemical substances published by the Environmental Protection Agency pursuant to the Toxic Substances Control Act or (ii) provide a completed Material Safety Data Sheet (OSHA Form 20 equivalent) for any chemical substances sold hereunder as required by any federal, state or local law, ordinance, rule or regulation.
9. **CHANGES.** Buyer may, at any time by written order, make changes in drawings, designs, specifications, method of shipment or packing, time or place of delivery, require additional work, or direct the omission of work covered by this order. If any such change causes an increase or decrease in the price under this order, or in the time required for performance, an equitable adjustment shall be made and this order shall be modified in writing accordingly. Any claim for adjustment under this provision must be asserted within 10 days from date this change is ordered and the amount of such claim must be stated in writing within 30 days thereafter.
10. **BUYER'S PROPERTY, MATERIALS, AND EQUIPMENT.** If Buyer furnishes Seller material or "equipment" ("Equipment" is defined as special dies, molds, jigs, tools, gages, test equipment, masks, etc), or pays for such material or "equipment", title thereto shall remain or vest in Buyer, and Seller shall identify, maintain and preserve such material and "equipment" and shall dispose of it (including scrap) in accordance with Buyer's direction. Such material and "equipment", and whenever practical such individual item thereof shall be plainly marked or otherwise adequately identified by Seller as "property of the City of Duluth" and shall be safely stored separate and apart from Seller's property. Seller shall not substitute any property for Buyer's property. Unless otherwise authorized in writing by Buyer, Seller shall use such material or "equipment" only in the performance of purchase orders for Buyer. Seller shall be responsible for any loss, damage, or destruction to such material or "equipment" but Seller shall not include any insurance costs therefore in the cost charged under this order. Also, the "equipment" required to produce the supplies under this order is for the exclusive use of the City of Duluth and is subject to recall upon written notice.
11. **ASSIGNMENT.** Seller shall not assign this order or any rights under this order without the prior written consent of Buyer, and no purported assignment by Seller shall be binding on Buyer without such written consent.
12. **NOTICE OF LABOR DISPUTES.** Whenever an actual or potential labor dispute delays, or threatens to delay, the timely performance of this order. Seller shall immediately notify Buyer in writing of all relevant information with respect to such dispute.
13. **TERMINATION.** (a) Termination Without Cause. Buyer shall have the right, without cause, at any time to terminate all or any part of the undelivered portion of this order by written notice. If Seller has and desires to assert any claim on account of any such termination, Seller shall submit its termination claims to Buyer, in form and with evidence satisfactory to Buyer, promptly, but no later than 90 days after the effective date of the termination. If Seller fails to submit a termination claim within that time, Buyer shall have no liability to Seller on account of the termination. If Seller's termination claim is not acceptable to Buyer and cannot be settled by negotiation, the claim shall be submitted to arbitration. (b) Termination With Cause. If Seller fails to make any delivery in accordance with the agreed delivery date or schedule or terms or conditions applicable to this order. Buyer shall have the right (in addition to any other right or remedy at law or under this agreement) by written notice to terminate all or any part of the undelivered portion of this order without any liability to Seller on account thereof, in the articles elsewhere on such terms and in such manner as Buyer may deem appropriate and Seller shall be liable to Buyer for all excess costs occasioned Buyer thereby.
14. **PATENTS AND COPYRIGHTS.** Seller shall defend, at its own expense, any suit or claim that may be instituted against Buyer or any customer of Buyer for alleged infringement of patents or copyrights relating to the maintenance, sale, or use of the Goods, except for any such infringement resulting from Seller's compliance with detailed designs provided by Buyer, and Seller shall indemnify Buyer and its customers for all costs and damages arising out of such alleged infringement. Buyer shall have the right, at no additional charge, to use and/or reproduce the Seller's applicable literature, such as operating and maintenance manuals, technical publications, prints, drawings, training manuals, and other similar supporting documentation and sales literature. Seller shall advise Buyer of any updated information relative to the foregoing literature and documentation with timely notification in writing.
15. **PUBLIC LIABILITY INSURANCE.** Seller shall hold Buyer and its customer harmless from all injuries, damages and claims arising from performance of work or services covered by this order. Seller shall maintain such insurance as will protect the Seller, the Buyer and his customer from claims under Worker's Compensation Acts and from all other claims for damages, personal injury, or death to employees of the Seller, the Buyer or his Customer, or any other persons which may arise from performance of work or services covered by this order whether performed by the Seller or any Subcontractor or any one directly or indirectly employed by either of them. Certificates of such insurance shall be filed with the Buyer and shall be subject to Buyer's approval for adequacy of protection.
16. **DELAYS.** Time is of the essence. All actual or potential delays of whatever nature must be reported to the Buyer when and as they occur if the event can be expected to result in a delivery later than that shown on the face of this order. Seller agrees to indemnify Buyer for all losses, costs and damages resulting from Seller's delay or failure to deliver.
17. **GENERAL.** This order is formed under and shall be interpreted according to, and governed by, Minnesota law. No waiver by Buyer of any of its rights or remedies hereunder shall be construed as a waiver of any other rights or remedies.

AFFIDAVIT AND INFORMATION REQUIRED OF BIDDERS

Affidavit of Non-Collusion:

I hereby swear (or affirm) under penalty of perjury:

- 1) That I am the bidder (if the bidder is an individual), a partner in the bidder (if the bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the bidder is a corporation);
- 2) That the attached bid or bids have been arrived at by the bidder independently and have been submitted without collusion with and without agreement, understanding, or planned common course of action with any other vendor or materials, supplied, equipment or services described in the invitation to bid, designed to limit independent bidding or competition;
- 3) That the contents of the bid or bids have not been communicated by the bidder or its employees or agents to any person not an employee or agent of the bidder or its surety on any bond furnished with the bid or bids and will not be communicated to any such person prior to the official opening of the bid or bids; and
- 4) That I have fully informed myself regarding the accuracy of the statements made in this affidavit.

Signed: _____

Firm Name: _____

Subscribed and sworn to me before this ____ day of _____, _____

NOTARY PUBLIC _____

My commission expires: _____

Bidder=s E.I. Number _____

(Number used on employer=s quarterly Federal Tax return)

**EQUAL EMPLOYMENT OPPORTUNITY EEO AFFIRMATIVE ACTION
POLICY STATEMENT & COMPLIANCE CERTIFICATE**

TO: City of Duluth, MN **PROJECT NUMBER & DESCRIPTION** _____

FROM: _____

(FIRM's name, address, telephone number)

A) Employment: It is the policy of the above named FIRM to afford equal opportunity for employment to all individuals regardless of race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance and/or disability. The FIRM will take affirmative action to ensure that we will: (1) recruit, hire, and promote all job classifications without regard to race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance, and/or disability, except where sex is a bona fide occupational qualification; (2) base decisions on employment so as to further the principle of equal employment opportunity; (3) ensure that promotion decisions are in accord with the principles of equal employment opportunity by imposing only valid requirements for promotional opportunities; (4) ensure that all personnel actions such as compensation, benefits, transfers, layoffs, return from layoff, FIRM sponsored training, education tuition assistance, social and recreational programs will be administered without regard to race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance, and/or disability. The FIRM also intends full compliance with Veteran affirmative action requirements. Additionally, minority and female employees shall be encouraged to participate in all FIRM activities and refer applicants.

I have designated (name) _____ to direct the establishment of and to monitor the implementation of personnel procedures to guide the FIRM's affirmative action program. Where PROJECTS exceed \$500,000, this official shall also serve as the liaison officer that administers the FIRM's Minority Business Enterprise Program. This official is charged with designing and implementing audit and reporting systems that will keep management informed on a monthly basis of the status of the equal opportunity area.

Supervisors have been made to understand that their work performance is being evaluated on the basis of their equal opportunity efforts and results, as well as other criteria. It shall be the responsibility of the FIRM and its supervisors to take actions to prevent harassment of employees placed through affirmative action efforts.

B) Reports: Unless exempted by law and regulation, the FIRM shall make available and file those reports related to equal opportunity as may be required by the City of Duluth and State and Federal compliance agencies. Requirements and Reports are defined in 41CFR60 *Compliance Responsibility for Equal Opportunity* published by the U.S. Department of Labor which is incorporated herein by reference. Additional requirements are defined in various State and Federal Civil Rights Legislation and Rules promulgated thereunder.

C) Nonsegregated Facilities: The FIRM certifies that it does not maintain or provide for its employees any segregated facilities at any of its establishments and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The FIRM certifies that it will not maintain or provide for its employees any segregated facilities at any of its establishments and that it will not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The FIRM agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this certificate. As used in this Certification, the term "segregated facilities" means any waiting rooms, work area, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation for entertainment area, transportation, and housing facilities provided for employees which are segregated by explicit directive or are, in fact, segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or otherwise.

D) Affirmative Action Compliance Program: Unless exempted by regulation and law, the FIRM, if the FIRM has 50 or more employees and if the value of current contracts with the City of Duluth exceeds \$50,000, shall prepare and maintain a written affirmative action compliance program that meets the requirement as set forth in 41CFR60.

- E) **Non-Compliance:** The FIRM certifies that it is not currently in receipt of any outstanding letters of deficiencies, show cause, probable cause, or other such notification of non-compliance with EEO Laws and Regulations.
- F) **Employment Goals - Construction Projects:** It shall be the goal of the FIRM if the PROJECT is of a construction nature that in all on-site employment generated that no less than 3% of the on-site workforce will be minority employees and that no less than 7% of the on-site workforce will be female employees. Further, it is the goal of the FIRM if the PROJECT is of a construction nature that in all on-site employment generated that no less than 3% of the work hours generated shall be worked by minority employees and that no less than 7% of the work hours generated shall be worked by female employees.
- G) **Subcontractors:** The FIRM will for all its PROJECT subcontractors regardless of tier (unless exempted by law and regulation) that received in excess of \$2,500 require that: (1) the subcontractor shall execute an *EEO Statement and Certification* similar in nature to this *Statement and Certification*, (2) said documentation to be maintained on file with the FIRM or subcontractor as may be appropriate.

Executed this _____ day of _____, 20__ by:

Printed name and title

Signature

NOTE: In addition to the various remedies prescribed for violation of Equal Opportunity Laws, the penalty for false statements is prescribed in 18 U.S.C. 1001.

Withholding Affidavit for Contractors

IC-134

This affidavit must be approved by the Minnesota Department of Revenue before the state of Minnesota or any of its subdivisions can make final payment to contractors.

Please type or print clearly. This will be your mailing label for returning the completed form.

Company Name		
Address		
City	State	Zip

Daytime phone [] [] [] [] [] []	Minnesota tax ID number
Total contract amount \$ _____	Month/year work began
Amount still due \$ _____	Month/year work ended

Project number	Project location		
Project owner	Address	City	State

Did you have employees work on this project: Yes No If no, who did the work?

Check the box that describes your involvement in the project and fill in all information requested.

- Sole contractor**
- Subcontractor**

Name of contractor who hired you:

Address: _____

- Prime contractor** - If you subcontracted out any work on this project, all of your subcontractors must file their own IC-134 affidavits and have them certified by the Department of Revenue before you can file your affidavit. For each subcontractor you had, fill in the information below and attach a copy of each subcontractor's certified IC-134. If you need more space, attach a separate sheet.

Business name	Address	Owner/Officer

I declare that all information I have filled in on this form is true and complete to the best of my knowledge and belief. I authorize the Department of Revenue to disclose pertinent information relating to this project, including sending copies of this form, to the prime contractor if I am a subcontractor, and to any subcontractors if I am a prime contractor, and to the contracting agency.

Contractor's signature	Title	Date
------------------------	-------	------

Mail to: MN Dept. of Revenue, Withholding Division, Mail Station 6610, St. Paul, MN 55146-6610

Certificate of Compliance	
Based on records of the Minnesota Department of Revenue, I certify that the contractor who has signed this certificate has fulfilled all the requirements of Minnesota Statutes 290.92 and 290.97 concerning the withholding of Minnesota income tax from wages paid to employees relating to contract services with the state of Minnesota and/or its subdivisions.	
Department of Revenue approval:	Date:

Instructions for Form IC-134

Who must file

If you are a prime contractor, a contractor of a subcontractor who did work on a project for the state of Minnesota of any of its local government subdivisions—such as a county, city, or school district—you must file Form IC-134 with the Minnesota Department of Revenue.

This affidavit must be certified and returned before the state of any of its subdivisions can make final payment for your work.

If you're a prime contractor and a subcontractor on the same project

If you were hired as a subcontractor to do work on a project and you subcontracted all or a part of your portion of the project to another contractor, you are a prime contractor as well. Fill out both the subcontractor and prime contractor areas on a single form.

When to file

The IC-134 cannot be processed until you finish the work. If you submit the form before the project is completed, it will be returned to you unprocessed.

If you are a subcontractor or sole contractor, send in the form when you have completed your part of the project.

If you are a prime contractor, send in the form when the entire project is completed and you have received certified affidavits from all of your subcontractors.

How to file

If you have fulfilled the requirements of Minnesota withholding tax laws, the Department of Revenue will sign your affidavit and return it to you.

If any withholding payments are due to the state, Minnesota law requires certified payments before we approve the IC-134.

Submit the certified affidavit to the government unit for which the work was done to receive your final payment. If you are a subcontractor, submit the certified affidavit to your prime contractor to receive your final payment.

Where to file

Mail to:

MN Dept. of Revenue
Withholding Tax Division
Mail Station 6610
St. Paul, MN 55416-6610

Minnesota tax ID number

You must fill in your Minnesota tax ID number on the form. You must have a Minnesota tax ID number if you have employees who work in Minnesota.

If you don't have a Minnesota ID number, you must apply for one. Call (651) 282-5225 or 1-800-657-3605.

If you prefer, you can get an application (Form ABR) from our web site or by calling or writing us.

If you have no employees and did all the work yourself, you do not need a Minnesota tax ID number. If this is the case, fill in your Social Security number in the space for Minnesota tax ID number and explain who did the work.

The Department of Revenue needs all the information to determine if you have met all state income tax withholding requirements. If all required information is not provided, the IC-134 will be returned to you for completion.

All information on this affidavit is private by state law. It cannot be given to others without your permission, except to the Internal Revenue Service, other states that guarantee the same privacy, and certain government agencies as provided by law.

Information and assistance

If you need help or more information to complete this form, call (651) 282-9999 or 1-800-657-3594.

Additional forms are available on our website at www.taxes.state.mn.us or by calling (651) 296-4444 OR 1-800-657-3676. You can also write for forms at the following address:

Minnesota Tax Forms
Mail Station 1421
St. Paul, MN 55146-1421

TTY users may contact the department through the Minnesota Relay Service at 1-800-627-3529.

We'll provide information in an alternative format upon request to persons with disabilities.

Use of information



CITY OF DULUTH
PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: That we:

_____ (contractor's name)
(hereinafter called the "Contractor") located at: _____

_____ (contractor's address)

and _____ (surety's name)

(a corporation holding a certificate of the Insurance Commissioner of the State of Minnesota showing that it is authorized to contract as a surety, hereinafter called the "Surety") located at:

_____ (surety's address)

are held and firmly bound unto the City of Duluth (hereinafter called the "Owner"), in the penal sum of _____ Dollars (\$ _____) for the payment of which we bind ourselves, our heirs, executors and administrators, successors and assigns, for the faithful performance of a written contract for the purpose of:

according to plans, profiles, and specifications thereto annexed. A copy of that contract is incorporated herein by reference and is made a part hereof as if fully copied herein.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH That,

- A) If the Contractor shall in all respects comply with the terms and conditions of the Contract (which includes the contract documents) and such alterations as may be made in said contract as documents therein provide for, and shall complete the contract in accordance with its terms,
- B) If the Contractor shall indemnify, defend and save harmless the owner from all costs, expenses, damages, injury or conduct, want or care or skill, negligence or default, including patent infringement on the part of the Contractor, agents or employees, in the execution or performance of the contract,

C) If the Contractor shall indemnify the owner for all costs that may accrue on account of the enforcing of the terms of the bond, if action is brought on the bond, including reasonable attorney's fees, in any case where such action is successfully maintained,

D) If the Contractor shall comply with all laws pertaining to doing the work under the contract, Then, this obligation shall be void; the Contractor and Surety jointly and severally agree to pay to the Owner any difference between the sum to which the Contractor will be entitled on the completion of the contract and that which the Owner may be obliged to pay for the completion of the work by contract or otherwise, and any damages, direct or indirect, or consequential, which the Owner may sustain on account of the work, or on account of the failure of the Contractor to properly and in all things, keep and execute all of the provisions of the Contract, provided however that Surety's liability to pay damages is limited to the amount of the Performance Bond as set forth above.

And, the said Contractor and Surety hereby further bind themselves, their successors, executors, administrators and assigns, jointly and severally, that they will employ and fully protect the said Owner against and will pay any and all amounts, damages, costs and judgements which may be recovered against or which the Owner may be called upon to pay to any person or corporation by reason of any damage arising from the performance of said work, repair or maintenance thereof, or the manner of doing the same, or the neglect of the said Contractor or his agents or servants, or the improper performance of the said work by the Contractor or his agents or servants, or the infringements of any patent rights by reason of the use of any material furnished or work done, as aforesaid, or otherwise. For the purpose of this paragraph, a subcontractor shall be deemed to be the agent or employee of the Contractor to the extent of his subcontract.

The Contractor and the Sureties do hereby expressly waive any objection that might be interposed as to the right of the Owner to require a bond containing the foregoing provisions, and they do hereby further expressly waive any defense which they or either and any of them might interpose to an action brought hereon by any person, firm, or corporation, including subcontractors, materialmen and third persons, for work, labor, services, supplies or material performed, rendered or furnished as aforesaid, upon the ground that there is no law authorizing the Owner to require the foregoing provisions to be placed in this bond.

And the Surety, for value received, hereby stipulates and agrees that the obligations of the Surety and this bond shall in no way be impaired or affected by any extension of time, modification, omission, addition or change in or to the contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of

any provision thereof, or by any assignment, subletting or other transfer thereof, or of any part thereof, or of any work to be performed, or of any moneys due or to become due thereunder; and the said Surety does hereby waive notice of any and all such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby stipulates and agrees that any and all things done and omitted to be done by and in relation to executors, administrators, successors, assignees, subcontractors and other transferees, shall have the same effect as to said Surety as though done or omitted to be done by and in relation to the Contractor.

Signed this _____ day of _____, 20____.

Name of Principal

By

Name of Surety

By
Attorney-in-Fact

ACKNOWLEDGEMENTS

State of Minnesota)
) ss. Principal – Individual
County of St. Louis)

This instrument was acknowledged before me on _____
by _____.

Notary Seal

Notary Public

State of Minnesota)
) ss. Principal – Corporate or Partnership
County of St. Louis)

This instrument was acknowledged before me on _____
by _____ as _____
of _____.

Notary Seal

Notary Public

State of Minnesota)
) ss. Surety
County of St. Louis)

Be It Known, That on this _____ day of _____ A. D., 20____, came before me personally
_____, to me personally known, who being
by me duly sworn, did say that he/she is the _____(title) of

the above named corporation which executed the foregoing bond as surety; that the seal affixed to the foregoing
instrument is the corporate seal of said corporation; that said instrument was executed in behalf of said corporation, by
authority of its Board of Directors; that said corporation hold a certificate of the Insurance Commissioner of the State
of Minnesota showing that it is authorized to contract as a surety; and said

acknowledged said instrument to be the free act and deed of said corporation.

Notary Seal

Notary Public

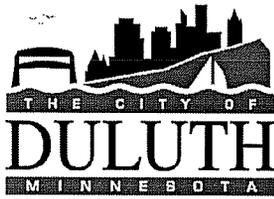
APPROVED AS TO FORM, CORRECTNESS AND VALIDTY HEREOF

Dated this _____ day of _____, 20 ____

Assistant City Attorney Duluth MN

Dated this _____ day of _____, 20 ____

Finance Director Duluth MN



CITY OF DULUTH

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: That we:

_____ (contractor's name)
(hereinafter called the "Contractor") located at: _____

_____ (contractor's address)

and _____ (surety's name)

(a corporation holding a certificate of the Insurance Commissioner of the State of Minnesota showing that it is authorized to contract as a surety, hereinafter called the "Surety") located at:

_____ (surety's address)

are held and firmly bound unto the City of Duluth (hereinafter called the "Owner"), for the benefit of persons furnishing labor and materials for the contract set forth below, in the penal sum of

_____ Dollars (\$ _____) for the payment of which we bind ourselves, our heirs, executors and administrators, successors and assigns, for the payment of all labor and materials supplied by any person in the performance of a written contract for the purpose of:

_____ according to plans, profiles, and specifications thereto annexed. A copy of that contract is incorporated herein by reference and is made a part hereof as if fully copied herein.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH That,

- A) If the Contractor shall make payments, as they may become due, to all persons supplying "labor and materials," as defined in Minnesota Statutes Section 574.26, used directly or indirectly by the Contractor, or his Subcontractor, in the prosecution of the work provided for in the contract,
- B) If the Contractor shall indemnify the owner or other claimant for all costs that may accrue on account of the enforcing of the terms of the bond, if action is brought on the bond, including reasonable attorney's fees, in any case where such action is successfully maintained,

Then, this obligation shall be void; otherwise it shall remain in full force and effect.

And, the said Contractor and Surety agree that in accordance with Minnesota Statutes Section 574.26 not only said City, but any person furnishing "labor and materials," as defined in Minnesota Statutes 574.26, may sue on this bond for their use on account of any sums due them for anything so furnished.

The Contractor and the Sureties do hereby expressly waive any objection that might be interposed as to the right of the Owner to require a bond containing the foregoing provisions, and they do hereby further expressly waive any defense which they or either and any of them might interpose to an action brought hereon by any person, firm, or corporation, including subcontractors, materialmen and third persons, for work, labor, services, supplies or material performed, rendered or furnished as aforesaid, upon the ground that there is no law authorizing the Owner to require the foregoing provisions to be placed in this bond.

And the Surety, for value received, hereby stipulates and agrees that the obligations of the Surety and this bond shall in no way be impaired or affected by any extension of time, modification, omission, addition or change in or to the contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provision thereof, or by any assignment, subletting or other transfer thereof, or of any part thereof, or of any work to be performed, or of any moneys due or to become due thereunder; and the said Surety does hereby waive notice of any and all such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby stipulates and agrees that any and all things done and omitted to be done by and in relation to executors, administrators, successors, assignees, subcontractors and other transferees, shall have the same effect as to said Surety as though done or omitted to be done by and in relation to the Contractor.

Signed this _____ day of _____, 20____.

Name of Principal

By

Name of Surety

By _____
Attorney-in-Fact

ACKNOWLEDGEMENTS

State of Minnesota)) ss. Principal – Individual
County of St. Louis)

This instrument was acknowledged before me on _____
by _____.

Notary Seal

Notary Public

State of Minnesota)) ss. Principal – Corporate or Partnership
County of St. Louis)

This instrument was acknowledged before me on _____
by _____ as _____
of _____.

Notary Seal

Notary Public

State of Minnesota)) ss. Surety
County of St. Louis)

Be It Known, That on this _____ day of _____ A. D., 20____, came before me personally
_____, to me personally known, who being
by me duly sworn, did say that he/she is the _____ (title)
of _____

_____ the above named corporation which executed the foregoing bond as surety; that the seal affixed to the foregoing instrument is the corporate seal of said corporation; that said instrument was executed in behalf of said corporation, by authority of its Board of Directors; that said corporation hold a certificate of the Insurance Commissioner of the State of Minnesota showing that it is authorized to contract as a surety; and said _____ acknowledged said instrument to be the free act and deed of said corporation.

Notary Seal

Notary Public

APPROVED AS TO FORM, CORRECTNESS AND VALIDTY HEREOF

Dated this _____ day of _____, 20 ____

Assistant City Attorney Duluth MN

Dated this _____ day of _____, 20 ____

Finance Director Duluth MN

City of Duluth

Indemnification & Insurance Requirements

(Updated February 16, 2011)

(Please Be Sure These Requirements Can Be Met Before Submitting Your Response)

INDEMNIFICATION CLAUSE

The Contractor will defend, indemnify and save the City harmless from all costs, charges, damages, and loss of any kind that may grow out of the matter covered by this contract. Said obligation does not include indemnification of the City for claims of liability arising out of the sole negligent or intentional acts or omissions of City but shall include but not be limited to the obligation to defend, indemnify and save harmless the City in all cases where claims of liability against the City arise out of acts or omissions of City which are derivative of the negligence or intentional acts or omissions of Contractor such as, and including but not limited to, the failure to supervise, the failure to warn, the failure to prevent such act or omission by Contractor and any other such source of liability. In addition, Contractor will comply with all local, state and federal laws, rules and regulations applicable to this contract and to the work to be done and things to be supplied hereunder.

INSURANCE

- a. Contractor shall provide the following minimum amounts of insurance from insurance companies authorized to do business in the state of Minnesota, which insurance shall indemnify Contractor and City from all liability described in the paragraph above, subject to provisions of subparagraph below.
 - (1) Worker's compensation in accordance with the laws of the state of Minnesota.
 - (2) Public Liability and Automobile Liability Insurance with limits not less than **\$1,500,00** Single Limit, and twice the limits provided when a claim arises out of the release or threatened release of a hazardous substance; shall be in a company approved by the city of Duluth; and shall provide for the following: Liability for Premises, Operations, Completed Operations, Independent Contractors, and Contractual Liability.
 - (3) City of Duluth shall be named as **Additional Insured** under the Public Liability, Excess/Umbrella Liability* and Automobile Liability, or as an alternate, Contractor may provide Owners-Contractors Protective policy, naming itself and the City of Duluth. Contractor shall also provide evidence of Statutory Minnesota Worker's Compensation Insurance. Contractor to provide Certificate of Insurance evidencing such coverage with 30-days notice of cancellation, non-renewal or material change provisions included. The City of Duluth does not represent or guarantee that these types or limits of coverage are adequate to protect the Contractor's interests and liabilities.

**An umbrella policy with a "following form" provision is acceptable if written verification is provided that the underlying policy names the City of Duluth as an additional insured.*

- (4) If a certificate of insurance is provided, the form of the certificate shall contain an unconditional requirement that the insurer notify the City without fail not less than 30 days prior to any cancellation, non-renewal or modification of the policy or coverages evidenced by said certificate and shall further provide that failure to give such notice to City will render any such change or changes in said policy or coverages ineffective as against the City.
 - (5) **The use of an "Acord" form as a certificate of insurance shall be accompanied by two forms – 1) ISO Additional Insured Endorsement (CG-2010 pre-2004) and 2) Notice of Cancellation Endorsement (IL 7002) or equivalent, as approved by the Duluth City Attorney's Office.**
- b. The insurance required herein shall be maintained in full force and effect during the life of this Agreement and shall protect Contractor, its employees, agents and representatives from claims and damages including but not limited to personal injury and death and any act or failure to act by Contractor, its employees, agents and representatives in the negligent performance of work covered by this Agreement.
 - c. Certificates showing that Contractor is carrying the above described insurance in the specified amounts shall be furnished to the City prior to the execution of this Contract and a certificate showing continued maintenance of such insurance shall be on file with the City during the term of this Contract.
 - d. The City shall be named as an additional insured on each liability policy other than the workers' compensation policies of the Contractor.
 - e. The certificates shall provide that the policies shall not be changed or canceled during the life of this Contract without at least 30 days advanced notice being given to the City.
 - f. Contractor shall be required to provide insurance meeting the requirements of this Paragraph unless Contractor successfully demonstrates to the satisfaction of the City Attorney, in the exercise of his or her discretion, that such insurance is not reasonably available in the market. If Contractor demonstrates to the satisfaction of the City Attorney that such insurance is not reasonably available, the City attorney may approve an alternative form of insurance which is reasonably available in the market which he or she deems to provide the highest level of insurance protection to the City which is reasonably available.

Procedure verified by:

_____ Date _____
Don Douglas, Claims Adjuster
Duluth City Attorney's Office

PRE-2004 CG 2010

- A. **Section II - Who Is an Insured** is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of your ongoing operations performed for that insured.

NOTICE OF CANCELLATIONS ENDORSEMENT IL-7002 (10-90)

All Coverage Parts included in this policy are subject to the following condition: If we cancel this policy for any reason other than non-payment of premium, we will mail advance notice to the person(s) or organization(s) as shown in the Schedule.

Schedule	
<u>Person or Organization (Name and Address)</u>	<u>Advance Notice (Days)</u>
City of Duluth Purchasing Division Room 100 City Hall 411 West First Street Duluth, MN 55802	30

GENERAL CONDITIONS 4-15-11

PART I

101. DEFINITIONS

Wherever used in any of the Contract Documents, the following meanings shall be given to the terms herein defined:

- a. The term "Contract" means the Contract executed by the City of Duluth in its capacity as agent for the City of Duluth and the Contractor, of which these GENERAL CONDITIONS form a part.
- b. The term "City" means the City of Duluth, Minnesota, which is authorized to undertake this Contract and within which the Project Area is situated or any employee of the City of Duluth designated by the City of Duluth for the purpose of inspecting, directing, or having in charge the work embraced in this Contract.
- c. The term "Contractor" means the person, firm, or corporation entering into the Contract with the City to construct and install the Improvements embraced in this Contract.
- d. The term "Project Area" means site within which is specified Contract limits of the Improvements contemplated to be constructed in whole or in part under this Contract.
- e. The term "Architect" means the architect or engineer licensed to practice architecture or engineering and serving the City with architectural or engineering services, or his authorized representative or successor.
- f. The term "Change Order" means a written order to the Contractor, signed by the City, issued after execution of the Contract, authorizing and directing a change in the Work or an adjustment in the contract sum or the contract time. The contract sum and the contract time may be changed only by Change Order.
- g. The term "Contract Documents" means and shall include the following: Executed Agreement, Addenda (if any), Invitation for Bids, Instructions to Bidders, Signed Copy of Bid, General Conditions, Special Conditions, Technical Specifications, and Drawings (as listed in the Schedule of Drawings), and all requested submittals such as Certificate of Insurance, performance and payment bonds, EEO Affirmative Action Policy Statement & Compliance Certificate, Certificate of Non-Collusion.
- h. The term "Drawings" means the drawings listed in the Schedule of Drawings.
- i. The term "Field Order" means a written interpretation necessary for the proper execution of the Work, in the form of drawings or otherwise issued to the Contractor by the City or the Architect.
- j. The term "Technical Specifications" means that part of the Contract Documents which describes, outlines and stipulates the quality of the materials to be furnished, the quality of workmanship required, and the methods to be used in carrying out the construction work to be performed under this Contract.
- k. The term "Addenda" or "Addendum" means any changes, revisions or clarifications of the Contract Documents which have been duly issued by the City to prospective Bidders prior to time of receiving Bids.
- l. The term "Work" means all labor necessary to produce the construction required by the Contract Documents, and all materials and equipment incorporated in such construction.

102. SUPERINTENDENCE BY CONTRACTOR

- a. Except where the Contractor is an individual and gives his personal superintendence to the work, the Contractor shall provide a competent superintendent, satisfactory to the City and the Architect, on the work at all times during working hours with full authority to act for him. The Contractor shall also provide an adequate staff for the proper coordination and expediting of his work.
- b. The Contractor shall lay out his own work and he shall be responsible for all work executed by him under the Contract. He shall verify all figures and elevations before proceeding with the work and will be held responsible for any error resulting from his failure to do so.

103. SUBCONTRACTS

- a. The Contractor shall not execute an agreement with any subcontractor, or permit any subcontractor to perform any work included in this contract until he has submitted a noncollusion affidavit from the subcontractor in substantially the form attached and has received written approval of such subcontractor from the City.
- b. No proposed subcontractor shall be disapproved by the City except for cause.
- c. The Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.
- d. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to require compliance by each subcontractor with the applicable provisions of this Contract.
- e. Nothing contained in this Contract shall create any contractual relationship between the subcontractor and the City.

104. OTHER CONTRACTS

The City may award, or may have awarded, other contracts for additional work, and the Contractor shall cooperate fully with such other Contractors, by scheduling his own work with that to be performed under other Contracts as may be directed by the City. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other Contractor as scheduled.

105. FITTING AND COORDINATION OF THE WORK

The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operations of all trades, subcontractors, or materialmen engaged upon this Contract. He shall be prepared to guarantee to each of his subcontractors the locations and measurements which they may require for the fitting of their work to all surrounding work.

106. MUTUAL RESPONSIBILITY OF CONTRACTORS

If, through acts or neglect on the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor shall settle with such other Contractor or subcontractor by agreement or arbitration, if such other Contractor or subcontractor will so settle. If such other Contractor or subcontractor shall assert any claim against the City on account of damage alleged to have been so sustained, the City shall notify this Contractor, who shall defend at his own expense any suit based upon such claim, and, if any judgment or claims against the City shall be allowed, the Contractor shall pay or satisfy such judgment or claim and pay all costs and expenses in connection therewith.

107. PROGRESS SCHEDULE

The Contractor shall submit for approval immediately after execution of the Agreement, a carefully prepared Progress Schedule, showing the proposed dates of starting and of completing each of the various sections of the work, the anticipated monthly payments to become due the Contractor and the accumulated percent of progress each month.

108. PAYMENTS

1) Partial Payments.

- a. The Contractor shall prepare his requisition of partial payment as of the last day of the month and submit it, with the required number of copies, to the City contracting officer for his approval. The amount of the payment due the Contractor shall be determined by adding to the total value of work completed to date, the

value of materials properly stored on the site and deducting (1) five percent (5%) of the total amount, this sum to be retained until final payment and (2) the amount of all previous payments. The total value of the work completed to date shall be based on the estimated quantities of work completed and on the unit prices contained in the agreement. The value of materials properly stored on site shall be based upon the estimated quantities of such materials and the invoice prices. Copies of all invoices shall be available for the inspection of the Architect and the City.

b. Monthly or partial payments made by the City to the Contractor are moneys advanced for the purpose of assisting the Contractor to expedite the work of construction. The Contractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the City. Such payments shall not constitute a waiver of the right of the City to require the fulfillment of all terms of the Contract and the delivery of all improvements embraced in this Contract complete and satisfactory to the City in all details.

2) Final Payment.

a. After final inspection and acceptance by the Architect and the City of all work under the Contract, the Contractor shall prepare his requisition for final payment which shall be based upon the carefully measured and computed quantity of each item of work at the applicable unit prices stipulated in the Agreement. The total amount of the final payment due the Contractor under this Contract shall be the amount computed as described above less all previous payments. Final payment to the Contractor shall be made subject to his furnishing the City with a release in satisfactory form of all claims against the City arising under and by virtue of his contract, other than such claims, if any, as may be specifically excepted by the Contractor from the operation of the release as provided under Section 113 hereof.

b. The City, before paying the final estimate, may require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project) and services to the Contractor, if the City deems the same necessary in order to protect its interest. The City, however, may if it deems such action advisable make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments so made shall in no way impair the obligations of any surety or sureties furnished under this Contract.

c. Withholding of any amount due the City under Section 403, entitled "Liquidated Damages," under SPECIAL CONDITIONS, shall be deducted from the final payment due the Contractor.

3) Withholding Payments

The City may withhold from any payment otherwise due the Contractor so much as may be necessary to protect the City and, if it so elects, may also withhold any amounts due from the Contractor to any subcontractors or material dealers for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the City and will not require the City to determine or adjust any claims or disputes between the Contractor and his subcontractors or material dealers, or to withhold any moneys for their protection unless the City elects to do so. The failure or refusal of the City to withhold any moneys from the Contractor shall in no wise impair the obligations of any surety or sureties under any bond or bonds furnished under this Contract.

4) Payments Subject to Submission of Certificates.

Each payment to the Contractor by the City shall be made subject to submissions by the Contractor of all written certifications required of him and his subcontractors by Section II, Part II Supplementary General Conditions for Federally, State of Minnesota, and/or City Assisted Activities.

109. CHANGES IN THE WORK

- a. The City may make changes in the scope of work required to be performed by the Contractor under the Contract by making additions thereto, or by omitting work therefrom, without invalidating the Contract, and without relieving the Contractor from any of his obligations under the Contract or any guarantee given by him pursuant to the Contract provisions, and without affecting the validity of the guaranty bonds, and without relieving or releasing the surety or sureties of said bonds. All such work shall be executed under the terms of the original Contract unless is expressly provided otherwise.
- b. Except for the purpose of affording protection against any emergency endangering health, life, or property, the Contractor shall make no change in the materials used or in the specified manner of constructing and/or installing the Improvements or supply additional labor, services, or materials beyond that actually required for the execution of the Contract, unless in pursuance of a written order from the City authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract Price will be valid unless so ordered.
- c. If applicable unit prices are contained in the Agreement (established as a result of either a unit price bid or a Supplement Schedule of Unit Prices), the City shall order the Contractor to proceed with desired changes in the work, the value of such changes to be determined by the measured quantities involved and the applicable unit prices specified in the Contract; provided that, in case of a unit price contract the net value of all changes does not increase or decrease the original total amount shown in the Agreement by more than twenty-five percent (25%) in accordance with Section entitled Unit Prices, under INSTRUCTIONS TO BIDDERS.
- d. If applicable unit prices are not contained in the Agreement or if the total net change increases or decreases the total Contract Price more than twenty-five (25%), the City shall, before ordering the Contractor to proceed with desired changes, request an itemized proposal from him covering the work involved in the change after which the procedure shall be as follows:
- (1) If the proposal is acceptable, the City will prepare the change order in accordance therewith for acceptance by the Contractor.
 - (2) If the proposal is not acceptable and prompt agreement between the two parties cannot be reached, the City may order the Contractor to proceed with the work on a cost-plus limited basis; provided that this basis shall not apply to costs incurred by Contractor for any work done by any subcontractor, which work may proceed under the basis set forth in sub-subparagraph (3) below. A cost-plus-limited basis is defined as the net cost of the Contractor's labor, materials, and insurance plus fifteen percent (15%) of said net cost to cover overhead and profit, the total cost not to exceed a specified limit.
 - (3) If the proposal of the Contractor is not acceptable in whole or part because of the proposals of one or more of the subcontractors and prompt agreement between the two parties cannot be reached, the City may order the Contractor to proceed with the work and reimburse Contractor for work done by any subcontractor on the basis of that subcontractor's net cost of labor, materials, and insurance plus twenty percent (20%) of said net cost to cover overhead and profit, the total cost not to exceed a specified limit. Contractor shall supply all data to City which is necessary to determine any such subcontractor's net costs.
- e. Each change order shall include in its final form:
- (1) A detailed description of the change in the work.
 - (2) The Contractor's proposal (if any) of a confirmed copy thereof.
 - (3) A definite statement as to the resulting change in the Contract price and/or time.
 - (4) The statement that all work involved in the change shall be performed in accordance with the Contract requirements except as modified by the change order.

110. CLAIMS FOR EXTRA COST

- a. If the Contractor claims that any instructions by Drawings or otherwise involve extra cost or extension of time, he shall, within ten (10) days after the receipt of such instructions, and in any event, before proceeding to execute the work, submit his protest thereto in writing to the City, stating clearly and in detail the basis of his objections. No such claim will be considered unless so made.

- b. Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or bench marks, will not be recognized unless accompanied by certified survey data, made prior to the time the original ground was disturbed, clearly showing that errors exist which resulted, or would result, in handling more material, or performing more work, than would be reasonably estimated from the Drawings and maps issued.
- c. Any discrepancies which may be discovered between actual conditions and those represented by the documents shall at once be reported to the City and work shall not proceed, except at the Contractor's risk, until written instructions have been received by him from the City.
- d. If, on the basis of the available evidence, the City determines that an adjustment of the Contract Price and/or time is justifiable, the procedure shall then be as provided in Section 109 hereof.

111. TERMINATION, DELAYS, AND LIQUIDATED DAMAGES

a. Termination of Contract.

If the Contractor refuses or fails to execute the work with such diligence as will insure its completion within the time specified in these Contract Documents, or as modified as provided in these Contract Documents, the City, by written notice to the Contractor, may terminate the Contractor's right to proceed with the work. Upon such termination, the City may take over the work and prosecute the same to completion, by contract or otherwise, and the Contractor and his sureties shall be liable to the City for any additional cost incurred by the City in its completion of the work and they shall also be liable to the City for liquidated damages for any delay in the completion of the work as provided below. If the Contractor's right to proceed is terminated, the City may take possession of and utilize in completing the work such materials, tools, equipment, and plant as may be on the site of the work and necessary therefore.

b. Liquidated Damages for Delays.

If the work is not completed within the time stipulated in Section 7 (Special Conditions) hereof, including any extensions of time for excusable delays as herein provided, the Contractor shall pay to the City as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) for each calendar day of delay, until the work is completed, the amount as set forth in Section 7 (Special Conditions) hereof and the Contractor and his sureties shall be liable to the City for the amount thereof.

c. Excusable Delays.

The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due: (1) To any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, National Defense, or any other national emergency;

(2) To any acts of the City;

(3) To causes not reasonably foreseeable by the parties to this Contract at the time of the execution of the Contract which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God or of the public enemy, acts of another Contractor in their performance of some other contract with the City, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones, and other extreme weather conditions; and

(4) To any delay of any subcontractor occasioned by any of the causes specified in subparagraphs (1), (2) and (3) of this paragraph "c". Provided, however, that the Contractor promptly notify the City in writing within ten (10) days the cause of the delay. Upon receipt of such notification, the City shall ascertain the facts and the cause of the delay. If, upon the basis of facts and the terms of the Contract, the delay is properly excusable, the City shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

112. ASSIGNMENT OR NOVATION

The Contractor shall not assign or transfer, whether by an assignment or novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this Contract without the written consent of the City; provided, however, that assignments to banks, trust companies, or other financial institutions may be made without the consent of the City. No assignment or novation expressly provides that the assignment of any of the Contractor's rights or benefits under the Contract is subject to a prior lien for labor performed, services rendered, and materials, tools, and equipment supplied for the performance of the work under this Contract in favor of all persons, firms, or corporations rendering such labor or services or supplying such materials, tools, or equipment.

113. DISPUTES

a. All disputes arising under this Contract or its interpretation, whether involving law or fact or both, or extra work, and all claims for alleged breach of contract shall, within ten (10) days of the first event giving rise to the dispute, be presented by the Contractor to the City for decision. All papers pertaining to claims shall be filed in quadruplicate. Such notice need not detail the amount of the claim but shall state the facts surrounding the claim in sufficient detail to identify the claim together with its character and scope. In the meantime, the Contractor shall proceed with the work as directed by the City. Any claim not presented within the time limit specified within this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) days of the first event giving rise to it, the claim will be considered only for a period commencing ten (10) days prior to the receipt by the City of notice thereof.

b. The Contractor shall submit in detail his claim and his proof thereof. Each decision by the City will be in writing and will be mailed to the Contractor by registered or certified mail, return receipt requested, directed to his last known address or actually delivered to Contractor or its managing agent. All interpretations or decisions of the City shall be consistent with the Contract and its intent.

c. If the Contractor does not agree with any decision of the City, he shall in no case allow the dispute to delay the work but shall notify the City promptly that he is proceeding with the work under protest and he may then accept the matter in question from the final release. If the Contractor does not agree with any decision of the City, he may submit the matter to arbitration no later than thirty (30) days after the date on which the Contractor received the City's decision; provided, however, that the City shall not be required to submit to arbitration without its prior written consent; and if the City does consent to arbitration, then the Contractor shall pay all costs of such arbitration.

114. TECHNICAL SPECIFICATIONS AND DRAWINGS

Anything mentioned in the Technical Specifications and not shown on the Drawings or shown on the Drawings and not mentioned in the Technical Specifications, shall be of like effect as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy on Drawings or Technical Specifications, the matter shall be immediately submitted to the City, without whose decision, said discrepancy shall not be adjusted by the Contractor, save only at his own risk and expense.

115. SHOP DRAWINGS

a. All required shop drawings, machinery details, layout drawings, etc. shall be submitted to the Architect or the City, as directed by the City, in two copies for approval sufficiently in advance of requirements to afford ample time for checking, including time for correcting, resubmitting and rechecking if necessary. The Contractor may proceed, only at his own risk, with manufacture or installation of any equipment or work covered by said shop drawings, etc. until they are approved and no claim, by the Contractor, for extension of the Contract time will be granted by reason of his failure in this respect.

b. Any drawing submitted without the Contractor's stamp of approval will not be considered and will be returned to him for proper resubmission. If any drawings show variations from the requirements of the Contract because of standard shop practice or other reason, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment of contract price and/or time, otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract even though the drawings have been approved.

c. If a shop drawing with the Contractor involves only a minor adjustment in the interest of the City not involving a change in Contract price or time, the Architect may approve the drawing. The approval shall be general, shall not relieve the Contractor from his responsibility for adherence to the Contract or for any error in the drawing and shall contain in substance the following: "The modification shown on the attached drawing is approved in the interest of the City to effect an improvement for the Project and is ordered with the understanding that it does not involve any change in the Contract price or time; that it is subject generally to all Contract stipulation and covenants; and that it is without prejudice to any and all rights of the City under the Contract and surety bond or bonds."

116. REQUEST FOR SUPPLEMENTARY INFORMATION

It shall be the responsibility of the Contractor to make timely requests of the City for any additional information not already in his possession which should be furnished by the City under the terms of this Contract, and which he will require in the planning and execution of the work. Such requests may be submitted in writing from time to time as the need is approached, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay. Each request shall be in writing, and list the various items and the latest date by which each will be required by the Contractor. The first list shall be submitted within two (2) weeks after Contract award and shall be as complete as possible at that time. The Contractor shall, if requested, furnish promptly any assistance and information the City may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in his work or to others arising from his failure to comply fully with the provisions of this Section.

117. MATERIALS AND WORKMANSHIP

a. Unless otherwise specifically provided for in the Technical Specifications, all workmanship, equipment, materials and articles incorporated in the work shall be new and the best grade of the respective kinds for the purpose. Where equipment, materials, articles or workmanship are referred to in the Technical Specifications as an equal to any particular standard, the City shall decide the question of equality.

b. The Contractor shall furnish to the City for approval the manufacturer's detailed specifications for all machinery, mechanical and other special equipment, which he contemplates installing together with full information as to type, performance characteristics, and all other pertinent information as required, and shall likewise submit for approval as required full information concerning all other materials or articles which he proposes to incorporate in the work. (See Section 118 hereof)

c. Machinery, mechanical and other equipment, materials or articles installed or used without such prior approval shall be at the risk of subsequent rejection.

d. Materials specified by reference to the number or symbol of a specific standard, such as A.S.T.M. Standard, a Federal Specification or other similar standard, shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the date of the Invitation for Bids, except as limited to type, class or grade, or modified in such reference. The Standards referred to, except as modified in the Technical Specifications shall have full force and effect as though printed therein.

e. The City may require the Contractor to dismiss from the work such employee or employees as the City may deem incompetent, or careless, or insubordinate.

118. SAMPLES, CERTIFICATES AND TESTS

a. The Contractor shall submit all material or equipment samples, certificates, affidavits, etc. as called for in the Contract Documents or required by the Architect, promptly after award of the Contract and acceptance of the Contractor's Bond. No such material or equipment shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples or certificates have been approved in writing by the City or the Architect. Any delay in the work caused by late or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the contract time. Each sample submitted by the Contractor shall carry a label giving the name of the Contractor, the project for which it is intended, and the name of the producer. The accompanying certificate or letter from the Contractor shall state that the sample complies with Contract requirements, shall give the name and brand of the product, its place of origin, the name and address of the producer and all specifications or other detailed information which will assist the Architect or the City in passing upon the acceptability of the sample promptly. It shall also include the statement that all materials or equipment furnished for use in the project will comply with the samples and/or certified statements.

b. Approval of any materials shall be general only and shall not constitute a waiver of the City's right to demand full compliance with Contract requirements. After actual deliveries, the City or the Architect will have such check tests made as they deem necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and equipment have been given general approval. If materials, equipment or accessories which fail to meet check tests have been incorporated in the work, the City or the Architect will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by the Contractor as is equitable.

c. Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follows:

- (1) The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, except those samples taken on the project by the City or the Architect;
- (2) The Contractor shall assume all costs of retesting materials which fail to meet Contract requirements;
- (3) The Contractor shall assume all costs of testing materials offered in substitution for those found deficient; and
- (4) The City will pay for all other testing expenses.

119. CARE OF WORK

a. The Contractor shall be responsible for all damages to persons or property that occur as a result of his fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all work performed until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the City.

b. In an emergency affecting the safety of life, limb or property, including adjoining property, the Contractor, without special instructions or authorization from the City is authorized to act at his own discretion to prevent such threatened loss or injury, and he shall so act. He shall likewise act if instructed to do so by the City. Any compensation claimed by the Contractor on account of such emergency work will be determined by the City as provided in Section 109 hereof.

c. The Contractor shall avoid damage as a result of his operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and he shall at his own expense completely repair any damage thereto caused by his operations.

d. The Contractor shall shore up, brace, underpin, secure and protect as may be necessary all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the Improvements embraced in this Contract. The Contractor shall be responsible for the giving of any and all required notices to

any adjacent or adjoining property owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the City from any damages on account of settlements or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the City may become liable in consequence of such injury or damage to adjoining structures and their premises.

120. ACCIDENT PREVENTION

a. The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his fault or negligence in connection with the prosecution of the work. The safety provisions of applicable Federal, State and local laws and ordinances and building and construction codes shall be observed and the Contractor shall take or cause to be taken such additional safety and health measures as the City may determine to be reasonably necessary. Machinery, equipment, and all hazards shall be guarded in accordance with the safety provisions of the A Manual of Accident Prevention in Construction published by the Associated General Contractors of America, Inc., to the extent that such provisions are not in conflict with applicable local laws.

b. The Contractor shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The Contractor shall promptly furnish the Owner with reports concerning these matters.

121. SANITARY FACILITIES

The Contractor shall furnish, install, and maintain ample sanitary facilities for the workmen. As the needs arise a sufficient number of enclosed temporary toilets shall be conveniently placed as required by the sanitary codes of the State and Local Government. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

122. USE OF PREMISES

a. The Contractor shall confine his equipment, storage of materials, and construction operations to the Contract limits as shown on the Drawings and as prescribed by ordinances or permits, or as may be directed by the City, and shall not unreasonably encumber the site or public rights of way with his materials and construction equipment.

b. The Contractor shall comply with all reasonable instructions of the City and the ordinances and codes of the Local Government regarding signs, advertising, traffic, fires, explosives, danger signals, barricades.

123. REMOVAL OF DEBRIS, CLEANING, ETC.

The Contractor shall, periodically or as directed during the progress of the work, remove and legally dispose of all surplus excavated material and debris, and keep the Project Area and public rights of way reasonably clear. Upon completion of the work, he shall remove all temporary construction facilities, debris and unused materials provided for the work, and put the whole site of the work and public rights of way in a neat and clean condition. Trash burning on the site of the work will be subject to prior approval of the City and existing State and local regulations.

124. INSPECTION

a. All materials and workmanship shall be subject to inspection, examination or test by the City or the Architect at any and all times during manufacture or construction and at any and all places where such manufacture or construction is carried on. The City shall have the right to reject defective or substandard

material and workmanship or require its correction. Unacceptable workmanship shall be satisfactorily corrected. Rejected material shall be promptly segregated and removed from the Project Area and replaced with material of specified quality without charge therefor. If the Contractor fails to proceed at once with the correction of rejected workmanship or defective material, the City may contract or otherwise have the defects remedied or rejected materials removed from the Project Area and charge the cost of the same against any moneys which may be due the Contractor, without prejudice to any other rights or remedies of the City.

b. The Contractor shall furnish promptly all materials reasonably necessary for any tests which may be required. (See Section 118 hereof). All tests by the City will be performed in such a manner as not to delay the work unnecessarily and will be made in accordance with the provisions of the Technical Specifications.

c. The Contractor shall notify the City sufficiently in advance of back-filling or concealing any facilities to permit proper inspection. If any facilities are concealed without approval or consent by the City, the Contractor shall uncover for inspection and recover such facilities all at his own expense, when so requested by the City.

Should it be considered necessary or advisable by the City at any time before final acceptance of the entire work to make an examination of work already completed by uncovering the same, the Contractor shall on request promptly furnish all necessary facilities, labor, and material. If such work is found to be defective in any important or essential respect, due to fault of the Contractor or his subcontractors the Contractor shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the actual cost of labor and material necessarily involved in the examination and replacement, plus 15 percent of such costs to cover superintendence, general expenses and profit, shall be allowed the Contractor and he shall, in addition, if completion of the work of the entire Contract has been delayed thereby, be granted a suitable extension of time on account of the additional work involved.

d. Inspection of materials and appurtenances to be incorporated in the Improvements embraced in this Contract may be made at the place of production, manufacture or shipment, whenever the quantity justifies it, and such inspection and acceptance, unless otherwise stated in the Technical Specifications, shall be final, except as regards (1) latent defects, (2) departures from specific requirements of the Contract, (3) damage or loss in transit, or (4) fraud or such gross mistakes as amount to fraud. Subject to the requirements contained in the preceding sentence, the inspection of materials as a whole or in part will be made at the Project Site.

e. Neither inspection, testing, approval nor acceptance of the work in whole or in part, by the City or its agents shall relieve the Contractor or his sureties of full responsibility for materials furnished or work performed not in strict accordance with the Contract.

125. REVIEW BY THE CITY

The City, its authorized representatives and agents, and the Architect, shall, at all times have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, and other relevant data and records pertaining to this Contract; provided, however, that all instructions and approvals with respect to work will be given to the Contractor only by the City through its authorized representative or agents.

126. FINAL INSPECTION

When the work embraced in this Contract is substantially completed, the Contractor shall notify the City in writing that the work will be ready for final inspection on a definite date which shall be stated in such notice. The notice shall bear the signed concurrence of the representative of the City having charge of inspection. If the City determines that the status of the Improvements is as represented, it will make the arrangements necessary to have final inspection commenced on the date stated in such notice, or as soon thereafter as is practicable.

127. DEDUCTION FOR UNCORRECTED WORK

If the City deems it not expedient to require the Contractor to correct work not done in accordance with the Contract Documents, an equitable deduction from the Contract Price will be made by agreement between the Contractor and the City and subject to settlement, in case of dispute, as herein provided.

128. TIME

a. The Contract Time is the period of time allotted in the Contract for completion of the Work. The date of commencement of the Work is the date established in a notice to proceed issued by the City to the Contractor. The Contractor shall begin the Work upon receipt of the notice to proceed.

b. The term "day" as used herein shall mean calendar day.

c. If a date of completion is included in the Contract, it shall be the Date of Substantial Completion of the Work, including authorized extensions thereto. The "Date of Substantial Completion of the Work" is the date certified by the City when construction is sufficiently complete, in accordance with the Contract, so the City may occupy the Work for the use for which it is intended.

129. INSURANCE

The Contractor shall carry the following insurance, at his expense and no direct payment for premiums shall be made by the City. Carriage of such insurance shall in no way alleviate the Contractor of his responsibilities under the contract.

a. The Contractor will be required to carry insurance of the kinds and in the amounts hereinafter specified. The Contractor shall not commence work under the contract until he has obtained all the insurance required by these specifications and until such insurance has been approved by the City Attorney, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor shall have been so obtained and approved.

b. Insurance

The Contractor shall provide Commercial General Liability in an amount not less than \$1,500,000.00 combined single limit and Automobile Liability Insurance in an amount not less than \$1,500,000.00 combined single limit shall be in a company licensed to do business in Minnesota; and shall provide for the following: Liability for Premises, Operations, Completed Operations, Independent Contractors, and Contractual Liability. Property damage coverage for explosion, collapse, and underground Axcu to be included. City of Duluth shall be named as Additional Insured under the Commercial General Liability policy. Contractor shall also provide evidence of Statutory Worker's Compensation Insurance. Contractor to provide Certificate of Insurance evidencing such coverage with 30-day notice of cancellation, non-renewal, or material change provision included.

c. Subcontractor's Insurance

In the event any work contemplated by the contract is sublet, the Contractor shall have the duty to assure that the subcontractors provide insurance in accord with the minimum requirements hereinabove imposed on the Contractor.

d. Proof of Insurance

The Contractor shall not proceed with the work contemplated in this contract until he has furnished the City Attorney of the City of Duluth with satisfactory proof of the existence and carriage of insurance of the kinds and in the amounts specified.

e. Indemnification

The Contractor shall defend, indemnify and save harmless the City and all of its officers, agents and employees from all suits, actions or claims of any character, name and description brought for on account of any injuries or damages received or sustained by any person, persons or property, by or from the act or acts of said Contractor, or by or in consequence of any negligence in safeguarding the work, or through the use of unacceptable materials in constructing the work, or by or on account of any act or omission, neglect or

misconduct of said Contractor, or from any claims or amount arising or recovered under the Workmen= Compensation Law or any other law, by-law, ordinance, order or decree, and so much of the money due the said Contractor under and by virtue of his contract, as shall be considered necessary by the City may be retained for the use of the City or in case no money is due, his surety shall be held until such suit or suits, action or actions, claim or claims, for injuries or damages as aforesaid, shall have been settled and suitable evidence to that effect furnished to the City. The Contractor shall indemnify and save harmless the City from any and all losses caused by or on account of any claims or amounts recovered for any infringement of patent, trademark, or copyright. The unauthorized use by the Contractor of public or private property for any purpose may be considered an injury or damage to the property so used.

130. PATENTS

The Contractor shall hold and save the City, its officers, employees, representatives and agents, and the Architect, harmless from liability of any nature or kind, including costs and expenses, for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the City, unless otherwise specifically stipulated in the Technical Specifications.

131. WARRANTY

No material, supplies, or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease-purchase or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the City free from any claims, liens, or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by this Contract shall have any right to a lien upon any improvement or appurtenance thereon. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the City. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notices for the work when no formal contract is entered into for such materials.

132. GENERAL GUARANTY

- a. Neither the final certificate of payment nor any provisions in the Contract nor partial or entire use of the improvements embraced in this Contract by the City or the public shall constitute an acceptance of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which subsequently appears. The City will give notice of defective materials and work with reasonable promptness.
- b. If, within one year after the Date of Substantial Completion or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract, any of the Work is found to be defective or not in accordance with the specifications of the Contract, the Contractor shall correct it promptly upon receipt of a written notice from the City to do so, unless the City has previously given the Contractor a written acceptance of such condition or work.

133. ENVIRONMENTAL CONDITIONS

Waste Disposal: The SUBRECIPIENT shall comply with the most recent Minnesota Pollution Control Agency (MPCA) waste disposal requirements and include said disposal requirements in the project=s base bid specifications. Waste material, including but not limited to: construction/demolition debris, asbestos-

containing material, residential lead paint waste, hazardous waste, and above- and under-ground tanks, shall be disposed of at MPCA-permitted landfill sites only. Copies of all notification, shipment, and landfill receipt records shall be maintained in the subrecipient's project file.

Minnesota Pollution Control Agency
520 Lafayette Rd., St. Paul, MN 55155
(800) 657-3864

a. Construction/Demolition Waste.

Construction/demolition debris will be disposed of at a Minnesota Pollution Control Agency (MPCA) permitted landfill site only, with copies of all landfill receipts for said debris maintained in the subrecipient's project file. *(Solid Waste Management Rules, Chapter 7001 & 7035)*

b. Asbestos-Containing Waste.

All asbestos removal and disposal shall be in strict accordance with all applicable permits. The contract bidder shall include the price of all permits, testing, removal, and disposal in the project base bid.

- Project asbestos-containing material removal pursuant to USEPA 40 CFR 61.145 Standard for Demolition and Renovation.
- All asbestos-containing waste material shall be disposed of pursuant to USEPA 40 CFR 61.150 at a MPCA permitted landfill site only, in accordance with the provisions of USEPA 40 CFR 61.154.
- For all asbestos-containing material, a copy of the MPCA Notification of Demolition and Renovation record and all Waste Shipment records shall be maintained in the subrecipient's project file.

c. Hazardous Waste Material.

The MPCA shall be contacted for instructions on handling and disposing of materials containing Polychlorinated Biphenyls (PCBs) or any other identified/encountered hazardous materials. A copy of all correspondence and disposal records shall be maintained in the subrecipient's project file.

- MPCA Hazardous Waste Compliance Guide -- October 1989, Revised January 1991
- MPCA Hazardous Waste Fact Sheet Checklist -- August 1993

d. Above and Below Ground Storage Tanks.

The MPCA Tanks and Spills Section shall be contacted for instructions on handling or removal of all above- and underground tanks identified/encountered. A copy of all correspondence and disposal records shall be maintained in the subrecipient's project file.

e. Residential Lead Paint Waste.

Projects whose activities produce residential lead paint waste are responsible for the management and proper disposal of the waste at an MPCA permitted landfill site only, pursuant to Minn. Stat. sections 116.87, 116.875, 116.88. A copy of the Residential Lead Abatement Notification and Shipping forms shall be maintained in the subrecipient's project file.

134. CONTRACTOR'S RECORDS

The contractor agrees that, as provided in Minnesota Statutes 16C.05, Subd. 5, contractor's books, records, documents, and accounting procedures and practices are subject to examination by the city or the state auditor for three years from the date of execution of this contract.

(End of Document)

CITY OF DULUTH - PART II -
SUPPLEMENTARY GENERAL CONDITIONS FOR FEDERALLY AND/OR CITY ASSISTED ACTIVITIES
(revised 9/2/09)

The following conditions take precedence over any conflicting conditions in this Contract.

<u>Section</u>	<u>Title</u>
1	Restrictions on Disbursements, Subcontractors Federal Agency Requirements, Separability, Property
2	Miscellaneous Provisions
3	Definitions
4	Environmental Provisions
5	Contract Compliance
6	Records, Reports and Information, Audits and Inspections
7	Conflict of Interest and Lobbying
8	Labor Standards - Physical Improvement Projects
9	Minnesota Department of Transportation Specification 1960 Partial Payments
10	Housing and Urban Development (HUD) Section 4010
11	Equal Opportunity and Affirmative Action
12	Employment Opportunities - "HUD Section 3"
13	Federal Requirements for Minority/Women Business Enterprises Contract Guidance - MPFA
14	Forms

Section I

Restrictions on Disbursements

No money under this Contract shall be disbursed by the City to any Contractor except pursuant to a written contract which incorporates the applicable PART II, Supplementary General Conditions for Federally and/or City Assisted Activities, and unless the Contractor is in compliance with the Federal Agency requirements with regard to accounting and fiscal matters to the extent they are applicable.

Subcontractors

(A) The Contractor shall include in any subcontract the clauses set forth in the PART II, Supplementary General Conditions for Federally and/or City Assisted Activities in their entirety and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

(B) The Contractor shall not subcontract any part of the work covered by this Contract or permit subcontracted work to be further subcontracted without the City's prior written approval of the subcontractors. The City will not approve any subcontractor for work covered by this Contract who is at the time ineligible under the provisions of any applicable regulations issued by a Federal Agency or the Secretary of Labor, United States Department of Labor, to receive an award of such subcontract.

Federal Agency Requirements

Unearned payments under this Contract may be suspended or terminated upon refusal to accept any additional conditions that may be imposed by the Federal Agency at any time; or if the grant, if applicable, to the City under which this Contract is made is suspended or terminated.

Separability

If any provisions of this Contract is held invalid, the remainder of this Contract shall not be affected thereby if such remainder would then continue to conform to the terms and requirements of applicable law.

Property

Acquisition, use, and disposal of all property, materials and goods acquired as a result of activities made possible by this Contract shall be accomplished in accordance with the applicable provisions of Federal Management Circular (FMC)-74-7, as amended.

Section 2

Miscellaneous Provisions

(A) **Copyrights.** In the event this Contract results in a book or other copyrightable material, the author is free to copyright the work, but Federal Agency and the City reserve a royalty-free, nonexclusive, and irrevocable license to reproduce, publish or otherwise use, all copyrighted material and all material which can be copyrighted.

(B) **Patents.** Any discovery or invention arising out of or developed in the course of work aided by this Contract shall be promptly and fully reported to the Federal Agency and the City for determination by the Federal Agency as to whether patent protection on such invention or discovery shall be sought and how the rights in the invention or discovery, including rights under any patent issued thereon, shall be disposed of and administered in order to protect the public interests.

(C) **Political Activity Prohibited.** None of the funds, materials, property or services provided directly or indirectly under this Contract shall be used in the performance of this Contract on any partisan political activity, or to further the election or defeat of any candidate for public office.

(D) **Lobbying Prohibited.** None of the funds under this Contract shall be used for publicity or propaganda purposes designed to support or defeat legislation pending before the Congress or the City.

(E) **Prohibition of and Elimination of Lead-Based Paint Hazard.** Notwithstanding any other provision, the Agency and Contractor agree to comply with the regulation issued by the Secretary of Housing and Urban Development set forth in 37 F. R. 22732-3 and all applicable rules and orders issued thereunder which prohibit the use of lead-based paint in residential structures undergoing Federally assisted construction or rehabilitation and require the elimination of lead-based paint hazards. Every contract or subcontract, including paint, pursuant to which such Federally assisted construction or rehabilitation is performed shall include appropriate provisions prohibiting the use of lead-based paint.

(F) **Architectural Barriers Act.** The design for and construction of any facility funded in whole or in part by this Contract shall be in conformance with the American Standard Specification for Making Buildings and Facilities Accessible and Usable by the Physically Handicapped, Number A-117.1-1971, as modified.

(G) **Relocation and Acquisition.** Any relocation or acquisition resulting from activities funded in whole or in part by this Contract shall be in conformance with the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (40 U.S.C. 4601) and the implementing regulations 24CFR Part 42.

(H) **Prohibition Against Payments of Bonus or Commission.** The assistance provided under this Contract shall not be used in the payment of any bonus or commission for the purpose of obtaining Federal Agency approval for such assistance, or Federal Agency approval of applications for additional assistance, or any other approval or concurrence of a Federal Agency required under this Contract, Federal Law or Federal Regulations thereto; provided, however, that reasonable fees or bonafide technical, consultant, managerial or other such services, other than actual solicitation, are not hereby prohibited if otherwise eligible as project costs.

(I) **Hatch Act.** Where applicable, the Contractor will comply with the provisions of the Hatch Act which limits the political activity of the Contractor's employees.

Section 3
Definitions

(A) City means the City of Duluth, Contracting Officer, or other persons authorized to act on behalf of the City of Duluth.

(B) Contracting Officer is the delegated representative of the City who has the responsibility for administering the Project.

(C) Contractor means an entity, whether public or private, which furnishes (other than standard commercial supplies, office space or printing services) to the City, products, services or supplies as described in this project Contract.

(D) Federal Agency means the United States, the District of Columbia, and any executive department, independent establishment, administrative agency, or instrumentality of the United States or of the District of Columbia, including any corporation, all or substantially all of the stock of which is beneficially owned by the United States, by the District of Columbia, or by any of the foregoing departments, establishments, agencies, and instrumentalities. The term Federal Agency shall also include the person or persons authorized to act on behalf of said Federal Agency.

(E) Project means the activities to be undertaken by the Contractor as described in this Contract, which from time to time may be amended by mutual consent of the City and Contractor.

(F) Subcontractor means an entity, regardless of tier, which has entered into an agreement with the Contractor or another Subcontractor, to undertake certain Project activities as described in that agreement.

(G) The term labor standards, as used in the Contract, means the requirements of the Davis-Bacon Act, the Contract Work Hours and Safety Standards Act (other than those relating to safety and health), the Copeland Act, and the prevailing wage provisions of the other statutes listed in 20 CFR 5.1.

(H) Work means all labor necessary to produce the construction required by the Contract Documents, all materials and equipment incorporated or to be incorporated in such construction, products, services, or supplies required by the Contract Documents, or any other requirements set forth in the Contract.

(I) Additional Definitions, that are applicable to the Labor Standards provisions - Section 8 - of this Contract can be found in 29CFR5.2 as published by the U.S. Department of Labor and said definitions are hereby incorporated by reference into the provisions of this Contract.

Section 4
Environmental Provisions

(A) The Contractor agrees to follow the regulations, requirements, policies, goals and procedures set forth by the Council on Environmental Quality (CEQ) under provisions of the National Environmental Policy Act (NEPA) (Pub. L 91-190, 42 U.S.C. 4321 et seq.), Executive Order 11514, and 40 CFR Part 1500.

(B) **Historic Properties.** The Contractor agrees to follow the regulations, requirements, policies, goals, and procedures set forth under provisions of the National Historic Preservation Act of 1966 (Pub. L. 89-665); Preservation of Historic and Archeological Data Act of 1974 (Pub. L. 93-291); Executive Order 11593; 36 CFR , Part 800 and applicable State legislation or regulations.

(C) **Coastal Zones and Wetlands.** The Contractor agrees to follow the regulations, requirements, policies, goals and procedures set forth under provisions of the Coastal Zone Management Act of 1972 (Pub. L. 92-583) and applicable State legislation or regulations.

(D) **Noise.** The Contractor agrees to comply with provisions set forth in the U.S. Department of Housing and Urban Development Handbook 1390.2, Noise Abatement and Control, Department Policy, Responsibility and Standards, 1971.

(E) **Flood Plain.** The Contractor agrees to comply with the provisions set forth in the Flood Disaster Protection Act of 1973 (Pub. L. 93-234) and implementing regulations; Title 24, Chapter X, Subchapter B, National Flood Insurance Program, Executive Order 11296, and Executive Order 11988 relating to the evaluation of flood hazards.

(F) **Air Quality.** The Contractor agrees to comply with provisions set forth in the Clean Air Act (Pub. L. 90-148) and Clean Air Act Amendments of 1970 (Pub. L. 91-604); and applicable U.S. Environmental Protection Agency implementing regulations.

(G) **Water Quality.** The Contractor agrees to comply with the provisions set forth in the Federal Water Pollution Control Act (Pub. L. 92-500) and applicable U.S. Environmental Protection Agency implementing regulations, and Executive Order 11288 relating to the prevention, control, and abatement of water pollution.

(H) **Wildlife.** The Contractor agrees to comply with the provisions of the Fish and Wildlife Coordination Act (Pub. L. 85-264).

Section 5
Contract Compliance

(A) In the event of the Contractor's noncompliance with the provisions of this Contract or with any of the said regulations, the City may withhold payment(s) until evidence of compliance by the Contractor has been demonstrated, or the Contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further City contracts.

(B) In the event the Contract is terminated or canceled as a result of noncompliance with any of the provisions of this Contract, the City may subject to bids the remainder of the Project for which this Contract was made. The City shall have the right upon termination or suspension to withhold all further payments under this Contract to the Contractor. Upon the award of a new contract for the remainder of the Project, the City shall pay to the Contractor an amount no more than the balance remaining due to the Contractor less the sum of the costs incurred by the City which are necessary in preparing the new bid specifications. In the event the amount paid the Contractor prior to the date of termination or cancellation exceeds the full amount of this Contract less the cost of the new contract and the additional costs mentioned above, the Contractor agrees to reimburse the City for such excess amount within ninety days after the new contract is awarded by the above procedures.

(C) Provisions contained in subparagraph (A) and (B) above shall not be interpreted as precluding any authorized Federal, State, or County governmental unit from exercising their legal administrative or other responsibilities in respect to the enforcement by said governmental units of laws or regulations concerning activities of the Contractor.

Section 6
Records

(A) **Establishment and Maintenance of Records.** Records shall be maintained in accordance with requirements prescribed by the Federal Agency or the City with respect to all matters covered by this Contract. Except as otherwise authorized by the Federal Agency, such records shall be maintained for a period of three years after receipt of final payment under this Contract.

(B) **Documentation of Costs.** All costs shall be supported by properly executed payrolls, time records, invoices, contracts, or vouchers, or other official documentation evidencing in proper detail the nature and propriety of the charges. All checks, payrolls, invoices, contracts, vouchers, orders, or other accounting documents pertaining in whole or in part to this Contract shall be clearly identified and readily accessible.

Reports and Information

At such times and in such forms as the Federal Agency or the City may require, there shall be furnished to the Federal Agency or the City such statements, records, data and information as the Federal Agency or the City may request pertaining to matters covered by this Contract.

Audits and Inspection

At any time during normal business hours and as often as the City, the Federal Agency and/or the Comptroller General of the United States may deem necessary, there shall be made available to the City, the Federal Agency and/or representatives of the Comptroller General for examination of all its records with respect to all matters covered by this Contract and will permit the City, the Federal Agency and/or representative of the Comptroller General to audit, examine and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment, and other data relating to all matters covered by this Contract.

Section 7

Conflict of Interest and Lobbying

(A) **Interest of Members, Officers, or Employees of the City, Members of Local Governing Body, or Other Public Officials.** No member, officer, or employee of the City, or its designees or agents, or member of the governing body of the City, during his/her tenure of for one year thereafter, shall have any interest, direct or indirect in any contract or subcontract, or the proceeds thereof, for work to be performed in connection with the Project assisted under this Contract. Any contract in which any of the above indicated individuals becomes directly or indirectly, interested, personally or as a member of a firm, or as an officer, director, or stockholder of a corporation, shall be and become absolutely void; and any money which shall have been paid on such contract by the City may be recovered back from any or all persons interested therein, by a joint action or several actions.

(B) The Contractor agrees that he will incorporate into every contract required to be in writing the following provisions: **Interest of Contractors and Employees** - The Contractor covenants that he presently has no interest and shall not acquire any interest, direct or indirect, in the Project which would conflict in any manner or degree with the performance of this Contract, and no person having any conflicting interest shall be employed. Any interest on the part of the Contractor or his employees must be disclosed to the Federal Agency and the City. Provided, however, that this paragraph shall be interpreted in such a manner so as not to unreasonably impede any statutory requirements that opportunity be provided for employment of and participation by certain residents of a designated geographical area, if applicable.

(C) **Interest of Member or of Delegate to Congress.** No member of or Delegate to Congress, or Resident Commissioner, shall be admitted to any share or part of this Contract or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this Contract if made with a corporation for its general benefit.

(D) The Contractor by signing this document certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of any 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.

(2) 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 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 Contractor shall complete and submit Standard Form -LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

The above 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 1332, 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.

(E) The parties to this Contract certify and agree that they are under no contractual or other disability which would prevent them from complying with the terms of this Contract.

Section 8

Labor Standards - Physical Improvement Projects

Where applicable, there shall be included in all construction, rehabilitation, alteration or repair contracts with private entities made possible by or resulting from this Contract, the following Labor Standards provisions;

(A) General Requirements.

(1) **Subcontracts.** The Contractor shall include in any subcontract the clauses set forth in Section 8, **Labor Standards**, in their entirety and also a clause requiring the subcontractors to include these clauses in any Tower tier subcontract which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

(2) The transporting of materials and supplies to or from the site of the Project or Program to which this Contract pertains by the Employees of the Contractor or of any subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the Project or Program to which this Contract pertains by persons employed by the Contractor or by any subcontractor, shall for the purpose of this Contract, and without limiting the generality of the foregoing provisions of this Contract, be deemed to be work to which these **Labor Standards** provisions are applicable.

(3) No person under the age of eighteen years shall be employed on work covered by this Contract.

(4) In connection with the performance of work under this Contract, the Contractor agrees not to employ any person undergoing sentence of imprisonment except as provided by Public Law 89-176, September 10, 1955 (18 U.S.C. 4082 (c) (2)) and Executive Order 11755, December 29, 1973.

(5) The Contractor will permit authorized representatives of the Federal Agency and the City to interview employees during working hours on the job.

(6) No employee to whom the wage, salary, or other **Labor Standards** provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the Labor Standards applicable under this Contract to his employer.

(B) **Safety Standards.** No Contractor or subcontractor contracting for any part of a construction contract shall require any laborer or mechanic, including apprentices and trainees, employed in the performance of the Contract to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous to his

health or safety, as determined under construction safety and health standards promulgated by the Secretary of Labor. The Contractor or subcontractor comply with all the rules, regulations, and relevant orders, promulgated by the Secretary of Labor pursuant to Public Law 91-54.

(C) **Davis-Bacon Act - 29 CFR 5.5**

Refer to Section 10, Page 9

Housing and Urban Development (HUD) form-4010 (07/2003) Ref Handbook 1344.1

City of Duluth "Mini Davis-Bacon"

(D) **City of Duluth - Minimum Wage Ordinance 8940, as Amended.**

(1) On a project (as defined below) funded in whole or in part by federal and/or state funds, these local provisions shall prevail in those instances where the requirements of the local provisions are equal to or greater than similar minimum labor standards provisions as set forth in applicable federal and/or state laws and regulations.

(2) In all contracts in excess of \$2,000 for projects (as defined below), the Contractor's particular attention is called to Ordinance 8940, effective June 8, 1989, respectively coded as Article IV of Chapter 2 of the Duluth City Code, and entitled "An Ordinance Pertaining to Wages and Working Hours of Persons on Public Works in the City of Duluth", as set forth below:

(3) **Definitions.**

For the purposes of this section the following words and phrases shall have the meanings respectively ascribed to them in this section:

(a) **Basic hourly rate.** - The hourly wage paid to any employee.

(b) **Prevailing wage rate.** - The basic hourly rate plus fringe benefits prevailing in the city of Duluth as determined by the United States secretary of labor pursuant to the Davis-Bacon act, as amended; provided that whenever employer and employee organizations employing and representing a majority of a class of workers in a particular industry within the city jointly certify that the prevailing basic hourly rate plus fringe benefits of such workers differs from the amount determined by the secretary of labor, the certified rate shall be considered to be the prevailing wage rate for such class of workers in that industry.

(c) **Fringe benefits.** - Employer contribution for health and welfare benefits, vacation benefits, pension benefits, and all other economic benefits other than the basic hourly rate.

(d) **Apprentice** - An employee who is working under a training program which is approved either by the U.S. Department of Labor Bureau of Apprenticeship & Training or the Minnesota Director of Voluntary Apprenticeship; see apprentice ratios on page 22 and HUD 4010 in Section 10..

(e) **Trainee** - An employee registered with the U. S. Department of Labor Employment & Training Administration; see HUD 4010 in Section 10.

(e) **Project.** - Erection, construction, demolition, painting, remodeling or repairing of any public building, highway, sidewalk, bridge, water or gas line, sewer and sewage treatment facility or other public work performed under contract with the city.

(f) **Labor, mechanic.** - All persons utilized, employed or working on a project who are doing work usually done by mechanics and laborers, including proprietors, partners, and members of cooperatives.

(4) **Wage Rates and Hours for City of Duluth Projects.**

(a) Any contract which provides for a project of estimated total cost of over \$2,000.00 shall contain a stipulation that no laborer, mechanic or apprentice-trainee employed directly upon the project work site by the contractor or any subcontractor shall be permitted or required to work at a rate of pay less than the prevailing wage rate; nor shall any such employee be permitted or required to work more than 8 hours in any work day or 40 hours in any work week unless he is paid at a rate of at least 1½ times the basic hourly rate for all hours in excess of 8 per day or after 40 per week and unless he receives fringe benefits that are at least equal to those in the prevailing wage rate; provided that whenever employer and employee organizations employing and representing a majority of a class of workers in a particular industry within the city jointly certify that the maximum number of hours that such persons may work under existing labor agreements before overtime wages must be paid differs from the hours specified in this paragraph, the maximum number of hours specified in such labor agreements shall be substituted for those specified above in applying the provisions of this paragraph to such workers.

(b) The word "or" in the state statute and the City of Duluth Code refers to the number of hours worked in any one week or, in the alternative, the number of hours worked in any one day in the week (the days in one week being totaled for reporting purposes); the law requires use of the alternative which results in the higher number of overtime hours for each employee whose time is being reported. All hours exceeding 40 per week are subject to overtime in addition to the daily overtime requirements.

EXCEPTIONS: Federal government funding only and HUD (Housing and Urban Development) funding - see point "e"

In summary, if a project is solely funded with City of Duluth monies, the City allows the employees to work four ten-hour days and be paid at the regular hourly rate for those ten hours; exceeding hours must be paid at the overtime rate. An employer may not withhold overtime payment exclusively until 40 hours per week have been worked. Daily overtime must be paid as it is earned.

- **The base workweek hours must be clearly indicated on each payroll. Employees may be assigned a different workweek; however, that must be clearly marked beside the employees' names.**

The following are examples of how these rules apply to different situations.

- TT refers to the total time worked on the day or in the week
- RT refers to the hours worked at the regular rate of pay (straight time)
- OT refers to the hours worked for which overtime must be paid

	State Funded with or without federal funding Projects							City-only Funded Projects (4 ten-hour days)						
	Mon	Tues	Wed	Thurs	Fri	Sat	Total	Mon	Tues	Wed	Thurs	Fri	Sat	Total
TT	10	10	10	10	0	6	46	10	10	10	10	0	6	46
RT	8	8	8	8	0	6	38	10	10	10	10	0	0	40
OT	2	2	2	2	0	0	8	0	0	0	0	0	6	6

	State Funded with or without federal funding Projects							City-only Funded Projects (4 ten-hour days)						
	Mon	Tues	Wed	Thurs	Fri	Sat	Total	Mon	Tues	Wed	Thurs	Fri	Sat	Total
TT	0	10	10	0	7	0	27	10	0	12	0	0	0	32
RT	0	8	8	0	7	0	23	10	0	10	10	0	0	30
OT	0	2	2	0	0	0	4	0	0	2	0	0	0	2

(c) Overtime Calculations

Minnesota Statutes Chapter 177.42, subd 4 specifies that the prevailing hours of labor may not be more than eight hours per day or more than 40 hours per week (as stated above in (b)), the City of Duluth does allow for ten hours per day/40 hours per week with City funding *only*.

Minnesota Statutes Chapter 177.42, subd 5 defines the hourly basic rate as the hourly wage paid to any employee. (subd 6): The prevailing wage rate means the hourly basic rate of pay plus the contribution for health and welfare benefits, vacation benefits, pension benefits, and any other economic benefit paid to the largest number of workers engaged in the same class of labor within the area...

Minnesota Statutes Chapter 177.43, subd 1 (1) ...employees are permitted to work more hours than the prevailing hours of labor [being] paid for all hours in excess of the prevailing hours at a rate of at least 1-1/2 times the hourly basic rate of pay. (2) A laborer or mechanic may not be paid a lesser rate of wages than the prevailing wage rate in the same or most similar trade or occupation in the area.

An employer may pay a lower hourly rate and higher fringe benefit rate--to a bona fide plan--than stated in the wage decision providing the total of the two rates is equal to or greater than the total in the wage decision.

Overtime Calculation with Fringe Benefits Paid to Bona Fide Plans

For overtime purposes, an employer paying higher fringe benefits to a bona fide plan and paying a lower hourly rate **MUST** calculate the overtime on the higher hourly rate as stated in the contract's wage decision.

Overtime Calculation with Cash Payment of Fringe Benefits

When the fringe benefit is paid directly to an employee, the prevailing base rate and the fringe benefit rate for a specific classification are totaled to arrive at the hourly rate. *Overtime is calculated (1.5 x) the base rate with the fringe benefit amount added to that rate: base rate x 1.5 + fringe benefit rate = overtime rate.*

(d) A contractor shall not reduce a worker's private, regular rate of pay when the wage rate certified by the U. S. Department of Labor or the Minnesota Department of Labor & Industry is less than the worker's normal hourly wage [Minnesota Statute 181.03 subdivision 1(2)].

(e) Regular Time & Overtime Definitions

- **State of Minnesota** funded projects with or without federal funding *only allow for five eight-hour days per week at regular time*. Overtime is calculated at a rate not less than time and one-half (1.5) of the prevailing base rate as stated in the wage decision--OR the base rate the employee is being paid if it is higher than the required base rate--plus the straight time fringe benefit amount.
- **City of Duluth** funded projects do permit four ten-hour work days at regular time--see point 4-a, b for stipulations. Overtime is calculated at a rate not less than time and one-half (1.5) of the prevailing base rate as stated in the wage decision--OR the base rate the employee is being paid if it is higher than the required base rate--plus the straight time fringe benefit amount.
- **Federal** funded only projects allow overtime pay for hours worked in excess of 40 in a workweek at a rate not less than time and one-half (1.5) of the prevailing base rate as stated in the wage decision--OR the base rate the employee is being paid if it is higher than the required base rate--plus the straight time fringe benefit amount.
- **HUD** funded projects allow overtime pay for hours worked in excess of 40 in a workweek at a rate not less than time and one-half (1.5) of the prevailing base rate as stated in the wage decision--OR the base rate the employee is being paid if it is higher than the required base rate--plus the straight time fringe benefit amount.

(f) The minimum hourly prevailing wages are contained in each project specification. When both federal (general decision rates from the U. S. Department of Labor) and State of Minnesota prevailing wages for state funded construction projects from the Minnesota Department of Labor and Industry are used, the prime contractor and all subcontractors including trucking operations, are required to pay the higher of the two wages for all laborers and mechanics [MnDOT Contract Administration Manual, Section 5-591.320].

(g) The prime contractor and any lower-tier subcontractor shall review all wage decisions and compensate a worker according to the type of work performed and at the rate that is the greatest.

(h) State of Minnesota prevailing wages typically list two rates for each classification with two effective dates. Should any City of Duluth contract continue to and past the second effective date, that rate and fringe benefit will be in effect through the remainder of the project.

(i) All contracts for city projects shall have applicable schedules of prevailing wage rates set forth in the contract. Schedules of applicable prevailing wage rates shall be present on all project job sites and shall either be posted on the site or be on the person of any supervisor in charge of the job site.

(j) Employees on projects shall be paid at least weekly. Fringe benefits shall be paid either in cash or to an employee benefit plan that has been approved by the U.S. Department of Labor.

☐ The fringe benefit package is an integral portion of the prevailing wage. Should the prime contractor become delinquent with any fringe benefit plan administrator's requirements for monthly payment, an estimated amount due that plan plus penalties will be withheld from the monthly estimate(s). This also pertains to subcontractors; their fringe plan payment delinquency will affect the monthly estimate(s) in the same manner. See MnDOT Specification 1906 on page eight.

See Statement of Compliance and Certified Payroll Report requirements in Section 10, HUD 4010 and web sites in Section 14, Forms.

(k) Any contractor or subcontractor working on a project shall furnish the City with **original** certified payroll reports with **original signatures** relating to the project. Such certified payroll reports shall be **submitted weekly** on U.S. Department of Labor standard forms (WH-347) or their equivalent--using the same format--to the City of Duluth Labor Standards representative. All City of Duluth funded projects must have the base workweek hours indicated on the

certified payroll form and/or beside each employee's name (should some employees be working different base workweeks).

(l) No contractor or subcontractor working on a project shall evade or attempt to evade the provisions of this section through the use of non-recognized training programs. The only employees involved in training programs that shall be allowed to work on projects covered by this section shall be apprentice-trainees as defined by this article.

(m) Any person violating the provisions of this section shall be guilty of a misdemeanor with each day of violation constituting a separate offense. In addition, if the prevailing wage rate and accompanying fringe benefit rate is not paid to employees working on a project, the City of Duluth may withhold contract payments to the prime contractor until such deficiencies are corrected. Should fringe benefits be paid to authorized Plans, the payments must be made within the demands of those Plans. Delinquencies may result in withholding of project funds to the prime contractor.

(n) This section shall not apply to contracts for projects where the total cost of the project is less than \$2,000.00; nor to materialmen who do no more than deliver materials to the work site, except that this section shall apply to employees who deliver asphalt, concrete or mineral aggregate such as sand, gravel or stone where such material is incorporated into the project by depositing the material substantially in place, either directly or through spreaders, from the transporting vehicle.

(5) **Helpers**

A helper may perform work *only* if the helper classification is specified and defined in the federal wage decision and/or State of Minnesota wage decision incorporated into the project contract. Without such a helper classification, the contractor must assign a job classification that is the "same or most similar" [Minnesota Statute 177.44, subdivision 1] and compensate the helper for the actual work performed regardless of the helper's skill level.

(5) **Apprentice Ratios**

Journeyworkers must be on site with the apprentices and their hours must match.

FUNDING SOURCE:

City of Duluth and State of Minnesota with or without Federal funding

(i) Apprentices are not permitted to work alone under any circumstances.

(ii) Working foremen are acceptable as a journeyworker PROVIDING he/she is in the same classification.

» Example: carpenter foreman and carpenter apprentice

- Ratios are determined by the trade's labor agreement.
- In the absence of ratio language, the following State of Minnesota apprenticeship ratios will be applied:
(apprentice:journeyworker) 1:1 2:4 3:7 4:10, etc.
- Employees working in excess of the allowable ratio must be paid the full journeyworker compensation.
- Out-of-ratio apprentices will be calculated beginning with the **apprentice at the highest level of training** and, then, to less senior apprentices in their rank order.
- Should two or more out-of-ratio apprentices have the same level of training, whomever was on the work site first will receive journeyworker pay; if the apprentices at the same level of training began work on the project site at the same time, hours worked out-of-ratio for which restitution is due will be divided among those apprentices.

Examples:

Four apprentices working unsupervised are on site. [4:0]

Ratio calls for four apprentices and ten journeyworkers [4:10]

Correction: all apprentices will receive the full journeyworker compensation as apprentices are not permitted to work alone.

Three apprentices and two journeyworkers are on site. [3:2]

Ratio calls for three apprentices and seven journeyworkers [3:7]

Two journeyworkers may accompany only one apprentice; therefore, the two highest level apprentices are paid the full journeyworker compensation.

Even though this particular job has three apprentices—the second journeyworker is a mute point; a third journeyworker would also be a mute point in this example.

Correction: the two highest level apprentices are paid the full journeyworker compensation and the third lower level apprentice is considered in ratio.

HUD (CDBG) and Federal funding only

- Apprentices are not permitted to work alone unless the U. S. Department of Labor-approved agreement allows that practice.
- Working foremen are acceptable as a journeyworker PROVIDING he/she is in the same classification.
» Example: electrician foreman and electrician apprentice
- Ratios are determined by the trade's U. S. Department of Labor-approved agreement.
- In the event of the absence of ratio language in the applicable agreement, the Minnesota Department of Labor ratio of one apprentice for the first journeyworker and one apprentice for each three journeyworkers thereafter will be applied, (i.e., 1:1, 2:4, 3:7, 4:10, etc.).
- **The legal apprentices are those who first came to work on the job site;** in the event that all apprentices begin work on the project site at the same time, hours worked out-of-ratio for which restitution is due will be divided among the apprentices.
- Time cards will be required to substantiate the start times.
- Employees working in excess of the allowable ratio—or for which U. S. Department of Labor-apprentice agreement/certificate is not provided—must be paid the full journeyworker compensation.

Examples:

Four apprentices and one journeyworker are on site. [4:1]

Ratio calls for four apprentices and ten journeyworkers. [4:10]

The first apprentice on site is considered in ratio as one journeyworker may only accompany one apprentice [1:1]; this particular job has four apprentices.

Correction: the second through the fourth apprentices coming on site are paid the full journeyworker compensation.

Six apprentices and two journeyworkers are on site [6:2]

Ratio calls for six apprentices and sixteen journeyworkers [6:16]

The first apprentice on site is considered in ratio as two journeyworkers may only accompany one apprentice; this particular job has six apprentices—the second journeyworker is a mute point.

Correction: the second through sixth apprentices coming on site are paid the full journeyworker compensation.

(6) **Poster Boards**

The prime contractor must construct and display a poster board, which contains all required posters, is legible and is accessible to all workers from the first day of work until the project is 100% complete. Prime contractors are not allowed to place a poster board at an off-site facility location.

(7) **Trucking Issues**

a) For the purpose of sections seven and eight, the term "owner" includes all persons having an ownership interest in the trucking entity or a partnership interest in the trucking entity and has a legal and rightful title to the vehicle(s) or has an approved lease on the vehicle(s). "Operate" means the owner either physically drives the vehicle or hires another to physically drive the vehicle, yet maintains the right to direct the day-to-day operations of the vehicle.

b) **Trucking Operations Definitions:**

Independent Trucking Operator: an individual or partnership who owns or holds a vehicle under lease and who contracts that vehicle and the owner's services to an entity which provides construction services to a public works project. The individual owns or leases and drives the equipment, is responsible for the maintenance of the equipment, bears all operating costs, determines the details and means of performing the services, and enters into a legally binding agreement that specifies the relationship to be that of an independent contractor and not that of an employee.

Multiple Truck Operations: any legal business entity that owns more than one vehicle and hires the vehicles out for services to brokers or contractors on public works projects. The owners of a trucking firm may either drive the vehicles or hire employees to drive the vehicles. Employee drivers are subject to the appropriate prevailing wage rate. The owner driving a vehicle is obligated to account for the value of his/her services as a driver at the appropriate prevailing wage.

Partnerships: a legal business entity where two or more individuals hold vehicles under lease and contract those vehicles and their services to an entity which provides construction services to a public works project. The partners own or lease the equipment, are responsible for maintenance and all operating costs, drive the equipment, determine the details and means of performing the services, and enter a legally binding agreement that specifies the relationship to be that of a partner and not that of an employee. All partners are subject to the appropriate prevailing wage.

Corporation: any legal business entity that owns or leases vehicles to provide construction services to public works projects. All individuals are employees of the corporation and subject to the appropriate prevailing wage regardless of title or position.

Broker: an individual or firm who (activities include, but are not limited to):

- contracts to **provide trucking services** [equipment and driver] in the construction industry to users of such services, such as prime contractors and various subcontractors of the prime;
- contracts to **obtain services** from other trucking operations and dispatches them to various assignments;
- receives payment from the users (such as prime contractors and various subcontractors) in consideration for the trucking services provided; and
- makes payment to the providers (trucking operations so **contracted** with) for their services.

(8) **Specific documentation from trucking operations.**

Independent Trucking Operators

The owner/operator of a truck must submit a copy of his/her commercial driver's license (CDL), cab card, and insurance certificate for each truck the owner/operator drives on each construction project *before commencing work on that project*. These documents must be sent to the prime contractor who will then forward the material to Labor Standards, Engineering Division at the City of Duluth.

Multiple Truck Operators

Weekly certified payrolls and payment of corresponding prevailing wages plus the fringe benefit package will be required for each project where trucks are operating. This covers the owner plus all employees performing work on the project.

Partnerships

Weekly certified payrolls and payment of corresponding prevailing wages plus fringe benefit packages will be required for each project where trucks are operating. This covers all partners of the organization who perform work on the project.

Each partner performing work on a project must submit a copy of his/her commercial driver's license (CDL), cab card, and insurance certificate for the truck being operated with that weekly certified payroll. It is not necessary to repeat such supporting documentation until a different truck is used and/or certificates or licenses have expired.

Employees of the partnership are always reported on a weekly certified payroll and paid the appropriate prevailing wage plus fringe benefit package for the work being performed.

Corporations

All persons employed by the corporation are subject to receive payment of the prevailing wage plus the fringe benefit package for the work performed on a project regardless of title or position. Weekly certified payrolls must be submitted for all work performed on the project.

Brokers

Truck ownership and a **bonafide contract** between the broker and another trucking operation, a prime contractor, or a subcontractor must be identified. Paperwork must be submitted with the month end trucking report to the City of Duluth Labor Standards representative - Engineering. Certified payrolls are not required when the above documentation is provided and approved.

(10) **Month End Trucking Report - ONLY REQUIRED WITH STATE OF MINNESOTA FUNDING**

The Minnesota Department of Transportation Month End Trucking Report (Mn/DOT TP-90550 7-05) and Minnesota Department of Transportation Month End Trucking Report Statement of Compliance (Mn/DOT TP-90551 7-05) are *only required on state funded projects*.

A guide for completing the forms including definitions and the reports, themselves, may be downloaded from:

www.dot.state.mn.us/const/labor/truckinginfo.html

Payment to the prime contractor may be withheld until documentation is received and approved.

(11) **Truck Rental Rates - ONLY REQUIRED WITH STATE OF MINNESOTA FUNDING**

Truck rental rates are listed in the prevailing wage section of the project specifications/contract.

(12) **Minnesota Rules 5200.1105 and 5200.1106**

These rules are incorporated into this supplementary general conditions by reference and are found on this web site:

www.revisor.leg.state.mn.us/rules/?id=5200

(13) **Truck Axles**

Per Minnesota Rules 5200.1100 Master Job Classifications, a truck "unit" refers to all axles including the steering axle.

A tag axle is also counted as one of the axles.

Examples: four rear axles plus one steering axle = five axles total
one rear axle plus one steering axle = two axles total

(14) **Non-Compliance and Enforcement**

- a) The prime contractor shall be liable for any unpaid wages to its workers or those of its lower-tier subcontractors, trucking companies/Multiple Truck Owners (MTO's) and/or Independent Truck Owner/Operator (ITOs) [MnDOT Standard Specifications for Construction, Section 1801].
- b) See Section 9, MnDOT Specification 1906 Partial Payments.

(15) **IC-134 form - Withholding Affidavit for Contractors**

The IC-134 form will be required from all Multiple Truck Operators, Partnerships, and Corporations performing trucking services on a project before the retainage or all remaining funds can be released. Web site for completing form online: www.mndor.state.mn.us
The form, itself, is found at: www.taxes.state.mn.us/forms/ic134.pdf

(16) **Owners, Supervisors, Foremen listed on certified payrolls.**

All persons working on a City of Duluth project including owners, partners, supervisors, salaried persons, and working foremen who perform laborer and/or mechanic work shall be reported on the weekly certified payroll reports including all data required of any laborer or mechanic. (ordinance 8731, 6/24/85)

(17) **Supporting documentation.**

At his/her discretion, the City of Duluth Labor Standards representative may demand proof of payment of the prevailing wage which may include copies of a payroll register, itemized time sheet and matching cancelled check, or any other supporting documents as stipulated. Payment to the prime contractor may be withheld until documentation is received and approved.

(18) **Kickbacks from Public Works employees prohibited.**

No contractor working on a project or other person shall, by force intimidation, or threat of termination of employment, cause any employee working on a project to give up any part of the compensation to which he is entitled under his contract of employment.

Section 9

**Minnesota Department of Transportation Specification 1906 Partial Payments
Process For "Withholding Contract Monies" and "Default and Termination of a Contract" 11/5/04**

Mn/DOT Specification 1906 Partial Payments describes the Commissioner's authority to withhold funds to protect the Department's interests. In addition, Specification 1808 Default and Termination of a Contract describes the Commissioner's authority to take the prosecution of the work out of the hands of the Contractor.

Additionally, on projects funded in whole or part with federal funds and in accordance with the Required Contract Provisions Federal-Aid Construction Contracts Form – 1273, Section IV, Subpart 6, "Withholding", incorporated into federal aid contracts, the Contracting Officer 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.

However, the Department must give the Contractor, and it's Sureties due notice prior to exercising these authorities. The withholding of contract funds, in accordance with Specification 1906 or the Required Contract Provisions Federal-Aid Construction Contracts Form – 1273, Section IV, Subpart 6, "Withholding", should be implemented as soon as a possible prevailing wage violation is recognized. However, Default and Termination of a Contract, in accordance with Specification 1808, should only be exercised as a "last resort" if the Contractor is not willing to comply.

Definitions

(Mn/DOT Standard Specifications for Construction 2000 Edition, Section 1103)

Commissioner: The Commissioner of the Minnesota Department of Transportation, or the chief executive of the department or agency constituted for administration of Contract work with its jurisdiction.

Contractor: The individual, firm or corporation Contracting for and undertaking prosecution of the prescribed work; the party of the second part to the Contract, acting directly or through a duly authorized representative.

Department: The Department of Transportation or the State of Minnesota, or the political subdivision, governmental body, board, commission, office, department, division, or agency constituted for administration of the Contract work within its jurisdiction.

(Form 1273 - 29 CFR, Part 5.1, Definitions)

Contracting Officer: The individual, a duly appointed successor or authorized representative who is designated and authorized to enter into Contracts on behalf of the Federal Agency and/or the City of Duluth.

Important Considerations

1. Upon completion of the work under a contract, the department should consider issuing the final voucher as soon as possible. Failure to finalize a contract expeditiously could result in subsequent claims that would prevent the department from finalizing the contract. However, before the issuance of the final voucher, the department must be able to ensure that the terms of the contract have been satisfied. Failure on the part of the department to ensure compliance could result in the Mn/DOT state aid division retaining funds from the department in accordance with *Minnesota Rules 8820.3000, subpart 5*.
2. On every contract, the department should withhold the final retainage in accordance with the following guidelines: (1) if the total amount of the contract is \$1,000,000 or more, the department should retain funds not more than \$50,000, (2) if the total amount of the contract is less than \$1,000,000, the department should retain 5% of the total contract, (3) retainage should be withheld until the department can ensure that the contractor has met the terms of the contract or until the finalization of the contract.
3. This guide specifies that the department verbally notify the bonding company early in the process. Generally, as a "rule of thumb", notifying the bonding company is usually the "last resort". However, the justification for the early notification is related to the language found in *Minnesota statute 574.31, subdivision 2*, which summarizes that if an individual or the department does not submit a claim on the payment bond within 120 days after the completion of work under the contract, the claim can be denied.

The following are general guidelines that should be followed prior to placing a Contractor in default:

Step 1: Upon verbal or written notification that a possible prevailing wage violation exists, the Department should give written notice to the Contractor regarding the nature of the claim, along with the Department's intent to withhold monies until the claim is investigated and determined to be in compliance. Additionally, the Department should inform the Contractor that the bonding company has been verbally notified of the claim. Please be aware, the Department should ensure employee confidentiality at all times.

Upon a preliminary determination surrounding the financial extent of the claim, the Department should consider retaining a "reasonable" portion of one or more partial estimates in accordance with Mn/DOT's 2000 Standard Specifications for Construction, Section 1906; or on federal aid contracts, in accordance with the Required Contract Provisions Federal-Aid Construction Contracts Form – 1273, Section IV, Subpart 6, "Withholding".

If it is determined that the claim is valid, the Department should schedule a meeting with the Contractor and attempt to resolve the matter. If the claim is determined to be invalid, the Department should release any partial estimates that may have been held as a result of the claim. However, the Department should continue to withhold the final retainage in accordance with the above-mentioned: *Important Considerations, 2*.

Step 4: If resolution cannot be obtained through a meeting, the Department should order the Contractor, in writing, to complete their obligations under the contract. The letter should clearly state the circumstances under which the Department has deemed that the Contractor has not met the terms of the contract.

- Additionally, the Department should include a reasonable deadline for this obligation to be completed. A copy of this letter should be forwarded to the Surety, District State Aid Engineer (DSAE), Labor Compliance Unit and the Department's Attorney.
- Step 5: In the event that the Contractor does not respond to the Department's written order, the Department should send a similar letter, requesting that the Contractor respond immediately, in writing, regarding the Contractor's intention to comply or not comply with the order. A copy of this letter should be forwarded to the Surety, District State Aid Engineer (DSAE), Labor Compliance Unit and the Department's Attorney.
- Step 6: If the Department still does not get a proper response from the Contractor, the Department should write another letter, addressed to both the Contractor and the Surety, specifying all the facts of the alleged breach, demanding that the Contractor, or its Surety, respond satisfactorily within 10 days or the Department may exercise its authority to Default and Terminate the Contract in accordance with/DOT's 2000 Specifications for Construction, Section 1808. It's important to provide sufficient detail so that the Surety understands the situation. This notification should be sent by certified mail. A copy of this letter should be forwarded to the Surety, District State Aid Engineer (DSAE), Labor Compliance Unit and the Department's Attorney.
- Step 7: If the Contractor or Surety is unresponsive after 10 days, the Department should consult with their attorney to consider proceeding with Default and Termination of the Contract.
- Step 8: Upon termination of the contract, the Department provides a written order to the Surety, requiring the Surety to bring resolution to the prevailing wage violation.
- Step 9: The Department places the Contractor on a Non-Responsible Bidder's List and rejects any future awards.

Section 10

Federal Labor Standards Provisions / U.S. Department of Housing and Urban Development Office of Labor Relations

Previous editions are obsolete

HUD-4010 (06/2009) ref. Handbook 1344.1

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. 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 29 CFR 5.5(a)(1)(iv); 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 29 CFR 5.5(a)(1)(ii) 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.

(ii) (a) Any class of laborers or mechanics 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. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee 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 HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, 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.

(iii) 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.

(iv) 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. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee 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, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, 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. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work 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. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. 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 HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, 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 subparagraph 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 HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

- (b) 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:
- (1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;
 - (2) 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 29 CFR Part 3;
 - (3) 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.

(c) 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 subparagraph A.3.(ii)(b).

(d) 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.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee 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, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, 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

(i) **Apprentices.** 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.

(ii) **Trainees.** 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 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.

(iii) **Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

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 will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses 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 this paragraph.

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 HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. 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) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) 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) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. 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 the individual is employed on such work to work in excess of 40 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 40 hours in such workweek.

(2) **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, 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 subparagraph (1) of this paragraph, 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 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) **Withholding for unpaid wages and liquidated damages.** HUD or its designee 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 contract, 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 subparagraph (2) of this paragraph.

(4) **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph 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 subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

Section 11

Equal Opportunity Laws and Regulations

(A) In addition to Contract specifications set forth below, the Contractor shall conduct and administer this Contract in compliance with:

- (1) Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352) and implementing regulations issued at 24 CFR Part 1;
- (2) Title VIII of the Civil Rights Act of 1968 (Pub. L. 90-284), as amended, and implementing regulations;
- (3) Section 109 of the Housing and Community Development Act of 1974, as amended; and the regulations issued pursuant thereto (24 CFR Section 570.601);
- (4) Section 3 of the Housing and Urban Development Act of 1968, as amended, and implementing regulations of 24 CFR Part 135;
- (5) Executive Order 11246, as amended by Executive Order 11375 and 12086 and implementing regulations at 41 CFR Chapter 60;
- (6) Executive Order 11063, as amended by Executive Order 12259 and implementing regulations at 24 CFR Part 107;
- (7) Section 504 of the Rehabilitation Act of 1973 (Pub. L. 93-112), as amended, and implementing regulations when published for effect;
- (8) The Age Discrimination Act of 1975, as amended, (Pub. L. 94-135) and implementing regulations when published for effect;
- (9) The Minnesota Human Rights Act of 1974, as amended (Chapter 363).

Equal Opportunity and Affirmative Action

(A) Contractors and Subcontractors that have a work force in excess of fifty (50) employees and a contract in excess of \$50,000.00 shall prepare and maintain an appropriate affirmative action plan in accordance with the provisions of 41 CFR 60 "Compliance Responsibility for Equal Opportunity".

(B) Non-segregated Facilities. The Contractor shall certify that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The Contractor covenants that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. As used in this paragraph the term "segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, creed, religion, national origin, ancestry, age, marital status, status with respect to public assistance, and/or disability because of habit, local custom, or otherwise.

General Provisions Against Discrimination

(A) In all hiring or employment made possible by or resulting from this Contract, there:

- (1) will not be any discrimination against any employee or applicant for employment because of race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance, and/or disability.
- (2) affirmative action will be taken to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance, and/or disability. This requirement shall apply to, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; lay-off or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. There shall be posted in conspicuous places available to employees and applicants for employment, notices setting forth the provisions of this clause. All solicitations or advertisements for employees shall state that all qualified applicants will receive consideration for employment without regard to race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance, and/or disability.

(B) No person in the United States shall, on the grounds of race, color, creed, religion, national origin, age, sex, marital status, status with respect to public assistance, and/or disability, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity made possible by or resulting from this Contract. The Contractor and each employer will comply with all requirements imposed by or pursuant to the regulations of the Federal Agency effectuating Title VI of the Civil Rights Act of 1966. The Contractor will note this requirement in all solicitations or advertisements for employees. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(C) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice advising the labor union or workers' representative of the Contractor's commitments under these provisions, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(D) The Contractor hereby agrees that he will incorporate into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained pursuant to this Contract, the equal opportunity clause which is a part of these Contract Documents.

(E) The Contractor further agrees that he will be bound by the equal opportunity clause and other provisions of 41 CFR Chapter 60, with respect to his own employment practices when he participates in federally assisted construction work: Provided: That of the Contractor so participating is a State or Local Government, the above equal opportunity clause is not applicable to any agency, instrumentality, or subdivision of such government which does not participate in work on or under the Contract. Also, the Contractor will make his files available to inspection by appropriate government agencies and shall furnish those reports as may be required by said agencies.

(F) The Contractor agrees that he will assist and cooperate actively with the Federal Agency and the Secretary of Labor in obtaining the compliance of subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that he will furnish the Federal Agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that he will otherwise assist the Federal Agency in the discharge of its primary responsibility for securing compliance.

(G) The Contractor further agrees that he will refrain from entering into any contract or any contract modification subject to Executive Order 11246 of September 24, 1965, with a subcontractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order. In addition, the Contractor agrees that if he fails or refuses to comply with these undertakings, the City or the Federal Agency may take any or all of the following actions: Terminate or suspend in whole or in part this Contract; refrain from extending any further assistance to the Contractor under the Project with respect to which the failure or refusal occurred until satisfactory assurance of future compliance has been received from such Contractor and refer the case to the Department of Justice for appropriate legal proceedings.

Affirmative Action - "Construction Contracts" over \$10,000
Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity
(Executive Order 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

<u>Timetables</u>	<u>Goals for minority participation (percent)</u>	<u>Goals for female participation (percent)</u>
From April 1, 1980 until revised	3.0	6.9

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area.

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 established for the geographical area where the contract resulting from this solicitation is to be performed. 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.

3. The Contractor shall provide written notification to the City and to the Director of the Office of Federal Contract Compliance Programs; U.S. Department of Labor, ESA/OFCCP, 16th Floor, 230 South Dearborn Street, Chicago, Illinois, 60604, within 10 working days of award of any construction subcontract and/or subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the contractor and/or subcontractor; employer identification number; estimated dollar amount of the prime contract; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

4. As used in this Notice, and in the Contract, the "covered area" is all work under a contract currently held with the City of Duluth, Minnesota.

Standard Federal Equal Employment Opportunity
Construction Contract Specifications (Executive Order 11246)

1. As used in these specifications:

- a) "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor; or any person to whom the Director delegates authority;
- b) "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
- c) "Minority" includes:
 - (iii) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (iv) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (v) 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
 - (vi) 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 and 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 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 7a 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. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a 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 non-working 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 sites 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 woman 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 notices 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 onsite 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 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 recruitments 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 work force.
 - 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 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 officers 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 supervisor's 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 action 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 violation of the Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, creed, religion, national origin, sex, ancestry, age, marital status, status with respect to public assistance and/or disability.
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 the 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 a limitation 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).

Affirmative Action for Handicapped Workers

(applies to contracts in excess of \$2,500)

(A) The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: Employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

(B) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(C) In the event of the Contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations and relevant orders of the Secretary of Labor issued pursuant to the Act.

(D) The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the contracting officer. Such notices shall state the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment, and the rights of applicants and employees.

(E) The Contractor will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Rehabilitation Act of 1973, and is committed to take affirmative action to employ and advance in employment physically and mentally handicapped individuals.

(F) The Contractor will include the provisions of this clause in every subcontract or purchase order of \$2,500 or more unless exempted by rules, regulations, or orders of the Secretary issued pursuant to Section 503 of the Act, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era

(applies to contracts in excess of \$10,000)

(A) The Contractor will not discriminate against any employee or applicant for employment because he or she is a disabled veteran or veteran of the Vietnam era in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based upon their disability or veterans status in all employment practices such as the following: Employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

(B) The Contractor agrees that all suitable employment openings of the Contractor which exist at the time of the execution of this contract and those which occur during the performance of this contract, including those not generated by this contract and including those occurring at an establishment of the Contractor other than the one wherein the contract is being performed but excluding those of independently operated corporate affiliates, shall be listed at an appropriate local office of the State employment service system wherein the opening occurs. The Contractor further agrees to provide such reports to such local office regarding employment openings and hires as may be required.

State and local government agencies holding Federal contracts of \$10,000 or more shall also list all their suitable openings with the appropriate office of the State employment service, but are not required to provide those reports set forth in paragraphs (D) and (E).

(C) Listing of employment openings with the employment service system pursuant to this clause shall be made at least concurrently with the use of any other recruitment source or effort and shall involve the normal obligations which attach to the placing of a bona fide job order, including the acceptance of referrals of veterans and non-veterans. The listing of employment openings does not require the hiring of any particular job applicant or from any particular group of job applicants, and nothing herein is intended to relieve the Contractor from any requirements in Executive Orders or regulations regarding nondiscrimination in employment.

(D) The reports required by paragraph (B) of this clause shall include, but not be limited to, periodic reports which shall be filed at least quarterly with the appropriate local office or, where the Contractor has more than hiring location in a State, with the central office of that State employment service. Such reports shall indicate for each hiring location (1) the number of individuals hired during the reporting period, (2) the number of non-disabled veterans of the Vietnam era hired, (3) the number of disabled veterans of the Vietnam era hired, and (4) the total number of disabled veterans hired. The reports should include covered veterans hired for on-the-job training under 38 U.S.C. 1787. The Contractor shall maintain at each hiring location copies of the reports submitted until the expiration of one year after final payment under the contract, during which time these reports and related documentation shall be made available, upon request, for examination by any authorized representatives of the contracting officer of the Secretary of Labor. Documentation would include personnel records respecting job openings, recruitment and placement.

(E) Whenever the Contractor becomes contractually bound to the listing provisions of this clause, it shall advise the employment service system in each State where it has establishments of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these provisions, and has so advised the State system, there is no need to advise the State system of subsequent contracts. The Contractor may advise the State system when it is no longer bound by this contract clause.

(F) This clause does not apply to the listing of employment openings which occur and are filled outside of the 50 States, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands.

(G) The provisions of paragraphs (B), (C), (D), and (E) of this clause do not apply to openings which the Contractor proposes to fill from within his own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement for that opening.

(H) As used in this clause:

(1) "All suitable employment openings" includes, but is not limited to, openings which occur in the following job categories: Production and non-production; plant and office; laborers and mechanics; supervisory and non-supervisory; technical; and executive, administrative, and professional openings as are compensated on a salary basis of less than \$25,000 per year. This term includes full-time employment, temporary employment of more than 3 days' duration, and part-time employment. It does not include openings which the Contractor proposes to fill from within his own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement nor openings in an educational institution which are restricted to students of that institution. Under the most compelling circumstances an

employment opening may not be suitable for listing, including such situations where the needs of the Government cannot reasonably be otherwise supplied, where listing would be contrary to national security, or where the requirement of listing would otherwise not be for the best interest of the Government.

(2) "Appropriate office of the State employment service system" means the local office of the Federal-State national system of public employment offices with assigned responsibility for serving the area where the employment opening is to be filled, including the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

(3) "Openings which the Contractor proposes to fill from within his own organization" means employment openings for which no consideration will be given to persons outside the Contractor's organization (including any affiliates, subsidiaries, and the parent companies) and includes any openings which the Contractor proposes to fill from regularly established "recall" lists.

(4) "Openings which the Contractor proposes to fill pursuant to a customary and traditional employer-union hiring arrangement" means employment openings which the Contractor proposes to fill from union halls, which is part of the customary and traditional hiring relationship which exists between the Contractor and representatives of his employees.

(I) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(J) In the event of the Contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations and relevant orders of the Secretary of Labor issued pursuant to the Act.

(K) The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the contracting officer. Such notices shall state the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era for employment, and the rights of applicants and employees.

(L) The Contractor will notify each labor union representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of the Vietnam Era Veterans Readjustment Assistance Act, and is committed to take affirmative action to employ and advance qualified disabled veterans and veterans of the Vietnam era..

(M) The Contractor will include the provisions of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary issued pursuant to the Act, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

Section 12

Employment Opportunities - "HUD Section 3"

General

These requirements apply to the City of Duluth contracts receiving assistance under the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) Program.

Type of Covered Projects

24CFR570.607 (b) of the HUD CDBG Program Regulations state in part "... that employment and other economic opportunities arising in connection with housing rehabilitation, housing construction, or other public construction projects shall to the greatest extent feasible, and consistent with existing Federal, State, and local laws and regulations be given to low- and very low-income persons.

Thresholds

In accordance with the provisions of 24CFR135.3(a) (3) (ii) (A), the requirements of this Section apply to those recipients as defined at 24CFR135.5 when the amount of this contract exceeds \$200,000.

In addition, in accordance with the provisions of 24CFR135.3 (a) (3) (ii) (B), the requirements of this Section apply to any contractor or subcontractor whose contract exceeds \$100,000 as a result of assistance provided under this contract.

Requirements (Section 3 Clause)

(A) The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

(B) The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

(C) The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement, or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

(D) The Contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

(E) The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligation under 24 CFR part 135.

(F) Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD-assisted contracts.

Section 13
Federal Requirements for Minority/Women Business Enterprises Contract Guidance - MPFA

General

Municipalities that receive loan funding must comply with Federal requirements concerning utilization of Minority Business Enterprises (MBE) and Women's Business Enterprises (WBE). These requirements are designed to encourage the prime contractors to utilize MBEs and WBEs whenever procurement opportunities occur.

Regulation

40 C.F.R. Section 35.3145(d) Application of other Federal Authorities, M/WBE Requirements

Executive Orders No. 11625, 12138 and 12432 - Promoting the use of M/WBEs

Section 129 of Public Law 100-590 - Small Business Administration Reauthorization and Amendment Act of 1988

Regulations detailed in the EPA's *Cross-Cutting Federal Authorities - Clean Water Act State Revolving Fund Program and Safe Drinking Water Act State Revolving Fund Program*

Implementation

The "fair share" target percentage participation proposed for this project is 3.5 percent (3.5%) for MBE and 11.5 percent (11.5%) for WBE.

If the Contractor intends to let any subcontractors for a portion of the work, the Contractor shall take affirmative steps to assure that minority and women businesses are utilized when possible as sources of supplies, equipment, construction and services. Affirmative steps shall include the following:

- a) Include qualified minority businesses on solicitation lists.
- b) Assure that minority businesses are solicited whenever they are potential sources.
- c) When economically feasible, divide total requirements into smaller tasks or quantities so as to permit maximum small and minority business participation.
- d) Where the requirement permits, establish delivery schedules, which will encourage participation by minority businesses.
- e) Use the services and assistance of the Office of Minority Business Enterprise of the Department of Commerce.

The low bidder will be required to submit to the City of Duluth documentation of his good faith efforts to meet the targeted goals of utilizing MBEs and WBEs.

Section 14 - Forms

**Minnesota Department of Transportation and City of Duluth, Minnesota
funded certified payroll forms**

- Statement of Compliance Form
www.dot.state.mn.us/const/labor/lcuforms.html
- Certified Payroll Form
www.dol.gov/esa/forms/whd/WH347.pdf

**U. S. Department of Housing and Urban Development and federal
government funded certified payroll forms**

- Statement of Compliance Form & Certified Payroll Forms
www.dol.gov/esa/forms/whd/WH347.pdf
- Fringe Benefit Form - use the second page of the MnDOT Statement of Compliance (form 21658 3/01)
www.dot.state.mn.us/const/labor/lcuforms.html

Minnesota Department of Transportation Trucking Requirements

- Month End Trucking Report
- Month End Trucking Report Statement of Compliance
- Definitions and instructions: www.dot.state.mn.us/const/labor/lcuforms.html

**MINNESOTA DEPARTMENT OF LABOR AND INDUSTRY PREVAILING WAGES FOR STATE FUNDED
CONSTRUCTION PROJECTS**



THIS NOTICE MUST BE POSTED ON THE JOBSITE IN A CONSPICUOUS PLACE

Construction Type: Commercial

County Number: 69

County Name: ST. LOUIS

Effective: 2013-11-18 Revised: 2013-12-06

This project is covered by Minnesota prevailing wage statutes. Wage rates listed below are the minimum hourly rates to be paid on this project.

All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at a rate of one and one half (1 1/2) times the basic hourly rate.

Violations should be reported to:

Department of Labor and Industry
Prevailing Wage Section
443 Lafayette Road N
St Paul, MN 55155
(651) 284-5091
DLI.PrevWage@state.mn.us

* Indicates that adjacent county rates were used for the labor class listed.

County: ST. LOUIS (69)

<u>LABOR CODE AND CLASS</u>	<u>EFFECT DATE</u>	<u>BASIC RATE</u>	<u>FRINGE RATE</u>	<u>TOTAL RATE</u>
LABORERS (101 - 112) (SPECIAL CRAFTS 701 - 730)				
101 LABORER, COMMON (GENERAL LABOR WORK)	2013-11-18	22.17	15.36	37.53
102 LABORER, SKILLED (ASSISTING SKILLED CRAFT JOURNEYMAN)	2013-11-18	22.17	15.36	37.53
103 LABORER, LANDSCAPING (GARDENER, SOD LAYER AND NURSERY OPERATOR)	2013-11-18	18.00	12.43	30.43
104* FLAG PERSON	2013-11-18	22.17	15.36	37.53
105* WATCH PERSON	2013-11-18	19.82	15.36	35.18
106 BLASTER	2013-11-18	22.87	15.36	38.23
107 PIPELAYER (WATER, SEWER AND GAS)	2013-11-18	28.11	15.61	43.72
	2014-05-01	28.61	16.09	44.70

<u>LABOR CODE AND CLASS</u>	<u>EFFECT DATE</u>	<u>BASIC RATE</u>	<u>FRINGE RATE</u>	<u>TOTAL RATE</u>
108 TUNNEL MINER	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVVAGE@STATE.MN.US			
109 UNDERGROUND AND OPEN DITCH LABORER (EIGHT FEET BELOW STARTING GRADE LEVEL)	2013-11-18	26.81	15.61	42.42
	2014-05-01	27.31	16.09	43.40
110 SURVEY FIELD TECHNICIAN (OPERATE TOTAL STATION, GPS RECEIVER, LEVEL, ROD OR RANGE POLES, STEEL TAPE MEASUREMENT; MARK AND DRIVE STAKES; HAND OR POWER DIGGING FOR AND IDENTIFICATION OF MARKERS OR MONUMENTS; PERFORM AND CHECK CALCULATIONS; REVIEW AND UNDERSTAND CONSTRUCTION PLANS AND LAND SURVEY MATERIALS). THIS CLASSIFICATION DOES NOT APPLY TO THE WORK PERFORMED ON A PREVAILING WAGE PROJECT BY A LAND SURVEYOR WHO IS LICENSED PURSUANT TO MINNESOTA STATUTES, SECTIONS 326.02 TO 326.15.	2013-11-18	22.17	15.36	37.53
111 TRAFFIC CONTROL PERSON (TEMPORARY SIGNAGE)	2013-11-18	22.17	15.36	37.53
SPECIAL EQUIPMENT (201 - 204)				
201* ARTICULATED HAULER	2013-11-18	31.37	16.70	48.07
	2014-05-01	31.77	17.20	48.97
202 BOOM TRUCK	2013-11-18	33.83	15.95	49.78
	2014-05-01	34.68	16.45	51.13
203* LANDSCAPING EQUIPMENT, INCLUDES HYDRO SEEDER OR MULCHER, SOD ROLLER, FARM TRACTOR WITH ATTACHMENT SPECIFICALLY SEEDING, SODDING, OR PLANT, AND TWO-FRAMED FORKLIFT (EXCLUDING FRONT, POSIT-TRACK, AND SKID STEER LOADERS), NO EARTHWORK OR GRADING FOR ELEVATIONS	2013-11-18	18.00	12.43	30.43
204 OFF-ROAD TRUCK	2013-11-18	31.37	16.70	48.07
	2014-05-01	31.77	17.20	48.97
205 PAVEMENT MARKING OR MARKING REMOVAL EQUIPMENT (ONE OR TWO PERSON OPERATORS); SELF-PROPELLED TRUCK OR TRAILER MOUNTED UNITS.	2013-11-18	26.29	14.65	40.94
HIGHWAY/HEAVY POWER EQUIPMENT OPERATOR				
GROUP 2 *	2013-11-18	32.22	16.70	48.92
	2014-05-01	32.62	17.20	49.82
306 GRADER OR MOTOR PATROL				
308 TUGBOAT 100 H.P. AND OVER WHEN LICENSE REQUIRED (HIGHWAY AND HEAVY ONLY)				
GROUP 3	2013-11-18	31.67	16.70	48.37
	2014-05-01	32.07	17.20	49.27
309 ASPHALT BITUMINOUS STABILIZER PLANT				

<u>LABOR CODE AND CLASS</u>	<u>EFFECT DATE</u>	<u>BASIC RATE</u>	<u>FRINGE RATE</u>	<u>TOTAL RATE</u>
310 CABLEWAY				
312 DERRICK (GUY OR STIFFLEG)(POWER)(SKIDS OR STATIONARY) (HIGHWAY AND HEAVY ONLY)				
314 DREDGE OR ENGINEERS, DREDGE (POWER) AND ENGINEER				
316 LOCOMOTIVE CRANE OPERATOR				
320 TANDEM SCRAPER				
322 TUGBOAT 100 H.P AND OVER (HIGHWAY AND HEAVY ONLY)				
GROUP 4	2013-11-18	31.37	16.70	48.07
	2014-05-01	31.77	17.20	48.97
323 AIR TRACK ROCK DRILL				
324 AUTOMATIC ROAD MACHINE (CMI OR SIMILAR) (HIGHWAY AND HEAVY ONLY)				
327 BITUMINOUS ROLLERS, RUBBER TIERED OR STEEL DRUMMED (EIGHT TONS AND OVER)				
328 BITUMINOUS SPREADER AND FINISHING MACHINES (POWER), INCLUDING PAVERS, MACRO SURFACING AND MICRO SURFACING, OR SIMILAR TYPES (OPERATOR AND SCREED PERSON)				
329 BROKK OR R.T.C. REMOTE CONTROL OR SIMILAR TYPE WITH ALL ATTACHMENTS				
330 CAT CHALLENGER TRACTORS OR SIMILAR TYPES PULLING ROCK WAGONS, BULLDOZERS AND SCRAPERS				
331 CHIP HARVESTER AND TREE CUTTER				
332 CONCRETE DISTRIBUTOR AND SPREADER FINISHING MACHINE, LONGITUDINAL FLOAT, JOINT MACHINE, AND SPRAY MACHINE				
334 CONCRETE MOBIL (HIGHWAY AND HEAVY ONLY)				
335 CRUSHING PLANT (GRAVEL AND STONE) OR GRAVEL WASHING, CRUSHING AND SCREENING PLANT				
336 CURB MACHINE				
337 DIRECTIONAL BORING MACHINE				
338 DOPE MACHINE (PIPELINE)				
340 DUAL TRACTOR				
341 ELEVATING GRADER				
345 GPS REMOTE OPERATING OF EQUIPMENT				
347 HYDRAULIC TREE PLANTER				
348 LAUNCHER PERSON (TANKER PERSON OR PILOT LICENSE)				
349 LOCOMOTIVE (HIGHWAY AND HEAVY ONLY)				
350 MILLING, GRINDING, PLANNING, FINE GRADE, OR TRIMMER MACHINE				
352 PAVEMENT BREAKER OR TAMPING MACHINE (POWER DRIVEN) MIGHTY MITE OR SIMILAR TYPE				
354 PIPELINE WRAPPING, CLEANING OR BENDING MACHINE				
356 POWER ACTUATED HORIZONTAL BORING MACHINE, OVER SIX INCHES				
357 PUGMILL				
359 RUBBER-TIERED FARM TRACTOR WITH BACKHOE INCLUDING ATTACHMENTS (HIGHWAY AND HEAVY ONLY)				
360 SCRAPER				
361 SELF-PROPELLED SOIL STABILIZER				
362 SLIP FORM (POWER DRIVEN) (PAVING)				
363 TIE TAMPER AND BALLAST MACHINE				
367 TUB GRINDER, MORBARK, OR SIMILAR TYPE				
GROUP 5 *	2013-11-18	18.77	8.18	26.95
370 BITUMINOUS ROLLER (UNDER EIGHT TONS)				
371 CONCRETE SAW (MULTIPLE BLADE) (POWER OPERATED)				
372 FORM TRENCH DIGGER (POWER)				
375 HYDRAULIC LOG SPLITTER				
376 LOADER (BARBER GREENE OR SIMILAR TYPE)				
377 POST HOLE DRIVING MACHINE/POST HOLE AUGER				

<u>LABOR CODE AND CLASS</u>	<u>EFFECT DATE</u>	<u>BASIC RATE</u>	<u>FRINGE RATE</u>	<u>TOTAL RATE</u>
379 POWER ACTUATED JACK				
381 SELF-PROPELLED CHIP SPREADER (FLAHERTY OR SIMILAR)				
382 SHEEP FOOT COMPACTOR WITH BLADE . 200 H.P. AND OVER				
383 SHOULDERING MACHINE (POWER) APSCO OR SIMILAR TYPE INCLUDING SELF-PROPELLED SAND AND CHIP SPREADER				
384 STUMP CHIPPER AND TREE CHIPPER				
385 TREE FARMER (MACHINE)				
GROUP 6	2013-11-18	27.12	16.70	43.82
	2014-05-01	27.52	17.20	44.72
387 CAT, CHALLENGER, OR SIMILAR TYPE OF TRACTORS, WHEN PULLING DISK OR ROLLER				
389 DREDGE DECK HAND				
391 GRAVEL SCREENING PLANT (PORTABLE NOT CRUSHING OR WASHING)				
393 LEVER PERSON				
395 POWER SWEEPER				
396 SHEEP FOOT ROLLER AND ROLLERS ON GRAVEL COMPACTION, INCLUDING VIBRATING ROLLERS				
COMMERCIAL POWER EQUIPMENT OPERATOR				
GROUP 1	2013-11-18	36.09	15.95	52.04
	2014-05-01	36.94	16.45	53.39
501 HELICOPTER PILOT (COMMERCIAL CONSTRUCTION ONLY)				
502 TOWER CRANE 250 FEET AND OVER (COMMERCIAL CONSTRUCTION ONLY)				
503 TRUCK CRAWLER CRANE WITH 200 FEET OF BOOM AND OVER, INCLUDING JIB (COMMERCIAL CONSTRUCTION ONLY)				
GROUP 2 *	2013-11-18	35.75	15.95	51.70
	2014-05-01	36.60	16.45	53.05
504 CONCRETE PUMP WITH 50 METERS/164 FEET OF BOOM AND OVER (COMMERCIAL CONSTRUCTION ONLY)				
505 PILE DRIVING WHEN THREE DRUMS IN USE (COMMERCIAL CONSTRUCTION ONLY)				
506 TOWER CRANE 200 FEET AND OVER (COMMERCIAL CONSTRUCTION ONLY)				
507 TRUCK OR CRAWLER CRANE WITH 150 FEET OF BOOM UP TO AND NOT INCLUDING 200 FEET, INCLUDING JIB (COMMERCIAL CONSTRUCTION ONLY)				
GROUP 3	2013-11-18	34.34	15.95	50.29
	2014-05-01	35.19	16.45	51.64
508 ALL-TERRAIN VEHICLE CRANES (COMMERCIAL CONSTRUCTION ONLY)				
509 CONCRETE PUMP 32-49 METERS/102-164 FEET (COMMERCIAL CONSTRUCTION ONLY)				
510 DERRICK (GUY & STIFFLEG) (COMMERCIAL CONSTRUCTION ONLY)				
511 STATIONARY TOWER CRANE UP TO 200 FEET				
512 SELF-ERECTING TOWER CRANE 100 FEET AND OVER MEASURED FROM BOOM FOOT PIN (COMMERCIAL CONSTRUCTION ONLY)				
513 TRAVELING TOWER CRANE (COMMERCIAL CONSTRUCTION ONLY)				
514 TRUCK OR CRAWLER CRANE UP TO AND NOT INCLUDING 150 FEET OF BOOM, INCLUDING JIB (COMMERCIAL CONSTRUCTION ONLY)				
GROUP 4	2013-11-18	34.00	15.95	49.95
	2014-05-01	34.85	16.45	51.30
515 CRAWLER BACKHOE INCLUDING ATTACHMENTS (COMMERCIAL CONSTRUCTION ONLY)				
516 FIREPERSON, CHIEF BOILER LICENSE (COMMERCIAL CONSTRUCTION ONLY)				
517 HOIST ENGINEER (THREE DRUMS OR MORE) (COMMERCIAL CONSTRUCTION ONLY)				

<u>LABOR CODE AND CLASS</u>	<u>EFFECT DATE</u>	<u>BASIC RATE</u>	<u>FRINGE RATE</u>	<u>TOTAL RATE</u>
518 LOCOMOTIVE (COMMERCIAL CONSTRUCTION ONLY)				
519 OVERHEAD CRANE (INSIDE BUILDING PERIMETER) (COMMERCIAL CONSTRUCTION ONLY)				
520 TRACTOR . BOOM TYPE (COMMERCIAL CONSTRUCTION ONLY)				
GROUP 5	2013-11-18	33.83	15.95	49.78
	2014-05-01	34.68	16.45	51.13
521 AIR COMPRESSOR 450 CFM OR OVER (TWO OR MORE MACHINES) (COMMERCIAL CONSTRUCTION ONLY)				
522 CONCRETE MIXER (COMMERCIAL CONSTRUCTION ONLY)				
523 CONCRETE PUMP UP TO 31 METERS/101 FEET OF BOOM				
524 DRILL RIGS, HEAVY ROTARY OR CHURN OR CABLE DRILL WHEN USED FOR CAISSON FOR ELEVATOR OR BUILDING CONSTRUCTION (COMMERCIAL CONSTRUCTION ONLY)				
525 FORKLIFT (COMMERCIAL CONSTRUCTION ONLY)				
526 FRONT END, SKID STEER 1 C YD AND OVER				
527 HOIST ENGINEER (ONE OR TWO DRUMS) (COMMERCIAL CONSTRUCTION ONLY)				
528 MECHANIC-WELDER (ON POWER EQUIPMENT) (COMMERCIAL CONSTRUCTION ONLY)				
529 POWER PLANT (100 KW AND OVER OR MULTIPLES EQUAL TO 100KW AND OVER) (COMMERCIAL CONSTRUCTION ONLY)				
530 PUMP OPERATOR AND/OR CONVEYOR (TWO OR MORE MACHINES) (COMMERCIAL CONSTRUCTION ONLY)				
531 SELF-ERECTING TOWER CRANE UNDER 100 FEET MEASURED FROM BOOM FOOT PIN (COMMERCIAL CONSTRUCTION ONLY)				
532 STRADDLE CARRIER (COMMERCIAL CONSTRUCTION ONLY)				
533 TRACTOR OVER D2 (COMMERCIAL CONSTRUCTION ONLY)				
534 WELL POINT PUMP (COMMERCIAL CONSTRUCTION ONLY)				
GROUP 6	2013-11-18	32.32	15.95	48.27
	2014-05-01	33.17	16.45	49.62
535 CONCRETE BATCH PLANT (COMMERCIAL CONSTRUCTION ONLY)				
536 FIREPERSON, FIRST CLASS BOILER LICENSE (COMMERCIAL CONSTRUCTION ONLY)				
537 FRONT END, SKID STEER UP TO 1 C YD				
538 GUNITE MACHINE (COMMERCIAL CONSTRUCTION ONLY)				
539 TRACTOR OPERATOR D2 OR SIMILAR SIZE (COMMERCIAL CONSTRUCTION ONLY)				
540 TRENCHING MACHINE (SEWER, WATER, GAS) EXCLUDES WALK BEHIND TRENCHER				
GROUP 7	2013-11-18	31.20	15.95	47.15
	2014-05-01	32.05	16.45	48.50
541 AIR COMPRESSOR 600 CFM OR OVER (COMMERCIAL CONSTRUCTION ONLY)				
542 BRAKEPERSON (COMMERCIAL CONSTRUCTION ONLY)				
543 CONCRETE PUMP/PUMPCRETE OR COMPLACO TYPE (COMMERCIAL CONSTRUCTION ONLY)				
544 FIREPERSON, TEMPORARY HEAT SECOND CLASS BOILER LICENSE (COMMERCIAL CONSTRUCTION ONLY)				
545 OILER (POWER SHOVEL, CRANE, TRUCK CRANE, DRAGLINE, CRUSHERS AND MILLING MACHINES, OR OTHER SIMILAR POWER EQUIPMENT) (COMMERCIAL CONSTRUCTION ONLY)				
546 PICK UP SWEEPER (ONE CUBIC YARD HOPPER CAPACITY) (COMMERCIAL CONSTRUCTION ONLY)				
547 PUMP AND/OR CONVEYOR (COMMERCIAL CONSTRUCTION ONLY)				
GROUP 8 *	2013-11-18	29.19	15.95	45.14
	2014-05-01	30.04	16.45	46.49
548 ELEVATOR OPERATOR (COMMERCIAL CONSTRUCTION ONLY)				
549 GREASER (COMMERCIAL CONSTRUCTION ONLY)				
550 MECHANICAL SPACE HEATER (TEMPORARY HEAT NO BOILER LICENSE REQUIRED) (COMMERCIAL CONSTRUCTION ONLY)				

<u>LABOR CODE AND CLASS</u>	<u>EFFECT DATE</u>	<u>BASIC RATE</u>	<u>FRINGE RATE</u>	<u>TOTAL RATE</u>
TRUCK DRIVERS				
GROUP 1	2013-11-18	26.85	14.40	41.25
601 MECHANIC . WELDER				
602 TRACTOR TRAILER DRIVER				
603 TRUCK DRIVER (HAULING MACHINERY INCLUDING OPERATION OF HAND AND POWER OPERATED WINCHES)				
GROUP 2	2013-11-18	26.30	14.40	40.70
604 FOUR OR MORE AXLE UNIT, STRAIGHT BODY TRUCK				
GROUP 3	2013-11-18	26.20	14.40	40.60
605 BITUMINOUS DISTRIBUTOR DRIVER				
606 BITUMINOUS DISTRIBUTOR (ONE PERSON OPERATION)				
607 THREE AXLE UNITS				
GROUP 4 *	2013-11-18	25.95	14.40	40.35
608 BITUMINOUS DISTRIBUTOR SPRAY OPERATOR (REAR AND OILER)				
609 DUMP PERSON				
610 GREASER				
611 PILOT CAR DRIVER				
612 RUBBER-TIRED, SELF-PROPELLED PACKER UNDER 8 TONS				
613 TWO AXLE UNIT				
614 SLURRY OPERATOR				
615 TANK TRUCK HELPER (GAS, OIL, ROAD OIL, AND WATER)				
616 TRACTOR OPERATOR, UNDER 50 H.P.				
SPECIAL CRAFTS				
701 HEATING AND FROST INSULATORS	2013-11-18	29.91	22.70	52.61
702 BOILERMAKERS	2013-11-18	32.40	25.37	57.77
703 BRICKLAYERS	2013-11-18	28.85	22.71	51.56
704 CARPENTERS	2013-11-18	27.07	15.98	43.05
705* CARPET LAYERS (LINOLEUM)	2013-11-18	29.01	14.74	43.75
	2014-06-01	30.07	14.74	44.81
706 CEMENT MASONS	2013-11-18	30.19	16.30	46.49
	2014-05-01	30.69	16.30	46.99
707 ELECTRICIANS	2013-11-18	32.04	23.14	55.18
	2014-06-01	32.54	23.73	56.27
708 ELEVATOR CONSTRUCTORS	2013-11-18	43.57	30.01	73.58
709 GLAZIERS	2013-11-18	26.28	15.42	41.70

	<u>LABOR CODE AND CLASS</u>	<u>EFFECT DATE</u>	<u>BASIC RATE</u>	<u>FRINGE RATE</u>	<u>TOTAL RATE</u>
710	LATHERS	2013-11-18	27.07	15.98	43.05
712	IRONWORKERS	2013-11-18	29.24	21.20	50.44
714	MILLWRIGHT	2013-11-18	29.32	16.38	45.70
715	PAINTERS (INCLUDING HAND BRUSHED, HAND SPRAYED, AND THE TAPING OF PAVEMENT MARKINGS)	2013-11-18	28.11	14.97	43.08
716	PILEDRIIVER (INCLUDING VIBRATORY DRIVER OR EXTRACTOR FOR PILING AND SHEETING OPERATIONS)	2013-11-18	30.79	17.08	47.87
717	PIPEFITTERS . STEAMFITTERS	2013-11-18	38.41	16.56	54.97
718*	PLASTERERS	2013-11-18	30.82	17.05	47.87
		2014-05-01	31.32	17.05	48.37
719	PLUMBERS	2013-11-18	38.41	16.56	54.97
720	ROOFER	2013-11-18	31.15	14.05	45.20
		2014-07-01	31.95	14.05	46.00
721	SHEET METAL WORKERS	2013-11-18	29.23	20.39	49.62
722	SPRINKLER FITTERS	2013-11-18	32.52	16.87	49.39
		2014-04-01	33.17	17.22	50.39
723	TERRAZZO WORKERS	2013-11-18	29.86	18.20	48.06
724	TILE SETTERS	2013-11-18	23.34	20.13	43.47
725	TILE FINISHERS	2013-11-18	16.15	16.45	32.60
726	DRYWALL TAPER	2013-11-18	28.71	14.87	43.58
727	WIRING SYSTEM TECHNICIAN	2013-11-18	34.16	12.31	46.47
		2014-07-01	35.24	12.31	47.55
728	WIRING SYSTEMS INSTALLER	2013-11-18	23.91	10.27	34.18
		2014-07-01	24.67	10.27	34.94
729	ASBESTOS ABATEMENT WORKER	2013-11-18	27.59	16.01	43.60
		2014-01-01	27.69	16.51	44.20
730	SIGN ERECTOR	2013-11-18	25.44	11.13	36.57

PROJECT LABOR AGREEMENT

NO STRIKE, NO LOCKOUT

PUBLIC SECTOR

CITY OF DULUTH

&

(Name of Contractor)

INDEX

AGREEMENT	1
ARTICLE I - PURPOSE	2
ARTICLE II - SCOPE OF THE AGREEMENT	2
ARTICLE III - UNION RECOGNITION AND REPRESENTATION	4
ARTICLE IV - LABOR HARMONY CLAUSE	5
ARTICLE V - WORK STOPPAGES AND LOCKOUTS	6
ARTICLE VI - DISPUTES AND GRIEVANCES	6
ARTICLE VII - JURISDICTIONAL DISPUTES	6
ARTICLE VIII - NO DISCRIMINATION	7
ARTICLE IX - SAVINGS AND SEPARABILITY	7
ARTICLE X - DURATION OF THE AGREEMENT	7
SCHEDULE "A"	10

AGREEMENT

This Project Labor Agreement (hereinafter, the “Agreement”), is entered into effective the _____ day of _____, 2014, by and between the various contractors engaged in the construction of facilities to be known as the (Project). The parties to this Agreement are the Building and Construction Trades Council, on behalf of its affiliated Local Unions (hereinafter “Union” or “Unions”), the City of Duluth (hereinafter “Owner”) and Contractor (hereinafter “Construction Manager/General Manager,” “Contractor,” and “Contractors”).

It is understood by the parties to this Agreement that it is the policy of the Owner that the construction work covered by this Agreement shall be contracted to Contractors who agree to be bound by the terms of this Agreement. Therefore, the Union agrees that other Contractors may execute the Agreement for the purpose of covering that work. The Construction Manager/General Contractor shall monitor compliance with this Agreement by all Contractors who through their execution of this Agreement, together with their subcontractors, have become bound hereto.

The term “Contractor” shall include all Contractors and subcontractors of whatever tier engaged in on-site construction work within the scope of this Agreement.

The Union and all signatory Contractors agree to abide by the terms and conditions contained in this Agreement with respect to the administration of the Agreement by the Owner and the performance of the construction by the Contractor of the Project. This Agreement represents the complete understanding of the parties, and it is further understood that no Contractor party is required to sign any other agreement as a condition of performing work within the scope of this Agreement. No practice, understanding or agreement between a Contractor and a Union party which is not explicitly set forth in this Agreement shall be binding on any other party unless endorsed in writing by the Project Contractor.

ARTICLE I - PURPOSE

The (Project), an undertaking of the Owner, is a public project which will employ numbers of skilled and unskilled workers. Construction of the Project will entail utilization of the construction industry in an area having multiple labor contracts and employer associations. Consequently, conflicts within labor-management relations could cause delay or disruption of the efficient completion of the .project unless maximum cooperation of all segments of the construction industry is obtained. This Agreement is to establish as the minimum standards on the Project the hours and working conditions as those prevailing for the largest number of workers engaged in the same classes of work within the area.

It is in the public interest that the Project progress and be completed in an expeditious and efficient manner, free of disruption or delay of any kind. Therefore, it is essential to secure optimum productivity and to eliminate any delays in the work. In recognition of the special needs of this Project and to maintain a spirit of harmony, labor-management peace and stability during the term of this Project Labor Agreement, the parties agree to establish effective and binding methods for the settlement of all misunderstandings, disputes or grievances which may arise. Therefore, the Unions agree not to engage in any strike, slowdown or interruption of work and the Contractor agrees not to engage in any lockout.

ARTICLE II - SCOPE OF THE AGREEMENT

Section 1. This Agreement, hereinafter designated as the "Project Labor Agreement" or "Agreement," shall apply and is limited to all construction work included in all Bid Categories for the (Project), under the direction of the signatory Contractors and performed by those Contractor(s) of whatever tier which have contracts awarded for such work on and after the effective date of this Agreement with regard to the Project.

Such Project is generally described as the construction of:

(Project)

Section 2. It is agreed that all direct subcontractors of a Contractor, of whatever tier, who have been awarded contracts for work covered by this Agreement on or after the effective date of this Agreement shall be required to accept and be bound by the terms and conditions of the Project Labor Agreement.

Section 3. The provisions of this Project Labor Agreement shall apply to all craft employees represented by any Union listed in Schedule A hereto attached and shall not apply to other field personnel or managerial or supervisory employees as defined by the National Labor Relations Act.

Section 4. All employees covered by this Agreement shall be classified in accordance with work performed and paid the base hourly wage rates for those classifications as specified in the attached Schedule A.

Section 5. The Contractors agree to pay contributions to the established employee benefit funds in the amounts designated in the appropriate Schedule A.

Contractors that are not signatory to a collective bargaining agreement beyond the scope of this Agreement (“PLA contractor”) may select to participate in the legally established industry health reimbursement arrangement (“HRA”) plan, in lieu of contributing to the respective bona fide benefit funds as designated in Schedule A. The amount of the contribution is based on the difference between the contribution amount of the bona fide Schedule A benefit funds and the cost of the PLA contractor's bona fide non-discretionary plans. Contributions must be made on behalf of named employees. Participating contractors will submit to the Trustees of the HRA trust and plan a copy of their plan, summary plan description, and the premium structure for workers covered under the PLA contractor's bona fide, non-discretionary plans. The value of the PLA contractor's benefit plans are subject to confirmation by the Trustees of the HRA trust and plan. This may include an independent audit according to a policy as established by the Trustees. Contractors are required to submit certified payroll reports to the Trustees or authorized administrator in order to confirm compliance with the terms of the HRA trust and plan.

The Contractors adopt and agree to be bound by the written terms of the legally-established Trust Agreements (or in lieu thereof, the aforementioned HRA plan and trust including any policies) specifying the detailed basis on which payments are to be made into, and benefits paid out of, such Trust Funds. The Contractors authorize the parties to such Trust Agreements to appoint trustees and successor trustees to administer the Trust funds and hereby ratify and accept the Trustees so appointed as if made by the Contractors.

Section 6. In the event of any conflict between any provisions of this Agreement and in the Local Area Agreements, the terms of this Agreement will be applied. In other words, where a subject covered by the provisions of this Project Labor Agreement is also covered by the Local Area Agreement the provisions of this Project Labor Agreement shall prevail. Where a subject is covered by the Local Area Agreement and not covered by this Project Labor Agreement, the Local Area Agreement provisions shall prevail.

Section 7. This Agreement shall only be binding on the signatory parties hereto and shall not apply to the parents, affiliates, subsidiaries, or other ventures of any such party.

Section 8. This Agreement shall be limited to work historically recognized as construction work. Nothing contained herein shall be construed to prohibit, restrict, or interfere with the performance of any other operation, work or function which may occur in or around the Project site or be associated with the development of the Project, or with the ongoing operations of the Owner.

Section 9. It is understood that the liability of any Contractor and the liability of the separate Unions under this Agreement shall be several and not joint. The Union agrees that this Agreement does not have the effect of creating any joint employment status between or among Owner and any Contractor.

Section 10. All workers delivering fill, sand, gravel, crushed rock, transit/concrete mix, asphalt or other similar materials and all workers removing any materials from the construction site as required by the specifications are subject to the provisions of the Minnesota state

prevailing wage law and are entitled to the appropriate area standard wage. For purposes of this contract, such materials are for specified future use and per Minnesota state prevailing wage law delivery and pickup of the above-listed materials constitutes incorporation.

ARTICLE III - UNION RECOGNITION AND REPRESENTATION

Section 1. The Contractor recognizes the Union as the sole and exclusive bargaining representative of all craft employees working on facilities within the scope of this Agreement.

Section 2. Authorized representatives of the Union shall have access to the Project, provided they do not interfere with the work of employees and further provided that such representatives fully comply with the posted visitor and security and safety rules of the Project.

ARTICLE IV - LABOR HARMONY CLAUSE

The contractor shall furnish labor that can work in harmony with all other elements of labor employed on that (Project) and shall submit a labor harmony plan to demonstrate how this will be done. "Harmony" shall include the provision of labor that will not, either directly or indirectly, cause or give rise to any work disruptions, slow downs, picketing, stoppages, or any violence or harm to any person or property while performing any work, or activities incidental thereto at the (project). The labor harmony plan should include the company's labor management policies, collective bargaining agreements if any and their expiration dates, past labor relations history, a listing of activities anticipated under this contract that may potentially cause friction with on-site workers, and procedures the company will undertake to eliminate this friction.

The contractor agrees that it shall require every lower-tier subcontractor to provide labor that will work in harmony with all other elements of labor employed in the work, and will include the provisions contained in the paragraph above, in every lower-tier subcontract let for work under this contract.

The requirement to provide labor that can work in harmony with all other elements of labor employed in the work throughout the contract performance is a material element of this contract. Failure by the contractor or any of its lower tier subcontractors to comply with this requirement shall be deemed a material breach of the contract which will subject the contractor to all rights and remedies the city of Duluth may have, including without limitation the right to terminate the contract.

ARTICLE V - WORK STOPPAGES AND LOCKOUTS

Section 1. There shall be no strike, picketing, work stoppages, slowdowns or other disruptive, activity for any reason by the Union or employees against any Contractor covered under this Agreement, and there shall be no lockout by the Contractor. Failure of any Union or employee to cross any picket line established by any union, signatory or non-signatory, or any other organization, at or in proximity to the Project site is a violation of this Article.

Section 2. Any party alleging a breach of Section 1, of Article IV shall have the right to petition a court for temporary and permanent injunctive relief. The moving party need not show the existence of irreparable harm, and shall be required to post bond only to secure payment of court costs and attorney fees as may be awarded by the court.

ARTICLE VI - DISPUTES AND GRIEVANCES

Section 1. This Agreement is intended to provide close cooperation between management and labor. The Construction Manager/General Contractor and the Building and Construction Trades Council shall each assign a representative to this Project for the purpose of assisting the Local Unions, together with the Contractor, to complete the construction of the Project economically, efficiently, continuously and without interruption, delays or work stoppages.

Each Contractor shall hold a pre-job conference with the Union and Construction Manager/General Contractor to clear up any project question and work assignments in which there is thought to be a difference in opinion. Every effort will be made to hold such conference well in advance of actual work performance.

Section 2. The Contractor, Union, and employees collectively and individually, realize the importance to all parties to maintain continuous and uninterrupted performance of the work of the Project, and agree to resolve disputes over grievances in accordance with the arbitration provisions set forth in the Local Area Agreements in effect with the Unions listed in Schedule A attached hereto.

ARTICLE VII - JURISDICTIONAL DISPUTES

Section 1. There will be no strikes, work stoppages, slowdowns, or other disruptive activity arising out of any jurisdictional dispute. Pending the resolution of the dispute, the work shall continue uninterrupted as assigned by the Contractor.

Section 2. Building construction work shall be assigned by the Contractor in accordance with the procedural rules of the Plan for the Settlement of Jurisdictional Disputes in the Construction Industry (hereinafter the "Plan"). Any jurisdictional dispute over the Contractor's assignment of work shall be settled in accordance with the provisions of the Plan.

Section 3. Where a jurisdictional dispute involves the International Brotherhood of Teamsters, it shall be referred for resolution to that International Union and the disputing International Union. The resolution of the dispute shall be reduced to writing, signed by the authorized representative of the International Unions and the Contractor. The assignments made by the Contractor shall be followed until such time as the dispute is resolved in accordance with this Section.

ARTICLE VIII - NO DISCRIMINATION

Section 1. The Contractor and Union agree that they will not discriminate against any employee or applicant for employment because of his or her membership or nonmembership in a Union or based upon race, color, religion, sex, national origin or age in any manner prohibited by law or regulation.

Section 2. Any complaints regarding application of the provisions of Section 1 should be brought to the immediate attention of the involved Contractor for consideration and resolution.

Section 3. The use of the masculine or feminine gender in this Agreement shall be construed as including both genders.

ARTICLE IX - SAVINGS AND SEPARABILITY

It is not the intention of the parties to violate any laws governing the subject matter of this Agreement. The parties hereto agree that in the event any provisions of the Agreement are finally held determined to be illegal or void as being in contravention of any applicable law, the remainder of the Agreement shall remain in full force and effect unless the part or parts so found to be void are wholly inseparable from the remaining portions of this Agreement. Further, the contractor and Union agree that if and when any and all provisions of this Agreement are finally held or determined to be illegal or void by Court of competent jurisdiction, the parties will promptly enter into negotiations concerning the substance affected by such decision for the purpose of achieving conformity with the requirements of an applicable law and the intent of the parties hereto.

ARTICLE X DURATION OF THE AGREEMENT

The Project Labor Agreement shall be effective the _____ day of _____, 2008, and shall continue in effect for the duration of the Project construction work described in Article II hereof Construction of any phase, portion, section or segment of the project shall be deemed complete when such phase, portion, section or segment has been turned over to the Owner and has received the final acceptance from the Owner's representative.

Since there are provisions herein for no strikes or lockouts in the event any changes are negotiated and implemented under a Local Area Agreement during the term of this Agreement, the Contractor agrees that, except as specified herein, such changes shall be recognized and shall apply retroactively to the termination date in the particular Local Agreement involved. Each Contractor which has a Local Agreement with a Union at the time that its contract at the project

List name of contract/File No.

commences shall continue it in effect with each said Union so long as the Contractor remains on the project. In the event any such Local Area Agreement expires, the Contractor shall abide by all of the terms of the expired Local Agreement until agreement is reached on a new Local Agreement, with any changes being subject to the provisions of this Agreement.

The Union agrees that there will be no strikes, work stoppages, sympathy actions, picketing, slowdowns or other disruptive activity affecting the Project by any Union involved in the negotiation of a Local Area Agreement nor shall there be any lockout on this Project affecting the Union during the course of such negotiations.

IN WITNESS WHEREOF the parties have entered into this Agreement to be effective as of the day and year above written.

DULUTH BUILDING AND
CONSTRUCTION TRADES COUNCIL

CONTRACTOR

By: _____

By: _____

Its _____
(Printed Name/Title)

Its _____
(Printed Name/Title)

Date: _____

Date: _____

CITY OF DULUTH

By: _____
Mayor

Attest:

City Clerk

Date: _____

City Auditor

Date: _____

Assistant City Attorney

Date: _____

SCHEDULE "A"

- A1 Asbestos Workers Local 49
- A-2 Boilermakers Local 647
- A-3 BAC Local 1 Chapter 3 Duluth & Iron Range
- A-4 Carpenters Local 361
- A-5 Cements Masons/Plasterers Local 633
- A-6 Elevator Constructors Local 9
- A-7 IBEW Local 242
- A-8 Iron Workers Local 512
- A-9 Laborers Local 1091
- A-10 Millwrights & Machinery Erectors Local 1348
- A-11 Operating Engineers Local 49
- A-12 Painters & Allied Trades Local 106
- A-13 Plumbers & Fitters Local 11
- A-14 Roofers Local 96
- A-15 Sheet Metal Workers Local 10
- A-16 Sprinkler Fitters Local 669
- A-17 Teamsters Local 346

**CONTRACTOR
&
CITY OF DULUTH**

THIS AGREEMENT, effective as of the date of attestation by the City Clerk, is made by and between the **CITY OF DULUTH**, a municipal corporation, hereinafter referred to as the "CITY," party of the first part, and _____(**Contractor Name**), _____(**Contractor Address, City, State, Zip Code**), hereinafter referred to as the "Contractor," party of the second part;

WITNESSETH: That the Contractor and the City agree as follows:

1. The following shall be deemed to be part of this contract:
 - a. The annexed resolution and legal advertisement of the City Council.
 - b. The bid request and specifications, as modified by irreconcilable language in this written contract.
 - c. The bid by Contractor, as modified by irreconcilable language in this written contract.
 - d. The performance bond and payment bond certification.
 - e. The project labor agreement, if applicable.
 - f. All provisions of law applicable to a contract of this nature.

2. The Contractor agrees to furnish and deliver to the City Department of _____ all labor, supervision, material, equipment, supplies, insurance, performance bond, payment bond and everything else necessary for general construction of _____ (Project Description) at _____ (Location of Project), all in strict accordance with plans and specifications prepared by _____ (City Architect/Engineer or City's Designated Consultant), your bid of _____ \$ (Vendor Bid Amount) and Council Resolution No. _____, passed _____ (Month/Day & Year of Resolution Passage). Contractor shall not commence performance of any work under this contract until Contractor receives authorization from the City's Purchasing Agent in writing and dated.

3. The City agrees to pay progress payments and make final payments to the Contractor as stated in the contract specifications. The total amount payable under this contract shall not exceed _____ (Sum in words) _____ (Sum in dollars) unless the contract is modified by formal amendment or change order. Payments under this Agreement shall be made from the following accounts _____, Vendor Code _____, Requisition No. _____.

4. The Contractor shall furnish and maintain in full force and effect until this contract is completely performed by the Contractor, a performance bond and payment bond if and when required by law, or if and when required by the City.

5. Inasmuch as this contract concerns work, materials and equipment needed for the public benefit, the provisions of this contract relating to the time of performance and completion of work and delivery of materials or equipment are of the essence of this contract.
6. The Contractor will defend, indemnify and save the City harmless from all costs, charges, damages, and loss of any kind that may grow out of the matters covered by this contract. Said obligation does not include indemnification of the City for claims of liability arising out of the sole negligent or intentional acts or omissions of City but shall include but not be limited to the obligation to defend, indemnify and save harmless the City in all cases where claims of liability against the City arise out of acts or omissions of City which are derivative of the negligence or intentional acts or omissions of Contractor such as, and including but not limited to, the failure to supervise, the failure to warn, the failure to prevent such act or omission by Contractor and any other such source of liability. In addition Contractor will comply with all local, state and federal laws, rules and regulations applicable to this contract and to the work to be done and things to be supplied hereunder.
7. Insurance
 - a. Contractor shall provide the following minimum amounts of insurance from insurance companies authorized to do business in the state of Minnesota, which insurance shall indemnify Contractor and City from all liability described in Paragraph 6 above, subject to provisions below.
 - (1) Workers' compensation insurance in accordance with the laws of the State of Minnesota.
 - (2) Public Liability and Automobile Liability Insurance with limits not less than **\$1,500,000** Single Limit, and twice the limits provided when a claim arises out of the release or threatened release of a hazardous substance; shall be in a company approved by the city of Duluth; and shall provide for the following: Liability for Premises, Operations, Completed Operations, Independent Contractors, and Contractual Liability.
 - (3) City of Duluth shall be named as **Additional Insured** under the Public Liability, Excess/Umbrella Liability* and Automobile Liability, or as an alternate, Contractor may provide Owners-Contractors Protective policy, naming itself and the City of Duluth. Contractor shall also provide evidence of Statutory Minnesota Workers Compensation Insurance. Contractor to provide Certificate of Insurance evidencing such coverage with 30-days notice of cancellation, non-renewal or material change provisions included. The City of Duluth does not represent or guarantee that these types or limits of coverage are adequate to protect the Contractor's interests and liabilities.

**An umbrella policy with a "following form" provision is acceptable if written verification is provided that the underlying policy names the City of Duluth as an additional insured.*

- (4) If a certificate of insurance is provided, the form of the certificate shall contain an unconditional requirement that the insurer notify the City without fail not less than 30 days prior to any cancellation, non-renewal or modification of the policy or coverages evidenced by said certificate and shall further provide that failure to give such notice to City will render any such change or changes in said policy or coverages ineffective as against the City.
 - (5) The use of an “ACORD” form as a certificate of insurance shall be accompanied by two forms – 1) ISO Additional Insured Endorsement (CG-2010 pre-2004) and 2) Notice of Cancellation Endorsement (IL 7002) or equivalent, as approved by the Duluth City Attorney’s Office.
 - b. The insurance required herein shall be maintained in full force and effect during the life of this Agreement and shall protect Contractor, its employees, agents and representatives from claims and damages including but not limited to personal injury and death and any act or failure to act by Contractor, its employees, agents and representatives in the negligent performance of work covered by this Agreement.
 - c. Certificates showing that Contractor is carrying the above described insurance in the specified amounts shall be furnished to the City prior to the execution of this Contract and a certificate showing continued maintenance of such insurance shall be on file with the City during the term of this Contract.
 - d. Contractor shall be required to provide insurance meeting the requirements of this Paragraph 7 unless Contractor successfully demonstrates to the satisfaction of the City Attorney, in the exercise of his or her discretion, that such insurance is not reasonably available in the market. If Contractor demonstrates to the satisfaction of the City Attorney that such insurance is not reasonably available, the City Attorney may approve an alternative form of insurance which is reasonably available in the market which he or she deems to provide the highest level of insurance protection to the City which is reasonably available.
8. No claim whatsoever shall be made by the Contractor against any officer, agent or employee of the City for, or on account of, anything done, or omitted to be done, in connection with this contract. If this contract is not made in conformity with mandatory provisions of any statute or of the ordinances and charter of the City of Duluth, the Contractor agrees to raise no defense and make no claim against the City on the basis of ratification, laches, estoppel, or implied contract.
 9. The Contractor shall not assign, transfer, convey or otherwise dispose of this contract, or his right to execute it, or his right, title or interest in or to it, or any part thereof, without the consent of the City, evidenced by a resolution duly adopted by the City Council. The prohibition contained in this paragraph shall not be deemed to prevent the contractor from subcontracting. Contractor shall remain primarily responsible for all work performed by any subcontractor.
 10. The Contractor agrees that in the hiring of common or skilled labor for the performance of any work under this contract, Contractor will not discriminate by reason of race, creed or

color, religion, national origin, sex, marital status, status with regard to public assistance, disability or age.

11. The Contractor agrees that Contractor shall not in any manner discriminate against or intimidate or prevent the employment of any person or persons, or on being hired, prevent or conspire to prevent any person or persons from the performance or work under this contract on account of race, creed or color, religion, national origin, sex, marital status, status with regard to public assistance, disability or age.
12. The contractor agrees that, as provided in Minnesota Statutes 16C.05, Subd. 5, contractor's books, records, documents, and accounting procedures and practices are subject to examination by the City or the state auditor for six years from the date of final payment under this contract.
13. This contract may be cancelled or terminated by the City and all moneys due or to become due hereunder may be forfeited for any failure to perform any terms or conditions of this contract including but not limited to any violation of the terms or conditions of Section 10 or 11 of this contract.
14. Any waiver by any party of any provision of this contract shall not imply a subsequent waiver of that or any other provision.
15. This contract is made in the state of Minnesota and shall be construed and interpreted in accordance with the laws of the State of Minnesota. The appropriate venue and jurisdiction for any litigation hereunder shall be in a court located in St. Louis, County, Minnesota, and the parties to this Agreement waive objection to the jurisdiction of this court, whether based on convenience or otherwise.
16. This Agreement constitutes the entire agreement between the City and the Contractor on the subject matter hereof. It may not be changed, modified, discharged or extended except by written instrument duly executed on behalf of the City and the Contractor. The Contractor agrees that no representations or warranties made by the City shall be binding upon the City unless expressed in writing herein.
17. This Agreement shall not be in force and effect, or in any way binding upon the City until the same shall have been approved by the Director of _____ (Department Name), signed by the Mayor, attested by the Clerk, and countersigned by the City Auditor.
18. The Contractor unconditionally guarantees to perform all work pursuant to this contract in a good and workmanlike manner, in strict compliance with the specifications and instructions hereto attached, and to the satisfaction of the City of Duluth.
19. This Agreement may be executed in counterparts, each of which shall be deemed to be original and all of which together shall constitute the binding and enforceable agreement of the parties hereto. This Agreement may be executed and delivered by a party by facsimile or PDF transmission, which transmission copy shall be considered an original and shall be binding and enforceable against such party.

CITY OF DULUTH

CONTRACTOR

Mayor

Attest:

City Clerk
Date: _____

Countersigned:

City Auditor

Approved as to form:

City Attorney

Department Director

Purchasing Agent

By _____
Its _____

And By _____
Its _____

**CITY OF DULUTH
INVITATION TO BID**

PROJECT NAME/DESCRIPTION: Duluth City Hall Interior Renovations, Phase 1: First Floor

PROJECT NUMBER: 14-02-TR

BID NUMBER: 14-0459

Sealed bids will be received by the City Purchasing Agent in and for the Corporation of the City of Duluth, Minnesota in Room 100 City Hall, Duluth, Minnesota 55802, (218) 730-5340 at 2:00 p.m., local time on Tuesday, October 14, 2014, for the Duluth City Hall Interior Renovations, Phase 1: First Floor; immediately thereafter, bids will be taken to Room 106A City Hall where they will be publicly opened and read aloud.

NOTICE TO BIDDERS:

- 1. A Project Labor Agreement (PLA) will be required for any bid that is over or could virtually go over \$150,000.**
- 2. Unless a Certificate of Exemption is provided, any out-of-state bidder receiving a bid award will have 8% retained from invoice payments on any contracts over \$50,000. Submit a signed copy from the State of Minnesota when submitting Payment and Performance Bonds. This form may be found at the following web address:
http://www.revenue.state.mn.us/Forms_and_Instructions/sde.pdf**
- 3. A mandatory pre-bid meeting and walk-thru of the site will take place on Tuesday, September 30, 2:00 PM. Meet at the elevators, First Floor City Hall.**

This advertisement is also available on the City of Duluth website at http://www.duluthgov.info/db_frames/bid_information.cfm

ONLY IF REQUIRED – Each bidder must review the 2014 edition of the City of Duluth Public Works/Utilities Department – Engineering Division Standard Construction Specifications on the city website (www.duluthmn.gov) as these Specifications are incorporated by reference and deemed to be a part of this project as if fully incorporated and set forth herein.

In general, this project consists of: Removal of existing asphalt parking lot and driveway and replacement with new compacted subgrade, geotextile fabric, 12" granular, 8" aggregate, and two (2) courses of 2" asphalt per drawings and specifications.

Proposal forms, contract documents, plans and specifications as prepared by the firm of John Ivey Thomas Associates are on file at the following offices: City Purchasing Office; City Architect's Office; Duluth Builder's Exchange; McGraw Hill Construction; Minneapolis Builder's Exchange; Reed Construction Data, and the office of John Ivey Thomas Associates, 413 East Superior Street, Duluth, MN 55802.

Copies of these plans and specifications may be obtained from Sheldon Plan Room, 124 E Superior St, Duluth, MN 55802. Copies of bidding documents may be obtained by purchase from Sheldon's.

A certified check or bank draft payable to the order of the City of Duluth, negotiable U.S. Government Bonds (at par value), or a satisfactory bid bond executed by the bidder and acceptable surety, in an amount equal to five percent (5%) of the total bid, shall be submitted with each bid.

The Contractor will comply with all local, state and federal laws, rules and regulations applicable to this contract and to the work to be done and items supplied hereunder. All building permits are the responsibility of the Contractor to acquire and pay through the Building Safety Division.

Attention is called to the fact that not less than the minimum salaries, wages and benefits as set forth in the contract documents must be paid on this project. The contractor must take affirmative action to ensure that the employees and applicants for employment are not discriminated against because of their race, color, creed, sex or national origin and must meet the affirmative action goals. Contractors are encouraged to subcontract with disadvantage business enterprises when possible.

The City of Duluth reserves the right to reject any or all bids or to waive any informalities in the bidding. Bids may be held by the City of Duluth for a period not to exceed thirty (30) days from the date of opening the bids for the purpose of reviewing the bids and investigating the qualifications of the bidders, prior to awarding the contract.

The City of Duluth is an Equal Opportunity Employer. Contractor shall comply with all applicable Equal Employment Opportunity laws and regulations.

CITY OF DULUTH

Dennis Sears
Purchasing Agent

SECTION 01 11 00

SUMMARY OF WORK

Work includes:

- Demolition
- New wall construction, trim, casings, baseboards.
- Suspended acoustical ceilings.
- New doors, frames, and hardware.
- Finishes
- Painting
- Window films
- Plaster repair
- Millwork and cabinetry
- Mechanical
- Electrical

SECTION 01 23 00

ALTERNATES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Contractor shall state, in the space provided in the Bid Form, an alternate price for the work described below. Base Bid and Alternate Bids shall include the cost of all supporting elements required so that no matter what combination of Base Bid and Alternates is accepted, that portion shall be a complete entity in itself. Work for all Alternates shall be in strict accordance with the applicable specifications.
- B. The Owner reserves the right to accept alternates in any order. Contractor shall indicate amount to be added or deducted from Bas Bid for all material, equipment, labor, services, etc. necessary for the work described below.

1.2 ALTERNATES

- A. Add Alternate #1: For complete and operational MIS area cools system as indicated on plans. This includes but is not limited to indoor cassettes, condensing unit, related refrigerant and condensate piping, electrical wiring and connections, and associated controls.
- B. Deduct Alternate #2: Eliminate ATS-2, Panelboard LP3A-G05, new 200a feeder breaker in existing switchboard and related conduit, wire, and installation.

SECTION 01 31 00

PROJECT COORDINATION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Project Coordination
- B. Schedule
- C. Construction Meetings
- D. Shift Times

1.2 SCHEDULE

- A. Schedule: The general contractor shall submit a schedule of construction activities for approval. Work shall be started as soon as Notice to Proceed is received.
- B. Project Completion: Construction work is to proceed immediately from Notice to Proceed with on-site construction work to begin when directed and continue uninterrupted until completion. Timelines as established by Contractor will be adhered to and used as a guide to construction progress.

1.3 CONSTRUCTION MEETINGS/COORDINATION

- A. All contractors scheduled to have operations on site during any week, or when requested, shall attend weekly construction meetings as scheduled. All upcoming construction operations will be reviewed at this meeting to allow for scheduling of building activities. Close coordination with owner's representative must occur throughout construction period.
- B. Coordination: The general contractor shall provide scheduling and superintendence.

1.4 SHIFT TIMES

- A. Minimum of eight (8) hour work days during regular Monday – Friday schedule. Work can be arranged for longer hours.

1.5 SITE ACCESS/RESTRICTIONS

- A. Building Access: As building will be occupied during construction, access to facilities will not be allowed except for scheduled construction operations.
- B. Operations must be fenced to extent possible for safety. All entrances must remain passable unless prior arrangements for restricted use have been made.
- C. Storage Areas: Storage areas are indicated on plans and must be fenced by contractor to preclude access by patients or others.
- D. Maintain facility delivery access during construction. Coordinate operations with Owner's representative.
- E. Parking – See Section 01500.

SECTION 01 33 00

SUBMITTALS

1.1 REQUIREMENTS INCLUDED

- A. Administrative provisions for required submittals.

1.2 RELATED REQUIREMENTS

- A. Sections 00 72 00 and 00 73 00 - General and Special Conditions
- B. Section 01 33 23 - Shop Drawings, Product Data, and Samples
- C. Section 01 70 00 - Contract Closeout Procedures - Closeout Submittals

1.3 SUBMITTALS

- A. Successful bidder will be required to submit the following:
- B. Performance and Material Payment Bond - on City Forms
- C. Non-Collusive Affidavit
- D. Progress Schedule
 - 1. The Contractor shall, within ten (10) days after the Notice of Award, prepare and submit to the Architect for approval, a schedule showing the order in which he proposes to carry on the work, and dates on which he will start, suspend, and complete the various items of work included in this agreement.
 - 2. The Contractor will be required to adhere to his proposed schedule and he shall prosecute the work in such a manner as to insure its completion within the time set forth in the contract. Any failure to adhere to the proposed schedule will be considered prima facie evidence that Contractor has failed to provide sufficient workmen, equipment or materials to insure completion of the work within the specified time limit.
- E. List of Subcontractors and Suppliers
- F. Certificates of Insurance

Certificates of insurance shall be filed with Owner and Architect/Engineer. No work under this contract shall be started until all insurance policies have been filed and approved.
- G. Other submissions required in this specification book.

SECTION 01 33 23

SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Submit all shop drawings, product data, and samples to the Architect for approval.

1.2 RELATED REQUIREMENTS

- A. Conditions of Contract govern requirements of this section.
- B. Documents 00 72 00 and 00 73 00 - Conditions of Contract: Definitions and basic responsibilities of entities.
- C. Section 01 72 00 - Project Record Documents
- D. Section 01 73 00 - Operations and Maintenance Data

1.3 SHOP DRAWINGS

- A. Contractor shall review, approve, and then submit to the Architect with reasonable promptness and in such sequence as to cause no delay in the work or in the work of the Owner or any separate contractor, shop drawings in electronic format, product data, and samples required by the Contract Documents. Each drawing must contain sufficient clear area for the Contractor stamp and the Architect/Engineer stamp.
- B. By approving and submitting shop drawings, product data, and samples, the Contractor represents that he has determined and verified all field materials, field measures, and file construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the work and of the contract documents.
- C. The Contractor shall not be relieved of any responsibility for any deviation from the requirements of the Contract Documents by the Architect's approval of shop drawings, product data or samples, unless the Contractor has specifically informed the Architect in writing of such deviation at the time of the submission, and the Architect has given written approval to the specific deviation.
- D. The Contractor shall not be relieved from responsibility for errors or omissions in the shop drawings, product data, or samples by the Architect/Engineer's approval thereof.
- E. No portion of the work requiring submission of a shop drawing, product, or sample shall be commenced until the submittal has been approved by the Architect/Engineer. All such portions of the work shall be in accordance with approved submittals.

1.4 PRODUCT DATA

- A. Submit only pages which are pertinent; mark each copy of standard printed data to identify pertinent products referenced to Specification Section and Article number. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.

- B. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the work. Delete information not applicable.

1.5 SAMPLES

- A. Where specific color or finish is not indicated in the specification, submit samples for selection of finishes within eight (8) days after date of contract.
- B. Note: Architect will act on color, finish, texture and pattern selections within reasonable time (30 days minimum) after all sample palettes have been received.
- C. Submit full range of manufacturer's standard finishes except when more restrictive requirements are specified, indicating colors, textures, and patterns, for Architect/Engineer selection.
- D. Submit samples to illustrate functional characteristics of products, including parts and attachments.
- E. Approved samples which may be used in the Work are indicated in the specification section.
- F. Label each sample with identification required for transmittal letter.
- G. Provide field samples of finishes at Project, at location acceptable to Architect/Engineer, as required by individual specifications section. Install each sample complete and finished. Acceptable finishes in place may be retained in completed work.

1.6 MANUFACTURER'S INSTRUCTIONS

- A. Manufacturer's instructions for storage, preparation, assembly, installation, start-up, adjusting, and balancing.

1.7 CONTRACTOR'S REVIEW

- A. Contractor shall sign or initial each sheet of shop drawings and product data, and each sample label to certify compliance with requirements of Contract Documents. Notify Architect/Engineer in writing at time of submittal, of any deviations from requirements of Contract Documents.
- B. Do not fabricate products or begin work which requires submittals until return of submittal with Architect/Engineer acceptance.

1.8 SUBMITTAL REQUIREMENTS

- A. Transmit submittals electronically in such sequence to avoid delay in the Work or work of other trade contracts.
- B. Provide blank space on each submittal for Architect/Engineer stamps.
- C. Apply Contractor's stamp, signed or initialed, certifying to review, verification of products, field dimensions and field construction criteria, and coordination of information with requirements of Work and Contract Documents.
- D. Submit under transmittal letter. Identify Project by title, work and product by specifications section and article number.

1.9 RESUBMITTALS

- A. Make resubmittals under procedures specified for initial submittals; identify changes made since previous submittal.

1.10 ARCHITECT/ENGINEER REVIEW

- A. Architect/Engineer will review shop drawings for general design only, product data, and samples and return submittals to Contractor within seven (7) days. Dimensions and quantities are the responsibility of the Contractor.

1.11 DISTRIBUTION

- A. Duplicate and distribute reproductions of shop drawings, copies of product data, and samples, which bear Architect/Engineer stamp of approval, to job site file, Record Documents file, subcontractor, suppliers, other affected contractors, and other entities requiring information.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

SECTION 01 50 00

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Temporary Utilities

1. Electricity: All electricity for construction program and temporary lighting by Contractor.
2. Heat: From building.
3. Telephone Service: Contractor will be required to have telephone service available.
4. Water: From building.
5. Sanitary Facilities: Toilets design in building for contractor to use.

B. Temporary Controls

1. Barriers: By Contractor.
2. Enclosures and Fencing: By Contractor.
3. Protection of the Work: By Contractor
4. Safety Railings: Provide required safety railings.

C. Construction Facilities

1. Parking: No Contractor parking will be allowed on site.
2. Project Sign: None on site.
3. Temporary Buildings: Not required.

D. Delivery of Materials: All delivery of materials across owner's parking lot must be coordinated with owner's representative.

E. Snow Removal: N/a.

F. Clean Up: Parking lot, staging area, and construction zone must be kept clean and all debris kept in approved dumpsters.

G. Safety Programs: Each contractor shall be responsible for their safety programs and safety programs of their subcontractors. They shall be responsible for holding safety meetings, adherence to safety programs for their own forces or forces that are performing work that is a part of their contract. They shall be further responsible for the related safety of the public or other persons on site relative to the work under their control.

In no case shall the Owner, the Architect, or their respective employees and agents have either direct or indirect responsibility for matters related to project safety.

SECTION 01 70 00

CONTRACT CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Administrative provisions for Substantial Completion and for final acceptance.

1.2 SUBSTANTIAL COMPLETION

- A. When Contractor considers Work or designated portion of Work is substantially complete, submit written notice to Architect with list of items to be completed or corrected.
- B. Should Architect/Engineer inspection find Work is not substantially complete, he will promptly notify Contractor in writing, listing observed deficiencies.
- C. Contractor shall remedy deficiencies and send a second written notice of substantial completion.
- D. When Architect/Engineer finds Work is substantially complete he will prepare a Certificate of Substantial Completion in accordance with provisions of General Conditions.

1.3 FINAL COMPLETION

- A. When Contractor considers Work is complete, submit written certification:
 - 1. Contract Documents have been reviewed.
 - 2. Work has been inspected for compliance with Contract Documents.
 - 3. Work has been completed in accordance with Contract Documents, and deficiencies listed with Certificate of Substantial Completion have been corrected.
 - 4. Equipment and systems have been tested, adjusted, and balanced, and are fully operational.
 - 5. Operation of systems has been demonstrated to Owner's personnel.
 - 6. Work is complete and ready for final inspection.
- B. Should Architect/Engineer inspection find Work incomplete, he will promptly notify Contractor in writing listing observed deficiencies.
- C. Contractor shall remedy deficiencies and send a second certification of final completion.
- D. When Architect/Engineer finds work is complete, he will consider closeout submittals.

1.4 REINSPECTION FEES

- A. Should status of completion of Work require reinspection by Architect/Engineer after substantial completion inspection and final inspection of this work and due to failure of Work to complete, Owner will deduct the amount of Architect/Engineer's compensation for reinspection services from final payment to Contractor.

1.5 CLOSEOUT SUBMITTALS

- A. Project Record Documents: Under provisions of Section 01720.
- B. Warranties and Bonds: Under provisions of Section 01740.
- C. Evidence of Payment and Release of Liens: In accordance with Conditions of the Contract.
- D. Consent of Surety to Final Payment.
- E. Certificates of Insurance for Products and Completed Operations: In accordance with Supplementary Conditions.

1.6 STATEMENT OF ADJUSTMENT OF ACCOUNTS

- A. Submit final statement reflecting Adjustments to Contract Sum indicating:
 - 1. Original contract sum.
 - 2. Previous change orders.
 - 3. Changes under allowances.
 - 4. Changes under unit prices.
 - 5. Deductions for uncorrected work.
 - 6. Penalties and bonuses.
 - 7. Deductions for liquidated damages.
 - 8. Deductions for reinspection fees.
 - 9. Other adjustment to contract sum.
 - 10. Total contract sum as adjusted.
 - 11. Previous payments.
 - 12. Sum remaining due.
- B. Architect/Engineer will issue a final Change Order reflecting approved adjustments to Contract Sum not previously made by change orders.

1.7 APPLICATION FOR FINAL PAYMENT

- A. Submit application for final payment in accordance with provisions of Conditions of the Contract.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

SECTION 01 74 00

FINAL CLEANING

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Final cleaning of project to be done by Contractor.

1.2 DESCRIPTION

- A. Contractors execute cleaning prior to inspection for Substantial Completion of each designated portion of the Work.
- B. Execute exterior and site cleaning. Provide access and coordinate with owner's personnel.

PART 2 - PRODUCTS

2.1 CLEANING MATERIALS

- A. Use materials which will not create hazards to health or property, and which will not damage surfaces.
- B. Use only materials and methods recommended by manufacturer of material being cleaned.

PART 3 - EXECUTION

3.1 CLEANING

- A. In addition to removal of debris and cleaning specified in other sections, clean exterior exposed to view surfaces.
- B. Remove temporary protection and labels not required to remain.
- C. Clean finishes free of dust, stains, films, and other foreign substances.
- D. Maintain cleaning until Substantial Completion.
- E. Remove waste, foreign matter, and debris from roofs, gutters, area ways, and drainage systems.
- F. Remove waste, debris, and surplus materials from site. Clean grounds; remove stains, spills, and foreign substances from paved areas and sweep clean. Rake clean other exterior surfaces.
- G. After substantial completion Owner will perform further cleaning as he may require.

SECTION 01 78 36

WARRANTIES, BONDS, AND GUARANTEES

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. This is separate from performance and payment bonds which are reviewed in other parts of this document.

See also Instructions to Bidders: Bid Bonds.
General and Special Conditions: Performance Bond and Labor and Material Payment Bonds, Warranty, and Correction of Work.

- B. Preparation and submittal of warranties and bonds.
- C. Schedule of submittals.

1.2 RELATED REQUIREMENTS INCLUDE

- A. Conditions of Contract and Division 1 - General Requirements govern work of this section.
- B. Section 01 70 00 - Contract Closeout Procedures
- C. Individual Specification Sections; Warranties and bonds required for specific products or work.

1.3 FORM OF SUBMITTALS

- A. Bind in commercial quality 8-1/2 x 11 inch three-ring side binders, with hard back, cleanable, plastic covers.
- B. Label cover of each binder with typed or printed title WARRANTIES AND BONDS, with title of project; name, address and telephone number of Contractor; and name of responsible principal.
- C. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of Product or work item.
- D. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List subcontractor, supplier, and manufacturer with name, address, and telephone number of responsible principal.

1.4 PREPARATION OF SUBMITTALS

- A. Obtain warranties and bonds, executed in duplicate by responsible subcontractors, suppliers, and manufacturers, within ten days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until the Date of Substantial Completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.

- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.
- E. Submit to Owner.

1.5 TIME OF SUBMITTALS

- A. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within ten days after acceptance.
- B. Make other submittals within ten days after Date of Substantial Completion, prior to final Application for Payment.
- C. For items of Work when acceptance is delayed beyond date of Substantial Completion, submit within ten days after acceptance, listing the date of acceptance as the beginning of the warranty period.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

SECTION 01 78 39

PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Maintenance of Record Documents and Samples.
- B. Submittal of Record Documents and Samples

1.2 RELATED REQUIREMENTS

- A. Conditions of Contract govern requirements of this section.
- B. Section 00 72 00 - General Conditions
- C. Section 01 33 23 - Shop Drawings, Product Data, and Samples
- D. Section 01 70 00 - Contract Closeout Procedures
- E. Individual Specification Sections: Manufacturer' certificates and certificates of inspection.

1.3 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. In addition to requirements in General Conditions, all Contractors shall maintain at the site for Owner one record copy of:
 - 1. Contract Drawings
 - 2. Specifications
 - 3. Addenda
 - 4. Change Orders and other modifications to the Contract
 - 5. Reviewed shop drawings, product data, and samples.
 - 6. Field test records
 - 7. Inspection certificates
 - 8. Manufacturer's certificates
- B. Store Record Documents and samples in Field Office apart from documents used for construction. Provide fields, racks, and secure storage for record documents and samples.
- C. Label and file Record Documents and samples in accordance with Section number listing in Table of Contents of this Project Manual. Label each document "PROJECT RECORD" in neat, large, printed letters.
- D. Maintain Record Documents in a clean, dry and legible condition. Do not use Record Documents for construction purposes.
- E. Keep Record Documents and samples available for inspection by Architect/Engineer.

1.4 RECORDING

- A. Record information on a set of blue line opaque drawings and in a copy of a Project Manual, provided to Owner.
- B. Provide felt tip marking pens, maintaining separate colors for each major system, for recording information.
- C. Record information concurrently with construction progress. Do not conceal any work until required information is recorded.
- D. Contract Drawings and Shop Drawings: Legibly mark each item to record actual construction, including:
 - 1. Measured depth of element of foundation in relation to finish first floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of construction.
 - 4. Field changes of dimension and detail.
 - 5. Changes made by Modifications.
 - 6. Details not on original Contract Drawings.
 - 7. References to related shop drawings and Modifications.
- E. Specifications: Legibly mark each item to record actual construction, including;
 - 1. Manufacturer, trade name, and catalog number of each product actually installed, particularly optional items and substitute items.
 - 2. Changes made by Addenda and Modifications.
- F. Other Documents: Maintain manufacturer's certifications, inspection certifications, and field test records, required by individual specification sections.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

SECTION 02 40 00

DEMOLITION

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. Work under this section includes all demolition and removal work at the existing building as is necessary to accommodate, build, and use the new construction; and disposition of all removed materials and equipment.
- B. Furnish all labor, tools, and appliances, and perform all operations necessary to complete all demolition work shown on the drawings and hereinafter specified, or as required to carry all work in the contract to satisfactory completion.
- C. The work shall include, but not necessarily be limited to, the following:
 - 1. Remove portions of existing building to receive new construction shown on drawings or herein specified including electrical, mechanical, and sprinkler work. Secure any unsupported ceiling areas or mechanical or electrical work.
 - 2. Remove materials, cut openings, chase masonry providing continuous waterproofing of building and protection of all openings.
 - 3. Removal and salvaging certain windows for reuse, window sash for storage, items noted on plans to be turned over to owner.
 - 4. Removal of existing concrete topping slabs at department entrances as required for alignment of new terrazzo tile floor finish with existing and new floor finishes.
 - 5. Removal of floor finishes and adhesives.
 - 6. Removal and salvaging of all existing wood casings, trim, and wood base boards for reinstallation.
- D. Contractor to remove and catalog location of all existing blinds for reinstallation by contractor.

1.2 WORK NOT INCLUDED

- A. This section does not include removal of asbestos or existing VAT floor tile or floor tile adhesive.

1.2 GENERAL

- A. Care of Work
 - 1. The Contractor shall be responsible for all injury to persons or property that occur as a result of his fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all work performed until completion and final acceptance.
 - 2. Demolition work shall proceed only after all materials, equipment, etc. designated for reuse or salvage of the Owner have been removed.

3. In an emergency affecting the safety of life or property, on or adjoining the site, the contractor shall act, at his own discretion to prevent such threatened loss or injury.
 4. The Contractor shall avoid damaging sidewalks, streets, curbs, pavements, utilities, structures or any other property (except that which is to be replaced or removed) either on or adjacent to the site. He shall repair, at his own expense and in a manner satisfactory to the Architect, any damage thereto caused by his operations.
 5. **Note: Existing terrazzo floors within building are to be protected from damage throughout entire construction work.**
- B. Except as otherwise specifically stated in the contract documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, heat, power, transportation, superintendence, temporary construction of every nature, charges, levies, fees or other expenses incurred and all other services and facilities of every nature whatsoever necessary for his performance of the contract within the time specified.

PART 3 - EXECUTION

3.1 PROTECTION

- A. The contractor shall take responsible and adequate precautions to protect the Owner's property from damage during demolition work, moving of debris, and damage by the elements, including flooding, wind storms, etc. Any damage to the Owner's property due to the aforesaid work shall be restored or replaced by the contractor at his own expense and in a manner satisfactory to the Owner.
- B. Contractor shall provide and maintain suitable barricades, shelters, lights and danger signals during the progress of the work. They must meet the requirements of state and/or local building codes. The Contractor shall assume full responsibility of barriers to completion of contract and shall remove same. This shall include fence and barriers erected by other contractors.

3.2 GENERAL

- A. Remove all work carefully and only to the extent required for the final work. Remove all loose or damaged materials caused by demolition, or noted or specified to be removed. Protect existing construction that is to remain from damage.
- B. Openings and pockets shall be neatly cut for installation of lintels, anchors, concrete slabs, and precast concrete slabs or bearing plates where required.
- C. Depressions, chases, etc. shall be neatly cut with carborundum saws where such cuts will be exposed in the finished work.
- D. The use of pneumatic hammers for demolitions and cutting purposes within the existing building will not be permitted.
- E. Debris transported through finished spaces shall be on rubber-tired trucks or dollies and shall be properly covered to minimize spread of dust. Clean up in finished spaces must occur on a regular basis.

- F. Leave each area broom clean upon completion of the demolition work.
- G. When clay tile walls are to have openings made, clay tile wall above opening is to be removed full height. Openings are to be saw cut plumb and square. No unsupported clay tile is to remain.

3.3 DISPOSITION OF MATERIALS

- A. Unsalvageable Materials - All unsalvageable materials shall be removed in a manner that will avoid damage to materials or equipment to remain and shall be completely removed and legally disposed away from the site.
- B. Salvageable Materials to be Reused in the Work - Salvageable materials designated for reuse or relocation shall be carefully removed by the applicable trades and shall be protected from damage until they are incorporated into the new work.
- C. Salvageable Materials to be Stored for the Owner - Salvageable materials designated to remain the property of the Owner shall be carefully removed by the applicable trades, protected from damage, and stored as directed on the site.
- D. All other materials or debris resulting from demolition operation shall become the property of the Contractor and shall be removed from the site promptly. No accumulation of debris will be permitted. Wood and flammable debris resulting from demolition operations shall not be burned on the site.

3.4 ASBESTOS OR PCB REMOVAL/ENCAPSULATION

- A. If suspect material is encountered, advise Project Manager for removal action or instructions.

3.5 DEMOLITION AND SALVAGE

- A. No right, title, property or interest of any kind whatsoever in or to the land or premises upon which buildings or structures stand is created, assigned, conveyed, granted or transferred to the Contractor or any other person or persons, except only the license and right of entry to remove parts of buildings and structures in strict accordance with the Contract.
- B. Only such property may be salvaged by the Contract as is owned by the Owner and in the event of any doubt respecting the ownership of any particular property, the Contractor shall request from the Owner a written statement regarding its ownership.
- C. All salvage becomes the property of the contractor except as otherwise indicated, but storage of such materials and equipment on the project area will not be permitted except for the duration of the contract and such storage at no time interfere with the activities of the Owner or of other contractors.
- D. Personal property of third persons or of occupants of buildings on the site shall not become the property of the Contractor.
- E. Unless otherwise specified, no part of the structure shall be removed from the premises as a whole, or in a substantially whole condition, but all such parts shall be demolished on the premises.

F. Live Utilities and Other Property

1. The contractor shall assume all responsibility for damage attributable to him to any property upon, or passing through the project area, but excluded from the work not owned by the Owner such as utility lines, surface improvements, or like items.
2. If disconnections of underground utility services are required to be made in public thoroughfares, the Contractor shall comply with all local requirements and regulations respecting the barricading of trees, the removal and restoration of pavement, and other pertinent matters.

G. Mechanical and Electrical Work Exposed: Where mechanical ductwork or piping or electrical conduit is exposed during removal of partitions or walls it shall be removed or rerouted by the respective trades as required. Rerouting piping shall be located where directed and shall be connected to maintain all functions in proper operation. Abandoned piping may be left in place where it is concealed in floors or walls, providing that it is disconnected from its source. There shall be no "dead end" water, sewer, or vent piping existing in the completed work.

3.4 PRECAUTIONS

- A. The operations of the contractor shall be done in such manner as to avoid fires and other hazards to persons and property, interference with the use of adjacent buildings or interruption of free passage to and from such buildings. On completion of the work at each building, the premises shall be left in a condition satisfactory to the Architect.
- B. Where adjoining structures are occupied, the contractor is required to advise the inhabitants as to when the demolition work or site clearance work will be started and of the hazards involved. A minimum of a rope barricade shall be provided during working hours to restrict unauthorized persons from entering hazardous working areas. If basement openings or other hazardous conditions must be left unattended, a minimum of a continuous snow fence barricade shall be provided around the entire basement opening or hazard.
- C. The use of explosives in the performance of the work under this Contract is prohibited.

3.5 DEBRIS CLEANUP

- A. No combustible debris shall be thrown, stored or burned on the site or adjacent parcels, sidewalks, streets, drives, parking lots or alleys. Debris created from wrecking site clearances must be disposed of as demolition or removal work proceeds.
- B. Dropping of brick, stone or concrete walls on adjacent property, sidewalks, streets, drives, parking lots or alleys not in Contract is forbidden. All wrecking operations, storing or processing of non-combustible debris shall be restricted to the boundaries of the demolition area.
- C. The cleaning up of the streets, drives, walks, parking lots, parcels and the site shall include the removal and disposal of any rubbish, refuse or other trash lying within the areas, whether or not such conditions have resulted from operations under this Contract.

SECTION 05 40 00

LIGHT GAUGE FRAMING

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. Furnish and install light gauge framing as described in the specifications or shown on the plans. All partition walls to run from floor to underside of deck unless otherwise noted.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Exterior Wall Studs:N/A
- B. Regular Duty: Studs shall be non-load bearing 16" o.c. equal to Gold Bond channel stud 20 gauge or approved equal. Metal studs and tracks 3-5/8" wide shall be erected where partitions are shown on drawings without specific designation. Install partitions plastered both sides except where wider space is indicated, as in back of toilets or other mechanical equipment where two sets of studs will be erected and braced between 4'-6" o.c. and plastered one side each set of studs. Studs shall not be set to be restrained at masonry, columns, or similar intersections. Use 6" stud walls behind lavatories. Thickness of walls above shall be verified in each case with total wall thickness shown on drawings.
- C. Heavy Duty: As indicated on drawings.
- D. Provide miscellaneous and shaft framing in shapes and sizes indicated on plans.
- E. Wall Furring: Provide and install light gauge metal furring system as detailed on plans.
- F. Suspended Metal Stud Ceiling Support System
 - 1. Performance Requirements: Fabricate and install systems as indicated but not less than that required to comply with ASTM C754 under the following conditions:
 - a. A pre-engineered drywall suspension systems consisting of straight main tees (for wall-to-wall system) or straight main tees and straight furring cross tees, that joint together to support screw attached interior gypsum panels, fiber reinforced aggregated Portland cement board, gypsum base panels and veneer plaster, metal lath and conventional gypsum plaster and independently supported light fixtures and air diffusers where applicable. Installed systems must conform to Underwriters Laboratories, Inc. Fire Resistance Design No. D502 where noted.
 - b. Maximum deflection of 1/360 for distance between supports.
 - c. Suspend system from roof or floor structure above with stainless steel wires at 4'-0" o.c. each way, or with metal stud framing as recommended by manufacturer.

2. Reference Standards:
 - a. ASTM C635, Standard Specification for Metal Suspension System
 - b. ASTM C636, Recommended Practice for Installation of Metal Suspension Systems
 - c. Cisca Ceiling Systems Installation Handbook
 - d. ASTM C1186, Standard Specification for Flat Non-Asbestos Fiber-Cement Sheets
 - e. ASTM C1278, Standard Specification for Fiber-Reinforced Gypsum Panels
 - f. ASTM C645, Standard Specification for Non-Bearing (Axial) Steel Studs, Runners, Track, and Rigid Furring Channels for Screw Application of Gypsum Board
 - g. ASTM C754, Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Board
 - h. ASTM C840, Specification for Application and finishing of Gypsum Board
 - i. ASTM C841, Specification for Installation of Interior Lathing and Furring
 - j. ASTM C842, Specification for Application of Interior Gypsum Plaster
 - k. ASTM C843, Specification for Application of Gypsum Veneer Plaster
 - l. ASTM C844, Specification for Application of Gypsum Base to receive Gypsum Veneer Plaster
 - m. ASTM E119, Standard Test Methods for Fire Tests of Building Construction and Materials
 - n. Underwriters Laboratories, Inc. Fire Resistance Directory
3. Samples: Submit technical data for suspension system main tees and cross tees for review.

PART 3 - EXECUTION

3.1 APPLICATION

- A. Track - Align steel stud track accurately to the partition layout at both floor and ceiling. Secure to concrete slabs with 1/2" concrete stud nails or other suitable fasteners not over 24" o.c.
- B. Studs - Secure studs, spaced 16" o.c. and doubled at doors between the track flanges with two stud shoes at both top and bottom. Wire tie shoes to studs with two double strands of 18 gauge, type I, galvanized tie wire.

Alternate: Combination stud shoe and starter clip may be used on base track, or shoe clips may be used to secure the stud shoes at floor and ceiling. Snap-in track may be used as another alternate.

- C. Framing Around Door Frame - When the door frame assembly is securely anchored, secure attachment around the frame. Adjacent to the stud which is fastened to the jamb anchors, erect another stud.

Over the frame head, erect jack studs not exceeding 16" o.c. Reinforce the framing over the door frame head by placing a 3/4" furring channel no more than 6" above the frame opening and extend this channel at least two full stud spaces beyond each side of the opening. The channel shall be securely wire tied to the flanges of each studs.

D. Studs and Runners

1. Align runners accurately according to wall layout and secure to base and head with power-driven fastener spaced 8" o.c.
2. Position studs vertically in runners and space no greater than 16". Securely anchor each stud or runner with four ½" Type S-12 pan head or 5/8" Type S-12 low profile head screws, two at top and two at bottom, with one screw in each flange.
3. For the slip track system, allow ½" to ¾" clearance between top of studs and UR runner. Do not fasten studs to UR runner. Install 1½" cold rolled channel lateral bracing within 10" to 12" of tops of studs. Connect bracing to each stud using welded or screw attached USG Clip Angle.

SECTION 05 50 00

MISCELLANEOUS METALS

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. The work required under this section consists of all steel and miscellaneous metals, painting, and related items necessary to complete the work indicated on the drawings and described in the specifications.

1.2 REFERENCE STANDARDS

- A. Cast iron shall conform to ASTM Specification A48-60T and unless designated otherwise shall be Class No. 30 with a minimum tensile strength of 30,000 psi.
- B. Nodular or ductile iron bars shall conform to ASTM A339-55. This material may be used in place of cast iron for items and locations as hereinafter specifically designated.
- C. Refined wrought iron bars shall conform to ASTM A189-60T, Grade B, single refined, round, hexagonal, and rectangular bars.
- D. Steel shall conform to ASTM A36-61T.

1.3 SUBMITTALS

- A. Submit shop drawings for approval. Shop drawings shall indicate the fabrication, gauge, assembly and erection details, size of members, fastenings, anchors, and all necessary connections to work of other trades and related items required.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Miscellaneous Anchors and Bolts: Provide all anchors, hangers, bolts, toggle bolts, expansion bolts, rods, clip angle screws, sleeves, shims, connection stiffeners, reinforcement screws, etc. required for proper and complete fabrication, assembly, and installation of miscellaneous and ornamental metal work. Exposed accessories shall have finish to match exposed hardware.

2.2 PAINTING AND PROTECTIVE COATING

- A. All ferrous metal, except stainless steel, shall be properly cleaned and given one (1) shop coat of red lead or zinc chromate primer. Anchors that are built into masonry shall be coated with asphalt paint unless specified to be galvanized. Metal work to be encased in concrete shall be left unpainted unless specified or noted otherwise. Where hot dip galvanized or zinc coated metal is specified or shown, it shall not be shop primed unless specifically required.

- B. Hot dip galvanized or zinc coatings applied on products fabricated from rolled, pressed, and forged steel shapes, plates, bars, and strips shall comply with ASTM A123-59. Hot dip galvanized or zinc coatings on assembled steel products shall comply with ASTM A386-61. The weight of coatings shall be as designated in Table 1 for class and thickness of material to be coated. Galvanized surfaces for which a shop coat of paint is specified shall be chemically treated to provide a bond for the paint. Except for bolts and nuts, all galvanizing shall be done after fabrication.
- C. Insulate faces of metal in contact with different metals, with masonry, concrete, or plaster, by giving each contact surface one coat of approved alkali resistant bituminous paint.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Metal surfaces shall be clean and free from mill scale, flake rust, and pitting; well formed and finished to shape and size with sharp lines and angles and smooth surfaces. Shearing and punching shall leave clean true lines and surfaces. Weld or rivet permanent connections. Welds and flush rivets shall be finished flush and smooth on surfaces that will be exposed after installation. Do not use screws or bolts where they can be avoided. Where used, heads shall be countersunk, screwed up tight, and threads nicked to prevent loosening.
- B. Casting shall be of uniform quality, free from blowholes, porosity, hard spots, shrinkage distortion or other defects. Casting shall conform to the dimensions indicated with a tolerance of plus or minus 1/8 inch, except in the dimensions of covers and the openings to receive them shall be limited to blasting or other approved method. Covers subject to street or foot traffic shall have machined horizontal bearing surfaces; provide machine bearing for contact surfaces for other joints where indicated or required.
- C. Fastenings shall be concealed where practicable. Thickness of metal and details of assembly and supports shall give ample strength and stiffness. Joints exposed to weather shall be formed to exclude water. Provide holes and connections for the work of other trades.
- D. At the proper time, deliver and set in place items of metal work to be built into adjoining construction.

SECTION 06 10 00

ROUGH CARPENTRY

PART 1 – GENERAL

1.1 WORK INCLUDES

- A. Furnish and install all carpentry indicated on the drawings and herein specified. The Contractor shall furnish and install carpentry work and wood necessary to complete structure in accordance with plans and specifications.
- B. Coordinate location of blocking in walls with previous bid package contractors, where required, for installation of cabinets, grab bars, shelf supports, etc. This Contractor shall furnish and install all rough hardware such as nails, spikes, screws, joist hangers, etc. which may be required in connection with carpentry work.
- C. Install all materials, equipment, and specialties specified not indicated to be installed by others.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Lumber: Lumber that has been used for concrete scaffolding and falsework may be used if thoroughly cleaned of nails and concrete, provided that this material is sound and to be covered with other finishes. All of the above shall be less than 15% moisture content when installed as framing, furring, or rough bucks. Lumber must bear stamp on each piece over 5'-0" long.
 - 1. Studs - Stud grade #2 and better. Spruce, Pine, White Fir. 16" o.c. except where noted. Fire treated where indicated or required by Code.
 - 2. Miscellaneous Framing - Spruce, Pine, Fir #2 and better. Fire treated where indicated or required by Code.
 - 3. Flat Board – Red Oak to match existing oak trim.
- B. Plywood shall be DFPA exterior grade "A-C" Douglas Fir plywood of thickness indicated on the drawings, tongue and groove where called for. Plywood shall comply with ANSI A199.1. Fire treated where indicated or required by Code.
- C. Vapor Barrier: All vapor barriers to be 6-mil polyethylene film lapped minimum of 16 inches where laps are required. Apply in as large panels as possible, depending on conditions. Install below concrete floor slab and where shown and called for on drawings.
- D. Air Infiltration Barrier: N/A.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Protect all masonry, carpentry, metal work, millwork and other materials from damage of any character during the progress of the work. Store millwork in accordance with manufacturer's recommendations. Provide temporary wood doors in exterior walls and cloth or transparent plastic covering over windows in exterior walls during plastering and until the building has dried out.
- B. Furnish and install all wood plates, nailing blocks, furring strips, plaster grounds, including grounds at top and ends of base cabinets, nailing strips for wall paneling, mounting grounds for folding doors, etc. and all other ground and framing detailed or required for the securing of all finished work. When installed on masonry, securely fasten with anchors spaced not more than 18" on centers. Anchors shall be similar to Rawl Plugs consisting of #12 sheet metal screws at least 2-1/4" long and lead lined fibre enclosed shield inserted in 1/4" holes drilled in masonry with a carboloy bit. Devices other than Rawl Plugs may be substituted provided they consist of metal lined shields enclosed with compressive material inserted in drilled holes and have screws to permit shimming of wood grounds providing for adjustment and alignment to true lines and planes.
- C. Furnish and install all rough hardware required, such as nails, screws, anchor bolts and devices (except those occurring in structural steel). All rough hardware shall be of the proper type and size for the intended use. Provide adequate hardware to achieve substantial and positive anchorage. Nailing into wood plugs is not acceptable for any work.
- D. After finish hardware is received from the hardware supplier, Contractor shall safeguard and install all hardware and be responsible for labor and material required to correct improper installation. Hardware shall be applied in strict conformance to the manufacturer's printed instructions at the mounting heights specified in Section 08700.

Holes and mortises in wood doors for locks and other hardware shall be cut with a jig approved or provided by the manufacturer of the item to be applied. All holes and mortises shall fit snugly to provide as much support as possible to the hardware. All locks shall be mounted so that the key enters the lock with its smooth edge DOWN. After hardware has been fitted, escutcheons and face-applied hardware shall be removed until final painting has been completed. Hardware shall be reinstalled after painting is completed, properly adjusted, tested, and left in perfect working order. Thresholds shall be set in a bed of mastic. After each lock has been reinstalled, the installer shall seal its keys in one of the supplied envelopes and shall enter on the exterior, all data for which space is provided. The envelopes with the keys they contain shall be delivered to the Owner by the installing contractor, together with all surplus envelopes. Door knobs, etc. shall be kept covered with heavy cloth, tied on, until the building is ready for occupancy.

- E. In no case shall any finish be allowed in the building until at least ten days after plastering or sheetrock taping has been completed. All finish material shall be air and kiln dried, highly sanded and free from defects. All finish shall be back painted and face primed, filled or stained as part of the work under painting section before placing. Fit and place all finish accurately and in a workmanlike manner. Gouges, dents, hammer marks, splits or other defects will not be permitted in the finished work. Doors shall be fitted with a uniform clearance of 1/8" at heads and jambs, and 5/8" clearance at floor unless additional clearance at floor is called for on drawings.

- F. Blanket and fill type insulation shall be installed where shown and to the extent indicated on the drawings.
- G. Hang doors with all screws inserted and hinges properly adjusted so that doors swing free and do not rattle when closed.
- H. Sinks and rims occurring in millwork are specified elsewhere but shall be installed as part of this section. Set sink rims in waterproof cement.
- I. Framing: All framing shall be done with nailing, bolting, and screwing in strongest possible manner developing full strengths of each member and in best practice.

SECTION 06 20 00

MILLWORK AND FINISH CARPENTRY

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. The work of this section consists of the furnishing of all millwork indicated on the drawings and herein specified. Include all wood window casings/enclosures, modifications to existing carpentry and ends panels and trim as shown on drawings. Remove and salvage existing casings, trim, and baseboards for reinstallation.
- B. Modifications to existing casings, moldings, and trim required for new construction.

1.2 SHOP DRAWINGS AND SAMPLES

- A. Submit shop drawings in accordance with Supplementary General Conditions for all built-up millwork items. Include schedules defining the types of wood.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. City Hall Building
 - 1. Interior Trim: Where indicated, reinstall salvaged wood trim casings and baseboard to match and align with existing. Supplement shortages with new material matching existing species and profile.

Contractor's Option: Furnish and install new white oak trim/casings matching existing in lieu of installation of salvaged material. All salvaged material to be turned over to owner.
 - 2. Wood preservative shall be a brand conforming to the requirements of Commercial Standard CS 262-63
 - 3. Quality Grading:
 - a. Moisture content not to exceed 5-10% for all lumber.
 - b. Lumber must be sound, thoroughly seasoned, well manufactured, and free from warp. Woodwork exposed on exterior of building shall be dressed.
 - c. Grade and trademark required on each piece of lumber (or bundle in bundled stock). Use only recognized official marks of Association. Grade and trademarks not required if each shipment is accompanied by certificate of inspection issued by Association.
 - 4. Hardware – Provide all required hardware.

2.2 FABRICATION

- A. Millwork and trim shall conform to design and details shown. Where practical, work shall be finished and assembled at the mill. All millwork and trim shall be finished smooth and free from machine or tool marks that will show through the finish. All nail heads shall be set to receive putty.

PART 3 - EXECUTION

3.1 GENERAL

- A. All finish carpentry work shall be done in a neat and workmanlike manner. Items shall be accurately cut, scribed, fitted and joints and all work shall be plumb, square, level, at proper elevation, straight, true to line and flush.
- B. In no case shall any finish be allowed in the building until at least ten days after plastering has been completed. All finish material shall be air and kiln dried, highly sanded and free from defects. All finish shall be back painted and face primed, filled or stained as a part of the work under painting specification before placing. Gouges, dents, hammer marks, splits or other defects will not be permitted in the finish work.
- C. Joints in plastic laminate shall be held to a minimum. Where joints are required in plastic laminate core material, provide tempered hardboard splines. Coat field joints with waterproof glue. Provide a backing sheet of thickness required to provide balanced construction on unexposed sides of all plastic laminate work. Apply plastic laminate to core materials by the hot press method.
- D. Coordinate unit construction with mechanical or electrical equipment.

SECTION 07 84 00

FIRE STOPPING

PART 1 - GENERAL

1.1 SCOPE

- A. The Contractor shall provide UL Listed fire stopping of penetrations through protected walls and floors not covered in mechanical, sprinkler, or electrical portions of the specifications. This is primarily around penetrations and at intersections of walls and floor deck.
- B. Protected walls are along all corridor walls or as indicated on plans. Floor between first and second floor is a protected floor.

1.2 SUBMITTALS

- A. Submit product data for all types of fire stopping methods to be employed throughout project. Include ratings and details for installation.

PART 2 - PRODUCTS

2.1 SYSTEMS

- A. It shall be the responsibility of the contractor to determine the rating required for each penetration and verify that the method of fire stopping used will meet the approval of the inspectors having jurisdiction.
- B. Firestop Putty System: The system shall be a non-hardening, conformable firestop system consisting of a water-insoluble putty and suitable damming materials where required. Putty shall contain no asbestos, fiberglass, or solvents. The putty shall be capable of being removed and reinstalled, and shall adhere to all common building materials and penetrations. Putty shall meet the requirements of ASTM E119 and system shall be tested to UL 1479 (ASTM E814) and classified for up to 2 hours.
- C. Firestop Sealant System: System shall be a water based firestop compound (along with the proper damming materials). Sealant shall not contain any solvents or inorganic fibers. Sealant shall be one part, requiring no critical mixing. The firestop system shall be tested to UL 1479 (ASTM E814) and classified for up to 3 hours.
- D. Firestop Mortar System: System shall be a lightweight cementitious mortar and suitable temporary damming material (where required). The mortar shall be fast drying and shall not shrink or crack during its cure. The firestop system shall be tested to the requirements of ASTM E119 and shall be tested UL1479 (ASTM E814) and classified for up to 3 hours.

- E. **Manufactured Collars:** System shall consist of a factory manufactured fire stop device and suitable smoke seal. The device shall contain a molded compound capable of expanding up to 10 times its original volume. This collar shall contain no asbestos, no fiberglass, no solvents nor corrosive mineral salts. It shall be sized to match the pipe and shall require no cutting, sizing or fabricating of components at the job site. The fire stop system shall be tested to the time/temperature requirements of ASTM E119 and shall be tested to UL 1479 (ASTM E814) and classified for up to 3 hours in both vented and unvented applications. Specified Technologies, Inc. - Specseal Firestop Collar or equal.

SECTION 07 90 00

CAULKING AND SEALANTS

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. Furnish and apply all caulking complete, in strict accordance with these specifications and the applicable drawings. Caulk at all intersections or junctions of metal and other materials as shown on drawings and as required.
- B. Caulk at intersections of metal, concrete, masonry, wood, or similar combinations. Caulk at all joints of aluminum clad composite panels.
- C. Related Work:
 - 1. Firestopping – See Section 07 84 00
 - 2. Caulking at aluminum fenestration.
 - 3. Acoustical - See plaster and gypsum drywall specification for sealants required for sound conditioned walls.
 - 4. All door frames and HM work, caulking at grills.
 - 5. Expansion joint flashings, wood, joints, and where indicated on drawings.

1.2 SUBMITTALS

- A. Provide samples of colors of sealants to be selected.
- B. Manufacturer's Data - Provide three (3) copies of manufacturer's data sheet recommendations, specifications, and installation instructions.

1.3 STORAGE AND DELIVERY

- A. Deliver materials in manufacturer's original unopened packaging with identification labels intact and eligible.
- B. Store materials in area protected from weather, moisture, open flame, and sparks.
- C. Environmental Requirements: Comply with sealant manufacturer's recommendations for maximum and minimum application temperatures and humidity.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Caulking and sealant material for exterior use shall be 20-year minimum life expectancy products.
- B. Control Joints and Exterior Wall Maintenance: Provide Ethafoam rod and Tremco DYmeric or Sonneborn NP-2 caulking, both installed as recommended by manufacturer and as per typical details shown on plans. Tremco DyMonic or Sonneborn NP-1 may be approved, dependent on the location of installation.. Architect will select color from samples provided by contractor. Installation shall be made by applicator regularly engaged in this work and knowledgeable in current caulking techniques and having approved equipment.

- C. One part urethane sealant shall comply with Federal Specification TT-S-00230C. Use for interior and exterior vertical surface joints where normal movement is anticipated, window and door perimeters, etc. Sonneborn-Contech-Sonolastic NPI; Sika Chemical Corp. - Sikaflex 1A. Colors as selected by Architect from manufacturer's standard colors.
- D. Two part self-leveling urethane sealant shall comply with Federal Specification TT-S-00227E, Type I, Class A. Use for horizontal surface joints, exterior/interior, such as concrete paving joints, concrete floor joints, etc. Sonolastic Paving Joint Sealant; Sonneborn-Contech, Urexpan NR100, Pecora Corp. Color as selected by Architect from manufacturer's standard colors.
- E. Acrylic Latex Sealant - Use for non-moving interior joints at HM doors, etc. Sonneborn-Contech-Sonolac; Tremco - Acrylic Latex Caulk; Pecora Corp. AC-20. Colors as selected by Architect from manufacturer's standard colors.
- F. Silicone Sanitary Sealant - Use at joints in ceramic tile, joints around plumbing fixtures, etc. General Electric Co. - Silicone Rubber Bathtub Caulk. Colors as selected by Architect from manufacturer's standard colors.
- G. Joint Cleaner - As recommended by sealant manufacturer.
- H. Joint Primer - As recommended by sealant manufacturer.
- I. Bond Breaker Tape - As recommended by sealant manufacturer.
- J. Sealant Backer Rod - Ethafoam circular sized to tight fit into opening.
 - 1. Sealant is to be "Sikaflex" polyurethane in color to match aluminum panels.
 - 2. Back up material shall be non-asphaltic expanded closed cell polyethylene, Ethafoam (round) Rod Stock by Dow Chemical Co., or approved equal. Back up material shall not bond to sealant. Diameter of rod stock shall be at least 1/8" larger than the joint opening.

PART 3 - EXECUTION

3.1 GENERAL

- A. Furnish and apply all caulking, complete, in strict accordance with these specifications and the applicable drawings. Caulk at all intersections or junctions, masonry and concrete at junctions of metal, and concrete or masonry at hollow metal and aluminum windows and doors, at tops of all precast and poured concrete walls, tops of block partitions, and as shown on drawings. Caulk at intersections of plaster, metal, concrete, masonry, wood, or similar combinations. Caulk under copings at expansion joints and where required for watertight construction.
- B. Caulk at all joints around doors, windows, louvers, or other openings through exterior walls where shown on drawings. Expansion joints, top joints of all sills, coping stone and projecting cut stone ledges, both sides of jambs and heads on exterior and interior panels, and interior joint at spandrel beams shall be caulked with caulking compound. Where joints are more than 3/4" in depth, joints shall be backed up to 3/4" of surface before caulking.

- C. Caulking compound shall be applied around metal walls and roof panels, HM doors, and similar locations. Where voids occur, joints shall be filled with back-up material specified for use with flexible sealant. For joints up to 1/2" in width, depth of joint shall be equal to width; for joints over 1/2" in width, depth shall be 1/2 of width.

3.2 INSPECTION

- A. Examine joints to be sealed for construction defects that would adversely affect execution of work.
- B. Ensure that masonry and concrete have cured a minimum of 28 days.
- C. Do not proceed with installation until unsatisfactory conditions are corrected.

3.3 PREPARATION

- A. At exterior wall maintenance locations, remove existing sealant, backer rod, and joint materials in area of replacement.
- B. Clean joint surfaces with joint cleaner, free of dust, dirt, oil, grease, lacquers, laitance, release agents, moisture, or other matter which might adversely affect adhesion of sealant.
- C. Apply primer to surfaces recommended by sealant manufacturer to be primed, following manufacturer's instructions.

3.4 INSTALLATION

- A. Install bond breaker tape where required by sealant manufacturer's instructions.
- B. Install sealant backer rod where shown or required by sealant manufacturer's instructions. Install in joints using a blunt instrument to avoid puncturing. Do not twist the backer rod while installing. Install so that joint depth is 50% of joint width, minimum 1/4" deep. Install dry and free of tears or holes.
- C. Install sealants in accordance with manufacturer's instructions. Install sealants in uniform, neat and continuous beads without gaps or air pockets. Tool joints to required configuration within 10 minutes of sealant installation.

3.5 WORKMANSHIP

- A. Sides and tops of windows and inside joint areas of exterior frames or any other openings in exterior wall shall be caulked with oakum where voids exist and tubular backup can not be used.
- B. After all back up caulking has been placed, caulk all joints with caulking compound. All surfaces to be caulked shall be clean and thoroughly dry. Caulking shall be forced into rabbets under mechanical pressure, filling all voids complete to render water and airtight and shall be struck smooth and left ready for painting. Where joints occur in stone or other materials not to be painted, compound shall match adjoining surface.

- C. Temperature shall be not less than 40°F, surface dry and clean when flexible sealant is applied. Remove lacquer from caulking rabbets in aluminum. Metal, glass, and other dense surfaces shall be solvent cleaned. Apply solvent with brush and wipe dry with lint-free paper towel. All stone, concrete, wood, and other porous surfaces shall be primed. Primer shall be dry before installation of back up material and applying sealant. Flexible sealant shall be applied from a gun or cartridge in a neat bead, well bonded to both sides and extending full depth of caulking rabbet. Joints shall be masked and struck as required for neatness, and smears solvent-cleaned immediately.

3.6 ADJUSTMENT AND CLEANING

- A. Remove excess materials adjacent to joints by mechanical means or with solvents as recommended by sealant manufacturer as work progresses to eliminate evidence of spillage or damage to adjacent surfaces.

SECTION 08 11 00

HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 WORK INCLUDED

- A. Drawings and general provisions of the contract, including General and Supplemental Conditions, and Division 1 specification sections, apply to work of this section.
- B. This section includes all labor, materials, equipment, and services necessary to furnish and install all commercial grade steel doors, frames, and related items to complete the work indicated on the drawings and described in the specifications.

1.2 RELATED WORK

- A. Section 08 14 00 – Wood Doors
- B. Section 08 71 00 – Door Hardware
- C. Section 08 80 00 – Glazing
- D. Section 09 90 00 – Painting and Coating

1.3 REFERENCES

- A. ANSI/SDI-250.8 - 2003 – Recommended Specifications for Standard Steel Doors and Frames
- B. ANSI A250.4-2001 – Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors and Hardware Reinforcing
- C. ASTM-E152 – Standard Methods of Fire Tests for Door Assemblies
- D. NFPA 80 – Standards for Fire Doors and Windows
- E. DHI – Recommended Locations for Builder's Hardware
- F. NFPA 101 – Life Safety Code
- G. U.L. – Building Material Directory

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's current product data including specifications, handling, storage, installation instructions and maintenance recommendations.
- B. Shop Drawings: Submit shop drawings showing system fabrication and installation drawings. Include plans, elevations, section details of components, joint locations, elevations of door design types, conditions at openings, details of construction, and installation requirements of finish hardware and reinforcements. Show anchorage and accessory items required for installation.
 - 1. Provide schedule of doors and frames using the same reference numbers for details and openings as those on the contract drawings.
 - 2. Indicate and coordinate frames to receive glass and glass stop with glass and glazing requirements.
 - 3. Resubmit copies of the corrected shop drawings when required.

- C. Substitutions: Submit under provisions of Division One - Substitutions. Provide detailed information and catalog cuts indicating the comparison to the specified products. If requested by the architect, provide a sample of the proposed substitution for review.

1.5 QUALITY ASSURANCE

A. Qualifications:

1. General: Provide steel door and frame units made of components of standard construction furnished by one manufacturer as a coordinated assembly.
2. Manufacturer: Minimum of ten years experience in the manufacture of steel doors and frames.
3. Supplier: Minimum of ten years experience in the steel door and frame industry.

B. Regulatory Requirements:

1. Steel Door Institute: Comply with standards of ANSI/SDI-100.
2. Fire-rated Door Assemblies: NFPA 80, tested, listed, and labeled in accordance with ASTM E152 and by nationally a recognized independent testing and inspection agency acceptable to authorities having jurisdiction.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Protection: Protect steel doors and frames from damage during shipment, storage, and construction.
- B. Delivery: Deliver materials to the jobsite in factory sealed containers bearing the manufacturer's name and brand.
- C. Storage: Store at building site under cover. Place on minimum 4 inch high wood blocking, with 1" space between stacked doors to promote air circulation. Avoid use of non-vented plastic or canvas shelters that could create a humidity chamber. If cardboard wrapper on door becomes wet, remove immediately.
- D. Damaged Material: Replace damaged material prior to acceptance at no additional cost to the owner.

1.7 PROJECT CONDITIONS

A. Existing Conditions:

1. Inspect the project prior to installation. If conditions do not meet approval, notify the Architect. Proceeding without notification implies acceptance of conditions.
2. Field Dimensions: Drawings do not purport to show actual dimensions, but are intended only to establish location and scope of work. Field verify dimensions and assume full responsibility for their accuracy.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Standard of Quality: Design is based on products of Curries Manufacturing, Mason City, Iowa.
- B. Other Acceptable Manufacturers: Subject to compliance with requirements, acceptable manufacturers and products are:
 - 1. Curries
 - 2. Steelcraft
 - 3. Ceco

2.2 MATERIALS

- A. Hot-rolled Steel Sheets and Strip: Commercial quality carbon steel, pickled and oiled; comply with ASTM A569, ASTM A568
- B. Cold-rolled Steel Sheets: Commercial quality carbon steel; comply with ASTM A569, ASTM A568
- C. Galvanized Steel Sheets: Commercial quality zinc-plated carbon steel; comply with ASTM A526, ASTM A525, A60 zinc coating; mill phosphatized.
- D. Supports and Anchors: Fabricate of not less than 18 gauge galvanized sheet steel.
- E. Inserts, Bolts, and Fasteners: Manufacturer's standard units, except hot-dip galvanized at items to be built into exterior walls, comply with ASTM A153, Class C or D as applicable.
- F. Shop applied Primer: Rust-inhibitive primer, air-dried or baked, suitable as a base for specified finish paints.

2.3 FABRICATION, GENERAL

- A. Steel Door and Frame Units: Rigid, neat in appearance, free from defects, warp or buckle. Where practical, fit and assemble in manufacturer's plant. Clearly identify work that cannot be permanently factory-assembled before shipment to assure proper assembly at the project site.
- B. Exposed Faces of Doors and Panels, Including Stiles and Rails of Non-flush Units: Constructed of cold-rolled furniture steel only.
- C. Frames, Concealed Stiffeners, Reinforcements, Edge Channels, Louvers, and Moldings: Cold-rolled or hot-rolled steel at fabricator's option.
- D. Exposed Fasteners: Countersunk Phillips head screws unless otherwise indicated.
- E. Finish Hardware Preparation:
 - 1. Doors and Frames to Receive Mortised and Concealed Finish Hardware: Prepare doors and frames in accordance with the final Finish Hardware Schedule and templates provided by the hardware supplier. Comply with applicable requirements of ANSI A115 specifications for door and frame preparation for hardware.

2. Doors and Frames to Receive Surface Applied Hardware: Doors and frames to be reinforced for surface applied hardware in compliance with SDI recommendations. Drilling and tapping for surface applied finish hardware to be done at the project site.
 3. Finish Hardware: Locate as indicated on the final hardware schedule or, if not shown, in accordance with referenced DHI Recommended Locations for Builder's Hardware standard.
- F. Shop Painting: Clean, treat, and prime paint exposed surfaces of units, including galvanized surfaces with manufacturer's standard rust-inhibitive primer. Clean steel surfaces of mill scale, rust, oil, grease, dirt, and other foreign materials. Correct minor irregularities with metallic putty sanded smooth before application of primer. Apply shop coat of prime paint of even consistency to provide uniform finish surface, ready for finish paint.

2.4 STANDARD HOLLOW METAL DOORS

- A. Flush Door Construction:
1. Exterior Doors: SDI Level 3 (extra heavy duty), model 2 (Seamless design), 16 gauge, insulated with polystyrene cores, (minimum .24 U Factor) equal to Curries 707N series, galvanized.
 2. Interior Doors: SDI Level 3 (extra heavy duty), model 2 (Seamless design), 16 gauge, insulated with polystyrene cores, (minimum .24 U Factor) equal to Curries 707N series.
 3. All doors to be 1-3/4" thick unless noted otherwise. (See Opening Schedule).
- B. End Closures: Close top and bottom edges of doors with inverted 16 gauge (minimum) end closure channels. Provide additional 18 gauge flush channel at tops of exterior doors, sealed with caulk to provide watertight seal.
- C. Edges: Provide beveled, (1/8" in 2"), 14 gauge continuous channels at lock edge and square 14 gauge continuous channel at hinge edge of all doors. Continuous edge channels to be intermittently welded to face sheets, edge filled and dressed smooth.
- D. Hardware Reinforcements:
1. Hinge Reinforcements: Continuous 14 ga. hinge channel with screw holes extruded to provide thread depth equal to 10 ga. plate..
 2. Lock Reinforcements: 12 gauge, or equivalent number of threads.
 3. Surface Closers and surface hold opens: 12 gauge
 4. Surface Exit Devices: 12 gauge
 5. Mortised Hardware: 14 gauge, preparation in accordance with ANSI A115 where applicable. Reinforce, drill and tap to receive mortised hardware.
 6. Other Hardware: Refer to SDI recommendations for minimum gauges for hardware reinforcements.
- E. Accessories: Glazing Beads: Removable glazing bead on interior side of glass only; exterior glazing stop to be non-removable.

2.5 STANDARD HOLLOW METAL FRAMES

- A. General Requirements: Types and styles as shown on drawings and schedules. Conceal fasteners unless otherwise indicated. Fabricate of minimum 16 gauge cold-rolled steel at interior locations and 14 gauge galvanized steel at exterior locations with mitered and welded corners. Reinforce for hardware using the SDI Hardware Reinforcing Gauges as a minimum standard.
- B. Door Silencers: Except at weather-stripped frames, drill stops to receive 3 silencers on strike jambs of single swing frames, and 2 silencers on heads of double swing frames.
- C. Plaster Guards: Provide 26 gauge steel plaster guards or mortar boxes, welded to frame at the back of finish hardware cutouts where mortar or other materials might obstruct hardware operation, and to close off the interior of openings.
- D. Glazing Beads: On frame assemblies indicated to have glazed openings, the frame shall be provided with glass stop designed to receive the glass and glazing specified.

PART 3 - EXECUTION

3.1 EXAMINATION AND INSTALLATION

- A. General Requirements: Install in accordance with the final Shop Drawings, manufacturer's data, and as specified.
- B. Placing Frames: Comply with SDI-105 unless otherwise indicated.
 - 1. Except for frames located at in-place concrete, masonry, or drywall constructions, place frames prior to construction. Remove temporary shipping spreader bars before beginning frame installation. Set accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. Remove temporary braces and spreaders after wall construction is completed, leaving surfaces smooth and undamaged.
 - 2. In masonry construction, locate a minimum of 3 wall anchors per jamb.
 - 3. In masonry construction, fill frames including head, with mortar.
 - 4. At in-place concrete or masonry construction, set and secure using existing opening anchors.
 - 5. In metal stud partitions, install a minimum of 3 wall anchors per jamb. In open steel stud partitions, place studs in wall anchor and attach with screws. In closed steel stud partitions, attach wall anchors to studs with self-tapping screws.
 - 6. Where frames require existing opening anchors, dimple to receive countersunk flathead expansion anchor screws, setting screw heads below surface of frame. Fill countersink with metal putty, sand smooth to match adjacent surface. Prime affected area to match shop finish.
 - 7. Install fire-rated frames in accordance with NFPA Standard #80.
- C. Door Installation: Fit accurately in frames within clearances specified in SDI-100. Install fire-rated doors using clearances specified in NFPA Standard #80.

3.2 ADJUSTMENT AND CLEANING

- A. Prime Coat Touch-up: Immediately after erection, sand smooth rusted or damaged areas of prime coat. Apply touch-up primer to match adjacent surfaces.
- B. Protection Removal: Immediately prior to final inspection, remove protective plastic wrappings from pre-finished doors.
- C. Final Adjustment: Check and readjust operating finish hardware items, leaving steel doors and frames undamaged and in complete and proper operating condition.

3.3 SCHEDULE

- A. Furnish items in amounts indicated on Drawings or required for complete and operable facility. Verify quantities and suitability of fasteners. Provide doors and frames required for fire rating indicated on Drawings or Door Schedule whether or not indicated in this Section. Coordinate schedule with Drawings and notify Architect of any door not scheduled.

SECTION 08 14 00

WOOD DOORS

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. Furnish and install wood doors where indicated on plans and/or schedule. All doors shall be designed by manufacturer for use as indicated on drawings and recommended for that service.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's current product data including specifications, handling, storage, installation instructions and maintenance recommendations.
- B. Shop Drawings: Submit shop drawings showing system fabrication and installation drawings. Include plans, elevations, section details of components, joint locations, elevations of door design types, conditions at openings, details of construction, and installation requirements of finish hardware and reinforcements. Show anchorage and accessory items required for installation.
 - 1. Provide schedule of doors and frames using the same reference numbers for details and openings as those on the contract drawings.
 - 2. Indicate and coordinate frames to receive glass and glass stop with glass and glazing requirements.
 - 3. Resubmit copies of the corrected shop drawings when required.
- C. Substitutions: Submit under provisions of Division 1. Provide detailed information and catalog cuts indicating the comparison to the specified products. If requested by the architect, provide a sample of the proposed substitution for review.

PART 2 – PRODUCTS

- A. All wood doors to be: White Oak, Karona K4010 flat panel ogee with custom layout. Doors are to replicate existing wood doors.
- B. Label as indicated on schedule.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Carefully inspect the locations where the doors are to be installed. Notify architect of any conditions that would adversely affect the installation or the subsequent operation of the door. Do not proceed until unsatisfactory conditions are corrected.
- B. Allow doors to become acclimated to building temperature and humidity before installation.
- C. Use only skilled mechanics to install and adjust the finish hardware.

3.2 INSTALLATION

- A. Install doors per manufacturer's recommendations.
- B. Clearances:
 - 1. For non-fire doors provide clearances of 1/8 inch at jambs and head; 1/8 inch at meeting stiles for pairs of doors, and 1/2 inch from bottom of door to top of decorative floor finish or covering. Where threshold is shown or scheduled, provide 1/4 inch clearance from bottom of door to top of threshold.
 - 2. For fire rated doors, provide clearances complying with the limitations of the authority having jurisdiction.

3.3 ADJUST AND CLEAN

- A. Operation: Rehang or respace doors that do not swing or operate freely, as directed by the Architect.
- B. Finish: Replace doors damaged during construction as directed by Architect.
- C. After the doors have been adjusted and cleaned, place poly bags over the doors to provide protection while the remainder of construction proceeds.

SECTION 08 42 29

SLIDING AUTOMATIC ENTRANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This section includes the following types of automatic entrance doors: Exterior and interior, single and bi-parting, sliding automatic entrance doors.
- B. Related Sections:
 - 1. Section 07 90 00 - Caulking
 - 2. Section 08 70 00 - Hardware
 - 3. Section 08 80 00 – Glazing
 - 4. Division 26 and 28 for electrical connections.

1.3 REFERENCES

- A. References:
 - 1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
 - 2. ICC/IBC - International Building Code.
 - 3. NFPA 70 - National Electrical Code.
 - 4. NFPA 101 - Life Safety Code.
- B. American National Standards Institute (ANSI) / Builders Hardware Manufacturers Association (BHMA).
 - 1. ANSI/BHMA A156.10 American National Standard for Power Operated Pedestrian Doors.
 - 2. ANSI Z97.1 Standards for Safety Glazing Material Used in Buildings.
- C. Underwriters Laboratories (UL).
 - 1. UL 325 Standard for Door, Drapery, Gate, Louver and window Operators and Systems.
- D. American Association of Automatic Door Manufacturers (AAADM).
- E. American Society for Testing and Materials (ASTM).
 - 1. ASTM B221 Standard Specification for Aluminum and Aluminum Alloy Extruded Bars, Rods, Wire, Profiles and Tubes.
 - 2. ASTM B209 Standard Specification for Aluminum and Aluminum Alloy Sheet and Plate.

- F. National Association of Architectural Metal Manufacturers (NAMM).
 - 1. Metal Finishes Manual for Architectural Metal Products.
- G. International Code Council (ICC).
 - 1. IBC: International Building Code Building Code.
 - 2. CBC: California Building Code.

1.4 DEFINITIONS

- A. Activation Device: Device that, when actuated, sends an electrical signal to the door operator to open the door.
- B. Safety Device: A device that detects the presence of an object or person within a zone where injury could occur and provides a signal to stop the movement of the door.
- C. AAADM: American Association of Automatic Door Manufacturers.

1.5 PERFORMANCE REQUIREMENTS

- A. General: Provide doors that have been designed and fabricated to comply with specified performance requirements, as demonstrated by testing manufacturer's corresponding standard systems.
- B. Compliance:
 - 1. ANSI/BHMA A156.10 American National Standard for Power Operated Pedestrian Doors.
 - 2. UL 325 listed.
- C. Automatic door equipment accommodates medium to heavy pedestrian traffic.
- D. Automatic Door equipment accommodates up to the following weights for active leaf doors:
 - 1. Bi-part doors: 220 lbs (150 kg) per active leaf.
 - 2. Single doors: 330 lbs (100 kg) per active leaf.
- E. Operating Temperature Range: -31° F to 122° F (-35° C to 50° C).
- F. Entrapment Force Requirements:
 - 1. Power Operated Sliding Doors: Not more than 30 lbf (133 N) required to prevent stopped door from closing.
 - 2. Sliding doors provided with a breakaway device shall require no more than 50 lbf (222N) applied 1 inch (25 mm) from the leading edge of the lock stile for the breakout panel to open.

1.6 SUBMITTALS

- A. Comply with Division 01 - Submittal Procedures.
- B. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, fabrication, operational descriptions and finishes.
- C. Shop Drawings: Submit manufacturer's shop drawings, including elevations, sections and details, indicating dimensions, materials, and fabrication of doors, frames, sidelites, operator, motion /presence sensor control device, anchors, hardware, finish, options and accessories.
- D. Samples: Submit manufacturer's samples of aluminum finish.
- E. Manufacturer's Field Reports: Submit manufacturer's field reports from AAADM certified technician of inspection and approval of doors for compliance with ANSI/BHMA A156.10 after completion of installation.
- F. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door opening installation in quantity as required in Division 01, Closeout Submittals. The manual to include the name, address, and contact information of the manufacturers providing the hardware and their nearest service representatives. The final copies delivered after completion of the installation test to include spare parts list.
- G. Warranties and Maintenance: Special warranties and maintenance agreements specified in this Section.

1.7 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Engage qualified manufacturers, certified by AAADM, with a minimum 10 years of documented experience in manufacturing of doors and equipment of similar to that indicated for this Project and that have a proven record of successful in-service performance.
- B. Installer Qualifications: Installers, trained by the primary product manufacturers, with a minimum 3 years documented experience installing and maintenance of units similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- C. Certified Inspector Qualifications: Certified by AAADM.
- D. Source Limitations for Automatic Entrances: Obtain each type of door, frame, operator and sensor components specified in this Section from a single source, same manufacturer unless otherwise indicated.
- E. Power-Operated Pedestrian Door Standard: ANSI/BHMA A156.10 (current version).
- F. Emergency Exit door requirements: Comply with requirements of authorities having jurisdiction for automatic entrance doors serving as a required means of egress.

1.8 PROJECT CONDITIONS

- A. Field Measurements: Verify actual dimensions of openings to receive automatic entrances by field measurements before fabrication and indicate on shop drawings.

1.9 COORDINATION

- A. Coordinate sizes and locations of recesses in concrete floors for recessed tracks and thresholds if applicable. Concrete, reinforcement and formwork are specified in Division 03.
- B. Electrical System Roughing-in: Coordinate layout and installation of automatic entrances with connections to power supplies and access control system as applicable.

1.10 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Automatic Entrance Doors shall be free of defects in material and workmanship for a period of One (1) year from the date of substantial completion.
- C. During the warranty period a factory-trained technician shall perform service and affect repairs. A safety inspection shall be performed after each adjustment or repair and a completed inspection form shall be submitted to the Owner.
- D. During the warranty period all warranty work, including but not limited to emergency service, shall be performed during normal business hours.
- E. Distributor shall have in place a dispatch procedure that shall be available 24 hours a Day, 7 Days a week for emergency call back service.

PART 2 – PRODUCTS

2.1 MANUFACTURER

- A. Manufacturer: Besam Entrance Solutions, 1900 Airport Road, Monroe, North Carolina 28110. Toll Free (877) SPEC-123. Phone (704) 290-5520 Fax (704) 290-5555 Website www.besam-usa.com
- B. Substitutions: Requests for substitution and product approval in compliance with the specifications must be submitted in writing and in accordance with the procedures outlined in Division 1, Section, "Substitution Procedures". Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.2 SLIDING AUTOMATIC ENTRANCES

- A. Model: Besam SL500 sliding automatic doors. (Basis of Design):
 - 1. Aluminum doors and frames with active door leaves.
 - 2. Surface applied, electro-mechanical, microprocessor controlled, sliding door operator.
 - 3. Operator housing, guide system and door carriers.

- B. Sliding Automatic Entrance Doors Configuration:
1. Bi-parting, surface mounted, door system.
Configuration: Bi-parting, two panel door unit with two operable leaves.
Traffic Pattern: Two-way
Emergency Breakaway Capability: Sliding leaves reverse breakout.
Mounting: Surface mounted header installed on face of wall.
 2. Dimensions: Confirm door package dimensions as indicated on Architectural drawings.

2.3 ALUMINUM DOORS AND FRAMES

- A. Doors and Frames: Extruded Aluminum, Alloy 6063-T5.
1. Door panels shall have a minimum .125" structural wall thickness including adjoining horizontal members and perimeter frames where applicable.
 2. Door construction shall be by means of an integrated corner block with 3/8 inch all-thread through bolt from each stile.
 3. Glass stops shall be .062" wall thickness and shall provide security function as a standard by means of a fixed non-removable exterior section with glazing to be performed from the interior only. Glazing stops that allow for glass removal from the exterior shall not be deemed as equivalent.
 4. Vertical stiles shall be narrow stile, 2-1/8 inch.
 5. Bottom rails shall be standard 7 inch.
 6. Intermediate muntin shall be 4 inch.
 7. Weather-stripping shall be slide-in type, replaceable pile mohair.
- B. Glass: Glazing shall comply with ANSI Z97.1, thickness as indicated.
1. Glazing Active Door Panels: 1/4" tempered, unless otherwise specified.
 2. Glazing installation: See Section 08 80 00.
- C. Door Carriers: Manufacturer's standard carrier assembly that allows vertical adjustment.
1. Carriage Assembly: Carriage bar with two wheel assemblies. Each assembly shall have tandem roller wheels.
 2. Roller Wheels: Two (2) heavy duty Delrin roller wheels per wheel assembly, for a total of four (4) roller wheels, 1-7/16 inch diameter, per active door leaf for operation over replaceable aluminum track. Single journal with sealed oil impregnated bearings.
 3. Two (2) heavy duty self-aligning anti-risers per leaf.
- D. Framing Members: Provide automatic entrances as complete assemblies. Manufacturer's standard extruded aluminum framing reinforced as required to support loads.
1. Vertical jambs shall be 1-3/4 inches by 4-1/2 inches.
- E. Header: Manufacturer's standard one-piece extruded aluminum header with a replaceable aluminum track extending full width of entrance unit. Header to conceal door operators, carrier assemblies, and roller track; complete with hinged access panel for service of door operator and controls.
1. Span: Maximum 16'-0" without intermediate supports when using 1/4 inch glass.

2. Capacity: Capable of supporting active breakout leafs up to maximum of 300 lb. per leaf when header is supported per manufacturer's recommendations.
3. Size: 4-1/2 inches wide by 7 inches.
4. Hinge Point: Continuous hinge at top of header allows for complete access to operator, internal electronics, mechanical assemblies and alarm contacts.
5. Design: Manufacturer's standard closed header.

F. Hardware: Provide manufacturer's standard hardware as required for operation indicated.

1. Breakaway arms and bottom pivot assemblies shall be supplied by the manufacturer and shall be adjustable to comply with applicable codes.
2. Locking hardware shall be provided as indicated.
 - a. Electrified slide lock shall automatically lock the sliding function of all sliding door panels within the entrance when the door panels and switch are in the closed position.
 - 1) Fail secure operation: Slide lock shall lock the sliding function of the door panels upon loss of power.
 - 2) Exterior Side: No cylinder.
 - b. Exit devices shall lock the breakout function while allowing emergency egress at all times. Exit devices in combination with the automatic slide locking hardware to be provided on secured doors. Automatic locking for the sliding door when the door control switch is in the closed position.
 - 1) Flush mounted Adams-Rite F86 Series, concealed vertical rod exit devices mounted to active doors.

G. Guide Track/Threshold: Manufacturer's guide track as indicated.

1. Aluminum guide track, surface mounted adjacent to the wall construction, shall extend past the jamb 2 inches into the door opening to allow reverse breakout door function.

2.4 SLIDING DOOR OPERATOR

A. Door Operator and Controller:

1. Electro-mechanical controlled unit utilizing a high-efficiency, energy efficient, DC motor requiring a minimum of 3 amp current draw, allowing 5 door systems on one 20 amp circuit. The supplied system shall have the capability to operate at full performance well beyond a brown out and high line voltage conditions (85V – 265V) sensing changes and adjusting automatically. The operator shall allow an adjustable hold open time delay of 0 to 60 seconds and have internal software to incorporate a self-diagnostic system.

B. Microprocessor Control Box:

1. Modular control unit to allow for changing technology. Factory adjusted configuration with opening and closing speeds set to comply with ANSI/BHMA A156.10 requirements and electronic dampening to reduce wear on drive train. Should the drive train operations deviate from design criteria ranges, Watchdog Control Circuit Monitoring will assume command of the system and shut down the automatic function allowing a secondary supervisory circuit to perform as a backup. Control unit shall allow the following functions:
 - a. Diagnostics with the ability to produce application data.

2. Mode Selector Control:
 - a. Multi-position keyed cylinder switch to be interior jamb mounted and shall allow selection of the indicated functions to be engaged when switch is turned to the appropriate setting.
 - b. Keyed cylinder switch allows the following functions:
 - 1) "Off"
 - 2) "Exit Only" One way traffic allowing automatic operation from the interior.
 - 3) "Two Way Traffic" allowing automatic operation from exterior and interior.
 - 4) "Partial Opening" energy saving door position allows door to automatically adjust opening width based on amount of usage, that is, full open during high use and partial open during low use. The control for this setting is programmable allowing adjustment to both the usage setting and the opening width.
 - 5) "Hold Open" doors activated and held in the full open position.

2.5 ACTIVATION AND SAFETY CONTROL DEVICES

- A. General: Provide the types of activation and safety devices specified in accordance with ANSI/BHMA standards, for the condition of exposure and for long-term, maintenance-free operation under normal traffic load for type of occupancy indicated. Coordinate activation and safety devices with door operation and door operator mechanisms.
- B. Combination Activation Motion Sensor/Safety Presence Sensor:
 1. Shall be a sliding door sensor utilizing K-band microwave technology to detect motion and focused active infrared technology to detect presence, combined in a single housing surface mounted on the cover side of the header and ceiling mounted on the plank side of the header.
 - a. Presence sensor shall remain active at all times.
 - b. The sensor shall communicate with the automatic door operator through a self-monitoring connection that allows the door to go into a fail safe mode preventing the door from closing in the event of a sensor failure.
 2. Motion/presence detecting sensors to be field installed and adjusted.

2.6 ELECTRICAL

- A. High-Efficiency DC Motor: Maximum of 3 amp current draw, allowing 5 operators to run on one 20 amp circuit.
- B. Power: Self-detecting line voltage capable control. 120 VAC through 240 VAC, 50/60 Hz, 3 amp minimum incoming power with solid earth ground connection for each door system.
- C. Key Impulse Input: Input for card readers or remote activation with independent adjustable hold open delay.
- D. Wiring: Separate internal channel raceway free from moving parts.

- E. Brown out / high voltage capability: System has capability to operate at full performance well beyond brown out and high voltage line conditions (85 V – 265 V) sensing changes and adjusting automatically.

2.7 ALUMINUM FINISHES

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Anodized Finish: AAMA 611, Dark Bronze, AA- M12C22A44, Class I, 0.018 mm.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, wall and floor construction, and other conditions affecting performance.
- B. Examine roughing-in for electrical source power to verify actual locations of wiring connections.
- C. Proceed only after such discrepancies or conflicts have been resolved.

3.2 INSTALLATION

- A. Do not install damaged components. Fit frame joints to produce hairline joints free of burrs and distortion. Rigidly secure non-movement joints.
- B. Entrances: Install automatic entrances plumb and true in alignment with established lines and grades without warp or rack of framing members and doors. Anchor securely in place.
 - 1. Install surface mounted hardware using concealed fasteners to greatest extent possible.
 - 2. Set headers, carrier assemblies, tracks, operating brackets and guides level and true to location with anchorage for permanent support.
- C. Door Operators: Connect door operators to electrical power distribution system as specified in Division 26 Sections.
- D. Glazing: Glaze sliding automatic entrance door panels in accordance with the Glass Association of North America (GANA) Glazing Manual, published recommendations of glass product manufacturer, and published instructions of automatic entrance system manufacturer.
- E. Sealants: Comply with requirements specified in Section 07900 to provide weather tight installation. Seal perimeter of framing members with sealant.
- F. Signage: Apply signage on both sides of each door and sidelite as required by ANSI/BHMA A156.10 and manufacturers installation instructions.

3.3 FIELD QUALITY CONTROL

A. Manufacturers Field Services:

1. Manufacturer's representative shall provide technical assistance and guidance for installation of doors.
2. Before placing doors into operation, AAADM certified technician shall inspect and approve doors for compliance with ANSI/BHMA A156.10. Certified technician shall be approved by manufacturer.

3.4 ADJUSTING

- #### A.
- Adjust door operators, controls and hardware for smooth and safe operation and for weather tight closure. Adjust doors in compliance with ANSI/BHMA A156.10.

3.5 CLEANING AND PROTECTION

- #### A.
- Clean adjacent surfaces soiled by door installation.
- #### B.
- Clean glass and metal surfaces promptly after installation. Remove excess sealants, compounds, dirt and other substances. Repair damages to finish to match original finish.
- #### C.
- Comply with requirements in Section 08 80 00 - Glazing for cleaning and maintaining glass.

3.6 DEMONSTRATION

- #### A.
- Engage a factory-authorized representative to train Owner's maintenance personnel to adjust, operate, and maintain safe operation of the door.

SECTION 08 70 00

FINISH HARDWARE

SCOPE OF WORK:

The General Conditions, supplemental general conditions, and special conditions apply to all work in the section.

Provide all Finish Hardware as shown on the Drawing or as specified herein unless specified excluded and called for in other Sections.

All items of Finish Hardware shall be guaranteed for one year, except closers shall be guaranteed for five years.

Conform to building code and life safety code requirement If more restrictive than those specified herein, including UBC 7-2(1997) for positive pressure. Notify Architect of differences prior to starting work. Conform to Underwriters Laboratories (U.L.) requirements for fire rated openings, including UL10-C for positive pressure.

SUBMITTALS:

After award of contract and prior to ordering material, Hardware Supplier shall deliver (6) copies of vertical hardware schedules to architect for approval.

Each door shall be scheduled to show door number, room name and number (from and to), door size, door and frame material and hand of door, name of manufacturer of items furnished.

Each item listed, including those specifically called for herein, shall be illustrated by manufacturer's catalog data furnished in brochure form. Architect's approval of schedule is limited to approval of products and does not relieve hardware supplier of responsibility to furnish hardware in all quantities required in accordance with the plans and specifications and to meet the function of each door.

Should items of hardware not definitively specified be required for completion of work, furnish such items in type and quantity compatible to adjacent hardware.

Include wiring schematics as part of the hardware schedule showing product numbers and Quantities and gauges of wire required for connecting electronic components.

SAMPLES:

If requested by the architect, physical samples shall be submitted for any item listed in the hardware schedule for acceptance of the project by the owner.

COORDINATION:

Submit necessary templates and schedules as soon as possible to door and frame fabricator in accordance with the schedule they require for fabrication.

DELIVERY, STORAGE AND HANDLING:

Properly and carefully package items to protect against damage in shipment and storage; each item shall be packaged complete with all proper fastenings.

Each item shall be marked with appropriate heading and door number in conformance with approved hardware schedule, WITH INDEX SHOWING HEADING NUMBER WHERE DOORS ARE SCHEDULED.

After approval of hardware schedule, deliver hardware templates and/or physical hardware as required to door and frame manufacture to insure building project is not delayed.

GUARANTEE AND ADJUSTMENTS:

All hardware shall be guaranteed against defective workmanship, and shall replace and make good all defective material appearing within a period of one (1) year after completion of work. Closers shall be guaranteed for five (5) years. Hardware supplier shall not be responsible for faulty application of hardware.

Where hardware indicates improper operation, hardware supplier or manufacturer shall visit job and make necessary adjustments and corrections. Where hardware is inadequate for required function, exposure or use, replace with suitable hardware as directed.

Shortages and/or incorrect items (based on the plans and specifications and approved sample lists and schedules) shall be furnished and/or replaced with correct material by the hardware distributor, at no additional cost to the owner.

At completion of project, installer shall notify hardware contractor, who shall have an AHC (Architectural Hardware Consultant) make an inspection of all hardware installation, and make a written report to the Architect reporting conditions of adjustments or improper installation and advise changes required.

KEYING:

All lock cylinders shall be BEST SFIC.

Hardware supplier shall prepare keying schedule and meet with owner and Architect to review and obtain approval. Supply six (6) Master keys per set.

Keying must be done by lock manufacturer or supplier, Manufacturer or supplier is to keep complete and proper records and identification of master keys and their serial numbers.

Furnish two (2) change keys per lock. All keys shall be properly marked immediately on receipt and turned over to the Owner at completion of project.

INSTALLATION:

Carefully install hardware, using skilled finish carpenters. Fit before painters finish is applied. Remove and re-install after finish is complete. Install hardware so that all operating parts function smoothly, close tightly and do not rattle. Carefully install hardware as listed in the installation instructions furnished with each finish hardware item, adhere to manufacturer's instructions for mounting.

Set metal thresholds in full bed of specified caulking compound, forming tight seal between threshold and surface to which set. Secure permanently using countersunk non-ferrous screws to match color of threshold.

Hardware Mounting Heights (Verify with Architect before installation):

Centerline pulls to finish floor 42"

Centerline push plates to finish floor 45"

Centerline lock strikes to finish floor 40 5/16"

Centerline cross bar on panic devices from finish floor 37 1/2"

Centerline deadlock strikes to finish floor 48"

Provide all anchorage, fasteners, etc. as required for the complete installation of all hardware. Furnish thru-bolts for all butts (surface type only), closers, exit devices, push bars and other hardware subject to severe usage or as required by Underwriter Laboratory (UL) or as directed by the Architect on the shop drawings.

FINISHES AND MATERIALS:

Butts, Exterior	<u>US10</u>
Interior	<u>US10</u>
Locksets	<u>US10</u>
Door Closers	<u>LT BRONZE</u>
Exit Devices	<u>US10</u>
Push Bars, Push Plates, Pulls	<u>US10</u>
Kickplates	<u>US10</u>
Stops and Holders	<u>US10</u>
Misc., Hardware	<u>US10</u>

BUTTS:

The following is a table of butt types in manufacturer's catalogue numbers which are considered equal. No substitutions will be allowed:

	<u>Hager</u>	<u>Stanley</u>	<u>PBB</u>
Type 3	BB1168	BB168	4B81

Butts types shall be furnished as follows, except as otherwise noted.

Interior Doors over 36" wide	Type <u>3</u>
Interior Doors with Closers	Type <u>3</u>
Interior Doors without closer	Type <u>3</u>

Butt quantities and sizes shall be as follows, except as otherwise noted. All butts shall be 4 1/2 x 4 1/2.

- Two (2) butts for Doors 60" in height and under
- Three (3) butts for doors 61" thru 90" in height
- Four (4) butts for doors 91" thru 120" in height
- Four (4) butts for Dutch doors

Provide proper width of butts to clear trim and allow full 180 degree swing.

LOCKSETS AND LATCHSETS

Unless otherwise indicated in hardware groups, all locks, latches, trim, deadlocks shall be the products of one manufacturer.

All locks shall be: **CORBIN ML2000 SERIES**

Design to be: **PSM**

Provide wrought boxes and strikes with proper length to protect trim, provide open back strikes where required. Lock functions shall be as listed in hardware groups.

Knurled knobs shall be installed on Janitor, Mechanical Stair, Equipment, etc, per Handicap Code restrictions where applicable.

The following is a table of devices and design which are considered equal and acceptable.

NO SUBSTITUTION.

EXIT DEVICES

All exit devices shall be U.L. listed for safety requirements as well as listed for labeled doors.

	<u>VON DUPRIN</u>
Series	99L
Design	06
Series	9927L
Design	06

Furnish electric latch retraction "EL" as specified in hardware groups including applicable power supply as required by the manufacturer.

ELECTRIC STRIKES

All electric strikes shall be U.L. listed for safety and fire requirements. Provide strikes with voltage as required by security system.

ELECTRIC STRIKES ARE TO BE HES 1000 SERIES PROVIDED BY THE SECURITY CONTRACTOR.

DOOR CLOSERS:

All closers shall be of rack and pinion construction with separate adjusting valves for latching speed, closing speed and back check. All closers to be surface applied and have non-ferrous covers.

All closers to be mounted on room side wherever possible, where wall conditions permit, all doors shall swing 180 degree.

It shall be the hardware supplier's responsibility to furnish door closers sized to comply with The manufacturer's recommendations for door sizes. Furnish thru bolts for all labeled wood doors.

The following is a table of closers which are considered acceptable:

<u>LCN</u>	
Exterior	4041XP H CUSH
Interior	4041XP

NO SUBSTITUTION.

DOOR TRIM:

Unless otherwise specified, all push plates shall be equal to Hiawatha 200F and pull plates shall be equal to Hiawatha 200F x 535B.

All push/pull bars shall be equal to Hiawatha 1081 LBP x 535B.

All kickplates shall be equal to Hiawatha 10" high and 2" less than door width for single doors, 1 1/2" less than door width for pairs of doors. Armor plates shall be 40" high, mop plates 6" high, width same as kickplates.

Items equal in quality and design by, Trimco, Ives, Quality, Hager, Burns will be acceptable.

DOOR STOPS AND HOLDERS

Unless otherwise indicated, all door stops shall be equal to Glynn Johnson GJWB50W OR GJWB60W.

Where wall bumpers are not applicable, provide overhead door stays equal to Glynn Johnson GJ450 series, unless otherwise specified.

Provide overhead holders and shock absorber equal to Glynn Johnson GJ900M for all exterior doors call for, unless otherwise specified.

FLUSH BOLTS

Unless otherwise indicated, Inactive doors of pairs shall have two flush bolts, equal to H. B. Ives FB358, FB458UL. The bottom bolt shall be provided with a dustproof strike, equal to H. B. Ives DP2.

Where indicated, furnish automatic flush bolts H. B. Ives FB41P on Wood Doors H. B. Ives FB31P on Hollow Metal doors.

Where indicated, furnish Coordinators equal to H. B. Ives COR complete with proper filler bar H. B. Ives FL, also furnish mounting brackets for any stop mounted hardware equal to H. B. Ives MB1 OR MB2. Provide carry open bars where applicable equal to H. B. Ives **CB1**.

WEATHERSTRIPPING, THRESHOLDS, SWEEPS, SMOKESTRIPPING

Unless otherwise indicated, thresholds shall be equal to Reese S424A
Weather stripping shall be equal to Reese 769C apply to head and jambs where indicated in hardware groups.

Sweeps shall be equal to Reese 323C, apply to door bottoms where indicated in hardware.

Smoke gasket shall be equal to Reese 797B, apply to head and jambs where indicated in hardware groups.

The following schedule of hardware will be considered a guide only and the supplier is cautioned to refer to GENERAL CONDITIONS and PREAMBLE. It will be the hardware supplier's responsibility to advise the Architect before bidding if a conflict exists.

Refer to floor plans and/or door schedule for hardware group required at each opening. Ignore hardware groups not used on floor plans or door schedule. If conflict exists between The hardware preamble and schedule of hardware groups, the hardware listed in hardware group shall be furnished.

GROUP 01

DOORS 103A, 103B, 107, 108, 114, 116, 131, 137

EACH LEAF TO RECEIVE;

**3 EA. BB1168 4.5 X 4.5 US10 HINGE
1 EA. ML2057 PSM CLS6 US10 STOREROOM LOCK (FUNCTION TO BE VERIFIED BY OWNER)
1 EA. BEST SFIC CORE US10
1 EA. 236W10 WALL STOP
1 EA. ELECTRIC STRIKE BY OTHERS
1 EA. CREDENTIAL READER BY OTHERS
1 EA. POWER SUPPLY BY OTHERS**

GROUP 02

DOORS 102, 115, 120A, 121, 130A, 130B, 136A, 138

EACH LEAF TO RECEIVE;

**3 EA. BB1168 4.5 X 4.5 US10 HINGE
1 EA. ML2057 PSM CLS6 US10 STOREROOM LOCK (FUNCTION TO BE VERIFIED BY OWNER)
1 EA. BEST SFIC CORE US10
1 EA. 4040XP Rw/PA 691 CLOSER
1 EA. 236W10 WALL STOP
1 EA. ELECTRIC STRIKE BY OTHERS
1 EA. CREDENTIAL READER BY OTHERS
1 EA. POWER SUPPLY BY OTHERS**

GROUP 03

DOORS 101, 134, 117, 132, 135, 139,140, 100, 119, 120B, 124, 125, 126, 133, 141, 142

EACH LEAF TO RECEIVE;

**3 EA. BB1168 4.5 X 4.5 US10 HINGE
1 EA. ML2055 PSM CLS6 US10 CLASSROOM LOCK (FUNCTION TO BE VERIFIED BY OWNER)
1 EA. BEST SFIC CORE US10
1 EA. 236W10 WALL STOP
1 EA. ELECTRIC STRIKE BY OTHERS
1 EA. CREDENTIAL READER BY OTHERS
1 EA. POWER SUPPLY BY OTHERS**

GROUP 04

DOORS 139B

EACH LEAF TO RECEIVE;

**3 EA. BB1168 4.5 X 4.5 US10 HINGE
1 EA. ML2055 PSM CLS6 US10 CLASSROOM LOCK (FUNCTION TO BE VERIFIED BY OWNER)
1 EA. BEST SFIC CORE US10
1 EA. 236W10 WALL STOP**

GROUP 05

DOORS 139A

EACH PAIR TO RECEIVE;

**6 EA. BB1168 4.5 X 4.5 US10 HINGE
1 EA. ML2055 PSM CLS6 US10 CLASSROOM LOCK (FUNCTION TO BE VERIFIED BY OWNER)
1 EA. BEST SFIC CORE US10
1 PR. FB458 MANUAL FLUSHBOLT
1 EA. DP2 DUST PROOF STRIKE
2 EA. 236W32D WALL STOP**

GROUP 06

DOORS 12

EACH LEAF TO RECEIVE;

- 3 EA. BB1168 4.5 X 4.5 US10 HINGE**
- 1 EA. ML2057 PSM CLS6 US10 STOREROOM LOCK (FUNCTION TO BE VERIFIED BY OWNER)**
- 1 EA. BEST SFIC CORE US10**
- 1 EA. 236W10 WALL STOP**

GROUP 07

DOORS 11

EACH PAIR TO RECEIVE;

- 6 EA. BB1168 4.5 X 4.5 US10 HINGE**
- 1 EA. 9927EO-F 4' US10 SVR PANIC**
- 1 EA. 9927L-F 4' US10 SVR PANIC**
- 1 EA. BEST 1E72 US10 RIM CYLINDER**
- 2 EA. 4040XP Rw/PA 691 CLOSER**
- 2 EA. 964C 7' ASTRAGAL**
- 1 EA. 769C 8070 W/S**
- 2 EA. 323C 4' SWEEP**
- 1 EA. S424A 8' THRESHOLD**

GROUP 08

DOORS 110A

EACH PAIR TO RECEIVE;

- 6 EA. BB1168 4.5 X 4.5 US10 HINGE**
- 1 EA. EPT10 POWER TRANSFER**
- 1 EA. 9927L 3' US10 SVR PANIC**
- 1 EA. EL9927L 3' US10 SVR PANIC**
- 1 EA. PS914-2RS POWER SUPPLY**
- 2 EA. BEST 1E72 RIM CYLINDER US10**
- 2 EA. 4040XP Hw/PA 691 CLOSER**
- 2 EA. 236W32D WALL STO**
- 1 EA. CREDENTIAL READER BY OTHERS**

GROUP 08A

DOORS 110C, 110C

EACH PAIR TO RECEIVE;

- 3 EA. BB1168 4.5 X 4.5 US10 HINGE**
- 1 EA. 99L 3' US10 RIM PANIC**
- 2 EA. BEST 1E72 RIM CYLINDER US10**
- 2 EA. 4040XP Rw/PA 691 CLOSER**
- 2 EA. 236W32D WALL STOP**
- 1 EA. CREDENTIAL READER BY OTHERS**
- 1 EA. ELECTRIC STRIKE BY OTHERS**
- 1 EA. POWER SUPPLY BY OTHERS**

SECTION 08 80 00

GLAZING

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. Furnish all labor and materials in connection with glass and glazing, interior and exterior hollow metal and doors, complete, in accordance with the drawings and as herein specified.
- B. Glass sizes, glass types, glazing details and methods shall conform to the published recommendations of the glass manufacturer and the "Glazing Manual" of the Flat Glass Jobber's Association.
- C. Compounds, tapes, and gasket materials for exterior glazing shall be products having a life expectancy of 20 years minimum.
- D. Glass shall be accurately sized from actual frame measurements to provide the required edge clearances and lap. Glass shall be accurately positioned by means of setting blocks and centering shims in accordance with glass manufacturer's recommendations.
- E. Surfaces to receive glazing compounds and tapes shall be wiped clean and dry. In cold weather the glass, frames, and sealants shall be warmed before installation.
- F. All glazing for rated doors must be installed in approved metal frames and shall be clear fire rated glass.
- G. Fire rated glass to be used in fire rated assemblies.
- H. All glass to be tempered except where tempered fire rated glass required by code.

1.2 WARRANTY

- A. Contractor shall furnish the Owner, manufacturer's written warranty on all units of insulating glass herein specified, guaranteeing insulating glass against film formation or dust collection between interior glass surfaces for a period of ten (10) years from the date of shipment to the job site.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Glass shall be as manufactured by Pittsburgh Plate Glass Co., Libby-Owens-Ford Co., American Saint Gobain, Mississippi Glass Co., or approved equal. Manufacturer of insulating glass must have had not less than five (5) years' experience in such manufacture.
 - 1. Tempered Plate Glass - 1/4" thick clear.
 - 2. Exterior Fixed Glazing and Sidelights – N/A

- B. Polybutene glazing compound shall be as manufactured by Tremco Manufacturing Co., Minneapolis Mining and Manufacturing Co., Presstite Division of Martin-Marietta Corporation, or approved equal. Compound shall be non-drying, non-oxidizing, and non-skinning.
- C. Oleo-resinous glazing compound shall be as manufactured by Dicks-Armstrong-Pontius, Tremco Manufacturing Co., Plastic Products Co., or approved equal. Compounds shall be especially formulated for the materials to which applied. Compound for face glazing of metal sash shall conform to Federal Specifications TT-G-00410(c).
- D. Flexible sealant shall be a two-component polysulfide base compound conforming to Federal Specification TT-S-227B and bearing a tested and approved seal of the Thiokol Chemical Corporation, or a one component polysulfide, acrylic, or silicone base compound conforming to Federal Specification TT-S-00230, color as selected. Primer shall be as recommended by manufacturer.
- E. Glazing tape shall be a non-hardening, non-drying butyl rubber cloth reinforced tape; an extruded polybutene glazing tape, a reinforced butyl polyisobutylene tape or an approved equal.
- F. Setting blocks and spacers shall be neoprene or vinyl, maximum durometer hardness 40-50 for spacers and 70-80 for setting blocks.
- G. Glazing clips as required.

2.2 LOCATION OF MATERIALS

- A. Door and sidelight exterior glass shall be as specified above unless noted otherwise. Door and sidelight glazing to be tempered glass.
- B. Interior glazing shall be as specified above and as called for on drawings.
- C. All other glazing shall conform to the following minimum requirements:

<u>Size of Opening</u> (sq. ft.)	<u>Glass</u>
Maximum 12	1/8" thick (DS) sheet
Maximum 24	3/16" thick sheet
Maximum 29	7/32" thick sheet
Over 30	1/4" thick plate

- D. Glazing compounds and sealants shall be located as follows:
 1. All interior glass set in wood or metal doors and frames; Oleo-resinous glazing compound.
 2. All exterior glass to be face glazed, set in aluminum, and embedded in polybutene glazing compound and faced with oleo-resinous glazing compound.
- E. All glazing must conform to IBC requirements. Sidelites and door glazing shall be tempered glazing unless fire rated glazing is required.

PART 3 - EXECUTION

3.1 PREPARATION

- A. All surfaces to receive glazing compound and tapes shall be wiped clean and dry. In cold weather the glass, frames, sealant, etc. shall be warmed before installation.

3.2 INSTALLATION

- A. All sizes for glass shall be taken from the actual sash, doors and frames. Glass shall be set so that there will be equal bearing the entire width of each panel. All glass shall be continuously sealed the entire perimeter of the glass. Wood and metal stops, stop screws, and washers are specified elsewhere, but shall be applied as a part of the work of this section. Use neoprene vinyl or other approved setting blocks and spacers to achieve proper bearing and uniform beads of glazing compound or sealant.

3.3 CLEANING

- A. Upon completion of the work, when directed by General Contractor, replace all cracked or broken glass and clean all glass thoroughly both sides.

SECTION 08 87 33

DECORATIVE FILMS

PART 1 - GENERAL

1.1 CONDITIONS AND REQUIREMENTS

- A. The General Conditions, Supplementary Conditions, and Division 01 – General Requirements apply.

1.2 SECTION INCLUDES

- A. Furnishing and installation of decorative window film at locations identified on plans.

1.3 REFERENCES

- A. ASTM International (ASTM):
 1. ASTM D882 - Standard Test Method for Tensile Properties of Thin Plastic Sheeting.
 2. ASTM D1044 - Test for Resistance of Transparent Plastics to Surface Abrasion (Taber Abrader Test).
 3. ASTM D4830 - Standard Test Methods for Characterizing Thermoplastic Fabrics Used in Roofing and Waterproofing. Section 7: Puncture Strength.
 4. ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.
 5. ASTM E903 - Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres.

1.4 DEFINITIONS

- A. Emissivity: The ability of a surface to absorb far-infrared heat and to reflect it. The lower the emissivity, the lower the far-infrared heat absorption and the greater the far-infrared heat reflectance.
- B. Far-Infrared Heat: Heat radiated from objects at temperatures below 1300 degrees F such as heat radiated from: room objects, objects heated by the sun, or a home heating system. Far-infrared heat is different from near-infrared heat that is heat radiated from objects at highly elevated temperatures such as the sun.
- C. Graphic Arts Series Films: These films are used for interior applications, are scratch-resistant, and available in a basic color palette that inspires a wide range of custom design solutions.
- D. Light to Solar Heat Gain Ratio: Ratio of visible light transmission to Solar Heat Gain Coefficient for a glazing system.
- E. Pattern Series Films: These films are scratch-resistant and offer a wide range of aesthetic solutions through varying levels of translucent and opaque whites with a simulated acid-etched appearance. These films also include a broad range of classic patterns.

- F. Privacy Series Films: These films are available in a wide range of colors and are used in commercial applications where low reflectivity is desired. These films are ideal for use in commercial interior glazing applications to achieve privacy or interior design goals.
- G. Solar Heat Gain Coefficient (SHGC): The fraction of incident solar radiation that actually passes through that window, including solar energy that is both directly transmitted and that which is absorbed and subsequently released inwardly by re-radiation and conduction. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits. This number is the mathematical complement of the Total Solar Energy Rejection (TSER) value: The sum of the TSER (in decimal form) of a glazing system and its SHGC value is 1; therefore, $1 - \text{TSER} = \text{SHGC}$.

1.5 PERFORMANCE REQUIREMENTS

- A. Scratch Resistance: Solar control films shall average less than 12% increase in haze when tested according to ASTM D1044 using a Teledyne Taber Abrader using CS10F Type III wheels each loaded to 0.5 kg for 100 cycles in a 70% vacuum.
 - 1. Scratch resistance testing shall be performed by an independent third party agency.
- B. Surface Burning Characteristics: Provide films that have Flame Spread Index of 0 and Smoke Developed Index of 30 or less when tested in accordance with ASTM E84.
- C. Ultraviolet Transmission: Provide decorative films with UV absorbing materials that limit the weighted UV Transmission to 10 percent when measured according to ASTM E903.
- D. Provide decorative films that do not have a masking sheet.

1.6 SUBMITTALS

- A. Product Data: Submit for each product specified indicating:
 - 1. Performance properties.
 - 2. Preparation and installation instructions and recommendations.
 - 3. Storage and handling recommendations.
- B. Samples: For each type of decorative film specified, two (2) samples, 12 inches square.
- C. Qualification Data: Submit documentation indicating qualifications of decorative film manufacturer.
- D. Operation and Maintenance Data: Submit for decorative film to include in maintenance manuals.
- E. Warranty: Submit warranty specified in this section.

1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A qualified manufacturer that has a minimum of ten (10) years of documented experience manufacturing decorative films similar to that used for this project.

- B. Installer Qualifications: A firm that is authorized by decorative film manufacturer to install film in accordance with guidelines set forth by the manufacturer.
- C. Source Limitations: Obtain each type of decorative film from same manufacturer.
- D. Mockups: Build mockups to verify selections made under sample submittals and to evaluate surface preparation techniques and application workmanship.
 - 1. Construct mockups in the location and of the size indicated or, if not indicated, as directed by Architect.
 - 2. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- E. Preinstallation Conference: Conduct conference at project site to discuss methods and procedures relating to installation of the decorative films.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, and handle materials in manufacturer's protective packaging.
- B. Store and protect materials according to manufacturer's written recommendations to prevent damage from condensation, temperature changes, direct exposure to sun, or other causes.

1.9 SITE CONDITIONS

- A. Ambient Conditions: Maintain temperature, humidity, and ventilation within limits recommended by manufacturer.

1.10 WARRANTY

- A. Manufacturer's Warranty: Manufacturer's standard form in which manufacturer agrees to replace films that fail within specified warranty period.
 - 1. Warranty Period: Ten (10) years from date of original installation.
 - 2. Warranty coverage limited to owner of property at time of installation.
 - 3. Manufacturer's obligation is limited to furnishing replacement film for any film covered by limited warranty which manufacturer determines to be defective. Manufacturer will not be liable for installation costs of replacement film or for any special, indirect, incidental or consequential damages.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Product: The design for decorative films is based on LLumar Decorative Series Films manufactured by Solutia Inc. Performance Films Division, 575 Maryville Centre Drive, St. Louis, MO 63141; telephone: 800-345-6088; Email: info@llumar.com; Web Site: www.llumar.com.
- B. Substitutions will be considered, subject to compliance with requirements of this section.

2.2 DECORATIVE FILMS

- A. Decorative Texture Film: LLumar NRMV CG HPR Decorative Texture Film with the following performance characteristics when applied to the interior surface of single-pane, 1/8-inch clear glass:
1. Total Solar Transmittance: 83 percent.
 2. Total Solar Reflectance: 8 percent.
 3. Total Solar Absorptance: 9 percent.
 4. Visible Light Transmission: 90 percent.
 5. Visible Light Reflection - Exterior: 9 percent.
 6. Visible Light Reflection - Interior: 9 percent.
 7. Winter U-Value: 0.94.
 8. Shading Coefficient: 0.99.
 9. Total Solar Energy Rejected (TSER): 14 percent.
 10. Emissivity: 0.80.
 11. Solar Heat Gain Coefficient (SHGC): 0.86.
 12. Ultraviolet Rejection: 27 percent.
 13. Light-to-Solar Heat Gain Ratio (LSG): 1.05.
 14. Summer Solar Heat Gain Reduction: 1 percent.
 15. Winter Heat Loss Reduction: 9 percent.
 16. Glare Reduction: 0 percent.
 17. Film Thickness: 0.012 inches.
 18. Film Texture: Cracked Glass.

2.3 DECORATIVE FILM ACCESSORIES

- A. General: Provide accessories either manufactured by or acceptable to decorative film manufacturer for application indicated, and with a proven record of compatibility with surfaces contacted in installation.
- B. Adhesive: Pressure sensitive acrylic adhesive system.
- C. Cleaners, Primers and Sealers: Types recommended by decorative film manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates for compliance with requirements and for conditions affecting performance of decorative film including glass that is broken, chipped, cracked, abraded, or damaged in any way.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions for surface preparation.
- B. Clean substrates thoroughly prior to installation.
- C. Prepare substrates using methods recommended by decorative film manufacturer to achieve the best results for the substrate under project conditions.

- D. Protect window frames and surrounding surfaces to prevent damage during installation.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's written instructions.
- B. Install film continuously, but not necessarily in one (1) continuous length. Install with no gaps or overlaps. Make seams non-overlapping.
- C. Do not remove release liner from film until just before each piece of film is cut and ready for installation.
- D. Install film with mounting solution and custom cut to the glass with neat, square corners and edges to within 1/8-inch of window frame.
- E. Remove air bubbles, blisters, and other defects. Be careful to remove "fingers" to eliminate any contamination or excess water pockets. It is crucial to remove as much water as possible during installation.
- F. A final squeegee pass over the entire pane using a Blue Max Blade with an extended handle design (or Thor's Hammer) is recommended.

3.4 FIELD QUALITY CONTROL

- A. After installation, view film from a distance of 10 feet against a bright uniform sky or background. Film shall appear uniform in appearance with no visible streaks, wrinkles, banding, thin spots or pinholes.
- B. If installed film does not meet these criteria, remove and replace with new film.

3.5 CLEANING AND PROTECTION

- A. Remove excess mounting solution at finished seams, perimeter edges, and adjacent surfaces.
- B. Use cleaning methods recommended by decorative film manufacturer.
- C. Replace films that cannot be cleaned.
- D. Protect installed products until completion of project.
- E. Touch-up, repair or replace damaged products before Substantial Completion.

SECTION 09 21 00

PLASTER PATCHING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes the minimum requirements for full-thickness interior gypsum plastering on gypsum lath, metal lath plaster base, masonry and concrete bases.
- B. All existing defective plaster throughout entire building is to be restored to perfect condition. Contractor is responsible for identifying repair locations and quantities and repair method for each condition.
- C. All repaired areas are to match and align with existing finishes and textures and be invisible when painted.
- D. Quantities: Base bid includes completion of 1000 sq. ft. of "larger cracks/small holes" plaster patching and restoration work as specified throughout first floor areas. Contractor is to document and submit actual areas/quantities to be repaired for verification by architect. Adjustment to quantities and prices up or down to be per rates included in unit costs, with prior approval by architect.

1.2 RELATED SECTIONS

- A. Metal Furring and Lathing
- B. Gypsum Lathing

1.3 REFERENCES

- A. ASTM C 5 Specification for Quicklime for Structural Purposes.
- B. ASTM C 11 Terminology Relating to Gypsum and Related Building Materials and Systems.
- C. ASTM C 28 Specification for Gypsum Plasters.
- D. ASTM C 35 Specification for Inorganic Aggregates for Use in Gypsum Plaster.
- E. ASTM C 61/C 61M Specification for Gypsum Keene's Cement.
- F. ASTM C 206 Specification for Finishing Hydrated Lime.
- G. ASTM C 631 Specification for Bonding Compounds for Interior Gypsum Plastering.
- H. ASTM C 645
- I. ASTM C 841 Specification for Installation of Interior Lathing and Furring.
- J. ASTM C 1489 Specification for Lime Putty for Structural Purposes.

1.4 SYSTEM DESCRIPTION

- A. Gypsum Plaster – Two and Three-coat work over gypsum lath, troweled or floated finish. 3/4 inch thick including finish.
- B. Gypsum Plaster – Three-coat work over interior vertical metal lath, troweled or floated finish. 3/4 inch thick including finish.
- C. Gypsum Plaster – Two and Three-coat interior vertical on masonry or concrete troweled or floated finish. 3/4 inch thick including finish.
- D. Veneer Plaster – ½ inch two coat plaster over gypsum lath.

- E. Patch Plaster – Two and three coat interior plaster over metal lath to match adjacent surface texture and alignment.

1.5 SUBMITTALS

- A. Product Data: Manufacturer's specifications and technical data.
- B. Manufacturer's installation instructions.
- C. Identify tested assemblies for fire rated construction.
- D. Preliminary Samples for Verification: 24" x 24" for each type of finish-coat color and texture indicated, prepared using same tools and techniques intended for actual work.

1.6 QUALITY ASSURANCE

- A. Fire Resistance Ratings: Where plaster systems with fire-resistance ratings are indicated, provide materials and installations identical to those of applicable tested assemblies by fire testing laboratories acceptable to authorities having jurisdiction.
- B. Plastering Contractor Qualifications: Contractor shall provide a list of completed work of equal scope.

1.7 DELIVERY STORAGE AND HANDLING

- A. Packing and Shipping: Deliver products in original unopened manufacturer's packaging.
- B. Storage and Protection: Comply with manufacturer's recommendations.
- C. Damaged Materials: Remove damaged or deteriorated materials from site.

1.8 PROJECT CONDITIONS

- A. One week prior to commencing plastering and continuing until plastering is completed, maintain a temperature of not less than 55°F (13°C) and not more than 80°F (27°C).
- B. After plaster has taken set, provide free circulation of air evenly distributed.
- C. Protect plaster from freezing and too rapid drying.

PART 2 – PRODUCTS

2.1 SUPPORTS

- A. Steel Framing: Non-axial load bearing studs complying with ASTM C 645.
- B. Furring: Cold-rolled spacer channels and metal furring fastened to framing or solid base to create an even surface for the application gypsum lath or metal plaster base. Installation shall comply with ASTM C 841.
- C. Wood Framing: Thickness in the least dimension shall not be less than 2 inches (51 mm) nominal.

2.2 SOLID BASE

- A. Masonry: Standard Concrete Masonry Units, Structural Clay Tile, Porous Brick.
- B. Concrete.

2.3 LATHING MATERIALS

- A. Gypsum Lath: Gypsum core faced with multilayer laminated paper to provide proper absorption, check plaster slide and resist sag complying with ASTM C 37.
- B. Metal Lath: expanded metal lath, sheet metal lath conforming to ASTM C 847.
- C. Lath Attachment Devices and Accessories: As required by ASTM C 841.

2.4 PLASTERING MATERIALS

- A. Liquid Bonding Compound: Vinyl acetate homopolymer emulsion for enhanced adhesion of new plaster to concrete. Larsen's Plaster Weld, USG Plaster Bonder or equal.
- B. Aggregate: ASTM C 35
- C. Water: Clean potable. Free of mineral or organic impurities that may affect the set of the plaster.
- D. Base Coat Gypsum Plasters: Shall conform to ASTM C 28.
 - 1. Mill-Mixed Plaster: Regular with mill added sand or job added sand.
 - 2. Wood Fibered Plaster:
 - a. Water added only for standard lath applications or with added sand for scratch and brown coat.
 - b. Job added sand over masonry bases or machine application.
 - 3. Neat Plaster: Plaster without added aggregate.
 - 4. High Strength Plaster: Proprietary where higher strength than conventional plaster is required.
- E. Finish Plasters
 - 1. Job Mixed
 - a. Gypsum Gauging Plaster.
Regular
Keenes Cement: Retemperable. Shall conform to ASTM C 61.
 - 2. Manufacturer's Prepared Finish: To match existing.

2.5 GYPSUM PLASTER MIXES AND PROPORTIONS

- A. Base Coat: Mix design and proportions per ASTM C 28 and ASTM C 842 and manufacturer's directions for gypsum plaster base coat proportions.
- B. Two-Coat Work over Gypsum Lath: 2 ½ ft.³ (250 lb.) damp loose sand per 1 ft.³ (100 lb.) of plaster.
- C. Three-Coat Work over Gypsum Lath or Metal Lath: Damp loose sand per 1 ft.³ (100 lb.) plaster.
 - 1. Scratch Coat: 2 ft.³ (200 lb.) sand to 1 ft.³ (100 lb.) plaster.
 - 2. Brown Coat: 3 ft.³ (300 lb.) to 1 ft.³ (100 lb.) plaster.
 - 3. Scratch & Brown: 2 ½ ft.³ (250 lb.) to 1 ft.³ (100 lb.) plaster.
- D. Two-Coat Work over Masonry: 3 ft.³ (300 lb.) damp loose sand per 1 ft.³ (100 lb.) plaster.
- E. Three-Coat Work over Masonry and Monolithic Concrete: 3 ft.³ (300 lb.) damp loose sand per 1 ft.³ (100 lb.) plaster.
- F. Finish Plaster: Mix design and proportions per ASTM C 842 and manufacturer's directions for finish coat proportions.
- G. Troweled Finishes
 - 1. Lime Putty with Gypsum Gauging: 1 ft.³ (100 lb.) gypsum/ 3 ft.³ (225 lb.) lime/ no sand.
 - 2. Gypsum Keene's Cement (Medium): 1 ft.³ (100 lb.) gypsum/ 1 ft.³ lime (50 lb.) / no sand.
 - 3. Gypsum Keene's Cement (Hard): 1 ft.³ (100 lb.) gypsum/ ½ ft.³ (25 lb.) lime/ no sand.
 - 4. Manufacturer's prepared finish.
- H. Floated Finishes
 - 1. Lime Putty with Gypsum Gauging: 1 ft.³ (100 lb.) gypsum/ 3 ft.³ (225 lb.) lime/ 2 ft.³ (200 lb.) sand.
 - 2. Gypsum Keene's Cement (Medium): 1 ½ ft.³ (150 lb.) gypsum/ 2 ft.³ (100 lb.) lime/ 4 ½ ft.³ (450 lb.) sand.
 - 3. Manufacturer's prepared finish.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions: Examine areas and conditions under which work is to be performed and identify conditions detrimental to proper or timely completion. Do not proceed until unsatisfactory conditions have been corrected.
- B. Other Work: Verify that electrical wiring, plumbing and heating, piping and ductwork is installed and accepted by architect/ owner's representative before plastering.

3.2 PREPARATION

A. Protection

1. Close exterior openings necessary to protect plaster from inclement weather. Protect wood, glass, tile and other finished work.
2. Provide watertight pans/ boxes under water barrels and mixers.
3. Place three layers of tarred felt extending 6 feet beyond outer edges of mix area.

B. Substrates: Surfaces of substrates for the application of gypsum plaster shall be free of materials that may inhibit the bond.

1. Substrates shall be straight, plumb, level, square, and true to the project requirements.
2. Comply with referenced lathing and furring installation standards for provision and location of plaster accessories of type indicated.
3. Hollow metal window and door frames shall be filled with gypsum plaster or grout.

C. Conditioning of Surfaces: Concrete and masonry:

1. All voids and depressions greater than 1/8" shall be filled with compatible cementitious materials.
2. All masonry surfaces shall be dampened (not saturated) with water prior to application of gypsum plaster.
3. Smooth surfaces shall be roughened by mechanical means and/ or a liquid bonding compound shall be utilized.
4. Where bond cannot be attained to smooth surfaces, self furring lath shall be installed as per ASTM C 841.

D. Gypsum or Metal Lath: Shall be installed as per ASTM C 841.

E. Patching of Existing Plaster

1. Hairline surface cracks
 - a. Commercially available spackling pastes are best suited to filling hairline cracks. Fill the void using a putty or broad knife. Strike the material off flush with the plaster surface.
 - b. Sand lightly when dry if necessary, and then re-paint.
2. Surface cracks larger than hairline up to credit card thickness
 - a. Use a ready mix drywall compound or setting type by method listed above. Setting type joint compounds (USG Durabond or equal) shrink less than ready mix compounds and may be preferable for cracks on the wider side of the scale.
3. Larger cracks/small holes
 - a. Clean out loose plaster particles.
 - b. Fill crack/hole with setting type joint compound (USG Durabond or equal) with a broad knife, striking the material off flush with the surface. Allow to set.

- c. Reinforce filled in crack with drywall tape embedded in setting type joint compound. Feather edges out to smooth and begin to conceal the repair. Allow to set.
 - d. Sand lightly to smooth and apply another thin coat of setting type joint compound. Allow to set. Repeat procedure as necessary to complete the repair.
4. Small patches (less than 4 inches in diameter)
- a. Clean out loose plaster particles.
 - b. Apply bonding agent, Larsen Plaster Weld or equal, to edges of existing plaster around the hole to be filled. Follow manufacturer's instructions for application.
 - c. Old, dry wooden lath should be dampened with a water spray mist to limit suction and uneven drying of the plaster.
 - d. Fill void with milled plaster product, National Gypsum Gold Bond, USG Red Top, or equal. Fill void full for smooth patch or leave slightly recessed as necessary to accommodate similar finish texture.
5. Large Patches
- a. Scrape and remove any loose plaster or debris.
 - b. Reinforce with expanded metal lath, cut slightly smaller than opening, fastened to framing, wood lath or other solid substrate.
 - c. Apply bonding agent (Larsen's Plaster-Weld or equal) to edges of sound existing plaster.
 - d. Re-plaster using three-coat technique as per ASTM C842 using milled plaster product, National Gypsum Gold Bond, USG Red Top, or equal.
6. Re-Surfacing Plaster Walls
- a. Sand surface. Painted surfaces may require more preparation.
 - b. Apply bonding agent, Larsen's Plaster-Weld or equal. Follow manufacturer's instructions for application.
 - c. Fill any low spots with prepared veneer base coat gypsum plaster product, USG Diamond, National Gypsum Kal-Kote or equal. Thickness should be no greater than 1/4" per layer. Scratch surface for key of next layer and allow to take-up sufficiently or dry.
 - d. Parge entire wall area with veneer base coat at approximately 1/16 – 3/32" thickness.
 - e. Embed glass fiber mesh (EIFS type such as Dryvit, Sto or equal) into the fresh veneer plaster base coat, scratching surface for subsequent finish coat. Allow to take-up sufficiently or dry.
 - f. Apply final finish veneer plaster, National Gypsum Kal-Kote, USG Imperial, Lime and Gauging.

F. Veneer Plaster Application

- 1. Base: Manufacturer's standard size gypsum base sheets in maximum available lengths to minimize end-to-end joints, manufacturer's standard edge profile.
- 2. Comply with ASTM C588.
- 3. Thickness: 5/8" unless otherwise indicated.
- 4. Imperial Gypsum base by USG or approved equal.
- 5. Bonding agent: USG Plaster Bonder or approved equal.

6. Plaster Base Coat: Ready-mixed material, mill-prepared, high-strength gypsum veneer plaster for two-coat application. Diamond Basecoat by USG or equal.
7. Plaster Finish Coat: Ready-mixed material. Textured finish. Match existing sand texture as required. Add water in accordance with manufacturer's instructions. Imperial finish by USG or equal.

3.3 APPLICATION

- A. Conform to applicable requirements of ASTM C 842 Standard Specification for the Application of Interior Gypsum Plaster.
- B. Thickness: Apply gypsum plaster in thickness described in section 1.4.
- C. Two-Coat Work over Gypsum Lath or Masonry: The first coat shall be applied with sufficient material and pressure to form a good bond. Double-back immediately to bring plaster out to grounds; straighten to true surface with rod and darby, leaving surface sufficiently rough to receive finish.
- D. Three-Coat Work over Metal Lath: Apply scratch coat with sufficient material and pressure to form a good bond with metal lath; then scratch to roughen surface to accept brown coat. Allow to dry firm and hard, then apply brown coat and true with rod and darby, leaving surface sufficiently rough to receive finish coat.
- E. Three-Coat Work over Masonry or Monolithic Concrete: Apply scratch coat with sufficient material and pressure to form a good bond with the masonry or concrete substrate; then scratch to roughen surface to accept brown coat. Allow to dry firm and hard, then apply brown coat and true with rod and darby, leaving surface sufficiently rough to receive finish.
- F. Application of Finishes: Base coat to receive finish shall be damp from partial drying. Or dry base coat shall be dampened (not saturated).
 1. Apply finish coat over base coat, 1/16 to 1/8 inch thick, doubling back as necessary for an even surface free of scratches, ridges, waves or other irregularities.
 2. Final trowelling for smooth finish
 - a. Lime Putty Keene's Cement: Trowel until finish has set.
 - b. Manufacturer's prepared finish: Shall be trowelled according to directions of manufacturer.
 3. Float/ Textured Finish
 - a. Texture shall be per sample or mock-up using float, methods and devices as predetermined.
 - b. Manufacturer's prepared finish: Special textures shall be floated according to the directions of the manufacturer.

3.4 CUTTING, FITTING AND PATCHING

- A. After finishing last coat, point up plastering, rake out surfaces where necessary, point up around trim and other adjoining work and leave surfaces complete and uniform at final completion.
- B. Unacceptable defects: Cracks, blisters, pits, discoloration or checks.
- C. Patch existing plaster surfaces where indicated on drawings and where affected by new construction as necessary to match existing plaster surfaces.

3.5 CLEANING AND PROTECTION

- A. Remove temporary protection and enclosure of other work. Promptly remove plaster from door frames, windows, floors, walls and other surfaces that are not to be plastered. When plastering work is completed, remove unused materials, containers, and equipment and clean floors of plaster debris.

SECTION 09 29 00

GYPSUM DRYWALL WORK

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Furnish all materials, labor, and related items required to complete work shown and/or specified. See wall types on plan for layers of gypsum. All interior walls shall be a minimum of gypsum partition metal studs 16" o.c. with 5/8X each side.
- B. Examine framing and blocking and report to the Architect any defects that should be corrected before installing dry interior finish. Do not install dry interior finish until work of other division is in compliance with Appendix A of ASA No. A97.1.
- C. Install poly film vapor barrier where shown on the drawings – see Section 06 10 00.
- D. Fit gypsum tight to decks and around joists where indicated. All walls to run full height from floor to underside of deck above
- E. Metal Stud Framing - See Light Gauge Framing - Section 05 40 00.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Interior Secure Areas: At rooms indicated on plan, all interior gypsum board to be USG Fiberock Abuse Resistant VHI or similar by other manufacturer meeting the same non-mold supporting characteristics. Install as shown on plans
- B. Interior Regular Gypsum Board: Gypsum wallboard shall be as manufactured by the National Gypsum Co., United States Gypsum Co., or Johns-Manville, UL listed gypsum wallboard (5/8 X), 5/8" thick, labeled type, tapered edge, 4' wide in lengths as long as practical to minimize the number of joints, or same 5/8 X water resistant type.
- C. Cement Backer Board: Durock Cement Board by USG or equal.
 - 1. Aggregated Portland cement board with woven glass fiber mesh facing complying with ANSI A118.9.
 - 2. Thickness: 1/2" or 5/8" as shown on plans.
- D. Shaft Wall: Gypsum panels assembled with Gypsum Liner Panel and USG C-H studs for UL Design U415 2 hour requirements.

- E. Acoustical Sealant: Meeting ASTM C919 and ASTM C834. Highly elastic, water-based caulking for sound-rated partition and ceiling systems and sealing vapor barriers at exterior walls to reduce air infiltration. Non-bleeding and staining, pumpable and easily applied in beads, providing adherence to surfaces, permanent flexibility, and lasting seal.
- F. Fasteners, joint and corner reinforcing joint compound, and surface sealer for gypsum board shall be as standard with and as recommended by the manufacturer of the gypsum wallboard.
- G. Furnish and install all required metal corner beads, metal end casings, and all other trim pieces as required or as called for on the drawings. Resilient clips or resilient channel on ceilings and necessary suspension and backing not shown by others. Feather out from all casing beads with taping compound.
- H. Expansion Joints: Shall be fabricated with casing beads back to back with 1/8 inch space between beads. Joint must be installed to allow direct expansion and contraction and also lateral movement. Provide all back up for expansion joints. Feather out from casing beads with taping compound each way. Cut and caulk open space.

PART 3 - EXECUTION

3.1 GENERAL

- A. Workmanship shall comply with applicable parts of American Standard Specifications for Gypsum Wallboard Finishes, ASA No. A97.1.
- B. In cold weather the building shall be heated during the application of the gypsum wallboard to maintain a uniform temperature in the range of 70°F and ventilation shall be provided to eliminate excessive moisture.
- C. All materials as specified above shall be delivered to the job in original unopened containers or bundles, stored in a place protected from exposure to elements and from damage by tampering, and used in strict accordance with manufacturer's directions.

3.2 INSTALLATION

- A. Installation of gypsum wallboard shall be in strict accordance with the manufacturer's printed recommendations and specifications.
- B. All ends and edges of gypsum wallboard shall occur over nailing members except when joints are at right angles to framing members as in horizontal application at all walls.
- C. Fastenings shall be by the double screwing method in groups approximately 9" o.c. in compliance with the manufacturer's printed recommendations and specifications. Install ceiling first with closest screwing 12" from wall. On wall sheets, fit with 1/2" gap at floor and 1/8" gap at ceiling board. Screw to approximately 9" from ceiling. Float corners.
- D. Joint reinforcing, corner reinforcing, joint compound, and topping compound shall be installed in accordance with manufacturer's printed specifications.
- E. Install poly film by securing to studs on all exterior insulated walls and ceilings.

- F. At water resistant drywall furnish joint treatment sealant as recommended by manufacturer at all cut edges, utility holes and joints, including those at all angle intersections and treat all fastener heads with sealant after installation.
- G. Tape and fill all joints, nail and screw holes as recommended by manufacturer at all cut edges, utility holes and joints, including those at all angle intersections. Treat all fastener heads with sealant after installation.
- H. Furnish blocking, anchoring devices, corner beads, casing beads, and other necessary accessories of size and spacing as recommended by manufacturer whether specified or not, but required for proper construction of systems.
- I. Install expansion joints where called for on drawings and as required using Metal Trim 200-A.
- J. Provide casing bead or approved surface bead where sheetrock abuts masonry or precast concrete. Miter corners of abutting metal return beads. Flat type and score joints between walls and ceiling.

SECTION 09 30 00

TILE

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Scope: All materials, labor, equipment, and related services necessary to furnish and install all terrazzo tile, ceramic tile, porcelain tile, quarry tile, anti-fracture membrane and waterproofing membranes as indicated on the drawings, room finish schedule, or specified herein.
- B. Maintenance Material: Leave all whole tile pieces on premises. Package for storage, label each product, and deliver to Owner. Overage must be a minimum of 5% of each type of color and size of product.
- C. Schluter tile edges and accessories as specified.
- D. Related Work: Section 09 40 00 – Floor Preparation and Leveling

1.2 SUBMITTALS

- A. Tile: Submit two samples of each color of tile. Do not submit sample boards.

1.3 REFERENCE STANDARDS

- A. Work shall conform to the Tile Council of America (TCA) Specifications listed in the current "Handbook for Ceramic Tile Installation."
- B. Installation:
 - ANSI A108.1 – Tile Installed with Portland Cement Mortar
 - ANSI A108.4 – Water-Cleanable Epoxy Adhesive
 - ANSI A108.5 – Ceramic Tile Installed with Dry-Set Portland Cement
 - ANSI A108.6 – Ceramic Tile Installed with Chemical-Resistant, Water-Cleanable Tile Setting and Grouting Epoxy
 - ANSI A108.10 – Grout Installation in Tile Work
 - ANSI A108.11 – Cementitious Backer Installation
 - TCA EJ171-01 – Movement Joint Design Essentials
- C. Materials:
 - ANSI A118.1 – Dry Set Portland Cement Mortar
 - ANSI A118.3 – Chemical Resistant, Water-Cleanable Tile-Setting Epoxy Adhesive
 - ANSI A118.4 – Latex-Portland Cement Mortar
 - ANSI A118.6 – Ceramic Tile Grout
 - ANSI A118.9 – Cementitious Backer Units
 - ANSI A137.1 – 1988 Recommended Standard Specification for Ceramic Tile
 - ASTM C-920 – Elastomeric Joint Sealants

1.4 PROJECT CONDITIONS

- A. Install mortar, set and grout tile when surfaces and ambient temperature is minimum 50 degrees F and maximum 70 degrees F for 24 hours prior to installation. Consult with manufacturer for specific requirements.

- B. Protection: Protect adjacent work surfaces during tile work. Close rooms or spaces to traffic of all types until mortar and grout have set.
- C. Safety: Observe the manufacturer's safety instructions including those pertaining to ventilation.

PART 2 - PRODUCTS

2.1 MATERIAL

- A. Floor Tile – See floor finish plans for type and location.
 - 1. Terrazzo Tile: Wausau Terrazzo Tile “Micro” 12 x 12, colors as selected. Polished finish except ramp, brushed finish. See floor finish plan for border configuration and arc pattern, 1/16” joints. Note: Multiple colors to be selected.
 - 2. Baseboard: 8” high terrazzo tile as manufactured by Wausau Tile. Bullnose top edge – color as selected.
- B. Metal Threshold/Trim Pieces: Schluter or comparable to provide joint between tile and adjacent surface. Provide Schluter Rondec sized for tile applications, Schluter Schiene Radius profile at curved floor tile. Contractor to verify appropriate style required. All finishes to be satin nickel. Provide all accessories and corner pieces.
- C. Grout
 - 1. Dry set acrylic latex-modified Portland cement grout.
 - 2. Flexible Latex Portland Cement Mortar: Add flexible latex additive to dry mortar mix as recommended by tile manufacturer.
 - 3. References: ANSI 108.5, ANSI A118.1, ANSI A118.4, and ANSI A118.6.
 - 4. Ceramic or porcelain wall tile – standard, dry sanded grout, color as selected.
 - 5. Ceramic or porcelain floor tile – sanded grout with latex additive, color as selected.
- D. Caulk
 - 1. Provide caulk in ceramic, porcelain, and quarry floors to isolate tile from the concrete control joints and constructions.
 - 2. Wall Sealant: Silicone sealant, FS TT-S-001543A, mildew-resistant type. Color to match adjacent grout.
- E. Penetrating Sealer: Aqua Magic by Akonia. Aqua Mix Penetrating Sealer or approved equal.
- F. Anti-Fracture Membrane: Under all tile and terrazzo tile surfaces including toilet room floors, dry storage, entries and corridors: Schluter Ditra/Ditra-XL as recommended by manufacturer for substrate or site conditions. Prepare and prime existing concrete and terrazzo as required by manufacturer. Turn membrane edges up wall 6” minimum and seal all seams watertight.

PART 3 - EXECUTION

3.1 PREPARATION

- A. All supporting surfaces shall be structurally sound, solid, stable, level, plumb, and true to a tolerance in plane of $1/8" \pm 8'-0"$ for walls, $1/8" \pm 10'-0"$ for floors when specified for thin-set method, or $1/4" \pm$ in $8'-0"$ for walls and $1/4"$ in $10'-0"$ for floors when specified for mortar bed method. They shall be clean and free of dust, oil, grease, paint, tar, wax, curing compound, primer, sealer, form release agent, laitance, loosely bonded topping, loose particles or any deleterious substance and debris which may prevent or reduce adhesion.
- B. Mechanically sand and scarify the substrate to completely remove all loose substrate and prepare surface for new.
- C. Neutralize any trace of strong acid or alkali.
- D. All substrates shall be dry. The moisture content shall not exceed 50%.
- E. Turn off all forced ventilation and radiant heating systems and protect work against drafts during installation and for a period of at least 72 hours after completion. Use indirect auxiliary heaters to maintain temperatures in the area at the recommended workable level. Vent temporary heater to exterior prevent damage to tile work from carbon dioxide build up.
- F. Presswood, particle board, chip board, masonite, gypsum floor patching compound, wood underlayment board and similar dimensionally unstable materials are not acceptable substrates.
- G. Before work commences examine the areas to be covered and report any flaw or adverse condition in writing to the architect and general contractor. Do not proceed with work until surfaces and conditions comply with the requirements indicated in ANSI A108.
- H. Concrete
 - 1. All concrete substrates shall be at least 28 days old, completely cured and free of hydrostatic conditions, and/or moisture problems.
 - 2. New concrete surfaces for dry-wet mortar, medium-bed mortar, or thick-bed mortar installations shall be broom finished.
 - 3. At existing spaces to receive porcelain tile, substrate is terrazzo. Terrazzo to be mechanically prepared (i.e. "scar firing") to remove existing finish that may compromise the bond of setting materials.
 - 4. On grade or below grade concrete slabs must be installed over an effective vapor barrier and be exempt from hydrostatic pressure.
 - 5. Over excessively dry porous concrete, keep the concrete substrate continuously moist for at least 24 hours before work begins when using dry-set mortars or medium-bed mortars. Remove all excess water or standing water allowing the surface to become almost dry before installing the leveling coat, dry-set mortar or medium-bed dry-set mortar.

3.2 INSTALLATION - GENERAL

- A. Install ceramic tile in accordance with ANSI A108.1A and ANSI A108.1B.
- B. Install porcelain pavers in accordance with ANSI A118.4.
- C. Install tile in accordance with ANSI A137.1 for acceptable lippage. Lippage refers to differences in elevation between edges of adjacent tile. For wall tile with 1/8" grout width or less, allowable lippage is 1/32". For quarry tile with 1/4" grout joint or greater, allowable lippage is 1/16". For porcelain paver with 1/16" grout joint, allowable lippage is 1/32". Where patterns are specified, tiles must align both in caliber and in thickness.
- D. Finished tiled areas to be level and plumb with no variations exceeding 1/4" in 10'-0" from the required plane.
- E. Install base flush with wall tile and floor tile.
- F. Where base has bullnose top, if wall tile is called out, butt wall tile to top of base bullnose. Where integral slant base is specified, cut floor tile to fit cove piece and install flush with floor and wall tiles.
- G. At ceramic floor tile installations, install solid surface thresholds with recommended silicone adhesive at wall or frame openings to other building areas not receiving tile floor finish or Schluter metal edging compliant with ADA requirements. 1/4" edge of threshold to align with tile installation and 1/8" edge of threshold to align with adjacent vinyl flooring or carpet. Transition to be flush with both flooring types. Refer to details for installation. Provide floor filler to taper substrate to align finishes if beyond method listed above.
- H. At quarry tile and porcelain tile floor installations, install metal threshold trim piece at wall or frame openings to other building areas not receiving tile floor finish. Where porcelain tile is installed at bathrooms, install solid surface thresholds, metal edge or floor fill as noted above.
- I. Install bond breaker on concrete slab at 2'-0" on each side of construction and control joints per TCA Guidelines EJ 171-01. Joints in tile work should be constructed during installation of mortar beds and tile to ensure the location will align with joints in substrate. Install sealant after tile work and grout are dry per ASTM C-920.
- J. Cut tile as required to slope to floor drains where noted.
- K. Install crack isolation or waterproof membranes as recommended by tile manufacturer.
- L. Waterproof membrane: Install membrane per manufacturer's written instructions. Turn edges up wall 6" minimum, seal corners, and all seams watertight.
- M. Grout is to be installed and wiped down flush to top edge of tile or cushioned edge with minimal concave grout joints. Concave joints greater than 1/16" depth are to have grout removed and replaced to meet requirements listed above.

3.3 PORCELAIN TILE/TERRAZZO TILE

- A. Bond Coat: Tec 3N1 Performance mortar exceeds ANSI 118.4 and A118.11. Must be used in conjunction with Tec Accucolor XT grout to maintain 25 year warranty from cracks.
- B. Install per manufacturer's instructions including grout joint width.
- C. Install according to acceptable lipped noted above.
- D. Install metal threshold trim or solid surface threshold at connection of porcelain paver and adjacent floor material. Solid surface threshold to be installed at all bathroom locations unless noted otherwise.
- E. Transition between tile, threshold, and adjacent flooring to be flush. Where necessary adjacent flooring to be feathered up to create flush transition.
- F. Provide epoxy grout at areas where water and chemical resistance is necessary and where noted in Room Finish Schedule.
- G. Where porcelain tile is installed at wall areas, install according to ceramic wall tile.
- H. Grout joints using 3/16" joint unless otherwise recommended by manufacturer. 1/16" joint at terrazzo tile. Where tile with rectified edges is specified, install with smaller grout joint as recommended by manufacturer. Clean and rinse tile work as recommended by manufacturer.
- I. Joints in pavers to be flush, not tooled.
- J. Caulk joint between floor tile and base on exterior walls. Caulk corner joint where interior walls meet exterior walls.
- K. Prior to grouting apply a grout release in accordance with manufacturer's instructions at all floor tiles with surface texture.
- L. Dampen tile prior to grouting. Grout small areas at a time. Use grout-release test to verify grout will release. If heavy residue exists, clean several times, but do not use acid. Follow grout manufacturer's printed instructions.

3.4 SEALER

- A. Apply penetrating sealer to floor tile and grout per manufacturer's instructions. Do not allow to dry on surface.
- B. Do not apply penetrating sealer where epoxy grout is installed.

3.5 CLEANING AND PROTECTION

- A. Proper curing of grout entails covering installation with non-staining Kraft paper for a period of 72 hours.

- B. Leave finished installation free of cracked, chipped, broken, unbonded or otherwise defective tile work.
- C. Protect all floor tile installations with Kraft paper or other heavy covering during construction period to prevent staining or damage. No foot or wheel traffic permitted on floor for at least three days after grouting.

SECTION 09 40 00

FLOOR REPAIR AND LEVELING

PART 1 - GENERAL

1.1 SCOPE

- A. Where necessary to level new and existing concrete, bush hammer existing concrete and provide tapering slab using Five Star Structural Concrete or approved equal, all according to manufacturer's recommendations.
- B. Provide all materials and labor necessary to make smooth transition where ramped floors interface with existing topping slabs, insulation, and structural slabs, and to correct the defective conditions of existing or new floors to level areas where walls, bases, or raised areas are to be revised and to make all floor area suitable for first class installation of flooring specified for this project.
- C. Prepare all floor areas for specified finishes.
- D. Quantities: Base bid includes 500 sq. ft. of "heavier repair work" as specified throughout first floor areas. Contractor is to document and submit actual areas/quantities to be repaired for verification by architect. Adjustments to quantities and prices up or down to be per unit price cost, with prior approval by architect.

1.2 REFERENCES

- A. ASTM C33: Concrete Aggregates
- B. ASTM C144: Aggregate for Masonry Mortar
- C. ASTM C150: Portland Cement
- D. ASTM C404: Aggregates for Masonry Grout

1.3 SUBMITTALS

- A. Comply with requirements of Division 0 and 1.
- B. Product Data: Submit with mixing and application instructions.

1.4 STORAGE AND HANDLING

- A. Deliver materials in original unopened containers. Store so as to prevent damage and deterioration.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Portland Cement: ASTM C150, Type I
- B. Sand: ASTM C33, use in section topping.
Sand: ASTM C144, use in bonding grout mix.
Sand: ASTM C404, size no. 2, use in thin section topping mix.
- C.

Bonding Agent:

1. Grace and Co., Daraweld-C
 2. Sonneborn, Sonocrete
- D. Thin Repair Work: Material for floor repair less than 3/4 inch thick shall be cement, sand, water, and bonding agent or one of the following proprietary compounds.
1. Bonsal Construction Products, Fast Set Cement Mix
 2. Laticrete International, Inc. Laticrete 3701 Mortar
 3. Thoro Systems Products, Thorocrete
- E. Heavier Repair Work: Use 3.4 gal. lath and concrete leveling.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Prepare existing floors to assure secure bonding of new floor repair material. Remove oil, grease, dirt, and other substances which will prevent bonding. Remove loose or unsound concrete. Follow with acid etching and rinsing in accordance with bonding agent manufacturer's instructions.

3.2 MIXING

- A. Bonding Grout Mixing: Mix Portland cement, sand, bonding agent, and water in proportions and method recommended by bonding agent manufacturer's instructions.
- B. Thin Section Topping; Mix Portland cement, sand, bonding agent, and water in proportions and method recommended by bonding agent manufacturer's instructions. For use in repairs not over 1/2 inch thick.

3.3 APPLICATION

- A. Grouting Application: Thoroughly moisten previously prepared surface and then scrub grout onto the surface, and in accordance with bonding agent manufacturer's instructions.
- B. Thin Section Topping Application: Immediately following application of grout, while grout is still soft and plastic, place and finish without excessive working or troweling, and in accordance with the bonding agent manufacturer's instructions.
- C. Proprietary Floor Repair Application: Mix and apply in strict accordance with the manufacturer's current printed instructions, trowel surface smooth.
- D. Finish: Match existing adjacent floor finish.
- E. Curing: Cure toppings by maintaining surface moist for four days after placement, or as recommended by manufacturer of prepared mixes.

SECTION 09 50 00

ACOUSTICAL CEILINGS

PART 1 - GENERAL

1.1 GENERAL

- A. Furnish and install suspended ceiling systems in rooms noted using first line materials, symmetrical layout, and good workmanship.
- B. Furnish and install splined ceiling system as shown on drawings.
- C. Acoustic materials and application shall comply with UL, ASTM or other recognized industry standards. Specifications and details for acoustic materials and application shall conform to the recommendations of the manufacturer of the material used.

1.2 SAMPLES, EXTRA MATERIAL, AND SHOP DRAWINGS

- A. Samples: Two pieces of each pattern or finish of ceiling panel material specified or proposed shall be submitted for approval by the Architect. Approvals must be received by Contractor in writing before proceeding with any phase of the work.
- B. Extra Materials for Maintenance: Upon completion of the acoustical work, the acoustical contractor shall deliver to the Owner or his agent, one carton of each size, pattern, and finish of the material used in the project.
- C. Shop Drawings: Layouts of grid system shall be supplied to Architect for approval prior to installation.

1.3 GUARANTEE

- A. The acoustical material and subcontractor shall furnish Owner, through Architect, a guarantee against sagging, warping, or shrinking where installed in accordance with manufacturer's directions. This guarantee for five (5) years.

PART 2 - PRODUCTS

2.1 MATERIALS AND SYSTEMS

- A. All acoustic material shall be non-combustible and, where required by code, shall be rated and labeled by UL for fire resistance or fire hazard classification.
- B. Support systems for suspended acoustical ceilings shall permit access to ceiling space where mechanical and/or electrical distribution systems are located above the ceiling and access to same is required for modifications or servicing.
- C. Ceiling Tile: Armstrong Cirrus, square lay-in #533, 2' x 4' x 3/4" white to match existing building standard.
- E. Hanger wire no. 12 galvanized wire located 48" o.c.

- F. Grid: Grid system as required for Class "A" system. Chicago Metallic "200" Series snap grid with paint finish and using all available applicable accessories. Grid main runners and cross tees to be of proper size and length to form the module and support the ceiling load. Main runners to be not less than .025" cold rolled steel and 1" flange. 4' cross tees to be not less than .024 cold rolled steel, 1-1/2" web, and 1" flange. Exposed flanges of main runner and cross tees to be finished with white high bake enamel.
- G. Accessories shall be specifically designed for use with components employed.
- H. Molding - Channel section shall be not less than .020 cold rolled steel of sufficient web height to accommodate the tile and runners used.
- I. Wall Molding - Angle section shall be no less than .025 with legs no less than 15/16" with hemmed edge.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Layout work so that all tile, boards, and panels are symmetrical about the centers. Coordinate acoustical work with other trades so that all materials work together as perfectly as possible and not less than 1/2 panel is used.
- B. Main runners shall be suspended from the structure by means of #12 galvanized wire located 48" o.c. Runners shall be straight, true, and accurately leveled. Main runners and cross tees to be located on centers to form the module and support the ceiling load. Grid members to be positively interlocked by manufacturer's standard method.

SECTION 09 65 13

RESILIENT BASE

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Furnish and install all resilient baseboard as scheduled in Room Finish Schedule.
- B. All toe spaces of millwork where wood base is not called for.

1.2 SUBMITTALS

- A. Submit samples of resilient baseboard for color selections.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Refer to Room Finish Schedule and details for extent and location of materials.
- B. Base shall be 4" high molded top set cove base, color as selected, complete with external cove corners with returns of not less than 2-1/2". Base to be rubber. Provide sheet base at ramps and other areas called for on drawings.
- C. Adhesive shall be as recommended by the manufacturer in his standard printed instructions.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install in accordance with manufacturer's recommendations.
- B. Cleaning and Finishing: Remove all excess cement and clean base thoroughly. Do not use cleaners containing solvents such as gasoline, kerosene, benzene, turpentine, oils, free fats, alkali or acids.

SECTION 09 65 19

RESILIENT FLOORING

PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Furnish and install all composition floor and base covering as scheduled in Room Finish Schedule including vinyl base at walls, millwork, and casework.
- B. Application methods and materials shall be in accordance with flooring manufacturer's recommendations for the particular conditions of application.
- C. This section shall also include all necessary leveling, trueing, filling necessary to correct defects in sub-floors. See also Section 09 40 00 – Floor Leveling and Repair.
- D. Base to be included at all resilient and carpeted areas and where indicated on plans when wood base is not called for. See Section 09 65 13.

1.2 SAMPLES AND SHOP DRAWINGS

- A. Submit two (2) complete sample boxes of all tile for approval.
- B. Submit shop drawings showing pattern and distribution of color.

1.3 ENVIRONMENTAL CONDITIONS

- A. Deliver materials in good condition to the job site in the manufacturer's original unopened containers that bear the name and brand of the manufacturer, project identification, and shipping and handling instructions.
- B. Store materials in a clean, dry, enclosed space off the ground, and protected from the weather and from extremes of heat and cold. Protect adhesives from freezing. Store flooring, adhesives and accessories in the spaces where they will be installed for at least 48 hours before beginning installation.
- C. Maintain a minimum temperature in the spaces to receive the flooring and accessories of 65°F and a maximum temperature of 100°F for at least 48 hours before, during, and for not less than 48 hours after installation. Thereafter, maintain a minimum temperature of 55°F in areas where work is completed. Protect all materials from the direct flow of heat from hot-air registers, radiators, or other heating fixtures and appliances.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Refer to Room Finish Schedule and details for extent and location of materials. Review drawings and include any pattern areas indicated.
- B. Composition flooring is not required under permanently installed base cabinets and similar items.

2.2 MATERIALS

- A. Vinyl tile (VCT) shall be 12 x 12 x 1/8" thick, Armstrong Standard Excelon or similar by Azrock, Congoleum or Tarkett. Color as selected from full palette.
- B. Metal edging to be used where resilient meets carpet. Metal edging where composition floor meets cement floor shall be Trimedge A-115-H.
- C. Base shall be resilient, specified in 09 65 13 or wood, specified in Section 06 20 00.
- D. Adhesive shall be as recommended by the tile manufacturer in his standard printed instructions.
- E. Wax for VCT floor shall be non-slip, waterproof water emulsion type wax as manufactured by Multi-Clean Products Inc., Midland Laboratories, Hillyard Chemical Co., Industrial Chemical Laboratories, Inc. or approved equal.

PART 3 – EXECUTION

3.1 INSPECTION

- A. Inspect all floors before installing new resilient flooring. Do not install if floor is not level within 1/8" in 10'-0" or if floor is not smooth or free from marks that will affect the finish surface. Provide all necessary truing and leveling to prevent telegraphing of subfloor through tile.
- B. Do not install until floors are satisfactory. This contractor will be responsible if sub floor deficiencies impair quality installation and telegraph imperfections through tile.
- C. Substrate Conditions: F1869-98 Standard Test for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride: The flooring contractor shall be responsible for conducting one calcium chloride test for every 1000 sq.ft. (minimum – three tests) to ensure concrete moisture emissions do not exceed 5.0 lbs. per 1000 sq.ft. within a 24-hour period. A diagram of the area showing the location and results of each test shall be submitted to the architect and general contractor. If the test results exceed the limitations, the installation must not proceed until the problem has been corrected. Alternately, use an internal relative humidity probe kit to measure moisture content, relative humidity, temperature and dew point.

1. Contingency for High Moisture Readings: If at the time of testing the moisture readings are in excess of 5.0 lbs., the flooring contractor will initiate testing using petrographic analysis to determine if the Water Cement Ratio and sufficient hydration has taken place. If the specifications were not followed in their entirety, water/cement ratio (as specified), and/or the concrete surface has been inadequately hydrated, the contractor responsible for the placement of the cement shall be responsible for the costs associated with the petrographic analysis and subsequent remediation requirements.
2. The flooring contractor shall verify in writing to the architect, a minimum of 30 days prior to scheduled resilient flooring installation, the following substrate conditions:
 - a. Moisture: Initial emission rate, as tested with a calcium chloride test kit, per ASTM F1869-89 requirements.
 - b. Alkalinity: Maximum pH of 10; floors with a pH higher than 10 must be neutralized and rested.
3. Upon request by architect, flooring manufacturer to provide independent testing lab verification of all applicable test results.

3.2 PREPARATION

- A. For patching, smoothing, and leveling, use manufacturer's recommended fast setting cement based underlayment. Prepare existing sub floor as required by manufacturer to insure adequate bond strength.
- B. Verify subfloor is prepared and ready to receive new flooring per manufacturer's written instructions.

3.3 INSTALLATION

- A. Vinyl Composition Tile:
 1. All vinyl tile shall be laid in a workmanlike manner in mastic cement conforming to manufacturer's standard practice. Room temperature shall be not less than 70°F and shall be kept at that temperature for several days after material has been installed. Tiles shall be stored in the building at the above mentioned temperature for at least 40 hours before they are laid. Tiles shall be laid in true, straight line, closely fitted to adjacent tile on all sides without voids. Lines shall be stretched on both axes of the room and tile shall be spaced from the center in both directions so that opposite margins will be uniform and not less than one half tile in width. Where composition flooring abuts floors of greater thickness, the composition flooring shall be ramped with trowel type underlayment to meet adjacent floors in a flush joint. In areas where vinyl wall covering occurs, it shall be in place before composition base is applied.
 2. After all vinyl is in place it shall be rolled in both directions with a roller not less than 12" wide and weighing not less than 150 pounds per foot of width.
 3. Floors shall be leveled to within 1/8" in 10'-0" in all directions and be smooth and free of trowel marks. See Section 09 64 00.

- B. Divider Strip: Install 1/8" top, recess white metal edging strip continuous wherever two different floor materials meet, similar and equal to Manhattan Edging Strip. Provide where composition covered floor meet carpeting concrete, ceramic or quarry tile.

3.2 CLEANING AND FINISHING

- A. Vinyl Composition Tile - Remove all excess cement and clean floor and base thoroughly. Scrub floor with power scrubber. Do not use cleaners containing solvents such as gasoline, kerosene, benzene, turpentine, oils, free fats, alkali or acids. Before occupancy, when directed by General Contractor, clean again and apply two light coats of wax and machine buff.

SECTION 09 68 00

CARPET

PART 1 GENERAL

1.1 WORK INCLUDES

- A. This contract includes preparation of floor after existing carpet is removed and the furnishing and installation of all carpet, pad, and metal edgings specified herein and indicated on drawings, utilizing glued down method, nails, adhesives, binder bar, and all other materials and labor required for finished job.

Note: Carpet and adhesive removal is by others and is not part of this work scope.

- B. This contract includes examining new concrete floors in all areas to be carpeted and reporting in writing to the general Contractor all defects that could produce wear concentration or visual imperfections in the final carpeted areas except those defects to be filled and repaired as a part of this contract. Any unavoidable changes in the floor height shall be gradually raised and troweled to create a ramp like effect.

1.2 QUALITY ASSURANCE

- A. Tests: Flame Spread Rating: Results of each carpet shall be furnished to the Architect before installation. Flame spread rating shall be 75 or less.
- B. Carpet shall pass the flame spread rating requirements of the State Fire Marshall and ASTM E-84 Tunnel Test.

1.3 SUBMITTALS

- A. Prior to installation the carpet contractor shall submit a working layout for seams to the Architect for approval. Cross seams are to be kept at an absolute minimum.

1.4 DELIVERY AND STORAGE

- A. The carpet contractor shall be held responsible for the scheduling, receiving, and placement on floors of goods from the manufacturer. Goods shall be delivered to the job site in the manufacturer's bundles and shall be clearly marked as to size, dye lot, and materials. A written record of received goods shall be submitted to the Architect.
- B. Store and carefully protect carpet from soiling, damage, and disappearance. Contractor is responsible for security of all goods left on job site. Carpet and adhesive shall be stored at a temperature of at least 60 degrees F. for at least 24 hours before installation.

1.5 WARRANTY

- A. All workmanship, and installation shall be guaranteed for a period of one (1) year. Industry standards of two year guarantee of materials shall prevail. If evidence is discovered within this two year period that the normal expected life of materials furnished can not be expected, the carpet contractor shall develop a replacement program for defective materials.

- B. Contractor shall, at his expense and upon written notice, promptly and properly replace any and all improper work and material that may become apparent within 12 months after final approval as evidenced by the date of the final certificate. Warning is hereby given that strict adherence to this specification will be required by the Owner and that the contractor shall receive no compensation for loss in replacement of goods disapproved.

1.6 MAINTENANCE

- A. Maintenance Manuals: The carpet manufacturer shall submit to the Owner, six (6) copies of a complete manual of the manufacturer's recommendations for this quality of carpet.
- B. Service: All service except cleaning required by carpeted areas during the first year after installation shall be included in the base bid. This shall include seam repair and restretching as necessary to remove defects in the surface.

PART 2 PRODUCTS

2.1 CARPET

- A. Carpet 1: Commercial grade, low static, modular carpet tiles.
 - 1. Brand: Interface.
 - 2. Product: Entropy.
 - 3. Color: As selected by Architect.
 - 4. Construction: 100% solution dye, tufted tip-sheared, 20 oz./yd. weight, 9.7 stitches/inch, 6.729 oz./yd. pile density, standard backing, 19.69" x 19.69".
- B. Carpet 2: Same construction type as carpet 1, but with additional anti-static characteristics suitable for electronic work.
- C. Verify carpet selections with owner prior to ordering.

2.2 ACCESSORIES

- A. Carpet edgings shall be metal with textured, polished, aluminum finish surface.
- B. Binder: Roll down type, color as selected.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Inspection Before Laying: Review floor areas before installation. Notify the Architect if any conditions exist that would be detrimental to proper installation of the carpet. The installation of any carpeting shall be an indication of the carpet contractor's acceptance of the sub-surface conditions and he shall be held responsible for any defects after laying the carpet

3.2 PREPARATION

- A. Measurements: The Contractor shall verify all dimensions for the carpeting at the building before cutting carpet.

- B. The carpet contractor shall submit a working layout for seams for the Architect's approval. Cross seams are to be kept at an absolute minimum. No carpet shall be installed until the Architect's approval has been received in writing.
- C. Floor Preparation: The floor must be dried, cleaned of dust, grease, wax, oil or other finishing material, and smooth enough to allow the carpet to cover the floor without high or low spots. Any cracks, irregularities or breaks shall be leveled to an even plane with water-resistant, non-shrinking, patching compound by this contractor.
- D. After existing carpet is removed, level ridges on remaining old glue to provide level surface for carpet. Install primer on existing glue as recommended by carpet manufacturer.
- E. Protection of Surrounding Areas: Any damage done to paint, walls, woodwork, doors, etc. shall be the responsibility of the carpet contractor.

3.3 INSTALLATION

A. Installation of Areas Utilizing Direct Glue Down

1. Damp mop the area of the floor after having properly prepared it as described under floor preparation to remove the surface dust, dirt, etc. On long runs, add 2 or 3 teaspoons of household ammonia per gallon of water to extend "open time" of waterproof adhesive.
2. Unroll the carpet face-up and cut the lengths required, making sure that the pile-lay runs in the same direction. Before cutting, be sure to check starting wall for squareness and allow extra inches of carpet for an off-square wall.
3. Strike a chalk line on the floor to designate the seam placement.
4. Prepare and seal carpet edges for seaming by applying a bead of latex carpet seaming adhesive along both edges of the carpet. In addition, these edges shall be taped by an approved method.
5. Spread the waterproof adhesive about three feet on each side of the chalk line. Apply adhesive evenly to the floor using a V-notched trowel. The trowel should be notched 1/8" in depth and 1/8" apart to spread adhesive minimum of 1/8" in thickness. These trowel dimensions should be maintained at all times. Trowels with clogged or worn teeth should never be used.
6. Because the carpet should be installed within 20 minutes after adhesive application, it is most important that ample manpower be available for spreading the adhesive, dependent upon the size of the area to be carpeted.
7. Carpet shall be securely bonded to the substrate with a waterproof adhesive such as the WW Henry Co. multi-purpose adhesive #356 or equal. All seams shall be trimmed and fitted in a workmanlike manner and shall be bonded at the time of installation with WW Henry's suction back seam adhesive #346 or equal. Contractor shall verify compatibility of adhesive and carpet with manufacturers, and make substitutions as required, subject to approval by the Architect. This adhesive must be applied to the cut edge of the carpet at the level of the carpet backing. The carpet must be tightly fitted to all vertical surfaces in a workmanlike manner. All carpet edges that abut on adjacent floor of a different level than the face of the carpet shall be finished with molding or edging.

8. Install roll down type edge metal where necessary and as directed.
 9. Butt seaming shall be done utilizing either hot seam method as approved, or by sewing and taping all seams.
- C. Cutting Carpet: Pillars, pipes, and other obstructions should be "dry-cut" with as much overage as possible. After the carpet is installed in place, finish cut these areas. Be careful to position the seams made by these cuts before working the balance of goods into place.

3.3 CLEANING

- A. Upon completion of the job, the installer shall remove all waste and excess materials, all tools and equipment, and shall carefully remove all waste and excess materials, all tools and equipment, and carefully vacuum clean the entire floor surface with an upright beater bar type vacuum cleaner. Restrict heavy traffic and furniture movement for at least 24 hours after carpet installation.
- B. Excess Carpet Pieces: All usable pieces of carpet not necessary to complete the work are to be left on the job site and placed in an orderly manner in an area designated by the Owner.
- C. Rubbish: All wrappings, small scraps, etc. shall be collected during operations by this contractor and promptly removed from job site by this contractor.

SECTION 09 72 00

PRESENTATION DRY ERASE WALLCOVERING

PART 1 – GENERAL

1.1 SUMMARY

- A. Section Includes: Furnish and installing projection dry erase wallcovering and accessories.
- B. Related Sections:
 - 1. Division 09 20 00 - Plaster and Gypsum Board: Wall substrate.
 - 2. Division 09 90 00 - Interior Painting: Priming for vinyl wall coverings.

1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. E84-91a – Test Method for Surface Burning Characteristics of Building Materials.
 - 2. D751 – Methods of Testing Coated Fabrics
- B. Underwriters Laboratory, Inc. (UL): UL 723 – Test for Surface Burning Characteristics of Building Materials.
- C. Gypsum Association: GA-214-M-97 – Recommended Levels of Gypsum Board Finish.

1.3 SUBMITTALS

- A. Manufacturer's product data and installation instructions for each type of dry erase wallcovering, adhesive, and accessories required.
- B. Manufacturer's written product data indicating compliance with specified materials required.
- C. Manufacturer's written installation instructions.
- D. Manufacturer's written instructions for recommended maintenance of each type of dry erase wall covering required.
- E. Samples:
 - 1. 7 inch (177.8mm) x 9 inch (228.6mm) samples of each dry erase material required.
 - 2. 6 inch (152.4mm) samples of trim, tray, and end caps required.

1.4 QUALITY ASSURANCE

- A. Manufacturer: Provide each type of dry erase wallcovering required produced by one manufacturer.

- B. Installer: Installation by skilled commercial wallcovering contractor with no less than three years of documented experience installing dry erase wallcovering of the types and extent required.
- C. Composition: **nu•vu•rite™**: Provide non-woven backing, pigmented vinyl capped with dry erase non-glare film, and heat embossed with a bi-directional lenticular pattern.
- D. Fire Hazard Classification: Provide materials that comply with NFPA Class A fire rating when tested in accordance with ASTM E84 using GRC board as substrate.
- E. Field Samples: Provide field samples for architect's review and establish requirements for seaming and finish trim.
 - 1. Install sample panel of each type presentation wallcovering specified in area designated by architect.
 - 2. Maintain corrected and approved samples to serve as a standard of performance for the project.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver presentation wallcoverings to the project site in unbroken and undamaged original factory packaging and clearly labeled with the manufacturer's identification label, quality or grade, and lot number.
- B. Store materials in a clean, dry storage area with temperature maintained above 55°F with normal humidity.
- C. Store material in a flat position to prevent damage to roll ends. Do not cross stack material. Support material off the floor in a manner to prevent sagging and warping.

1.6 PROJECT CONDITIONS

- A. Do not apply presentation wallcoverings when surface and ambient temperatures are outside the temperature ranges required by the wallcovering manufacturer.
- B. Provide continuous ventilation and heating facilities to maintain substrate surface and ambient temperatures above 55°F unless required otherwise by manufacturer's instructions.
- C. Apply adhesive when substrate surface temperature and ambient temperature is above 55°F and relative humidity is below forty percent.
- D. Maintain constant recommended temperature and humidity for at least 72 hours prior to and throughout the installation period, and for 72 hours after wallcovering installation completion.

1.7 WARRANTY

- A. Submit manufacturer's limited five-year written warranty against manufacturing defects.

1.8 MAINTENANCE

- A. Maintenance instructions: Include precautions against cleaning materials and methods that may be detrimental to finishes and performance.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Wallcoverings: Walltalkers Wallcoverings manufactured by RJF International Corporation, Fairlawn, Ohio.

2.2 MATERIALS

- A. **Walltalkers nu•vu•rite:** Patented bi-directional lenticular embossed vinyl surface for projection and dry erase markers. Patent # 5,361,164
NV60: 60 inch width, 17 ounces per square yard, non-woven backing.

2.3 ACCESSORIES

- A. Adhesives: Heavy-duty clear or clay based premixed vinyl adhesive.
- B. Substrate Primer/Sealer: White pigmented acrylic base primer/sealer specifically formulated for use with vinyl wallcoverings.
- C. Wood Tray: Provide wood tray in random lengths of 8 feet to 12 feet. WTYS-RC: Oak wood marker and eraser tray to match existing trim.
- D. Wood Trim: Provide wood trim in random lengths of 8 feet to 12 feet. WTRS-RC: Oak wood trim to match existing trim.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and installation conditions to ensure surface conditions meet or exceed a Level 4 finish, per GA-214-M-97: Recommended Levels of Gypsum Board Finish.
- B. Test substrate with suitable moisture meter and verify that moisture content does not exceed four percent.
- C. Verify substrate surface is clean, dry, smooth, structurally sound, and free from surface defects and imperfections that would show through the finished surface.
- D. Evaluate all painted surfaces for the possibility of pigment bleed-through.
- E. Notify the contractor and architect in writing of any conditions detrimental to the proper and timely completion of the installation.
- F. Beginning of installation means acceptance of surface conditions.

3.2 INSTALLATION (Wallcovering backing)

- A. Acclimate wallcovering in the area of installation a minimum of 24 hours before installation.
- B. Read and follow the manufacturer's installation instruction sheet contained in each roll of the dry erase wallcovering.

- C. Examine all materials for pattern, color, quantity and quality, as specified for the correct location prior to cutting.
- D. Adhesive: Use heavy-duty, pre-mixed strippable clear or clay-based vinyl adhesive, such as Koroseal A-848-B or other high quality adhesive recommended for fabric backed vinyl wallcovering and approved by manufacturer.
- E. Primer: Use a pigmented primer on deep colored walls and walls with contrasting colors.
- F. Install each strip in the same sequence as cut from the roll.
- G. Install dry erase wallcovering panels in exact order as they are cut from bolt. Reverse hang alternate strips. Do not crease or bend the wallcovering when handling.
- H. Install dry erase wallcovering horizontally using a level line. Using level or straight edge, double cut the seam with a new razor or knife.
- I. When covering the entire wall, seam the material out of the main writing and viewing areas of the wall.
- J. Smooth wallcovering to the hanging surface using a wallcovering smoother, wrapped with a soft cloth, to remove air bubbles, wrinkles, gaps, and overlaps. Do not use sharp edged smoothing tools. Smooth material on the wall from the middle to the outside edge.
- K. Remove excess adhesive along finished seams immediately after each wallcovering strip is applied. Clean entire surface with a mild soap solution, a natural sponge, and clean soft cloths. Rinse thoroughly with water and let dry before using. Change water often to maintain water clarity.
- L. Stop installation of material that is questionable in appearance and notify the manufacturer's representative for an inspection.

3.4 CLEAN-UP

- A. Upon completion of installation, remove all exposed adhesive immediately using a soft cloth and a warm, mild soap solution and rinse thoroughly with water and dry with clean towel prior to using.
- B. Upon completion of the work, remove surplus materials, rubbish, and debris resulting from the wallcovering installation. Leave areas in neat, clean, and orderly condition.

SECTION 09 90 00

PAINING

PART 1 - GENERAL

1.1 SCOPE

- A. These specifications cover the complete painting and finishing of all surfaces throughout the project, unless otherwise specified. Coats listed are a minimum and additional coats may be necessary to provide coverage/hideability.
- B. The painting contractor shall furnish all material, labor, and equipment required to complete all painting and finishing as shown on the drawings and specified in the project manual. The word "paint" includes stain, lacquer, varnish, etc. applied by brush or staining.
- C. The Contractor shall examine all sections of this specification as well as mechanical and electrical specifications, and shall thoroughly familiarize himself with all provisions regarding painting. He shall understand that all surfaces that are left unfinished by the requirements of other divisions shall be painted or finished as a part of this division.
- D. Copper, bronze, chromium plate, nickel, stainless steel, aluminum, Monel metal, lead and lead-coated copper shall not be painted or finished, except as otherwise specified.
- E. The Contractor shall examine all surfaces to be finished and make certain that they can be put in proper condition for finishing by customary cleaning, sanding, and puttying operations. The painting subcontractor assumes full responsibility for producing a satisfactory finish with the materials specified.
- F. A "coat" of finish shall be defined as one layer of finish applied with a minimum of four hours dry time (unless longer drying times are required by manufacturer or conditions) between succeeding coats.
- G. Installation of painting caulk at all intersections of painted surfaces to prevent gaps and paint bridging.

1.2 REFERENCES

- A. ASTM D16- Definitions of Terms Relating to Paint, Varnish, Lacquer, and Related Products.
- B. ASTM B2016 – Test Method for Moisture Content of Wood

1.4 SUBMITTALS

- A. Submit list of proposed material including manufacturer's name, trade name, and data for each product.

B. Colors and Samples:

1. All colors shall be selected or approved by the architect.
2. Upon request, painting contractor shall prepare and submit finished samples of specified materials for approval by the Architect. Successive coats on these sample panels shall be applied in such a way that portions of all preceding coats remain exposed. Samples shall be retained by the Architect to compare with the finishes as they are applied.

1.5 QUALITY ASSURANCE

A. Qualifications

1. **Manufacturer:** All materials used on the work shall be as specified in brand and quality. No claim by the painting contractor to the unsuitability of any material specified, or his/her unwillingness to use same, or his/her inability to produce first class work with the same, will be entertained unless such claims are made in writing and submitted prior to receipt of bids.

All paints, varnishes, enamels, lacquers, stains, paste fillers, and similar materials must be delivered in the original containers with the seals unbroken and labels intact.

2. **Contractor:** Employ skilled mechanics to ensure the very best workmanship. Quality workmanship is required. Materials to be applied by craftsmen experienced in the use of the specific product involved.
3. **Job Mock-Up:** Up to three (3) rooms in project area or areas as designated by architect. These rooms will serve as the standard for subsequent rooms.

1.6 REGULATORY REQUIREMENTS

- A. Conform to applicable code for flame and smoke rating requirements for finishes.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. All materials used on the job shall be stored in a single place designated by the Owner or the Architects. Such storage place should be kept neat and clean and all damage thereto or to its surroundings shall be made good by the painting contractor. All soiled or used rags, waste, and trash shall be removed from the building each night and every precaution taken to avoid the danger of fire. Latex painted must be stored at above freezing temperature (32° F). The area selected for paint storage and mixing must have good natural or mechanical ventilation. It shall be posted as a "No Smoking" area and this regulation strictly enforced.

There shall be no open containers of any flammable liquids, including paint left in the storage or mixing area. Paints, turpentine, spirits, thinners, and all other flammable liquids shall be kept in closed metal containers. The container size shall be one gallon or smaller if the material is more flammable than kerosene. Brushes and rollers left in solvent or brush cleaner must be kept in closed containers. If the quantity of materials more flammable than kerosene exceeds five gallons, it must be stored in a closed metal or flame retardant plywood lockers.

Waste rags, paper and similar combustible materials shall be placed in metal containers provided with self-closing covers. These containers shall be emptied regularly and the contents removed from the premises.

- B. The painting contractor shall protect surfaces and objects outside the building against damage. The painting contractor shall hold himself/herself responsible for all damage to adjacent property.
- C. At completion of work the painting contractor shall remove from the premises all surplus painting materials and debris; remove all spatters, and leave this part of the work in a clean and finished condition.

1.8 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- B. When surface temperature is below 50° F do not apply paints, varnishes or special coatings unless otherwise specified. Do not paint exterior during frosty or rainy weather. Avoid painting surfaces while they are exposed to hot sun.

1.9 JOB CONDITIONS

- A. Cleaning: Areas to be painted shall be cleaned and free of dust and shall remain in that condition throughout the painting process.
- B. Protection: The painter shall not only protect his/her work at all times but shall also protect all adjacent work and materials by suitable covering or other method during progress of work.

1.10 EXTRA MATERIALS

- A. Provide one gallon minimum of each color to owner.
- B. Label each container with color, type, and room locations in addition to the manufacturer's label.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. All paint to be best quality and grade of products manufactured by PPG, Benjamin Moore, Sherwin Williams, Valspar, or approved equal

2.2 MATERIALS

- A. All materials on the work shall be of the brand and quality specified and shall be delivered to site in original containers with seals unbroken and labels intact.
- B. All materials shall be used in strict accordance with manufacturer's label directions. All paint products shall be of the specific type recommended by the paint manufacturer of the particular substrate and conditions of exposure.

- C. All paint shall be ready mixed and delivered to the site in manufacturer's sealed containers. Each container shall be labeled by the manufacturer; labels shall give manufacturer's name, type of paint, and instructions for reducing. Thinning shall be done only in accordance with directions from manufacturer. Job mixing or job tinting may be done when approved by the Architect. Each coat shall be tinted so that respective coats can be identified.
- D. All materials such as linseed oil, shellac, and turpentine shall be pure and of highest quality and approved by the Architect. They shall bear identifying labels on the containers.
- E. Any necessary materials not specifically covered and specified in this contract shall be subject to the Architect's approval and the Contractor shall submit to the Architect, before any materials are delivered, the name and brand of materials proposed to be use. Approval will be provided by the Architect in writing.
- F. Colors – To be selected by Architect. No limit on number of different selections within individual rooms or project.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Verify site conditions.
- B. Verify that surfaces are ready to receive work as instructed by product manufacturer.
- C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.
- D. Test shop applied primer for compatibility with subsequent cover materials.
- E. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
 1. Wood: 15%, measured in accordance with ASTM D2016
 2. Masonry: Mortar, block, brick, concrete or any other masonry related surface shall not be painted if its moisture content exceeds 12%. If moisture content is between 8% and 12%, prime with an Alkali Resistant Primer in place of specified primer.

3.2 SURFACE PREPARATION

- A. All surfaces shall be sound, clean, and free of oil, grease, loose or peeling paint, and other foreign substrates.
- B. New Steel: Surfaces that exhibit mill scale, rust formation, etc. shall be cleaned by hand scraping, wire brushing, power tool scraping, or sandblasting.
- C. New Galvanized Iron: Acid etch or clean thoroughly with a grease cutting solvent such as mineral spirits. Prime with a galvanized metal primer.
- D. This contractor will remove and reinstall, or provide acceptable in-place protection for, all installed hardware, accessories, lighting and electric components, factory finish materials, plumbing fixtures and fittings, and any other materials that may become splattered or damaged by the paint or coating materials.

- E. New Interior Wood: Sand lightly. Countersink nailheads and putty. Prime or stain entire surface with an enamel undercoat or stain. After thoroughly drying, sand lightly before applying finish coat.
- F. Existing Interior Wood: Sand/prep and touch-up stain to provide even and consistent color coverage. Apply two coats varnish.
- G. New Plaster: allow to cure 30 days before painting. Cracks and holes shall be spackled and finished flush to the adjoining surface. Prime with the appropriate primer sealer.
- H. Existing Interior Walls: Clean/prep/prime as recommended by paint manufacturer.
- I. New Drywall: Must be free of sanding dust and joint treatment cement shall be thoroughly dry. Steel corner beadings shall be primed with appropriate metal primer before applying latex coating.
- J. Dry Erase: At locations indicated on plans, furnish, prepare wall surfaces, and apply dry erase paint coatings. Coating is to be applied full height of wall – floor to ceiling, corner to corner, at listed rooms. Coating to be Sherwin Williams Dry Erase Gloss Coating. On rough/uneven surface, apply coats of Sherwin Williams “Builders Solution Surfer.” Apply per manufacturer’s written instructions.

3.4 APPLICATION

- A. All work shall be done by skilled mechanics in accordance with the best standard practice and in a manner acceptable to the Architect. Any work not conforming to these specifications shall be corrected to the satisfaction of the Architect. Such corrections shall be made at the expense of the painting contractor.
- B. All materials shall be applied to surfaces that are dry and properly prepared and when weather conditions are favorable. Exterior surfaces shall not be painted in damp, frosty, or cold weather. Latex paints shall not be applied when surface or air temperature is below 50 degrees F.
- C. All finishes shall be evenly applied and free from sags, runs, crawls, brush marks, skips or other defects. Make edges of paint, stain, or coating adjoining other materials or colors, sharp and clean, with no overlapping.
- D. When paint, stain or coating is brush applied, each coat shall be brushed out uniformly to eliminate laps, skips and excess brush marks.
- E. When paint, stain or coating is roller applied, proper skill must be used to avoid all signs of lapping and excess paint lines from edge of roller. When cutting in with a brush is required, these areas must be of the same texture, color and hiding as adjacent areas, to assure good appearance.
- F. When paint, stain or coating is applied by spray, the work shall be done before the installation of fixtures, hardware, flooring and other finish items. If installed, these items must be thoroughly protected from the paint, stain or coating. The paint, stain or coating shall be applied only by skilled painters to assure a uniform finish, with no evidence of poor or improper application.
- G. Each coat of clear finish or enamel shall be lightly sanded and wiped free of dust before applying the first and successive coats. Final coat to be smooth to the touch.

- H. If the finish coat is to be colored, the prime coat and the intermediate coat shall be tinted to have a slight variation in color from each other and from the finish coat.
- I. Each coat of material shall be thoroughly dry before application of the succeeding coat. The number of coats listed in the schedule is a minimum. Additional coats may be required for proper coverage and hideability.
- J. Block filler when applied to concrete or lightweight block shall be in two coats: Smooth the filler with a squeegee to leave the surface film with no pinholes.
- K. Tops of all upper sashes and bottoms of all lower sashes shall be finished same as exterior finish. Tops, bottoms, and edges of doors shall be finished the same as balance of doors after they are fitted by the carpenter.
- L. All necessary puttying of nail holes, cracks, and other defects shall be done after application of the first coat, using putty of a color to match that of the finish. Putty shall be brought flush with the adjoining surface. Install paintable caulk at all painted surface intersections to eliminate gap and paint bridging.
- M. To prevent bleeding or discoloration, all knots, pitch streaks and sappy spots shall be sealed before application of the prime coat.
- N. All metal surfaces shall be washed with mineral spirits to remove any dirt, oil, or grease before being painted. Remove rust and scale by wire-brush or sanding before painting Shop coats of paint that become badly weathered, worn, or marred shall be cleaned and spot primed by the painting contractor with the recommended metal primer.
- O. Back prime exterior trim before installation with primer specified.
- P. Do not paint plaster containing more than 15% moisture. After the application of the first coat, all suction spots or hot spots in plaster or cement shall be touched up before the second coat is applied.
- Q. All scratches, cracks, and abrasions in plaster surfaces, and openings adjoining trim, shall be cut out as required, then filled with a spackling compound or approved patching plaster, flush with adjoining plaster surface, and when dry shall be sanded smooth and sealed before application of the prime coat.
- R. All closet and ancillary rooms shall be finished the same as adjoining rooms, unless otherwise specified. All other surfaces shall be finished with the same materials as used on the nearest or adjoining surfaces, unless otherwise specified.
- S. The painting contractor shall notify the Architect in writing of any surface which he/she considers not his/her responsibility, of any defects in surfaces to be painted, or of any error or omissions in the drawings or in the specification. The painting contractor shall not proceed with the finishing of the surfaces in question until an agreement has been reached with the Architect concerning all alleged discrepancies. The start of work on any surface shall imply that the surface has been inspected and approved by the painting contractor.
- T. Spot painting to correct soiled or damaged paint surfaces will be allowed only when touch up spot is blended into surrounding finish and is invisible to normal viewing. Otherwise, re-coat entire section to corners or visible stopping point. Touch up should be accomplished by same method used in applying the original coating: when sprayed, touch up with spray; if brushed, use a brush; if rolled, use same texture roller.

3.5 FINISHING MECHANICAL AND ELECTRICAL EQUIPMENT

- A. Paint shop primed equipment.
- B. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.
- C. Prime and paint exposed piping, conduit, and electrical equipment occurring in finished areas to match adjacent surfaces. Where walls only are painted, pipes, ducts, conduit in ceiling to be painted color of ceiling tile or color selected.
- D. Hanger and other pipe accessories: In all areas where pipe and pipe covering, ducts and conduit are paint, the hangers, accessories and/or supports are to be primed and painted two coats as called for piping.
- E. Paint interior surfaces of air ducts, and convector and baseboard heating cabinets that are visible through grilles and louvers with one coat of flat black paint, to visible surfaces. Paint dampers exposed behind louvers, grilles, and convector and baseboard cabinets to match face panels.
- F. Electrical conduit carrying over 240 volts in room and areas not painted shall be painted orange and voltages stenciled every ten (10) feet.
- G. Identification: Identification of piping, conduit, etc. shall be accomplished by stenciling black letters on a yellow background or may be done by applying self-sticking cloth tape employing black letters on a yellow background similar to W.H. Brady Co. or approved equal tapes. Where possible the letters shall be 1" in height. Omit labels in painted rooms.

3.6 SCHEDULE/FINISHES

- A. Painter's finishes shall generally be as follows:
 - 1. Finish for exterior wood (except wood to be stained) shall be a first quality oil or acrylic paint applied over compatible primer.
 - 2. Finish for exterior ferrous metals shall be rust inhibitive type paint applied over compatible shop prime coat.
 - 3. In general, finish for interior wall and ceiling surfaces shall be latex paint or enamel with semi-gloss or eggshell finish over primers or epoxy finishes or shop coats compatible with the substrate material.
 - 4. Finish for hollow metal frames, sidelights, and all interior metal and steel shall be alkyd base semi-gloss or eggshell enamel. Hollow metal doors to be semi-gloss finish only.
 - 5. Finish for interior wood doors (except prefinished doors) cabinet work, wood paneling, and trim shall be alkyd base semi-gloss or eggshell enamel. Interior millwork may be stained and varnished or oiled in lieu of enameling as herein specified or called for on drawings when prior authorization is received from Architect.
 - 6. Prime coated butts and overhead door closers will be painted the same color as door and frame to which they are attached.

7. Metal covered and hollow metal doors, trim, and frames will not be painted the same color or finish as adjacent walls.
 8. Access doors, electric panel doors, fire extinguisher cabinets, etc. shall be painted in an open position.
 9. Prime and back prime all surfaces of millwork indicated to be painted and enameled. Also back prime all unexposed faces of millwork indicated, scheduled or specified to be stained, varnished, lacquered or otherwise finished on exposed faces. Parts inaccessible after assembly shall be primed or back primed before assembly. Shellac all knots, streaks, etc. before priming.
- B. Exposed steel beams and steel members in finished rooms and areas: One coat enamel undercoat. Two coats alkyd satin enamel (sprayed or brush painted). Treat galvanized metal with bonding compound.
- C. Metal and aluminum stops for all hollow metal doors, frames, and sidelights: Paint to match color of frame.
- D. All new and existing regular concrete masonry and concrete wall surfaces (interior): Semi-gloss, Low VOC.
1. New:
 - a. Surface Preparation
 - b. Base coat: 1 coat block filler applied as recommended by the manufacturer. Benjamin Moore 285 Supercraft alkali; Benjamin Moore M310M32 waterborne epoxy block filler.
 - c. Primer: 1 coat CMU primer applied as recommended by the manufacturer.
 - d. Finish: Two coats compatible with base coat and primer.
 2. Existing: Clean/prep/prime as required. Two (2) coats minimum finish same as new.
- E. High Moisture Areas: Benjamin Moore solvent base epoxy (gloss).
- F. Hollow Metal: Factory primed, two (2) coats enamel, semi gloss.
- G. SCHEDULE

Exterior - N/A

Interior

1. Drywall: 1 Coat PVA Latex Wall Primer, 2 coats Acrylic Latex, sheen as selected
2. Galvanized Metal: 1 coat Interior Trim Primer, 2 coats Enamel
3. Ferrous Metal: 1 coat Interior Trim Primer, 2 coats Enamel
4. Plaster: 1 Coat PVA Latex Wall Primer, 2 coats Acrylic Latex, sheen as selected.
5. Exposed Wood: 1 coat stain, 2 coats polyurethane satin finish.

6. Existing Wood Trim Baseboards: Sand and prep surface as required to receive new finish.
 - a. Paint: 1 coat adhesion promoting primer, 2 coats latex trim paint.
 - b. Stain: 1 or 2 coats gel stain, 2 coats UV resistant polyurethane satin finish.
7. Existing Plaster: 1 coat primer, 2 coats acrylic latex – satin finish.
8. Dry Erase: 1 coat Builders Solution Surfacer, Primer (depending on substrate); 1 coat interior latex eggshell, 1 coat dry erase coating.

SECTION 10 14 00

SIGNAGE

All interior signage will be furnished and installed by others.

SECTION 10 44 00

FIRE EXTINGUISHERS AND CABINETS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Furnish and install fire fighting devices and cabinets as described below and shown on plans. Locations are indicated as "FE Cabinet" where cabinets are included.

1.2 SUBMITTALS

- A. Submit shop drawings.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Fire Extinguishers: .
- B. ABC Dry Chemical Fire Extinguishers - Cosmic 10E, 20A-120BC, 20 pounds.
- C. Fire extinguisher cabinet to be JL Industries Academy 1027, factory finished aluminum, semi-recessed installation with 2½" rolled round edge construction in accordance with ADA requirements.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install firefighting devices and cabinets as indicated, in accordance with manufacturer's written directions and approved shop drawings.
- B. Height of Fire Extinguisher Cabinets – All fire extinguisher cabinets are to be set so that the top of the cabinet doors does not exceed 5'-0" above the finished floor line in accordance with NFPA Portable Fire Extinguisher Code Requirements.

SECTION 12 24 00

WINDOW SHADES

PART 1 - GENERAL

1.1 WORK INCLUDES

- A. Reinstall owner's blinds at cataloged locations. Reuse existing hardware.
- B. Installer shall be approved by manufacturer.

PART 2 PRODUCTS

2.1 WINDOW TREATMENT

- A. Existing mini blinds.

PART 3 – EXEUCION

3.1 INSTALLATION

- A. Install window shade systems in accordance with manufacturer's instructions and these specifications. Adjust window shade system for proper operation.

SECTION 12 35 70

CUSTOM CASEWORK/MILLWORK

See also Section 06 20 00

PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. The work of this section consists of the furnishing of all millwork indicated on the drawings and herein specified. Include all hinges, drawer guides, shelf supports, catches and pulls for cabinets in this section.
- B. Casework provided under this section includes, but is not limited to, the following:
 - 1. New main reception counters.
 - 2. Break room base/wall cabinets.
 - 3. Other cabinet configurations shown on plans.
- C. All casework to be fabricated in AWI certified shop and conform to AWI standards of construction.
- D. All materials low VOC and without formaldehyde.
- E. Related Sections: 12 36 00 – Solid Surface Countertops
- F. Submittals: Submit complete shop drawings of all cabinetry provided under this section. Include field verified dimensions and conditions noted. Submit product for all hardware.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Interior Trim: Furnish and install all interior trim moldings and all other trim as noted in this section or on plans. All exposed trim to be oak to match existing.
- B. Wood preservative shall be a brand conforming to the requirements of Commercial Standard CS 262-63
- C. Quality Grading:
 - 1. Moisture content not to exceed 5-10% for all lumber.
 - 2. Lumber must be sound, thoroughly seasoned, well manufactured, and free from warp. Woodwork exposed on exterior of building shall be dressed.
 - 3. Grade and trademark required on each piece of lumber (or bundle in bundled stock). Use only recognized official marks of Association under show rules it is grade. Grade and trademarks not required if each shipment is accompanied by certificate of inspection issued by Association.
- D. All open bookcase units are to be constructed from Combo Core material with plastic laminate faces and hardwood edging.

- E. Plastic laminate shall be hard, dense, stainproof, 1/16" thick high pressure plastic laminate, in color as selected, conforming to NEMA specifications, general purpose type or post forming type as required. Colors and type to be selected by Architect.
- F. Core materials: CFC Combo Core: Veneer core consisting of Western softwood inner core, with outer plys on both faces consisting of medium density fiberboard (MDF) resulting in a smooth laminating surface with minimal telegraphing. 5-ply for 1/2 inch thickness, 7-ply for 3/4 inch thickness, and 9-ply for 1 inch formaldehyde. All edges to receive 3 mm PVC edging, color to match laminate unless hardwood edging is called out. Faces to be covered with plastic laminate.

G. Hardware

Door and Drawer Pulls

Drawer Pull Stanley #4484 - SS

Door Pulls Stanley #4484 - SS

Drawer Slides

KV No. 8400 - Full Extension Ball Bearing Slide, 100 lb. Class

Fill Drawer Slides

KV No. 8525, Full Extension, 175 lb. Class

Cabinet Door Catches

Stanley #SP45

Shelf Supports

5 MM Clip System with Steel "L" Shaped Supports

Door Hinges

Stanley HT 1592 satin chrome, knuckle hinge

Finish Washers

Stanley - Stainless steel, appropriate size for oval head screws.

Door and Drawer Locks – N/A

H. Cabinets, Casework, and Similar Cabinet Work:

1. Work to be equal to AWI Custom Standards, site installed.
2. All surfaces exposed in building shall be plastic laminate color as selected. Interior indicates space enclosed by doors or drawer fronts - see below.
3. Cabinet Body Construction:
 - a. Tops and bottoms are glued and doweled to cabinet sides and internal cabinet components such as fixed horizontals, rails, and vertical. Minimum 6 dowels each joint for 24" deep cabinets and a minimum of 4 dowels each joint for 12 inch deep cabinets. Tops, bottoms, and sides of all cabinets are CFC Combo Core.

- b. Cabinet backs: ¼ inch thick medium density fiberboard panel fully captured by the cabinet top, bottom, and side panels. Finish matching cabinet interior. ¾ inch x 4 inch CFC Combo Core rails will be placed behind the back panel at the top and bottom, and doweled to the sides utilizing 10 mm hardwood fluted dowels. A third intermediate rail will be included on all cabinets taller than 56 inches. Utilize hot metal glue to further secure back and increase overall strength.
 - c. Exposed back on fixed or movable cabinets: ¾ inch thick CFC Combo Core with the exterior surface finished in VGS laminate as selected.
 - d. Fixed base and tall units have an individual factory-applied base, constructed of ¾ inch thick exterior grade plywood. Base is 96 mm (nominal 4 inch) high unless otherwise indicated on the drawings.
 - e. Base units, except sink base units: Full sub-top. Sink base units are provided with open top and a stretcher at the front, attached to the sides. Back to be split removable access panel.
 - f. Side panels and vertical dividers shall receive adjustable shelf hardware at 32 mm line boring centers. Mount door hinges, drawer slides, and pull-out shelves in the line boring for consistent alignment.
 - g. Exposed and semi-exposed edging. Edging: 1 mm PVC machine applied.
 - h. Adjustable shelf core: ¾ inch thick CFC Combo Core up to 30 inches wide, 1 inch thick CFC Combo Core over 30 inches wide. Front edge: 1 mm PVC.
 - i. Interior finish, units with open interiors: Top, bottom, sides, horizontal and vertical members, and adjustable shelving faces with CLS with matching prefinished back.
 - j. Interior finish, units with closed interiors: Top, bottom, sides, horizontal and vertical members, and adjustable shelving faces with CLS with matching prefinished back.
 - k. Exposed ends: Faced with VGS high-pressure decorative laminate.
 - l. Wall unit bottom: Faced with CLS.
 - m. Balanced construction of all laminated panels is mandatory. Unfinished core stock surfaces, even on concealed surfaces (excluding edges), not permitted.
4. Drawers:
- a. Sides, back, and sub front: Minimum ½ inch thick plywood, laminated with CLS doweled and glued into sides. Top edge banded with 1 mm PVC.
 - b. Drawer bottom: Minimum ½ inch thick plywood laminated with CLS screwed directly to the bottom edges of drawer box.

- c. Paper storage drawings; Minimum $\frac{3}{4}$ inch thick plywood sides, back, and sub front laminated with CLS. Minimum $\frac{1}{2}$ inch thick plywood drawer bottoms screwed directly to the bottom edges of the drawer box. Provide PVC angle retaining bar at the rear of the drawer.

5. Door/Drawer Fronts

- a. Core: $\frac{3}{4}$ inch thick Combo Core.
- b. Provide double doors in openings in excess of 24 inches wide.
- c. Faces:
 - 1) Exterior: VGS high-pressure decorative laminate.
 - 2) Interior: High-pressure cabinet liner CLS.
- d. Door/drawer edges: 3 mm PVC, external edges and outside corners machine profiled to $\frac{1}{8}$ inch radius.
- e. Miscellaneous Shelving:
 - 1) Core material: $\frac{3}{4}$ inch or 1 inch thick Combo Core.
 - 2) Exterior: VGS high-pressure decorative laminate.
 - 3) Edges: 2 mm PVC, external edges and outside corners machine profiled to $\frac{1}{8}$ inch radius.

J. Countertops and Backsplashes: See Section 12 36 23 and 12 36 60.

K. All exposed wood to be prefinished in shop with stain, two coat varnish system. Color as selected by Architect. Submit samples for final approval. Finishing includes exposed wood and interior of cabinets and drawers. Include nail hole filling and touch up after installation.

2.2 FABRICATION

A. Millwork and trim shall conform to design and details shown. Where practical, work shall be finished and assembled at the mill. All millwork and trim shall be finished smooth and free from machine or tool marks that will show through the finish. All nail heads shall be set to receive putty.

PART 3 - EXECUTION

3.1 GENERAL

A. All finish carpentry work shall be done in a neat and workmanlike manner. Items shall be accurately cut, scribed, fitted and joints and all work shall be plumb, square, level, at proper elevation, straight, true to line and flush.

B. In no case shall any finish be allowed in the building until at least ten days after plastering has been completed. All finish material shall be air and kiln dried, highly sanded and free from defects. All finish shall be back painted and face primed, filled or stained as a part of the work under painting specification before placing. Gouges, dents, hammer marks, splits or other defects will not be permitted in the finish work.

- C. Joints in plastic laminate shall be held to a minimum. Where joints are required in plastic laminate core material, provide tempered hardboard splines. Coat field joints with waterproof glue. Provide a backing sheet of thickness required to provide balanced construction on unexposed sides of all plastic laminate work. Apply plastic laminate to core materials by the hot press method.
- D. All shelves in cabinets to have solid wood exposed edges.
- E. Coordinate unit construction with mechanical or electrical equipment.

SECTION 12 36 23

PLASTIC LAMINATE WORK

See also Section 06 20 00

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. Furnish and install plastic laminate tops and backsplashes, colors as selected from full color line.
- B. Laminate shall conform to NEMA specifications.

PART 2 - PRODUCTS

2.1 FABRICATION

- A. Countertops: 1 inch thick ANSI A208.1-1993 M-2 Certified particle board.
- B. Surface: High-pressure decorative HGS/HGP laminate with balanced backer sheeting.
- C. Edges, including applied backsplash: 3 mm ABS, exposed edges and corners machine profiled to 1/8 inch radius. Edges are machine applied with water based low Volatile Organic Compound (VOC), non-toxic, PVA adhesive.
- D. All countertop joints must be dry fit at the factory to check for consistency in color from one panel to the other and overall finished panel thickness.
- E. Selection will be made from full line of Wilson Art or Formica.
- F. Other plastic laminate work as indicated. Provide rounded hardwood edges where indicated.
- G. Certify that casework does not contain formaldehyde.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Joints in plastic laminate shall be held to a minimum. Where joints are required in plastic laminate core material, provide tempered hardboard splines. Coat field joints with waterproof glue. Provide a backing sheet of thickness required to provide balanced construction on unexposed sides of all plastic laminate work. Apply plastic laminate to core materials by the hot press method.

SECTION 12 36 60

SOLID SURFACE COUNTERTOPS

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. All labor, material, equipment, and related services necessary to provide solid surfaces and fabrications as indicated on the drawings or specified herein.
- B. Work described in this section: Countertops
- C. Related Work:
 - 1. Finish Carpentry – Section 06 20 00
 - 2. Sealants – Section 07 90 00
 - 3. Casework – Section 12 35 70
 - 4. Mechanical – Division 22 and 23

1.2 SUBMITTALS

- A. Shop Drawings: Indicate dimensions, component sizes, fabrication details, attachment provisions, and coordination requirements with adjacent work.
- B. Samples: Submit minimum 2" x 2" samples. Indicate full range of color and pattern variation. Samples shall be used to verify standard of work.
- C. Product Data: Indicate product description, fabrication information, hardware requirements, and compliance with specified performance requirements.
- D. Maintenance Data: Submit manufacturer's care and maintenance data, including repair, preventing and repairing damage, and cleaning instructions.

1.3 DELIVERY, STORAGE, AND HANDLING

- A. Deliver no components to Project site until ready for installation. Store indoors.
- B. Handle materials to prevent damage to finished surfaces and edges. Provide protective coverings to prevent physical damage or staining following installation for duration of project.
- C. Store components on edge, fully supported at 10 deg. off vertical; store inside away from extreme temperatures, moisture, and ultraviolet light.

1.4 QUALITY ASSURANCE

- A. Standards of the following, as referenced herein:
 - 1. American National Standards Institute (ANSI) – Z-124.1, 2, 3, 4; A-112.19.7, 112.19.8, and ANSI/NEMA LD3.
 - 2. American Society for Testing Materials (ASTM)
 - 3. National Electric Manufacturers Association (NEMA)
 - 4. Applicable building codes

- B. Provide provision of evidence of certification to applicable standards.
- C. Allowable Tolerances:
 - 1. Variation in component size: $\pm 1/8$ "
 - 2. Location of opening: $\pm 1/8$ " from indicated position
 - 3. Translucent resin product: variation in sheet thickness: $\pm 10\%$
- D. Manufacturer's Qualifications: Materials and systems shall be manufactured by a company continuously and regularly employed in the manufacture of specified materials for a period of at least five consecutive years.
- E. Installer Qualifications: Engage a duly qualified and experienced installer who has demonstrated successful installation of cast polymer products similar in material design and to extent indicated for the project. The installer shall be approved by the manufacturer insofar as product warranty is maintained.

1.5 COORDINATION

- A. Coordinate work with other contractors, fixtures, or fittings built into or mounted on or adjacent to sold surface material.

1.6 WARRANTY

- A. Provide manufacturer's ten-year warranty against defects in materials. Warranty shall provide material and labor to repair or replace defective materials.

PART 2 - PRODUCTS

2.1 SOLID SURFACES

- A. Homogeneous acrylic and/or polyester high performance resins with very high filler content, not coated, laminated, or of composite construction.

- B. Performance Requirements.

Color fastness	No change – 200 hours	ANSI Z-124
Wear and cleaning	Passes	ANSI Z-124
Impact resistance	No cracks or chips	ANSI Z-124
Stain resistance	Passes	ANSI Z-124
Chemical resistance	Passes	ANSI Z-124
Drain fitting connection	Passes	ANSI Z-124.3
Loads on lavatory tops	Passes	ANSI Z-124.3
Thermal shock resistance	Passes	ANSI Z-124.3
Cigarette burn test	Passes	ANSI Z-124.3
Flame spread	Class 1	ASTM-E84
Boiler water surface resistance	No change	NEMA LD

- C. Material shall have minimum physical and performance properties specified.
- D. Superficial damage to a depth of .010" shall be repairable by sanding and polishing.

E. Corian:

1. Sheet thickness: ½" as required by location.
2. NSF 51 certified for food preparation areas.
3. Color: To be selected, include price group "D".

F. Performance Requirements (IBC "Light Transmitting Plastics")

1. Smoke density rating less than 75%: ASTM D2843 – Varia is 71.6%
2. Self-ignition temperature greater than 650 degrees F: ASTM D1929 – Varia is greater than 71.6%
3. Burning rate of less than 2.5" per minute: ASTM D635, passes CC1
4. Sheets shall not have more than:
 - One pit or contaminant at a maximum diameter of 1/16" within a 12 sq. ft. area.
 - One scratch or irregularity flaw in excess of ½" within a 12 sq. ft. area.
 - One area of discoloration in excess of ½" within a 12 sq. ft. area
 - Textile core materials shall not skew across the width of the sheet more than 1" across a 48" width.

2.2 FABRICATION

A. Types:

1. Countertops: ½" thick countertop with built up edge as indicated on drawings. All back and end splashes to be integrated into top to form a one-piece unit. Provide all required countertop supports/sheets as recommended by manufacturer. Coordination installation of all appliances and sinks with mechanical.

B. Accessory Products

1. Joint adhesive for solid polymer fabrications: Manufacturer's standard two-part adhesive kit to create inconspicuous, non-porous joints, with a chemical bond.
2. Sealant: Manufacturer's standard mildew-resistant, FDA/UL recognized silicone sealant in color matching or clear formulation.

C. Fabrications to be performed by a fabricator/installer certified by manufacturer. Fabricate components in shop to greatest extent practical to sizes and shapes indicated, in accordance with approved shop drawings and manufacturer's requirements.

1. Coved Side and Backsplashes: Fabricate ½" radius cove at intersection of counters and back/side splashes. Form joints between components using manufacturer's standard joint adhesive. Joints shall be inconspicuous in appearance and without voids. Attach 2" wide reinforcing strip of solid surface product under each joint.
2. Install materials with manufacturer's recommended gap for joints.
3. Do all cutting with carbon tipped blades or bits.
4. Provide factory cutouts for plumbing fittings and bath accessories.

5. Outside Corners: Route all horizontal edge corners with ¼" quarter round bit. Vertical corners to be radiused as shown on plans.
 6. Route and finish component edges to a smooth, uniform finish. Route all cutouts, then sand all edges smooth. Repair or reject defective or inaccurate work.
 7. Finish: All surfaces shall have uniform finish, Matte, with a gloss rating of 5-20.
 8. Thermoforming: Comply with forming instructions per fabrication guide. Fabricate matching molds to form component shape per drawings. Form pieces to shape prior to seaming and joining. Cut pieces larger than finished dimension. Sand edges to a smooth surface to remove all nicks and scratches. Heat entire component uniformly between 275-319 degrees F. during forming. Prevent overheating, blistering, and cracking of material during heating and forming. Allow adequate time for cooling/annealing of material to prevent stress buildup in component.
- D. Adhesive Requirements: As recommended by manufacturer.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install components plumb and level, in accordance with approved shop drawings and product installation details.
- B. Form field joints in solid surface fabrications using manufacturer's recommended adhesive, with joints inconspicuous in finished work. Keep components and hands clean when making joints.
- C. Adhere undermount sinks to countertops using manufacturer's recommended adhesive, mounting hardware, and color matching silicone sealant.
- D. Provide backsplashes, sidesplashes, and aprons as indicated on the drawings. Adhere to countertops using manufacturer's standard adhesive and color-matched silicone sealant.
- E. Provide blocking at walls to support counters, including supports or blocking at front of lavatory counters.
- F. Finish all exposed surfaces per manufacturer's recommendations.
- G. Keep components and hands clean during installation. Remove adhesives, sealants, and other stains. Keep clean until date of Substantial Completion. Replace stained components.
- H. Make plumbing connections to sinks in accordance with Division 22 – Plumbing.
- I. As soon as installation is complete, perform a preliminary walk through to verify condition of the surfaces. Surfaces shall be sound, not chilled, and free of cracks and scratches. After this preview is performed, protect surfaces from damage until date of Substantial completion. Materials used for protection of the work shall not interfere with the work of other trades. Repair work or replace damaged work that cannot be repaired to architect's satisfaction.

SECTION 21 10 00

FIRE PROTECTION/SPRINKLER SYSTEM

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. Extend and revise existing sprinkler system to all renovated areas of this facility. System to be designed and installed in accordance with NFPA 13 and the State of Minnesota codes and regulations. Generally work includes relocation of sprinkler heads as required for new room configuration. All new sprinkler heads to be quick response heads.
- B. Drawings indicate areas with suspended ceiling and indicate fire walls and standpipe locations.
- C. Code: Comply with NFPA 13 "Installation of Sprinkler Systems".
- D. UL and FM Labels: Provide fire sprinkler piping products which have been approved and labeled by Underwriters Laboratories, and have Factory Mutual approval.
- E. The system is not shown on the drawings. Fire protection contractor to submit system from plans to architect for approval.

1.2 SUBMITTALS

- A. Approved Drawings: Prepare approval drawings of fire protection systems, hydraulically calculated, indicating pipe sizes, pipe locations, fittings, shutoffs, equipment, etc. Submit to Architect/Engineer and Agency having jurisdiction for approval. Submit one reproducible approved copy, bearing stamp and or signature of Agency having jurisdiction, before proceeding with fabrication. Drawings shall be prepared by and signed by person with NICET Level 3 Certification.
- B. Approved Calculations: Prepare hydraulic calculations of fire protection systems. Submit to Architect/Engineer and Agency having jurisdiction for approval. Submit one approved copy, bearing stamp and/or signature of Agency having jurisdiction, before proceeding with fabrication.
- C. Certification: The plans submitted for this project shall be signed by a Certified Fire Protection Technician NICET Level 3 who had direct involvement in the design.
- D. Maintenance Data: Submit maintenance data and parts lists for fire protection materials and products. Include this data, product data, shop drawings, approval drawings, approval calculations, certificate of installation in maintenance manual.
- E. Product Data: Submit manufacturer's data for fire protection systems, materials and products.
- F. Shop Drawings: Submit scaled layout drawings for fire protection pipe and fittings including, but not necessarily limited to, pipe and tube sizes, locations, elevations and slopes of horizontal runs, wall and floor penetrations, and connections. Show interface and spatial relationship between piping and proximate equipment. Check electrical fixture layouts and HVAC plans to avoid conflicts in locations.

- G. Certificate of Installation: Submit certificate upon completion of fire protection piping work which indicates that work has been installed, flushed and tested in accordance with ANSI/NFPA 13 and also that system is operational, complete, and has no defects.

1.3 GUARANTEE

- A. System shall be guaranteed for a period of five (5) years.

1.4 INSPECTIONS AND TESTS

- A. Inspections and Tests: All inspections, permits, examinations and tests required by the authorities and/or agencies specified shall be arranged and paid for by fire protection contractor as necessary to obtain complete and final acceptance of the fire protection system. The fire protection contractor shall deliver certificates of all such inspections to the Architect and ISO of Minnesota.

PART 2 - PRODUCTS

2.1 FIRE PROTECTION PIPING MATERIALS AND PRODUCTS

- A. General: Provide piping materials and factory-fabricated piping products of sizes, types, pressure ratings, temperature ratings and capacities as indicated. Where not indicated, provide proper selection as determined by installer to comply with installation requirements. Provide sizes and types matching piping and equipment connections; provide fittings of materials that match pipe materials used in fire protection piping systems. Where more than one type of material or product is indicated, selection is installer's option.

2.2 BASIC PIPE, TUBE, AND FITTINGS

- A. General: Provide pipe, tube, and fittings complying with Division 15 Basic Materials and Methods section "Pipe, Tube, and Fittings", in accordance with the following listing:
- B. Pipe Weight: Schedule 40 electric resistant welded, ASTM A-135. Schedule 10 electric resistant welded, ASTM A-135 or threadable lightwall pipe.
- C. Fittings: Class 125 sprinkler system, cast iron threaded.
- D. Fittings: Mechanical grooved pipe couplings and fittings; cut-groove type or rolled.
- E. Interior Valves:
 - 1. Valves shall be Grinnell, Elkhart, Allenco, JL Industries, Crane, or approved equivalent, UL, 175 psi working pressure.
 - 2. Provide drains in all piping for draining the entire piping system, using 2" valve in main risers, 1" for "auxiliary" system drainage, approved UL, 175 psi bronze globe valves with C.I. plug in end. Provide two adapters to screw into drain valves with garden hose thread outlet.
- F. Escutcheon - Provide where piping passes through wall - white.

2.3 SPRINKLER HEADS

- A. Shall be quick response brass upright or side-wall mounted on exposed piping in all areas without lowered ceilings, using light hazard head spacing. Install wire guards on heads in gym.
- B. In lowered ceiling areas where piping is concealed, install chrome plated pendant sprinkler below ceiling.
- C. Where shown on drawings, provide chrome sidewall sprinkler heads at proper spacing from ceilings and walls.
- D. Heads under hood shall be glass as designed for cooking hood use.
- E. Coordination: Head layouts shown are diagrammatic only. Sprinkler contractor shall coordinate with other trades and contractors to avoid conflict of heads with location of lights, registers, equipment, etc. No extras will be allowed due to lack of layout coordination.

2.4 WATER SUPPLY CONNECTION

- A. Connect system to existing mains. Verify proper sizes.

2.5 FLOWSWITCH, TAMPER SWITCHES

- A. Furnish and install approved flow switches and tamper switches. Tamper switches on all gate valves.
- B. Wiring from flow switches, pressure switches, and tamper switch to fire alarm shall be by the Electrical contractor. Exterior annunciator and light shall be furnish and installed by the Sprinkler Contractor.

2.6 VALVES

- A. All control valves shall be O.S.&Y. Type. M&H FIG. 81-F or approved equal.
- B. Check valves shall be rubber faced as approved by Underwriters for Fire Service.
- C. All gate valves shall be supplied with approved tamper switches. (Wiring by Electrical Contractor.)

2.7 INSPECTOR'S TEST CONNECTION

- A. Furnish and install inspector's test connections as required.

2.8 INSPECTION OF SITE

- A. Sprinkler Contractor shall make a detailed inspection of site before bidding, including determination of water pressure from local utility.

2.9 PIPE AND FITTINGS

- A. Refer to Mechanical Specifications. Acceptable pipe shall be schedule 40 black steel, or light wall steel, 0.120 thickness with roll groove/mechanical couplings.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Fire Protection Contractor shall provide all necessary labor, equipment, and materials required to accomplish all the specified cleaning operations on all pipe, pipe components, and designated equipment. Where ducts or mechanical equipment block water spray, install sprinklers below ducts in addition to other requirements.
- B. Prior to assembly of pipe and pipe components, all loose dirt and scale on internal and external surfaces shall be removed by wire brush or by other means approved by Architect/Engineer in accordance with good piping practice.
- C. Chips and burrs from machining or thread cutting operations shall be wiped or blown out of the pipe before assembly.
- D. All excess cutting oil shall be wiped from external and internal surfaces of pipe prior to assembly.

3.2 INSTALLATION OF PIPE, TUBE, AND FITTINGS

- A. General: Install pipe, tube, and fittings in accordance with Division 15 Basic Materials and Methods section "Pipe, Tube, and Fittings".
- B. Grade water piping in such a manner that low points or traps shall be avoided. If traps are unavoidable, tees with plugs shall be provided at low points.
- C. Install hose outlet valves in piping where hose outlets are required for service or inspection.
- D. Install fire department connection valves in piping where fire department connections are indicated.
- E. Cutting as required for sprinkler installation shall be done by this contractor.
- F. Patching made necessary by cutting or condition of surface shall be done by this contractor.
- G. Fire Sprinkler Piping Systems:
 - 1. General: Comply with requirements of NFPA 13 and NFPA 14 for installation of fire sprinkler piping materials. Install fire sprinkler piping products where indicated, in accordance with manufacturer's written instructions, and in accordance with recognized industry practices to ensure that fire sprinkler piping complies with requirements and services intended purposes.
 - 2. Coordinate with other work, including other piping and ductwork as necessary to interface components of fire sprinkler piping properly with other work.
 - 3. Install valved vent connections of sizes indicated, or 3/4" size if not otherwise indicated, on sprinkler at ends of branch lines and cross mains.
 - 4. Install drain piping at low points of fire sprinkler piping.

3.3 FIRE WALL AND CEILING SEALING

- A. Furnish and install approved fire safing where piping penetrates fire walls, ceiling corridors, or precast concrete floor construction.

3.4 INSTALLATION OF SUPPORTS, ANCHORS AND SEALS

- A. Install supports, anchors, and seals in accordance with Division 15 Basic Material and Methods section "Supports and Anchors", and NFPA 13 and NFPA 14.

3.5 INSTALLATION OF VALVES

- A. Install valves in accordance with Division 15 Basic Materials and Methods section "Valves".

3.6 ADJUST AND CLEAN

- A. Sprinkler Piping Flushing: Prior to connecting sprinkler risers for flushing, flush water feed mains, lead-in connections and control portions of sprinkler piping. After fire sprinkler piping installation has been completed and before piping is placed in service, flush entire sprinkler system, as required to remove foreign substances, under pressure as specified in ANSI/NFPA 13. Continue flushing until water is clear, and check to ensure that debris has not clogged sprinklers.

3.7 FIELD QUALITY CONTROL

- A. Hydrostatic Testing: After flushing system, test fire sprinkler piping hydrostatically for a period of two (2) hours at not less than 200 psi or 50 psi in excess of maximum static pressure when maximum static pressure is in excess of 150 psi. Check system for leakage of joints. Measure hydrostatic pressure at low point of each system or zone being tested.
- B. Repair or replace piping system as required to eliminate leakage in accordance with ANSI/NFPA standards for "little or no leakage", and retest as specified to demonstrate compliance.
- C. Wiring: Wiring for outside alarm from flow switch, supervised valves and for air compressor and dry pipe assembly is work of Division 26.
- D. Inspector's Test Connection: Furnish and install Inspector's test connection on system so that periodic tests can be made as required by the Underwriter's Fire Inspection Bureau.