

CITY OF MILWAUKEE
SPECIFIC OFFICIAL NOTICE NO. 138-2010

Sealed bids will be opened on Thursday, November 4, 2010 at 10:30 am CST for the **LS-32: SUPPLEMENTAL FILL LINE FOR WATER STORAGE TANKS**, located at Lincoln Station, 3641 West Lincoln Avenue, Milwaukee, WI 53215.

Bid Security Required: Bond, Certified Check, Cashier's Check, or Cash to accompany bid: 10% of Contractor's Base Bid.

Time for Completion: All work on this project shall be completed by Friday, February 25, 2011. Contractor shall not begin work on this project prior to Monday, November 29, 2010.

Liquidated Damages, per diem: \$150.00

The EBE requirement for this project is 20% of the contract base bid.

The residency requirement for this project is 40% of all hours worked on the project.

The apprenticeship requirements for this project are: Not Applicable

The contractor shall specifically note the EBE and residency forms for this project. If the forms are not filled out properly, it will be cause for rejection of the bid. These forms may be found at http://www.mpw.net/services/bids_home.

The Invitation to Bid, Specifications, and Drawings for this project will be available to prospective bidders via <http://www.mpw.net/bids/docs/138-2010/>. Any required addenda or responses related to this project will be posted on the website.

Contractor must comply with all provisions of the CITY OF MILWAUKEE GENERAL OFFICIAL NOTICE TO CONTRACTORS which may be found at http://www.mpw.net/services/bids_home.

Pre-Bid Meeting: A **MANDATORY** Pre-Bid Meeting is scheduled for **THURSDAY, OCTOBER 21, 2010 at 10:00 AM CST** in the Howard Avenue Purification Plant Conference Room; 3929 South 6th Street, Milwaukee, WI 53221. The City of Milwaukee will **ONLY** receive bids from prospective bidders who are in attendance at the **MANDATORY** Pre-Bid Meeting. The official envelope for submitting a bid will be available at the **MANDATORY** Pre-Bid Meeting. **All attendees are required to e-mail both anthony.j.supinski@milwaukee.gov and mark.a.gremmer@milwaukee.gov at least 24 hours in advance of the Pre-Bid Meeting to be placed on the visitor list for access to the Howard Avenue Purification Plant.**

Site Visit: A site visit will be available at the conclusion of the **MANDATORY** Pre-Bid Meeting.

Signed:

JEFFREY J. MANTES
Commissioner of Public Works

PUBLISH SIX (6) TIMES INSERTION WITHOUT FAIL, Thursday, October 7, 2010.

City Of Milwaukee
Department of Public Works
Room 501 – Frank P. Zeidler Municipal Building
841 North Broadway
Milwaukee, Wisconsin 53202-3684

INVITATION TO BID

Commissioner of Public Works
Phone: 414-286-3314

OFFICIAL NOTICE NO. 138-2010
PROJECT NO. LS-32

Sealed bids for the work, material, labor, and services hereinafter described will be received at the Department of Public Works **Contract Office**, Room 506, Frank P. Zeidler Municipal Building, 841 North Broadway, Milwaukee, Wisconsin 53202-3684, no later than November 4, 2010 at 10:30 A.M.

IMPORTANT

This bid is your offer to perform or supply the subject matter under "DESCRIPTION" below according to the terms and conditions set forth in this Invitation to Bid, Specific Official Notice No. 138-2010, General Specifications, Detailed Specifications, Special Provisions, Plans of this particular project, the proposed contract and Special Conditions when applicable.

Your bid must meet the Detailed Specifications and the Plans for this particular project.

You must agree to comply with all applicable requirements of the Americans with Disabilities Act of 1990, 42 U.S.C. Section 12101, et seq.

The bid must be signed as set forth in the General Specifications and must comply with all the requirements therein set forth, or it will not be considered. If submitted by a corporation, the bid proposal must bear the corporate seal.

Bid security hereinafter specified must be submitted with your bid. If a bid bond is used, it must be sealed by the bonding company and be accompanied by an affidavit of no interest and a copy of a power of attorney. Bonding agents must be licensed to do business in the State of Wisconsin.

Bids received after the date and the time above specified will not be opened and read and will be deemed rejected.

NOTE: Also read the General Official Notice to Contractors, General and Detailed Specifications, Special Provisions, and Special Conditions when applicable pertaining to this bid.

Description: LS-32, Supplemental Fill Line for Water Storage Tanks

The EBE Requirements for this Project are: 20%

The Residents Preference Program Requirements for this Project are: 40%

The Apprenticeship Requirements for this Project are: N/A

Liquidated damages per diem (applies for Project Completion Date): \$150.00

Project Completion Date: **February 25, 2011**

A **MANDATORY** pre-bid meeting will be held on October 21, 2010 at 10:00 A.M. at the Howard Avenue Purification Plant Conference Room, for all prospective bidders.

THE SUCCESSFUL CONTRACTOR SHALL FURNISH A PERFORMANCE BOND AND A PAYMENT BOND IN THE AMOUNT OF 100% OF THE BID WITH EACH EXECUTED CONTRACT.

NOTE: BIDS WILL BE OPENED AND PUBLICLY READ AT THE OFFICE OF THE COMMISSIONER OF PUBLIC WORK ON **November 4, 2010 @ 10:30 A.M.**

Specifications and Drawings for this project will be available to prospective bidders via <http://www.mpw.net/bids/docs/138-2010/>. Any required addenda or responses related to the specifications will be posted on the website.

THE CONTRACTOR SHALL SPECIFICALLY NOTE THE EBE FORMS AND THE RESIDENCY FORMS FOR THIS PROJECT. IF THE FORMS ARE NOT FILLED OUT PROPERLY, IT WILL BE CAUSE FOR REJECTION OF THE BID.

THE TRAINING CREDIT INCENTIVE WILL NOT APPLY TO THIS PROJECT.

Contractor must comply with provisions of the CITY OF MILWAUKEE GENERAL OFFICIAL NOTICE TO CONTRACTORS, published above.

LS-32, SUPPLEMENTAL FILL LINE FOR WATER STORAGE TANKS

OFFICIAL NOTICE NO. 138-2010

For furnishing and installing all equipment, labor and materials, training and start-up services for the **SUPPLEMENTAL FILL LINE FOR WATER STORAGE TANKS** at Lincoln Station, 3641 West Lincoln Avenue, Milwaukee, WI 53215 in accordance with plans and specifications for the lump sum bid of:

TOTAL BID

(Bid in figures) \$

(Bid in words) \$

BIDS MUST BE TYPED OR PRINTED IN INK

***** IMPORTANT NOTICE *****

ALL BID PRICES MUST BE ENTERED IN WORDS AND IN NUMERALS. IN CASE OF VARIATION BETWEEN THE TWO, THE WORDS WILL PREVAIL.

IN ADDITION, IF THERE IS A DISCREPANCY BETWEEN THE TOTAL INDICATED IN THE PROPOSAL AND THE AMOUNT OBTAINED BY ADDING THE PRODUCTS OF THE QUANTITIES TIMES THE UNIT PRICES, THE LATTER SHALL GOVERN. ANY ERRORS FOUND IN THE TOTAL INDICATED SHALL BE CORRECTED AND THE CONTRACT AWARD SHALL BE MADE TO THE LOWEST RESPONSIBLE BIDDER BASED ON THE CORRECTED TOTAL.

IF DOUBT EXISTS AS TO WHAT IS BID, THE BID WILL BE REJECTED.

ACKNOWLEDGEMENTS PAGE

EMERGING BUSINESS ENTERPRISE, RESIDENT PREFERENCE AND APPRENTICESHIP PROGRAM REQUIREMENTS

In submitting this bid, the bidder acknowledges, understands and agrees that submission of a bid shall commit the bidder to comply with the City's requirements as outlined in the Emerging Business Enterprise (EBE) Program, the Resident Preference Program and the Apprenticeship Program provisions. The bidder also agrees to comply with the specific requirements as follows:

The bidder's commitment for EBE participation on this project is 20 %

The bidder's commitment for Resident Preference Program Participation on the project is 40 %

The bidder's commitment for Apprenticeship Program participation on this project is:
Apprentice(s) from N/A of the following trade(s) are to be employed.

In submitting this bid, the bidder understands that the Commissioner of Public Works reserves the right to reject any and all bids. If written notice of the acceptance of the bid is mailed, telegraphed, or delivered to the undersigned within forty-five (45) days after the opening thereof, the undersigned agrees to execute and deliver the contract in the prescribed form (contract form on file in the office of the Commissioner of Public Works) and furnish the required performance and payment bonds, and to meet such insurance requirements as may be required, within ten days after the receipt of the official notice of award.

This bidder understands that if they are the successful bidder and the contract is awarded, that pursuant to Sec. 7.14, Milwaukee City Charter, 1971 Compilation, as amended, failure to execute and to deliver the contract or to furnish the required insurance and the required security within ten (10) days after receipt of the official notice of award or such extension thereto as the Commissioner only may deem reasonable, the City, in addition to any other legal or equitable remedy which it may have, may annul the award and notice of award, and the bid security of this bidder will be forfeited.

Attached hereto is an affidavit in proof that the undersigned has not colluded with any person in respect to this bid or any other bid for the contract for which this bid is submitted.

We acknowledge the receipt of Addenda _____ to _____ inclusive.

Bidder assures the City and acknowledges that the Official Notice, Special Provisions, if any, Special Conditions where applicable, Invitation to Bid and Bid, Detail Specifications, Addenda, if any, and Plans of this particular project have been read and has a full understanding of the provisions therein.

SIGNATURE PAGE

In signing and submitting this bid, the bidder assures the City of Milwaukee that the Official Notice, Notice to Bidders, Special Conditions where applicable, Invitation to Bid and Bid, Detail Specifications, Special Provisions, Schedule of Fixed Prices, Addenda, and Plans of this particular project have been read and understood and that the furnishing of the subject work, material, labor and services is under bidder's control. If the bidder's performance is contingent upon the acts of another party, the bidder assures that they have the necessary commitments to complete the contract which may be awarded.

Submitted by _____
Name of Bidder (person, firm or corporation)

Telephone No. _____

Fax No. _____

Address _____

(City, State, Zip Code)



Signed per _____
(Manual signature required)

MUST BE SIGNED

Official Capacity _____

BID DATED _____ EBE Contractor Yes _____ No _____

If a Corporation, answer the following:

Incorporated under laws of what state? _____

If a foreign corporation, are you licensed to do business in Wisconsin? _____

**SWORN STATEMENT OF BIDDER
AS REQUIRED BY
SECTION 66.0901 (7) WISCONSIN STATUTES**

I, being first duly sworn at _____
(City, State)

on oath state on behalf of said bidder, that I have examined and carefully prepared this proposal from the plans, specifications, and the other contract documents and have checked the same in detail before submitting this proposal; and this sworn statement is hereby made a part of the foregoing proposal.



MUST BE SIGNED

Signature _____

(Title, if any)

Subscribed and sworn to before me this

_____ day of _____, 20_____

Notary Public, _____ County

State of _____

(Notary Signature)

My commission expires _____

NON-COLLUSION AFFIDAVIT

State of _____)
County of _____) ss.

_____, being first duly sworn, deposes and says that:

(1) He is _____
(owner, partner, officer, representative, or agent)

of _____, the Bidder that has submitted the attached Bid;

(2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

(3) Such Bid is genuine and is not a collusive or sham Bid;

(4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly with any other Bidder, firm, or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm, or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit, or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against the Commissioner of Public Works or any person interested in the proposed Contract; and

(5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Check One) _____
Signature of

_____ Bidder if the bidder is an individual;

_____ Partner if the bidder is a partnership;

_____ Officer if the bidder is a corporation.

Subscribed and sworn to before me this

_____ day of _____, 20_____.

Notary Signature

My commission expires _____, 20_____.

State of Wisconsin
 Department of Workforce Development
 Equal Rights Division
 Labor Standards Bureau

Disclosure of Ownership

Notice required under Section 15.04(1)(m), Wisconsin Statutes. The statutory authority for the use of this form is prescribed in Sections 66.0903(12)(d) and 103.49(7)(d), Wisconsin Statutes. The use of this form is mandatory. The penalty for failing to complete this form is prescribed in Section 103.005(12), Wisconsin Statutes. Personal information you provide may be used for secondary purposes

- (1) On the date a contractor submits a bid to or completes negotiations with a state agency or local governmental unit, on a project subject to Section 66.0903 or 103.49, Wisconsin Statutes, the contractor shall disclose to such state agency or local governmental unit the name of any "other construction business", which the contractor, or a shareholder, officer or partner of the contractor, owns or has owned within the preceding three (3) years.
- (2) The term "other construction business" means any business engaged in the erection, construction, remodeling, repairing, demolition, altering or painting and decorating of buildings, structures or facilities. It also means any business engaged in supplying mineral aggregate, or hauling excavated material or spoil as provided by Sections 66.0903(3), 103.49(2) and 103.50(2), Wisconsin Statutes.
- (3) This form must **ONLY** be filed, with the state agency or local governmental unit that will be awarding the contract, if **both (A) and (B) are met.**
 - (A) The contractor, or a shareholder, officer or partner of the contractor:
 - (1) Owns at least a 25% interest in the "other construction business", indicated below, on the date the contractor submits a bid or completes negotiations.
 - (2) Or has owned at least a 25% interest in the "other construction business" at any time within the preceding three (3) years.
 - (B) The Wisconsin Department of Workforce Development (DWD) has determined that the "other construction business" has failed to pay the prevailing wage rate or time and one-half the required hourly basic rate of pay, for hours worked in excess of the prevailing hours of labor, to any employee at any time within the preceding three (3) years.

Other Construction Business

Name of Business

Street Address or P O Box	City	State	Zip Code
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Name of Business

Street Address or P O Box	City	State	Zip Code
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Name of Business

Street Address or P O Box	City	State	Zip Code
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Name of Business

Street Address or P O Box	City	State	Zip Code
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I hereby state under penalty of perjury that the information, contained in this document, is true and accurate according to my knowledge and belief.

Print the Name of Authorized Officer

Signature of Authorized Officer	Date Signed
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Name of Corporation, Partnership or Sole Proprietorship

Street Address	City	State	Zip Code
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If you have any questions call (608) 266-0028

**NOTICE TO ALL CONTRACTORS AND
SUBCONTRACTORS:**

**EFFECTIVE 1/1/2010, DUE TO CHANGES IN
WISCONSIN PREVAILING WAGE LAW,
SEC. 66.0903 -**

**IN ADDITION TO THE PREVAILING WAGE
REPORTING REQUIREMENTS ALREADY IN
PLACE FOR CITY OF MILWAUKEE DPW
CONTRACTS:**

**ALL CONTRACTORS AND
SUBCONTRACTORS ON A PREVAILING
WAGE PROJECT ARE *ALSO* REQUIRED TO
FILE CERTIFIED PAYROLLS OR
COLLECTIVE BARGAINING AGREEMENTS
ELECTRONICALLY WITH THE STATE OF
WISCONSIN DEPARTMENT OF
WORKFORCE DEVELOPMENT (DWD)**

**INSTRUCTIONS AND FURTHER DETAILS
CAN BE FOUND ON THE DWD'S WEBSITE
EXPLAINING THE REQUIREMENTS**

(google: State of Wisconsin *Prevailing Wage* & do a search).

PREVAILING WAGE NOTICE

ALL PREVAILING WAGE CONTRACTS AWARDED BY THE DEPARTMENT OF PUBLIC WORKS AFTER THE FIRST OF ANY CALENDAR YEAR ARE SUBJECT TO THE NEW PREVAILING WAGE SCHEDULE THAT GOES INTO EFFECT ON JANUARY 2ND. THE PREVAILING WAGE SCHEDULE INCLUDED IN BID PACKAGES ISSUED LATE IN THE PRECEDING YEAR MAY NOT BE TOTALLY ACCURATE FOR CONTRACTS OFFICIALLY AWARDED AFTER THE TURN OF THE YEAR. THE NEW PREVAILING WAGE WILL BE INCORPORATED INTO THE CONTRACT WHEN AWARDED.

BIDDERS ARE REQUIRED TO UTILIZE THE WISCONSIN DEPARTMENT OF WORKFORCE DEVELOPMENT'S "DICTIONARY OF OCCUPATIONAL CLASSIFICATIONS AND WORK DESCRIPTIONS" TO DETERMINE THE APPROPRIATE JOB CLASSIFICATIONS AND WAGE RATES FOR THEIR EMPLOYEES PRIOR TO BIDDING. THIS DOCUMENT CAN BE FOUND ON THEIR WEBSITE AT DWD.WISCONSIN.GOV; TYPE "DICTIONARY" IN THE SEARCH BOX.

City of Milwaukee
Department of Public Works
Local Business Enterprise Provisions

I. General:

- A. In accordance with Chapter 365 of the Milwaukee Code of Ordinances, the application of a Local Business Enterprise (LBE) program is required in all contracting activities of the Department of Public Works, unless contrary to federal, state or local law or regulation. To this end, the Commissioner of Public Works, as a contracting officer of the City, will apply an award standard in all bids so that an otherwise responsive and responsible bidder which is a Local Business Enterprise shall be awarded the contract, provided that its bid does not exceed the lowest bid by more than 5%.
- B. Bidders seeking the Local Business Enterprise preference shall prepare and submit with the bid an accurate affidavit certifying their LBE status. Failure to do so may result in an LBE forfeiting their rights to be considered for the program.
- C. Sanctions – If any document submitted to the city by a contractor under this chapter for the purpose of participating in any city contract contains false, misleading or fraudulent information, the Commissioner of Public Works, may direct the imposition of any of the following sanctions on the offending contractor:
1. Withholding of payment.
 2. Termination, suspension or cancellation of the contract in whole or in part.
 3. Denial to participate in any further contracts awarded by the City.
- D. Penalty – Any person, firm or corporation knowingly engaging in fraud, misrepresentation or in any attempt, direct or indirect, to evade the provisions of this chapter by providing false, misleading or fraudulent information shall, upon conviction, forfeit not less than \$2,000 nor more than \$5,000 together with the costs of prosecution.
- E. Right to Appeal – All contracts awarded under ss. 7-14-2 and 7-22 of the City Charter shall be awarded by the Commissioner of Public Works to the lowest responsible bidder determined in accordance with any applicable City Ordinances relating to the participation of Local Business Enterprises. Following the opening of any bid where the Commissioner has considered compliance with such City Ordinances, the Commissioner shall publish in an official City newspaper his or her determination as to the lowest responsible bidder. Any bidder who objects to the determination based on the consideration of such City Ordinances, may appeal the recommendation by filing a written appeal with the Commissioner within five (5) working days of the date of publication. The appeal shall state the specific objection to the determination, including supporting documentation, and specify an alternative determination. Any appeals that do not conform to this section shall not be considered. The Commissioner shall schedule a hearing before the Public Works Contract Appeals Committee, which shall be comprised of the chair of the Economic Development Committee or his or her designee, and a member of the Economic Development Committee selected by the chair and the Director of Administration or his or her designee, to be held within five days of receipt of the appeal. The Public Works Contract Appeals Committee shall have the authority by majority vote to affirm or set aside the determination of the Commissioner and their decision in this regard shall be final. In the event that a timely appeal meeting the requirements of this paragraph is not filed, or the Committee

affirms the commissioner's determination following a timely appeal, the Commissioner shall make an award in accordance with his or her determination.

II. Definitions:

A. Local Business Enterprise means a business which satisfies all of the following criteria:

1. Owns or leases property within the geographical boundaries of the City of Milwaukee. Post office boxes shall not suffice to establish status as a Local Business Enterprise.
2. A residential address may qualify, but only if the business does not own or lease other real property, either within or outside the geographical boundaries of the City of Milwaukee.
3. Leased property may qualify but only if at least half of the acreage of all the real property owned or leased by the business is located within the geographical boundaries of the City of Milwaukee.
4. Has been doing business in the City of Milwaukee for at least one (1) year.
5. Is not delinquent in the payment of any local taxes, charges or fees, or the business has entered into an agreement to pay any delinquency and is abiding by the terms of the agreement.
6. Will perform at least 10% of the monetary value of the work required under the contract.

III. Local Business Enterprise Requirement:

- A. Department of Public Works shall, unless contrary to federal, state or local law or regulation, apply an award standard in all bids so that an otherwise responsive and responsible bidder which is a Local Business Enterprise shall be awarded the contract, provided that its bid does not exceed the lowest bid by more than 5%.
- B. If the bids of two or more Local Business Enterprises do not exceed the lowest bid by more than 5%, the contract shall be awarded to the Local Business Enterprise that submitted a bid that exceeded the lowest bid by the smallest amount.
- C. If a bid submitted by a non-Local Business Enterprise and a bid submitted by a Local Business Enterprise are identical, the contract shall be awarded to the Local Business Enterprise, even if the bids are only identical due to the 5% award standard provided for in this chapter.
- D. If two bids submitted by two Local Business Enterprises are identical, the winner will be determined in accordance with the process for tie-breakers as established by the city purchasing director.
- E. If the difference between the low bidder's amount and the lowest Local Business Enterprise amount is within 5% of the low bidder and exceeds \$25,000, then the provisions in section III-A shall not apply.
- F. Paragraph III-A **shall** only be applied to the "base bid".



DEPARTMENT OF PUBLIC WORKS
CONTRACT DIVISION

**LOCAL BUSINESS ENTERPRISE (LBE) PROGRAM
AFFIDAVIT OF COMPLIANCE**

IMPORTANT: This form must be submitted with your bid to be considered for LBE status.

Bid/RFP #: _____

Company Name: _____

Address: _____

City, State, Zip _____

This affidavit of compliance will be the contractor's sworn statement that the business meets the following criteria:

1. The business owns or leases property within the geographical boundaries of the City of Milwaukee. Post office boxes shall not suffice to establish status as a Local Business Enterprise.
2. A residential address may suffice to establish compliance as a Local Business Enterprise, but only if the business does not own or lease other real property, either within or outside the geographical boundaries of the City of Milwaukee.
3. Leased property shall not suffice to establish compliance as a Local Business Enterprise unless at least half of the acreage of all the real property owned or leased by the business is located within the geographical boundaries of the City of Milwaukee.
4. The business has owned or leased real property within the geographical boundaries of the City of Milwaukee *and* the business has been doing business in the City of Milwaukee for at least one (1) year.
5. The business is not delinquent in the payment of any local taxes, charges or fees, or the business has entered into an agreement to pay any delinquency and is abiding by the terms of the agreement.
6. The business will perform at least 10% of the monetary value of the work required under the contract.

SITE VISITS: Please note the contractor agrees to allow the City to verify Local Business Enterprise status by allowing City Staff to visit the operation(s) of the business that is seeking Local Business Enterprise status at any time without notice, in an effort to maintain the integrity of the City's bidding process.

If applicable, initial here _____ if criteria in #3 above is satisfied.
Initial

I hereby declare compliance with the City of Milwaukee Code of Ordinances Chapter 365.

Authorized Signature: _____

Printed Name: _____

Date: _____

NOTARIZATION

Subscribed to before me on this _____ day of _____ in the year _____,
at _____ County, _____ State.

NOTARY PUBLIC SIGNATURE: _____

(SEAL)

PRINT NAME: _____

My commission expires: _____

PLEASE SUBMIT THIS FORM *WITH YOUR BID* TO:
DEPT. OF PUBLIC WORKS – ROOM 506
841 NORTH BROADWAY
MILWAUKEE, WISCONSIN 53202



DEPARTMENT OF PUBLIC WORKS
CONTRACT DIVISION

LOCAL BUSINESS ENTERPRISE (LBE) PROGRAM
BUSINESS PROPERTY LOCATION FORM

Important Note: This form must be submitted with your bid to be considered for LBE status.

Bid / RFP # _____

Property Location 1 Check one: Own [] Lease []

Name:	
Address:	
City, State, Zip	

Property Location 2 Check one: Own [] Lease []

Name:	
Address:	
City, State, Zip	

Property Location 3 Check one: Own [] Lease []

Name:	
Address:	
City, State, Zip	

Property Location 4 Check one: Own [] Lease []

Name:	
Address:	
City, State, Zip	

PLEASE SUBMIT THIS FORM WITH YOUR BID TO:
DEPT. OF PUBLIC WORKS – ROOM 506
841 NORTH BROADWAY
MILWAUKEE, WISCONSIN 53202

City of Milwaukee

Department of Public Works

Residents Preference Program Provisions

I. General

- A. In accordance with Chapter 309 of the Milwaukee Code of Ordinances, residents preference hiring is required for all construction contracting activities of the Department of Public Works. The ordinance requires that 40% of WORKER HOURS worked on a DPW contract be performed by UNEMPLOYED or UNDEREMPLOYED RESIDENTS of the City, except in special cases where the Commissioner of Public Works determines there is sufficient reason to impose lesser levels of participation. Further, the Commissioner of Public Works may increase the percentage of RESIDENT worker participation to more than 40% on specific contracts. For this contract, bidders are required to show that a minimum 40% of WORKER HOURS will be performed by UNEMPLOYED or UNDEREMPLOYED RESIDENTS of the City. Up to one-third of required worker hours may be achieved by documenting the use of UNEMPLOYED or UNDEREMPLOYED RESIDENTS on projects undertaken by the contractor where such compliance is not required, or by hiring UNEMPLOYED or UNDEREMPLOYED RESIDENTS on a full-time permanent basis for non-construction job categories connected to the project. Such adjustments must be proposed in an affidavit on a form provided by the department setting forth the facts upon which the request for adjustment is based.
- B. The contractor, prior to commencing work, shall submit an affidavit (Form I) for proof of residency for all employees utilized by the contractor and subcontractors to meet the Residents Preference Program requirements, stating that each employee is either UNEMPLOYED or UNDEREMPLOYED and is a RESIDENT of the City. The contractor shall prepare and submit accurate and timely resident utilization forms and reports to the Department of Public Works. Time Reports shall be submitted within ten (10) days following completion of work, or every three months, whichever comes first. The reports shall identify the name, address, race, gender, work classification, wage rates and hours worked of all employees utilized on the contract by the contractor and all subcontractors. Failure to submit the required forms and reports to the Department of Public Works may result in disqualification of future bids, delay of payments, or other appropriate sanctions. Final contract payments will not be made until the summary of hours worked on the back of the Prime Contractor's Affidavit of Compliance is completed and on file with the Department of Public Works.
- C. During the performance of this contract the Department of Public Works reserves the right to conduct compliance reviews. If the contractor is not in compliance with the specifications, the Commissioner of Public Works will notify the contractor in writing of the corrective action that will bring the contractor into compliance. If the contractor fails or refuses to take corrective action as directed, or if the contractor, prime or sub, submits any documents which contain any false, misleading, or fraudulent information, or if the contractor or subcontractor fail to comply with this ordinance, the Department of Public Works may take one or more of the actions listed below.
1. Withhold payments on the contract.
 2. Terminate or cancel the contract, in whole or in part.
 3. Consider possible debarment of the contractor from bidding for a period of up to two years.

4. Any other remedy available to the City at law or in equity.
- D. The penalty for any person, firm, or corporation knowingly engaging in fraud, misrepresentation, or in any attempt directly or indirectly, to evade the provisions of this ordinance by providing false, misleading, or fraudulent information shall, upon conviction, forfeit not less than \$1,000 or more than \$5,000 together with the costs of prosecution and, upon default of payment, shall be imprisoned in the county jail or house of correction not to exceed 90 days, or until the forfeiture costs are paid.

II. Definitions

- A. **RESIDENT** – A person who maintains his or her place of permanent abode in the City of Milwaukee. Domiciliary intent is required to establish that a person is maintaining his or her place of permanent abode in the City. Mere ownership of real property is not sufficient to establish domiciliary intent. Evidence of domiciliary intent includes, without limitations, the location where a person votes, pays personal income taxes, or obtains a driver's license.
- B. **UNEMPLOYED or UNDEREMPLOYED** – a **RESIDENT** that has worked less than 1,200 hours in the preceding 12 months or has not worked in the preceding 30 days or, regardless of employment status, has household income at or below the federal poverty guidelines as adjusted by the Wisconsin Department of Public Instruction to define eligibility for reduced lunch in public schools. A **RESIDENT** will continue to qualify as unemployed or underemployed for five (5) years from the date he or she first participates in a contract under Chapter 309. If a **RESIDENT** becomes an apprentice for a contractor or becomes a participant in an on-the-job training program as determined by the City immediately after or in the course of performing on a particular construction contract, he or she shall continue to qualify as unemployed or underemployed for a period not exceeding 5 years from the date the person became an apprentice or participant in such on-the-job training program.
- C. **WORKER HOURS** – means the total hours worked on a construction contract by skilled and unskilled construction trade workers, whether those workers are employed by the contractor or any subcontractor. In determining the total worker hours to be furnished at a construction site, the number of hours devoted to all tasks customarily performed on a construction site shall be included, whether or not such tasks are performed on the construction site. "Worker hours" includes work performed by persons filling apprenticeships and participating in on-the-job training programs and excludes the number of hours of work performed by all non-Wisconsin residents.

III. Residency Utilization Requirements

- A. The contractor shall utilize **UNEMPLOYED or UNDEREMPLOYED RESIDENTS** of the City in a minimum amount equal to the percentage of the **WORKER HOURS** stated in paragraph IA above.
- B. The contractor, by signing and submitting a bid, certifies that it understands the provisions of Chapter 309 and knows of and intends to comply with them, and shall ensure that all subcontractors are also informed.
- C. The contractor shall maintain, and shall ensure that all subcontractors maintain, personnel records listing the name, address, race and gender of all employees utilized for this contract and any records demonstrating that the employees utilized by the contractor in meeting the residency requirements are actual residents of the City. These records

shall be maintained for seven (7) years after the contractor has received final payment under the contract and shall be made available to the Commissioner of Public Works upon reasonable notice.

- D. Compliance with these residency requirements is an element of bid responsiveness. Failure to meet the specified residency requirements will render the bid unresponsive, and the Commissioner of Public Works may then recommend the award to the next apparent low bidder.
- E. The City recognizes the following three organizations which can be contacted for access to trained or qualified workers from the City. Other organizations or sources of qualified RESIDENTS can be used at the bidder's discretion.
 - 1. Esperanza Unida (EU), located at 1329 West National Avenue, Milwaukee, WI 53204. Telephone number 414-671-0251 Ext. 125, fax number 414-383-7392.
 - 2. Milwaukee Urban League, located at 435 West North Avenue, Milwaukee, WI 53212. Telephone number 414-374-5850 Ext. 103, fax number 414-374-1995.
 - 3. Big Step, located at 3841 West Wisconsin Avenue, Milwaukee, WI 53208. Telephone 414-342-9787, fax number 414-342-3546.
- F. If the prime contractor has problems in meeting the residency requirements or if any other problems relative to residency participation arise during the completion of this project, the prime contractor shall immediately contact the Commissioner of Public Works.
- G. Right to Appeal – All contracts awarded under ss. 7-14-2 and 7-22 of the City Charter shall be awarded by the Commissioner of Public Works to the lowest responsible bidder determined in accordance with any applicable City ordinances relating to the participation of Emerging Business Enterprise Programs or requiring participation of City RESIDENTS. Following the opening of any bid where the Commissioner has considered compliance with such City ordinances, the Commissioner shall publish in an official City newspaper his or her determination as to the lowest responsible bidder. Any bidder who objects to the determination based on the consideration of such City Ordinances, may appeal the recommendation by filing a written appeal with the Commissioner within five (5) working days of the date of publication. The appeal shall state the specific objection to the determination, including supporting documentation, and specify an alternative determination. Any appeals that do not conform to this section shall not be considered. The Commissioner shall schedule a hearing before the Public Works Contract Appeals Committee which shall be comprised of the chair of the Economic Development Committee or his or her designee and a member of the Economic Development Committee selected by the chair and the Director of Administration or his or her designee to be held within five days of receipt of the appeal. The Public Works Contract Appeals Committee shall have the authority by majority vote to affirm or set aside the determination of the Commissioner and their decision in this regard shall be final. In the event that a timely appeal meeting the requirements of this paragraph is not filed, or the Committee affirms the Commissioner's determination following a timely appeal, the Commissioner shall make an award in accordance with his or her determination.

Contractor Name

DPW Contract No.

**Employee Affidavit
Residents Preference Program**

I certify that I maintain my permanent residence in the City of Milwaukee and that I vote, pay personal income tax, obtain my driver's license, etc. at _____, Milwaukee, WI _____
(Address) (Zip Code)

Residency status:

To verify my resident status, attached please find the following (check one)

- _____ Copy of my voter's certification form.
- _____ Copy of my last year's Form 1040.
- _____ Copy of my current Wisconsin Driver's License or State ID.
- _____ Copy of Other (i.e., Utility bill, Lease, etc.)

AND

Unemployment status:

I certify that I have been unemployed as follows: (Check those that apply)

- _____ I have worked less than 1,200 hours in the preceding 12 months.
- _____ I have not worked in the preceding 30 days.

OR

Underemployed status:

_____ I certify that based on the attached chart (Income Eligibility Guidelines), I am underemployed.

Print Name

Sign Name

Social Security Number

Home Telephone Number

Subscribed and sworn to me this _____ day

Of _____, _____ A.D.

My Commission Expires _____.

Notary Public Milwaukee County

**Income Eligibility Guidelines
July 1, 2009 to June 30, 2010**

Eligibility determination is based on household size and income. Total income must be at or below the amount in the table.

Household Size	Yearly	Monthly	Twice per month	Every 2 weeks	Weekly
1	20,036	1,670	\$835	\$771	\$386
2	26,955	2,247	1,124	1,037	519
3	33,874	2,823	1,412	1,303	652
4	40,793	3,400	1,700	1,569	785
5	47,712	3,976	1,988	1,836	918
6	54,631	4,553	2,277	2,102	1,051
7	61,550	5,130	2,565	2,368	1,184
8	68,469	5,706	2,853	2,634	1,317
For each add'l household member add	6,919	577	289	267	134

Source: Wisconsin Department of Public Instruction
School Nutrition Programs

City Of Milwaukee
Department Of Public Works
Emerging Business Enterprise Provisions

I. General

- A. In accordance with Chapter 360 of the Milwaukee Code of Ordinances, Emerging Business Enterprise (EBE) participation is required in all contracting activities of the Department of Public Works. The ordinance requires that certified EBEs be utilized for **25%** of the total dollars annually expended through prime contracts or subcontracts. To that end, the Commissioner of Public Works, as a contracting officer for the City, requires all bidders to utilize EBEs as subcontractors and material suppliers on all contracts. For this contract, bidders are required to achieve a minimum 20 % EBE participation.
- B. The prime contractor shall prepare and submit accurate and timely EBE utilization forms and reports to the Department of Public Works. The reports shall include, but not be limited to, project participation (Form A), monthly utilization (Form D), and EBE subcontractor payment certification (Form E) forms as directed. Failure to submit the required forms and reports to the Department of Public Works may result in disqualification of future bids, delay of payments, or other appropriate sanctions. Final contract payments will not be made until final EBE utilization reports and EBE subcontractor payment certification forms are on file with the Department of Public Works.
- C. During the performance of this contract, the Department of Public Works reserves the right to conduct compliance reviews. If the contractor is not in compliance with the specifications, the Commissioner of Public Works will notify the contractor in writing of the corrective action that will bring the contractor into compliance. If the contractor fails or refuses to take corrective action as directed, the Department of Public Works may take one or more of the actions listed below:
1. Terminate or cancel the contract, in whole or in part.
 2. Consider possible debarment of the prime contractor from bidding.
 3. Withhold payments on the contract.
 4. Any other remedy available to the City at law or in equity.

II. Definitions

- A. "EMERGING BUSINESS ENTERPRISE" (EBE) means a small business concern that is owned, operated and controlled by one or more individuals who are at a disadvantage. The individuals must have day-to-day operational and managerial control and interest in capital, financial risks and earnings commensurate with the percentage of their ownership.
- B. "INDIVIDUAL AT A DISADVANTAGE" means a person who is a citizen or lawful permanent resident of the United States and who has experienced and who continues to experience substantial difficulty in achieving business-related success as defined in subsection 5 of Chapter 360 of the Milwaukee Code of Ordinances.

- C. "OWNED, OPERATED AND CONTROLLED" means a business which is one of the following:
1. A sole proprietorship legitimately owned and operated and controlled by an individual as defined in subsection 12.
 2. A partnership or joint venture legitimately owned, operated and controlled by individuals who are at a disadvantage and who own at least 51% of the beneficial ownership interests in the enterprise and who hold at least 51% of the voting interests of the enterprise.
 3. A corporation legitimately owned, operated and controlled by one or more individuals who are at a disadvantage and who own at least 51% of the outstanding shares and who hold at least 51% of the voting interests of the corporation.

III. EBE Utilization Requirements

- A. Each prime contractor shall utilize EBE to a minimum of 20 % on this contract. Note that the prime contractors shall be required to attain EBE participation on their base bid excluding specified allowances, alternatives, and change orders. EBE commitments relative to contract award shall be based upon the approved EBE Participation Form (Form A).
- B. The determination of EBE utilization shall be based on the following criteria:
1. The firms identified as EBE by the prime contractor on the EBE Participation Form must be certified by the Emerging Business Enterprise Program prior to bid opening.
 2. The prime contractor shall be credited for the entire expenditure to EBE firms only if all of the identified scope of work is performed directly by the certified EBE firm.
 3. The prime contractor shall be credited for the entire expenditure to EBE manufacturer only if the manufacturer produces goods from raw materials or substantially alters them for resale. Only 20% of the EBE goals may be expended for EBE suppliers that do not manufacture products they supply.
 4. The prime contractor shall count toward the EBE requirement only those payments to EBEs who perform a commercially-useful function in the actual performance of the contract. While that generally means an EBE should be engaged in direct contract work, a "commercially-useful function" may also include management of a third tier subcontractor. For example, while an EBE trucking subcontractor is always expected to perform some direct work on the project, in some cases it may become necessary to subcontract work out to one or more third tier subcontractors. If a third tier subcontractor is also an EBE, the full amount of the work performed by that third tier EBE can be counted toward EBE participation. However, if the third party subcontractor is not an EBE, the prime contractor may only count 20% of the amount being subcontracted to the third tier non-EBE subcontractor. EBEs are required to notify the Department of Public Works if they subcontract out work so that the Department can determine how much, if any, of the subcontracted work can be counted toward the EBE requirement. The Commissioner of Public Works will make the final determination and evaluation of whether the EBE is performing a commercially-useful function.

C. The contractor, by signing and submitting a bid, certifies that the contractor understands the provisions of Chapter 360 and knows of and intends to comply with them. The completed EBE Participation Form (Form A) must be submitted by the apparent low bid contractor within three (3) working days after the date of the bid opening.

1. Information on Form A shall include, but not be limited to:

- a. The names, addresses, telephone numbers and contact person names for the certified EBE contractors that will participate on the project as subcontractors or suppliers;
- b. A description of the scope of work to be performed by the EBE on this project; and
- c. The EBE contractor dollar value(s) and corresponding percentages that the dollar values represent of the total contract amount.

2. Listing an EBE on the Participation Form shall constitute a representation that the contractor has communicated directly with the EBEs listed. If awarded the contract, the bidder will enter into a subcontract with the firm for the portion of the work listed.

3. EBE participation is an element of bid responsiveness. Failure to meet the specified EBE requirements will render the bid unresponsive. The contract may then be awarded to the next apparent low bidder. Under certain circumstances, failure to meet specified EBE requirements after submission of an apparent low bid may result in surrender of the bidder's bid bond.

4. Only EBEs that have been certified by the Emerging Business Enterprise Program may be listed on the EBE Participation Form and counted towards the percentage requirements on this project. A listing of the currently City certified EBE firms is maintained at:

Emerging Business Enterprise Program Office
200 East Wells Street
City Hall, Room 606
Milwaukee, Wisconsin 53202
Phone: (414) 286-5553
FAX: (414) 286-8752

D. After execution of the contract, if for any reason an EBE cannot perform, the prime contractor shall contact the Commissioner of Public Works for approval to substitute another certified EBE firm. The prime contractor must submit a written request for substitution which specifies the reasons for the request. Approval must be obtained prior to making substitutions. Any difference in the cost occasioned by such substitution shall be borne by the prime contractor. If the prime contractor cannot find another certified firm to do the work at a comparable price, a non-EBE firm may be substituted with the approval of the Commissioner of Public Works.

E. If the prime contractor has a problem in meeting the EBE requirements or if any other problems relative to EBE(s) arise during the completion of this project, the prime contractor shall immediately contact the Commissioner of Public Works.

F. Certification from programs other than the Emerging Business Enterprise Program is neither accepted by the City of Milwaukee nor do they have any bearing whatsoever on the eligibility criteria established by the City of Milwaukee.

G. Right to Appeal.

All contracts awarded under ss.7-14-2 and 7-22 of the City Charter shall be awarded by the Commissioner of Public Works to the lowest responsible bidder determined in accordance with applicable City ordinances for participation of the Emerging Business Enterprise Program. Following the opening of any bid involving a determination under applicable City ordinances for participation of Emerging Business Enterprises, the Commissioner of Public Works shall make a written recommendation as to the lowest responsible bidder and notify all bidders by publication in an official City newspaper as to the content of the written recommendation. Any bidder who objects to the recommendation on grounds of determinations made under applicable City ordinances for participation of Emerging Business Enterprises may appeal the recommendation on such grounds by filing a written appeal with the Commissioner of Public Works within five (5) working days of the date of publication. The appeal shall state the specific objection to the recommendation, include supporting documentation and specify an alternative recommendation. The Commissioner of Public Works shall schedule a hearing before an appeals committee consisting of the Chair of the Economic Development Committee or the Chair's designee, a member of the Economic Development Committee selected by the Chair and the Director of the Emerging Business Enterprise Program to be held within five (5) days of receipt of the appeal. The Committee shall have authority by majority vote to affirm or set aside the recommendation of the Commissioner of Public Works and its decision in this regard shall be final. In the event a timely appeal, meeting the requirements above is not filed, or the Committee affirms the Commissioner's recommendation following a timely appeal, meeting the requirements above, the Commissioner shall make an award in accordance with the recommendation.

**CITY OF MILWAUKEE – DEPARTMENT OF PUBLIC WORKS
EBE PARTICIPATION FOR SUBCONTRACTORS AND/OR MATERIAL SUPPLIERS**

PRIME CONTRACTORS NAME: _____ OFFICIAL NOTICE NUMBER: _____

DATE: _____ TOTAL BID AMOUNT: _____ TOTAL EBE AMOUNT: _____

Please list all proposed EBE subcontractor(s) and/or material supplier(s) for this project. I/We propose to utilize the following subcontractor(s) and/or material supplier(s).
NOTE: To receive full credit EBE's must perform commercially useful work at the job site. Up to twenty percent (20%) credit may be given under certain circumstances to EBE suppliers or other EBE contractors who assist in management of the project.

EBE FIRM(S) NAME ADDRESS/CONTACT PERSON AND PHONE NUMBER	SUBCONTRACTOR OR SUPPLIER	WORK PERFORMED/ MATERIAL SUPPLIED	% OF BID	AMOUNT	AUTHORIZED EBE(S) OWNER/ REPRESENTATIVE SIGNATURE OF ACKNOWLEDGEMENT
1.					
2.					
3.					
4.					
5.					

CONTRACTOR: _____ DATE: ____/____/____
(SIGNATURE & TITLE REQUIRED)

REVIEWED BY – _____ DATE: ____/____/____
EBEP ANALYST: _____

DEPARTMENT OF PUBLIC WORKS: _____ DATE: ____/____/____

OFFICE USE ONLY –
PROJECT SUMMARY: _____

**DEPARTMENT OF ADMINISTRATION
EMERGING BUSINESS ENTERPRISE PROGRAM**

Form D - EBE MONTHLY REPORT

(1) Report for the Month of _____ 20____ (Final: yes ___ no ___)

(2) Prime Contractor/Firm _____

(3) Full Address & Phone Number: _____

(4) Description of service performed and/or material supplied _____

(5) Purchase Order /Contract # _____ (6) Project Number _____

(7) Start Date: _____ (8) Prime Contractor's Total \$: _____

(9) Completion Date: _____ (10) Prime Contractor to date \$: _____

(11) EBE % _____ and EBE \$ amount _____

List all EBE subcontractor firm(s) utilized in connection with the above contract, either as service performed and/or supplier for the month. This form shall be signed and returned. **If this represents the final report, be sure to attach EBE Payment Certification Form (Form E) for each sub listed.**

NAME OF EBE FIRM(s)	SERVICE PERFORMED/ MATERIAL SUPPLIED	AMOUNT PAID FOR THE MONTH	TOTAL \$ PAID TO DATE
TOTAL PAID TO EBE(s)			

I/we hereby certify that I/we have read the above and approved this information to be precise and confirmed.

(12) Report Prepared By: _____
(Name) (Title) (Phone Number)

(13) Authorized Signature : _____
(Name) (Title)

(14) Date _____

Note: This form should be submitted no later than the **20th of every month** to the **DEPARTMENT of PUBLIC WORKS CONTRACT ADMINISTRATION, Room 506, Frank P. Zeidler Municipal Building, 841 North Broadway, Milwaukee, WI.**

DIRECTIONS FOR EBE MONTHLY REPORT (FORM D)

1. List the month that the report is being submitted. **Note: If this is the final report, check yes and submit Form E Subcontractor Payment Certification Form.**
2. Prime contractor's or firm's registered company name.
3. List full registered business address to include city/state, zip code and telephone number.
4. Brief description service performed and/or material supplied on this contract.
5. List the official Purchase Order or Contract Number, as represented on the contract or purchase order.
6. List the project number as represented on the front page of the contract.
7. List the start date of the project.
8. List the total dollars awarded to the prime contractor.
9. List the completion date of the project.
10. Total dollars paid to Prime contractor to date.
11. List the EBE percentage on this project and the EBE dollar amount.
12. List the name of the name, title and phone number of the individual who prepared the report.
13. Provide the authorized signature and title of the individual who approves the report.
14. List the date that the report is completed.

THIS REPORT IS DUE THE 20TH OF EVERY MONTH FOR THE PREVIOUS MONTH'S ACTIVITY. FAILURE TO RETURN THIS FORM BY THE SPECIFIED TIME MAY CAUSE A DELAY IN PAYMENTS.

City Of Milwaukee
Department Of Public Works
Emerging Business Enterprise Program (EBE)
Subcontractor Payment Certification

(This form must be completed by the EBE subcontractor and attached to the Prime Contractor's Final EBE Report)

-SUBCONTRACTOR EXECUTES-

Section A - EBE Company Officer Completes For Payment That Has Been Received

EBE Subcontractor Name : _____

Official Notice No.: _____ Project No. _____ DPW Contract No. _____

I hereby certify that I have received \$ _____ for subcontract work on the above project.

Dated: _____ Signature of **EBE** Subcontractor: _____

Printed Name & Title of **EBE** Subcontractor: _____

Acknowledged by **Prime** Contractor Signature: _____

Printed name & Title of **Prime** Contractor: _____

-PRIME CONTRACTOR & SUBCONTRACTOR EXECUTE-

Section B – Prime contractor and EBE Company Officers Complete if Full Payment Has Not Been Made to the EBE Subcontractor and a balance remains to be paid.

Prime Contractor: _____

EBE Subcontractor: _____

Official Notice No.: _____ Project No. _____ DPW Contract No. _____

I hereby certify that I will pay \$ _____ to _____ for subcontract work on the above project.

Dated: _____ Signature of **Prime** Contractor: _____

Printed Name & Title of **Prime** Contractor: _____

Acknowledged by **EBE** Subcontractor Signature: _____

Printed name & Title of **EBE** Subcontractor: _____

SUMMARY OF HOURS WORKED
 (TARGET RESIDENCY VS TOTAL HOURS)

Name	No. of Hours of Special Impact Area Workers	% of Total Hours	No. of Hours of All Other Workers	% of Total Hours	Total of <u>All</u> Worker Hours
Prime Contractor:					
Subcontractors:					
GRAND TOTAL					

**AFFIDAVIT OF COMPLIANCE
WITH WISCONSIN STATUTE 103.503
SUBSTANCE ABUSE PREVENTION REQUIREMENTS**

STATE OF _____) PROJECT NAME _____
 _____) ss.
 _____ COUNTY) DPW Contract No. _____

I, _____, being first duly sworn state that:
 (Print name)

1. I am the _____ of _____, a _____.
 (Title) (Company Name) (State)
 Corporation, partnership, or individual of _____,
 (City, Village, Township) (State)

and make this affidavit pursuant to the provisions of Wis. Stat. § 103.503.

2. I have entered into City of Milwaukee, Department of Public Works' Contract No. _____, to which the provisions of Wis. Stat. 66.0903 apply.
3. I have in place a substance abuse prevention program that meets the requirements of Wis. Stat. 103.503, and I will fully comply in all respects with the requirements of Wis. Stat. 103.503 during the performance of this Contract.
4. I will include in each subcontract covering work performed under this Contract to which the provisions of Wis. Stat. 66.0903 apply, a provision similar to that in Paragraph 3 above, together with a clause requiring such insertion in further subcontracts that may in turn be made.

<u>Title</u>	<u>Officer Name</u>	<u>Address</u>
<u>President</u>	_____	_____
<u>Vice President</u>	_____	_____
<u>Secretary/Treasurer</u>	_____	_____

Subscribed and sworn before me this _____
 day of _____, 20____.

 Notary Signature

 Contractor Signature

Notary Public, State of _____

My Commission Expires: _____

1121-2004-1516/96897

PROPOSED RESIDENT / APPRENTICE UTILIZATION FORM

This is a preliminary statement of proposed workforce needs where known.

Official Notice # _____ Project # _____ Contract # _____

Contractor _____

JOB CATEGORY	PROPOSED # OF HOURS ON THIS PROJECT	PROPOSED # OF HOURS FOR SPECIAL IMPACT AREA RESIDENTS	PROPOSED # OF HOURS FOR ALL OTHER WORKERS
TRUCK DRIVERS:		(%)	(%)
OPERATING ENGINEERS:			
JOURNEYMEN		(%)	(%)
APPRENTICES		(%)	(%)
SKILLED TRADES: (Specify)			
JOURNEYMEN		(%)	(%)
APPRENTICES		(%)	(%)
TRAINEES		(%)	(%)
LABORERS: (Specify type)			
		(%)	(%)
		(%)	(%)
		(%)	(%)
		(%)	(%)
		(%)	(%)

NAME and ADDRESS of Target Area Residents: _____

NAME and ADDRESS of Apprentices: _____

City of Milwaukee
Department of Public Works
Apprenticeship Provisions

I. General:

- A. In accordance with Section 309-38 of the Milwaukee Code of Ordinances, apprenticeship requirements will be specified on all Department of Public Works construction contracts, where appropriate, which are in excess of \$100,000. The ordinance requires that a contractor employ apprentices in the performance of the contract and of all subcontracts entered into by the contractor in accordance with the maximum ratio of apprentices to journeymen as established by the Wisconsin Department of Industry, Labor, and Human Relations. Fair consideration must be given to minorities and women. For this contract, bidders are required to utilize apprentice(s) from N/A of the following trade(s):

(See "Ratio of Apprentices to Journeymen".)

- B. The contractor shall prepare and submit an accurate and timely Apprenticeship Utilization Form (Form F) and other reports to the Department of Public Works. The Apprenticeship Utilization Form shall be returned with the executed contract and shall specifically identify the apprentice(s) that will work on the project. The Contractor Time Report shall be submitted within ten (10) days following completion of work or every three (3) months, whichever comes first. Failure to submit the required forms and reports to the Department of Public Works may result in disqualification of future bids, delay of payments, or other appropriate sanctions. Final contract payments will not be made until all apprenticeship related reports are on file with the Department of Public Works.
- C. During the performance of this contract the Department of Public Works reserves the right to conduct compliance reviews. If the contractor is not in compliance with the specifications, the Commissioner of Public Works will notify the contractor in writing of the corrective action that will bring the contractor into compliance. If the contractor fails or refuses to take corrective action as directed, or if the contractor, prime or sub, submits any documents which contain any false, misleading, or fraudulent information, or if the contractor or subcontractor fail to comply with this ordinance, the Department of Public Works may take one or more of the actions listed below:
1. Withhold payments on the contract.
 2. Terminate, suspend, or cancel the contract, in whole or in part.
 3. After due process, consider debarment of the contractor from bidding for a two-year period.
 4. Any other remedy available to the City at law or in equity.

II. Definitions:

- A. Apprentice - a person, 16 years of age or over, who shall enter into a written contract of service where he or she is to receive from or through his or her employer in consideration for his or her services, in whole or in part, instruction in any trade, craft, or business. Apprenticeship agreements shall be governed by Ch. 106, Wis. Stats.

- B. Construction - Means either new construction work or repair work on any roads, bridges, sewers, streets, alleys, buildings, or any other public works.

III. Apprenticeship Utilization Requirements:

- A. The contractor shall utilize apprentices in a minimum amount equal to that stated in paragraph I-A above.
- B. The contractor, by signing and submitting a bid, certifies that the contractor understands the provisions of Chapter 309 and knows of and intends to comply with them.
- C. The contractor shall maintain personnel records listing the names and addresses of its employees utilized for this contract in meeting apprenticeship requirements. These records shall be maintained for three (3) years after the contractor has received final payment under the contract and shall be made available to the Commissioner of Public Works upon reasonable notice.
- D. Compliance with these apprenticeship requirements is an element of bid responsiveness. Failure to meet the specified apprenticeship requirements will render the bid unresponsive, and the Commissioner of Public Works may then recommend award to the next apparent low bidder.
- E. If the prime contractor has problems in meeting the apprenticeship requirements or if any other problems relative to apprenticeship participation arise during the completion of this project, the prime contractor shall immediately contact the Commissioner of Public Works.

NOTICE TO CONTRACTORS

PLEASE NOTE: Effective December 28, 2005, the City of Milwaukee adopted an ordinance relative to the disclosure of participation in or profits derived from slavery by contractors. All contractors awarded a contract on behalf of the City of Milwaukee, whether or not subject to a competitive bid, shall complete an affidavit prior to entering into the contract verifying that the contractor has searched any and all records of the company or any predecessor company regarding records of investments or profits from slavery or slaveholder insurance policies during the slavery era. The names of any enslaved persons or slaveholders described in those records must be disclosed in the affidavit.

The City shall make the information contained in the affidavit available to the public. Any contract between the City and a contractor which fails to provide the requisite affidavit or which includes material false information on such affidavit shall be rendered null and void. To reference Milwaukee Code of Ordinances 310-14, please see:

<http://cctv25.milwaukee.gov/code/volume3/ch310.pdf>

CITY OF MILWAUKEE - DEPARTMENT OF PUBLIC WORKS
AFFIDAVIT OF COMPLIANCE
DISCLOSURE OF PARTICIPATION IN OR PROFITS DERIVED
FROM SLAVERY BY CONTRACTORS

COMPANY NAME:

ADDRESS:

CITY/STATE/ZIP:

This affidavit of compliance will be the contractor's sworn statement that publicly discloses any slavery policies sold by any companies, or profits from slavery by industries or their predecessors who are doing business with the City of Milwaukee as defined in the Milwaukee Code of Ordinances 310-14.

Please check one:

_____ This business **was not** in existence prior to 1865.

_____ This business **was** in existence prior to 1865. I have searched any and all records for records of investments or profits from slavery and have found no such records.

_____ This business **was** in existence prior to 1865. I have searched any and all records for records of investments or profits from slavery and am disclosing the findings on the attached pages.

I hereby declare that all statements are true, accurate and complete as of the date furnished to the City of Milwaukee.

AUTHORIZED SIGNATURE: _____

PRINTED NAME: _____

Subscribed to before me this _____ day of _____, 20__

NOTARY PUBLIC _____ County, _____ State _____

SIGNATURE: _____

PRINT NAME: _____

(Seal)

My commission expires: _____

Ref: slaverydisclosureaffidavit

MINIMUM WAGE SCALE

RESOLVED, By the Common Council of the City of Milwaukee, that building and construction trades workers in the construction industry employed upon public work projects done by contract for the City of Milwaukee, either new construction or repair work, upon any roads, bridges, sewers, streets, alleys, buildings, or any other public work, shall be paid no less than the hourly wage rates and fringe benefits which prevail in the Milwaukee metropolitan area for the same type of work or for closely related work. (FILE NUMBER 68-1317)

Prevailing hours of labor for all classes of laborers and mechanics means no more than ten (10) hours per day nor more than forty (40) hours per week and may not include any hours worked on a Saturday, Sunday, or one of six holidays. ALL work performed in excess of these prevailing hours must be paid at a rate of at least 1-1/2 times the hourly basis rate of pay (plus fringe benefits). *Fringe Benefits must be paid on ALL hours worked for ALL job classifications.*

If a contractor or subcontractor anticipates employing a person or persons in classifications, trades, or occupations that are not set forth in the Minimum Wage Scale, then that contractor or subcontractor is required to apply to the Commissioner of Public Works PRIOR to the bid opening date set forth in the official notice for the project for a special wage determination containing the classification(s) and associated wage and benefit rate(s). Special wage determinations requested after the bid opening date MAY be issued at the discretion of the Commissioner of Public Works' Office if it is satisfied that a special classification is used as a prevailing practice in the City of Milwaukee.

The Prime Contractor must provide each subcontractor with a copy of the Minimum Wage Scale with the appropriate classifications and rates for the type of work to be performed. The Minimum Wage Scale, including this cover sheet, must be physically included in the subcontract agreement between the prime and subcontractor.

Bidders are required to utilize the Wisconsin Department of Workforce Development's "Dictionary of Occupational Classifications and Work Descriptions" to determine the appropriate job classifications/wage rates for their employees prior to bidding and to insure employees are paid for those job duties they actually perform. This document can be found on their website at dwd.wisconsin.gov; type "dictionary" in the search box. All disputes and/or controversies regarding the proper classification of any laborer, worker, or mechanic employed on a City project will be referred to the State of Wisconsin Department of Workforce Development for final resolution and disposition.

ss. 66.0903(8), Wis. Stats.

Any contractor, subcontractor, or agent thereof, who fails to pay the prevailing rate of wages determined by the department under this subsection or pays less than 1-1/2 times the hourly basic rate of pay for all hours worked on the project in excess of prevailing hours of labor determined under this subsection, shall be liable to the employees affected in the amount of their unpaid minimum wages or their unpaid overtime compensation and an additional amount as liquidated damages.

Each contractor, subcontractor, or agent thereof participating in a project covered by this subsection shall keep full and accurate records clearly indicating the name and trade or occupation of every laborer, workman, or mechanic employed by him in connection with the project and an accurate record of the number of hours worked by each employee and actual wages paid therefor.

8/19/10

JOB CLASSIFICATION	HOURLY RATE	WELFARE PER HOUR	VACATION PER HOUR	PENSION PER HOUR	OTHER SPECIFIC BENEFITS	TOTAL FRINGES	TOTAL WAGE
ACOUSTIC CEILING TILE INSTALLER	34.60					15.48	50.08
ASBESTOS ABATEMENT WORKER	24.50	7.55	1.72			15.80	40.30
BITUMINOUS, DUMPER, IRONER, SMOOTHER & TAMPER(Paving)	21.62	7.55	1.72	6.05	.48 A,I,S,E,T	15.65	37.27
Effective 6/7/10:	21.86	7.65	1.85	6.05	.33 A,T	16.88	38.74
BITUMINOUS LUTEMAN, RAKER (Paving)	21.97	7.55	1.72	6.05	.33 A,T	15.65	37.62
Effective 6/7/10:	22.21	7.65	1.85	7.05	.33 A,T	16.88	39.09
BITUMINOUS SHOVELER, LOADER, UTILITY MAN (Paving)	21.62	7.55	1.72	6.05	.33 A,T	15.65	37.27
Effective 6/7/10:	21.86	7.65	1.85	7.05	.33 A.T.	16.88	38.74
BLASTER (Laborer-Sewer, Water, Tunnel)	30.61					13.91	44.52
Effective 6/7/10:	29.63	7.65	1.85	7.05	.43	16.98	46.61
Increase to \$47.79 on 6/6/11; \$49.52 on 6/4/12							
BLOCKLAYER - Buildings, Paving (see Cement/Concrete Blocklayer)							
BLOCKLAYER-Sewer,Water,Tunnel (see Cement/Concrete Blocklayer)							
BOILERMAKER	30.04	7.07	1.05	8.85	1.90 A,T; 4.00Annuity	22.87	52.91
BOILERMAKER FOREMAN	32.54	7.07	1.05	8.85	1.90 A,T; 4.00Annuity	22.87	55.41
BOILERMAKER GENERAL FOREMAN	34.54	7.07	1.05	8.85	1.90 A,T; 4.00Annuity	22.87	57.41
BOTTOM DIGGER,MISC.BOTTOM MAN	26.27	7.55	1.72	6.05	.43 A,I	15.75	42.02
Effective 6/7/10:	26.72	7.65	1.85	7.05	.43 A,I	16.98	43.70
Increase to \$45.09 on 6/6/11; \$46.82 on 6/11/12							
BRACER (Laborer-Sewer,Water,Tunnel)	30.13					13.91	44.04
Effective 6/7/10:	29.11	7.65	1.85	7.05	.43	16.98	46.09
Increase to \$47.31 on 6/6/11; \$49.04 on 6/4/12							
BRACER (Laborer-Sewer,Water,Tunnel)-Compressed Air	30.23	7.65	1.85	7.05	.43	16.98	47.21
BRICKLAYER (Buildings, Tunnel)	32.26	7.50	none	6.24	3.94 A,I	17.68	49.94
Effective 6/7/10:	33.15	7.50	none	6.24	4.00 A,I	18.74	51.89
6/1/11 Increase rate to \$53.40							
BRICKLAYER (Paving)	14.00					0.00	14.00
BRICKLAYER (Sewer,Water)	31.43					13.76	45.19
BRICKLAYER FOREMAN	35.72	7.50	none	6.24	3.94 A,I	17.68	53.40
Effective 6/7/10:	36.70	7.50	none	6.24	4.00 A,I	18.74	55.44
BRICKLAYER SUBFOREMAN	33.99	7.50	none	6.24	3.94 A,I	17.68	51.67
Effective 6/7/10:	34.93	7.50	none	6.24	4.00 A,I	18.74	53.67
CABINET INSTALLER	32.64					13.65	46.29
CARPENTER (Buildings)	29.32	9.56	2.06	8.26	1.09 A,I,T	20.97	50.29
CARPENTER (Paving)	27.51					13.46	40.90
CARPENTER (Sewer, Water, Tunnel)	31.38					16.11	47.49
Add \$2.60 on 5/31/10 = \$50.09; \$2.65 on 6/6/11 = \$52.74							
CARPENTER FOREMAN	32.46	9.56	2.06	8.26	1.09 A,I,T	20.97	53.43
CARPENTER SUBFOREMAN	30.89	9.56	2.06	8.26	1.09 A,I,T	20.97	51.86
CARPET LAYER,SOFT FLOOR COVERER	29.32	9.56	2.06	8.26	1.09 A,I,T	20.97	50.29
CAULKER, Cleaner, Tuckpointer (Buildings)	31.99	7.50	none	6.24	2.84 A	16.58	48.57
Effective 6/7/10:	32.73	7.50	none	7.24	3.05A	17.79	50.52
Increase to \$51.72 on 6/6/11							
CAULKER, Cleaner, Tuckpointer (Paving)	31.48					14.39	45.87
CAULKER, Cleaner, Tuckpointer(Sewer,Water)	25.00					11.75	36.75
CAULKER, Cleaner, Tuckpointer (Shaft, Tunnel)	31.99	7.50	none	6.24	2.84A	16.58	48.57
CAULKER, Cleaner, Tuckpointer FOREMAN	32.74	7.50	none	6.24	2.84 A	16.58	49.32
Effective 6/7/10:	33.48	7.50	none	7.24	3.05A	17.79	51.27
Add \$.75 for Swing Stage-Buildings,Shaft, Tunnel & Foreman							
CEMENT OR CONC.BLOCK LAYER (Buildings)	34.58					14.92	49.50
Add \$1.95 on 6/7/10= \$51.45; \$1.95 on 6/6/11 = \$53.40							
CEMENT OR CONC.BLOCK LAYER (Paving)	14.00					0.00	14.00
CEMENT OR CONC.BLOCK LAYER (Sewer,Water,Tunnel)	31.43					13.76	45.19
CEMENT OR CONC. BLOCK LAYER FOREMAN (Bldgs.;Shaft/Tunnel)	30.56	4.00		3.50	.61 A,I	8.11	38.67
CEMENT OR CONC. BLOCK LAYER FOREMAN (SWING STAGE)	31.31	4.00		3.50	.61 A,I	8.11	39.42
CEMENT MASON (FINISHER) (Buildings)	28.56	7.65	2.31	8.48	.37 A,I	18.81	47.37
CEMENT MASON (Highway)	25.86	7.65	2.31	8.48	.20 A	18.64	44.50
CEMENT MASON (Sewer,Water, Tunnel)	28.82					13.98	42.80
CEMENT MASON FOREMAN (Buildings)	31.65	7.65	2.31	8.48	.37 A,I	18.81	50.46
CEMENT MASON FOREMAN (Highway)	27.11	7.65	2.31	8.48	.20 A	18.64	45.75
CEMENT MASON FOREMAN (Sewer)	28.19	4.35		3.50	.30 A,I	8.15	36.34
CEMENT MASON FOREMAN (Tunnel)	28.96	4.45		3.90	.30 A,I	8.65	37.61
CONCRETE MANHOLE BUILDER (See Manhole Builder)							
DRYWALL TAPER OR FINISHER	28.17	8.40	none	6.45	.59 A,I	15.44	43.61
Add \$2.00 on 6/1/10=\$45.56; \$2.10 on 6/1/11=\$47.66; \$2.20 ON 6/1/12 = \$49.86							
ELECTRICAL LINE CONSTRUCTION ONLY:							
Line Constructor (also under Line Constructor) - (Buildings)	35.26					15.59	50.85
Line Constructor (also under Line Constructor)-(Paving,Sewer,Water,Tunnel)	34.57					14.78	49.35
Heavy Equipment Operator (Buildings,Sewer,Water,Tunnel)	34.57					9.97	44.54
Heavy Equipment Operator (Paving)	31.11					13.78	44.89
Light Equipment Operator (Buildings,Paving, Sewer, Water, Tunnel)	35.87					14.61	50.48
Heavy Truck Driver (Buildings, Sewer, Water, Tunnel)	16.50					8.50	25.00
Heavy Truck Driver (Paving)	27.66					10.70	38.36
Light Truck Driver (Buildings, Paving, Sewer, Tunnel, Water)	22.47					0.00	22.47
Groundman (Buildings, Sewer, Water, Tunnel)	25.00					15.39	40.39
Groundman (Paving)	27.66					11.75	39.41

8/19/10

JOB CLASSIFICATION	HOURLY RATE	WELFARE PER HOUR	VACATION PER HOUR	PENSION PER HOUR	OTHER SPECIFIC BENEFITS	TOTAL FRINGES	TOTAL WAGE
ELECTRICIAN (Buildings)	31.10	8.70	3.11	5.53	.96 A,I; 2.40Annuity	20.70	51.80
ELECTRICIAN(Paving)	31.64					23.21	54.85
ELECTRICIAN (Sewer,Water,Tunnel)	29.50					17.26	46.76
ELECTRICIAN FOREMAN	34.21	8.70	3.42	5.63	1.05 A,I;2.40Annuity	21.20	55.41
ELECTRICIAN GENERAL FOREMAN	35.77	8.70	3.58	5.67	1.08 A,I;2.40Annuity	21.43	57.20
ELEVATOR CONSTRUCTOR/MECHANIC	40.46	10.025	3.24	5.96	2.10 E,H,W;3.50 Annuity	24.725	65.185
FENCE ERECTOR (Buildings, Sewer, Water, Tunnel)	22.50					3.00	25.50
FENCE, GUARD RAIL, BRIDGE BUILDER (Paving)	21.62	7.55	1.72	6.05	.33 A,E,T	15.65	37.27
Effective 6/7/10:	21.86	7.00					
FIBER OPTIC LABORER (Outside,other than Concrete Encased)							
(Buildings, Paving, Sewer, Water, Tunnel)	21.49	7.65	1.85	7.05	.33 A,E,T	16.88	38.74
FIRE SPRINKLER FITTER - see SPRINKLER FITTER							
FLAGPERSON, TRAFFIC CONTROL (Paving)	18.11	7.55	1.72	6.05	.33 A,E,T	15.65	33.76
Effective 6/7/10:	18.35	7.65	1.85	7.05	.33 A,E,T	16.88	35.23
FLAGPERSON, TRAFFIC CONTROL (Sewer,Water,Tunnel)	16.71	7.55	1.72	6.05	.43 A,E,I	15.75	32.46
Effective 6/7/10:	16.77	7.65	1.85	7.05	.43 A,E,I	16.98	33.75
FLOOR COVERER, Soft	29.32	9.56	2.06	8.26	1.09 A,I,T	20.97	50.29
FLOOR COVERER FOREMAN (Buildings, Tunnel)	32.46	9.56	2.06	8.26	1.09 A,I,T	20.97	53.43
FLOOR COVERER SUBFOREMAN	30.89	9.56	2.06	8.26	1.09 A,I,T	20.97	51.86
FORKLIFT-AIR, ELECTRIC EQUIPMENT & POWER BUGGY OPERATOR-LABORER (also see under Laborer-Fork Lift Operator)	26.33					13.91	40.24
GAS OR UTILITY PIPELINE LABORER (other than Sewer & Water)	18.84					13.83	32.67
GLAZIER	32.25	8.25	none	6.99	.70 A	15.94	48.19
Increase to \$50.29 on 6/1/11; \$52.44 on 6/1/12							
GUNITE MACHINEMAN (Laborer-Buildings)	26.44					13.91	40.35
INSULATOR (BATT & BLOWN)	19.37					15.43	34.80
INSULATOR (HEAT & FROST)(can also be used for ASBESTOS WORKER)	33.28	7.45	none	8.07	.74 A,E,I; 6.25 Annuity	22.51	55.79
INSULATOR FOREMAN (HEAT & FROST)(5 man crew incl. Foreman)	35.78	7.45	none	8.07	.74 A,E,I; 6.25Annuity	22.51	58.29
IRONWORKER-Buildings	31.31	8.87	none	8.07	.81 A,I; 4.25Annuity	22.00	53.31
IRONWORKER-Paving,Sewer, Water, Tunnel	30.51					20.59	51.10
Add \$2.00 on 6/9/10 = \$53.10; \$2.00 on 6/6/11= \$55.10							
IRONWORKER FOREMAN	33.31	8.87	none	8.07	.81 A,I;4.25Annuity	22.00	55.31
IRONWORKER GENERAL FOREMAN	33.81	8.87	none	8.07	.81 A,I;4.25Annuity	22.00	55.81
JACKHAMMER OPERATOR (Laborer-Buildings)	26.44					13.91	40.35
Effective 6/7/10:	25.54	7.65	1.85	7.05	.51	17.06	42.60
JOINTMAN (Laborer-Sewer,Water)	30.13					13.91	44.04
Effective 6/7/10:	29.11	7.65	1.85	7.05	.43	16.98	46.09
Increase to \$47.31 on 6/6/11; \$49.04 on 6/4/12							
JOINTMAN (Laborer-Sewer,Water)-Compressed Air	30.23	7.65	1.85	7.05	.43	16.98	47.21
LABORER- Fork Lift Operator, Air & Electrical Equipment, Power Buggy Operators (also listed under Fork Lift Operator-Laborer)	26.33					13.91	40.24
LABORER-GENERAL (Buildings)	24.50	7.55	1.72	6.05	.48 A,I,S,E,T	15.80	40.30
Effective 6/7/10:	25.32	7.65	1.85	7.05	.51	17.06	42.38
Increase to \$44.43 on 6/1/11							
LABORER-Paving	23.26					14.16	37.42
Effective 6/7/10:	21.86	7.65	1.85	7.05	.33	16.88	38.74
LABORER -Sewer,Water,Tunnel	24.43	7.55	1.72	6.05	.43 A,I,S,E,T	15.75	40.18
Effective 6/7/10:	24.80	7.65	1.85	7.05	.43	16.98	41.78
Increase to \$43.35 on 6/6/11; \$45.08 on 6/4/12							
Add \$2.00 all tunnel work under 15 lbs. compressed air; \$2.00 for 0-30 lbs. compressed air							
Add \$3.00 over 30 lbs. compressed air							
LABORER FOREMAN (Buildings)	25.87	7.55	1.72	6.05	.48 A, E, I	15.80	41.67
Effective 6/7/10:	26.68	7.55	1.85	7.05	.51	17.06	43.74
LANDSCAPER-Buildings	13.40					15.33	28.73
LANDSCAPER - Paving	21.62	7.55	1.72	6.05	.33 A,E,T	15.65	37.27
Effective 6/7/10:	21.86	7.65	1.85	7.05	.33 A,E,T	16.88	38.74
LANDSCAPER-Sewer,Water	13.40					15.33	28.73
Effective 6/7/10:	13.79	7.65	1.85	7.05	.43	16.98	30.77
LATHER	31.38					15.83	47.21
LINE CONSTRUCTOR(ELECTRICAL)(Building)	35.26					15.59	50.85
LINE CONSTRUCTOR(ELECTRICAL)(Paving,Sewer,Water,Tunnel)	34.57					14.78	49.35
ALSO SEE Electrical Line Construction							
MANHOLE BUILDER, Concrete	28.57	7.55	1.72	6.05	.43 A,I	15.75	44.32
Effective 6/7/10:	29.11	7.65	1.85	7.05	.43 A,I	16.98	46.09
Increase to \$47.31 on 6/11/11; \$49.04 on 6/4/12							
MARBLE FINISHER	25.54	7.50	none	6.24	3.40	17.14	42.68
Effective 6/7/10:	26.25	7.50	none	7.24	3.45	18.19	44.44
Increase to \$46.14 on 6/1/11							
MARBLE MASON	32.26	7.50	none	6.24	3.60	17.34	49.60
Effective 6/7/10:	33.15	7.50	none	7.24	3.66	18.40	51.55
MARBLE MASON FOREMAN	35.72	7.50	none	6.24	3.60	17.34	53.06
Effective 6/7/10:	36.70	7.50	none	7.24	3.66	18.40	55.10
METAL BUILDING ERECTOR	15.50					6.21	21.71
MILLWRIGHT	26.70	9.56	1.60	7.18	6.48 A,I,M,T	24.82	51.52
MILLWRIGHT FOREMAN	29.20	9.56	1.60	7.18	6.48 A,I,M,T	24.82	54.02
MILLWRIGHT GENERAL FOREMAN	29.70	9.56	1.60	7.18	6.48A,I,M,T	24.82	54.52

JOB CLASSIFICATION	HOURLY RATE	WELFARE PER HOUR	VACATION PER HOUR	PENSION PER HOUR	OTHER SPECIFIC BENEFITS	TOTAL FRINGES	TOTAL WAGE
MORTAR MIXER - Buildings	24.61	7.55	1.72	6.05	.48 I,S,E	15.80	40.41
Effective 6/7/10:	25.43	7.65	1.85	7.05	.51 I,S,E	17.60	42.49
OPERATORS-BUILDING CONSTRUCTION							
SITE PREPARATION, UTILITY & LANDSCAPING WORK ONLY							
Crane, Backhoe 130,000 lbs. & over; Boring Machine	33.07	9.15	none	6.75	1.25	17.15	50.22
Tractor or Truck Mounted Hydraulic Backhoe; Gradall (Cruz-Aire type); Mechanic or Welder; Bulldozer or Endloader; Grader or Motor Patrol; Scraper(Self propelled or Tractor Drawn) 5 cu yards or more capacity; Power Subgrader; Asphalt Milling Machine; Boring Machine (Horizontal, Vertical or Directional); Air Track, Rotary or Percussion Drilling Machine; Trencher, Post Hole Digger or Driver; Compactor; Tug or Launch (Not Performing Work on the Great Lakes).	32.32	9.15	none	6.75	1.25	17.15	49.47
	Add \$1.85 on 6/1/11 = \$50.92						
Cranes over 300 ton OR 300 ft:	Add \$.01/hour per foot OR ton, whichever is greater						
Broom or Sweeper; Environmental Burner, Farm or Industrial Type Tractor, Greaser, Compactor (Self Propelled)	32.02	9.15	none	6.75	1.25	17.15	49.17
	Add \$1.85 on 6/1/11 = \$50.92						
Crusher, Screening or Wash Plant; Air Compressor (400 CFM or Over); Pump (3 inch or over) or Well Points; Refrigeration Plant or Freeze Machine; Skid Steer Loader (with or without attachments); Skid Rig; Stump Chipper; Mulcher; Vibratory Hammer or Extractor	31.32					16.05	47.37
	Add \$1.70 on 6/1/10 = \$49.07; \$1.85 on 6/1/11 = \$50.92						
Work performed on the Great Lakes including Diver; Wet Tender or Hydraulic Dredge Engineer	34.76					16.75	51.51
Work performed on the Great Lakes including Crane or Backhoe Operator; Mechanic or Welder; Assistant Hydraulic Dredge Engineer; Hydraulic Dredge Leverman or Diver's Tender	36.20					18.81	55.01
	Add \$.50/hour for Friction Crane, Lattice Boom or Crane Certification (CCO)						
work performed on the Great Lakes including Deck Equipment Operator or Machineryman (maintains Cranes over 50 tons or Backhoes over 115,000 lbs.); Tug, Launch or Loader, Dozer or like equipment when operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery	32.20					18.69	50.89
	Add \$1.95 on 1/1/11 = \$52.84						
Work performed on the Great Lakes including Deck Equipment Operator; Machineryman or Fireman (operates 4 units or more or maintains Cranes 50 tons or under or Backhoes 115,000 lbs. Or under), Deck Hand, Deck Engineer or Assistant Tug Operator	30.20					17.08	47.28
OPERATORS-BUILDING CONSTRUCTION							
EXCLUDING SITE PREPARATION, UTILITY, PAVING & LANDSCAPING WORK							
Crane, Tower Crane or Derrick, with or without attachments, with a lifting capacity of over 100 tons; Crane, Tower Crane or Derrick, with Boom, Leads and/or Jib lengths measuring 176 feet or over	38.06	9.15	none	8.10	1.02 A,I,L,S	18.27	56.33
	There will be a wage increase of the higher of \$.50 per 100 ton or per 100 feet of boom (or any portion thereof) for the length of the boom over 200 feet or lifting capacity of the crane over 200 tons to a maximum of 300 tons or 300 feet. Increase to \$58.26 on 6/1/11						
Crane Operators with CCO certification	38.56	9.15	none	8.10	1.02 A,I,L,S	18.27	56.83
	Increase to \$58.76 on 6/1/11						
Cranes with boom length over 200 ft. not exceeding 300 ft. OR lifting capacity over 200 ton not exceeding 300 ton	39.06	9.15	none	8.10	1.02 A,I,L,S	18.27	57.33
	Increase to \$58.76 on 6/1/11						
Cranes over 300 ton OR 300 ft.	Add \$.01/hour per foot OR ton, whichever is greater						
Crane, Tower Crane or Derrick, with or without attachments, with a lifting capacity of 100 tons or under; Crane, Tower Crane or Derrick, with Boom, Leads and/or Jib lengths measuring 175 or under; Backhoe (Track Type) having a Mfr.'s rated capacity of 130,000 lbs. or over, Caisson Rig; Pile Driver	37.56	9.15	none	8.10	1.02 A,I,L,S	18.27	55.83
	Increase to \$57.76 on 6/1/11						
Crane Operators with CCO certification	38.06	9.15	none	8.10	1.02 A,I,L,S	18.27	56.33
	Increase to \$58.26 on 6/1/11						

JOB CLASSIFICATION	HOURLY RATE	WELFARE PER HOUR	VACATION PER HOUR	PENSION PER HOUR	OTHER SPECIFIC BENEFITS	TOTAL FRINGES	TOTAL WAGE
OPERATORS-BUILDING CONSTRUCTION							
EXCLUDING SITE PREPARATION, UTILITY, PAVING & LANDSCAPING WORK							
CONTINUED							
Backhoes (excavators) under 130,000 lbs.; self-erecting tower cranes with a lifting capacity of 4,000 lbs and under; skid rigs; dredge operator; mechanic; concrete paver (over 27E); concrete spreader and distributor; forklift; hydro-blaster (10,000 psi and over); Traveling Crane (Bridge Type); Dredge(not performing work on the Great Lakes)	37.06	9.15	none	8.10	1.02 A,I,L,S	18.27	55.33
	Increase to \$57.26 on 6/1/11						
Crane Operators with CCO certification	37.56	9.15	none	8.10	1.02 A,I,L,S	18.27	55.83
	Increase to \$55.66 6/1/10; \$57.76 on 6/1/11						
Material hoists; stack hoists; tractor or truck mounted hydraulic backhoe; tractor or truck mounted hydraulic crane (5 tons or under); hoist (tuggers, 5 ton and over); hydro-excavators; daylighters; concrete pumps; Rotec type conveyors; tractor (over 40 H.p.); bulldozer; endloader, scraper operator; sideboom; straddle carrier; welder; bituminous plant and paver operator; roller (over 5 tons); rail leveling, machine (railroad); tie placer; tie extractor; tie tamper; stone leveler; rotary drill operator and blaster; percussion drill operator; air track drill and/or hammers; trencher (wheel type or chain type having over 8-inch bucket); milling machine, post hole digger, Concrete breaker, tamper, Gradall, Concrete Paver, Boring Machine	35.56					17.50	53.06
	Add \$2.10 on 6/1/10 = \$55.16; \$2.10 on 6/1/11 - \$57.26						
Cranes with boom length over 200 ft. not exceeding 300 ft OR lifting capacity over 200 tons not exceeding 300 tons							
	Add \$.50/hour						
Cranes over 300 ton OR 300 ft							
	Add \$.01/hr per foot OR ton, whichever is greater						
Backfiller; concrete auto breaker (large), concrete finishing machines(road type); roller(rubber-tired);concrete batch hopper; Concrete conveyor systems; grout pumps; concrete mixers (14S or over); screw type pumps and gypsum pumps; tractor; trencher (chain type having bucket 8-inch and under); industrial locomotives; rollers (under 5 tons); timber shear; processor; timber equipment; firemen (pile drivers and derricks); robotic tool carrier with or without attachments	35.56					17.50	53.06
	Add \$2.10 on 6/1/10 = \$55.16; \$2.10 on 6/1/11 = \$57.26						
Crane Operators with CCO certification							
	Add \$.50/hour						
Cranes with boom length over 200 ft. not exceeding 300 ft. OR lifting capacity over 200 tons not exceeding 300 tons							
	Add \$.50/hour						
Cranes over 300 ton or 300 ft.							
	Add \$.01/hr per foot OR ton, whichever is greater						
Farm or Industrial Type Tractor; Greaser, Compactor (Self-Propelled); Concrete Saw (Vermeer Type); Concrete Bump Cutter or Grooving Machine; Tining or Curing Machine; Roller (5 tons or under); Broom or Sweeper; Hoist (Tugger); Environmental Bumer; Crusher, Screening or Wash Plant; Air, Electric or Hydraulic Jacking System; Air Compressor (400 CFM or over); Generator (150KW or over); Pump (3 inch or over) or Well Points; refrigeration Plant or Freeze Machine; Skid Steer Loader (with or without attachments); Stump Chipper; Mulcher; Vibratory Hammer or Extractor; Robotic Tool Carrier (with or without attachments).	29.44	9.15	none	8.10	1.02 A,I,L,S	18.27	47.71
Oiler, Forklift	29.44	9.15	none	8.10	1.02 A,I,L,S	18.27	47.71
	Increase to \$49.54 on 6/1/11						
Gas or Utility Pipeline, except Sewer & Water (Primary Equipment)	32.71					18.53	51.24
Gas or Utility Pipeline, except Sewer & Water (Secondary Equipment)	29.06					18.40	45.46
	Add \$1.60 on 6/1/10 = \$47.06; \$1.60 on 6/1/11 = \$48.96						
Fiber Optic Cable Equipment	22.79					15.30	38.09
	Add \$1.75 on 2/1/10 = \$39.84; \$1.75 on 2/1/11 = \$41.59						

JOB CLASSIFICATION	HOURLY RATE	WELFARE PER HOUR	VACATION PER HOUR	PENSION PER HOUR	OTHER SPECIFIC BENEFITS	TOTAL FRINGES	TOTAL WAGE
OPERATORS -SEWER,WATER,SHAFT & TUNNEL							
Crane, Tower Crane or Derrick, with or without attachments, with a lifting capacity of over 100 tons; Crane, Tower Crane or Derrick, with Boom, Leads and/or Jib lengths measuring 176 feet or over; Backhoe (Track Type) 130,000 or over	33.59	9.15	none	7.75	1.09 A,I,L,S	17.99	51.58
	Increase to \$53.24 6/6/11; \$55.29 on 6/4/12 Add \$.25/hour for operating Tower Crane						
Crane, Tower Crane or Derrick, with or without attachments, with a lifting capacity of 100 tons or under; Crane, Tower Crane or Derrick, with Boom, Leads and/or Jib lengths measuring 175 feet or under; Backhoe (Track type) having a Mfr.'s rated capacity of under 130,000 lbs. or over; Traveling Crane (Bridge type); Caisson Rig; Pile Driver; Dredge operator (not performing work on the Great Lakes); Skid Rlgs, Concrete Paver Concrete Spreader, Concrete Pumps, Concrete Conveyor (Rotec), Boring Machines	32.81	9.15	none	7.70	1.09 A,I,L,S	17.99	50.88
	Increase to \$53.24 on 6/6/11; \$55.29 on 6/4/12 Add \$.25/hour for operating Tower Crane						
Truck Mounted Hydraulic Crane (10 tons or under); Tractor or Truck Mounted Hydraulic Backhoe; Gradall (Cruz-Aire Type); Mechanic or Welder; Bulldozer or Endloader; Grader or Motor Patrol; Grout Pump, or Concrete Conveyor (Bidwell type); Concrete Breaker (Manual or Remote); Concrete Batch Plant; Power Subgrader; Concrete Paver; Concrete Grinder or Planing Machine; Concrete Conveyor System; Concrete Slipform Placer, Curb and Gutter Machine; Roller (over 5 ton); Shouldering Machine; Air Track, Rotary or Percussion Drilling Machine; Straddle Carrier or Travel Lift; Manhoist or Elevator; Material or Stack Hoist; Trencher; Sideboom; Post Hole Digger or Driver; Tug or Launch (not performing work on the Great Lakes)	31.86	9.15	none	7.75	1.09 A,I,L,S	17.99	49.85
	Increase to \$51.51 on 6/6/11; \$53.56 on 6/4/12 Add \$.25/hour for operating Tower Crane						
Farm or Industrial Type Tractor; Greaser; Compactor (self-propelled); Concrete Saw (Vermeer type); Concrete Bump Cutter or Grooving Machine; Tining or Curing Machine; Roller (5 ton or under); Broom or Sweeper; Hoist (Tugger); Environmental Burner	30.86					17.05	47.91
	Add \$1.70 on 6/1/10 = \$49.61; \$1.90 on 6/6/11 = \$51.51; \$2.05 on 6/4/12 = \$53.56 Add \$.25/hour for operating Tower Crane						
Crusher, Screening or Wash Plant; Air, Electric or Hydraulic Jacking System; Air Compressor (400 CFM or over); Generator (150kw or over); Pump (3 inch or over) or Well Points; Refrigeration Plant or Freeze Machine; Skid Steer Loader (with or without attachments); Robotic Tool Carrier (with or without attachments); Stump Chipper; Mulcher; Vibratory Hammer or Extractor; Oiler; Forklift, High Pressure Utility Locating Machine(daylighting machine)	30.86					17.05	47.91
	Add \$1.70 on 6/1/10 = \$49.61; \$1.90 on 6/6/11 = \$51.51; \$2.05 on 6/4/12 = \$53.56						
Oiler, Forklift	29.97					16.60	46.57
Work performed on the Great Lakes including Diver; Wet Tender or Hydraulic Dredge Engineer	37.70	9.00	none	7.65	1.05	17.70	55.40
Work performed on the Great Lakes including Crane or Backhoe Operator; Mechanic or Welder; Assistant Hydraulic Dredge Engineer; Hydraulic Dredge Leverman or Diver's Tender	36.20	9.00	none	7.65	1.05	17.70	53.90
Work performed on the Great Lakes including Deck Equipment Operator or Machineryman (maintains Cranes over 50 tons or Backhoes over 115,000 lbs); Tug, Launch or Loader, Dozer or like equipment when operated on a Barge, Breakwater Wall, Slip, Dock or Scow	32.20	9.00	none	7.65	1.05	17.70	49.90
Work performed on the Great Lakes including Deck Equipment Operator; Machineryman or Fireman (operates 4 units or more or maintains Cranes 50 tons or under or Backhoes 115,000 lbs. or under), Deck Hand, Deck Engineer, or Assistant Tug Operator	30.20					17.08	47.28

JOB CLASSIFICATION	HOURLY RATE	WELFARE PER HOUR	VACATION PER HOUR	PENSION PER HOUR	OTHER SPECIFIC BENEFITS	TOTAL FRINGES	TOTAL WAGE
OPERATORS - LOCAL STREET OR MISCELLANEOUS PAVING CONCRETE PAVEMENT OR BRIDGE WORK ONLY							
Crane, Tower Crane or Derrick, with or without attachments, with a lifting capacity of over 100 tons; Crane, Tower Crane or Derrick, with Boom, Leads and/or Jib Lengths measuring 176 feet or over	33.07	9.15	none	8.10	.93 A,L	18.18	51.25
	Increase to \$53.12 on 6/1/11; \$5.12 on 6/1/12; \$57.12 on 6/1/13 Premium Pay: For State Highway Construction type project, add \$1.50/hour for work on projects involving temporary traffic control setup, for lane & shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).						
Crane, Tower Crane or Derrick, with or without attachments, with a lifting capacity of 100 tons or under; Crane, Tower Crane or Derrick, with Boom, Leads and/or Jib lengths measuring 175 feet or under; Backhoe (Track type) having a Mfr. rated capacity of 130,000 lbs. or over; Caisson Rig; Pile Driver; Dredge (not performing work on the Great Lakes)	32.57	9.15	none	8.10	.93 A,L	18.18	50.75
	Increase to \$52.62 on 6/1/11; Increase to \$54.62 on 6/1/12; \$56.62 on 6/1/13 Premium Pay: For State Highway Construction type project, add \$1.50/hour for work on projects involving temporary traffic control setup, for lane & shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).						
Backhoe (Track Type) having a Mfr.'s rated capacity of under 130,000 lbs.; Tractor or Truck Mounted Hydraulic Backhoe; Gradall (Cruz-Aire Type); Mechanic or Welder; Bulldozer or Endloader; Grader or Motor Patrol; Scraper (Self propelled or Tractor Drawn) 5 cu yards or more capacity; Concrete Pump, Grout Pump or Concrete Conveyor (Rotec or Bidwell Type); Concrete Breaker (Manual or Remote); Concrete Batch Plant; Power Subgrader; Concrete Paver; Concrete Grinder or Planing Machine; Concrete Conveyor System; Concrete Slipform Placer Curb and Gutter Machine; Air Track, Rotary or Percussion Drilling Machine; Straddle Carrier or Travel Lift; Trencher; Post Hole Digger or Driver; Tug or Launch (not performing work on the Great Lakes); Concrete Bump Cutter or Grooving Machine	32.07	9.15	none	8.10	.93 A,L	18.18	50.25
Farm or Industrial Type Tractor; Greaser; Compactor (Self-Propelled); Concrete Saw (Vermeer Type); Tining or Curing Machine; Environmental Burner, Mulcher, Concrete Spreader	31.81	9.15	none	8.10	.93 A,L	18.18	49.99
Crusher, Screening or Wash Plant; Air Compressor; Generator; Pump (3 inch or over) or Well Points; Forklift; Skid Steer Loader (with or without attachments); Skid Rig; Stump Chipper; Vibratory Hammer or Extractor; Oiler	31.52	9.15	none	8.10	.93 A,L	18.18	49.70
	Increase to \$51.57 on 6/1/11; \$53.57 on 6/1/12; \$55.57 on 6/1/13 Premium Pay: For State Highway Construction type project, add \$1.50/hour for work on projects involving temporary traffic control setup, for lane & shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).						
Fiber Optic Cable Equipment	22.79					15.30	38.09
Work performed on the Great Lakes including Diver, Wet Tender, or Hydraulic Dredge Engineer	34.76					16.75	51.51
Work performed on the Great Lakes including Crane or Backhoe Operator, Mechanic or Welder, Assistant Hydraulic Dredge Engineer, Hydraulic Dredge Leverman or Diver's Tender	33.90					17.19	51.09
Work performed on the Great Lakes including Deck Equipment Operator or Machineryman (maintains Cranes over 50 tons or Backhoes over 115,000 lbs.); Tug, Launch or Loader, Dozer or like equipment when operated on a Barge, Breakwater Wall, Slip, Dock or Scow	30.20					17.08	47.28
Work performed on the Great Lakes including Deck Equipment Operator, Machineryman or Fireman (operates 4 units or more and maintains Cranes 50 tons or under or Backhoes 115,000 lbs. Or under) or Assistant Tug Operator	30.20					17.08	47.28

JOB CLASSIFICATION	HOURLY RATE	WELFARE PER HOUR	VACATION PER HOUR	PENSION PER HOUR	OTHER SPECIFIC BENEFITS	TOTAL FRINGES	TOTAL WAGE
OPERATORS - ASPHALT PAVEMENT OR OTHER WORK							
Crane, Tower Crane or Derrick, with or without attachments, with a lifting capacity of over 100 tons; Crane, Tower Crane or Derrick, with Boom, Leads and/or Jib lengths measuring 176 feet or over	33.07	9.15	none	8.10	.93 A,L	18.18	51.25
Crane, Tower Crane or Derrick, with or without attachments, with a lifting capacity of 100 tons or under; Crane, Tower Crane or Derrick, with Boom, Leads and/or Jib lengths measuring 175 or under; Backhoe (Track Type) having a Mfr.'s rated capacity of 130,000 lbs. or over; Caisson Rig; Pile Driver; Dredge (not performing work on the Great Lakes)	32.57 Increase to \$51.67 on 6/1/11	9.15	none	8.10	.93 A,L	18.18	50.75
Backhoe (Track Type) having a Mfr.'s rated capacity of under 130,000 lbs.; Tractor or Truck Mounted Hydraulic Backhoe; Gradall (Cruz-aire Type); Mechanic or Welder; Bulldozer or Endloader; Grader or Motor Patrol; Scraper (Self Propelled or Tractor Drawn) 5 cu yards or more capacity; Concrete Breaker (Manual or Remote); Power Subgrader; Concrete Grinder or Planing Machine; Concrete Slipform Placer; Curb and Gutter Machine; Asphalt Plant; Asphalt Paver; Asphalt Screed; Asphalt Milling Machine; Roller (over 5 ton); Shouldering Machine; Trencher; Post Hole Digger or Driver	32.07 Increase to \$51.22 on 6/1/11 Increase to \$53.22 on 6/1/12; \$55.22 on 6/1/13	9.15	none	8.10	.93 A,L	18.18	50.25
Farm or Industrial Type Tractor; Greaser; Compactor (self-propelled); Roller (5 ton or under); Broom or Sweeper; Environmental Burner	31.81 Increase \$51.22 on 6/1/11 Increase to \$53.22 on 6/1/12; \$55.22 on 6/1/13	9.15	none	8.10	.93 A,L	18.18	49.99
Crusher, Screening or Wash Plant; Air Compressor; Generator; Pump (3 inch or over) or Well Points; Forklift; Skid Steer Loader (with or without attachments); Skid Rig; Stump Chipper; Mulcher; Vibratory Hammer or Extractor; Oiler	31.52 Increase to \$51.22 on 6/1/11 Increase to \$53.22 on 6/1/12; \$55.22 on 6/1/13	9.15	none	8.10	.93 A,L	18.18	49.70
Fiber Optic Cable Equipment	26.46					12.69	39.15
OVERHEAD DOOR INSTALLER	25.04					13.01	38.05
PAINTERS:							
Bridges, Iron	28.82 Increase to \$47.66 on 6/1/11; \$49.86 on 6/1/12	8.65	none	7.45	.69 I,A	16.79	45.61
Buildings	28.47 Increase to \$47.31 on 6/1/11; \$49.41 on 6/1/12	8.65	none	7.45	.69 I,A	16.79	45.26
Drywall	28.82 Increase to \$47.66 on 6/1/11; \$49.86 on 6/1/12	8.65	none	7.45	.69 I,A	16.79	45.61
Paperhanging	28.67 Increase to \$47.31 on 6/1/11; \$49.41 on 6/1/12	8.65	none	7.45	.69 I,A	16.79	45.46
Paving Construction	26.04					12.60	38.64
Sandblasting & Spraying	29.22 Increase to \$48.06 on 6/1/11; \$50.06 on 6/1/12 Add \$.60 for EIFS work and \$1.00 for Lead Based Paint Removal All night work is \$1.25/hour above basic wage rate	8.65	none	7.45	.69 I,A	16.79	46.01
PAINTER FOREMAN (Buildings)	29.22 All night work is \$1.25 /hour above basic wage rate	8.65	none	7.45	.69 I,A	16.79	46.01
PAVEMENT MARKING OPERATOR - Buildings,Paving,Sewer,Water	23.46					9.45	32.91
PILEDRIIVER - BUILDINGS	26.05	9.56	2.06	8.84	5.56 A,M,T	26.02	52.07
PILEDRIIVER-LOFTSMAN	26.70	9.56	2.06	8.84	5.56 A,M,T	26.02	52.72
PILEDRIIVER-SHEET PILING LOFTSMAN	26.80	9.56	2.06	8.84	5.56 A,M,T	26.02	52.82
PILEDRIIVER - PAVING, SEWER, WATER, TUNNEL	27.25					19.51	46.76
PILEDRIIVER FOREMAN	28.86	9.56	2.06	8.84	5.56 A,M,T	26.02	54.88
PIPELAYER (Sewer,Water,Tunnel)	28.57	7.55	1.72	6.05	.43 A, I	15.75	44.32
	Effective 6/7/10: 29.11 increase to \$47.31 on 6/6/11; \$49.04 on 6/4/12	7.65	1.85	7.05	.43 A,I	16.98	46.09
PIPELAYER (Tunnel)(in compressed air 0-15)	29.65	7.55	1.72	6.05	.43 A,I	15.75	45.40
	Effective 6/7/10: 30.23 Over 15-30 lbs. - add \$2.00; Over 30 lbs. - Add \$3.00 hour	7.65	1.85	7.05	.43 A,I	16.98	47.21
PIPELINE FUSER OR WELDER (Gas or Utility)	29.27					15.89	45.16
PLASTERER	30.36 Increase to \$49.74 on 5/30/11 Swing Stage work add additional \$.40/hour	7.65	none	8.93	.49 A	17.07	47.43
PLASTERER FOREMAN	33.40	7.65	none	8.93	.49 A	17.07	50.47
PLASTERER LABORER-Buildings	24.31	7.55	1.72	6.05	.40 I,T	15.72	41.75
	Effective 6/7/10: 25.13	7.65	1.85	7.05	.40 I,T	16.95	42.08
PLASTERER LABORER FOREMAN	26.09	7.55	1.72	6.05	.40 I,T	15.72	43.53
	Effective 6/7/10: 26.91	7.65	1.85	7.05	.40 I,T	16.95	43.86

JOB CLASSIFICATION	HOURLY RATE	WELFARE PER HOUR	VACATION PER HOUR	PENSION PER HOUR	OTHER SPECIFIC BENEFITS	TOTAL FRINGES	TOTAL WAGE
PLUMBER (Buildings)	35.44	8.05	none	8.05	1.69 E,I	17.79	53.23
	Increase to \$54.44 on 11/28/10						
PLUMBER (Sewer,Water,Tunnel)	31.39					18.05	49.44
PLUMBER FOREMAN/GENERAL FOREMAN	39.78	8.05	none	8.05	1.69 E,I	17.79	57.57
POWER BUGGY OPERATOR - LABORER	24.32					12.01	36.33
PUMP INSTALLER (BUILDINGS)	24.22					14.80	39.02
PUMP INSTALLER (SEWER,WATER,TUNNEL)	23.52					13.90	37.42
RAILROAD TRACK LABORER-BUILDINGS,PAVING,SEWER,WATER	22.41					12.73	35.14
REFRIGERATION MECHANIC	35.81	9.45	none	8.68	1.20 I,T	19.33	55.14
REFRIGERATION FOREMAN	39.39	9.45	none	8.68	1.20 I,T	19.33	58.72
REFRIGERATION GENERAL FOREMAN	41.18	9.45	none	8.68	1.20 I,T	19.33	60.51
ROOFER (BUILDINGS) *	28.85	6.90	none	7.42	.28 T	14.60	*43.45
	*All Roofers MUST be paid the Total Wage Rate Amount FOR ALL hours worked						
ROOFER (PAVING) *	28.85					11.98	*40.83
ROOFER FOREMAN *	29.85	6.90	none	7.42	.28 T	14.60	*44.45
SEWER, WATER, TUNNEL FOREMAN	31.20	7.55	1.72	6.05	.43 A, I	15.75	46.95
	Effective 6/7/10:						
SEWER & WATER TUNNEL FOREMAN-Compressed Air	31.84	7.65	1.85	7.05	.43 A, I	16.98	48.82
	Effective 6/7/10:						
	31.20	7.55	1.72	6.05	.43 A, I	15.75	46.95
	32.97	7.65	1.85	7.05	.43 A, I	16.98	49.95
SHEET METAL WORKER	36.60	6.60	none	9.08	.98 I,T	16.66	53.26
SHEET METAL FOREMAN	39.80	6.60	none	9.08	.98 I,T	16.66	56.46
SHEET METAL GENERAL FOREMAN	41.30	6.60	none	9.08	.98 I,T	16.66	57.96
SIDING INSTALLER	34.60					14.63	49.23
SPRINKLER FITTER	33.70	7.40	3.12	10.78	.85 E,I,T	22.15	55.85
SPRINKLER FITTER FOREMAN	36.65	7.40	3.12	10.78	.85 E,I,T	22.15	58.80
STEAMFITTER (Buildings)	35.81	9.45	none	8.68	1.20 A,I,T	19.33	55.14
	Increase to \$55.90 on 11/29/10						
STEAMFITTER (Sewer,Water,Tunnel)	31.43					13.76	45.19
STEAMFITTER FOREMAN	39.39	9.45	none	8.68	1.20 A,I,T	19.33	58.72
STEAMFITTER GENERAL FOREMAN	41.18	9.45	none	8.68	1.20 A,I,T	19.33	60.51
STONE MASON-BUILDINGS	34.58					14.92	49.50
	Add \$1.95 on 6/7/10 = \$51.45; \$1.95 on 6/6/11 = \$53.40						
STONE MASON-PAVING	14.00					0.00	14.00
STONE MASON-SEWER,WATER	31.43					13.76	45.19
STONE MASON FOREMAN	30.56	4.00		3.50	.61 A, I	8.11	38.67
STONE MASON FOREMAN ON SWING STAGE	31.31	4.00		3.50	.61 A, I	8.11	39.42
TAPER - See DRYWALL TAPER							
TELEDATA INSTALLER (Buildings)	24.09					14.48	38.57
TELEDATA INSTALLER (Paving,Sewer,Water,Tunnel)	23.77					13.68	37.45
TELEDATA TECHNICIAN	24.65	7.70	2.47	3.15	1.40 A,E,I, .70Annuity	15.42	40.07
TEMPERATURE CONTROL INSTALLER	31.43					13.56	44.99
TERRAZZO FINISHER	25.50					4.21	29.71
TERRAZZO MECHANIC	31.16					15.98	47.14
TERRAZZO FOREMAN (more than 3 journeymen)	32.95	7.10	none	8.16	.66 E	15.92	48.87
TILE FINISHER	23.96					15.80	39.76
TILE SETTER/LAYER	28.48	7.10	none	8.16	2.25 A,E	17.51	45.99
TILE SETTER/LAYER FOREMAN	30.48	7.10	none	8.16	2.25A,E	17.51	47.99
TOPMAN (Sewer & Water)	24.43	7.55	1.72	6.05	.43 A, I	15.75	40.18
	Effective 6/7/10:						
	24.80	7.65	1.85	7.05	.43 A, I	16.98	41.78
TRUCK DRIVERS - Building Construction							
Single	26.87	8.80	3.16	7.30		19.26	46.13
Two Axle	26.62					17.81	44.43
Three or More Axle	30.12					2.90	33.02
Articulated, Euclid, Dumptr or Off Road Material Hauler	31.32					16.05	47.37
	Add \$1.70 on 6/1/10 = \$49.07; \$1.85 on 6/1/11 = \$50.92						
TRUCK DRIVERS - Sewer,Water,Tunnel							
Single, Two Axle	23.00					0.00	23.00
Tandem/Tri Axle	25.22	10.00	3.33	6.45	.12	19.90	45.12
Quad/Semi Trailer Truck	25.11	10.00	3.33	6.45	.12	19.90	45.01
Articulated, Euclid, Dumptr or Off Road Material Hauler	30.12					15.55	45.67
TRUCK DRIVERS - Paving							
Single, Two, Three or More Axle	26.87	8.80	3.16	7.30		19.26	46.13
Articulated, Euclid, Dumptr or Off Road Material Hauler	30.89					17.16	48.05
	Add \$1.80 on 5/31/10 = \$49.85						
Pavement Marking Vehicle (Buildings, Paving, Sewer, Water, Tunnel)	19.25					10.84	30.09
Shadow or Pilot Vehicle	22.25					13.24	35.49
Truck Mechanic (Buildings)	30.12					2.90	33.02
Truck Mechanic (Paving)	12.00					12.35	24.35
Truck Mechanic (Sewer,Water,Tunnel)	25.00					7.47	32.47

8/19/10

JOB CLASSIFICATION	HOURLY RATE	WELFARE PER HOUR	VACATION PER HOUR	PENSION PER HOUR	OTHER SPECIFIC BENEFITS	TOTAL FRINGES	TOTAL WAGE	
TUCKPOINTER, CAULKER, CLEANER (Buildings, Shaft, Tunnel)	31.99	7.50	none	6.24	2.84 A	16.58	48.57	
Effective 6/7/10:	32.73	7.50	none	7.24	3.05 A	17.79	50.52	
	Increase to \$51.72 on 6/6/11							
TUCKPOINTER, CAULKER, CLEANER (Paving)	31.48					14.39	45.87	
TUCKPOINTER, CAULKER, CLEANER (Sewer, Water)	25.00					11.75	36.75	
TUCKPOINTER, CAULKER, CLEANER FOREMAN	32.74	7.50	none	6.24	2.84 A	16.58	49.32	
Effective 6/7/10:	33.48	7.50	none	7.24	3.05 A	17.79	51.27	
	Add \$.75 for Swing Stage - Buildings, Shaft, Tunnel & Foreman							
UNDERWATER DIVER (EXCEPT ON GREAT LAKES) (Buildings, Paving, Sewer, Water, Tunnel)	33.00					13.26	46.26	
UTILITY OR GAS PIPELINE LABORER (other than Sewer & Water)	18.84					13.83	32.67	
WATERPROOFER-BUILDINGS *	28.85	6.90	none	6.42	.28T	13.60	42.45	
WATERPROOFER-PAVING *	28.85					11.98	40.83	
	*All Waterproofers/Roofers MUST be paid the Total Wage Rate Amount FOR ALL hours worked							
WELDER, Certified (Laborer-Buildings)	26.44					13.91	40.35	
WELLDRIILLER, PUMP INSTALLER (Buildings, Sewer, Water, Tunnel)	24.22					14.80	39.02	

FUND CODES:

A - APPRENTICESHIP FUND
 B - EMPLOYEE SAVINGS FUND
 C - CONTRACTOR FUND OR COOPERATION FUND
 D - DEVELOPMENT FUND
 E - EDUCATION TRUST FUND
 H - HOLIDAYS
 I - INDUSTRY ADVANCEMENT PROGRAM FUND
 L - LABOR MANAGEMENT FUND
 M - MUIAR FUND
 S - SKILL IMPROVEMENT FUND
 T - TRAINING FUND
 W - WORK PRESERVATION

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CITY OF MILWAUKEE

DEPARTMENT OF PUBLIC WORKS

GENERAL SPECIFICATIONS

January 31, 1992

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**PART I
INSTRUCTIONS TO BIDDERS
GENERAL**

CHAPTER 1.1.0

1.1.1 Contracting Officer

The contracting officer shall be the Commissioner of Public Works of the City of Milwaukee hereinafter referred to as Commissioner.

1.1.2 Qualifications of Bidders

Qualifications for the project shall be demonstrated by each bidder as requested by the Commissioner of Public Works. Such bidder shall submit within five days of such request written evidence and documentation as required by the Commissioner, including financial capability, previous experience, and evidence of authority to conduct business in the State of Wisconsin.

1.1.3 Examination of Contract Documents and Site

- a) Before submitting a bid, each bidder shall:
 - 1. examine the contract documents thoroughly,
 - 2. visit the site to become familiar with local conditions that may in any manner affect performance of the work,
 - 3. become familiar with federal, state, and local laws, ordinances, rules and regulations affecting performance of work, and
 - 4. carefully correlate observations with the requirements of the contract documents.
- b) Before submitting a bid, each bidder shall, at own expense, make such surveys and investigations as may be deemed necessary to determine a bid price for performance of the work within the terms of the contract documents. Bidder is responsible for obtaining all necessary licenses and permits at own expense.
- c) The submission of a bid shall constitute a prima facie representation by the bidder that the bidder has complied with every requirement of this Section 1.1.3.

1.1.4 Interpretations

All questions about the meaning or intent of the contract document shall be submitted to the Commissioner in writing. Replies shall be issued by Addenda, mail, or delivery to all parties recorded by the Commissioner as having received the bidding documents. Questions received less than five days prior to the date for opening of bids will not be answered. Only questions answered by formal written Addenda shall be binding. Oral and other interpretations or clarifications shall be without legal effect.

1.1.5 Bid Security

Bid security required is 10% of the contractor's bid, unless otherwise stated in the Official Notice and Invitation to Bid. The required security must be in the form of a certified or bank cashier's check made payable to Commissioner, or when indicated in said Notice or Invitation to Bid, a bid bond issued by a Surety licensed to conduct business in the State of Wisconsin and named in the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Department. The bid bond must be accompanied by a copy of the power of attorney for the agent or attorney-in-fact signing the bid bond. The bid security of the successful bidder shall be retained until the bidder has executed the Agreement and furnished the required contract security, whereupon it will be returned. Upon failure to execute and deliver the contract and furnish the required contract security within ten days of Notice of Award, the Commissioner may annul the Award and the bid security of that bidder shall be forfeited and the City reserves the right to pursue any available remedies against the bidder. The bid security of all except the two lowest bidders shall be returned after the opening of bids. The balance of the bid deposits, except that of the lowest responsible bidder, will be returned after the Commissioner has made an award to the lowest responsible bidder.

1.1.6 Bid Proposal

- a) The Bid Proposal is included in the contract documents. Additional copies of the bid documents may be obtained through the Contract Administration Office, Room 506, Municipal Building.
- b) Bid Proposal shall be completed in ink or typewritten. The bid price of each item on the form must be stated in words and numerals. In case of a conflict, words shall take precedence.
- c) Bids submitted by an individual shall be signed by the bidder or by an authorized agent.
- d) Bids by corporation shall be executed in the corporate name by the president or vice president (or other authorized corporate officer accompanied by

evidence of authority to sign), and the corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.

- e) Bids by partnerships shall be executed in the partnership name and signed by a partner; the partner's title must appear under the signature, and the official address of the partnership must be shown below the signature.
- f) Bids which are signed by an attorney-in-fact for individuals, firms, partnerships, or joint ventures shall have attached thereto a power of attorney evidencing authority to sign the bid.
- g) All names shall be typed or printed below the signature.
- h) The bid shall contain an acknowledgment of receipt of all Addenda, if any, the numbers of which shall be filled in on the bid form.
- i) Any bid received which does not respond to the items as requested on the bid proposal form shall be considered as a nonresponsive bid and may not be considered for award. This includes any alterations, modifications or conditions to the proposal or alternate bids which are not specifically requested on the bid proposal form.
- j) The contractor shall include in the contract price all applicable federal, state and local taxes in the proposal submitted.

1.1.7 Emerging Business Enterprise Program

Chapter 360 of the Milwaukee Code of Ordinances established a Emerging Business Enterprise Program (EBE) which is implemented through establishment of percentages of public works contractors to be allocated to City certified emerging businesses and enterprises. These percentages are established by the department and are stated in the Official Notice and the Invitation for Bid. Forms required by the established EBE provisions must be submitted by bidders as part of the bidding process. Failure to comply with these requirements may result in rejection of the bid. The EBE provisions will be made a part of all departmental bid solicitations and are included in this bid package.

1.1.8 Submission of Bids

Bids shall be submitted at the place and no later than the date and time indicated in the Official Notice and Invitation to Bid. The bid and the bid security shall be placed in an opaque, sealed envelope marked with the Official Notice Number, project number, branch number, date of opening bids, name and address of bidder, and the type and location of work. Such envelope shall be addressed and delivered to the Office of the Commissioner, Contract Administration Office, Room

506, Municipal Building, before time specified in the Official Notice and Invitation to Bid for opening bids. Bids received later than the date and time indicated will not be considered, and the unopened envelope will be returned.

1.1.9 Modification and Withdrawal of Bids

A bidder may withdraw a bid because of error, omission or mistake at any time before the opening of the bids. In such case, the bid shall be returned unopened, and the bidder shall not be entitled to bid on the contract unless it is readvertised and re-let.

After bid opening, a bidder may only withdraw or correct a bid if the bidder meets the requirements of 66.29(5), State Statutes.

1.1.10 Opening of Bids

Bids shall be publicly opened at the time and place as indicated in the Invitation to Bid and Official Notice.

1.1.11 Adequacy of Bids

A bid which appears unreasonable or inadequate for any item in the schedule of quantities stated in the proposal form may be rejected.

1.1.12 Quantities

The estimated quantities of the work are the result of careful calculations but are not to be considered as final and shall be used as a basis for determining the lowest bidder. After the contract is awarded, the quantity of work listed under any item, or all items, may be increased or decreased a reasonable amount at the discretion of the Commissioner without in any way invalidating the bid price.

1.1.13 Bids to Remain Open

All bids shall remain open for **45** days after the day of the bid opening or until execution of contract, whichever occurs first.

1.1.14 Acceptance or Rejection of Bids

- a) The contract shall be awarded to the lowest responsible bidder whose bid complies with the bid specifications. The Commissioner reserves the right to reject all bids if it appears that the lowest bid for the work to be let is

unreasonably high. The Commissioner further reserves the right to reject the bid of any bidder who is, in the judgment of said Commissioner, incompetent or otherwise unreliable for the performance of the work bid or who shall previously have willfully or negligently failed to complete any work or contract entered into with the City or any officer or department thereof or who shall have willfully or negligently failed to enter into a contract with satisfactory Surety for any work that shall have been previously awarded by said Commissioner. The Commissioner further reserves the right to disregard and reject any and all bids.

- b) If the contract is to be awarded, the Commissioner shall give the successful bidder a Notice of Award within forty-five days after the day of the bid opening.
- c) The Contractor shall submit with the executed contract, the required performance and payment bonds and proof of required insurance coverage within ten (10) days after contract award notification.

1.1.15 Contract Time

The number of days or the completion date for the completion of the work (the contract time) is set forth in the Official Notice and the Invitation to Bid and shall be part of the contract. Any provisions for liquidated damages shall be set forth in the Official Notice.

1.1.16 Subcontractors

- a) If the Conditions or Specifications required the identity of certain subcontractors and other persons and organizations to be submitted in advance of the Award, the apparent low bidder and any other bidder so requested shall within seven days after the day of the bid opening submit to the Commissioner a list of all subcontractors and other persons and organizations, including those who are to furnish the principal items of material and equipment, proposed for those portions of the work as to which such identification is so required. Such list shall be accompanied by an experience statement with pertinent information as to similar projects and other evidence of qualification for each such subcontractor, person, or organization if requested by Commissioner. If the Commissioner, after due investigation, has reasonable objection to any proposed subcontractor, other person, or organization, the Commissioner may, before giving the Notice of Award, request the apparent low bidder to submit an acceptable substitute without any increase in bid price. If the bidder declines to make any such substitution, such bidder will not thereby sacrifice the bid security. Any subcontractor, other person or organization so listed and to whom City by its Commissioner does not make written objection prior to the giving of the Notice of Award shall be deemed acceptable.

- b) In contracts where the contract price is on the basis of Cost of the Work Plus a Fee, the Contractor, prior to the Notice of Award, must identify in writing to the Commissioner those portions of the work that the Contractor proposed to subcontract and after the Notice of Award may subcontract other portions of the work only with the Commissioner's consent.
- c) Contractor shall not be required to employ any subcontractor, other person, or organization against whom the Contractor has reasonable objection.

1.1.17 Starting Work Before Notification

No work shall be started under the contract, and no materials or equipment shall be brought upon the site of the work, prior to the date named in the written notice to proceed with the work.

1.1.18 Protest and Appeal Procedure

- a) Prior to Bid Opening - Protests regarding form and content of bid documents must be received by the Commissioner of Public Works not less than five days prior to the scheduled bid opening time. A protest shall be in writing and state the reason for it. The protest will be reviewed and if modification is necessary, the bid opening day will be extended and addenda sent to each bidder. The decision of the Commissioner is final.

**PART II
GENERAL CONDITIONS
DEFINITIONS AND TERMS**

CHAPTER 2.1.0

2.1.1 General

Whenever in the specifications or in any document or instruments in construction operations where the specifications govern, the following abbreviations, terms, or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

2.1.2 Abbreviations

- a) A.A.S.H.T.O. The American Association of State Highway and Transportation Officials.
- b) ADMINISTRATIVE CODE. Rules of Wisconsin Code.
- c) A.N.S.I. American National Standards Institute.
- d) A.R.E.A. The American Railway Engineering Association.
- e) A.S.M.E. The American Society of Mechanical Engineers.
- f) A.S.T.M. The American Society for Testing and Materials.
- g) A.W.W.A. The American Water Works Association.
- h) D.N.R. Wisconsin Department of Natural Resources.
- l) FEDERAL SPECIFICATIONS. The Specification of the United States Federal Specifications Board.
- j) O.S.H.A. Federal Occupational Safety and Health Administration.
- k) S.S.P.C. Steel Structures Painting Council.
- l) STATE SPECIFICATIONS. Current Standard Specifications for Road and Bridge Construction of the Wisconsin Department of Transportation.
- m) A.C.I. American Concrete Institute.
- n) A.G.M.A. American Gear Manufacturers' Association.

- o) A.I.A. American Insurance Association.
- p) A.I.S.C. American Institute of Steel Construction.
- q) A.S.C.E. American Society of Civil Engineers.
- r) A.W.S. American Welding Society.
- s) I.E.E.E. Institute of Electrical and Electronic Engineers.
- t) J.I.C. Joint Industry Conference.
- u) N.E.C. National Electrical Code.
- v) N.E.M.A. National Electrical Manufacturers' Association.
- w) P.C.A. Portland Cement Association.
- x) P.C.I. Prestressed Concrete Institute.

2.1.3 Contract Documents

All the integral documents of the contract comprised of (a) written agreement (contract) covering the performance of the work and furnishing of materials for the construction of the work, (b) official notice, (c) invitation to bid and bid, (d) instructions to bidders, (e) specifications, (f) special provisions, (g) special conditions when applicable, (h) plans, (l) schedule of fixed prices, (j) supplemental agreements, and (k) all addenda, as fully as though they had been set forth therein full in the body of the contract.

2.1.3.1 Governing Order of Contract Documents

In the case of a discrepancy or conflict in the contract documents, the order of governing shall be as follows:

- First - Special Provisions
- Second - Plans
- Third - Specifications

2.1.4 City

The City of Milwaukee, a municipal corporation of the State of Wisconsin, located in the County of Milwaukee.

2.1.5 Commissioner of Public Works, Commissioner or CPW

The Commissioner of Public Works of the City of Milwaukee.

2.1.6 Bidder

Any individual, firm, partnership, corporation, or a combination of any or all jointly submitting a proposal for the work contemplated, acting directly or through a duly authorized representative.

2.1.7 Contractor

Any individual, firm, partnership, corporation, or a combination of any or all jointly submitting a proposal to whom the contract is awarded by the City or its heirs, executors, administrators, successors, or assigns.

2.1.8 Subcontractor

The individual, firm, partnership, or corporation to whom the Contractor, with the written consent of the Commissioner, sublets, assigns, or otherwise disposes of any part of the work covered by the contract documents.

2.1.9 Surety

The approved Surety corporation licensed to do business in the State of Wisconsin bound with and for the Contractor to insure acceptable performance of the contract and for payment of all obligations under the contract.

2.1.10 Plans

All contract drawings, reproductions of drawings, sketches, and revisions thereof pertaining to the work covered by the contract.

2.1.11 Addenda

All revisions of and supplements to the plans and specifications incorporated in or attached to and becoming an integral part of the contract documents.

2.1.12 Special Provisions

The special body of directions, provisions, or requirements peculiar to a project and otherwise not thoroughly or satisfactorily detailed or prescribed in the specifications. The requirements of these Special Provisions shall govern the work and shall take precedence over the specifications or plans whenever they conflict.

2.1.13 City Datum

The plane of zero elevation used for City work, being 54.815 feet below the permanent bench mark on a stone monument located near the northwest corner of North Jackson and East Wells Streets.

2.1.14 Pavement

All types of pavements except such surfacings as crushed stone, screenings, cinders, or untreated water-bound macadam.

2.1.15 Work

Work shall be understood to mean the furnishing of all labor, materials, equipment, and other incidentals necessary for all the successful completion of the project or particular part of the project in accordance with the requirements of the contract.

2.1.16 Engineers

The Engineers of the Department of Public Works assigned to the work.

2.1.17 Milwaukee Code

The Milwaukee Code of Ordinances, being the revision and codification of the general ordinances of the City of Milwaukee, adopted by the Common Council on December 19, 1941, and supplements and amendments thereto.

2.1.18 Emergency or Emergencies

Unforeseen occurrences and combinations of circumstances involving the public welfare or the protection of work already done under the contract documents or which endanger life or property and call for immediate action or remedy.

2.1.19 Trade Terms

Terms having a well-known technical or trade meaning and generally recognized by architects, engineers, and the trade.

2.1.20 Date of Completion of Work

The work shall be considered as completed on the date certified to the Commissioner by the Engineer in Charge or other authorized representative.

2.1.21 Time Allowed for Completion

The time allowed the Contractor to complete all work under the contract including cleaning of the work site will be specified in the official notice. This time will be specified either as number of working days allowed, number of calendar days allowed, a specified calendar date, or a combination of these when a specific portion of the work is to be completed by a specific date. If any of these requirements are exceeded, Section 2.5.11 of the Specifications shall be invoked.

2.1.22 Advertisement

The official notice inviting bids for all proposed work included in any one letting.

2.1.23 Award

Notice to Contractor of Contract Award.

2.1.24 Calendar Days

Every day shown on the calendar; Saturdays, Sundays and holidays included.

2.1.25 Contract Bond

The approved form of security furnished by the Contractor and Surety as a guarantee of good faith on the part of the Contractor to execute the work in accordance with and complying with all the terms and conditions of the Contract Documents.

2.1.26 Contract Change Order

A written order by the Commissioner or the Commissioner's authorized representative covering work not otherwise provided for, revision in or amendments to the contract, or conditions specifically prescribed in the specifications as requiring contract change orders. Such document becomes a part of the contract.

2.1.27 Contract Period

The period from the date of commencing work to the date of completing work, both dates inclusive, as specified in the contract.

2.1.28 Inspector

The authorized representative of the City assigned to make a detailed inspection of any and all portions of work or materials thereof.

2.1.29 Official Notice

The advertisement for proposals for all work or materials on which bids are required. Such advertisement will indicate with reasonable accuracy the location and character of the work to be done or materials to be furnished and the time and place of submitting the proposals

2.1.30 Notice to Proceed

A written notice to the Contractor by the Commissioner or the Commissioner's authorized representative of the time within which the Contractor shall begin the prosecution of the work.

2.1.31 Proposal

The offer of the bidder, submitted on the prescribed proposal form, to perform the work including the furnishing of labor and materials at the prices quoted by the bidder.

2.1.32 Proposal Form

The approved form on which the City requires bids to be prepared and submitted for the work.

2.1.33 Bid Security

The security furnished with a bid to guarantee that the bidder will enter into the contract if the bid is accepted.

2.1.34 Schedule of Fixed Prices

The fixed prices as listed in the Contract Documents.

2.1.35 Working Day

A working day shall be any calendar day where, in the opinion of the Commissioner or his duly authorized representative, it is possible for the Contractor to start and continue work, except that unless the Contractor actually starts and continues work on days of inclement weather, Saturdays, Sundays, and nationally-recognized legal holidays, such days shall not be considered as working days.

CHAPTER 2.2.0 EMPLOYMENT OF LABOR

2.2.1 Residence Preference Program

Chapter 309 of the Milwaukee Code of Ordinances established a Residence Preference Program which is implemented through establishment of the percentages of worker hours to be performed by unemployed residents of a special impact area. These percentages are established by the Department and are stated in the Official Notice and the Invitation to Bid. Forms required by the established resident preference provisions must be submitted by bidders as part of the bidding process. Failure to comply with these requirements may result in payments being withheld, contracts canceled, debarment from bidding for up to two years, or any other remedy available to the City at law or in equity. The resident preference provisions will be made a part of all departmental bid solicitations and are included in this bid package.

2.2.2 Hours of Labor and Overtime Pay

- a) In accordance with Section 309-21, Milwaukee Code Ordinances, the service of all laborers and mechanics who are now or may hereafter be employed by any contractor or subcontractor of the City of Milwaukee upon any of the public works of this City is hereby limited to days other than Saturdays, Sundays, and legal holidays recognized by the City and restricted to 40 hours per week, of which no more than ten hours shall occur in any one calendar day, and except as the Commissioner may approve to conform with occupational practices or as specifications may require, it shall be unlawful for any officer of the City government or any such contractor or subcontractor, whose duty it shall be to employ, direct, or control the services of such laborers or mechanics, to require or permit any such laborer or mechanic to work on Saturdays, Sundays, and legal holidays or more than 40 hours per week and ten hours in any calendar day, except in cases where, in the opinion of the Commissioner, an emergency exists.
- b) In such instances where overtime work has been permitted and laborers or mechanics are required to work more than ten hours per day or 40 hours per week or at times other than the normal work day or work week, they shall be paid by the contractor in accordance with the prevailing overtime wage rates. When, and only when, an emergency has been declared to exist and the Commissioner, after the signing of a contract, has ordered in writing that work on a project be carried on in excess of ten hours per day or 40 hours per week, it shall be the duty of the City to reimburse the contractor over and above the price agreed upon for the performance of such work in the amount of the premium paid for overtime work or work performed at times other than the normal work day or work week in accordance with the prevailing overtime wage rates plus any premium paid for necessary materials because of

delivery during times other than the normal work day or work week.

2.2.3 Minimum Wage Rate

- a) In accord with Section 309-25, Milwaukee Code, and Res. No. 68-1317, building and construction industry trade workers employed upon public works contracts by any contractor or subcontractor shall be paid no less than the wage rates and fringe benefits approved for their respective trades or occupations. Such wage rates shall be incorporated into the contract. In addition, a schedule of wage rates and hours of labor shall be kept posted in at least one conspicuous and easily accessible place on the site of the project or, if there is no common site, at the place normally used by the city to post public notices.
- b) Fringe benefits must be paid as follows: Welfare - within six weeks of the date work was performed; Vacation and Pension within 31 days of the date work was performed.

2.2.4 Unclassified Employees

- a) In case it becomes necessary for the Contractor or any subcontractor to employ on the work covered by the contract documents any person in a trade or occupation (except executive, supervisory, administrative, clerical, or other non-manual workers) for whom no minimum wage rate is herein specified, the Contractor shall immediately notify the Commissioner who shall promptly thereafter furnish the Contractor with the minimum wage rate for such person.
- b) Apprentices are considered unclassified employees and their rates are not furnished in the minimum wage scale. Contractors/subcontractors employing apprentices are required to furnish a copy of the signature page of their indenture papers and a copy of their rate sheet with the paid rate highlighted. The Commissioner shall determine whether or not a person so employed was properly paid or if an underpayment exists.

2.2.5 Minimum Wage - Time Reports

The Contractor hereby agrees to make a sworn report or affidavit within ten days following the Contractor's completion of a contract, or every three months, whichever occurs first, and shall procure and submit a like sworn report or affidavit from every subcontractor employed in the work to the Commissioner, listing every employee employed on or under this contract or subcontract, and shall include for the specified period but not be limited to the employee's name, address, type of work performed, total hours worked, hourly rate, gross earnings, and employer's contribution to vacation, welfare, and pension trust funds. Said reports or affidavits from the Contractor or subcontractor shall include a statement that each and every employee has been paid in full the amount prescribed by the Common

Council and that there has not been, nor is to be, any rebate or refund of any part of said wages by employee to employer.

The Commissioner or other officers are hereby ordered not to pass any estimate for payment on any contract in which the Contractor or subcontractor has failed to comply with all the provisions of the foregoing sections, and no estimate shall be processed for payment until the Commissioner is satisfied that the provisions of the foregoing specifications have been fully complied with.

2.2.6 Provision of Wisconsin Statutes and Administrative Code Pertaining to Municipal Wage Rates

Pursuant to Section 66.293 Wisconsin Statutes and Section IND 90.13 and 90.14 of the Wisconsin Administrative Code, each contractor and subcontractor is subject to the following requirements.

Each contractor, subcontractor, or agent thereof participating in a project shall keep full and accurate records clearly indicating the name and trade or occupation of every laborer, worker, or mechanic employed in connection with the project and an accurate record of the number of hours worked by each employee and the actual wages paid therefore.

Upon completion of the project and prior to final payment therefore, each contractor shall file with the municipality an affidavit stating compliance with the provisions and requirements of the Wisconsin Statutes and Administrative Code and that said contractor has received evidence of compliance from each subcontractor. No municipality may authorize final payment until such an affidavit is filed in proper form and order.

Upon completion of the subcontractor's portion of the work and prior to final payment, each subcontractor shall file with the contractor an affidavit stating that said subcontractor has fully complied with the provisions and requirements of Section 66.293 (3) Wisconsin Statutes and the Wisconsin Administrative Code Chapter IND 90.

In accordance with Section 66.293 (3) (h), each contractor shall file with the City copies of the subcontractor's affidavit prescribed under IND 90.13 Wisconsin Administrative Code.

2.2.7 Enforcement of "Hours and Wages" Provisions

Every person, firm, or corporation who shall violate the provisions of §309-21, 309-25, 309-27, and 309-31 Milwaukee Code, shall upon conviction thereof, be punished by a fine not to exceed \$25 and in default of payment thereof by imprisonment in the House of Correction of Milwaukee County for a period not to

exceed 90 days. The employment of each person contrary to the provisions of said sections shall be deemed a separate and distinct violation of the provisions thereof for each day so employed.

Attention is called to Section 66.293, Wisconsin Statutes, 1951, which provides that a contractor who violates the provision of this law, to-wit, fails to comply with the municipal wage scale set forth in the contract may be fined not to exceed \$500 for each offense. The failure to pay the required wage to an employee for only one week or part thereof constitutes a separate offense.

2.2.8 Wage and Hours Limitation

The provisions of Sections 309-21 to 309-37 inclusive of the Milwaukee Code shall apply, and the Contractor or any subcontractor is not to pay less than the minimum wage scale adopted by the Common Council of the City of Milwaukee pursuant to said provisions.

2.2.9 Days of Work and Shift Regulations

No work shall be performed under the contract on Saturdays, Sundays, or legal holidays, except with the approval of the Commissioner.

The Commissioner reserves the right to name the number of shifts per day, the hours per shift, and the starting time of each shift.

2.2.10 Wage and Hours Disputes

Whenever a dispute arises between the Contractor or Surety and the City as to the determination whether there is compliance with the provisions of the contract documents as to the hours of labor, wages, character, and classification of workers employed, the determination of the Commissioner shall be final, and in case of violations of said provisions, the Commissioner may declare the contractor in default and order the Surety to perform or re-let upon advertisement, the remaining portion of the contract as provided by Section 66.29 (8), Wisconsin Statutes, 1943.

2.2.11 Disqualification of Contractor

As provided by Section 309-33, Milwaukee Code, whenever any contractor or subcontractor engaged in any public work of the City has been found by the Commissioner, officer, or employee of the City or by a court of competent jurisdiction to have infringed any of the provisions of the minimum wage ordinance

or any ordinance or any resolution or scale of wages adopted pursuant thereto, in that event any such contractor or subcontractor shall not be deemed to be a competent and reliable bidder in the sense of Section 7-14 of the Milwaukee City Charter, 1984 compilation, and such contractor or subcontractor shall not be allowed to compete in securing future contracts with the City by such individual, or partner, or agent, or by any corporation of which such individual is a member, for a period of two years. A second violation by such individual, or partner, or agent, or by any corporation of which such individual is a member, shall disqualify such individual, or such partner, agent, or corporation from competing or doing any future City work for a period of three years.

2.2.12 Lien Law

All provisions of Section 7-32, Milwaukee City Charter, shall be binding upon the Contractor.

2.2.13 Discrimination in Employment

In accord with Section 109-15, Milwaukee Code and federal guidelines, it shall be unlawful for any private employer performing work within the City involving any public works of the City to willfully refuse to employ or to discharge any person otherwise qualified because of race, color, religion, sex, sexual orientation, age, handicap, national origin or ancestry, disability, lawful source of income, marital status, or family status to discriminate for the same reason in regard to tenure, terms, or conditions of employment; to deny promotion or increase in compensation solely for these reasons; to publish offer of employment based on such discrimination, to adopt or enforce any rule or employment policy which discriminates between employees on account of race, color, religion, sex, sexual orientation, age, handicap, national origin or ancestry, disability, lawful source of income, marital status, or family status to seek such information as to any employee as a condition of employment; to penalize any employee or discriminate in the selection of personnel for training, solely on the basis of race, color, sex, sexual orientation, age, handicap, national origin or ancestry, disability, lawful source of income, marital status, or family status.

The Contractor shall include or cause to be included in each subcontract covering any of the work covered by this contract, a provision similar to the above paragraph, together with a clause requiring such insertion in further subcontracts that may in turn be made.

2.2.14 Americans With Disabilities Act

Contractor (Vendor, Consultant, Lessee, etc.) agrees that Contractor will comply

with all applicable requirements of the Americans with Disabilities Act of 1990, 42 U.S.C. §12101, et seq.

CHAPTER 2.3.0 NECESSARY NOTICES AND PERMITS

2.3.1 Notice to Proceed with Work

The Commissioner shall notify the Contractor of the date to commence work covered by the contract. Upon receipt of such notice the Contractor shall comply with all notice requirements set forth below and in the specifications.

2.3.2 Notice to Fire, Police, and Sheriff

Contractor shall give notice in writing to the Chief Engineer of the Fire Department and to the Chief of Police of the City of Milwaukee and to the Sheriff of Milwaukee County at least three days before blocking off any street.

2.3.3 Notice to Utilities, City Bureaus and Governmental Units

The Contractor shall notify all utilities, City bureaus, and governmental units whose property may be affected by the Contractor's operations at least three days before breaking ground. The Contractor shall not interfere with said property until the expiration of the time specified in said notice and then only by permission of the Commissioner, nor shall the Contractor hinder or interfere with any person in the protection of such work or with the operation of buses at any time except with the permission of the Commissioner.

2.3.4 Notice to Railroads

The Contractor shall send by registered mail a notice to the district or division engineer or persons in charge of the operations of trains for any railroad at least ten days prior to doing any work in the right-of-way or any track zone. Such Contractor shall ascertain the schedule of all trains and shall comply with all rules and regulations requested by the railroad company.

2.3.5 Notice for State Arterial Highways

Whenever the work will obstruct or in any other way affect through vehicular traffic on State arterial highways, the Contractor shall give notice at least three days in advance thereof to the State of Wisconsin, Department of Transportation, Division of Highways, and the Traffic Division of the Infrastructure Division of the City.

2.3.6 Notice to Support Buildings

Whenever the work endangers the support or involves the undercutting of any building or other structure along the site of work, the Contractor shall send by registered mail, return receipt requested, a written notice to the owner or the owner's agent to support such building or structure, and following the service of the notice, the contractor shall allow a reasonable length of time for the placing of the necessary support. Such notice shall be in accordance with applicable law.

2.3.7 Notice of Work Suspension

In case the work is stopped and is to remain stopped for any considerable length of time, the Contractor shall promptly notify the Commissioner. At least three days before the work is to be resumed, the Contractor shall again notify the Commissioner.

2.3.8 Permits and Licenses

The Contractor shall procure all necessary permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work.

2.3.9 Permit for Parks and Parkways

The Contractor shall obtain a permit from the local park authority for construction work to be done within the limits of parks or parkways.

2.3.10 Permit for Storage of Materials

When the Contractor finds it necessary to store materials on a street which is open to traffic, such Contractor shall obtain a permit from the Department of Public Works to store such materials at the designated location.

2.3.11 Water Permit

The Contractor shall obtain a permit from the Milwaukee Water Works for the use of City water. A permit is not required on contracts for installing water mains.

2.3.12 Permit for Excavation

Before starting excavation in any street, roadway, or other public way, the Contractor must obtain a permit from the Department of Public Works.

2.3.13 Permit for Street Closings

When it is necessary to close any street to traffic, the Contractor shall obtain a permit from the Department of Public Works. The only exception would be for contractors paving or reconstructing a street.

2.3.14 Permit for Blasting

Before doing any blasting the Contractor shall, with the approval of the Commissioner, obtain a permit from the Building Inspector. The Commissioner reserves the right to order the discontinuance of blasting operations at any time.

2.3.15 Copies of Notices and Permits

Copies of all written notices and permits shall be submitted to the Commissioner or the Commissioner's representative prior to the commencement of construction.

2.3.16 Notice to Cable Franchises

The Contractor shall notify all cable television franchises whose property may be affected by the Contractor's operations at least three (3) days before breaking ground. The Contractor shall not interfere with said property until the expiration of the time specified in said notice and then only by permission of the Commissioner, nor shall the Contractor hinder to interfere with any person in the protection of such work.

CHAPTER 2.4.0 CONTROL OF WORK AND MATERIALS

2.4.1 Plans and Specifications to be Available

The Contractor shall keep a legible copy of the plans, if any, and specifications at the site of the work.

2.4.2 Contractor's Representative

The Contractor shall either give personal superintendence to the work and be present, or shall have at the site of the work at all times while work is in progress, a representative having authority both to receive orders from the Commissioner and to act for the Contractor. Such representative must be thoroughly familiar with the work and be acceptable to the Commissioner and must be capable of reading and understanding the plans and specifications and capable of directing the work as called for by the contract documents.

2.4.3 Authority and Duties of Inspectors

Inspectors employed by the City shall be authorized to inspect all work done and all material furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. The Inspector is not authorized to revoke, alter, or waive any requirements of the specifications, nor is the Inspector authorized to approve or accept any portion of the completed project. The Inspector shall call the attention of the Contractor to any failure of the work or materials to conform to the specifications and contract and shall have the authority to reject materials. Any dispute between the Inspector and Contractor shall be referred to the Commissioner. Any advice which the Inspector may give the Contractor shall in no way be construed as binding the Commissioner or the Commissioner's representative in any way or releasing the Contractor from fulfilling any of the terms of the contract.

2.4.4 Performance of Work

All work to be performed must be in accordance with the contract documents and subject to the supervision, approval, and acceptance of the Commissioner.

2.4.5 Materials, Labor, Equipment, Etc.

All construction materials to be used on the work, all materials to be incorporated

into the work, and all labor, equipment, plant, tools, appliances, or methods to be used on the work shall be subject to the inspection and approval or rejection of the Commissioner.

It is understood that, except as otherwise specifically stated in the contract documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other service and facilities of every nature whatsoever necessary to execute, complete, and deliver the work within the specified time.

2.4.6 Decisions of the Commissioner

All work shall be done in compliance with the contract documents. The Commissioner shall decide all questions which shall arise as to the quality and acceptability of materials furnished, work performed, manner of performance, extensions of time, rate of progress of the work, interpretation of the plans and specifications, acceptable fulfillment of the contract, compensation, disputes, and mutual rights between Contractors under the Specifications. All questions as to the meaning of the contract documents and all questions as to the interpretation of any orders or directives which may have been issued in connection with the work shall be decided by the Commissioner whose decision shall be considered final and conclusive between the parties hereto and binding upon them.

2.4.7 Order of Work

The place of commencement, the sequence of operations, and the prosecution of the work may be determined by the Commissioner as he shall deem fit to best serve the needs and the convenience of the public and for the proper and timely completion of the contract.

2.4.8 Regulation of Tools, Equipment, and Plant Usage

The Commissioner reserves the right to regulate the time of usage or to prohibit the use of any type or kind of tools, equipment, and plant which may cause objectionable smoke, noises, odors, or damage to property.

2.4.9 Gas-Powered Equipment

The Commissioner reserves the right to prohibit the stationary use of gas or diesel-powered plant equipment when such usage would cause objectionable noises, odors, or damage to property or trees.

2.4.10 Electrically-Powered Plant

Where conditions are such that, in the opinion of the Commissioner, an electrically-powered plant should be used, the Commissioner shall have the right to order the Contractor to furnish an adequate plant powered by electric service.

2.4.11 Location and Type of Plant

The location and type of any plant, at the site of the work, including buildings, machinery, equipment, and tools, is subject to the approval of the Commissioner. If these are furnished, placed, or used without approval, the Commissioner may require the removal and substitution of any or all parts of the plant, including buildings, machinery, equipment, and tools, to a location and of a type acceptable to the Commissioner.

2.4.12 Right to Inspect and Test Materials

All materials to be used in the work are subject to the inspection, testing, and approval of the Commissioner or the Commissioner's authorized representatives at the place of manufacture, the site of the work, or other location, and before use, or before, during, or after the incorporation of such materials into the work. The Contractor shall, at all times, afford the necessary facilities for the Commissioner and the Commissioner's representatives to examine or sample all materials and to inspect the work, plant, equipment and tools in order to determine whether the materials, operations, workmanship, methods, and finished work comply with the requirements of the contract documents.

2.4.13 Inspection

All materials and each part or detail of the work shall be subject at all times to inspection by the Commissioner or the Commissioner's authorized representatives, and the Contractor shall be held strictly to the true intent of the specifications in regard to quality of materials, workmanship, and the diligent execution of the contract. Such inspection may include mill, plant, or shop inspection, and any material furnished under these specifications is subject to such inspection. The Commissioner or the Commissioner's representatives shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is determined by the Commissioner or the Commissioner's representative to make a complete and detailed inspection.

The Contractor shall, if the Commissioner requests, remove or uncover such portion of the finished work as the Commissioner may direct before the final acceptance. After the examination, the Contractor shall restore said portion of the work to the standard required by the specifications. If the work thus exposed and

examined proves acceptable, the expense of uncovering or removing and replacing the parts removed shall be paid for as extra work but, if the work so exposed and examined is unacceptable, the expense of the uncovering or removing and replacing in accordance with the specifications shall be borne by the Contractor.

Failure or negligence on the part of the Commissioner or the Commissioner's representative to condemn or reject substandard or inferior work or materials shall not be construed to imply an acceptance of such work or materials, if it becomes evident at any time prior to the final acceptance of the work by the City. Neither shall it be construed as barring the City at any subsequent time from the recovery of damages or of such a sum of money as may be needed to rebuild and/or replace all portions of the substandard or inferior work or replacement of improper materials wherever found.

Any portion of the work or any material incorporated into the work, which may have become damaged during the progress of the work, shall be removed and replaced at the expense of the Contractor prior to final inspection and acceptance of the work.

2.4.14 Source of Supply

The Commissioner reserves the right to prohibit the use of materials from any source when such material is known to the Commissioner to be inferior and from any plant when its mode of operation is known to the Commissioner to be such as to make improbable the supplying of reasonably uniform material.

2.4.15 Or Equal Clause

Whenever a material, article, or piece of equipment is identified on the plans or in the specifications by reference to manufacturers or vendors names, trade names, catalogue numbers, etc., it is intended merely to establish a standard, and any material, article, or equipment of other manufacturers and vendors which will perform adequately the duties imposed by the general design shall be considered equally acceptable provided the material, article, or equipment so proposed is, in the opinion of the Commissioner, of equal substance and function. It shall not be purchased or installed by the Contractor without the Commissioner's written approval.

2.4.16 Continuous Work

The Contractor shall execute the work only in the presence of the Commissioner or the Commissioner's representative during the working hours of the day unless, at the Contractor's own volition upon due notice to the Commissioner and with the Commissioner's approval, the Contractor desires to prosecute the work continuously or at night. In all cases, the Contractor shall provide such facilities

for carrying on night work as the Commissioner directs. No claims shall be allowed for extra payment on account of night or continuous work nor for damages or detriment to the quality of work which may be incurred by the Contractor in being permitted to carry on work during such time, it being understood that full compensation for night or continuous work and all expenses incident thereto are included in the prices for the various items in the contract.

2.4.17 Progress of the Work

The Contractor shall proceed with diligence to do the work and shall work continuously without delay. The Contractor shall not suspend operations at own discretion for whatever purpose without City of Milwaukee approval. It is the intent under this Section of the General Specifications that the work proceed continuously and expeditiously to completion irrespective of time allowed for completion of the work. Should the Contractor fail to prosecute the work continuously and expeditiously, the Commissioner may invoke the provision of Section 7.14(2) of the Milwaukee City Charter with a recommendation to the Common Council that the Contractor is not deemed to be a competent and reliable bidder and be disbarred from bidding for a period of time. If interruption of the work occurs during the term of contract which is beyond the control of the Contractor, i.e., strikes, governmental regulations, severe shortage of building materials, fires, or floods which are entirely beyond the control of the Contractor, the Contractor shall within such time as the Commissioner deems reasonable present written notice of such conditions to the Commissioner with a request for interruption of the work or an extension of the time for the completion of the entire contract. If said delays are approved by the Commissioner, such delays will entitle the Contractor to an extension of time as provided herein, but the Contractor shall not be entitled to damages or additional payment due to these delays. Whenever the Commissioner shall have taken action for the reasons described above to change the term of the contract described in this agreement, it is incumbent upon the Contractor to notify the Surety of such change.

Should the Contractor fail to maintain the rate of progress required to complete the work within the contract time specified, the Commissioner may require that additional workers or equipment be placed on the work or a reorganization of plant layout be effected in order that the work be brought up to schedule and maintained there. Should the Contractor fail to comply therewith, the Commissioner may proceed under the provisions of 2.4.18 of these Specifications.

In the event work is prosecuted during adverse weather conditions, the Contractor will be required to exercise precautions necessary to produce satisfactory work and shall protect the finished work from the elements. It is agreed and understood that the cost thereof has been included in the unit prices bid for the various items of work in the contract and that no extra compensation be allowed therefore.

2.4.18 Default and Completion of Work

The Commissioner has the right, in case of the improper or imperfect performance of the work, to suspend the work at any time and to order the entire reconstruction of the same or to re-let the same to some other competent party. The Commissioner has the right, in case the work shall not be prosecuted with such diligence and with such number of employees to insure its completion within the time limited by the contract documents, to suspend such work and re-let the same to some other competent party or employ personnel and secure material for the completion of the same and charge the costs thereof to the Contractor.

When the Contractor or Surety, both if locally available, are notified that the Commissioner has elected to suspend the work, the Contractor shall cease to have the right to occupancy of the work site, and the Commissioner shall have the right to forthwith take possession of any materials, tools, equipment, or plant delivered thereon for work under the contract.

The Surety shall have the right to complete the contract, but in the event that performance has not been commenced within ten days from the date of the notice of suspension, the Commissioner has the right to continue in the possession of and utilize, for the completion of the contract, any and all materials, tools, equipment, and plant which the Contractor has had delivered upon the site of the work, and to prosecute the work to completion either by force account or by contract.

Expenditures made by the Commissioner in completing the work under the contract and in payment of valid claims arising under the terms of the contract shall be deducted from monies due or which would have become due to the Contractor upon completion of the contract. No claims for "extras" arising from the Commissioner's actions in completing the work will be entertained. The Contractor and Surety shall be liable and shall reimburse the City for any costs, in excess of the contract amount, required to complete the work.

2.4.19 Assumption of Control of Work Not a Waiver

Neither the acceptance of any work by the Commissioner nor any order, measurement, or certificate by the Commissioner for payment of money nor any payment for nor acceptance of the whole or any part of the work by the Commissioner, nor any extension of time except for causes beyond the control of the Contractor as set forth above, nor any possession taken by the City or its employees, shall operate as a waiver of any portion of this contract or of any power herein reserved to the City or any right to damages herein provided; nor shall any waiver of any breach of this contract be held to be a waiver of any other or subsequent breach.

2.4.20 Workmanship

All workmanship shall conform to the best standard practice. Unless otherwise specified, the specifications of recognized association of manufacturers and contractors or industrial manufacturers shall be used as guides for the standards of workmanship.

All exposed items of work shall present a neat and acceptable appearance and shall be as true to shape and alignment as is possible to obtain with measuring or leveling instruments generally used in the respective types of work. Items of work shall be sound and fully protected against damage and premature deterioration. It is specifically understood that in all questions of quality and acceptability of workmanship, the Contractor agrees to abide by the decisions of the Commissioner.

The Contractor shall furnish all labor, materials, necessary tools, equipment, and accessories that are necessary for integrating all portions of the work included in the contract to fulfill the true purpose and intent of the contract.

2.4.21 Partial Acceptance

When requested by the Contractor and upon specific approval of the Commissioner, prior to final inspection and acceptance, the Contractor may be relieved of maintenance of sections of the work which have been completed. Such partial acceptance and assumption of the maintenance by the City shall be covered by a written notice from the Commissioner to the Contractor, and such notice shall definitely designate the sections of the work on which the Contractor is to be relieved of maintenance and shall also set forth the date upon which such notice will be effective. The assumption of maintenance by the City, however, shall not relieve the Contractor of any responsibility for defective workmanship or materials or for damages caused by the Contractor's own operations.

Such action shall not be construed to be a final inspection or acceptance of any part of the work nor waiver of any legal rights.

2.4.22 Final Acceptance

The Commissioner shall make an inspection of the work included in the contract as soon as practical after notification by the Contractor and confirmation by the Inspector that such work has, in their opinion, been completed and final cleanup performed.

Should the inspection disclose any work, in whole or in part, as being unsatisfactory, the Commissioner shall give the Contractor the necessary instructions for correction of the same, and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be

made which shall constitute the final inspection provided the work has been satisfactorily completed.

All work included in the contract shall be considered accepted on the date certified to the Commissioner as completed by the Engineer in Charge or other authorized representative.

2.4.23 Employee Qualifications

The Contractor shall employ only such foremen, mechanics, laborers, or other employees as are physically fit, competent, experienced, and qualified to handle each class of work on which they are employed. Any person previously discharged by order of the Commissioner from work on any City contract shall not be permitted to work on this contract without first obtaining written permission from the Commissioner.

2.4.24 Employees to be Discharged for Cause

When any employee willfully, negligently, or ignorantly fails to perform any of the duties or assignments or is disobedient or abusive and disrespectful to a fellow employee or to the Commissioner or the Commissioner's representative, such employee shall, upon written order from the Commissioner to the Contractor, be discharged from the work.

2.4.25 Blasting

In all blasting operations, the Contractor shall abide by all provisions of Section 32-26, Milwaukee Code of Ordinances.

2.4.26 Right of Entry

The Commissioner reserves the right of entry to any portion of the site of the work. Such right of entry shall also be available to the City forces, utilities, or contractors for the purpose of constructing collateral work or making emergency repairs. The contractor shall not be entitled to any damages for delays or hindrances resulting from such work.

2.4.27 Guarantee

Contractor guarantees the work performed under this contract for the period set forth in the technical specifications.

CHAPTER 2.5.0 SCOPE OF WORK AND SPECIFIC INSTRUCTIONS

2.5.1 Intent of Contract Documents

The true intent of the contract documents is to provide for the construction, execution, and completion in every detail of a complete work or improvement which the Contractor undertakes to do in full compliance with the contract documents and in accordance with recognized engineering and construction principles. The contractor shall perform all items of work covered and stipulated in the proposal and perform altered and extra work, all in accordance with the lines, grades, typical sections, and dimensions given and shall furnish, unless otherwise provided in the contract documents, all material, implements, machinery, equipment, tools, supplies, transportation, electric power and labor necessary to the prosecution and completion of the work.

2.5.2 Location of Underground Structures

It is the responsibility of the Contractor to become acquainted with the location of all underground structures which may be encountered or which may be affected by work under the contract.

The locations of any underground structures furnished, shown on the plans, or given on the site are based upon the available records but are not guaranteed to be complete or correct and are given only to assist the Contractor in making a determination of the location of all underground structures. The Contractor understands and acknowledges that the City is not responsible for any representations made by it to the Contractor relating to the location or dimensions of underground structures.

2.5.3 Harmonious Relations

The Contractor shall work in harmony with other contractors or with utility or City forces engaged in collateral work. The Contractor's operations shall be arranged to prevent interference or damage to the work of others. In case of dispute the decision of the Commissioner shall be final and binding upon the parties affected.

2.5.4 Cleaning of Work Site

The Contractor shall at all times keep the site of the work, including streets, alleys, and all private or public property involved in or adjacent to the work free from any rubbish, surplus, or waste materials that have been deposited by the employees or which have accumulated as a result of the work.

The Contractor shall remove all surplus materials, tools, equipment, or plant, leaving the site of the work and all portions of the finished work clean, unobstructed, and ready for use before the work will be considered completed. The Commissioner may have removed from the site of the work all rubbish, surplus, or waste materials which the Contractor has neglected or refused to remove and deduct the costs of such removal from any monies due the Contractor.

2.5.5 Items Not Listed in "Estimate of Quantities"

Sundry items which are incident to or required in the construction of the work but are not included as items in the estimate of quantities shall be considered an integral part of the contract, and all labor, materials, etc., required for such items shall be furnished by the Contractor and the cost of same included in the unit prices bid.

2.5.6 Omissions, Discrepancies and Corrections

It is the intent of the contract documents that all performance under the contract be in accordance with the best practice. The Contractor shall carefully check the plans both before commencing and throughout the work. The Contractor shall immediately call the Commissioner's attention to any errors, omissions, or discrepancies that the Contractor may discover in the plans before proceeding with the work affected. The Commissioner reserves the right to make such corrections as deemed necessary for the fulfillment of the true intent of the contract documents.

2.5.7 Work to be Done at Contractor's Risk

All work to be done under the contract documents from the commencement until the final acceptance of such work shall be done entirely at the Contractor's risk. No partial payment for, or partial acceptance of, any part of the work shall absolve the Contractor from such risk.

2.5.8 Guarantee

The Contractor shall be liable for the acceptable condition of all work under the contract, both during construction and throughout any guarantee period. The guarantee period, if any, shall commence on the Date of Completion. If, within said guarantee, repairs, or changes are required in connection with the work, which, in the opinion of the Commissioner, is rendered necessary as a result of the use of materials, equipment, or workmanship which are inferior, defective, or not in accordance with the terms of the contract, the Contractor shall promptly, upon receipt of the notice from the Commissioner, and without expense to the

City, install the work to a satisfactory condition, correct all defects, make good all damage to the structure, site, or contents thereof, which damage, in the opinion of the Commissioner, results from the use of such inferior or defective materials, equipment, or workmanship.

2.5.9 Breakdown for Partial Estimates

Whenever the Commissioner sanctions partial payments for work completed during any specified period, the Contractor upon request by the Commissioner shall furnish a breakdown of the actual quantities and unit prices used in preparing unit bid price for each item in the Proposal. The breakdown must be balanced and not contain prices which are proportionately higher for work to be completed first than for work to be completed later. The Commissioner reserves the right to order such changes as may, in the Commissioner's opinion, be necessary to balance such breakdown.

2.5.10 Time for Completion - Essence of Contract

The parties hereto specifically understand and agree that the time specified for completion is of the essence of this contract, and the Contractor shall not be entitled to claim performance of this agreement unless the work is satisfactorily completed in every respect within the time specified in the contract.

2.5.11 Contractor to be Charged for Inspection After Time Allowed for Completion has Expired

The Contractor shall be charged for inspection provided by the City or by an agent for the City for each and every day inspection is required on all construction projects after the time allowed for completion has expired. This per diem rate for inspection, when provided by the City, shall include the cost of inspection, construction supervision, clerical, and administrative costs, traffic engineering, vacations, pensions, holidays, overtime, and other similar overhead charges. This charge for inspection will be deducted from monies due the Contractor at the completion of the contract. The amount of the per diem charge shall be set forth in the Bureau Specifications.

An inspector shall be assigned to the project upon notice from the Commissioner to the Contractor to start work. If more than one crew is utilized by the Contractor, as many additional inspectors will be assigned to the work as the Commissioner deems necessary. An additional charge per day after the time allowed for completion shall be made for each such additional inspector. Inspection will be continuous until, in the judgment of the Commissioner, the work is complete. This period of time will include all construction operations, including cleaning of work site. If for any reason a Contractor wishes to suspend operations, a request for

permission to do so shall be made in writing to the Commissioner. Such permission will only be granted for conditions beyond the control of the Contractor such as strikes, governmental regulations, severe shortage of building materials, fires, floods, or for other reasons authorized by the Commissioner.

When the official notice requires completion of the contract by a specific calendar date or a specified number of calendar/work days from date of order to proceed, all work including cleanup of the work site must be complete by that date. However, upon written request from the Contractor, an extension of time may be granted by the Commissioner due to conditions beyond control of the Contractor such as strikes, governmental regulations, severe shortage of building material, fires, floods, or for other reasons authorized by the Commissioner.

When a portion of the contract is required to be completed by a specific calendar date or within a specified number of calendar/work days, the per diem charge for inspection will be assessed for each work day beyond that date until the required portion is complete unless an extension of time has been granted.

The decision of the Commissioner shall be considered final in all matters pertaining to the necessity for inspection, the number of inspectors, and the granting of time extension.

2.5.12 Substitution of Materials

The Contractor may submit plans and specifications for a type of material other than those covered by the contract documents, provided they conform to requirements of the contract documents covering the particular type of material for which a substitute is proposed. In all cases, however, the plans and specifications for the proposed substitution must be approved by the Commissioner in writing.

In the event of such substitution, the Commissioner shall require from the Contractor a credit deduction from the contract amount equal to any saving in material cost resulting from use of the proposed substitute.

The name of the manufacturer and location of the plant shall be furnished together with the proposal for the use of any substitute.

CHAPTER 2.6.0 EXTRA WORK AND CREDITS

2.6.1 Revision of Plans

In case the Commissioner deems it advisable or necessary in the execution of the work to make any alteration which will increase or diminish the quantity of labor or material or the expense of the work, such alterations shall not annul or vitiate the contract nor release the Surety. The Contractor shall furnish the necessary labor, material, etc., to complete the work as altered within the time limit originally specified or as extended by the Commissioner. The difference in cost of the work so altered shall be added to or deducted from the amount otherwise due the Contractor, as the case may be, and shall be determined in accordance with the methods specified in this chapter.

2.6.2 Authority for Altered Work

No alteration in the work under the contract shall be made without a written order from the Commissioner. No verbal suggestion or order of any employee of the Department of Public Works or of any other person shall be construed as authorizing any claims on the part of the Contractor for extra compensation for labor, materials, or other items pertaining to such work, or for damages or any other expense because of the Contractor's compliance therewith.

Verbal orders and suggestions as to the performance of the work may be given from time to time by representatives of the Commissioner, but when, in the opinion of the Contractor, such orders or suggestions involve extra work for which added compensation should be received, a written order from the Commissioner authorizing such work shall be requested. In the event of any disagreement as to the amount of work involved under any authorized order for extra work, it is specifically agreed by all parties that the decision of the Commissioner shall be binding and conclusive.

2.6.3 Basis of Payment or Credit for Altered Work

The method of determining the basis of payment or credit resulting from such altered work shall be:

- a) By the UNIT BID PRICE named in the proposal for like items of work.
- b) By a SUPPLEMENTAL SCHEDULE OF PRICES stated by the Contractor in the proposal when such bids are requested and when the Unit Bid Price is not applicable.
- c) By the predetermined FIXED UNIT PRICE contained in the "Supplemental Schedule" included in the contract documents when the Unit Bid Price is not

applicable or when a Supplemental Schedule of Prices bid by the Contractor was not required.

In the event that none of the three foregoing methods are applicable, the Commissioner reserves the right to employ any of the following methods:

- d) By Unit Prices submitted by the Contractor and accepted by the Commissioner.
- e) By a Lump Sum Price submitted by the Contractor and accepted by the Commissioner
- f) By a Cost Plus 15% Basis. Cost is hereby defined as including the actual cost of labor, foremen over labor actually employed upon the extra work (time of foreman if engaged upon supervising other work to be prorated), labor liability insurance, the Contractor's payroll taxes, if any, and materials delivered upon and forming a part of the extra work, but excluding all administration and clerical expenses, all supervision and superintendence above foreman, and use and upkeep of small tools, plant and machinery and rent of storage yard. Prevailing rental rates on special tools and equipment and actual cost of special services will be allowed the Contractor without the above specified 15% added thereto.

2.6.4 Claims for "Cost Plus" Extra Work

Claims for such extra work shall not be considered unless the Contractor presents to the Commissioner's representative on the work an itemized statement in duplicate of the hours of labor, quantities of materials, etc., upon which payment is to be based. The Commissioner's representative shall verify such amounts and shall retain the original for the Commissioner and return the duplicate copy to the Contractor. The verification of such items by the Commissioner's representative shall not in itself be construed as authorization or acceptance of such claims. No claims will be considered until the original bills, receipts, or vouchers have been furnished to the Commissioner by the Contractor.

2.6.5 Time Limit for Filing Claims for Extra Work

Claims for extra work shall be filed at such intervals as directed by the Commissioner or as designated in the contract documents, but in all cases not later than five days after the Date of Completion.

Chapter 2.7.0 PROTECTION OF WORK

2.7.1 Protection of Work

During performance and up to completion date of work, the Contractor shall be under an absolute obligation to protect finished and unfinished work against any damage, loss, or injury, and in the event of such damage, loss or injury, the Contractor shall promptly replace or repair such work, whichever the Commissioner shall determine to be preferable. The performance of any work by City forces, when done in conjunction with work under the contract, shall not relieve the Contractor from full responsibility and liability.

2.7.2 Street Barricades, Signs, and Warning Devices

The Contractor shall be responsible for the erection and maintenance of all barricades, lights, and signs necessary for public safety and convenience in accordance with the specifications entitled "Minimum Requirements for Warning Devices to be Used for Work Performed in the Public Ways." In general, all hazards within the limits of the work or on detour around the work must be marked with well-painted, well-maintained barricades, reflectors, electric lights, flashers, and warning and directional signs in sufficient quantity and size adequate to protect life and property. These safeguards shall be moved, changed, increased, or removed as required during the progress of the work to meet changing conditions.

2.7.3 Street Barricades and Detour Signs

Whenever the Contractor shall have received a permit to close any street, alley, or public right of way to travel, the Contractor shall immediately upon the closing of such thoroughfare furnish, erect, and maintain substantial barricades across the streets, alleys, or property affected and shall furnish, post, and maintain detour signs thereon. Detour signs shall also be posted and maintained at immediately adjacent street and alley intersections for the convenience and guidance of traffic. The barricades and detour signs shall be illuminated by yellow lights throughout the night, or, when visibility is poor, detour signs shall conform to the standard detailed and shown in the specifications.

2.7.4 Flagpersons Required

Whenever the Contractor's operations obstruct or endanger a traffic lane and no marked detour has been provided, the Contractor shall furnish a flagperson to

direct traffic through or around the congested area. The Commissioner shall have the right to require additional flagpersons as may be deemed necessary.

2.7.5 Removal of Snow

The Contractor shall be responsible for immediate removal of snow from those sections of streets and/or alleys which the Contractor has obstructed.

CHAPTER 2.8.0 PROPERTY PROTECTION AND SANITATION

2.8.1 Protection of Work and Property - Emergency

- a) The Contractor shall at all times safely guard City property from injury or loss in connection with this contract. Contractor shall at all times safely guard and protect the work site, and that of adjacent property, from damage. The Contractor shall replace or make whole any such damage, loss, or injury unless such be caused directly by the City.
- b) In case of some emergency which threatens loss or injury of property and/or safety of life, the Contractor will be allowed to act, without previous instructions from the Commissioner, in a diligent manner. The Contractor shall notify the Commissioner immediately thereafter. Any claim for compensation by the Contractor due to such extra work shall be promptly submitted to the Commissioner for approval. The Commissioner's determination shall be final and conclusive.
- c) Where the Contractor has not taken action but had notified the Commissioner of an emergency threatening injury to persons or damage to the work or any adjoining property, the Contractor shall act as instructed or authorized by the Commissioner.

2.8.2 Safeguarding Adjacent Buildings

Prior to commencing an excavation or tunnel in the immediate vicinity of any building or other structure, the safety of which may be endangered thereby, the Contractor shall comply with all requirements of applicable law. The Contractor shall serve the required notice upon the owner of such building or structure or the agent, naming the date of commencement of such work and allotting a reasonably sufficient length of time for the owner to take steps to protect the property. Throughout the course of the work adjacent to such property, the Contractor shall exercise due precaution and care and, at own expense, shall furnish and place such extra timbering, bracing, and sheathing as may be necessary to insure against the loss of ground adjacent to the excavation or tunnel and, when so indicated on the plans or when so ordered in writing, as an extra, by the Commissioner, shall leave such portions of timbering, bracing, and sheathing in place, as the Commissioner may direct. The Contractor must also take necessary precautions in the work operations to prevent the loss or settlement of such adjacent grounds and avoid the use of equipment which would tend to encourage such settlement or loss of ground.

2.8.3 Property Safeguards

The Contractor shall safeguard from and be solely responsible for all damage resulting from the work operations to water, gas, steam or drain pipes, street and building sewers, building services, catch basins, manholes, conduits, cables, hydrants, valve and stop boxes, light poles, street lighting cables and

transformers, traffic signals, traffic and street signs, fire and police alarm boxes, mail boxes, or any other privately or publicly owned existing installation or structure and the right-of-way structure of any steam or electric railway or railroad. The Contractor shall also safeguard from and be solely responsible for damage to pavements, sidewalks, curbs, gutters, trees, shrubbery, or lawns, except in such cases where the removal without replacement has been authorized in the contract documents or by the Commissioner. The cost of all safeguarding shall be included in the price bid for work under the contract.

2.8.4 Access to Properties

During the work the Contractor shall not shut off nor unnecessarily interfere with either pedestrian or vehicular access to property without the consent of the Commissioner.

2.8.5 Work in Private Right-of-Way

Whenever the work is to be prosecuted through private property for which the City has obtained a license or an easement, the Contractor shall abide fully with the terms of the license or the easement, a copy of which is on file in the Department of Public Works.

2.8.6 Statement from Easement Grantors

Before final payment will be made, the Contractor shall obtain and submit to the Commissioner a statement from the parties granting the license or easement, which statement shall be in the following form:

Date _____

Commissioner of Public Works,
City of Milwaukee:

The property owned by the undersigned has been left in a satisfactory condition, following the recent completion of construction work through such property, as described in the license or easement agreement permitting such work.

(Witness)

(Owner)

(Witness)

by

(Title)

2.8.7 Failure to Secure Statement

In case the Contractor is unable to secure the above statement, the Contractor shall inform the Commissioner of the reasons for failure to do so. The Commissioner or the Commissioner's representative shall then examine the site, and the Commissioner shall direct the Contractor to complete any work that may be necessary to satisfy the terms of the license or easement. Should the Contractor refuse to do the work, the Commissioner reserves the right to have it done by contract or force account and deduct the cost of same from monies due the Contractor, or the Commissioner may require the Contractor to furnish a bond in a sum satisfactory to the Commissioner to cover any legal claims for damages. When the Commissioner is satisfied that the work has been completed in compliance with the contract documents and the terms of the license or easement, the Commissioner reserves the right to waive the requirement of obtaining the statement, when the Contractor's failure to obtain such statement is due to the grantor's refusal to sign and this refusal is not based upon any legitimate claims that the Contractor has failed to fulfill the terms of the license or easement or when the Contractor is unable to find or undue hardship would be imposed to solicit the grantors.

2.8.8 Maintenance of Crosswalks and Gutters

Suitable pedestrian crossings, at least four feet in width, shall be provided and maintained by the Contractor as directed by the Commissioner. Gutters must not be obstructed at any time, and where it is necessary to cover them, a continuous pipe or timber drain ample to carry off the storm waters shall first be laid along the gutter, and such pipe or drain shall be kept open and free from obstructions.

2.8.9 Sanitary Regulations

The Contractor shall construct and maintain properly sheltered sanitary conveniences for the employees, and their use must be strictly enforced. When permission is granted to use the manholes of designated sewers for sanitary outlets, such manholes must be flushed and cleaned periodically and thoroughly cleaned when no longer in use.

2.8.10 Drainage

Drainage must not be obstructed at any time. When necessary, a continuous pipe or timber drain of ample capacity shall be laid to carry off the storm water. Such pipe or drain shall be kept open and free of obstructions. All storm or ground water, which is to be removed from the site of the work, must be conveyed to an inlet of a storm or combined sewer, or when so approved by

the Commissioner to some other point of disposal. All sanitary sewage must be conveyed by closed pipe or hose to an inlet of a sanitary or combined sewer, or when so approved by the Commissioner, to some other point of disposal. Proper precautions shall be taken to prevent excessive quantities of clay, sand, or silt from entering existing sewers. All existing structures which are disturbed must be restored to a condition at least equal to their original condition and to the satisfaction of the Commissioner.

2.8.11 Access to Public and Private Underground Structures and Appurtenances

Free access must always be maintained to fire hydrants, fire alarm and police call boxes, water and gas gate valves, catch basins, sewer, water, Bureau of Traffic Engineering and Electrical Services, utilities, manholes, and appurtenances. Whenever free access to any such structure shall have been obstructed or interfered with during the progress of the work, the Contractor shall immediately remove, at the Contractor's own expense, such obstruction or interference.

2.8.12 Water Line Connections to Hydrants

The piping and fittings which the Contractor employs for connecting a water supply line to a City hydrant shall be equipped with a valve to be used in place of the regular hydrant valve which shall remain fully opened during usage. The fitting and valve assembly shall be watertight.

2.8.13 Traffic

The Contractor shall maintain vehicular traffic as specified in the contract documents or as otherwise directed by the Commissioner.

2.8.14 Emergency Maintenance and Protection

In the event it becomes necessary for the City to perform emergency maintenance and protection, which is the responsibility of the Contractor under the contract documents, the cost of such work shall be billed to the Contractor or deducted from the final payment if not paid.

CHAPTER 2.9.0 LEGAL RELATIONS

2.9.1 Laws and Regulations

The Contractor, the Contractor's agents, and employees, shall at all times observe and comply with all Federal laws, rules and regulations, statutes, codes, rules and regulations of the State of Wisconsin, and all applicable charter provisions, codes, regulations, and ordinances of the City of Milwaukee, all amendments thereto, and all the provisions of the contract documents, which in any manner affect the conduct of the work and all such orders or decrees as exist at the present and which may be enacted later of bodies or tribunals having jurisdiction or authority over the work. The Contractor shall protect and save harmless the City, its officers, and representatives, against any claim or liability arising from the violation of any such law, ordinance, code, rule, regulation, or order.

2.9.2 Assignment and Subletting

Any subcontracting of this agreement is mutually recognized by all parties only to the extent of its approval and acceptance by the Commissioner at the time of the award of this contract. The Contractor shall not subsequently assign this contract or any interest therein, nor subcontract the work or any part thereof, without written consent of the Commissioner having first been obtained. If the Contractor submits subsequent written request to the Commissioner for substitution(s) of listed subcontractor(s), the Contractor shall give the Commissioner written assurance that the Contractor will save the City harmless from any damages which may arise from litigation between the original subcontractor(s) and the Contractor as a result of such substitution(s). The decision of the Commissioner shall be final in determining consent for said substitution(s). It is incumbent upon the Contractor to notify the Surety of such consent granted by the Commissioner for said substitution(s).

If the Contractor shall so assign or subcontract without such consent, the Commissioner shall have the right to rescind this contract and to declare the same null and void or to re-let the work to some other competent party, thereupon adjusting and determining the damages to the City arising thereby, and the Contractor shall be liable to the City for such damages as the Commissioner shall so adjust and determine, which adjustment and determination thereof, shall be final and conclusive on the parties thereto.

The Contractor assumes full liability for all acts and omissions of any subcontractor or of anyone employed directly or indirectly by either said Contractor or any subcontractor, and this liability shall be in addition to any other legal liability of the Contractor. Neither the approval nor endorsement of the Commissioner nor

anything contained in the contract documents shall be construed as creating any contractual relationship between any subcontractor and the City.

Consent to the assignment or subletting of this contract or of any part thereof or any alterations which may be made in the terms of this contract or in the work to be done under it or the granting of any extension of time for the performance of the contract or any other forbearance on the part of either the Commissioner or Contractor to the other shall not in any way release the Contractor or Surety or their heirs, executors, administrators, successors, or assigns from their liability hereunder.

The Contractor, to the extent practicable, shall maintain a list of all subcontractors and suppliers performing work or furnishing materials under each formal contract. This list must be submitted to the Commissioner upon request.

2.9.3 Patents and Trade Secrets

The Contractor shall hold and save the City and its officers, agents, servants, and employees harmless from liability of any nature or kind, including cost 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 contract documents.

If the Contractor uses any design, device, or materials covered by letters, patent or copyright, the Contractor shall provide for such use by suitable agreement with the owner of such patented or copyrighted design, device, or material. It is mutually agreed and understood, that without exception, the contract prices shall include all royalties or costs arising from the use of such design, device, or materials, in any way involved in the work. The Contractor and/or Contractor's Sureties shall indemnify and save harmless the City from any and all claims for infringement by reasons of the use of such patented or copyrighted design, device, or materials or any trademark or copyright in connection with work agreed to be performed under this contract and shall indemnify the City for any cost, expense, or damage which it may be obliged to pay by reason of such infringement at any time during the prosecution of the work or after the completion of the work.

License and/or Royalty Fees for the use of a process which is authorized by the City must be reasonable and paid by the Contractor to the holder of the patent or authorized licensee.

2.9.4 Liens and Taxes

Any and all taxes and license or permit fees imposed by the Federal, State, and local municipalities are the sole responsibility of the Contractor. Any and all liens

or claims of damages which may be chargeable to the Contractor are the sole responsibility of the Contractor. Commissioner reserves the right to withhold a sufficient amount from the contract payment to indemnify the City against such liens or claims of damages.

No materials or supplies for the work shall be purchased by the Contractor or by any subcontractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants that the Contractor has good title to all materials and supplies used in the work, free from all liens, claims, or encumbrances.

2.9.5 Sales Tax

The City is exempt from Wisconsin Use, Sales Tax, and the .5% County Tax. Bidders, therefore, shall not add sales tax to their proposals when bidding to the City but shall include in their lump sum bids only the sales tax they will be required to pay directly as a consumer when obtaining materials, etc., to fulfill the contract requirements should they be the successful bidder.

2.9.6 Protection Against Liability

Contractor covenants and agrees that Contractor shall save and indemnify and keep harmless the City against all liability, judgments, costs, and expenses, which may in any way come against the City in consequence of the granting of the contract, or which in anyway results from the carelessness or neglect of the Contractor or the agents, employees, or workers of the Contractor or Subcontractors in any respect whatever, and in every such case where judgment is recovered against the City by reason of the carelessness or negligence of the Contractor or the Contractor's agents, employees or workers, or Subcontractors, such judgments shall be conclusive against the Contractor, not only as to the amount of damages, but as to Contractor's liability to the City.

2.9.7 Liability and Insurance

The Contractor shall be responsible for and shall save the City harmless from, and defend the City against all liability for damages occasioned by the digging up, use or occupancy of the street, alley, highway, public grounds, and private grounds, or which may result therefrom or which may result in any way from the negligence or carelessness of the Contractor, the Contractor's agents, employees, workers, by reason of the elements, unforeseen or unusual difficulties, obstructions, or obstacles encountered in the prosecution of the work, and they shall indemnify the City for and save it harmless from all claims and liabilities, actions, causes of action, and liens for materials furnished or labor performed in the construction or execution of the work and from all costs, charges, and expenses incurred in

defending such suits or actions and from and against all claims and liabilities for injury or damage to persons or property emanating from defective or careless work methods, or from and against all claims or liabilities for royalties, license fees, actions, suits, charges, and expenses or damage from infringement for reason of the use of any invention or improvement in tools, equipment or plant or any process, device or combination of devices used in the construction of the work.

Each Prime Contractor must furnish to the City of Milwaukee, prior to the start of work, certificates of insurance which confirm that the Prime Contractor has the types and amounts of insurance referenced in Sections (a) through (d). The Prime Contractor shall require all of its subcontractors to carry the same types and amounts of coverage as required of the Prime or may instead provide the coverage for any or all subcontractors. The Prime Contractor is fully responsible for assuring subcontractor compliance with all the insurance requirements specified herein.

a) WORKER'S COMPENSATION AND EMPLOYEES LIABILITY

Coverage Amounts

Worker's Compensation		Statutory
Employer's Liability		
Bodily Injury by Accident	each accident	\$100,000
Bodily Injury by Disease	each employee	\$100,000
Bodily Injury by Disease	policy limit	\$500,000

To Include

Other state's coverage
 United States Longshoremen and Harbor
 Worker's Endorsement (Required only when the
 contract involves work on navigable bodies of water)

b) COMMERCIAL GENERAL LIABILITY

Limits of Liability

Bodily Injury/Property Damage	each occurrence	\$1,000,000
	general aggregate	\$1,000,000
	products/completed Operations aggregate	\$1,000,000
Personal Injury	aggregate	\$1,000,000

To Include

Occurrence form
Premises/operations coverage
Products/completed operations coverage including extension of coverage for two (2) years after acceptance of work by the City of Milwaukee
Independent contractors (Owners/Contractors Protective) coverage
Contractual liability for risks assumed in this agreement
No exclusion for explosion, collapse, or underground occurrences

c) AUTOMOBILE LIABILITY

Limits of Liability

Bodily Injury/Property Damage	each accident	\$1,000,000
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To Include

Coverage on all owned, non-owned, and hired vehicles

d) UMBRELLA LIABILITY

Limits of Liability

Personal Injury/Property Damage	each occurrence aggregate	\$2,000,000 \$2,000,000
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To Include

Occurrence form
First dollar defense coverage
Insuring agreement which will provide excess protection to the primary coverages

For coverages referred to in section 2.9.7.(b), (c), and (d), the City of Milwaukee shall be named as an additional insured.

The worker's compensation and employers liability certificate should confirm that thirty (30) days notice of cancellation must be provided. For all other insurance coverages referenced above, sixty (60) days notice of cancellation must be provided.

A separate certificate need not be filed if the Prime Contractor has a current certificate on file with the City of Milwaukee. It is the responsibility of the Prime Contractor to make this determination and to provide evidence of coverage if a previous certification has been filed.

No Prime Contractor or Subcontractor shall perform any work under the contract after a certificate has expired or been canceled unless a new or renewal certificate is provided prior to the expiration or cancellation date of the previous certificate. The Prime Contractor shall have the responsibility of ensuring that valid certificates are on file for itself and all Subcontractors it plans to use.

2.9.8 Performance Bond and Payment Bond

For all Public Works contracts over \$25,000, the contractor is to submit to the Commissioner, prior to or at the time of execution of the contract, a performance bond and a payment bond in an amount equal to 100% of the Contract price. For contracts of \$10,000 or more, but not over \$25,000, the contractor may be requested, in lieu of 100% bonds, to provide an irrevocable letter of credit or a performance bond and a payment bond in an amount equal to 50% of the contract price. The bonds required on any contract will be based on the estimated contract amount and will be specified in the bid specifications. All bonds must be executed by a surety company authorized to do business in the State of Wisconsin and must be accompanied by a Power-of-Attorney for the Attorney-in-Fact. The performance bond and the payment bond must be submitted as separate instruments. The performance bond shall also cover all work required under the guarantee provisions of the contract.

2.9.9 Unforeseen Delay

If the City is prohibited or enjoined from proceeding with the work or from authorizing its prosecution, either before or after its commencement, by reason of any litigation or otherwise, the Contractor shall not be entitled to any damages by reasons of the delays thereby caused, except for the actual cost of protection of such work as the Contractor may have underway for the cost of removal and replacement of such tools, plant, and materials, as the Contractor may have delivered upon the work site, and such cost is to be determined by the Commissioner. The time of completion may be extended for such time, as in the judgement of the Commissioner, shall be equal to the aggregate delay.

2.9.10 Default, Neglect, or Delay Shall Not Render the City Liable

The default, neglect, or delay of any other Contractors, or the extension of time to any of them by the City for the completion of their work, shall not render the City liable to the Contractor or its Surety nor relieve them or either of them in any manner or sum whatsoever.

2.9.11 Termination of Contract for Cause

If, through any cause, the Contractor shall fail to fulfill in a timely and proper manner its obligations under this contract, or if the Contractor shall violate any of the covenants, agreements, or stipulations of this Contract, the City shall thereupon have the right to terminate this Contract by giving written notice to the Contractor of such termination, specifying the effective date thereof, at least five (5) days before the effective date of such termination. The City may relet the work to be performed under this Contract to some other competent party, or employ persons and secure material for the completion of same, and charge the costs thereof to the Contractor. In such event, all finished or unfinished work accomplished by the Contractor under this Contract shall, at the option of the City, become its property and the Contractor shall be entitled to receive just and equitable compensation for any work satisfactorily completed hereunder.

Notwithstanding the above, the Contractor shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of the Contract by the Contractor, and the City may withhold any payments to the Contractor for the purpose of set-off until such time as the exact amount of damages due to the City from the Contractor is determined.

2.9.12 Termination for Convenience of the City

The City may terminate this Contract at any time for any reason by giving at least ten (10) days notice in writing to the Contractor. If the Contract is terminated by the City as provided herein, the Contractor will be paid an amount which bears the same ratio to the total compensation as the work actually performed bears to the total work of the Contractor covered by this Contract, less payments of compensation previously made. However, if less than sixty percent (60%) of the work covered by this Contract has been performed upon the effective date of such termination, the Contractor shall be reimbursed (in addition to the above payment) for that portion of the actual out-of-pocket expenses (not otherwise reimbursed under the Contract) incurred by the Contractor during the Contract period which are directly attributable to the uncompleted portion of the work covered by this Contract.

2.9.13 Collusive Agreements - Prohibited

Each bidder submitting a bid for any portion of the work contemplated by the documents on which bidding is based shall execute, and attach thereto, an affidavit substantially in the form provided to the effect that the bidder has not entered into a collusive agreement with any other person, firm, or corporation in

regard to any bid submitted and also include therein compliance with Sec. 3.29, Milwaukee City Charter, such forms of affidavit being on file in the office of the Commissioner.

Before executing any subcontract, the successful bidder shall submit the name of any proposed subcontractor for prior approval and a non-collusive affidavit substantially in the form provided.

2.9.14 Progress Payments

If the Contractor shall proceed properly and with diligence to perform and complete this contract, the Commissioner may, from time to time as the work progresses, grant to the Contractor a payment for the estimated amount already earned, reserving five percent thereof, except that at any time after fifty percent of the work is completed and the Commissioner finds that satisfactory progress is being made, remaining progress payments may be paid in full, which shall entitle the holder thereof to receive the amount due thereon, when the conditions, if any, annexed to such estimate shall have been complied with, and that a payment may be granted by the Commissioner for any fabricated or manufactured materials and components specified, previously paid for by the Contractor and delivered to the work site or properly stored and suitable for incorporation in the work embraced in the contract. The granting of any such estimate shall not be construed as an acceptance of the work or any portion thereof. Generally, payments will be made not more than once a month or for less than \$5,000.

Nothing herein shall prevent the Commissioner from withholding additional retainage if work on the project is not satisfactory. In no event, however, shall more than ten (10) percent of the value of the work completed be retained.

For contracts involving \$10,000 or more, the City reserves the right to pay the Contractor with checks that are made payable to the Contractor and one or more subcontractors.

2.9.15 Final Payment

Upon the completion of the work by the Contractor pursuant to the terms of this contract and according to the contract documents and the true intent and meaning of this contract and after the acceptance of the work by the Commissioner, the City shall pay the Contractor, subject to any retainer or guarantee provisions in the contract documents, any balance then remaining due and payable by the terms of this contract.

Final payment may be withheld if prevailing wage statements are not filed or if there is noncompliance with requirements concerning the hiring of residents, disadvantaged businesses and apprentices. If these deficiencies are not satisfied within one (1) year of completion of the work, the department, following a final notification to the prime contractor, may close out the contract account and retain the contract proceeds permanently.

All monies paid or owed by the City to the Contractor shall be and constitute a trust fund, in the hands of the Contractor only, to the amount of all claims due and to become due or owing from the Contractor for lienable labor and materials until all such claims have been paid. The using of such monies by the Contractor for any other purpose until all such claims have been paid is, as declared by Section 779.02(5), and 779.16 Wisconsin Statutes, punishable as therein provided by law.

2.9.16 Final Payment to Terminate Liability of City

- a) The acceptance by the Contractor of the "Final Payments" provided for in the contract shall operate as, and shall be, a release to the City and its representatives from all claims by the Contractor for anything done or furnished for or relating to the work or for any act or neglect of the City or of any person relating to or affecting the work.
- b) Prompt Payment In accordance with Common Council File 900859, the provisions of 66.285 and 66.286 Stats., relating to prompt payment are modified as follows: The City of Milwaukee as a matter of policy shall strive to pay all invoices within 30 days. Payment to contractors will be deemed timely if the payment is mailed, delivered or transferred within 60 calendar days after receipt of a properly completed invoice (including all required attachments such as stored material forms, guarantees, manuals, as-build plans, etc.), or receipt and acceptance of the property or service, or the date of final completion as determined by the City when all corrective measures are complete on punch list items under the order or contract, whichever is later. If the City does not make payment by the 60th calendar day, the City shall pay simple interest beginning with the 31st calendar day at the rate of one percent per month, unless the City disputes the amount of the invoice. No interest will be paid on final payments of 10% of the contract or \$1,000, whichever is greater.

2.9.17 Time for Completion

The time specified for the completion of the work is of the essence of this contract, and the Contractor shall not be entitled to claim performance of this contract unless the work is satisfactorily completed in every respect within the time herein specified.

2.9.18 Contractor/City Relationship

The relation of the Contractor to the City is and shall be that of an independent Contractor.

2.9.19 Special Conditions - Federally-Aided Projects

Any special conditions relating to contracts involving the Economic Development Administration (EDA), the Department of Housing and Urban Development (HUD), or federally-assisted projects are subject to the special conditions attached hereto, which special conditions insofar as inconsistent with the provisions and general conditions heretofore stated shall be controlling.

2.9.20 Assignment of Payments

All monies payable under the contract, or any part thereof, will be paid to the contractor in accordance with the provisions of this section, and no assignment or order executed by the contractor directing payment of any portion or all of such funds to any other person or persons will be recognized by the City unless such assignment or order is given and shall have attached thereto, by endorsement or otherwise, the consent of the surety, and any designated assignee. No such assignment or order shall be binding on the City.

2.9.21 Records

Both parties understand that the City is bound by the Wisconsin Public Records Law, and as such, all of the terms of this Agreement are subject to and conditioned on the provisions of Wis. Stat. § 19.21, *et seq.* Contractor acknowledges that it is obligated to assist the City in retaining and producing records that are subject to Wisconsin Public Records Law, and that the failure to do so shall constitute a material breach of this Agreement, and that the Contractor must defend and hold the City harmless from liability under that law. Except as otherwise authorized, those records shall be maintained for a period of seven (7) years after receipt of final payment under this Agreement.

2.9.22 Audit

Audits and Inspections. At any time during normal business hours and as often as the City, or if federal or state grants or aids are involved, as the appropriate state or federal agency may deem necessary, there shall be made available to the City or such agency for examination all of its records with respect to the matters covered by this Contract and the Contractor shall permit the City or such agency

and/or their representatives and agents 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 or employment, and other data relating to all matters covered by this contract.



Milwaukee
Water Works

Safe, Abundant Drinking Water.

City of Milwaukee
Department of Public Works
Milwaukee Water Works

Specifications for

Pumping Station

LS-32: Supplemental Fill Line for
Water Storage Tanks



Dinah G. Gant, P. E.
Chief Design Engineer

Carrie M. Lewis
Superintendent

Anthony J. Supinski, P.E.
Civil Engineer IV

Mark A. Gremmer, P.E.
Mechanical Engineer III

GENERAL REQUIREMENTS

PART 1 DEPARTMENT OF PUBLIC WORKS – GENERAL SPECIFICATIONS

The Department of Public Works General Specifications applies to all contracts. These specifications are in a separate booklet.

PART 2 SPECIFIC OFFICIAL NOTICE & GENERAL OFFICIAL NOTICE

The Specific Official Notice as it appears in The Daily Reporter and General Official Notice is part of these Contract Documents.

PART 3 SPECIFICATIONS

LS-32; Supplemental Fill Line for Water Storage Tanks

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JOB REQUIREMENTS

LS-32 SUPPLEMENTAL FILL LINE FOR WATER STORAGE TANKS

- JR-1 **FORM OF BID** Contractor shall submit a lump sum bid for furnishing the complete job in accordance with plans and specifications.
- JR-2 **JOB LOCATION** The pumping station is located at Lincoln Station, 3641 West Lincoln Avenue, Milwaukee WI 53215.
- JR-3 **GENERAL DESCRIPTION OF WORK** The work to be performed under the provisions of this contract and as set forth in these documents consists of the supply and installation of all materials, labor, supervision, inspection, and rentals for all work involved and described below.
- JR-4 **CONTRACT DRAWINGS** The contract drawings upon which the proposal is to be based are listed hereunder:
- | | |
|--------------|--------------------------------|
| LS - 32 - 01 | Location Map and Drawing Index |
| LS - 32 - 02 | Site Plan and Fill Valve Plan |
- Above drawings are general in nature and are intended to indicate the relative locations of the equipment specified in the space provided. It shall be the responsibility of the successful bidder to ascertain the suitability of the specific equipment to be furnished in regard to the space allotted.
- JR-5 **REFERENCE DRAWINGS** The following reference drawings are the original construction drawings. These are included here for general information only. The drawings are assumed to be accurate; however, the contractor is responsible for field verification of any dimensions essential to the work.
- | | |
|-----------|---|
| L - 3 - 3 | Pumping Station Building - Basement |
| L - 3 - 6 | Pumping Station Building - Balcony |
| L - 3 - 8 | Pumping Station Building - Roof |
| L - 4 - 3 | Pumping Station Electrical Installation |
| L - 5 - 4 | Pumping Station Pump Equipment - Plan |
- JR-6 **PRE-BID MEETING** A **MANDATORY** Pre-Bid Meeting is scheduled for **THURSDAY, OCTOBER 21, 2010 at 10:00 AM CST** in the Howard Avenue Purification Plant Conference Room, 3929 South 6th Street, Milwaukee, WI 53221. The City of Milwaukee will **ONLY** receive bids from prospective bidders who are in attendance at the **MANDATORY** Pre-Bid Meeting. The official envelope for submitting a bid will be available at the **MANDATORY** Pre-Bid Meeting. **All attendees are required to e-mail both anthony.j.supinski@milwaukee.gov and mark.a.gremmer@milwaukee.gov at least 24 hours in advance of the Pre-Bid Meeting to be placed on the visitor list for access to the Howard Avenue Purification Plant.**

SITE VISIT: A site visit will be available at the conclusion of the MANDATORY Pre-Bid Meeting.

- JR-7 PRE-CONSTRUCTION MEETING Within ten (10) days after Notice to Proceed is issued, a pre-construction meeting will be held at the job site. Construction details of the project will be discussed in the meeting.
- JR-8 JOB SCHEDULE Within ten (10) days after Notice to Proceed is issued, the contractor shall submit a construction schedule for approval. The schedule shall be made in sufficient detail to indicate dates of each significant operation. The schedule shall be such that the entire job will be completed within the specified completion time. Contractor shall submit the construction schedule in hard copy and electronic format using Microsoft Project 2000. However, if an electronic copy cannot be provided in this format, a copy shall be transmitted electronically in a .PDF format and a hardcopy of any updated schedules must be provided at all progress meetings.
- The contractor shall place all orders for materials promptly after award of the contract. With submittal of the construction schedule, he shall include a schedule of delivery of all major material and equipment required for the job.
- The contractor shall immediately notify the City, in writing, of any problems with meeting this schedule. If the construction schedule cannot be met because of materials or equipment deliveries, the contractor shall be required to submit purchase orders and confirmations of delivery, showing the date the order was placed and the promised date of delivery.
- JR-9 WORK DAYS AND TIMES Work shall take place between the hours of 7:15 AM to 3:30 PM. Work will not be allowed on Sunday, Saturday and City of Milwaukee holidays.
- JR-10 START AND COMPLETION DATES Work shall not start prior to Monday, November 29, 2010. All work on this project shall be complete by Friday, February 25, 2011.
- JR-11 CHARGE FOR INSPECTION The Contractor will be charged \$350.00 per day per inspector for each and every day inspection is required on this Contract after the date allowed for completion or after such extension of time as may have been granted. This charge is further defined in Section 2.5.11 of the Department of Public Works (DPW) General Specifications.
- JR-12 PROGRESS PAYMENTS Within ten (10) days after the Notice to Proceed is issued, the contractor shall submit to the City for approval a schedule showing the breakdown of the contract with quantities and prices as a basis for checking and computing progress estimates. The values shown in the approved breakdown shall be used for pay purposes only and shall not be used as a basis for additions to or deductions from contract work.
- When the contractor proceeds properly and with diligence to perform and complete the work on this contract, the Commissioner of Public Works may, from time to time as the work progresses, grant to the contractor an estimate of the amount already earned. In making such progress estimates, there shall be retained 5% of each progress estimate

until final completion and acceptance of the work; except that after 50% of the work has been completed and the Commissioner finds that satisfactory progress is being made and all conditions complied with, he may authorize any of the remaining progress payments to be paid in full to the contractor. Progress Payments are further defined in Section 2.9.14 of the Department of Public Works (DPW) General Specifications.

In accordance with Charter Ordinance 7.26 as amended 6-1-72, payment for materials delivered to the work or storage site may be authorized by the Commissioner of Public Works providing the following terms and conditions are met:

- A. The work is progressing properly and such materials as specified are properly stored and suitable for permanent incorporation in the work.
- B. Materials designated for pay in the next progress estimate after delivery shall be limited to fabricated or manufactured components which are assembled in final form ready for placement in the work.
- C. The following forms shall be submitted with requests for payment.
 1. Progress Estimate and Request for Payment for Fabricated Materials or Components Properly Stored.
 2. Certification of the Contractor or his duly authorized representative.

Field Engineer shall verify that material is as specified and properly stored.
- D. The contractor shall be responsible for the safeguarding of any such materials against loss or damage whatsoever, and in the case of any loss or damage, the contractor shall replace such lost or damaged materials at no cost to the City. The Commissioner shall reserve the right to deduct from ensuing progress estimates the value of any lost or damaged materials until such loss or damage is restored by the contractor.
- E. The Commissioner may limit processing progress estimates to those cases where the amount earned in any pay period for work and materials is \$5,000 or more.
- F. Any materials for which payment has been made shall not be removed from the work or storage site without the specific written approval of the Commissioner of Public Works.

JR-13 FORMAL CORRESPONDENCE Formal correspondence shall be addressed to: Ms. Carrie M. Lewis, Superintendent of Milwaukee Water Works, 841 North Broadway, Room 409, Zeidler Municipal Building, Milwaukee, WI 53202. Formal correspondence shall include:

1. Request for Change Order.
2. Request for extension of Completion Date.
3. Disputes concerning Payment or Field Issues.
4. Payment Requests.
5. Submittals.

END OF SECTION

SECTION 01010
SUMMARY OF WORK

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Contract description.
2. Contractor use of site.
3. Work sequence.
4. Owner occupancy.
5. Specifications and standards.
6. Shop Drawings.
7. Guarantee.

1.02 CONTRACT DESCRIPTION

- A. This contract includes the furnishing of all equipment, labor, supervision, materials and appurtenances for and in connection with the supply and installation of a system to fill water storage tanks as shown on the contract drawings and further specified herein.
- B. The Work to be performed shall include but not be limited to the following:
1. Demolition of existing valves and emergency fill piping that are connected to existing 12-inch piping.
 2. Supply and installation of electronic control valve, motor actuated butterfly valve, isolation valves, associated piping, supports, controls and sensors.
 3. All required electrical work for the electronic control valve and motor actuated butterfly valve.

1.03 CONTRACTOR USE OF SITE AND PREMISES

- A. Existing equipment that is on site shall not be taken out of service during the work of this project. Equipment will be taken out of service to allow for demolition and installation of Isolation Valves. See below.

1.04 WORK SEQUENCE

- A. Sequence Work to accommodate City's operational requirements during the construction period, coordinate construction schedule and operations with City.

- B. City will isolate Pumping Station from pressurized water mains for a period of eight (8) hours. Contractor shall perform demolition and installation of isolation valves at this time. Isolation valves shall have a temporary blind flange fastened to them.
- C. Blind flange shall be removed when final piping connections are made. Pumping Station will not be isolated from the pressurized water mains during the final connection.

1.05 OWNER OCCUPANCY

- A. The premises are unoccupied, but the City will continue to conduct normal operations of the equipment from a remote location.
- B. Cooperate with City to minimize conflict, and to facilitate City's operations.

1.06 SPECIFICATIONS AND STANDARDS

- A. Materials, general design, design loads, allowable stresses, joint design, shop fabrication and field construction shall conform to the requirements of the following latest standard specifications of any technical society, organization, or association, or to codes of local or state authorities:
 - 1. NEC, National Electric Code.
 - 2. AWWA, American Water Works Association.
 - 3. IEEE, Institute of Electrical and Electronic Engineers.
 - 4. ANSI, American National Standards Institute.
 - 5. SSPC, The Society for Protective Coatings.
 - 6. ASTM, American Society for Testing and Material.
 - 7. The Wisconsin Administrative Code.
 - 8. OSHA, U.S. Department of Labor Occupational Safety and Health Act.
 - 9. EPA, United States Environmental Protection Agency.
- B. The contractor shall be familiar with the requirements of the above agencies. Any conflict in the contract drawings, these specifications, the contractor's design or construction methods shall result in this contractor performing in a manner which conforms to the applicable requirements. Agencies and/or associations not specified above are referenced in individual specification sections as required.

1.07 SHOP DRAWINGS

- A. Within three weeks after Notice to Proceed is issued, the Contractor shall submit to the City for approval a minimum three copies of all shop, fabrication, assembly, foundation and other drawings required by the specifications; all drawings of equipment and devices offered by the Contractor; all drawings showing essential details of any change in design or construction proposed by the Contractor; and all necessary wiring and piping layouts. Drawings of equipment and devices shall show sufficient detail to adequately depict the construction and operation of each item.

- B. Each shop drawing shall bear City of Milwaukee, the name and location of the structure, job number, the name of Contractor, the date of the drawing, the date of each correction or revision and the specification numbers and plan sheet numbers applicable thereto.
- C. Three (3) revised copies of each drawing shall be submitted each time a drawing is returned to the Contractor for revision. The final review of a drawing shall be included in the Operation and Maintenance manuals.
- D. After reviewed by the City, all such drawings shall become a part of the contract documents and the work or equipment shown thereby shall be furnished and installed as shown unless otherwise required by the City. No work shall be performed or equipment manufactured until drawings have been approved. The review of drawings submitted by the Contractor will be for, and will cover only general conformity to the plans and specifications and will not constitute a blanket approval of all dimensions, quantities, or details of the material or equipment shown by such drawings, nor shall such approval relieve the Contractor of responsibility for errors contained therein.
- E. At the completion of work and prior to final payment, the Contractor shall provide the City with three (3) sets of "as-built" drawings for the completed job showing all new and modified appurtenances. All conduit or similar items shall be located by dimensions and elevations. The Contractor will be responsible for the accuracy of these drawings.

1.08 GUARANTEE

- A. The contractor shall furnish a written one (1) year warranty from the date of official acceptance against defective materials or workmanship before the final payment is made.
- B. During the period of one (1) year from and after the date of the final acceptance by the City of the work embraced by this contract, the Contractor shall make all needed repairs arising out of defective workmanship or materials, or both, which in the judgment of the Commissioner of Public Works, shall become necessary during such period.
- C. Whenever defective equipment or materials are replaced, the equipment or materials shall be guaranteed for one (1) year from the date that the replacement is performing satisfactorily.
- D. If within ten days after mailing of a notice in writing to the Contractor, or his agent, the said Contractor shall neglect to make, or undertake with due diligence to make, the aforesaid repairs, the City is hereby authorized to make such repair at the Contractor's expense; providing, however, that in case of an emergency where, in the judgment of the Commissioner, delay would cause serious loss or damage, repairs may be made without notice being sent to the Contractor, and the Contractor shall pay the cost thereof.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01039
COORDINATION AND MEETINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Coordination.
- B. Alterations.
- C. Cutting and Patching.
- D. Preconstruction Meeting.
- E. Preinstallation Meetings.
- F. Progress Meetings.

1.02 COORDINATION

- A. Coordinate scheduling, submittals, and Work on the various Sections of specifications to assure efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify that the City requirement characteristics of operating equipment are compatible with building utilities. Coordinate work of various Sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- C. Coordinate space requirements and installation of mechanical and electrical work. Follow routing shown for pipes, and conduit, as closely as practicable; place runs parallel with line of structure. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. Coordinate completion and clean up of Work of separate Sections in preparation for Substantial Completion.
- E. Coordinate correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of the City of Milwaukee's activities.

1.03 ALTERATIONS

- A. Materials: As specified in product Sections; match existing products and work for patching and extending work.
- B. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity.
- C. Remove, cut and patch work in a manner to minimize damage and to provide a means of restoring products and finishes to original condition.
- D. Refinish visible existing surfaces to original condition.

- E. Where new work abuts or align with existing, perform a smooth and even transition. Patched work to match existing adjacent work in texture and appearance.
- F. When finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to the City.
- G. Patch or replace portions of existing surfaces that are damaged, lifted or discolored, or showing other imperfections.
- H. Finish surfaces as specified in individual product sections.

1.04 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching.
- B. Submit written request in advance of cutting or altering elements which affects:
 - 1. Structural integrity of element.
 - 2. Integrity of weather-exposed or moisture resistant element.
 - 3. Efficiency, maintenance or safety of element.
 - 4. Visual qualities of sight-exposed elements.
 - 5. Work of City of Milwaukee or separate contractor.
- C. Execute cutting, fitting and patching to complete work, and to:
 - 1. Fit the several parts together, to integrate with other work.
 - 2. Uncover Work to install or correct ill-timed work.
 - 3. Remove and replace defective and non-conforming work.
 - 4. Remove samples of installed work for testing.
 - 5. Provide openings in elements of Work for penetrations of mechanical and electrical work.
 - 6. Execute work by methods which will avoid damage to other work, and provide proper surfaces to receive patching and finishing.
 - 7. Cut rigid materials using masonry saw or core drill.
 - 8. Restore work with new products in accordance with requirements of Contract Documents.
 - 9. Fit work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
 - 10. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
 - 11. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit.
 - 12. Identify and hazardous substance or condition exposed during the work to the City.

1.05 PRECONSTRUCTION MEETING

- A. The City will schedule a pre-construction conference after Notice of Award.
- B. Attendance Required: City and Contractor. Attendees are required to contact Milwaukee Water Works at 414-286-5508 at least 24 hours in advance for placement on that day's visitor list for access to the meeting and project site.
- C. Agenda
 - 1. Submission of executed bonds and insurance certificates (unless previously submitted to DPW).
 - 2. Submission of list of Subcontractor, list of products, Schedule of Values, and progress schedule.
 - 3. Designation of personnel representing the parties in Contract.
 - 4. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders and Contract closeout procedures.
 - 5. Scheduling and reports.
 - 6. Use of premises by City and Contractor.
 - 7. Construction facilities and controls provided by City.
 - 8. Temporary utilities and controls provided by City, if any.
 - 9. Security and housekeeping procedures.
 - 10. Procedures for testing.
 - 11. Procedures for start-up of equipment.
 - 12. Requirements for maintaining record documents.
 - 13. Inspection and acceptance of equipment put into service during construction period.
 - 14. Conflicts.
 - 15. A review of Contract Documents shall be made and deviations or differences shall be resolved.
 - 16. Establish which areas on-site will be available for use as storage areas and working area.

1.06 PREINSTALLATION MEETING

- A. When determined by the City, convene a pre-installation meeting at work site prior to commencing work.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify all parties four days in advance of meeting date.

- D. Prepare agenda, preside at meetings, record minutes, and distribute copies within three days after the meeting to participants, with one copy to the City.
- E. Review conditions of installation, preparation and installation procedures, and coordination with related work.

1.07 PROGRESS MEETING

- A. The City will schedule and administer meetings throughout progress of the Work as required.
- B. The City will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings, record minutes, and distribute copies within three days to the City, participants, and those affected by decisions made.
- C. Attendance Required: Contractor's general superintendent, major Subcontractors and suppliers, City, as appropriate to agenda topics for each meeting.
- D. Agenda
 - 1. Review minutes of previous meeting.
 - 2. Review of work.
 - 3. Field observations, problems and decisions.
 - 4. Field observations of problems that impede planned progress.
 - 5. Review submittal schedule and status of submittals.
 - 6. Review of off-site fabrication and delivery schedules.
 - 7. Maintenance of progress schedule.
 - 8. Corrective measures to regain projected schedules.
 - 9. Planned progress during succeeding work period.
 - 10. Coordination of projected progress.
 - 11. Maintenance of quality and work standards of proposed changes on progress schedule and coordination.
 - 12. Other business relating to work.

END OF SECTION

SECTION 01500
JOB SITE SECURITY, UTILITES AND FACILITIES

PART 1 SCOPE

1.01 INDEX

- A. Scope.
- B. Security and Safety.
- C. Occupancy during Construction.
- D. Electric Power.
- E. Water.
- F. Toilet Facilities.

1.02 GENERAL CONDITIONS

- A. All operations shall be carried on with a minimum of damage and disturbance. All damages shall be repaired to the original condition to the satisfaction of the Field Engineer.
- B. All removals become the property of the Contractor and shall be disposed of off the site unless otherwise specified.

1.03 TEMPORARY VENTILATION

- A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.

1.04 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Protect non-owned vehicular traffic stored materials, site and structures from damage.

1.05 PROGRESS CLEANING

- A. Waste materials, debris, and rubbish shall be removed daily after work. Maintain site in a clean and orderly condition.
- B. Clean and repair damage caused by removals or installations.
- C. Restore existing facilities used during construction to original condition.

PART 2 SECURITY AND SAFETY

2.01 GENERAL

- A. The Milwaukee Water Works consists of a number of facilities to treat and deliver drinking water to the City and surrounding suburban communities. To insure the safety and security of drinking water, the Milwaukee Water Works has instituted protocols for visitors and contractors to control entry to these facilities. It is essential that contractors strictly comply with the security policy outlined in the specification section.
- B. For this project, the Contractor shall continuously coordinate building and site security measures, including accessing the site, with the designated Water Engineering representative or the Water Security Manager, Telephone # (414) 286-2934.

2.02 SCOPE

- A. Any and all City agencies and contractors engaged for work at Milwaukee Water Works facilities shall be required to hold a "Pre-Construction Security Briefing" before any contracted work can be initiated. At this meeting, the contractor and sub-contractors shall have a detailed briefing with discussions regarding the following items:
 - 1. Milwaukee Water Works site security policies and procedures.
 - 2. Contractor & Sub-Contractor Obligations.
 - 3. Work Permit System.

2.03 POLICIES

- A. At the, "Pre-Construction Security Briefing", Milwaukee Water Works staff shall provide the Prime Contractor with site polices to be reviewed by the Prime and Sub Contractors. These documents may include:
 - 1. Lock-out / Tag-out Policy.
 - 2. Confined Space Entry Procedures.
 - 3. Evacuation Procedure for Propane, Lox, & Ammonia Releases.
 - 4. Personal Protective Equipment Guidelines.
 - 5. No Smoking Policy.
 - 6. Prohibited Materials.
- B. Additionally, the Contractor will be provided:
 - 1. Contact Phone Numbers for MWW Staff.
 - 2. On-Site Parking Location and designated construction entrance.
 - 3. Site security policy and procedures.
- C. The contractor shall be required to review these documents and is responsible for conveying the contents of these submittals to their employees, sub-contractors, and

any other parties working directly or indirectly for them. These policies apply equally to all contractors. Failure to comply with established policies and procedures may result in access privileges being withdrawn.

- D. MWW Staff shall provide a “walk-through” session with the contractor to review area layout and site plans as part of this orientation process and to establish the specific work areas necessary for the contractors to perform their scope of work. Topics covered in this session include: site overview with hazards, material safety data sheets, fire extinguisher placement, and the storm water protection policy.

2.04 CONTRACTOR RESPONSIBILITIES

- A. Contractors shall provide the following documents no less than 7 days prior to the start of contracted work. Documents shall be sent to the Water Security Manager, (414) 286-3465:
 1. Scope of work to be performed.
 2. Name of primary contractor’s onsite representative.
 3. Names of all companies sub-contracted to do work on the project.
 4. Completed “Contract Firm Registration Form” (see attachment ‘A’) for prime contract firm and every sub-contract firm.
 5. A “Contractor Employee Registration Form” completed for the contractors and every employee who needs to be granted site access (see attachment ‘B’).
 6. List of items to be stored on-site.
 7. Material Safety Data Sheets for all chemicals to be used/stored on-site.
- B. It is the responsibility of the Primary Contractor to facilitate gathering the “Contractor Employee Registration Form” for all sub-contractors working on the project. A sub-contractor is defined as an individual or firm hired by the primary contractor to perform a specific task as part of the overall project. This would not include an organization making deliveries of supplies or equipment to the job site. Procedures for these firms are covered under Part 8, “DELIVERIES”.
- C. In the event it is necessary for the Prime Contractor to add additional employees to the list of approved personnel, a minimum of 72 hours, or 3 business days, must be allowed for processing of the request. Site access will be denied to the additional personnel until processing is complete.
- D. Contract firms are obligated to notify the Water Security Manager, (414) 286-3465 in a timely manner of any site-authorized staff that leaves the employ of the contractor.
- E. Only the Primary Contractor should be contacting Milwaukee Water Works employees with issues or access requests. If a request for site access does not come from the Primary Contractor, the request will not be processed.
- F. During the time period that the Contractor is on-site, they must agree to:

1. Notify the Plant Manager immediately of any significant chemical spills or leaks.
2. Maintain Normal Non-Toxic Breathable Air Quality, through Adequate Ventilation, at their work site.
3. Perform no equipment isolations or tie-ins without the signed approval of Site Management.
4. Restrict movement to the specific work areas within the Site to perform Contractors Scope of Work.

2.05 CONTRACTOR NOTIFICATION OF CITY

- A. Contractors must notify Engineering / Site Management Staff of any welding, torching, or potentially hazardous or operational impact request, prior to commencing such operations.
- B. Failure to comply with the terms of the provisions that provide for MWW Employee Safety shall be cause for the contractor to discontinue activities at the Site.

2.06 CONTRACTOR IDENTIFICATION AND DAILY REGISTRATION

- A. Every day, all contractors shall be required to show a valid ID card, to sign-in at the start of work, and sign out at the end of work. At the end of the week, each of the daily logs from that week shall be submitted to the Water Security Manager for review.

2.07 CONTRACTOR GATE ACCESS & PARKING

- A. Contractors must comply with the terms of entry for the site and park only in the areas designated for parking by the MWW site representative.
- B. Parking privileges may be rescinded at any time as Site Operational Requirements dictate.

PART 3 CITY OF MILWAUKEE PERMITS

- 3.01 See Chapter 2.3.0 – Necessary Notices and Permits of the Department of Public Works General Specifications for further information and requirements.

PART 4 OCCUPANCY DURING CONSTRUCTION

- 4.01 During the Contractor's performance of the work, the City will continue to occupy the existing building. The Contractor shall take precautions to prevent the spread of dust and debris, particularly where such material may sift into the building. The Contractor shall provide labor and materials to construct, maintain and remove necessary temporary enclosures to prevent dust or debris in the construction area(s) from entering the remainder of the building.

PART 5 ELECTRICAL POWER AND TELEPHONE SERVICE

- 5.01 Limited electrical power for construction purposes is available at the site and will be made available to the Contractor. The Contractor's equipment shall not exceed the capabilities of these receptacles. The Contractor shall provide additional electrical power if their equipment exceeds the capabilities of the receptacles.
- 5.02 Contractor shall provide and maintain all necessary power cords, electrical lighting, heat and ventilation, and shall make all necessary connections in accordance with OSHA regulations.
- 5.03 Contractor shall provide and pay for his own telephone service.

PART 6 WATER

- 6.01 Water for construction purposes is available at the site and will be made available to the Contractor.
- 6.02 Contractor shall provide all hoses, back flow preventer, valves and connections for water from source designated by the City.

PART 7 TOILET FACILITIES

Sanitary facilities are available at the site and will be made available to the Contractor.

PART 8 DELIVERIES

- 8.01 Contractor shall coordinate the delivery of all equipment, material, Dumpsters, portable toilets and other required items required for the contract work with the MWW staff. A minimum of 24 hours prior notice in advance of the desired delivery date shall be transmitted to the designated Water Engineering Representative. Contractor shall provide the following information in the notification:
 - A. Trucking/Delivery Company.
 - B. Driver Name.
 - C. Truck License Plate Number.
- 8.02 The driver of the delivery vehicle is required to display picture identification as a pre-requisite for entry to the MWW facility for the delivery. Failure to comply with the above will result in denial of project site access, requiring the contractor to re-schedule delivery.

END OF SECTION

Milwaukee **Water Works**

Safe, Abundant Drinking Water.

FORM A

CONTRACT FIRM REGISTRATION FORM

CONTRACTOR: _____

PLANT/SITE: _____

CONTRACT/SERVICE ORDER No. _____

WATER ENGINEERING PROJECT No. _____

PRIMARY CONTACT PERSON: _____

OFFICE PHONE NUMBER: _____

CELL PHONE NUMBER: _____

REQUESTED WORK HOURS (00am – 00pm): _____

NUMBER OF EMPLOYEES TO BE WORKING ON-SITE: _____

SIGNATURE: _____

PRIMARY CONTACT PERSON

DATE: _____

Accompanying this form should be a complete listing of all equipment to be stored on site for the duration of the project.

Milwaukee Water Works

Safe, Abundant Drinking Water.

FORM B

CONTRACTOR EMPLOYEE REGISTRATION FORM

(Information that is illegible or not completed will require confirmation delaying entry to the site)

Contract Firm: _____

Plant/Site/Project: _____

Employee Name (Printed): _____

Signature certifies receipt of the materials as follows:

1. MWW security and safety requirements

EMPLOYEE
SIGNATURE: _____
Required

DATE: _____

ONSITE PARKING

- I will always be driving a Company vehicle.
- I will always be a passenger in a vehicle.
- I will be driving my personal vehicle. If checked here complete and sign the next section.

Contractor Personal Vehicle Liability Waiver

EMPLOYEE VEHICLE
MAKE & MODEL: _____ LICENSE PLATE: _____

I, hereby agree to hold harmless the City of Milwaukee for any and all damage, loss or injury, which may occur as a result of utilizing the contractor onsite parking area.

EMPLOYEE
SIGNATURE: _____
Required

DATE: _____

SECTION 01600
MATERIAL AND EQUIPMENT

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Products.
2. Transportation and handling.
3. Storage and protection.
4. Product options.
5. Substitutions.

1.02 PRODUCTS

- A. Material, machinery, components, equipment, fixtures and system shall be new. Assure standardization and uniformity by using products from one manufacturer.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
- C. Provide interchangeable components of the same manufacture for components being replaced.

1.03 TRANSPORTATION AND HANDLING

- A. Transport and handle Products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to ensure that Products comply with requirements, quantities are correct and Products are undamaged.
- C. Provide equipment and personnel to handle Products by methods to prevent soiling, disfigurement or damage.

1.04 STORAGE AND PROTECTION

- A. Store and protect Products in accordance with manufacturer's instructions.
- B. Store with seals and labels intact and legible.
- C. Store sensitive Products in weather tight, climate controlled, enclosures in an environment favorable to Product.
- D. For exterior storage of fabricated Products, place on sloped supports above ground.
- E. Provide off-site storage and protection when site does not permit on-site storage or protection.

- F. Cover Products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement or damage.
- I. Arrange storage of Products to permit access for inspection. Periodically inspect to verify Products are undamaged and are maintained in acceptable condition.

1.05 PRODUCT OPTIONS

- A. Products specified by reference standards or by description only: Any Product meeting those standards or description.
- B. Products specified by naming one or more manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products specified by naming one or more manufacturers with a provision for substitutions: Submit a request for substitution for any manufacturer not named in accordance with the following article.

1.06 SUBSTITUTIONS

- A. City will consider requests for Substitutions only within 15 days after date established in Notice to Proceed.
- B. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that the Contractor:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Will provide the same warranty for the Substitution as for the specified product.
 - 3. Will coordinate installation and make changes to other work that may be required for the work to be complete with no additional cost to City.
 - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
 - 5. Will reimburse City for review or redesign services associated with re-approval by authorities.
- E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.

F. Substitution Submittal Procedure:

1. Submit two copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
2. Submit shop drawings, product data and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
3. The City will notify Contractor in writing of decision to accept or reject request.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01650
STARTING OF SYSTEMS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Starting systems.
2. Demonstration and instructions.

B. Related Sections

1. Section 01700 – Contract Closeout: System operation and maintenance data and extra materials.

1.02 STARTING SYSTEMS

A. Coordinate schedule for start-up of various equipment and systems.

B. Notify City seven days prior to start-up of each item.

C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence and for conditions which may cause damage.

D. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.

E. Verify that wiring and support components for equipment are complete and tested.

F. Provide expendables required for initial start-up of equipment unless otherwise specified.

G. Execute start-up under supervision of applicable Contractors' personnel in accordance with manufacturers' instructions.

H. When specified in individual specification sections, require manufacturer to provide authorized representative to be present at site to inspect, check and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.

I. Submit a written report stating that equipment or system has been properly installed and is functioning correctly.

1.03 DEMONSTRATION AND INSTRUCTIONS

A. Demonstrate operation and maintenance of products to City's personnel on mutually agreeable dates prior to date of initial placement in service and final payment.

- B. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- C. Utilize Operation and Maintenance manuals as basis for instruction. Review contents of manual with City's tests personnel in detail to explain all aspects of operation and maintenance.
- D. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at agreed time and location.
- E. Prepare and insert additional data in Operation and Maintenance manuals when need for additional data becomes apparent during instruction.
- F. The amount of time required for instruction on each item of equipment and system is that specified in individual sections.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01700
CONTRACT CLOSEOUT

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Closeout Procedures.
2. Final Cleaning.
3. Adjusting.
4. Project Record Documents.
5. Operation and Maintenance Data.
6. Spare Parts and Maintenance Products.
7. Guarantee.

B. Related Sections

1. Section 01500 – Job Site Security, Utilities and Facilities.
2. Section 01650 – Starting of Systems.

1.02 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for City's review.
- B. Provide submittals to City that are required by governing or other authorities.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments and sum remaining due.

1.03 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- C. Clean equipment, fixtures and piping to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned. Remove deposits of concrete and grout from surfaces.
- D. Clean construction and existing debris from areas where work occurred and areas affected by work. Sweep floors.

- E. Clean site; sweep paved areas, rake clean landscaped surfaces.
- F. Remove waste and surplus materials, rubbish and construction facilities from the site.

1.04 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

1.05 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the work:
 - 1. Contract Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders.
 - 5. Reviewed Shop Drawings, Product Data, and Samples.
 - 6. Manufacturer's instructions for assembly, installation and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by City.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Contract Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to finish 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 the work.
 - 4. Field changes of dimension and detail.
 - 5. Details not on original Drawings.
- F. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda or Change Orders.
- G. Submit documents to City in the following manner:
 - 1. Submit prior to final Application for Payment.

2. Documents shall be accompanied with a transmittal letter that includes the following:
 - a) Date.
 - b) City's project title and number.
 - c) Contractor's name and address.
 - d) Title and number of each record document.
 - e) Certification that each document as submitted is complete and accurate.
 - f) Contractor's signature or authorized representative.
3. Delete Consultant and City's title block from documents. Delete Engineer's seals from documents.
4. Submit four sets of documents.
5. Submit one set of reproducible "mylar" Contract Drawings.

1.06 OPERATION AND MAINTENANCE DATA

- A. Submit data bound in 8-1/2 x 11 inch text pages, three D-side ring binders with durable plastic covers. Drawings and diagrams shall be reduced to 8-1/2 x 11 inches or 11 x 17 inches. Where reduction is not practicable, large drawings shall be folded separately and placed in an envelope that is bound into the manuals. Envelope shall bear suitable outside identification.
- B. Prepare binder cover and spine with printed title "OPERATION & MAINTENANCE INSTRUCTION", title of project, project number and subject matter of binder when multiple binders are required.
- C. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- D. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, typed on 24 pound white paper, in three parts as follows:
 1. Part 1: Directory, listing names, addresses, telephone numbers and e-mails of Architect/Engineer, Contractor, Subcontractors and major equipment suppliers.
 2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, telephone numbers and e-mails of Subcontractors and suppliers. Identify the following:
 - a) Significant design criteria.
 - b) List of Equipment.
 - c) Parts list and assembly drawings for each component.
 - d) Operating instructions for start-up, normal operation, shutdown and emergency conditions.

- e) Maintenance instructions for equipment and systems.
 - f) Maintenance instructions for finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
 - g) Troubleshooting Guide.
3. Part 3: Project documents and certificates, including the following:
- a) Shop drawings and product data.
 - b) Air and water balance reports.
 - c) Certificates.
 - d) Photocopies of warranties.
- E. Submit one draft copy of volumes 15 days prior to final inspection. This copy will be reviewed and returned with City comments. Revise content of all document sets as required prior to final submission.
- F. Submit four sets of revised final volumes within 10 days after receipt of City's comments.
- 1.07 SPARE PARTS AND MAINTENANCE PRODUCTS
- A. Provide spare parts, maintenance, and extra products in quantities specified in individual specification sections.
 - B. Deliver to Project site and place in location as directed; obtain receipt prior to final payment.
- 1.08 GUARANTEE
- A. Provide duplicate notarized copies.
 - B. Execute and assemble transferable warranty documents from subcontractors, suppliers and manufacturers.
 - C. Provide Table of Contents and assemble in binder with durable plastic cover.
 - D. Submit prior to final Application for Payment.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 15060
PIPES & PIPE FITTINGS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Pipe.
2. Joints.
3. Fittings.
4. Flanges.
5. Bolting.
6. Gaskets.

B. Related Sections

1. Section 15100 – Valves and Operators.
2. Section 15110 – Electronic Control Valve.

1.02 REFERENCES

- A. The following documents refer to the latest edition.
- B. AWWA Standard C200 Steel Water Pipe.
- C. AWWA Standard C207 Steel Pipe Flanges for Waterworks Service.
- D. ASTM A53/A53M Standard Specifications for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
- E. ASTM A234/A234M Standard Specifications for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and High Temperature Service.
- F. ASTM A307 Standard Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength.
- G. ASTM A563 Standard Specification for Carbons and Allow Steel Nuts.
- H. ASME/ANSI B16.9 Factory-Made Wrought Steel Buttwelding Fittings.
- I. ANSI B18.2.1 Square and Hex Bolts and Screws.
- J. SSPC Standard; The Society for Protective Coatings.
- K. NSF/ANSI 61 Drinking Water System Components.

1.03 SUBMITTALS

- A. Submit under provisions of Section 01010 – Summary of Work.
- B. Product Data:
 - 1. Submit manufacturer’s descriptive literature and product specifications for each product.
 - 2. Submit standard color chart for pipe coating.
- C. Shop Drawings:
 - 1. Indicate typical layout including dimensions.
 - 2. Submit drawings showing field measured dimensions.

1.04 PROJECT RECORD DOCUMENTS

- A. Submit under provisions of Section 01700 – Contract Closeout.
- B. Record information requested in Section 01700 – Contract Closeout.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this Section with minimum five years experience.
- B. Fabricator Qualifications: Company specializing in fabricating work specified in this section with minimum five years experience.
- C. Installer Qualifications: Acceptable to manufacturer with experience on at least five projects of similar nature in past five years.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Comply with requirements of Section 01600 – Material and Equipment.

1.07 GUARANTEE

- A. Comply with provisions of Section 01010 – Summary of Work.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Pipe
 - 1. Black carbon steel, ASTM A53/A53M-07, Grade B seamless or ERW. Threaded, butt-welded and flanged joints; Schedule 80.
 - 2. Pipe shall be of the nominal diameter (size) as indicated on the drawings and conforming to all requirements of AWWA Standard C200-05.
- B. Joints
 - 1. Butt-welded except at valves and equipment where joints shall be flanged.

C. Fittings

1. Wrought carbon steel butt-welding, ASTM A234/A234M-07, Grade WPB meeting the requirements of ASME/ANSI B16.9-2001, fitting wall thickness to match adjoining pipe; long radius elbows unless shown otherwise.

D. Flanges

1. Steel slip-on; flanges shall conform to AWWA C207-07; flanges shall conform to the requirements of Table 2 in AWWA C207-07; flange shall be class D, hub type, flat faced with concentric or spiral serrated finish, back-faced or spot-faced on the back.

E. Bolting

1. Bolts, studs, and nuts shall be carbon steel, ASTM A307 grade B, with ASTM A563 grade A heavy hex nuts. Bolts shall have hexagonal heads and nuts shall have hexagonal dimensions, all in accordance with ANSI B18.2.1. Bolt diameters shall conform to the requirements of Table 2 in AWWA C207-07.

F. Gaskets

1. Gaskets shall be full-faced, 1/16-inch thick compressed nonasbestos composition flat ring type. Garlock, Style 3000, Manville, Style 978, or approved equal.

G. Substitutions: Under provisions of Section 01600

2.02 FINISH

A. The interior and exterior surfaces of pipe, fittings and flanges shall have a sprayed finish that is applied in the shop. Damaged coatings shall be touched up in the field.

1. Surface Preparation: SSPC-SP10 (NACE No. 2); A minimum surface profile of 1.5 mils is required.
2. Provide two coats of Tnemec Series N140 Pota Pox Plus. Each coat shall have a DFT 8.0-10.0 mils. City shall select the color for the exterior surface from the manufacturer's standard color chart.
3. Coatings shall be ANSI/NSF 61 Certified: for use inside potable water piping.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine conditions and proceed with work in accordance with Section 01710.
- B. Verify size, material, joint types, elevation, horizontal location, and pipe service of existing pipelines to be connected to new pipelines or new equipment.
- C. Inspect size and location of structure penetrations to verify adequacy of wall pipes, sleeves and other openings.

3.02 PREPARATION

- A. Inspect pipe and fittings before installation, clean ends thoroughly, and remove foreign matter and dirt from inside.

3.03 INSTALLATION

A. General

1. Install in accordance with manufacturer's written instructions.
2. Before coupling, clean pipe holdback area of foil, scale, rust and dirt.
3. Remove foreign objects prior to assembly and installation.
4. Piping runs shall be parallel to building or column lines and perpendicular to floor, unless shown otherwise.

B. Piping

1. Install piping so that no load or movement in excess of that stipulated by equipment manufacturer will be imposed upon equipment connection; install to allow for contraction and expansion without stressing pipe, joints or connected equipment.

C. Joints

1. Welds shall be sound, free from embedded scale and slag, have a tensile strength across the weld not less than that of the thinner of the connected sections, and that all pipe welds be water-tight. Butt welds shall be used for shop-welded joints in pipe, fittings and specials except where fillet welds are specified or shown. Fillet welds shall be used for flange attachment in accordance with AWWA C207. Fillet welds shall also be used in fabrication of pipe reinforcement and other locations where shown on the plans. Weld test specimens shall be furnished whenever requested by the City. Contractor shall follow the requirements of AWWA C206 and shall furnish the operator certificates prior to any field welding.
2. The use of back-up welding strips or rings for shop or field butt welds shall not be permitted. Welding of field joints shall conform to the applicable requirements of AWWA C206.
3. Leaks in welds shall be repaired by removing the defective material which caused the leak in each case and re-welding. No leak shall be repaired by mechanical caulking.

D. Flanges

1. Provide at each piping connection to equipment or instrumentation on equipment side of each block valve to facilitate installation and removal.

E. Finish

1. Coating shall be applied to the pipe and pipe fittings per the applicable Society for Protective Coatings standard.

3.04 TESTING

- A. All piping, valves, and accessories installed under this contract shall be tested for tightness and leakage for a one-hour period at 150 % of normal operating pressure. The contractor shall provide all necessary equipment and shall perform all work required in connection with these tests. Piping will be tested by observation at normal operating pressures. The section tested shall be slowly filled with water, care being taken to expel all air from the pipes. If necessary, the pipes shall be tapped at high points to vent the air. All joints which are found to leak shall be made tight by approved methods or replaced by the contractor at no additional cost to the City.

3.05 CLEANING

- A. Clean as recommended by manufacturer. Do not use materials or methods, which may damage finish or surrounding construction.

END OF SECTION

SECTION 15100
VALVES AND ACTUATOR

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Butterfly Valves.
2. Actuators.

B. Related Sections

1. Section 15060 – Pipes & Pipe Fittings.
2. Section 15110 – Electronic Control Valve.

1.02 REFERENCES

- A. The following documents refer to the latest edition.
- B. ANSI/AWWA C504, Rubber-Seated Butterfly Valves.
- C. ANSI/AWWA C550, Protective Interior Coatings for Valves and Hydrants.
- D. NSF/ANSI 61 Drinking Water System Components – Health Effects.

1.03 SUBMITTALS

A. Submit under provisions of Section 01010 – Summary of Work.

B. Product Data:

1. Submit manufacturer's descriptive literature and product specifications for each product.
2. Proof of Design Test reports that valves meet or exceed ANSI/AWWA C504.

C. Shop Drawings:

1. Indicate typical layout including dimensions and position of valve actuator.

1.04 PROJECT RECORD DOCUMENTS

A. Submit under provisions of Section 01700 – Contract Closeout.

B. Record information requested in Section 01700 – Contract Closeout.

1.05 OPERATION AND MAINTENANCE DATA

A. Submit under provisions of Section 01700 – Contract Closeout.

B. Maintenance Data.

1.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A minimum of five (5) years experience manufacturing AWWA butterfly valves.
- B. Installer Qualifications: Acceptable to manufacturer with experience on at least five projects of similar nature in past five years.

1.07 DELIVERY, STORAGE AND HANDLING

- A. Comply with requirements of Section 01600 – Material and Equipment.

1.08 GUARANTEE

- A. Comply with provisions of Section 01010 – Summary of Work.
- B. Warrant installed units to be free from defects in material and workmanship for one (1) year.

PART 2 PRODUCTS

2.01 BUTTERFLY VALVES

- A. Butterfly valves shall be of the size indicated on the plans; tight closing, rubber-seat type; bubble-tight with rated pressure applied from either side; satisfactory for throttling service, frequent operation and infrequent operation; valve discs shall rotate 90 degrees from the full open position to the tight shut position; travel stops for the disc shall not be located on the interior of the body; shall meet or exceed standard ANSI/AWWA C504 and conform to standard NSF/ANSI 61. Valves shall meet the following requirements:
 1. Pressure Class: 150B.
 2. Valve Body: flanged ends.
 3. Valve Shafts: stainless steel, Type 304.
 4. Valve Discs: ductile or cast iron; disk shall have a 316 stainless steel edge if valve seat is mounted in valve body.
 5. Valve Seat: Buna-N rubber.
 6. Valve Actuator: manual traveling-nut, self-locking type with handwheel; fusion bonded epoxy coating.
 7. Interior Finish: fusion bonded epoxy conforming to NSF/ANSI 61.
 8. Exterior Finish: fusion bonded epoxy.
- B. Acceptable manufacturers and models:
 1. Milliken Valve Company; Model 511.
 2. Henry Pratt Company; Model 2FII.
 3. Val-Matic Valve & Mfg. Corp.; Model American-BFV.
- C. Substitutions: Under provisions of Section 01600.

2.02 ACTUATORS

- A. Handwheel Actuator: rotate counter-clockwise to open valve; handwheel shall have a diameter of not greater than 24-inches for valves 30-inches or smaller and a diameter of not greater than 30-inches for valves 36-inches and larger; the work open and an arrow indicating the direction shall be cast into the handwheel; provide on isolation valves.
- B. Motorized Actuator:
 - 1. Valve Drive Unit:
 - a) A single speed drive unit and controller shall be furnished with the butterfly valve indicated on the contract drawings for automatic operation. The motor operated drive unit shall be mounted on the valve shaft or on the reduction gearing. The new valve drive unit shall consist of the motor, gearing mechanism, handwheel mechanism, limit switches, torque switches, lubricants, heating elements, wiring, and terminal facilities enclosed in a cast iron, weatherproof housing.
 - b) The functional requirements are covered in the attached drawings. The complete crosshead movement, including unseating, seating and disc rotation in both the opening and closing operation, shall require approximately 120 seconds. Valves shall close with a clockwise rotation.
 - c) Valve actuators shall be tested according to the test requirements of AWWA Standard C540. The tests shall prove that the design, material selection and manufacture of the actuator meet the requirements as specified. Performance tests shall prove that each actuator is in working order prior to shipment. Test reports shall be submitted to the City for approval before the shipment of actuators to the job site.
 - d) The valve manufacturer shall provide the required sizing data to the actuator manufacturer.
 - 2. Motor: The motor shall be a high torque (1.5 safety factor minimum), low starting current design, made expressly for valve control service and capable of operating the valve under full differential pressure for at least two cycles of travel without overheating. The motor shall be capable of producing an actuator output of not less than one and one-half times the required valve operating torque when voltage to the motor is +/- 10% of the nominal voltage. The motor shall be totally enclosed, non-ventilated, compound wound, and rated 125 VDC with a minimum Class B insulation. The motor shall be factory lubricated for lifetime operation; motor enclosure rating shall be NEMA 4.
 - 3. Gearing Mechanism: Reduction shall be performed by a series of spur, helical, bevel, and/or worm gears. Worm gears shall be bronze, all others shall be steel. All gears shall be supported on anti-friction bearings. The unit shall be designed so that the motor comes up to full speed before the valve stem load is encountered in either the opening or closing operation. All gearing shall be designed for 100 percent overload conditions, permanently lubricated, and

effectively sealed against entrance of foreign materials. The unit shall be constructed to permit changing of the gear ratio, if required.

4. Handwheel Mechanism: The actuator shall be equipped with a handwheel for manual operation. The handwheel shall not rotate during motor operation and during handwheel operation the motor shall not turn. The drive unit shall be responsive to electrical control at all times and shall instantly disengage the handwheel when the motor is energized. The handwheel shall rotate counterclockwise to open the valve. An arrow, indicating the direction of rotation, and the word "OPEN" or "CLOSE" shall be cast on the handwheel. The handwheel pull required to manually operate the valve shall not exceed 80 pounds on the rim for seating or unseating load or 60 pounds for running load.
5. Lubrication: All gearing and bearings shall be grease or oil-lubricated. Seals shall be provided at all shaft penetrations of the gear case to prevent leakage of lubricant, regardless of position. Lubricants shall be suitable for year-round service based on prevailing ambient conditions.
6. Torque Switch:
 - a) The actuator shall include an adjustable torque limit switch (and thrust switch where applicable) These switches shall be incorporated into the valve control circuit so as to interrupt the power supply when a valve requiring torque seating has reached the fully open or fully closed position, or when an obstruction has been encountered during travel. Open and close torque switches shall be adjustable by means of individually calibrated dials and marked "OPEN" or "CLOSE".
 - b) The torque spring furnished with the unit shall allow adjustment of torque to be increased a minimum of 25 percent beyond that required to open or close and seat the valve, i.e. the torque spring shall not be compressed beyond 75 percent of its travel to successfully close the valve. Portions of the scale which are beyond the travel of a fully compressed torque spring shall be painted out or removed. The gear head, gearing and valve shall be designed to withstand the 25 percent over torque capability required by the maximum torque switch setting specified above.
 - c) Limit Switches: Provisions shall be made for four (4) trains of geared limit switches, each train independently adjustable and with provisions for three (3) switch contacts. The switch contacts to be furnished shall be as indicated below.
 - d) GLS/1 Contact open only when the valve is fully open; used to de-energize "OPEN" contactor and turn off "GREEN" indicating light (Gear train No. 1).
 - e) GLS/2 Contact open only when the valve is fully closed; used to de-energize "CLOSE" contactor and turn off "RED" indicating light (Gear train No. 2).

- f) GLS/3 Contact open only when the valve is fully open, used for remote indication. (Gear train No. 1).
- g) GLS/4 Contact open only when the valve is fully closed, used to for remote indication. (Gear train No. 2).

Terminal facilities for connection to motor leads, solenoid, heaters, and heaters shall be provided in the limit switch compartment. Threaded conduit hubs shall be provided for conduit connections.

- 7. Heating Elements: Space heating elements shall be provided in both the motor housing and the geared limit switch compartment. The heating elements shall be rated 120 VAC.
- 8. Valve Controller:
 - a) To ensure complete coordination of the equipment, the actuator supplier shall also furnish a valve controller with each actuator.
 - b) Electrical controls shall include but not limited to: combination circuit breaker type reversing motor starter, OPEN-CLOSE push buttons and position indication lights, heating element, wiring, selector switch, and terminal facilities all enclosed in a surface-mounted, NEMA 4 weatherproof enclosure. The enclosure shall be sheet metal or cast iron with a bolted front cover and threaded conduit hubs located at the bottom of the box. It is intended that the controller must be opened to operate the circuit breaker, selector switch, local pushbuttons, and other devices.
 - c) Controls shall be in accordance with the following:
 - (1) Reversing Starter: Control voltage shall be 125 VDC. Seal-in contacts shall be supplied for use in the push-button circuits. The starter shall be both electrically and mechanically interlocked. Reversing controller package complete with control transformer, heater and terminal strips shall be the integral part of the actuator.
 - (2) Push-Button and Indicating Lights: Each actuator shall be supplied complete with open-close push buttons and cluster LED lights for valve position indication. Lenses shall be RED for OPEN and GREEN for CLOSE. Both lenses shall be lit during intermediate travel. Indicating lights shall be LED, push-to-test type.
 - (3) Heating Elements: Space heaters shall be provided in the valve controller. The heaters shall be rated 120VAC and will operate continuously energized.
 - (4) Wiring: All electrical components shall be shop-wired to a terminal strip to facilitate a minimum of field wiring at the time of installation, including inter-wiring of space-heater, limit and torque switches, etc. All conductors shall be numbered and labeled.

- (5) Selector Switch: The actuator shall be supplied with a 3-position “LOCAL-REMOTE” selector switch which is padlockable in any position. The selector switch shall also include additional contacts for remote indication of mode selection.
 - (6) Terminal Facilities: Terminal strips shall be provided for all external control connections and labeled with suitable terminal designations which are in agreement with the manufacturer’s drawing.
 - (7) Position indication: Local position indication for quarter valves shall be by indicator dial located on the gear operator and graduated in 25 % increments.
9. Nameplates: Each valve shall have its number suitably shown on both the valve operator and the valve controller. Numerals shall not be less than 2 inches high and shall be black baked enamel on anodized aluminum plates. The location of the name plate and the method of fastening shall be subject to approval by the City.
10. Acceptable manufacturers:
- a) EIM Controls; Model Limitorque.
 - b) Substitutions: Under provisions of Section 01600.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine conditions and proceed with work in accordance with Section 01710.

3.02 INSTALLATION

- A. Install in accordance with manufacturer’s printed instructions and approved shop drawings.
- B. The valve’s inside shall be smooth, clean, and free from blisters, loose mill scale, sand and dirt when erected. All lines shall be thoroughly flushed before placing in service.
- C. Flanged Ends
 - 1. Flanged valve bolt holes shall straddle vertical centerline of pipe.
 - 2. Clean flanged faces, insert gasket and bolts, and tighten nuts progressively and uniformly.
 - 3. Care shall be taken in bolting flanged joints to insure that there is no restraint on the opposite end of the pipe, specials, fittings, and valves which would prevent pressure from being evenly and uniformly applied upon the gasket. The pipe or fitting must be free to move in any direction while bolting. Bolts shall be

alternately tightened, each in turn, at a uniform rate of gasket compression around the entire flange.

D. Valve Orientation

1. Install operating stem vertically when valve is installed in horizontal runs of pipe having centerline elevations 4 feet 6 inches or less above finished floor, unless otherwise shown.
2. Install operating stem horizontally in horizontal runs of pipe having centerline elevations between 4 feet 6 inches and 6 feet 9 inches above finished floor, unless otherwise shown.
3. Locate valve to provide accessibility for control and maintenance.
4. In open or closed positions, valve stems shall not interfere with ceiling or other equipment.

3.03 FIELD QUALITY CONTROL

A. Tests:

1. Valves shall be field tested to verify that valve is tight closing and leak-free after operators are installed.
2. Test that valves open and close smoothly with operating pressure on one side and atmospheric pressure on the other.
3. All piping, valves, and accessories installed under this contract shall be tested for tightness and leakage for a one-hour period at 150 % of normal operating pressure. The contractor shall provide all necessary equipment and shall perform all work required in connection with these tests. Piping will be tested by observation at normal operating pressures. The section tested shall be slowly filled with water, care being taken to expel all air from the pipes. If necessary, the pipes shall be tapped at high points to vent the air. All joints which are found to leak shall be made tight by approved methods or replaced by the contractor at no additional cost to the City.

3.04 ADJUSTING

- A. Adjust parts for smooth uniform operation.

3.05 CLEANING

- A. Clean as recommended by manufacturer. Do not use materials or methods, which may damage finish or surrounding construction.

END OF SECTION

SECTION 15110
ELECTRONIC CONTROL VALVE

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Electronic Control Valve.
2. Electronic Valve Controller.

B. Related Sections

1. Section 15060 – Pipes & Pipe Fittings.
2. Section 15100 – Valves & Actuators.

1.02 REFERENCES

- A. NSF/ANSI 61 Drinking Water System Components**

1.03 SUBMITTALS

- A. Submit under provisions of Section 01010 – Summary of Work.**

B. Product Data:

1. Submit manufacturer's descriptive literature and product specifications for each product.
2. Data on the electronic control valve shall include a computerized cavitation chart which shows flow rate, differential pressure, percentage of valve opening, Cv factor, system velocity, and if there will be cavitation damage. Data shall be from an accredited third party facility with hydraulic test data available upon request. Theoretical performance data will not be accepted.

C. Shop Drawings:

1. Submit drawings showing layout and dimensions of piping and valves. Indicate clearances from valves to existing obstructions.
2. Submit drawings showing field measured dimensions.

1.04 PROJECT RECORD DOCUMENTS

- A. Submit under provisions of Section 01700 – Contract Closeout.**

- B. Record information requested in Section 01700 – Contract Closeout.**

1.05 OPERATION AND MAINTENANCE DATA

- A. Submit under provisions of Section 01700 – Contract Closeout.**

1.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing Products specified in this Section with minimum five years experience.
- B. Installer Qualifications: Acceptable to manufacturer with experience on at least five projects of similar nature in past five years.

1.07 DELIVERY, STORAGE AND HANDLING

- A. Comply with requirements of Section 01600 – Material and Equipment.

1.08 GUARANTEE

- A. Comply with provisions of Section 01010 – Summary of Work.
- B. Valve manufacturer shall warrant the valve to be free of defects in material and workmanship for a period of three years from date of shipment.
- C. Valve manufacturer shall warrant the electrical components to be free of defects in material and workmanship for a period of one year from date of shipment.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable Manufacturers:
 - 1. Cla-Val Co., Newport Beach, CA.
- B. Substitutions: Under provisions of Section 01600

2.02 EQUIPMENT

- A. Electronic Control Valve
 - 1. Model No.: Cla-Val 633-42KX/BCSYKCKO
 - a) The Electronic Control Valve shall control flow, reduce pressure, sustain upstream pressure and provide a metering output in conjunction with an electronic controller.
 - 2. Main Valve
 - a) The valve shall be hydraulically operated, single diaphragm-actuated, globe pattern. The valve shall consist of three major components: the body with seat installed, the cover with bearing installed, and the diaphragm assembly. The diaphragm assembly shall be the only moving part and shall form a sealed chamber in the upper portion of the valve, separating operating pressure from line pressure. Packing glands and/or stuffing boxes are not permitted and there shall be no pistons operating the main valve or pilot controls.

- b) No separate chambers shall be allowed between the main valve cover and body. Valve body and cover shall be of cast material. No fabrication or welding shall be used in the manufacturing process.
- c) The valve shall contain a resilient, synthetic rubber disc with a rectangular cross-section contained on three and one-half sides by a disc retainer and forming a tight seal against a single removable seat insert. No O-ring type discs (circular, square, or quad type) shall be permitted as the seating surface. The disc guide shall be of the contoured type to permit smooth transition of flow and shall hold the disc firmly in place. The disc retainer shall be of a sturdy one-piece design capable of withstanding opening and closing shocks. It must have straight edge sides and a radius at the top edge to prevent excessive diaphragm wear as the diaphragm flexes across this surface. No hour-glass shaped disc retainers shall be permitted and no V-type or slotted type disc guides shall be used.
- d) The diaphragm assembly containing a non-magnetic 303 stainless steel stem; of sufficient diameter to withstand high hydraulic pressures shall be fully guided at both ends by a bearing in the valve cover and an integral bearing in the valve seat. The seat shall be a solid, one-piece design and shall have a minimum of a five-degree taper on the seating surface for a positive, drip-tight shut off. No center guides shall be permitted. The stem shall be drilled and tapped in the cover end to receive and affix such accessories as may be deemed necessary. The diaphragm assembly shall be the only moving part and shall form a sealed chamber in the upper portion of the valve, separating operating pressure from line pressure.
- e) The flexible, non-wicking, FDA approved diaphragm shall consist of nylon fabric bonded with synthetic rubber compatible with the operating fluid. The center hole for the main valve stem must be sealed by the vulcanized process or a rubber grommet sealing the center stem hole from the operating pressure. The diaphragm must withstand a Mullins Burst Test of a minimum of 600 x per layer of nylon fabric and shall be cycle tested 100,000 times to insure longevity. The diaphragm shall not be used as the seating surface. The diaphragm shall be fully supported in the valve body and cover by machined surfaces which support no less than one-half of the total surface area of the diaphragm in either the fully opened or fully closed position.
- f) The main valve seat and the stem bearing in the valve cover shall be removable. The valve seat shall be retained by flat head machine screws for ease of maintenance. The lower bearing of the valve stem shall be contained concentrically within the seat and shall be exposed to the flow on all sides to avoid deposits. To insure proper alignment of the valve stem, the valve body and cover shall be machined with a locating lip. No "pinned" covers to the valve body shall be permitted. Cover bearing, disc retainer, and seat shall be made of the same material. All necessary repairs and/or modifications other than replacement of the main valve body shall be

possible without removing the valve from the pipeline. Packing glands and/or stuffing boxes shall not be permitted and components including cast material shall be of North American manufacture.

g) Material Specifications

- (1) Valve Size: 12-inch reduced port.
- (2) Main Valve Body and Cover: ductile iron.
- (3) Main Valve Trim: stainless steel, anti-cavitation, radial slot type (no holes, V-porting or orifice plate).
- (4) End Detail: 150# flanged globe pattern.
- (5) Pressure Rating: to 250 psi working pressure.
- (6) Temperature Range: City water.
- (7) Rubber Material: Buna-N.
- (8) Coating: NSF-61 approved fusion-bonded epoxy of all iron components, interior and exterior.
- (9) Options: opening and closing speed controls, X117D valve position transmitter, DP transmitter.

3. Pilot Control System

- a) The 133-42 hydraulic control valve pilot system shall consist of dual solenoids which alternately apply or relieve pressure to the diaphragm chamber to position the main valve. They shall be normally closed (energized to open), 120 volt AC with NEMA Type 4 enclosure. A manual system to by-pass the solenoids shall also be provided. A hydraulic pressure sustaining control shall be provided to sustain upstream pressure from going below a certain minimum pressure.

b) Material Specification

- (1) Body and Cover: bronze.
- (2) Trim: stainless steel.
- (3) Rubber Material: Buna-N.
- (4) Tubing and Fittings: copper and brass.
- (5) Adjustment Range: 20 to 200 psi
- (6) Solenoid Voltage: 120/60 (loss of power, valve fails in last position) stainless steel solenoid body.
- (7) Enclosure Type: NEMA 4.

B. Electronic Valve Controller:

1. Model No.: Cla-Val 131VC-3T .

2. Controller Specifications
 - a) Control Input: 4-20 mA full scale.
 - b) Control Parameters: 0- 6.0 million gallons per day (MGD).
 - c) Proportional Bands: 1 to 200% adjustable in 1% increments independently for opening and closing.
 - d) Deadband: Adjustable 0.00 to 25.5% of span.
 - e) Cycle Time: 1 to 60 seconds in 1 sec. increments.
3. Environmental Parameters
 - a) Temperature: 40° F to 130° F.
 - b) Humidity: 90% RH, non condensing.
 - c) Power Input: 13.5 watts max at 117 VAC, 50/60 Hz.
 - d) Memory Protection: 10 year type. life lithium battery.
 - e) Housing: Flame retardant UL rated ABS plastic; fits ¼ DIN cutout.
4. Function
 - a) The controller shall provide the interface between a remote computer system and the hydraulic control valve.
 - b) It shall have remote communication capability in both the analog or digital format. Local manual set-point and emergency manual control shall also be provided. The controller shall accept an analog 4-20 mA feedback signal with retransmission capabilities.
 - c) Upon receiving the remote set-point command from the computer system or local command from the operator, the controller will provide proper signals to modulate and maintain the valve at the desired set-point value.
 - d) A fluorescent display of current feedback status and set-point in scalable engineering units shall be provided as an integral part of the controller.
 - e) When the feedback signal deviates from the set-point, the appropriate opening or closing solenoid on the valve will pulse. As the feedback signal approaches the set-point, this on/off pulse time will gradually lessen to smoothly modulate the valve to the set-point. The total cycle time between each pulse shall be programmable between 1 and 60 seconds. A programmable time proportional output feature shall also function to aid in tuning valve response. When the feedback signal is within a programmable deadband zone, the opening and closing solenoids will not activate and the valve will maintain position.
 - f) The operator keypad shall consist of two rows of alphanumeric characters to display numeric values and units. Color coded alarm, status and mode indicators will display operating conditions. Security key codes shall protect

against unauthorized changes to the controller. All programming shall include key words and prompts to aid in set-up and timing the controller.

- g) The controller shall be solid-state construction with an internal chassis capable of being removed for inspection and repair. All program memory including set-point and timing parameters shall be protected by an internal lithium battery rated for 10 year life.
- h) When optional remote digital communications are provided, the controller shall be capable of direct linkage to a computer or other instrumentation which has RS232C or RS422 communications. When RS 422 data highway communications is specified, up to 64 controllers may be addressed from a single computer port and shall operate up to 5000' from the computer. RS232C shall operate up to 50' distance between the computer or RTU and the valve controller. All set-point, tuning, and auto-manual operation shall be adjustable commands sent from the computer. Each transmission shall include the individual controller address. Communication baud rates shall be 300, 1200, or 2400 baud.

C. Additional Electronics

- 1. Electronic control valve shall include but not be limited to the following: door-mounted fuse-protected electronic valve controller, DIN rail-mount flow measurement module, circuit breaker, convenience duplex GFCI receptacle, wiring, mounting and terminal facilities, all enclosed in a surface-mounted NEMA 4, stainless steel enclosure. Stainless steel enclosure shall be as manufactured by Hoffman, 20"x16"x8", 16 gauge minimum door thickness.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install in accordance with manufacturer's printed instructions and approved shop drawings.

3.02 FIELD QUALITY CONTROL

- A. Inspection and Start-Up: A direct factory representative shall be made available for inspection, start-up service and instructions.
- B. Provide eight (8) hours of instruction in the start-up, operation, control, adjustment, trouble shooting, servicing, maintenance and shutdown of electronic control valve.

3.03 ADJUSTING

- A. A direct factory representative shall be made available for necessary adjustments.

3.04 CLEANING

- A. Clean as recommended by manufacturer. Do not use materials or methods, which may damage surface or surrounding construction.

END OF SECTION

SECTION 16050**BASIC ELECTRICAL MATERIALS AND METHODS****PART 1 GENERAL****1.01 SECTION INCLUDES**

- A. Junction and pull boxes used at, or below grade.
- B. Device plates and decorative box covers.
- C. Circuit breakers.
- D. Metal and Liquidtight conduit.
- E. Building wire and cable.
- F. Wiring connectors and connections.

1.02 REFERENCES

- A. NECA Standard of Installation (published by the National Electrical Contractors Association).
- B. NEMA AB1 - Molded Case Circuit Breakers.
- C. NEMA WD 1 – General Requirements for wiring Devices.
- D. NEMA WD 6 – Wiring Device – Dimensional Requirements.
- E. NETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment (published by the International Electrical Testing Association).
- F. ANSI/NFPA 70 - National Electrical Code.
- G. ANSI C80.1 – Rigid Steel Conduit, Zinc Coated.
- H. ANSI/NEMA FB 1 – Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit and Cable Assemblies.

1.03 SUBMITTALS FOR REVIEW AND INFORMATION

- A. Section 01300 - Submittals: Procedures for submittals and information.
- B. Submit manufacturer's installation instructions. Indicate application conditions and limitations of use stipulated by Product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, and installation of Product.
- C. Upon project completion, record actual circuiting arrangements in project record documents and update panelboard directories to reflect new loads.

1.04 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.

1.05 REGULATORY REQUIREMENTS

- A. Conform to requirements of NFPA 70.
- B. Products: Listed and classified by Underwriters Laboratories, Inc. or testing firm acceptable to the authority having jurisdiction as suitable for the purpose specified and indicated. Approval by local authority shall be documented prior to submittal.

PART 2 PRODUCTS

2.01 LOAD CENTER CIRCUIT BREAKERS

- A. Molded Case Circuit Breakers:
 - 1. NEMA AB1 and UL 489.
 - 2. Thermal-magnetic trip, quick-make, quick-break, molded case, indicating type showing ON/OFF with common trip handle for all poles.
- B. Voltage and Current Ratings: To match branch circuit and load characteristics.
- C. Minimum Integrated Short Circuit Rating: To match panel main breaker rating.
- D. Manufacturers:
 - 1. Eaton Cutler-Hammer.
 - 2. Square D.
 - 3. Approved equal.

2.02 OUTLET BOXES

- A. Sheet Metal Outlet Boxes: NEMA OS 1, galvanized steel.
 - 1. Wiring devices mounted inside of panels shall be NEMA OS 1, galvanized steel. Cover Plates: As specified in Section 16140.
- B. Cast boxes: NEMA FB 1, Type FD, cast ferrous alloy. Provide gasketed cover, by box manufacturer, and threaded hubs.

2.03 PULL AND JUNCTION BOXES

- A. Cast Boxes: NEMA 250, Type 4, ferrous alloy, flat-flanged for surface mounting. Boxes shall be galvanized cast iron with neoprene gasketed cover and stainless steel cover screws.
- B. All contractor fabricated boxes shall be stainless steel.

2.04 WIRING DEVICES

A. Receptacles

1. Manufacturer: Hubbell, Cooper Crouse-Hinds, approved equal.
2. Description: NEMA WD 1, heavy-duty, specification grade, general use, receptacle with cover.
3. Configuration: NEMA WD 6, type as specified and indicated.
4. GFCI Receptacle and cover plate: Convenience receptacle with integral ground fault circuit interrupter to meet regulatory requirements, Type 5-20R, Hubbell Model GFR8300.

2.05 NAMEPLATES AND LABELS

A. Nameplates: Engraved three layer laminated plastic, ¼ inch white letters on black background.

B. Locations:

1. Each electrical distribution and control equipment enclosure; controllers shall be labeled “East Fill Line Motorized Isolation Valve” and “East Fill Line Flow Control Valve”.
2. Communication cabinets.

C. Letter Size: Use 1/4 inch letters for identifying grouped equipment and loads.

D. Labels: Embossed adhesive tape, with 3/16 inch (5 mm) white letters on black background. Use only for identification of individual wall switches and receptacles, control device stations, which shall include panel and circuit number.

2.06 WIRE MARKERS

A. Manufacturers: 3M, or approved equal.

B. Description: Cloth, tape, split sleeve, or tubing type wire markers.

C. Locations: Each conductor at panelboard gutters, pull boxes, outlets, junction boxes, and each load connection.

D. Legend:

1. Power and Lighting Circuits: Branch circuit or feeder number.
2. Control Circuits: Control wire number indicated on shop drawings.

2.07 CONDUIT REQUIREMENTS

A. Minimum Size: ¾ inch unless otherwise specified.

B. Underground and Outdoor Installations: Use heavy wall, galvanized, rigid steel conduit

C. Indoor Installations: Use heavy wall, galvanized, rigid steel conduit or intermediate steel, metal conduit.

D. Liquidtight Flexible Metal Conduit: Use in all areas for flexible connections.

- E. Support conduit using coated steel or malleable iron straps, lay-in adjustable hangers, clevis hangers, and split hangers and fasten conduit supports to building structure and surfaces, grouping related conduits.
- F. Fasten conduit to concrete structural members using expansion anchors or preset inserts. Fasten conduit to concrete surfaces using expansion anchors or self-drilling anchors. All materials shall be corrosion resistant.

2.08 CONDUCTORS 600 VOLTS AND BELOW

- A. Conform to applicable requirements of NEMA WC 3, WC 5, and WC 7.
- B. Conductor Type: Conductors No. 10 AWG and smaller: solid copper. All other circuits stranded copper.
- C. Insulation Voltage Rating: 600 Volts.
- D. Insulation: ANSI/NFPA 70; insulation shall be rated for use at 75 °C minimum, in dry and wet locations.

2.09 CABLE RATED 600 VOLTS

- A. General:
 - 1. Type: TC, meeting requirements of UL 1277, including Vertical Tray Flame Test at 20,000 BTU/hr, and NFPA 70, Article 340, or UL 13 Listed Power Limited Circuit Cable meeting requirements of NFPA 70, Article 725.
 - 2. Permanently and legibly marked with manufacturer's name, maximum working voltage for which cable was tested, type of cable, and UL Listing mark.
 - 3. Suitable for installation in open air, cable trays, or conduit.
 - 4. Minimum Temperature Rating: 75° C in dry and wet locations.
 - 5. Overall Outer Jacket: PVC flame-retardant, sunlight- and oil- resistant.
- B. Type 3-No. 16 AWG, Twisted, Shielded Pair, Instrumentation Cable: Single pair designed for noise rejection for process control, computer, or data log applications meeting NEMA WC 55 requirements.
 - 1. Outer Jacket: 45-mil nominal thickness.
 - 2. Individual Pair Shield: 1.35 mil double-faced aluminum /synthetic polymer overlapped to provide 100 per cent coverage.
 - 3. Dimension: 0.31-inch nominal OD.
 - 4. Conductors:
 - a) Bare, soft annealed copper, Class B, seven-strand concentric, meeting requirements of ASTM B8.
 - b) 20 AWG, seven-strand tinned copper drain wire.
 - c) Insulation: 15-mil nominal nylon.
 - d) Color Code: Pair conductors black and red.

PART 3 EXECUTION

3.01 INSTALLATION

- A. All work and material installation shall be performed in a neat and workmanlike manner in keeping with the best practices of the trade and in accordance with: NFPA 70, NECA "Standard of Installation", and all other governing codes.
- B. Update panelboard circuit directory for each branch circuit.
- C. Equipment ground shall originate at panelboard ground bus and shall be securely bonded to all switches and receptacle boxes and electrical equipment enclosures to ensure continuous system ground in accordance with applicable sections of NFPA 70.
- D. Install receptacles with grounding pole on top.
- E. Connect wiring device grounding terminal to branch circuit equipment grounding conductor.
- F. Install weatherproof plates on switches, receptacles, and blank outlets.
- G. Mark and identify all receptacles, switches, and control device stations in accordance with Section 16195, "Electrical Identification", indicating panel and circuit number.
- H. Coordinate mounting of equipment and outlet boxes with Field Engineer for exact locations and mounting heights.
- I. Conduit shall be run parallel and perpendicular to walls inside building, maintaining adequate head room; ground and bond conduit, equipment and piping to meet all Regulatory Requirements.
- J. Support conduit using coated steel or malleable iron straps, lay-in adjustable hangers, clevis hangers, and split hangers and fasten conduit supports to building structure and surfaces, grouping related conduits.
- K. Provide separate, insulated equipment grounding conductor within each feeder and branch circuit raceway. Equipment ground shall originate at panelboard ground bus and shall be securely bonded to all switches and receptacle boxes and electrical equipment enclosures to ensure continuous system ground in accordance with applicable sections of NFPA 70. Terminate each end on suitable lug, bus, or bushing.

3.02 FIELD QUALITY CONTROL

- A. Inspect and test in accordance with all applicable sections of NETA ATS.
- B. Perform inspections and tests listed in NETA ATS, Section 7.4 for switches, Section 7.5 for circuit breakers.
- C. Inspect each wiring device for defects.
- D. Operate each wall switch with circuit energized and verify proper operation.
- E. Verify that each receptacle is energized.
- F. Test each receptacle device for proper polarity.

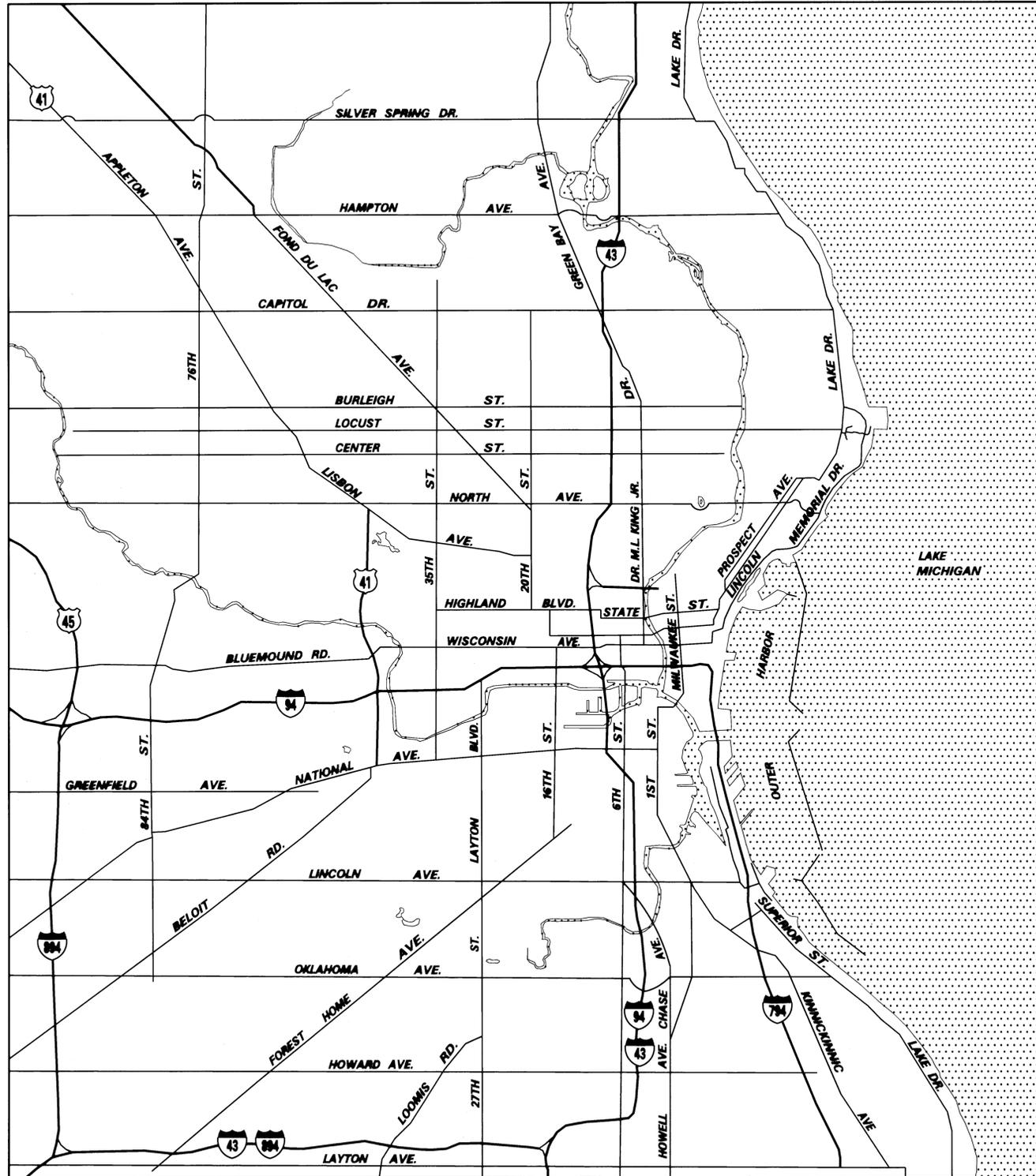
G. Test each GFCI receptacle device for proper operation.

H. Adjust devices and wall plates to be flush and level.

3.03 ADJUSTING

A. Measure and record steady state load currents at each panelboard feeder.
Maintain proper phasing for multiwire branch circuits.

END OF SECTION



MILWAUKEE, WISCONSIN

Milwaukee Water Works

PUMPING STATION

LS-32 SUPPLEMENTAL FILL LINE FOR WATER STORAGE TANKS

DRAWING INDEX

<u>DRAWING NO.</u>	<u>TITLE</u>
LS-32-01	LOCATION MAP AND DRAWING INDEX
LS-32-02	FILL VALVE PLAN

<u>REF. DRAWING NO.</u>	<u>TITLE</u>
L-3-03	PUMPING STATION BUILDING-BASEMENT
L-3-06	PUMPING STATION BUILDING-BALCONY
L-3-08	PUMPING STATION BUILDING-ROOF
L-4-03	PUMPING STATION BUILDING-ELECTRICAL INSTALLATION
L-5-4	PUMPING STATION BUILDING-PUMP EQUIPMENT PLAN

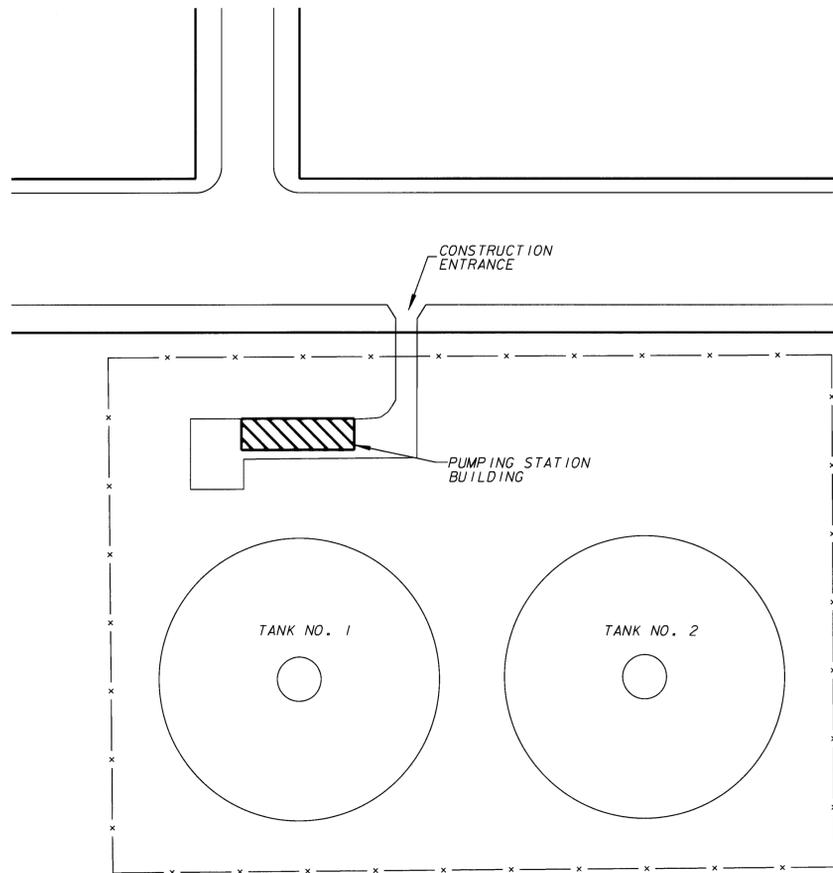


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APPROX SCALE IN MILES

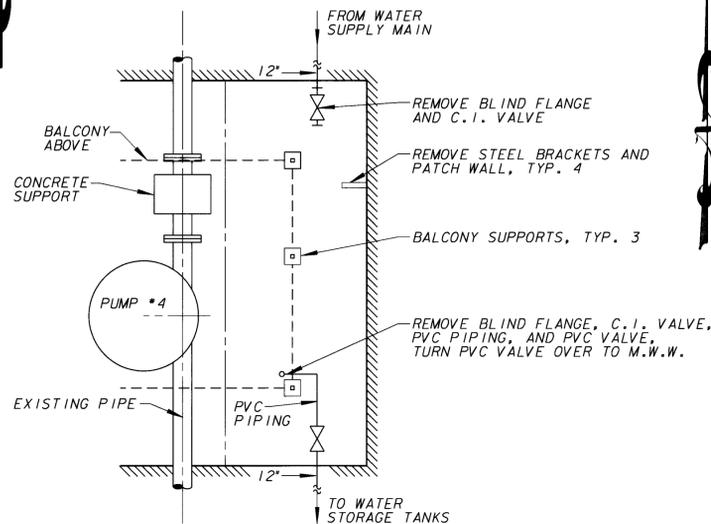


Milwaukee Water Works Department of Public Works		Water Engineering Department of Public Works	
PUMPING STATION LS-32 SUPPLEMENTAL FILL LINE FOR WATER STORAGE TANKS FILL VALVE PLAN			
DESIGNED BY	MAG	DATE	9/17/10
DRAWN BY	LN/JFS	PLANTS PROJECT ENGINEER	
CHECKED BY	AJS	DATE	9/17/10
SCALE	SEE DRAWING	CHIEF DESIGN ENGINEER	
WORK ORDER	WT48076800	SPECIAL DEPUTY COMMISSIONER OF PUBLIC WORKS	
OFFICIAL NOTICE		DRAWING NO.	LS-32-01

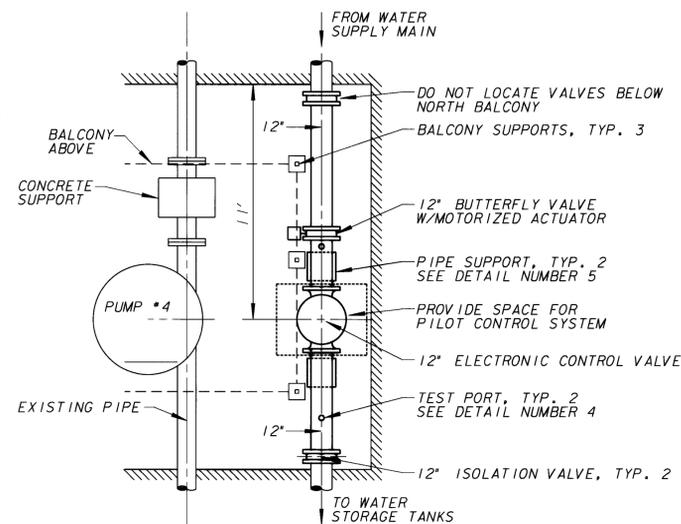
NO.	BY	REVISION	DATE	FILE NO.



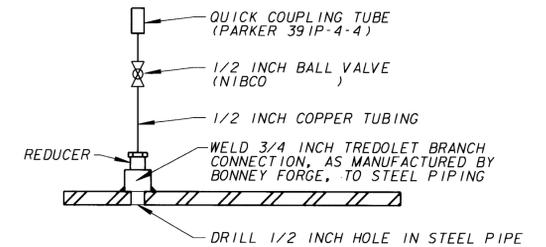
1 SITE PLAN
1" = 50'



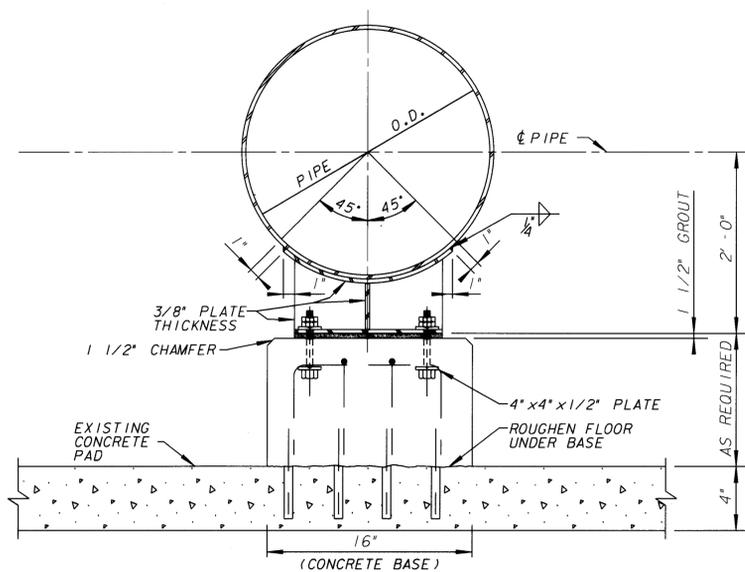
2 DEMOLITION PLAN - BASEMENT
1/4" = 1' - 0"



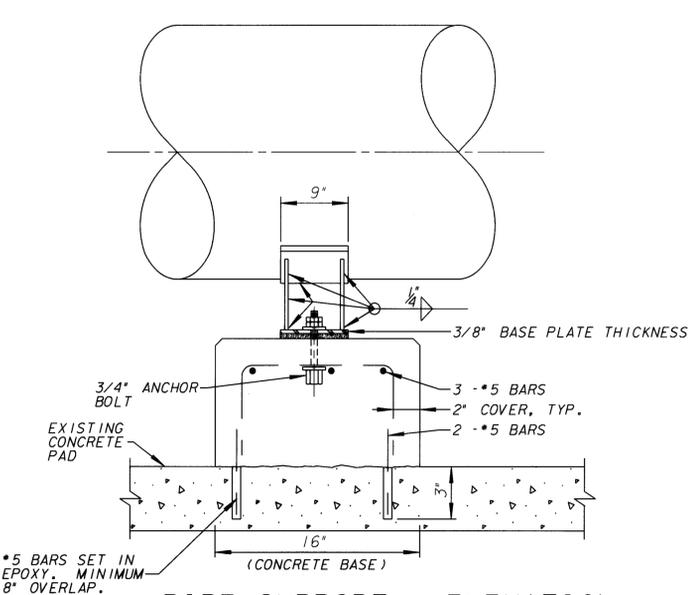
3 PIPING PLAN-BASEMENT
1/4" = 1' - 0"



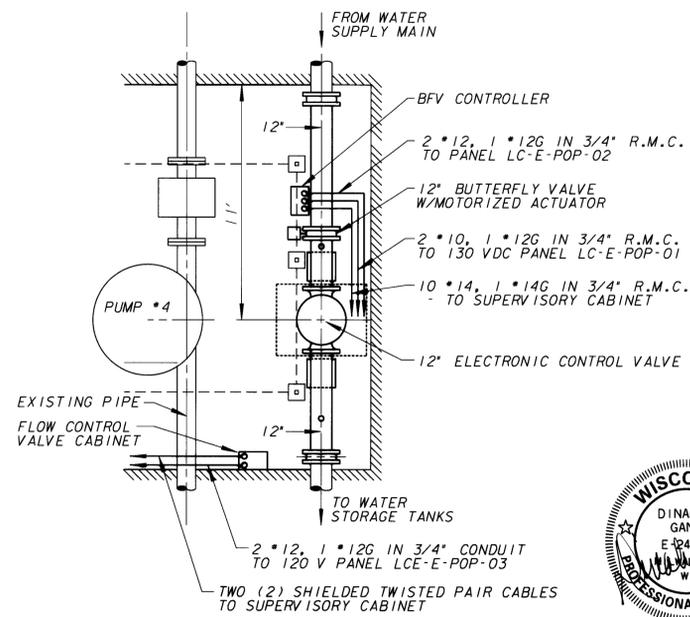
4 TEST PORT
NOT TO SCALE



5 PIPE SUPPORT - SECTION
NOT TO SCALE



PIPE SUPPORT - ELEVATION
NOT TO SCALE



6 WIRING PLAN-BASEMENT
1/4" = 1' - 0"

- NOTE
- 1) CONTRACTOR TO FABRICATE STEEL CHANNEL ANCHORED SUPPORT FOR MOTORIZED BUTTERFLY VALVE CONTROL CABINET.
 - 2) SEE REFERENCE DRAWING L-4-3, "LINCOLN STATION ELECTRICAL INSTALLATION FOR PANEL LOCATIONS".



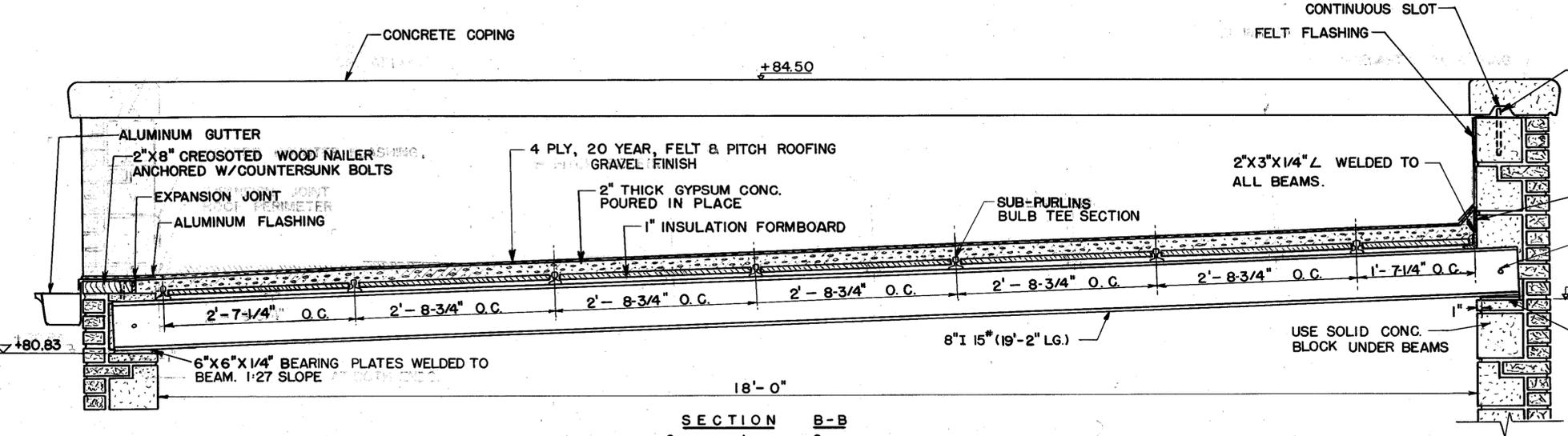
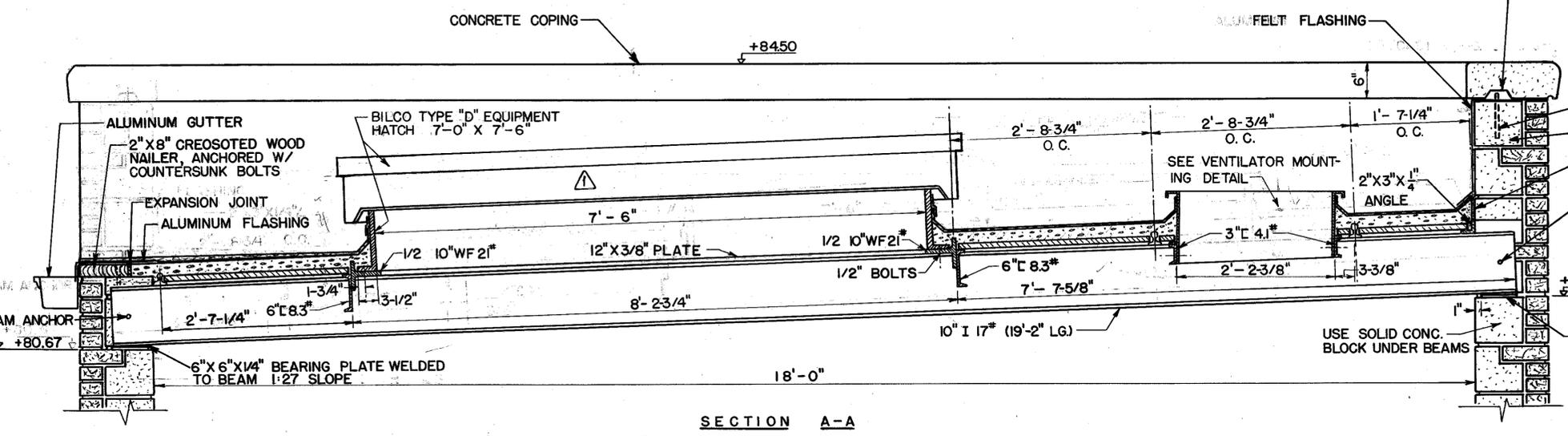
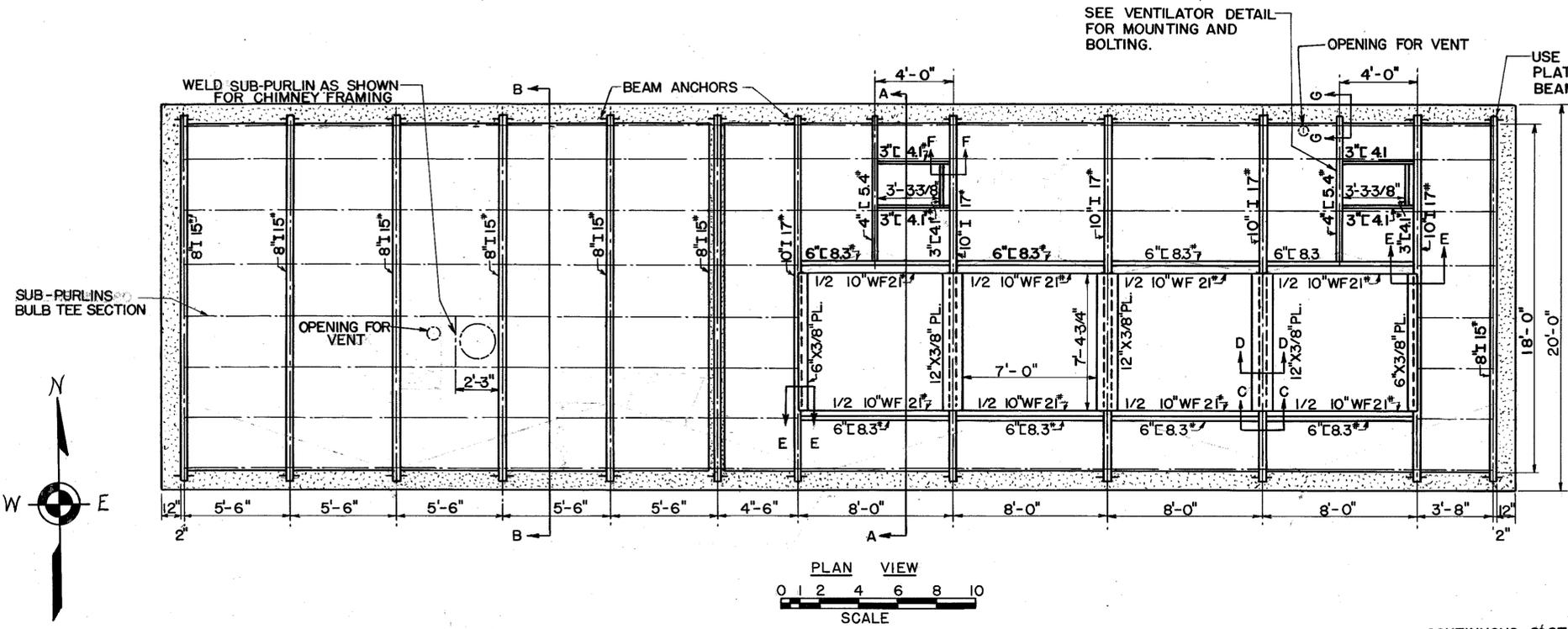
Milwaukee Water Works Department of Public Works	
PUMPING STATION LS-32 SUPPLEMENTAL FILL LINE FOR WATER STORAGE TANKS FILL VALVE PLAN	
DESIGNED BY	MAG
DRAWN BY	JFS/LR
CHECKED BY	AJS
DATE	9-16-2010
SCALE	SEE DRAWING
WORK ORDER	WT46675600
OFFICIAL NOTICE	
FILE NO.	

DINAH G. GANT
 E-124883
 11/11/10
 PROFESSIONAL ENGINEER

DATE 9/17/10
 PLANTS PROJECT ENGINEER
 DATE 9/17/10
 CHIEF DESIGN ENGINEER
 DATE 9/17/10

DRAWING NO. **LS-32-02**

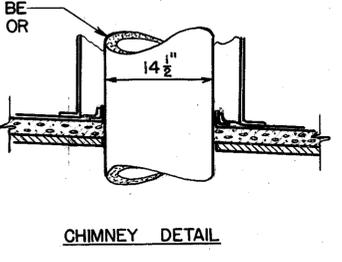
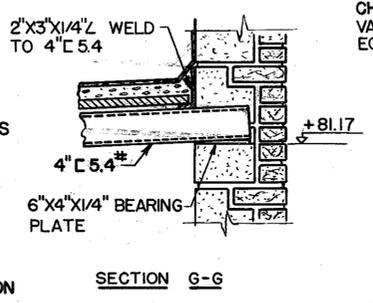
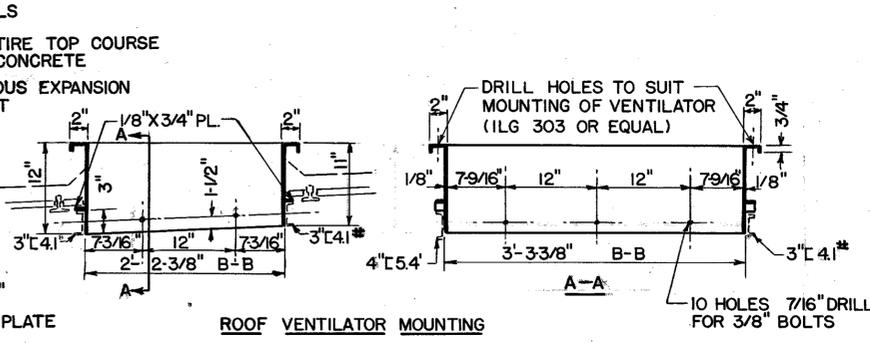
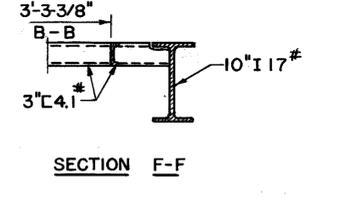
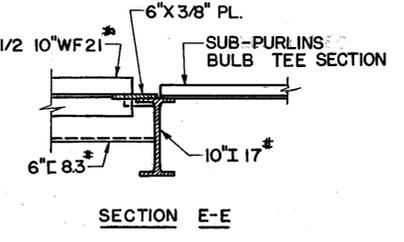
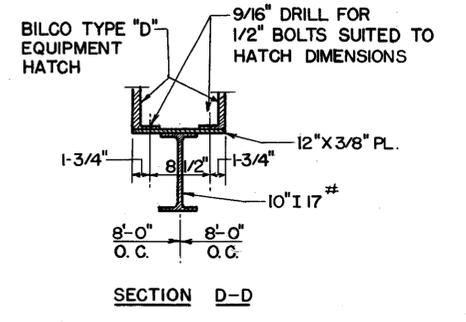
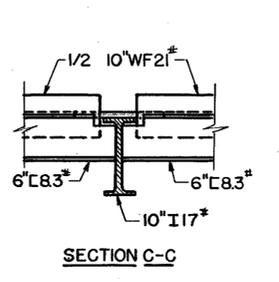
NO.	BY	REVISION	DATE



SEE VENTILATOR DETAIL FOR MOUNTING AND BOLTING.

OPENING FOR VENT

USE 6"X6"X1/4" BEARING PLATES FOR BOTH ENDS OF BEAMS



CITY ENGINEER'S OFFICE, MILWAUKEE, WIS.
MILWAUKEE WATER WORKS

BUILDING ROOF

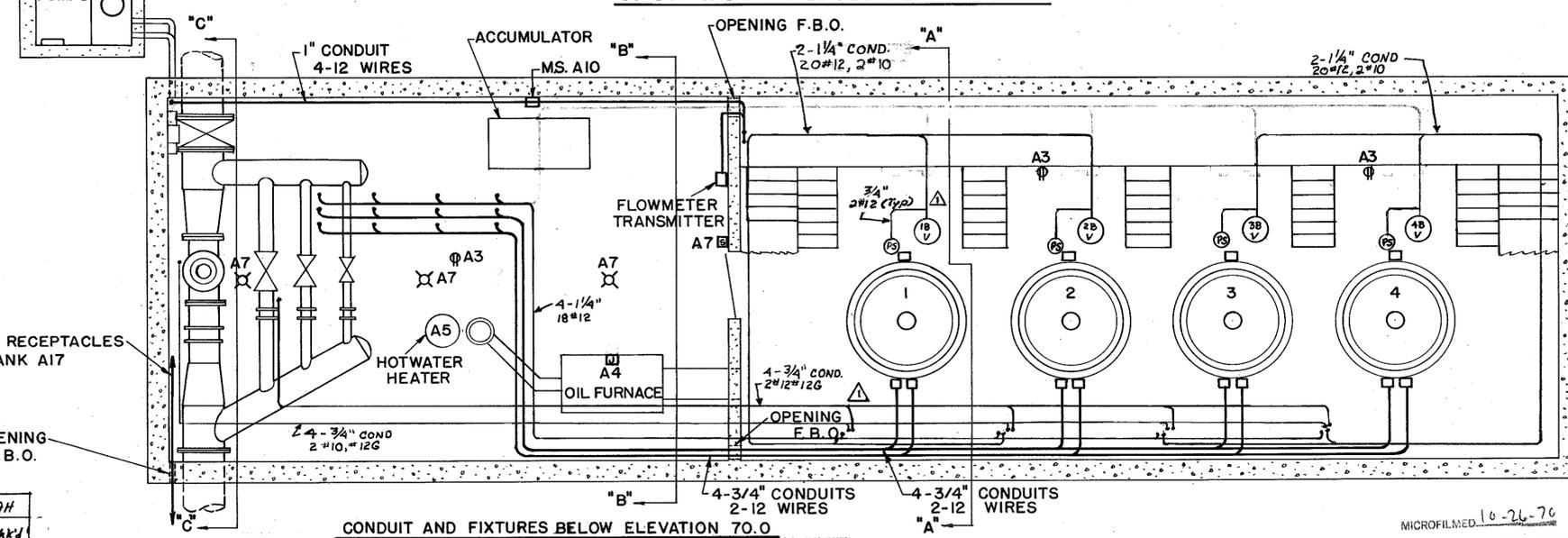
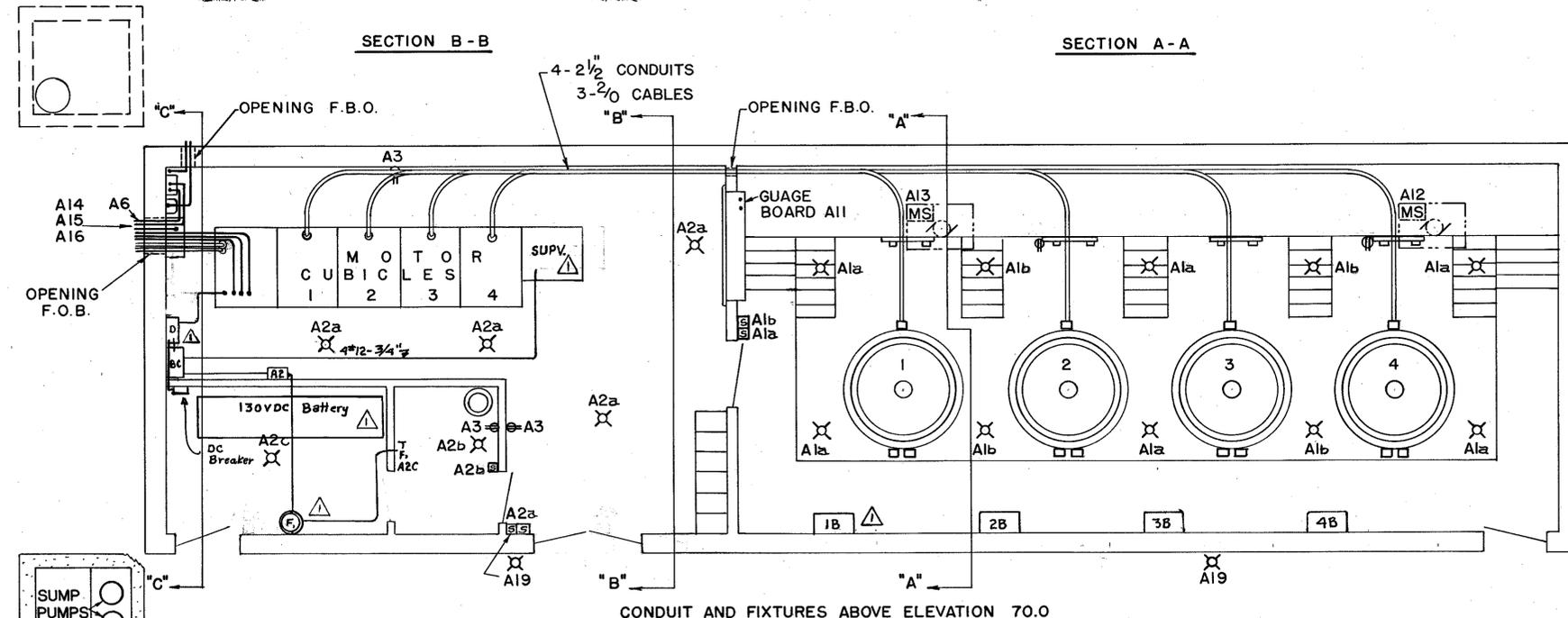
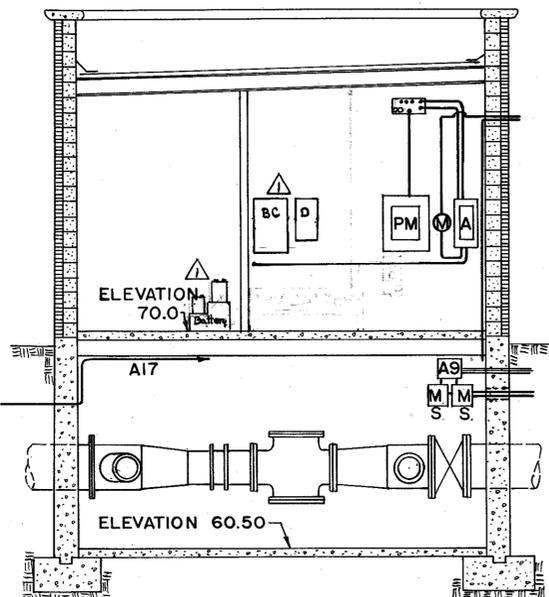
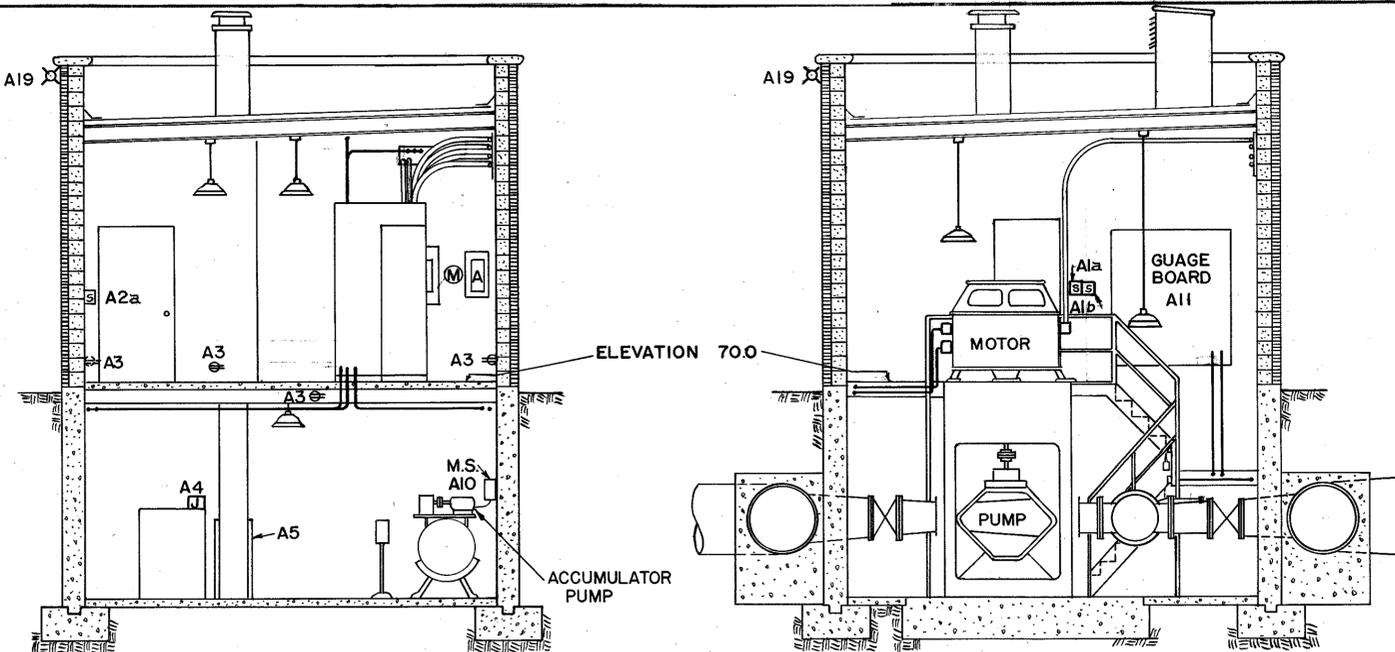
APPROVED *A. Rynders*
 APPROVED *Walter H. Smith* 2-1-55
 DESIGNED BY E.W. RWB
 DRAWN BY RWB, DRP
 TRACED BY RWB
 CHECKED BY E.W.
 DATE 11-26-54
 SCALE AS SHOWN
 FILE 4-11-4 DRWG. L-3-8

No.	Date	Revision	By	Chkd.
1	10-18-90	As Built per Field Observation	PFC	Chkd.

MICROFILMED 10-21-70

LEGEND

- F.B.O. FURNISHED BY OTHERS
- A DISTRIBUTION PANEL
- M.S. MOTOR STARTER
- J JUNCTION BOX
- M SECONDARY METER
- P.M. PRIMARY METER
- B.C. BATTERY CHARGER
- SUPV. SUPERVISORY
- D DC PANEL
- F FAN MOTOR
- T TIMER



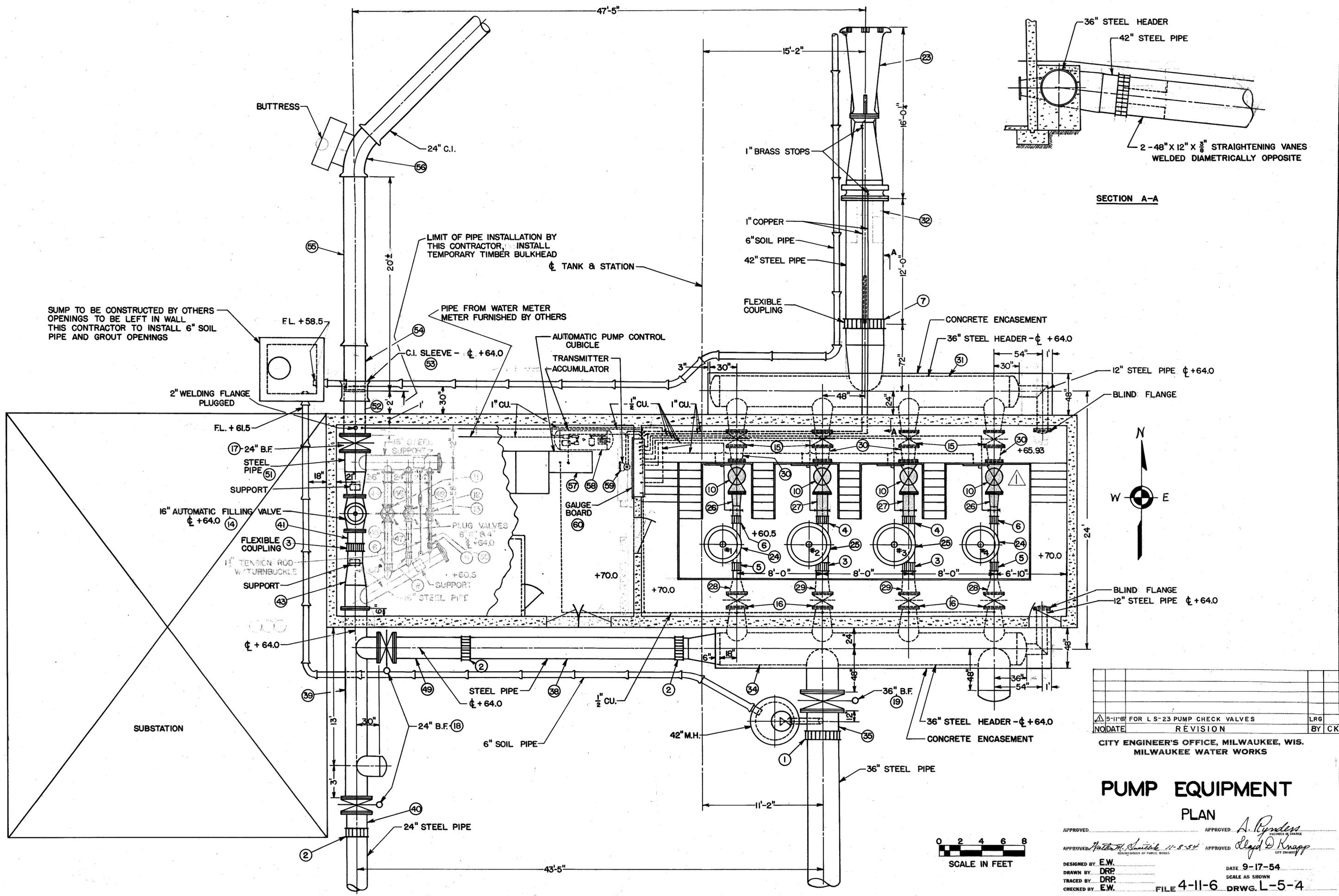
CITY ENGINEER'S OFFICE, MILWAUKEE, WIS.
MILWAUKEE WATER WORKS

ELECTRICAL INSTALLATION WIRING

APPROVED: *A. Ryderson*
 APPROVED: *Walter D. ...*
 DESIGNED BY: K.W., W.W.
 DRAWN BY: J.W.L.
 CHECKED BY: E.W., W.W.
 DATE: 10-19-54
 SCALE AS SHOWN
 FILE: 4-11-5
 DRWG. L-4-3

No.	Date	Revision	By	Chk'd
10-22-54		Added 130VDC Battery System; DC operated "B" values	AH	AH
		LS-238	Bv	ckd

MICROFILMED 16-26-76



SECTION A-A



5-11-67	FOR L-5-23 PUMP CHECK VALVES	LRG
NO DATE	REVISION	BY CK

CITY ENGINEER'S OFFICE, MILWAUKEE, WIS.
MILWAUKEE WATER WORKS

PUMP EQUIPMENT PLAN

APPROVED: *A. Rynders*
ENGINEER IN CHARGE

APPROVED: *Nathan M. Smith 11-8-54*
CITY ENGINEER

APPROVED: *Lloyd D. Knapp*
CITY ENGINEER

DESIGNED BY: E.W.
DRAWN BY: DRP
TRACED BY: DRP
CHECKED BY: E.W.

DATE: 9-17-54
SCALE AS SHOWN
FILE: 4-11-6 DRWG. L-5-4

