

Separate sealed Bids are solicited for the following project:

Project Name: **Bingham Township, Michigan
400,000 Gallon Spheroid
Exterior Overcoat
Dry Interior Spot Repaint
And Miscellaneous Repairs**

Note: This project name is to be understood to include the entire scope of project as defined and detailed by these specifications and Contract Documents.

Separate sealed bids will be received by the Owner and then publicly opened and read aloud at:

Bids Sent To: **Attn: Bingham Township, Dixon Engineering, Inc. 1104 Third Ave.,
Lake Odessa, MI 48849**

Bid Due Date: **May 20, 2026**

Bid Due Time: **12:00 P.M. (local time)**

Bid Opening Date: **May 20, 2026**

Bid Opening Time: **2:00 P.M. (local time)**

Bid Opening Site: **Bingham Township, 2057 North Lansing St., St. Johns, MI 48879**

The Bid Requirements and Contract Documents may be examined at the following locations:

Construction Association
43636 Woodward Ave.
Bloomfield Hills, MI 49801

Builders Exchange
1240 E. Saginaw St.
Lansing, MI 48909

Builders Exchange
2007 Eastcastle Dr. SE
Grand Rapids, MI 49508

At the OFFICE of the ENGINEER and at the OFFICE of Joe Cooper, Water/Sewer Maintenance Supervisor.

Complete digital project bidding documents will be available at www.questcdn.com. Download the digital plan documents for a non-refundable fee of \$100 by inputting Quest Project No. 10177654 on the website's Project Search page. Please contact QuestCDN.com at (952) 233-1632 or info@questcdn.com for assistance in free membership registration, downloading, and working with this digital project information.

For further requirements regarding bid submittal, qualifications, procedures, and contract award, refer to the Instructions to Bidders, and if applicable Supplemental Instructions to Bidders, that are included in the Bidding Requirements.

Note 1: The Engineer assumes no responsibility to supply Builders Exchanges and similar plan review rooms with all addenda issued. An attempt will be made to do so; however, only registered plan holders will be notified by email of expected or late term addendum with short preparation times.

Note 2: Prequalification of BIDDERS - Dixon Engineering will review qualifications of all Contractors and determine their status. Contractors will be prequalified for different sized tanks and towers based on experience, workmanship, successful Project completions with DIXON and Contractor's financial data. Prequalification protocol is in the Instructions to Bidders. Any Contractor who has any projects in dispute or unfinished because of Contract problems will be considered NOT prequalified. Disqualification will result in the return of any handling fee for Bidding Documents.

SCHEDULE and LIQUIDATED DAMAGES

The Contractor is to abide by the following schedule:

Commence work on or after September 14, 2026.

Substantial Completion by October 30, 2026, including cure and disinfection time.

The tank may be out-of-service for a maximum of 25 days.

Work hours are 7:00 AM to 7:00 PM Monday through Saturday, Sunday work will require approval.

Liquidated damages are applicable and begin after 25 days out-of-service or after Substantial Completion date whichever is the earlier date. Liquidated damages at \$1,250/calendar day is to apply after this date. Ready for Final Payment Date is to be thirty (30) days after date Substantial Completion Date based on out-of-service days or scheduled Substantial Completion, or as adjusted by Change Order, or actual Substantial Completion if earlier. Liquidated damages after Ready for Final Payment Date of \$250/day is to apply. Liquidated damages are cumulative if damages from Substantial Completion and Ready for Final Payment overlap. In addition, Special Damages, fines, or Set-Off may also apply per Bid/Agreement Form.

SCOPE of WORK

Tank Information:

The structure is a 400,000 gallon spheroid elevated water storage tank with a high-water level of 153 ft. The structure is located on Superior Dr. in St. Johns, Michigan.

The work includes:

Exterior: High-pressure water clean (5,000 to 10,000 psi) and spot power tool clean to an SSPC-SP11 standard. Apply a three (3) coat epoxy urethane system.

Dry Interior: Spot abrasive blast clean the spot coating failures throughout to an SSPC-SP6 commercial standard. Apply a spot two (2) coat epoxy system to the prepared surfaces. Note that most of the coating failures are in the access tube and on the top platform (areas to repair are not limited to these areas).

Foundation: Water clean and apply a two (2) coat epoxy system.

Repairs:

- 1) Install a gasket on the wet interior roof hatch.
- 2) Install handholds at the roof hatches and painter's (bird) hatch.
- 3) Replace the gasket on the roof vent and install additional nuts and bolts.
- 4) Install cathodic clips and pressure fitting.
- 5) Install painter's railing stand-offs.
- 6) Weld a rigging lug on the transition cone.
- 7) Replace antenna cable penetration boots.
- 8) Replace the aviation light.
- 9) Replace the dry interior light bulbs.

BINGHAM TOWNSHIP, MICHIGAN
400,000 GALLON SPHEROID
EXTERIOR OVERCOAT
DRY INTERIOR SPOT REPAINT
AND MISCELLANEOUS REPAIRS

BID DATE: MAY 20, 2026
BID TIME: 12:00 P.M.

CONTRACT NO. 22-16-60-01-26

Table of Contents

Notice to Bidders (1-2)
Project Summary (1-2)
Instructions to Bidders (1-13)
Supplementary Instructions to Bidders (1)
Bid/Agreement Form (1-9)
Iran Certification Form (1)
Schedule of Values (1-2)
General Conditions (1-71)
Supplemental Conditions (1-12)
Submittals (1-9)
Submittal Checklist (1)
Technical Specifications (1-47)

SECTION 00 00 30
NOTICE TO BIDDERS

Separate sealed Bids are solicited for the following project:

Project Name: **400,000 Gallon Spheroid
Exterior Overcoat
Dry Interior Spot Repaint
And Miscellaneous Repairs**

Note: This project name is to be understood to include the entire scope of project as defined and detailed by these specifications and Contract Documents.

Separate sealed bids will be received by the Owner and then publicly opened and read aloud at:

Bids Sent To: **Attn: Bingham Township, Dixon Engineering, Inc. 1104 Third Ave.,
Lake Odessa, MI 48849**

Bid Due Date: **May 20, 2026**

Bid Due Time: **12:00 P.M. (local time)**

Bid Opening Date: **May 20, 2026**

Bid Opening Time: **2:00 P.M. (local time)**

Bid Opening Site: **Bingham Township, 2057 North Lansing St., St. Johns, MI 48879**

The Bid Requirements and Contract Documents may be examined at the following locations:

Construction Association 43636 Woodward Ave. Bloomfield Hills, MI 49801	Builders Exchange 1240 E. Saginaw St. Lansing, MI 48909	Builders Exchange 2007 Eastcastle Dr. SE Grand Rapids, MI 49508
---	---	---

At the OFFICE of the ENGINEER and at the OFFICE of Joe Cooper, Water/Sewer Maintenance Supervisor.

Complete digital project bidding documents will be available at www.questcdn.com. Download the digital plan documents for a non-refundable fee of \$100 by inputting Quest Project No. 10177654 on the website's Project Search page. Please contact QuestCDN.com at (952) 233-1632 or info@questcdn.com for assistance in free membership registration, downloading, and working with this digital project information.

For further requirements regarding bid submittal, qualifications, procedures, and contract award, refer to the Instructions to Bidders, and if applicable Supplemental Instructions to Bidders, that are included in the Bidding Requirements.

Note 1: The Engineer assumes no responsibility to supply Builders Exchanges and similar plan review rooms with all addenda issued. An attempt will be made to do so; however, only registered plan holders will be notified by email of expected or late term addendum with short preparation times.

Note 2: Prequalification of BIDDERS - Dixon Engineering will review qualifications of all Contractors and determine their status. Contractors will be prequalified for different sized tanks and towers based on experience, workmanship, successful Project completions with DIXON and Contractor's financial data. Prequalification protocol is in the Instructions to Bidders. Any Contractor who has any projects in dispute or unfinished because of Contract problems will be considered NOT prequalified. Disqualification will result in the return of any handling fee for Bidding Documents.

SECTION 00 00 40
PROJECT SUMMARY

PART 1 – GENERAL

This Project Summary is an overview of the entire Project and is intended, but is not guaranteed, to place all project specifics in one location to aid Bidders.

1.01 SCHEDULE and LIQUIDATED DAMAGES

The Contractor is to abide by the following schedule:

Commence work on or after September 14, 2026.

Substantial Completion by October 30, 2026, including cure and disinfection time.

The tank may be out-of-service for a maximum of 25 days.

Work hours are 7:00 AM to 7:00 PM Monday through Saturday, Sunday work will require approval.

Liquidated damages are applicable and begin after 25 days out-of-service or after Substantial Completion date whichever is the earlier date. Liquidated damages at \$1,250/calendar day is to apply after this date. Ready for Final Payment Date is to be thirty (30) days after date Substantial Completion Date based on out-of-service days or scheduled Substantial Completion, or as adjusted by Change Order, or actual Substantial Completion if earlier. Liquidated damages after Ready for Final Payment Date of \$250/day is to apply. Liquidated damages are cumulative if damages from Substantial Completion and Ready for Final Payment overlap. In addition, Special Damages, fines, or Set-Off may also apply per Bid/Agreement Form.

1.02 SCOPE of WORK

Tank Information:

The structure is a 400,000 gallon spheroid elevated water storage tank with a high-water level of 153 ft. The structure is located on Superior Dr. in St. Johns, Michigan.

The work includes:

Exterior: High-pressure water clean (5,000 to 10,000 psi) and spot power tool clean to an SSPC-SP11 standard. Apply a three (3) coat epoxy urethane system.

Dry Interior: Spot abrasive blast clean the spot coating failures throughout to an SSPC-SP6 commercial standard. Apply a spot two (2) coat epoxy system to the prepared surfaces. Note that most of the coating failures are in the access tube and on the top platform (areas to repair are not limited to these areas).

Foundation: Water clean and apply a two (2) coat epoxy system.

Repairs:

- 1) Install a gasket on the wet interior roof hatch.
- 2) Install handholds at the roof hatches and painter's (bird) hatch.
- 3) Replace the gasket on the roof vent and install additional nuts and bolts.
- 4) Install cathodic clips and pressure fitting.
- 5) Install painter's railing stand-offs.
- 6) Weld a rigging lug on the transition cone.
- 7) Replace antenna cable penetration boots.
- 8) Replace the aviation light.
- 9) Replace the dry interior light bulbs.

TABLE OF CONTENTS
INSTRUCTIONS TO BIDDERS

ARTICLE 1 – Defined Terms.....	1
ARTICLE 2 – Bidding Documents.....	1
ARTICLE 3 – Qualifications/Prequalifications of Bidders	2
ARTICLE 4 – Pre-Bid Conference.....	3
ARTICLE 5 – Site and Other Areas; Existing Site Conditions; Examination of Site; Owner’s Safety Program; Other Work at the Site.....	3
ARTICLE 6 – Bidder’s Representations and Certifications.....	4
ARTICLE 7 – Interpretations and Addenda	5
ARTICLE 8 – Bid Security.....	5
ARTICLE 9 – Contract Times.....	6
ARTICLE 10 – Substitute and “Or Equal” Times.....	6
ARTICLE 11 – Subcontractors, Suppliers, and Others	6
ARTICLE 12 – Preparation of Bid.....	7
ARTICLE 13 – Basis of Bid.....	8
ARTICLE 14 – Submittal of Bid.....	9
ARTICLE 15 – Modification and Withdrawal of Bid.....	9
ARTICLE 16 – Opening of Bids	10
ARTICLE 17 – Bids to Remain Subject to Acceptance	10
ARTICLE 18 – Evaluation of Bids and Award of Contract.....	10
ARTICLE 19 – Bonds and Insurance	11
ARTICLE 20 – Signing of Agreement	11
ARTICLE 21 – Non-Discrimination	12
ARTICLE 22 – Non-Collusion.....	13
ARTICLE 23 – Alternate Bids or Restrictions on Bids.....	13
ARTICLE 24 – Contractor’s Responsibilities	13

SECTION 00 21 13
INSTRUCTIONS TO BIDDERS

ARTICLE 1 – DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- A. Issuing Office – The office from which the Bidding Documents are to be issued, and which registers plan holders.
 - B. Owner’s Office – The office where the bidding procedures are to be administered.

ARTICLE 2 – BIDDING DOCUMENTS

- 2.01 The Bidder is to obtain a complete set of Bidding Requirements and proposed Contract Documents (together, the Bidding Documents). See the Agreement for a list of the Contract Documents. It is the Bidder’s responsibility to determine that it is using a complete set of documents in the preparation of a Bid. Bidder assumes sole responsibility for errors or misinterpretations resulting from the use of incomplete documents, by Bidder itself or by its prospective Subcontractors and Suppliers.
- 2.02 Bidding Documents are made available for the sole purpose of obtaining Bids for completion of the Project and permission to download or distribution of the Bidding Documents does not confer a license or grant permission or authorization for any other use. Authorization to download documents, or other distribution, includes the right for plan holders to print documents solely for their use, and the use of their prospective Subcontractors and Suppliers, provided the plan holder pays all costs associated with printing or reproduction. Printed documents may not be re-sold under any circumstances.
- 2.03 Bidder may register as a plan holder and obtain complete sets of Bidding Documents, in the number and format stated in the Notice to Bidders, from the Issuing Office. Registered plan holders will receive Addenda issued by the Owner.
- 2.04 The Owner is not responsible for omissions in Bidding Documents or other documents obtained from plan rooms, or for a Bidder’s failure to obtain Addenda from a plan room.
- 2.05 Electronic Documents
- A. When the Notice to Bidders Requirements indicates that electronic (digital) copies of the Bidding Documents are available, such documents will be made available to the Bidders as Electronic Documents in the manner specified. (Sealed master copy of Bid documents held by Owner.)
 - 1. Bidding Documents will be provided in Adobe PDF (Portable Document Format) (.pdf) that is readable by Adobe Acrobat Reader Version 9.0 or later. It is the intent of DIXON and Owner that such Electronic Documents are to be exactly representative of the paper copies of the documents. However, because the Owner and DIXON cannot totally control the transmission and receipt of Electronic Documents nor the Contractor’s means of reproduction of such documents, the Owner and DIXON cannot and do not guarantee that Electronic Documents and

reproductions prepared from those versions are identical in every manner to the paper copies.

- B. Unless otherwise stated in the Bidding Documents, the Bidder may use and rely upon complete sets of Electronic Documents of the Bidding Documents, described in Paragraph 2.05A above. However, Bidder assumes all risks associated with differences arising from transmission/receipt of Electronic Documents versions of Bidding Documents and reproductions prepared from those versions and, further, assumes all risks, costs, and responsibility associated with use of the Electronic Documents versions to derive information that is not explicitly contained in printed paper versions of the documents, and for Bidder's reliance upon such derived information.
 - 1. In no case will the Contractor be entitled to additional compensation or time for completion due to any differences between the actual Contract Documents and any related document in native file format.

ARTICLE 3 – QUALIFICATIONS/PREQUALIFICATIONS OF BIDDERS

- 3.01 Coating projects require competent, financially solvent Contractors who complete projects on time. These projects deal with the health and safety of the public, have a short availability time, and include dangerous work; therefore, the Owner will only consider prequalified Contractors. Bidders who are not prequalified may be considered non-responsive and bids may be returned, unopened or opened. Bidders who are not prequalified may not be awarded the project if there is insufficient time (30 days) to complete a thorough review or may be awarded solely at the Owner's discretion.
 - A. Requirements for prequalification are:
 - 1. On tanks of 1,000,000 gallons or smaller, successful completion of at least ten projects of like or larger size in the last five years. On tanks larger than 1,000,000 gallons, five projects of like size that have been successfully completed in the last five years.
 - 2. The experience list is to be based on the type of project being Bid. If the project is for a reservoir, then the experience list is to contain the required number of projects for reservoirs only; if Project is for an elevated tank, then elevated only; wastewater, wastewater only; clarifier, clarifier only.
 - 3. All projects listed by a Bidder that have been completed by that bidder under the company name in which they will be bidding this project. If the Bidder has completed the project(s) under a different company name, then the name under which the project(s) was completed is to be noted.
 - 4. Bidders are to furnish proof that they are bondable for the size of the project they are bidding on and furnish proof of their bonding company's rating.
 - B. DIXON will review submitted data to determine if Bidder meets prequalification requirements. QP1 or QP2 certification by Association for Material Protection and Performance (AMPP) is an alternate method of prequalification, except for the experience list and financials. Any information found to be false, incorrect, or embellished (determination of embellishment will be solely in opinion of Engineer) will be sufficient reason for disqualification.
 - C. New Bidders can apply for prequalification; however, they must be able to prove that they are bondable, provide a certified financial statement (most recent fiscal quarter), provide a complete equipment list; and a list of manpower, including work experience and the contractor(s) for whom they have worked. From this information, an

evaluation and recommendation will be made by DIXON using economic ratios and comparisons regarding project size, equipment, manpower available, and foreman's experience. A determination will then be made by the Owner as to whether-or-not the Bidder is qualified to perform the Project.

- D. Any prequalified Contractor (by DIXON or AMPP) who has pending litigation against him for work not completed on a project or for failed work on a project may be subject to disqualification.
- E. In addition, the Owner may make further investigations into the Bidder's prequalification, including compliance with human resource programs, as well as OSHA and environmental histories. The Owner also may review elements of the prequalification and determine if experience is generic to and specific to the Project. Furnish the Owner information, data, or certifications requested.

3.02 Disqualification:

A Contractor may be ineligible for prequalification if the Contractor has ever been Disqualified by any State or Federal Agency, prequalification of that Contractor is revoked for Work in the Disqualifying State, or for Federal Work from Disqualifying Agency. In the case of a prior disqualification, upon the expiration of the prescribed disqualification period, the Contractor may apply for reinstatement of Prequalification by the Disqualifying State or with the Disqualifying Federal Agency. By submitting their bid, the Bidder certifies that they are not currently disqualified or rejected from submitting bids in the state or political subdivision of the state where the Project is located or with the Federal Agency for whom the Work is being bid.

3.03 If not Prequalified; to demonstrate Bidder's qualifications to perform the Work, and at least ten (10) days prior to Bid Opening, Bidder is to submit the following information:

- A. Written evidence establishing qualifications such as financial data, previous experience, and present commitments.
- B. A written statement that Bidder is authorized to do business in the state where the Project is located, or a written certification that Bidder will obtain such authority prior to the Effective Date of the Contract.
- C. Bidder's state license or other contractor license number, if applicable.
- D. Subcontractor and Supplier qualification information.
- E. A completed Qualification Form and supporting documentation.
- F. Other required information regarding qualifications.
- G. A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.
- H. No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.

ARTICLE 4 – PRE-BID CONFERENCE

SEE SUPPLEMENTAL INSTRUCTIONS to BIDDERS

ARTICLE 5 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

5.01 Site and Other Areas

- A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by the Contractor.

5.02 Existing Site Conditions

- A. Subsurface and Physical Conditions; Hazardous Environmental Conditions
 - 1. There are no reports or drawings that contain Technical Data.
 - 2. There are no reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
- B. Underground Facilities – The only known Underground Facilities may be piping pits unless noted in the Supplemental Conditions.
- C. No Site-related documents are available.

5.03 Site Visit and Testing by Bidders

- A. Bidder is required to visit the Project Site, to conduct a thorough visual examination of the Site and adjacent areas sufficient to complete the bidding documents and if awarded the Project, to successfully and properly complete the Project. During a Site visit the Bidder must not disturb any ongoing operations at the Project Site.
- B. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.
- C. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder general access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site. Bidder is responsible for establishing access needed to reach specific selected test sites.

5.04 Owner's Safety Program

- A. Site visits and work at the Site may be governed by an Owner safety program. If an Owner safety program exists, it will be noted in the Supplementary Conditions or included as an attachment in these Bid Documents.

5.05 Other Work at the Site

- A. Reference is made to the Supplementary Conditions for the identification of the general nature of other work of which the Owner is aware (if any) that is to be performed at the Site by the Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents.

ARTICLE 6 – BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 Express Representations and Certifications in Bid Form, Agreement

- A. The Bid/Agreement Form that each Bidder will submit contains express representations regarding the Bidder's examination of Project documentation, Site visit, and preparation of the Bid, and certifications regarding lack of collusion or fraud in connection with the Bid. Bidder should review these representations and

certifications and assure that Bidder can make the representations and certifications in good faith, before executing and submitting its Bid.

- B. If the Bidder is awarded the Contract, Bidder (as Contractor) will automatically reaffirm representations and certifications when it executes the Bid/Agreement.

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

- 7.01 The Owner on its own initiative may issue Addenda to clarify, correct, supplement, or change the Bidding Documents.
- 7.02 The Bidder shall submit all questions about the meaning or intent of the Bidding Documents to DIXON in writing. Contact information and submittal procedures for such questions are to be made to the Issuing Office.
- 7.03 Interpretations or clarifications considered necessary by DIXON and in DIXON’s sole judgement, in response to such questions will be issued by Addenda delivered to all registered plan holders. Questions received less than seven days prior to the date for the opening of Bids may not be answered.
 - A. Addenda may be electronically issued within five days of opening of Bids if Addenda is considered clarification only.
 - B. The only Addenda issued within three days of the bid will be a notice to reschedule the opening of Bids, or to cancel opening of Bids. Bids already in transit will be returned unopened or held unopened if requested by the Bidder until a new date for opening of Bids.
- 7.04 Only responses set forth in an Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect. Responses to questions are not part of the Contract Documents unless set forth in an Addendum that expressly modifies or supplements the Contract Documents.

ARTICLE 8 – BID SECURITY

- 8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of ten (10) percent of Bidder’s maximum Bid price (determined by adding the base bid and all alternates) and in the form of a Bid bond issued by a surety meeting the requirements of Article 6 of the General Conditions, or in the form of a Certified check made payable to Owner. A check is considered a stopgap measure only and is to be replaced by a Bid Bond as soon as practical. As an alternative to replacement Contractor must demonstrate that they can procure the required Construction Bonds.
- 8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract, furnished the required Contract security, and met the other Conditions Precedent of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract and furnish the required Contract security (Conditions Precedent) within 10 days after the Notice of Award, the Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited, in whole as a Liquidated Damage.

- 8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of 7 days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.
- 8.04 The Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within 7 days after the Bid opening.
- 8.05 Bid Bonds will not be returned, but allowed to expire sixty-one days after Bid opening, unless notified by Owner.
- 8.06 Bid security in the form of a certified check have in the past been overlooked when following Paragraphs 8.02 –8.04 permit return, without intent, because the Certified checks were kept in a different location than the Bonds. It is the Bidder’s responsibility to track the location and secure the return of their check.

ARTICLE 9 – CONTRACT TIMES

- 9.01 The number of days within which, or the dates by which, the Work is to be (a) substantially completed and (b) ready for final payment, and (c) Milestones (if any) are to be achieved, are set forth in the Bid/Agreement and in Project Summary.
- 9.02 Provisions for Liquidated Damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement and in Project Summary.

ARTICLE 10 – SUBSTITUTE AND “OR EQUAL” ITEMS

- 10.01 All prices that Bidder sets forth in its Bid will be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of “or-equal” or substitution requests are made at Bidder’s sole risk.
- 10.02 Parity of Bids - The Technical Specifications are intended to be primarily Performance based. There are instances where the Specifications appear to be Prescriptive.
- A. As an example, in some Specifications we require dehumidification of the interior projects to a specific humidity. That is Performance based but then DIXON specifies a minimum size dehumidification unit, say 7,500 cfm, which may appear to be Prescriptive. Specifying the minimum size dehumidification unit in this example is an attempt at BID PARITY. There is no guarantee that 7,500 cfm will maintain the required humidity level, only that all Bidders at least as a minimum include the cost of rental and operation of that size unit.
- B. It is the Contractors responsibility to supply equipment and materials as needed to complete the project as specified.

ARTICLE 11 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 11.01 A Bidder must be prepared to retain specific Subcontractors and Suppliers for the performance of the Work if required to do so by the Bidding Documents or in the Specifications. If a prospective Bidder objects to retaining any such Subcontractor or

Supplier and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.

- 11.02 The apparent Successful Bidder, and any other Bidder so requested, must submit to the Owner a list of the Subcontractors or Suppliers proposed and the item of Work they are proposed to do.
- 11.03 If requested by Owner, such list must be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor or Supplier. If Owner or DIXON, after due investigation, has reasonable objection to any proposed Subcontractor or Supplier, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder will submit a substitute.
- 11.04 If the apparent Successful Bidder declines to make any such substitution, the Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors and Suppliers. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder.

ARTICLE 12 – PREPARATION OF BID

- 12.01 The Bid/Agreement Form is included with the Bidding Documents. Additional copies are available from the Issuing Office.
 - A. DIXON has a combined Bid and Agreement Form. While preparing the Bid documents, use caution to remain in the Bid portion and not the Agreement.
 - B. All blanks on the Bid Form must be completed in ink and the Bid Form signed in ink. Erasures or alterations must be initialled in ink by the person signing the Bid Form. A Bid price must be indicated for each section, bid item, alternate, adjustment unit price item, and unit price item listed therein.
 - C. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words “No Bid” or “Not Applicable.”
- 12.02 If Bidder has obtained the Bidding Documents as Electronic Documents, then Bidder is to prepare its Bid on a paper copy of the Bid Form printed from the Electronic Documents version of the Bidding Documents. The printed copy of the Bid Form must be clearly legible, printed on 8½ inch by 11-inch paper and as closely identical in appearance to the Electronic Document version of the Bid Form as may be practical. The Owner reserves the right to accept Bid Forms which nominally vary in appearance from the original paper version of the Bid Form, providing that all required information and submittals are included with the Bid.
- 12.03 A Bid by a corporation must be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation must be shown.
- 12.04 A Bid by a partnership must be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership must be shown.

- 12.05 A Bid by a limited liability company must be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of where the firm was formed, and the official address of the firm must be shown.
- 12.06 A Bid by an individual must show the Bidder's name and official address.
- 12.07 A Bid by a joint venture will not be accepted.
- 12.08 All names must be printed legibly below the signatures.
- 12.09 The Bid must contain an acknowledgment of receipt of all Addenda, the numbers of which must be filled in on the Bid Form.
- 12.10 Postal and e-mail addresses and telephone number for communications regarding the Bid must be shown.
- 12.11 The Bid must contain evidence of Bidder's authority to do business in the state where the Project is located, or Bidder must certify in writing that it will obtain such authority within the time for acceptance of Bids and attach such certification to the Bid.
- 12.12 If Bidder is required to be licensed to submit a Bid or perform the Work in the state where the Project is located, the Bid must contain evidence of Bidder's licensure, or Bidder must certify in writing that it will obtain such licensure within the time for acceptance of Bids and attach such certification to the Bid. The Bidder's state contractor license number, if any, must also be shown on the Bid Form.

ARTICLE 13 – BASIS OF BID

- 13.01 Unit Price
 - A. Bidders must submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form. Where a quantity is not specified (i.e., exterior paint), consider the quantity as one, or a lump sum line item.
 - B. The "Bid Price" (sometimes referred to as the extended price) for each unit price Bid item will be the product of the "Estimated Quantity", which Owner or its representative has set forth in the Bid Form, for the item and the corresponding "Bid Unit Price" offered by the Bidder. The total of all unit price Bid items will be the sum of these "Bid Prices"; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with the General Conditions.
 - C. Owner is exempt from and will not be responsible to pay, or reimburse Contractor for, any state or local sales, use, or excise taxes. The Bid Price will include all other applicable federal, state, and local taxes of every kind and nature applicable to the Work as well as all taxes, contributions, and premiums for unemployment insurance, old age or retirement benefits, pensions, annuities, or other similar benefits. Bidders will not be entitled to any claim or right to additional compensation by reason of the payment of any such tax, contribution, or premium.

13.02 Discrepancy in Bid and Corrections

Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the math corrections. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. See Schedule of Values for further determinations.

ARTICLE 14 – SUBMITTAL OF BID

14.01 Bidder shall print the Bid/Agreement form (00 50 00) and the Schedule of Values (00 54 00), complete the Forms, and submit the unbound copy of the Bid Form with the Bid Security and the other documents required to be submitted under the terms of Article 4 of the Bid Form. The Bid Form is identified herein as Bid/Agreement Form but is only a Bid Form until signed by Owner as an Agreement.

14.02 A Bid must be received no later than the date and time prescribed and at the place indicated in the Advertisement or invitation to bid and must be enclosed in a plainly marked package with the Project title, and, if applicable, the designated portion of the Project for which the Bid is submitted, the name and address of Bidder, and must be accompanied by the required Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid must be enclosed in a separate package plainly marked on the outside with the notation “BID ENCLOSED.” A mailed Bid must be addressed to the location designated in the Advertisement. Failure to meet the requirements of this paragraph is sufficient reason to disqualify the bidder.

14.03 Bids received after the date and time prescribed for the opening of bids or not submitted at the correct location or in the designated manner, may not be accepted at the option of the Owner, and may or may not be opened at the discretion of the Owner. The Owner has the right to request documentation that the Bid submittal was in the delivery system prior to bid opening.

ARTICLE 15 – MODIFICATION AND WITHDRAWAL OF BID

15.01 An unopened Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Dependent upon the timing of receipt of such notice, the unopened Bid may be returned to the Bidder. If the Bid is opened, then the Bidder must comply with Paragraph 15.03 below. There is no guarantee that Notice is sufficient or timely if sent by text or email.

15.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 15.01 and submit a new Bid prior to the date and time for the opening of Bids.

15.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, the Bidder may withdraw its Bid, and the Bid security will be returned. If the Project is rebid, the Bidder who withdraws their bid may be disqualified from submitting a new Bid, at the sole discretion of the Owner.

ARTICLE 16 – OPENING OF BIDS

16.01 Bids will be opened at the time and place indicated in the Notice to Bidders and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders upon written request to DIXON.

ARTICLE 17 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

17.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but the Owner may, in its sole discretion, release any Bid and allow the Bid security to expire prior to the end of this period.

ARTICLE 18 – EVALUATION OF BIDS AND AWARD OF CONTRACT

18.01 The Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. The Owner also reserves the right to waive all minor Bid informalities not involving price, time, or changes in the Work.

18.02 The Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsive.

18.03 If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, whether in the Bid itself or in a separate communication to Owner or DIXON, then Owner will reject the Bid as nonresponsive.

18.04 If the Owner awards the contract for the Work, such award will be to the responsive Bidder submitting the lowest responsive Bid as determined in the Owner's sole and absolute discretion.

18.05 Evaluation of Bids

A. In evaluating Bids, Owner will consider whether the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

B. In the comparison of Bids, alternates will be applied in the same order of priority as listed in the Bid Form. After determination of the Successful Bidder based on this comparative process and on the responsiveness, responsibility, and other factors set forth in these Instructions, the award may be made to said Successful Bidder on its base Bid and any combination of its additive alternate Bids for which Owner determines funds will be available at the time of award.

C. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.

18.06 In evaluating whether a Bidder is responsible, the Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and

Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.

- 18.07 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders including prequalified Bidders, and any proposed Subcontractors or Suppliers. Prequalification by DIXON does not guarantee that Owner after investigation will determine the same Contractor to be qualified. The Owner's sole determination will govern.

ARTICLE 19 – BONDS AND INSURANCE

- 19.01 Article 6.01 of the General Conditions, as may be modified by the Supplementary Conditions Article SC 6.01, sets forth Owner's requirements as to Performance, Payment, and Maintenance bonds, and other required bonds (if any). Article 6.02 and subsequent Articles concerning insurance and Article 7, the Indemnification requirements have been moved to Supplemental Conditions Paragraph 6.02 and subsequent respective insurance related Article numbers. When the Successful Bidder delivers the executed Notice of Award to the Owner, the signed Award is to be accompanied by required bonds and insurance documentation.
- 19.02 DIXON has relocated the entire insurance and indemnification requirements to the Supplemental Conditions, in one location. The Contractor, to save Award time, is recommended to forward the entire insurance section to their insurance agents each time.

ARTICLE 20 – SIGNING OF AGREEMENT

- 20.01 The Articles of these Instructions as prepared by EJCDC consider a formal "Closing" or contract signing meeting. All references to a Closing, contract signing event, are intended to be deleted. Notice of Award will be issued by the Owner; all requirements of Conditions Precedent (bonds and insurance) will be completed by contractor within 10 days after issuance of Notice of Award and forwarded to DIXON who will then compile Contract Documents. Three sets of documents will be sent to Owner for signature and distribution. One executed copy will be retained, one executed copy will be sent to the Contractor and one to DIXON. There will be no meeting for signing unless required by the Supplemental Instructions.
- 20.02 This Bidding Document contains a combined Bid/Agreement form. The Bidder signs Article 1 as Bidder. The Owner will issue a Notice of Award and request Bonds and insurance and possibly other items (Conditions Precedent). When the Conditions Precedent are met, the Owner signs Article 2 of the Bid/Agreement making the document an Agreement Document.
- 20.03 The executed copy will be accompanied by three copies of the signed Notice to Proceed. Within five days of the date on the Notice to Proceed, the Bidder will sign the Notice to Proceed and return a copy to DIXON. If DIXON does not receive the accepted Notice to Proceed in five days, then the Notice to Proceed will be considered accepted by default. The Notice to Proceed will be dated on or around the contract date. The actual contracted start date, completion date, etc. will be the same as the Effective Agreement Date, or as noted in the Project Summary.

- 20.04 Notice of Award; Effective Date of Award (Effective Date of Agreement): If the Contract is awarded by Owner, such award is to be effective when the Notice of Award has been delivered to the successful Bidder (“Effective Date of Award”). The Effective Date of Agreement is the date the BID/Agreement is signed by the Owner.
- 20.05 The acknowledgement of the Notice of Award, the submittal of additional requested materials, the Contractor’s Certifications, and acceptable certificate(s) of insurance and Performance, Payment, and Maintenance Bonds are to be considered Conditions Precedent to the Contract.
- 20.06 Failure to timely execute or submit any of the Conditions Precedent is to be grounds for the imposition of Liquidated Damages. The Liquidated Damages will be equal to the Bid Security. If the submitted documents or any of them fail to comply with these Instructions or Supplemental Instructions to Bidders, Owner may, in its sole discretion, annul the award or allow the successful Bidder an opportunity to correct the deficiencies.
- 20.07 In no event will the Owner execute the Agreement until any and all such deficiencies have been cured, or the Owner has received adequate assurances, as determined by Owner, of complete and prompt performance.
- 20.08 Subsequent Awards: Upon an annulment of an award, the Owner may accept, and award a Contract based on, any other Bidder’s Proposal as Owner, in its sole judgment, deems to be the best or may invite new Proposals or may abandon the bidding process or the Work.

ARTICLE 21 – NON-DISCRIMINATION

- 21.01 Bidders are to, if requested, submit a compliance report concerning their employment practices and policies in order to maintain their eligibility to receive the award of the Contract.
- 21.02 Successful Bidders are to, if requested, submit a list of all subcontractors who will perform work on the Project and written signed statements from authorized agents of the labor pools with which they will or may deal for employees on the work, together with supporting information to the effect that said labor pools’ practices and policies are in conformity with Equal Employment Opportunity, including latest federal and local policies. Labor pools will affirmatively cooperate in or offer no hindrance to the recruitment, employment, and equal treatment of employees seeking employment and performing work under the Contract, or a certification as to what efforts have been made to secure such statements when such agents or labor pools have failed or refused to furnish same prior to award of the Project.
- 21.03 Successful Bidders are to comply in all respects with the Labor Standards Contract Provisions regarding non-discrimination on this Project.
- 21.04 Bidder agrees that in the hiring of employees for the performance of work under this Agreement or any sub-agreement, neither the Contractor, nor any Subcontractor, nor any person acting on behalf of either, is to by reason of race, creed, or color, discriminate against any citizen in the employment of labor or workers who are qualified and available

to perform the work to which the employment relates; nor that the Contractor, or any Subcontractor, or any person acting on behalf of either, in any manner discriminate against or intimidate any employee hired for the performance of work under this Agreement on account of race, creed, or color.

ARTICLE 22 – NON-COLLUSION

22.01 Collusion between Bidders will be cause for rejection of affected bids and may be cause for rejection of all bids. Multiple bids submitted by one bidder under the same or different names, whether as individual, firm, partnership, corporation, profit or non-profit, affiliate, or association will be cause for rejection of bids. A subcontractor is not a Bidder, and they may submit prices to multiple Bidders.

ARTICLE 23 – ALTERNATE BIDS OR RESTRICTIONS ON BIDS

23.01 Items that affect the scope of the Project and are not addressed by addenda will not be accepted as an alternate bid.

23.02 Alternate bids will automatically be considered non-responsive.

- A. Such bids may be examined prior to the Project award and may result in bid cancellation, followed by new bids, including the alternate.
- B. Discounts to the Owner for payment within a stipulated time will not be considered conditional or qualified bids. Discounts will be accepted but not considered in the bid price evaluation for the bid award.
- C. Interest clauses will be considered a qualified bid.

ARTICLE 24 – CONTRACTOR’S RESPONSIBILITIES

24.01 Sales Tax

- A. The Owner is exempt from payment of sales and compensating use taxes in the state and of cities and counties thereof on all materials to be incorporated into the Work.
 - 1. Owner will furnish the required certificates of tax exemption to Contractor for use in the purchase of supplies and materials to be incorporated into the Work.
 - 2. Owner’s exemption does not apply to construction tools, machinery, equipment, or other property purchased by or leased by Contractor, or to supplies or materials not incorporated into the Work.

SECTION 00 22 13
SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

ARTICLE 4 – PRE-BID CONFERENCE

- 4.01 A pre-bid conference will not be conducted for this Project.
- A. All access to the site must be coordinated through the Owner. Bidder must conduct the site visit during normal working hours.
 - B. Information presented during the site visit does not alter the Contract Documents. Owner will issue Addenda to make any changes to the Contract Documents that result from discussions at the visit. Information presented, and statements made during the visit will not be binding or legally effective unless incorporated in an Addendum.

ARTICLE 21 – NON-DISCRIMINATION

- 21.05 Non-discrimination in Employment is required.

SECTION 00 50 00

BID/AGREEMENT FORM FOR CONSTRUCTION CONTRACT

The terms used in this Bid/Agreement Form with initial capital letters have the meanings stated in the Instructions to Bidders, Supplemental Instructions to Bidders (if applicable), the General Conditions, and the Supplementary Conditions.

ARTICLE 1 – BID/AGREEMENT SIGNATURES AND BID

1.01 By signing this Bid Proposal, Contractor acknowledges that this Bid Form becomes an Agreement upon acceptance and signature of Owner below in Article 2.

1.02 Receipt of Addenda – Bidder hereby acknowledges receipt of the following Addenda:
Attach sheet if more rows are needed.

Addendum Number	Addendum Date	SIGNATURE -Addendum Received

1.03 Base Bid – Bidder will complete the Work in accordance with the Contract Documents, including all labor and material, for the following Total price which is the Sum of prices or the Lump Sum Price from the Schedule of Values. Section 00 54 00:

_____ \$

Unit Prices have been computed in accordance with the General Conditions and listed in Schedule of Values.

Bidder acknowledges that estimated quantities are not guaranteed and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

Bidder acknowledges that Lump Sum bids are actually itemized bids based on the Schedule of Values, and further agrees and acknowledges the alternatives and conditions set forth in the Schedule of Values.

1.04 This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

1.05 BIDDER hereby submits this Bid to:

Owner: Bingham Township

Owner Address: 2057 North Lansing Street, St. Johns, MI 48849

Bidder: _____
(typed or printed name of organization)

By: _____
(individual's signature)

Name: _____

Title: _____

Date: _____

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest: _____
(individual's signature)

Name: _____

Title: _____

Date: _____

Address for giving notices:

Bidder's Contact and Agent for Service or Process:

Name: _____

Title: _____

Phone: _____

Email: _____

(Email will be used for Electronic Document Transfer Protocol.)

All Business Entities

Date of Qualification to do business in _____ [State Where Project is Located] is
____ \ ____ \ ____.

ARTICLE 2 – AGREEMENT SIGNATURES

2.01 Owner's signature as Party to Agreement, Changes Bidder's Status to Second Party to Agreement, Contractor.

AGREEMENT: IN WITNESS WHEREOF, Contractor has signed this Agreement as Bidder. Owner has signed Agreement in duplicate and one counterpart each has been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or identified by Owner and Contractor or on their behalf. (a third copy or original has been delivered to DIXON)

This Agreement will be effective on, _____, _____ (which is the Effective Date of the Agreement)

OWNER: _____

By: _____

Title: _____

ARTICLE 3 – BIDDER TO CONTRACTOR

3.01 The above signed Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner by Owner signing above and transforming this Document into a combined Bid/Agreement Form and Bidder:

A. Agrees to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

1. Bidding Documents include:

- a. Bid/Agreement Form
- b. Notice to Bidders
- c. Instructions to Bidders
- d. Supplemental Instructions to Bidders
- e. Schedule of Values
- f. All Contract Document Sections as defined in Article 13.01A.1

B. Agrees to accept all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

C. Accepts all the terms and conditions of the combined Bid/Agreement form. (The Bid/Agreement form is an attempt to shorten the time period between submittal and award.) Bidder's signature is an acceptance of all terms of the Bid and Agreement section, and this Bid, if successful, will become an Agreement after it has been signed by an authorized representative of the Owner.

ARTICLE 4 – ATTACHMENTS TO THIS BID

4.01 The following documents are submitted with and made a condition of this bid:

A. Required bid security, including evidence of authority to do business in the state of the project; or a written covenant to obtain such authority within the time for acceptance of bids.

B. Contractor's license number as evidence of bidder's state contractor's license or a covenant by bidder to obtain said license within the time for acceptance of bids.

C. Bidder qualification statement with supporting data (submitted 10 days prior to bid opening), unless contractor is prequalified.

ARTICLE 5 – TIME OF COMPLETION

5.01 Bidder agrees that the Work will be substantially complete and will be completed and Ready for Final Payment in accordance with the General Conditions on or before the dates or within the number of calendar days indicated in this Bid Agreement, or in the Project Summary.

5.02 Bidder accepts the provisions of the Agreement as to Liquidated Damages, Special Damages, and Set-offs in the event of failure to complete the Work within the Contract

Times, or within Milestone dates or in compliance with the specifications and General Conditions.

ARTICLE 6 – BIDDER’S REPRESENTATIONS AND CERTIFICATIONS

6.01 Bidder’s Representations

A. In submitting this Bid, Bidder represents the following:

1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings, if any.
5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder’s (Contractor’s) safety precautions and programs.
7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work in the State required by the Bidding Documents (Project).

12. Bidder has been prequalified for projects of this design, size, and complexity, or submitted Qualification forms ten (10) days prior to Bid Opening.

6.02 Bidder's Certifications

A. The Bidder certifies the following:

1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

6.03 Affirmations of Bidder Transferred to Contractor

A. All references to Bidder in Paragraph 6.01 and 6.02 in these affirmations, representations, and certifications will change to the term Contractor if this Bid becomes an Agreement.

ARTICLE 7 – TIME REQUIRED TO EXECUTE AGREEMENT

7.01 Time Framework for Award Execution – The Owner will open bids on the bid date. After opening, no bid may be withdrawn or altered for sixty days, unless specifically stated elsewhere. The Owner may negotiate with the low Bidder and mutually both parties may alter bid (i.e., partial award of project).

The Bidder will be notified of award within sixty days of bid date, unless stated elsewhere or mutually extended. Notice of Award form will be sent by fax, mail, or email. Within ten business days of Notice of Award, supply the Engineer with three original sets of separate Payment, Performance, and Maintenance Bonds. Supply three original sets of Certificates of Insurance meeting requirements of Supplementary Conditions 6.02 – 6.07. Insurance companies and insurance forms must be standard to the industry and acceptable to the Owner. Failure to submit bonds and/or insurance within the time frame will be considered a default, a failure to perform as required by the Bid Bond. The Owner, at his option, may waive default, delay default, or proceed with

capture of the Bid Bond as Liquidated Damages which will become the Owner's property.

Bonds and insurances are to be submitted to the Engineer for review. The Owner will within twenty days of receipt of approved bonds and insurances from the Engineer execute the Agreement and send a signed copy to the Contractor.

The executed copy will be accompanied by three copies of the Notice to Proceed. Within five days of the date on the Notice to Proceed, the Bidder is to sign the Notice to Proceed and return a copy to the Engineer. If the Engineer does not receive the accepted Notice to Proceed in five days, then the Notice to Proceed will be considered accepted by default.

The Notice to Proceed will be dated on or around the Effective Date of Agreement.

ARTICLE 8 – BID ACCEPTANCE

8.01 Bid Acceptance:

- A. The above Bid is accepted by the Owner and is to become a Contract Agreement binding on all parties after signing by an authorized representative of the Owner in Article 2 of this Bid/Agreement Form.
- B. All references in the second portion of this form are Agreement terminology. Bidder is now referred to as Contractor. Where appropriate, the term Bidder in the Bid/Agreement form is changed to Contractor.

ARTICLE 9 – ENGINEER

9.01 The Owner has retained Dixon Engineering, Inc. (DIXON) to act as Owner's representative, assume all duties and responsibilities of Engineer, and RPR, and have the rights, limitations of responsibility, and authority assigned to Engineer in the Contract.

ARTICLE 10 – CONTRACT TIMES

10.01 Time is of the essence:

- A. All time limits for Milestones, if any, Substantial Completion, and completion and Readiness for Final Payment as stated in the Project Summary and these Contract Documents are of the essence of the Contract.
- B. The Work is to be Substantially Completed and completed and ready for Final Payment on or before the dates or time period as required by the Project Summary.

10.02 Liquidated Damages

- A. Contractor and Owner recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not completed within the times specified in the Project Summary 00 00 40, plus any extensions thereof allowed in accordance with the General Conditions and approved Change Order. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that Liquidated Damages are for delay (but not as a penalty) and agree to the Liquidated Damages listed in the Project Summary 00 00 40.
- B. If Milestones are identified in the Project Summary 00 00 40 as essential to the proper sequencing/or coordination of work with others, or to the successful compliance with

the project Substantial Completion date, Liquidated Damages are identified in the Project Summary.

- C. Liquidated damages for failing to timely attain Milestones, Substantial Completion, and final completion are additive, and will be imposed concurrently.

10.03 Special Damages

- A. Contractor is to reimburse Owner (1) for any fines or penalties imposed on Owner as a direct result of the Contractor's failure to attain Substantial Completion according to the Contract Times, and (2) for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in the Project Summary for Substantial Completion (as duly adjusted pursuant to the Contract), until the Work is substantially complete.
- B. After Contractor achieves Substantial Completion, if Contractor is to neglect, refuse, or fail to complete the remaining Work within the Contract Times, Contractor is to reimburse Owner for the actual costs reasonably incurred by Owner for engineering, construction observation, and administrative services needed after the time specified in Paragraph 4.02 for Work to be completed and ready for final payment (as duly adjusted pursuant to the Contract), and if necessary to hire other Contractors to complete portions of the Work, until the Work is completed and ready for final payment.
- C. The Special Damages imposed in this paragraph are supplemental, in addition to, any Liquidated Damages for delayed completion established in this Agreement.

ARTICLE 11 – CONTRACT PRICE

- 11.01 Owner is to pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Schedule of Values and this Bid/Agreement.
- 11.02 As provided in the General Conditions Section 00 72 00, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.

ARTICLE 12 – PAYMENT PROCEDURES

- 12.01 Submittal and Processing of Payments
 - A. Contractor is to submit Applications for Payment in accordance with the General Conditions. Applications for Payment will be processed by DIXON as provided in the General Conditions.
- 12.02 Progress Payments; Retainage
 - A. Owner is to make progress payments based on Contractor's Applications for Payment once each month during performance of the Work as provided in Paragraphs 12.02.A.1 through 12.02.A.5 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established and by protocol as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided in the General Conditions. The following is a protocol used for partial completion of an individually listed lump sum item.

1. The exterior, surface preparation by high pressure cleaning and power tool cleaning will be considered equal to 40 percent of the Line Item work and cost and each full coat of paint 15 percent. The remainder will be for lettering, demobilization and cleanup.
 2. Dry interior painting and repairs will not be broken down. 100 percent completion is required before they will be considered for payment.
 3. Mobilization is included in the surface preparation allotment for the items above.
- B. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated above but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to Liquidated Damages, in accordance with the Contract. Retainage to be held as follows: 10% of the dollar value through 50% completion; 5% of the dollar value through 100% completion.
- C. Upon Substantial Completion, Owner is to pay an amount sufficient to increase total payments to Contractor to 90 percent of the Work completed, less such amounts set off by Owner pursuant to the General Conditions, and less 150 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

12.03 Final Payment, Consent of Surety

- A. Upon final completion and acceptance of the Work in accordance with the General Conditions, Owner is to pay the remainder of the Contract Price as recommended by Engineer.
- B. Owner reserves the right to not make final payment or return or release retainage at Substantial Completion or any other time, unless Contractor submits written consent of the surety to such payment, return, or release. Determination to require Consent will be based on the Owner's sole decision as to the level of confidence in Contractor's Work practices, their payment of employees, certified payrolls (when required), or the potential of future claims against the Owner or Contractor.
- C. Nothing in this Article 12 imposes a requirement on the Contractor to submit once monthly invoices or statements. This article establishes the protocol to follow if requesting Partial Payments. The Contractor, at their option may submit one final pay request per Article 15 of the General Conditions Section 00 72 00.

ARTICLE 13 - CONTRACT DOCUMENTS

13.01 Contents

- A. The Contract Documents consist of the following:
1. Contractor's Completed Bid/Agreement Form Section 00 50 00 including all certifications and required forms, Schedule of Values Section 00 54 00 and:
 - a) Project Summary.
 - b) Addenda as listed on page 1 of this Contractor's Completed Bid Agreement Form. Prebid meeting (if any) is not part of the Contract Documents. Any changes necessitated because of the Prebid Meeting would result in the issuance of an Addendum.
 - c) General Conditions and Supplementary Conditions.
 - d) Technical Specifications and Drawings (if any) as listed in the table of contents for Technical Specifications.
 2. Documents submitted by Contractor as a Condition precedent to award:
 - a) Performance bond.

- b) Payment bond.
- c) Maintenance (Warranty) bond.
- d) Certificate of Insurance.
- 3. Exhibits to this Agreement which were part of the Bid Documents:
Iran linked Business Certification.
- 4. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
 - a) Notice to Proceed.
 - b) Preconstruction Meeting Minutes
 - c) Work Change Directive(s).
 - d) Change Order(s).
 - e) Field Order(s).
- B. There are no Contract Documents other than those listed above in this Article 13.
- C. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

ARTICLE 14 – MISCELLANEOUS

14.01 Assignment of Contract

- A. No assignment by a party hereto of any payment rights under or interests in the Contract will be binding on the Owner hereto without the written consent of the Owner; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

14.02 Successors

- A. Owner and Contractor each binds itself, its partners, successors, and legal representatives to the other party hereto, its partners, successors, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

14.03 Severability

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation is to be deemed stricken, and all remaining provisions is to continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents are to be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

IRAN LINKED BUSINESS CERTIFICATION

The undersigned Bidder does hereby certify, pursuant to Michigan Public Act 517 of 2012, that:

Bidder is not a person engaging in investment activities in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers, or products used to construct or maintain pipelines used to transport oil or liquefied natural gas, for the energy sector of Iran, or

Bidder is not a financial institution that extends credit to another person if that person will use the credit to engage in investment activities in the energy sector of Iran.

Date: _____

By: _____

_____ Its:

SECTION 00 54 00
SCHEDULE OF VALUES

PART 1

1.01 LINE ITEMS

A. Bidder agrees to perform all work as described in the Contract Documents, including all labor and material for the following items – Section 05 00 00:

- 1. CATHODIC CLIPS AND PRESSURE FITTING
_____ \$

- 2. PAINTER’S RAILING STAND-OFFS - 5
_____ \$

- 3. ANTENNA PENETRATION BOOTS
_____ \$

B. Bidder agrees to perform all work as described in the Contract Documents, including all labor and material for the following items – Section 09 00 00:

- 4. EXTERIOR OVERCOAT
_____ \$

- 5. DRY INTERIOR PARTIAL REPAINT
_____ \$

C. Bidder agrees to perform all work as described in the Contract Documents, including all labor and material for the following items – Section 16 00 00:

- 6. AVIATION LIGHT
_____ \$

PROJECT TOTAL INCLUDING #1 THROUGH #6:
_____ \$

D. THE ESTIMATED COST ALREADY INCLUDED IN EXTERIOR AND DRY INTERIOR PAINTING TO PROTECT AND WORK AROUND ANTENNAS AND CABLES. OWNER RESERVES THE RIGHT TO DELETE THIS AMOUNT IF THE ANTENNAS AND CABLES ARE REMOVED.
_____ \$

1.02 TOTALS

- A. Project Total Base Bid is to match total Base Bid price supplied in Bid/Agreement form.

1.03 MISTAKES

- A. Project Total of Schedule of Values paragraph should equal sum of individual items. If the addition of individual items does not match the total, then each individual item will be added again, and the math corrected.
- B. A mistake in addition for schedule items cannot be used to increase lump sum bid. If Bid correction results in an increased price, then Owner may accept, may request Bidder to reduce all individual item prices proportionally, or may reject Bid.
- C. Mistakes discovered after the Award, even after completion will adjust Price downward only. It is the Bidders responsibility to recheck prices prior to Award.
- D. A mistake in the Schedule of Values may be used as evidence of error in any request to withdraw bids because of error. Approval of request to withdraw bids is covered in the Information for Bidders. This section is not intended to conflict with any portion of the bid package. Approval of bid withdrawal will be based solely on the Owner's interpretation of the severity of the mistake.

1.04 CHANGES IN SCHEDULE OF VALUES BY OWNER

- A. The Owner reserves the right to delete any line item of Part 1.01 adjusted line item; except for coating work, at their sole discretion for any reason. All contract general costs (mobilization, demobilization, bonds, etc.) should be evenly distributed over the coating items which are not subject to deletion.
- B. The Bidder is advised not to overload any specific deductible line item. It could result in loss of profit if the overload item is deleted.
- C. This deletion of items or not including alternates is an expressly stated reservation (a contractually agreed automatic negotiation). Any deletion of specific line items will be completed before selection of the lowest responsible/responsive Bidder. The change will be reflected in the Notice of Award (NOA).

1.05 NON-DELETABLE WORK BEFORE AND AFTER NOTICE OF AWARD

- A. Bidders are advised that all line items except for base bid coating work may be deleted from the project prior to award. Any deletion of line items or increase or decrease in unit cost items deemed necessary after the Notice of Award, will be completed through the Change Order procedure. Prices used in the Schedule of Values will be used in the Change Order adjustment.

SECTION 00 72 00
STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT
2018 These documents have been modified by DIXON and should no
longer be considered an EJCDC document

Modified and supplemented by

Prepared by



Issued and Published Jointly by



This document will be known as General Conditions, 2018 edition.

The original document and formatting is the 2013 version of the EJCDC C-700 version of the General Conditions. DIXON modified these documents because we are a specialized firm in coating and structure repairs. The original documents are for multiple trade projects and the 2018 is even endorsed by NUCA, a Utilities and excavating association. Some terms and paragraphs that are not applicable to our industry were deleted. All Insurance Requirements were moved from Article 6 to SC-Article 6. Other parties are advised against using these General Conditions as they may not be sufficient for your project.

DIXON then added paragraphs in blue to increase the specificity to our projects. All additions were Supplemental DIXON Conditions moved to the General Conditions. If they were written by DIXON they will remain blue. Blue paragraphs are equivalent and will be enforced the same as black paragraphs.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

TABLE OF CONTENTS

	Page
ARTICLE 1 – Definitions and Terminology	1
1.01 Defined Terms.....	1
1.02 Terminology.....	7
1.03 Intent of Certain Terms of Adjectives.....	7
1.04 Indemnification Terms	8
ARTICLE 2 – Contractual Preconditions and Matters Preliminary to Preconstruction Meeting, and Preconstruction Meeting	9
2.01 Step 1 - Delivery of Bonds and Evidence of Insurance - Preconditions of Contract	9
2.02 Step 2 - Copies of Documents and Distribution.....	9
2.03 Step 3 – After Completion of Contract Documents – Contractor’s Requirements Prior	9
to Scheduling Preconstruction Meeting and Before Starting Construction	
2.04 Submittals – Scheduling Preconstruction Conference	10
2.05 Preconstruction Conference; Designation of Authorized Representatives	11
2.06 Initial Acceptance of Schedules – Moved to Section 00 83 00	
2.07 Electronic Transmittals – Moved to SGC 2.06	
ARTICLE 3 – Contract Documents: Intent, Requirements, Reuse	11
3.01 Intent	11
3.02 Reference Standards.....	12
3.03 Reporting and Resolving Discrepancies	12
3.04 Requirements of the Contract Documents	13
3.05 Reuse of Documents	14
ARTICLE 4 – Commencement and Progress of the Work	14
4.01 Commencement of Contract Times	14
4.02 Starting the Work	15
4.03 Reference Points N/A.....	15
4.04 Progress Schedule	15
4.05 Delays in Contractor’s Progress.....	16
ARTICLE 5 – Site; Subsurface and Physical Conditions; Hazardous Environmental Conditions	18
5.01 Availability of Lands.....	18
5.02 Use of Site and Other Areas.....	18
5.03 Subsurface and Physical Conditions	20
5.04 Differing Subsurface or Physical Conditions.....	20

5.05	Underground Facilities.....	22
5.06	Hazardous Environmental Conditions at Site	22
ARTICLE 6 – Bonds and Insurance		24
6.01	Performance, Payment, and Maintenance Bonds (Not Bid Bonds)	24
6.02	Insurance – General Provisions.....	26
6.03	Contractor’s Insurance	26
6.04	Builder’s Risk and other Property Insurance	26
6.05	Property Losses; Subrogation	27
6.06	Receipt and Application of Property Insurance Proceeds	27
ARTICLE 7 – Contractor’s Responsibilities.....		27
7.01	Contractor’s Means and Methods of Construction	27
7.02	Supervision and Superintendence	27
7.03	Labor; Working Hours	28
7.04	Services, Materials, and Equipment.....	28
7.05	“Or Equals” – Moved to Section 00 83 00.....	28
7.06	Substitutes – Moved to Section 00 83 00.....	28
7.07	Concerning Subcontractors, Suppliers, and Others.....	29
7.08	Patent Fees and Royalties.....	30
7.09	Permits – Moved to Section 00 83 00.....	30
7.10	Taxes	30
7.11	Laws and Regulations	31
7.12	Record Documents	32
7.13	Safety and Protection	32
7.14	Hazard Communication Programs	34
7.15	Emergencies	34
7.16	Submittals – Moved to Section 00 83 00	34
7.17	Contractor’s General Warranty and Guarantee.....	34
7.18	Indemnification	
3635		
7.19	Delegation of Professional Design Services – Moved to Section 00 83 00.....	35
ARTICLE 8 – Other Work at the Site		35
8.01	Other Work	35
8.02	Coordination.....	36
8.03	Legal Relationships.....	36
ARTICLE 9 – Owner’s Responsibilities		38
9.01	Communications to Contractor	38
9.02	Replacement of Resident Project Representative.....	38

9.03	Furnish Data.....	38
9.04	Pay When Due	38
9.05	Lands and Easements; Reports, Tests, and Drawings	38
9.06	Change Orders.....	38
9.07	Inspections, Tests, and Approvals.....	38
9.08	Limitations on Owner’s Responsibilities	38
9.09	Undisclosed Hazardous Environmental Condition	38
9.10	Safety Programs	39
ARTICLE 10 – Engineer’s Status During Construction.....		39
10.01	Owner’s Representative	39
10.02	Visits to Site	39
10.03	Resident Project Representative.....	39
10.04	Engineer’s Authority	41
10.05	Determinations for Unit Price Work	41
10.06	Decisions on Requirements of Contract Documents and Acceptability of Work	41
10.07	Limitations on Engineer’s Authority and Responsibilities	42
10.08	Compliance with Safety Program	42
ARTICLE 11 – Changes to the Contract.....		42
11.01	Amending and Supplementing Contract Documents	42
11.02	Change Orders.....	43
11.03	Work Change Directives	43
11.04	Field Orders.....	44
11.05	Owner-Authorized Changes in the Work.....	44
11.06	Unauthorized Changes in the Work	45
11.07	Change of Contract Price	45
11.08	Change of Contract Times	46
11.09	Change Proposal	46
11.10	No Notification of Obligation to Surety by Owner.....	48
ARTICLE 12 – Claims		48
12.01	Claims	48
ARTICLE 13 – Cost of the Work; Allowances; Unit Price Work.....		59
13.01	Cost of the Work	49
13.02	Allowances.....	53
13.03	Unit Price Work	53
ARTICLE 14 – Test, Observations, and Inspections, Removal or Acceptance of Defective		54
Work, Stop Work		

14.01	Access to Work	54
14.02	Test, Observations, Inspections, and Approvals	54
14.03	Defective Work	56
14.04	Acceptance of Defective Work	57
14.05	Uncovering Work.....	57
14.06	Owner, Engineer/RPR May Stop the Work	58
14.07	Owner May Correct Defective Work.....	58
ARTICLE 15 – Payments to Contractor; Set-offs; Completion; Correction Period.....		59
15.01	Progress Payments	59
15.02	Contractor’s Warranty of Title.....	62
15.03	Substantial Completion	62
15.04	Partial Use or Occupancy.....	63
15.05	Final Inspection.....	64
15.06	Final Payment	64
15.07	Waiver of Claims	65
15.08	Correction Period	65
ARTICLE 16 – Suspension of Work and Termination		67
16.01	Owner May Suspend Work.....	67
16.02	Owner May Terminate for Cause.....	67
16.03	Owner May Terminate for Convenience.....	68
16.04	Contractor May Stop Work or Terminate	69
ARTICLE 17 – Final Resolution of Disputes		69
17.01	Methods and Procedures	69
ARTICLE 18 – Miscellaneous		69
18.01	Giving Notice.....	70
18.02	Cumulative Remedies	70
18.03	Limitation of Damages.....	70
18.04	No Waiver	70
18.05	Survival of Obligations	70
18.06	Controlling Law	70
18.07	Assignment of Contract.....	71
18.08	Successors and Assigns.....	71
18.09	Headings.....	71

ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 Definitions of General Conditions

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda* – Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement* – The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment* – The document prepared by Contractor in a form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid* – The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder* – An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents* – The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements* – The Advertisement, Notice, or Invitation to Bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Bulletin* – If time permits, a Bulletin is issued prior to a Change Order. A Bulletin is an inquiry of the Contractor of the cost to complete the work described in the Bulletin. It is intended as the basis of a Change Order if all parties reach agreement. A Bulletin may be considered the same as a Request for Proposal. A Bulletin is generated by the Engineer because it generally requires specifications and/or drawings to be addressed.
 9. *Change Order* – A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 10. *Change Proposal* – A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a Set-off against payments due; or seeking other relief with respect to the terms of the Contract.

11. *Claim* – (a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer’s decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer’s decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. A demand for money or services by a third party is not a Claim.
12. *Constituent of Concern* – Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead based paint (as defined by the HUD/EPA standard) hazardous waste, and any substance, product, waste, or other material. Lead, chrome, and other by-products of paint removal, as well as strippers, new coatings, and thinners, are to be included in this definition.
13. *Contract* – The entire and integrated written contract between the Owner and Contractor concerning the Work.
14. *Contract Documents* – Those items so designated in the Agreement, and which together comprise the Contract.
15. *Contract Price* – The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
16. *Contract Times* – The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
17. *Contractor* – The individual or entity with which Owner has contracted for performance of the Work.
18. *Cost of the Work* – See Paragraph 13.01 for definition.
19. *Drawings* – The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
20. *Effective Date of the Contract* – The date, indicated in the Agreement, on which the Contract becomes effective.
21. *Electronic Document* – Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
22. *Electronic Means* – Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use

by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

23. *Engineer* – The individual or entity named as such in the Agreement. The terms Engineer, Project Manager, and DIXON are used interchangeable in these Contract Documents.
24. *Field Order* – A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
25. *Hazardous Environmental Condition* – The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.
26. *Hold Point* – A point in the construction sequence when the Contractor is required to stop work on that portion of the project until an inspection has been completed.
27. *Inspection* – is a term which originally applied to both Quality Control (Contractor’s Responsibility) and Quality Assurance (Engineer’s service). There will remain some reference to Inspection but all references to Inspection when it is obviously the Engineer’s service shall be understood to mean Observation, whether the word is capitalized or not.
28. *Laws and Regulations; Laws or Regulations* – Any and all applicable laws, statutes, rules, regulations, ordinances, codes, binding decrees and resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
29. *Liens* – Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
30. *Milestone* – A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
31. *Non-Conformance Report (NCR)* – A report written by the Engineer or Resident Project Representative to document the Contractor’s Work that does not meet requirements of the specifications or contract, including lack of progress.
32. *Notice of Award (NOA)* – The written notice by Owner to a Bidder of Owner’s acceptance of the Bid.
33. *Notice to Proceed (NTP)* – A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
34. *Observation* – Service performed by Engineer as part of their RPR services.

35. *Owner* – The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
36. *Performance Specifications* – Specifications that require the manufacturer or supplier of equipment, materials, or systems to design, manufacture, deliver, and install products to achieve specific results under stipulated conditions of operation and in environments described in applicable Specification Sections.
37. *Preconstruction Conference or Preconstruction Meeting* – are interchangeable terms.
38. *Progress Schedule* – A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor’s plan to accomplish the Work within the Contract Times.
39. *Project* – The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
40. *Project Manual* – This term is deleted in the 2018 edition.
41. *Ready for Final Payment* – This term is used to define a time when Liquidated Damages begin, separate from and in addition to Liquidated damages for failure to meet Substantial Completion Date. All punchlist items are to be completed, Site cleaned and restored, and equipment removed within 21 days. Finalize and submit all paperwork for Final Pay Request within 30 days of Substantial Completion. Failure to meet 21 day and/or 30-day requirements may individually trigger the charge of Liquidated Damages. Some Bonding Companies refer to a Final Completion Date, and for the purpose of this Agreement we will define Final Completion Date and Ready for Final Payment as synonymous, both terms referring to 20 days past Substantial Completion.
42. *Resident Project Representative (RPR)* – The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or “RPR” includes any assistants or field staff of Resident Project Representative. In some Contracts there may be multiple RPRs on site when DIXON is contracted with Owner’s Engineer. In those cases DIXON’s Resident Representative is referred to in writings as DRR.
43. *Samples* – Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
44. *Set-off* – A contracted remedy for the Owner for minor Contract breaches by the Contractor which results in additional and/or unnecessary costs or fees to the Owner.
45. *Schedule of Submittals* – A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals and the performance of related construction activities.

46. *Schedule of Values* – A schedule, prepared filled out and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment. The Schedule of Values Form is supplied in the Bidding Documents. This Schedule is to be submitted with the Bid. Adjustment of Schedule of Values by Engineer to correct for front loading of bid (without mathematical error) will not change the total Bid as calculated by completing the Schedule of Values.
47. *Shop Drawings* – All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether accepted or not, are not Drawings and are not Contract Documents.
48. *Site* – Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
49. *Specifications (also Technicals or Technical Specifications)* – The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
50. *Subcontractor* – An individual or entity having a direct contract with Contractor for the performance of a part of the Work.
51. *Subsubcontractor* – An individual or entity having a direct contract with a Subcontractor for the performance of a part of the work.
52. *Submittal* – A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers’ instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals. Progress Schedules and Schedules of Values required by Article 2 of these General Conditions will not be considered Submittals for the purpose of Section 00 83 00 and remain in Article 2.
53. *Submittal Acceptance* – either “Approval” or “No Exception Taken” – Engineer’s review and Approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with

the design concept of the completed project as a functioning whole as indicated in the Contract Documents. See Article 2 of these General Conditions for additional limitations and restrictions to this Definition.

54. *Substantial Completion* – The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof. On coating projects, the date of substantial completion is the date the structure is, or would have been returned to service, except for voluntary delay by Owner. Date of Substantial Completion is after complete cure, disinfection, and testing. Engineer will generate a Certificate of Substantial Completion Form. This section does not apply for non-coating projects.
55. *Successful Bidder* – The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
56. *Supplementary Conditions* – The part of the Contract that amends or supplements these General Conditions. The terms Supplemental Conditions used in these General Conditions and Project Specific Supplemental Conditions are to be used interchangeable. Since items such as Insurance change with every Project, all items associated with insurance are moved. It is the intent but not a requirement that these General Conditions remain the same and are only altered in the Supplemental Conditions.
57. *Supplier* – A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
58. *Technical Data* – Revised
 - a. Those items, if any, expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
 - b. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.
59. *Underground Facilities* – All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.

60. *Unit Price Work* – Work to be paid for on the basis of unit prices.
61. *Work* – The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
62. *Work Change Directive* – A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 *Terminology*

- A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

1.03 *Intent of Certain Terms or Adjectives:*

- A. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer.
- B. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:*
 1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:*
 1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents; or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by

Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).

d. All work completed that is rejected by an unresolved non-conformance report.

E. *Furnish, Install, Perform, Provide:*

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

F. Contract Price or Contract Times: References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.

G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

1.04 Indemnification Terms – Many Articles throughout these General and Supplemental Conditions include indemnification clauses. In an attempt to shorten these clauses, the following terms replace their definitions but the full definition or meaning remains in effect. Paragraph SC 6.07 is the general Indemnification requirement. This paragraph was not shortened because it may be sent whole to the Contractor’s Insurance agent.

A. Owner/Engineer et al – shall replace all or the appropriate portion of the following:

1. Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them.

B. Indemnify, Hold Harmless, and/or Defend:

1. To the fullest extent permitted by Laws and Regulations, indemnify and hold harmless from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable.

ARTICLE 2 – CONTRACTUAL PRECONDITIONS AND MATTERS PRELIMINARY TO PRECONSTRUCTION MEETING, AND PRECONSTRUCTION MEETING (This article was rewritten to consolidate, as much as possible, all relevant Submittal materials into Section 01 33 00 Submittals. Some material was left in this article for sequencing purposes)

2.01 *Step 1 - Delivery of Bonds and Evidence of Insurance – Precondition of Contract*

- A. Within ten (10) business days of Notice of Award, supply the Engineer with three (3) original sets of separate Payment, Performance, and Maintenance Bonds. Supply three (3) original sets of Certificates of Insurance meeting requirements found herein and with the limits of insurance to be found in the Supplemental General Conditions. Failure to submit bonds and/or insurance within time frame will be considered a default, a failure to perform as required by the Bid Bond. The Owner, at his option, may waive default, delay default, or proceed with capture of the Bid Bond which will become the Owner's property.
- B. Bonds and insurances are to be submitted to the Engineer for initial review. The Owner will within twenty (20) days of receipt of preliminarily approved bonds and insurances from the Engineer, have bonds and insurances reviewed by their insurance Consultant, execute the Agreement and send a signed copy to the Contractor.
- C. *Evidence of Contractor's Insurance* See Insurance Information for required limits in the Supplemental Conditions.
- D. *Evidence of Owner's Insurance* Owner will not provide Certificate of Insurance to the Contractor. The Owner will not name Contractor additional insured.
- E. *Correction Requirements of Bonds and Insurance:* Bonds and Certificate of Insurances that fail the initial review and first subsequent review by a DIXON contract administrator will be returned to Contractor. All subsequent returns for insufficient material will be cause for Owner to Set-off DIXON recurring handling fees. Also, failure of Bonds and Certificate of Insurance to meet Contract requirements during review by Owner's insurance consultant will be cause for Set-off.

2.02 *Step 2 - Copies of Document and Distribution*

- A. Owner will furnish the Contractor one signed copy of the Contract Documents. Additional printed copies will be furnished upon request at the cost of reproduction, or an electronic version will be supplied upon request and at cost.
- B. Owner shall maintain and safeguard at least one copy of signed document version of the Contract, including Drawings and Specifications in unaltered electronic format. Owner shall make such copy of signed document version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer. This is a copy of the signed document only

2.03 *Step 3 – After Completion of Contract Documents – Contractor's Requirements Prior to Scheduling Preconstruction Meeting and Before Starting Construction*

- A. Schedules: Contractor shall submit to Engineer for timely review:

1. Preliminary Progress Schedule (generated by Contractor based on the Master Schedule detailed in Section 00 00 40 Project Summary) indicating the times (numbers of days or dates, and expected hourly daily, hourly weekend schedule, and if applicable any hourly holiday schedule) for starting and completing the various stages of the Work, including any Milestones specified in the Contract. **Be prepared to submit at the Preconstruction Meeting.**
 2. Schedule of Submittals, including Submittals (using Submittal Form and following specifications of Section 01 33 00 Submittals). **Submit within 10 days after the Effective Date of the Agreement, or as otherwise specifically required by the Contract Documents.**
 3. Schedule of Values - for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work. **Submit with Bid.**
- B. *Initial Acceptance of Schedules – If items arise during the Preconstruction Meeting that affect the submitted Progress Schedule*, Contractor shall make corrections and adjustments, complete and resubmit the Progress Schedule, before leaving the meeting. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor’s full responsibility **therefore**. **Failure to meet Milestone or significant Progress Schedule dates may be cause for rejection of prior accepted Progress Schedule and require an additional Progress meeting and new Progress Schedule to put Project back on an acceptable schedule, or to revise existing Schedule. Cost of meeting, Owner’s and Engineer’s time will be considered the responsibility of the Contractor, subject to Set-off.** Contractor’s Schedule of Submittals [Section 00 83 00] will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals, in a timely manner. Schedule of Submittals **shall** be submitted with Submittal Package.
1. Contractor’s Schedule of Values (Section 00 54 00 to be completed and submitted with Bidding Documents) *will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work. If the Engineer determines the Schedule of Values is not acceptable, the Engineer will use the Contractor’s Schedule to reallocate values. The Engineer’s reallocation will be to maintain sufficient funds for work completed toward the end of the project to avoid frontloading values. The Engineer will assign values high enough to bring in another Contractor to finish work in case of default. The Contractor has five (5) days to appeal this reallocated Schedule of Values. Pay Requests shall be made based on the prices in the Schedule of Values as submitted unless adjusted by the Engineer and in that case the adjusted Schedule of Values. The Schedule of Values will not be reallocated if the Contractor files only a Final Application of Payment.*

2.04 Submittals – Scheduling Preconstruction Conference

- A. Contractor shall complete all Submittal requirements of Section 00 83 00 Submittals, including any resubmittals if required, prior to scheduling the Preconstruction Conference.
- B. When all of the requirements of Section 00 83 00 are completed DIXON will schedule the Preconstructin Conference at a mutually agreeable Date and Time for the Contractor, Owner, and DIXON

2.05 *Preconstruction Conference; Designation of Authorized Representatives*

- A. The scheduled Preconstruction Conference shall be attended by Engineer and Contractor(s). **The Owner at their option may attend.** Once the Work has started, the Contractor shall carry the Progress Schedule to completion without delay, making adjustments to Schedule as Work progresses.
- B. A corporate officer or someone with legal authority to obligate the company/corporation, project manager (if different from officer), and the intended foreman shall attend. If project foreman does not attend the meeting, it shall be the Contractor’s responsibility to supply the information discussed at the meeting to the field foreman.
- C. The Owner, **if in attendance**, will be represented by the project contact person, and the Engineer **represented** by the Project Manager or a senior Contract Administrator.
- D. The Preconstruction Conference will discuss all containment, personal hygiene, and lead control issues required in this contract and review. Be prepared to commit designated “competent person(s)” to responsibilities of confined space, scaffold rigging, lead, etc.
- E. At the Preconstruction Conference Owner and Contractor, each party shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.
- F. The Engineer may prepare Preconstruction Conference minutes and send to all attendees. All parties to the Preconstruction Conference will have five days from the postmarked, or email dated delivery of the minutes to protest any item of the minutes in writing. After five days the minutes will be considered not protested and will become part of the Contract Documents per established Electronic Transmittal Protocol (See SC Paragraph 2.06).

ARTICLE 3 – CONTRACT DOCUMENTS INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.

- B. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed version of record shall govern. *If there is a conflict between written copies, see Paragraph 2.02 B above.*
- C. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- D. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein. *The Documents shall be given the following preference in order:*
 - 1. *Addenda.*
 - 2. *Agreement.*
 - 3. *Special Conditions, if any.*
 - 4. *Technical Specifications.*
 - 5. *Drawings. Figure dimensions shall govern over scaled drawings.*
 - 6. *Supplemental Conditions.*
 - 7. *General Conditions.*
- E. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- F. Nothing in the Contract Documents creates:
 - 1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - 2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 *Reference Standards*

- A. Standards Specifications, Codes, Laws and Regulations
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the

part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. Reporting Discrepancies:

1. Contractor's Verification of Figures and Field Measurements: Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
2. Contractor's Review of Contract Documents: If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof. **Contractor as Bidder was required to visit the site. Visible errors in the specifications, such as number of manholes, pits, etc. including the existence of a clear coat not noted on the exterior will be the responsibility of the Bidder to report and will not be the basis of any Change Order request.**

B. Resolving Discrepancies:

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. The provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or

- b. The provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs) or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer’s written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. Have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. Have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner’s express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times*

- A. The contract times are defined in the Project Summary in Section 00 00 40. A Notice to Proceed will be issued thirty (30) days prior to the start date if time permits. An email or verbal notice may be used to give thirty (30) days notice until all parties can sign the Notice to Proceed.
- B. The effective start date will be indicated in the Notice to Proceed. The start date may exceed sixty (60) days after bid opening. The Contract Dates will be maximum out-of-service time AND/OR the Project Completion Date. The start date, if noted, may float to give the Contractor more flexibility with scheduling. Out of Service Date starts the maximum out of service time. Out of Service Date is the agreed date the tank or structure was removed from service. If the Contractor delays start so that the out of service date **extends beyond** the Project Completion Date, the Project Completion Date becomes Primary and Out of Service Date is no longer applicable. Liquidated Damages starts then on the Contracted Project Completion Date.

4.02 Starting the Work

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to such date except as recommended immediately following. Contract time is governed by out-of-service time. The Contractor is encouraged to deliver equipment to the site prior to Contract Start. The site will be available up to two (2) weeks prior to agreed drainage date. (Out of Service Date)
- B. Contractor is also encouraged to rig the structure, complete containment installation, and complete weld repairs that do not affect the wet interior prior to draining of the structure. The amount of work completed shall have been approved at the preconstruction conference. Since the structure is not out of service these dates do not apply against Out of Service time.
- C. Delaying Work start until the next coating season for the convenience of the Contractor will require Owner to Set-off inflation increased Engineering expenses and Owner's costs against Contractor's Request for Payment.

4.03 Reference Points *N/A*

4.04 Progress Schedule

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.
- C. See Technical Specifications for Scheduling RPR Services Section 00 91 19.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 2. Abnormal weather conditions: **Abnormal weather conditions are defined as weather conditions that are at variance with the routine or normal weather conditions. Below is an example of the determination procedure and of the required claim format and is not intended to match the specified project:**
 - a. Project length: 45 days
 - b. Substantial completion date: June 30th.
 - c. Start date: May 16th.
 - d. Three (3) years of data* 2023, 2024, 2025
 - e. Average number of rain/wind days: 9
 - f. Actual number rain/wind days**: 12
 - g. Claim for time extension: 3 days.

*Submit weather history from nearest weather reporting station for three (3) previous years from the same time period. Submit same data for current year. Submit formal, but simple Change Proposal (use format above).

**Rain/wind day is a rain or wind day where either rain and/or wind conditions exceeded safe work conditions or were outside the parameters of good paint practices. Wind days are winds in excess of 20 mph for over four (4) hours during normal work hours, and rain days having measurable precipitation.

progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.

- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, and Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.
- G. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.
- H. The termination of Work during the winter season because of cold weather shall not be taken as entitling Contractor to any extension of Contract Time. If approved by Owner, Liquidated Damages being applied will cease through the winter and will begin again when the structure is removed from service. New Liquidated Damages are cumulative with any Liquidated Damages applied for Fall work.

ARTICLE 5 – SITE, SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Contractor shall provide for all additional lands and access thereto, that may be required for temporary construction facilities or storage of materials and equipment.

5.02 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas:

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
2. If a damage; including car/paint damage, or injury reparation demand is made by the Owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those

for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13.F, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner/Engineer et al, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Failure to continually maintain site or to immediately clean the Site after a complaint or at project completion may result in the Owner completing the cleaning by hire or by the Owner's forces. All cleaning costs are the responsibility of the Contractor, they will be collected by payment or Set-off.*
- E. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them. *Bent rails, ladder rungs, etc. occurring as a result of construction loading, shall be restored, or negotiated with Owner.*
- F. *The Contractor shall provide adequate signs, barricades, red lights, and watchmen and take all necessary precautions for the protection of the work and the safety of the public. All barricades and obstructions shall be protected at night by signal from sunset-to-sunrise. Barricades shall be of suitable construction and shall be painted to increase their visibility at night. Suitable warning signs shall be so placed and illuminated at night as to show in advance where construction, barricades, or detours exist.*
- G. *The Contractor shall at all times so conduct his work to ensure the least obstruction to traffic and inconvenience to the general public and the residences in the vicinity of the work, and to insure the protection of persons and property in a manner satisfactory to the Engineer. No road or street shall be closed to the public except with the permission of the Engineer and proper governmental authorities. The Contractor shall confer with and keep police and fire departments of the municipality fully informed as to streets or alleys which are to be closed to traffic for construction purposes. Live fire hydrants on or adjacent to the work shall be*

kept accessible to firefighting equipment at all times. Temporary provisions shall be made by the Contractor to insure the usability of sidewalks and the proper functioning of all street gutters, sewer inlets and drainage ditches.

- H. The Contractor shall have full charge of the premises and work under construction until completion and final acceptance of the Work under the Contract except as noted in the Special Conditions.
- I. The Engineer and Owner shall have full access to the Site and Contractor's personnel and equipment shall be available to the Owner and Engineer/RPR to expedite inspections. The Contractor shall be responsible for all injury to work in process of construction, and for all property or materials stored at the premises that may be damaged or stolen while the work is in his care and shall make good all such damage or loss without expense to the Owner.

5.03 *Subsurface and Physical Conditions*

A. *Coating and Repair Work:*

1. The coating and repair of steel or concrete structures does not involve reports and drawings and what can and cannot be considered Technical Data as an excavation Contract may. All of those General Conditions are deleted.
2. Underground work in the coating industry involves drilling for anchors for containment systems. The painting of pit piping may also be considered underground. For this type of Work the Contractor must rely on Utility Locating Services and not Technical Data from Owner, or in the case of pits, a visual inspection. Contractor shall notify each utility before digging for anchors or for any reason. Before starting, call in advance to 811 or as required by the individual agencies.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* In Paragraph 5.03 it is stated that based on the type of industry, the coating industry, that there would be no subsurface technical data. Since there is no Technical Data or opinion proffered, it is impossible to have Differing Subsurface Conditions. But if Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site or **Underground Facility**, either is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents; then Contractor shall, promptly after becoming aware thereof and before further disturbing the physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.
- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare

recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.

- C. Owner's Statement to Contractor Regarding Site Condition: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. Early Resumption of Work: If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- E. *Possible Price and Times Adjustments:*
 - 1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
 - 2. The Contractor is liable for all subsurface damages, Contractor may be entitled to an equitable adjustment if an unidentified Underground Facility is located but it will be determined on a project-by-project nature, based on what is known, should have been known or anticipated, since these situations are a rarity.
 - 3. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
 - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 5.04.A.
 - d. Rough Surfaces in the Wet Interior: The wet interiors of steel structures are subject to corrosion. Based on the age of the structure, maintenance history of the structure, and other factors, the inside of the structure may be pitted. The degree or severity or extent of this pitting will not be considered a hidden condition. No claim of extra for blasting or coating application will be accepted or reviewed. If pit welding or pit filling is

completed, that will be done at the bid unit price or a negotiated price. The Owner and Engineer will determine and authorize the extent of pit filling. There will likely be as many or more, unfilled pits than the number authorized for repair. Contractor cannot rely on pit filling to eliminate some of the application techniques needed for pitted structures. Back rolling of a spray application may be necessary and will be considered Good Painting Practice and not a Differing Physical Condition.

- e. The Contractor is also advised that older structures may have been previously blasted, and pit filled. The more difficult blasting also does not qualify as a hidden condition. Reducing blasting requirements and leaving some filler residue in the pit may be reviewed on a case-by-case basis.
4. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
 5. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

5.05 *Underground Facilities*

A. *Contractor's Responsibilities: See Paragraph 5.04*

1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site.
 - b. complying with applicable state and local utility damage prevention Laws and Regulations.
 - c. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction.
 - d. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 - e. the safety and protection of all existing Underground Facilities at the Site and repairing any damage thereto resulting from the Work.

B. *Notice by Contractor: See Paragraph 5.04*

5.06 *Hazardous Environmental Conditions at Site*

- A. There are no known hazardous environmental conditions on-site; for exceptions see D below. No reports or drawings related to Hazardous Environmental Conditions

are known to the Owner or Engineer. There is the possibility of lead in soils or other Constituents of Concern related to the coating industry from past projects. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work or eventually identified as being caused or created by the Contractor. (i.e. Contractor spills thinner and during the cleanup of the thinner, soil containing lead is also removed, then the Owner pays only for the cleanup that can be cost differentiating, not a cost sharing principle.)

- B. Reports and Drawings: The Supplementary Conditions identify:
1. those reports or drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
 2. Technical Data contained in such reports and drawings, and the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto.
- C. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- D. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Article 14); **Engineer or RPR has full authority to STOP Work until the Owner/or Engineer are contacted**, and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.G. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition and impose a Set-off against payments to account for the associated costs. **Authority to STOP Work in this instance is expanded to include potential environmental contamination.**
- E. If Hazardous Environmental condition is soil related, contractor shall:
1. **If Work involves exterior coating removal inside containment, then the soil is already covered with impermeable tarps and plywood. The ground cover is a barrier between workers and the contaminated soil, and no further action is**

- required, except possibly by Owner after Contractor cleans up site from this Work and removes equipment. There shall be no adjustment of Contract Price.
2. If Work involves exterior coating without containment, then Contractor shall cover contaminated soil with impermeable tarps and plywood. Contractor may submit a Change Proposal for Change in Contract Price per paragraph 11.07 but not Contract Time.
 3. If Work involves interior coating only, then Contractor shall cover contaminated soil with impermeable tarps and plywood in staging area only. Contractor may cover entire site but may only make a Change Proposal for Contract Price for staging area only.
 4. No Change Proposal for Contract Time will be considered with any of the three above alternates. Par. 5.06.E. 1-3.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a Set-off.
- H. If after receipt of such written notice Contractor does not agree to resume such Work, then Owner may Terminate or Suspend Work per Article 14. If Work is Suspended, Owner will give Notice as to what further action they may take while the suspension is in place. Owner may have such plywood barrier installation by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner/Engineer et al, arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. The provisions of Paragraphs 5.06.H do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6 – BONDS AND INSURANCE

6.01 *Performance, Payment, and Maintenance Bonds (Not Bid Bonds)*

- A. Contractor shall furnish a Performance Bond and a Payment Bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect from Effective Date of Agreement until fifteen months after date of Substantial Completion, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by these General Conditions or Supplementary Conditions or other specific provisions of the Contract.
- B. The Owner retains the right to require a time extension to both the original Performance Bond and Maintenance Bond if the extent of the Correction Period Repairs exceed the value of the Maintenance Bond.
- C. Supply a Maintenance (Warranty) Bond for two (2) years at 50% of the contract price. The purpose of the Maintenance Bond shall include all of the same obligations required of the original Performance Bond and Payment Bond; completion of any Correction Period, per original specifications, repair work required after the one (1) year Post Construction observation.
1. The start date of the two (2) year Maintenance Bond shall be the Date of Ready for Final Payment. The Termination Date is 2 years after the Date of Ready for Final Payment, unless extended mutually or for a new Correction Period (see Items 3 and 4 below).
 2. The Post Construction Evaluation will be completed within 13 months, unless stated otherwise in the Contract Documents.
 3. If repair scheduling is delayed for months (more than 15 months but less than 24 months from Ready for Final Payment Date) for Contractor's schedule with mutual agreement of the Owner, then the Maintenance Bond shall be continued and be effective until all required post construction repairs are completed.
 4. If repair scheduling is delayed several months (Correction Period Repairs to be completed more than 24 months (after Ready for Final Payment) for Contractor's schedule with mutual agreement of the Owner then the Maintenance Bond shall be extended until all required Correction Period repairs are completed.
 5. If during the Post Construction Evaluation it is determined that repairs exceed 10% of any specific line item or line item area i.e. wet interior coating, a second Warranty Period and the Correction Period shall be extended an additional year for that specific failed area. The Maintenance Bond shall also be extended until after a second warranty inspection. (of the failed line item area from original Evaluation only), and repair work, if any, determined as necessary during the second Evaluation are completed. (See Article 15.08E Correction Period)
 6. Both parties acknowledge that coating applications are weather dependent when negotiating an extension of the Correction Period.

7. The maintenance (warranty) bond shall be issued by the same surety that issues the Performance Bond required under Paragraph 6.01.A of the General Conditions.
- D. Submittal of Performance, Payment, and Maintenance bonds shall all be Condition Precedent to Contract award. The Contract will not be signed until all three bonds are submitted, reviewed and included in the Contract Documents. If for some reason the Maintenance or any bond is not included, the Contractor is still fully responsible financially for all assurances a bond would provide. Contractor shall provide Bond at whatever stage of the Work; the discrepancy of a missing Bond is noted. Owner retains the right to terminate or suspend the Project per Article 14, until the Bond is delivered.
 - E. Use Bond forms acceptable to AIA Industry Standards, or use forms specifically required by the Owner. Supply three (3) original signed and properly executed bonds for each type of bond and documented Power of Attorney for those parties executing Bonds. All bonds shall be executed by such sureties as are named in “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies” as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual’s authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
 - F. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts. Surety Companies must, in addition to State license, be incorporated and originating from within the United States. Offshore companies or internet companies are not acceptable. Supply bonds and insurance from companies with a Class A- VII rating or better (rating listed in latest edition and by A.M. Best Co.).
 - G. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above. No Pay Requests will be accepted until new Bonding is approved as acceptable per Bond Requirements and Owner’s satisfaction.
 - H. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner’s termination rights under Article 16.
 - I. Upon written request, Owner will provide a copy of the Payment Bond to any Subcontractor, Supplier, or other person or entity claiming with documentation to have furnished labor or materials used in the performance of the Work.
 - J. Owner is under no obligation to furnish Surety Co with copies of Bids, Change Orders, or Project Status updates.
 - K. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in

the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

NOTE to OWNER & CONTRACTOR – All paragraphs related to Insurance were moved to Supplemental Condition, so that project specific and general requirements are in one location. This was completed with the intention of an aid to the Contractor. The Contractor can now forward this consolidated section of Insurance Requirements directly to their agent for each Project.

6.02	Insurance – General Provisions	Moved to SC-6.02
6.03	Contractor’s Insurance	Moved to SC-6.03
6.04	Builder’s Risk and Other Property Insurance	Moved to SC-6.04
6.05	Property Losses: Subrogation	Moved to SC-6.05
6.06	Receipt and Application of Property Insurance Proceeds	Moved to SC-6.06

ARTICLE 7 – CONTRACTOR’S RESPONSIBILITIES

7.01 *Contractor’s Means and Methods of Construction*

- A. Contractor shall direct all communication intended for the Owner directly to the Engineer who is the representative of the Owner. Communication in any format and for most purposes could result in miscommunication back from Owner to Engineer and additional expense to Owner. Any expense from a miscommunication, or communication directly with the Owner will assume a miscommunication and shall be back charged to the Contractor at a lump sum of \$900 as a Set-off, and per incident rather than documenting time and expenses.
- B. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- C. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor’s responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor’s expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor’s determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.
- C. Resident Superintendent shall be fluent in English to the level of competency to complete requirements of 7.01.A and 7.02.A. Superintendent shall also be fluent

or have access to a translator for the primary language of a majority of the workers. Degree of fluency to be sufficient so that Superintendent can adequately complete his duties under 7.01.A.

- D. No employee of Contractor, Subcontractor, or Supplier may be on the Project Site who cannot be directed by a Superintendent, or translator in regard to work assignments, safety issues, or who cannot understand safety signage.

7.03 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.
- C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.
- D. The Owner may revoke any written or verbal consent if the Contractor's performance of the Work completed on days or work hours outside the designated work times, results in complaints by neighbors.

7.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 *"Or Equals"* – *Moved to Section 00 83 00*

7.06 *Substitutes* – *Moved to Section 00 83 00*

7.07 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.
- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- G. "Subcontracting" – This project requires prequalification. This prequalification requirement extends to Subcontractors. Paragraph 7.07.G does not apply to projects located in Iowa.
- H. The Contractor agrees not to sublet or assign this work without the written consent of the Owner. Violation of this condition shall be grounds for immediate dismissal of the Subcontractor or Contractor to which the work was sublet or assigned and if a satisfactory (Engineer's opinion) replacement is not on the site working within forty-eight (48) hours, the violations shall then be grounds for Contract termination and Performance Bond forfeiture.
- I. Lump sum payments to employees instead of hourly wage will be evidence of subcontracting. The Owner reserves the right to review payroll records and pay

stubs. If subcontracting is approved, no more than 30% of the project may be subcontracted.

- J. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.
- K. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- L. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- M. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- N. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
- O. Nothing in the Contract Documents:
 - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
 - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.08 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others.
- B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner/Engineer et al, arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.09 Permits – **Moved to Section 00 83 00**

7.10 Taxes

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.11 Laws and Regulations

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner/Engineer et al, arising out of or relating to such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. **Liability for Noncompliance.** Contractor will be solely liable for any fines or civil penalties that are imposed by any governmental or quasi-governmental agency or body that may arise, or be alleged to have arisen, out of or in connection with Contractor's, or its subcontractors' or suppliers', performance of, or failure to perform, the Work or any subordinate part.
- D. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.
- E. **Required Provisions.** Every provision of law required by law to be inserted into this Contract will be deemed to be included in this Contract.
- F. **Claims or Change Proposals made for extra costs resulting from laws and regulations that become effective after the opening of Bids or (EDA), will be reviewed based on the exposure and publication of the law or regulation in advance.** There will be no adjustment in Contract Price or Contract Time for environmental or safety regulations, or other laws and regulations with similar public notice and public hearing/review procedures. It is the Contractor's responsibility to be aware of industry specific changes in OSHA or environmental issues.
- G. **Regulations dealing with labor rates have a known expiration date.** Everyone can safely assume there will be a cost increase with each new issue. If these rates are scheduled to expire during Contract Time, then increase labor costs in Bid for the expected manhours by local cost-of-living factor. If rates increase more than cost-of-living, a Change Order will be reviewed for difference between cost-of-living and actual inflation adjusted wage of new rate above the adjusted old rate. Copy of payroll will be used to determine increase in wage only, not associated taxes, insurance, and benefits. The Contractor is responsible for requesting extra Change Proposal and supplying documentation establishing extra. All consideration for an

increase end on Substantial Completion, either original or Change Order extended date.

- H. There will be no considerations given to Change Proposals increase expenses resulting from changed laws, regulations, or wage rates for Projects extended or delayed until the next coating season because of Contractor's failure to adhere to the Progress Schedule. If delay is at request of Owner, Contractor may submit a Change Proposal for Contract Price and Contract Time.

7.12 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, approved Shop Drawings, and Non-Conformance Reports. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer, only after written request. Superintendent's copy including permits may be digital but shall be available for review.
- B. Contractor shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The Contractor alone shall be responsible for the safety, efficiency, and adequacy of his plans, appliances, and methods, and for any damage which may result from their failure or their improper construction, maintenance, or operations. Submit a copy of all OSHA reportable or recordable injuries or illness, and all OSHA citations relative to this project at project completion.

7.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work; all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.
- C. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing

work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.

- D. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions may identify any Owner's safety programs that are applicable to the Work. Failure to identify specific program does not relieve the Contractor from safety program adherence requirement. If safety requirement is for a program not identified in the Supplemental Condition and is more restrictive than OSHA and it interferes with Contractor's Methods of Operation, then Contractor may submit a Change Proposal for Contract Time and/or Contract Price.
- E. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- F. All damage, injury, or loss to any property referred to in Paragraph 7.13.A.1 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- G. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed.
- H. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.
- I. Lead/chrome paint removal, and painting of structures are recognized as very hazardous work, and it is further recognized that the coating industry has extensive safety training programs available.
- J. Monitor and be responsible for all safety on job site. The Engineer and Owner will not monitor safety practices and will not assume any responsibility for safety.
- K. The Owner and Engineer have historically followed the Contractor's safety plan when on the site. There have been occasions where the Contractor's safety plan has proven inadequate. The specifications may require safety features for the Owner and Engineer which are now the Contractor's contractual obligation to provide. These include such items as safety cables suspended from the roof for inspection of the interior roof, and safety clips on the bottom of the bowl for fall protection cables. (Legged tanks only) We encourage the Contractor to modify his fall protection plan and to provide additional cables and fall protection grabs for his personnel. Items such as roof railings are provided for the Owner's safety. Do not rig from the railings – a separate painter's rail is provided for rigging.

- L. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs. Contractor's Safety Representative shall have the authority to supersede Contractor's foreman and shall stop work if the Work being completed is in violation of Contractor's or Owner's safety program, or OSHA.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of Safety Data Sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

7.16 *Submittals – Moved to Section 00 83 00*

7.17 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.
- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
 - 1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 - 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.

3. Normal wear-and-tear does not apply to wet interior coating below the high-water line. After one (1) year, zero (0) failure or deterioration is acceptable.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
1. observations by Engineer.
 2. recommendation by Engineer or payment by Owner of any progress or final payment.
 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner.
 4. use or occupancy of the Work or any part thereof by Owner.
 5. any review and approval of a Shop Drawing or Sample submittal.
 6. the issuance of a notice of acceptability by Engineer.
 7. the end of the correction period established in Paragraph 15.08.
 8. any inspection, test, or approval by others; or
 9. any correction of defective Work by Owner.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification Both Paragraphs A and B moved to SC-6.07 under the Insurance Requirements*

7.19 *Delegation of Professional Design Services – Moved to Section 00 83 00*

ARTICLE 8 - OTHER WORK AT THE SITE

8.01 *Other Work Some of this Article rewritten for clarity.*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.

- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be provided at the Preconstruction Meeting or provided to Contractor prior to the start of any such other work:
 - 1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors.
 - 2. An itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. The extent of such authority and responsibilities.
- B. Unless otherwise provided in this Contract, the Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking

an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
 - 1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a Set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.
 - 2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a Set-off against payments due Contractor.
- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner/Engineer et al arising out of or relating to such damage, delay, disruption, or interference.
- D. If overhead power lines present an unsafe work condition as determined by OSHA, Owner or Utility; Owner at their expense and coordination, shall have the Utility temporarily relocate, move, or cover lines, eliminating the hazard. Contractor will determine problems with utility lines during their prebid site visit and include anticipated costs in his bid.

- E. Unless stated differently in Contract Documents, protect all antennas, controls, cables, and associated property of Owner's or Telecommunication Carrier's equipment or material on, in, or near the structure during work. Design construction procedures to maintain operation of antenna system.

ARTICLE 9 - OWNER'S RESPONSIBILITIES

9.01 Communications to Contractor

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 Replacement of Resident Project Representative

- A. Owner may at its discretion have the Resident Project Representative (RPR) replaced with another RPR. The replacement RPR status under the Contract Documents shall be that of the former RPR.
- B. Contractor may request replacement of RPR for failure to perform safely, timely and /or professionally by submitting a complaint to DIXON that clearly delineates how the RPR failed to perform. Removal is the discretion of the Engineer or the Owner. If requested removal is because of disputes with Contractor, Owner may remove RPR and/or Contractor's Resident Superintendent. If an RPR is removed, they will be replaced with another RPR from DIXON.
- C. Project Manager may request removal of Resident Superintendent or any crew member for unprofessional performance and/or confrontational and /or aggressive attitude.
- D. The Contractor's Safety Representative can be removed but is not relieved of his responsibilities until a new Safety Representative is on Site. In no situation, even if only temporary shall the Safety Representative and the Company Superintendent or Foreman be the same person (paragraph 7.13.L).

9.03 Furnish Data

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 Pay When Due

- A. Owner will make payments to Contractor when they are due as provided in the Agreement.

9.05 Lands and Easements; Reports, Tests, and Drawings

- A. Owner's duties with respect to providing lands and easements are set forth in Article 5.

9.06 Change Orders

- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.07 Inspections, Tests, and Approvals

- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.08 Limitations on Owner's Responsibilities

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.09 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.10 *Safety Programs*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 - ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Engineer/Owner Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work, and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07.

10.03 *Resident Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as directed by Engineer, and limitations on the responsibilities thereof will be as provided in Paragraph 10.07.
- B. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and

authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

- C. Resident Project Representative (RPR) will be Engineer's representative at the Site. RPR's dealings in matters pertaining to the Work in general will be with Engineer and Contractor. RPR's dealings with Subcontractors will only be through or with the full knowledge or approval of Contractor. The RPR will:
1. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings (but not including Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.
 2. Safety Compliance: Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site. If Contractor requires safety training exceeds Industry Standard, as determined solely by Engineer, then all training cost including RPR fees for their time, are the responsibility of the Contractor, and are subject to Set-off protocol.
 3. Liaison
 - a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Contract Documents.
 - b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.
 - c. Assist in obtaining from Owner additional details or information, when required for Contractor's proper execution of the Work.
 4. Review of Work; Defective Work
 - a. Conduct on-Site observations of the Work to assist Engineer in determining, to the extent set forth in Paragraph 10.02, if the Work is in general proceeding in accordance with the Contract Documents.
 - b. Observe whether any Work in place appears to be defective.
 - c. Observe whether any Work in place should be uncovered for observation, or requires special testing, inspection or approval.
 5. Payment Requests: Review Applications for Payment with Contractor.
 6. Completion
 - a. Participate in Engineer's visits regarding Substantial Completion.
 - b. Assist in the preparation of a punch list of items to be completed or corrected.
 - c. Participate in Engineer's visit to the Site in the company of Owner and Contractor regarding completion of the Work and prepare a final punch list of items to be completed or corrected by Contractor.
 - d. Observe whether items on the final punch list have been completed or corrected.

D. The RPR will not:

1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including “or-equal” items).
2. Exceed limitations of Engineer’s authority as set forth in the Contract Documents.
3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers.
4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction.
5. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
7. Authorize Owner to occupy the Project in whole or in part.

10.04 *Engineer’s Authority*

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer’s authority as to Submittals, **shops**, design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner’s delegation (if any) to Contractor of professional design services, is set forth in **Section 00 83 00 Submittals**.
- C. Engineer’s authority as to changes in the Work is set forth in Article 11.
- D. Engineer’s authority as to Applications for Payment is set forth in Article 15.
- E. **Engineer/RPR shall have the authority to stop Work in the event continuation of Work is under a noncompliance situation, such as incomplete containment, which may result in the violation of environmental laws, or which may result in the covering of defective or unaccepted work product, or for flagrant safety violations such as the use of harnesses and safety lines for both RPR and Contractor’s employees. Authority to continue Work Stoppage transfers back to the Owner after the Owner has been notified and returns to the Site.**

10.05 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 *Determinations on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for, or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents. Any plan or method of accomplishing the work suggested to the Contractor by the Engineer or other representative of the Owner, but not specified or required, may be used but shall be used at the Contractor's own risk and responsibility. The Owner and Engineer assume no responsibility.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 shall also apply to the Resident Project Representative, if any.

10.08 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

ARTICLE 11 --CHANGES TO THE CONTRACT (RETITLED)

11.01 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
- B. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.

All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's

recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.

11.02 *Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive.
 2. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and
 3. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.
- C. If Owner and Contractor are unable to agree on a price for Change Order work, do not proceed with Work unless ordered in writing by the Engineer or Owner as a Work Change Directive.
- D. If work involved is not essential to the scope of the project and/or there is sufficient time, a Bulletin will be issued and recommended by the Engineer. The Bulletin will request a price for proposed work, and/or any adjustment in Contract Times. If the price as offered or as later negotiated is acceptable, the Bulletin will become the basis of the Change Order. By Owner acceptance and signing, the Bulletin offered by the Contractor may become a combined document: Bulletin # ___/Change Order # ___, or a new separate Change Order may be prepared.
- E. Changes in Contract Price resulting from an Owner Set-off, unless Contractor has duly contested such Set-off; will not require a Change Order but will be reflected in review of final Pay Request.

11.03 *Work Change Directives:*

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are

unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price (actual time and material plus profit).

- B. If Owner has issued a Work Change Directive and:
1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive.
 2. Owner believes that an adjustment in Contract Time or Contract Price is necessary, then Owner shall submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders:*

- A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.
- C. A Field Order is written by the Engineer and issued to the Contractor, copied to Owner. If the Contractor, or Owner does not object to the Field Order within three days of issuance and delivery, the Field Order will be deemed in full force and effect.

11.05 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.
- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents.
- C. Nothing in paragraph 11.05 shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15.

11.07 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.7) or
 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
 1. a mutually acceptable fixed fee; or
 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 10 percent.
 - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent.
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.04.C.2.a and 11.04.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27

percent of the costs incurred by the Subcontractor that actually performs the work;

- d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C.
- e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
- f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.05. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05
- C. A delay from one season to the next (Fall to Spring) may only be changed by Change Order. All additional charges resulting from the delay will be treated as a Set-off to the Contract Price.

11.09 *Change Proposal*

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a Set-off against payment due; or seek other relief under the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.
- B. *Change Proposal Procedures*
 - 1. Submittal: Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
 - 2. Supporting Data: The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.

- a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
- b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

3. Engineer's Initial Review: Engineer will advise Owner regarding the Change Proposal and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
4. Engineer's Full Review and Action on the Change Proposal: Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor.

If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

5. Binding Decision: Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. Resolution of Certain Change Proposals: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. Post-Completion: Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 *No Notification of Obligation to Surety by Owner*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the

giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

- B. Acceptance of Bonds tendered by Contractor to Owner neither creates nor does Owner accept any and all obligations that the Bonding Company may attempt to transfer to Owner even if specified by Bonding Company as a Condition of the Bond. The Contractor is advised he will be assuming any responsibility that the Contractor's Surety tries to impose on the Owner.

ARTICLE 12 – CLAIMS

12.01 *Claims*

- A. *Claims Process*: The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
 - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals.
 - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
 - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
 - 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full and fair amount to which Contractor is entitled.
- C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation*:
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.

2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.
 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 2. When needed to determine the value of a Change Order, Change Proposal, Claim, Set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those

prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.
2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith.
3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
5. Other costs consisting of the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.

- c. Construction Equipment Rental
 - 1) Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
- d. Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.
- e. With respect to Work that is the result of a Change Order, Change Proposal, Claim, Set-off, or other adjustment in Contract Price (“changed Work”), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.
- f. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
- g. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- h. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor’s fee.
- i. The cost of utilities, fuel, and sanitary facilities at the Site.
- j. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- k. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. Costs Excluded: The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
2. The cost of purchasing, renting, or furnishing small tools and hand tools. For purposes of this paragraph, "small tools and hand tools" means any tool or equipment whose current price if it were purchased new at retail would be less than \$500.
3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
6. Expenses incurred in preparing and advancing Claims.
7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. Contractor's Fee

1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
 - a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.
 - b. for any Work covered by a Change Order, Change Proposal, Claim, Set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
 - c. When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
 - d. When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.

2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change Order, Change Proposal, Claim, Set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2. Contractor's Fee:
- E. Documentation and Audit: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance*: Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual

quantities. The Schedule of Values may refer to unknown quantities as “Estimated Figures.”

1. Change proposals submitted because of reduction of over 25% of estimated quantity of pit filling, or pit sealing, or roof seam sealing will be limited to reasonable (<25% cost of material) material restocking charge.
 2. Change proposals submitted because of reduction of over 25% of estimated quantity of pit welding, seam welding, or repairs will not be accepted if mobilization of welder for other repairs was required. Claims for reduction where repair was limited to reduced item will be limited to remaining percentage of mobilization costs.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor’s overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer’s written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.

ARTICLE 14 – TESTS, OBSERVATIONS, AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK, STOP WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide the **Owner and Engineer and Resident Project Representative**, proper and safe conditions and equipment for such access and advise them of Contractor’s safety procedures and programs so that they may comply therewith as applicable. **Reasonable times means at times that would not burden the Contractor with an entire workforce, waiting to go back to work. Between job functions, at scheduled times, or Contractor breaks are reasonable times.**

14.02 *Tests, Observations, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required observations, required inspections, and tests by others and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector (RPR), testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility

for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner.
 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work.
 3. by manufacturers of equipment furnished under the Contract Documents.
 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

E. Correction of Failed Inspections, Non-Conformance Reports

1. Non-Conformance Reports (NCR): The Engineer/RPR will issue a Non-Conformance Report for every performance item, material, or equipment supplied, and/or environmental situation that fails to meet requirements of the specifications.
2. Correct all work in Non-conformance before proceeding.
3. Immediately correct all environmental non-conformance to prevent accidents or environmental incidents. If an incident has already occurred, contact the proper governmental environmental agency and conduct an immediate clean-up per their direction. Notify Engineer/RPR of environmental release and of the environmental agency's requirements for cleanup.
4. If issued non-conformance reports are not corrected, the failure will be considered a breach of contract by the Contractor entitling the Owner to damages as follows, items listed in Paragraph 14.02.E.4.b will be treated as a Set-off:
 - a. Work in non-conformance: If the Contractor refuses to correct, the bonding company will be notified to finish the project. At that point, payment to the Contractor for all completed work will stop until the bonding company authorizes payment, or payment may be made to the bonding company after they have proven assumption of the contract. This clause does not give either party rights to a greater payment than detailed elsewhere in these documents.
 - b. Equipment specified but never supplied, or broken equipment not repaired or replaced: 125% of the rental value of equipment in non-conformance (i.e. non-working decontamination trailer, hand wash facilities, air filtration units, etc.). Environmental issues: 125% of the

estimate of compliance. *The cost of items 4.a. above is calculated by damage estimates. The cost of equipment will be the rental charge from a reputable local dealer with 35% extra, being for operation cost. Cost of environmental compliance is the estimated cost of compliance. In no situation will the Owner assume liability.

- F. Costs of failed observations as defined in the Technical Specifications, are the responsibility of the Contractor. Owner will pay Engineer and recover costs by Set-off to the Contractor.
- G. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- H. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense. (See Hold Points in Specifications.)

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective. **With coatings it is recognized that removing topcoat will damage underlying coats. Repair and recoat per directive of Engineer.**
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the observation and/or inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable Set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept defective Work, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable Set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the coating, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable Set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.
- D. Article 14.05 will be used only where applicable, such as insulation over fill pipe, work that can be viewed after it is uncovered. These paragraphs do not apply to coating because "uncovering" the topcoat will subsequently damage the underlying coatings. With coating removal, all work will be considered defective and Paragraph Article 14.05.C.1 shall apply. Article 14.05.C.2 shall not be used with coating removal.

14.06 *Owner, Engineer/RPR May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.
- B. *Engineer/RPR may stop work if continued Work would result in the Contractor covering defective Work, or if continued operations will result in an environmental incident. Engineer/RPR's authority to stop Work ceases after notification of Owner and sufficient time for Owner to issue directives or to appear on site. (See 14.06 A)*

14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as Set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all Engineer's fees and Owner's expenses, costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress

payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.

B. *Applications for Payments:* Contractor is not required to apply for monthly payments. If they choose, they may submit a final pay request only. If they want interim payment then the protocol of paragraph 15.01 shall be followed.

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
2. Engineer will consider that material stored on-site has no value until properly applied. Engineer will not recommend payment for materials in storage.
3. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.4.

C. *Review of Applications:*

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. If Contractor fails to submit required documentation material with application for payment, Engineer will notify Contractor of missing documents. If after second submittal material is still missing, Engineer may submit pay application to Owner withholding all moneys relative to missing data, or to contact Contractor again. Contractor is responsible for all increased engineering costs to the Owner as a Set-off after second submittal.
3. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated.
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of

- quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
- c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
4. By recommending any such payment Engineer will represent that:
 - a. observations made to check the quality or the quantity of the Work as it has been performed have been completed per conditions and limitations of Article 10 and Engineer Owner contract.
 - b. there may be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
 5. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
 6. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.3.
 7. Engineer will recommend reductions in payment (Set-Off) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement.
 - b. the Contract Price has been reduced by Change Orders.
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04.
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.
 - f. Reasonable evidence that the work cannot be completed for the unpaid balance of the contract sum.

- g. Reasonable evidence that the work cannot be completed within the contract time, or;
- h. Damage to Owner or another Contractor.
- i. Persistent failure to carry out the work in accordance with the Contract Documents.
- j. Amount withheld to complete work calculated at cost of hiring another Contractor to complete work in case of default.
- k. Legal claims have been made, or Engineer has reasonable knowledge of anticipated claims.

D. *Payment Becomes Due:*

- 1. Thirty days, or Owner's normal check processing schedule, after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner Set-Off) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner:*

- 1. In addition to any reductions in payment (Set-Off) recommended by Engineer, Owner is entitled to impose a Set-off against payment based on any of the following:
 - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement.
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site.
 - c. Contractor has failed to provide and maintain required bonds or insurance.
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible.
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to complete field observations that were determined to be a failed observation.
 - f. the Work is defective, requiring correction or replacement including additional inspection costs.
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04.
 - h. the Contract Price has been reduced by Change Orders.

- i. an event that would constitute a default by Contractor and therefore justify a termination for cause.
 - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work.
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens.
 - l. other items entitling Owner to a Set-off against the amount recommended.
2. If Owner imposes any Set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

15.03 Substantial Completion

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. On coating projects, the date of Substantial Completion is the date the structure is, or would have been returned to service, except for voluntary delay by Owner. Date of Substantial Completion is after complete cure, disinfection, and testing. A voluntary delay by Owner in filling the structure does not extend the Substantial Completion Date. Note that this section does not apply to non-coating project.
- C. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
 1. If some or all of the Work has been determined not to be at a point of Substantial Completion and will require re-inspection or re-testing by

Engineer, the cost of such re-inspection or re-testing, including the cost of time, travel and living expenses, will be paid by Contractor to Owner. If Contractor does not pay, or the parties are unable to agree as to the amount owed, then Owner may impose a reasonable Set-off against payments due under this Article 15.

- D. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 Partial Use or Occupancy

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through F for that part of the Work.
 - 2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto. **Note: If an item on the punch list interferes with return of structure to service, then the structure cannot be considered Substantially Complete.**

15.05 Final Inspection

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 Final Payment

A. Application for Payment:

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, and other documents, Contractor may make application for final payment.
2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents.
 - b. consent of the surety, if any, to final payment.
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects or will so pass upon final payment.
 - d. a list of all duly pending Change Proposals and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
 - f. **A complete Submittal of Application for Final Payment fulfills all requirements and terminates the Liquidated Damages that may be assessed against Ready for Final Payment date.**

B. Engineer's Review of Application and Acceptance:

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment

and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any Set-Off against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give notice to Owner and Contractor that the Work is completed, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

- C. *Completion of Work*: The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment. Contractor is responsible for security, safety, etc. on the site until all his equipment is removed and all keys are returned.
- D. *Final Payment Becomes Due*: Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall Set-off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to Set-Off for liquidated damages and Set-offs allowed under the provisions of this Contract with respect to payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 Waiver of Claims

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim, appeal under the provisions of Article 17, Set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

15.08 Correction Period

- A. If within **thirteen months** after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such other adjacent areas.

2. correct such defective Work.
 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B. [Notice by email is sufficient if made to designated contact person in Bid/Agreement Form. Notice may be from Engineer if requested by Owner.](#)
- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay. [Notice of Claim may also be made to the bonding company and will include requirement that the Maintenance Bond remain in effect.](#)
- D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, [where the repair or replacement is for a specific item or exceeds 10% of the surface area of coating, then a new](#) correction period with respect to such Work [only](#) will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

16.01 Owner May Suspend Work

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be

resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule).
 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents.
 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 4. Contractor's repeated disregard of the authority of Owner or Engineer.
 5. **When, in the opinion of the Engineer, the Non-Conformance Reports and daily reports indicate the Contractor is unable or unwilling to complete the contract within the terms of the contract.**
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable Performance Bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses,

and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any Payment Bond or Performance Bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a Performance Bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.
- H. Because of health, safety, and security concerns, this contract requires prequalification of Contractors. Termination procedures in this General Conditions are part of this contract. The bonding surety when taking over this Contract is required to complete work with an alternate prequalified Contractor.

16.03 *Owner May Terminate For Convenience*

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work.
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days

after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 Methods and Procedures

- A. *Disputes Subject to Final Resolution*: The following disputed matters are subject to final resolution under the provisions of this Article:
1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents and arising after final payment has been made.
- B. *Final Resolution of Disputes*: For any dispute subject to resolution under this Article, Owner or Contractor may:
1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
 2. agree with the other party to submit the dispute to another dispute resolution process; or
 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.
 4. For any matter subject to final resolution under this Article, the prevailing party shall be entitled to an award of its attorneys' fees incurred in the final resolution proceedings, in an equitable amount to be determined in the discretion of the court, arbitrator, arbitration panel, or other arbiter of the matter subject to final resolution, taking into account the parties' initial demand or defense positions in comparison with the final result.

ARTICLE 18 - MISCELLANEOUS

18.01 Giving Notice

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.
 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.03 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.04 *No Waiver*

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.05 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.06 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.07 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.08 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.09 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SECTION 00 73 00
SUPPLEMENTARY CONDITIONS
OF THE CONSTRUCTION CONTRACT

Prepared By



Modified by



DIXON C-800 (2018),
SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION
CONTRACT

This document was prepared using the guidelines for Supplemental Conditions prepared by the EJCDC (Document Committee). They have been edited to supplement General Conditions prepared by DIXON and are referred to as DIXON General Conditions 2018. In those documents DIXON merged all applicable supplemental conditions with the general conditions where appropriate. Issues that may change on a project-to-project basis were removed from the general conditions and placed in their entirety in the Supplementals. Items like Insurance where the Owner has to approve all of the Insurance paragraphs, not just those usually located in the supplemental. Electronic Document Transmittal (EDT) was also moved to the Supplemental.

TABLE OF CONTENTS
SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION
CONTRACT

The purpose for moving certain paragraphs to these Supplemental General Conditions is because those paragraphs change more than average or require supplementing. Contractor as Bidder is still required to read General Conditions prior to submitting bid.

ARTICLE 1 – Definitions and Terminology	1
ARTICLE 2 – Preliminary Matters Par 2.06 moved from General Conditions	1
ARTICLE 3 – Contract Documents : Intent, Requirements, Reuse	5
ARTICLE 4 – Commencement and Progress of the Work.....	5
ARTICLE 5 – Site, Subsurface and Physical Conditions, Hazardous Environmental Conditions	5
ARTICLE 6 – Bonds and Insurance	5
ARTICLE 7 – Contractor’s Responsibilities	11
ARTICLE 8 – Other Work at the Site	11
ARTICLE 9 – Owner’s Responsibilities	11
ARTICLE 10 – Engineer’s Status During Construction.....	11
ARTICLE 11 – Changes to the Contract	11
ARTICLE 12 – Claims	11
ARTICLE 13 – Cost of Work; Allowances, Unit Price Work	12
ARTICLE 14 – Tests and Inspections; Correction, Removal, or Acceptance of Defective Work	12
ARTICLE 15 – Payments to Contractor, Set-Offs; Completions; Correction Period	12
ARTICLE 16 – Suspension of Work and Termination	12
ARTICLE 17 – Final Resolutions of Disputes	12
ARTICLE 18 – Miscellaneous.....	12

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

These Supplementary Conditions amend or supplement DIXON 2018 Standard General Conditions of the Construction Contract. The General Conditions remain in full force and effect except as amended.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added—for example, “Paragraph SC-4.05.”

ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

No Supplementary Conditions in this Article.

ARTICLE 2 - PRELIMINARY MATTERS

2.06 *Electronic Transmittals – Moved from Paragraph SC 2.06*

A. The parties shall conform to the following provisions in Paragraphs 2.06.B and 2.06.C, together referred to as the Electronic Documents Protocol (“EDP” or “Protocol”) for exchange of electronic transmittals. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.

B. *Electronic Documents Protocol*

Delete paragraphs 2.06.B through 2.06.D from the General Conditions

1. Basic Requirements - Include Project Engineer in this Protocol.

- a. To the fullest extent practical, the parties agree to and will transmit and accept Electronic Documents in an electronic or digital format using the procedures described in this Protocol. Use of the Electronic Documents and any information contained therein is subject to the requirements of this Protocol and other provisions of the Contract.
- b. The contents of the information in any Electronic Document will be the responsibility of the transmitting party.
- c. Electronic Documents as exchanged by this Protocol may be used in the same manner as the printed versions of the same documents that are exchanged using non-electronic format and methods, subject to the same governing requirements, limitations, and restrictions, set forth in the Contract Documents.
- d. Except as otherwise explicitly stated herein, the terms of this Protocol will be incorporated into any other agreement or subcontract between a party and any third party for any portion of the Work on the Project, or any Project-related services, where that third party is, either directly or indirectly, required to exchange Electronic Documents with a party or with

Engineer. Nothing herein will modify the requirements of the Contract regarding communications between and among the parties and their subcontractors and consultants.

- e. When transmitting Electronic Documents, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the receiving party's use of software application packages, operating systems, or computer hardware differing from those established in this Protocol.
- f. Nothing herein negates any obligation 1) in the Contract to create, provide, or maintain an original printed record version of Drawings and Specifications, signed and sealed according to applicable Laws and Regulations; 2) to comply with any applicable Law or Regulation governing the signing and sealing of design documents or the signing and electronic transmission of any other documents; or 3) to comply with the notice requirements of Paragraph 18.01 of the General Conditions.

2. *System Infrastructure for Electronic Document Exchange*

- a. Each party will provide hardware, operating system(s) software, program software, internet, e-mail, and large file transfer functions ("System Infrastructure") at its own cost and sufficient for complying with the EDP requirements. With the exception of minimum standards set forth in this EDP, and any explicit system requirements specified by attachment to this EDP, it is the obligation of each party to determine, for itself, its own System Infrastructure.
 - 1) The maximum size of an email attachment for exchange of Electronic Documents under this EDP is ten (10) MB. Attachments larger than that may be exchanged using large file transfer functions or physical media.
 - 2) Each Party assumes full and complete responsibility for any and all of its own costs, delays, deficiencies, and errors associated with converting, translating, updating, verifying, licensing, or otherwise enabling its System Infrastructure, including operating systems and software, for use with respect to this EDP.
- b. Each party is responsible for its own system operations, security, back-up, archiving, audits, printing resources, and other Information Technology ("IT") for maintaining operations of its System Infrastructure during the Project, including coordination with the party's individual(s) or entity responsible for managing its System Infrastructure and capable of addressing routine communications and other IT issues affecting the exchange of Electronic Documents.
- c. Each party will operate and maintain industry-standard, industry-accepted, ISO-standard, commercial-grade security software and systems that are intended to protect the other party from: software viruses and other malicious software like worms, trojans, adware, malware; data breaches;

loss of confidentiality; and other threats in the transmission to or storage of information from the other parties, including transmission of Electronic Documents by physical media such as CD/DVD/flash drive/hard drive. To the extent that a party maintains and operates such security software and systems, it shall not be liable to the other party for any breach of system security.

- d. In the case of disputes, conflicts, or modifications to the EDP required to address issues affecting System Infrastructure, the parties shall cooperatively resolve the issues; but, failing resolution, the Owner is authorized to make and require reasonable and necessary changes to the EDP to effectuate its original intent. If the changes cause additional cost or time to Contractor, not reasonably anticipated under the original EDP, Contractor may seek an adjustment in price or time under the appropriate process in the Contract.
- e. Each party is responsible for its own back-up and archive of documents sent and received during the term of the contract under this EDP, unless this EDP establishes a Project document archive, either as part of a mandatory Project website or other communications protocol, upon which the parties may rely for document archiving during the specified term of operation of such Project document archive. Further, each party remains solely responsible for its own post-Project back-up and archive of Project documents after the term of the Contract, or after termination of the Project document archive, if one is established, for as long as required by the Contract and as each party deems necessary for its own purposes.
- f. If a receiving party receives an obviously corrupted, damaged, or unreadable Electronic Document, the receiving party will advise the sending party of the incomplete transmission.
- g. The parties will bring any non-conforming Electronic Documents into compliance with the EDP. The parties will attempt to complete a successful transmission of the Electronic Document or use an alternative delivery method to complete the communication.

C. Software Requirements for Electronic Document Exchange; Limitations

- 1. Each party will acquire the software and software licenses necessary to create and transmit Electronic Documents and to read and to use any Electronic Documents received from the other party (and if relevant from third parties), using the software formats required in this section of the EDP.
 - a. Prior to using any updated version of the software required in this section for sending Electronic Documents to the other party, the originating party will first notify and receive concurrence from the other party for use of the updated version or adjust its transmission to comply with this EDP.
- 2. The parties agree not to intentionally edit, reverse engineer, decrypt, remove security or encryption features, or convert to another format for modification purposes any Electronic Document or information contained therein that was

transmitted in a software data format, including Portable Document Format (PDF), intended by sender not to be modified, unless the receiving party obtains the permission of the sending party or is citing or quoting excerpts of the Electronic Document for Project purposes.

3. Software and data formats for exchange of Electronic Documents will conform to the following requirements, including software versions, if listed:

Item	Electronic Documents	Transmittal Means	Data Format	Note (1)
a.1	General communications, transmittal covers, meeting notices and responses to general information requests for which there is no specific prescribed form.	Email	Email	
a.2	Meeting agendas, meeting minutes, RFI's and responses to RFI's, and Contract forms.	Email w/ Attachment	PDF	(2)
a.3	Contactors Submittals (Shop Drawings, "or equal" requests, substitution requests, documentation accompanying Sample submittals and other submittals) to Owner and Engineer, and Owner's and Engineer's responses to Contractor's Submittals, Shop Drawings, correspondence, and Applications for Payment.	Email w/ Attachment	PDF	
a.4	Correspondence; milestone and final version Submittals of reports, layouts, Drawings, maps, calculations and spreadsheets, Specifications, Drawings and other Submittals from Contractor to Owner or Engineer and for responses from Engineer and Owner to Contractor regarding Submittals.	Email w/ Attachment or LFE	PDF	
a.5	Layouts and drawings to be submitted to Owner for future use and modification.	Email w/ Attachment or LFE	DWG	
a.6	Correspondence, reports and Specifications to be submitted to Owner for future word processing use and modification.	Email w/ Attachment or LFE	DOC DOCX	
a.7	Spreadsheets and data to be submitted to Owner for future data processing use and modification.	Email w/ Attachment or LFE	XLS XLSX	
a.8	Database files and data to be submitted to Owner for future data processing use and modification.	Email w/ Attachment or LFE	DB	
Notes				
(1)	All exchanges and uses of transmitted data are subject to the appropriate provisions of Contract Documents.			
(2)	Transmittal of written notices is governed by Paragraph 18.01 of the General Conditions.			
Key				
Email	Standard Email formats (SMTP). Do not use stationery formatting or other features that impair legibility of content on screen or in printed copies			
LFE	Agreed upon Large File Exchange method (FTP, CD, DVD, Flash Drive, File Sharing Services)			
PDF	Portable Document Format readable by Adobe® Acrobat Reader Current Version			

DWG	Autodesk® AutoCAD .dwg format Version 2016-2025
DOC	Microsoft® Word Office 97-Office 2021 (Office 2007)
EXC	Microsoft® Excel Office 97-Office 2021 (Office 2007)
DB	Microsoft® Access .mdb format Version 2013 or later

ARTICLE 3 – CONTRACT DOCUMENTS INTENT, REQUIREMENTS, REUSE

No Supplementary Conditions in this Article.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

No Supplementary Conditions in this Article.

ARTICLE 5 – SITE, SUBSURFACE AND PHYSICAL CONDITIONS, HAZARDOUS ENVIRONMENTAL CONDITIONS

SC-5.03 *Subsurface and Physical Conditions*

- A. There are no known technical data or drawings available for this site.

SC-5.06 *Hazardous Environmental Conditions*

- A. There are no known reports or site conditions which would or could indicate that the site is a hazardous environmental site.

ARTICLE 6 – BONDS AND INSURANCE

SC-6.02 *Insurance—General Provisions*

- A. Contractor shall obtain and maintain insurance as required in this Article of the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. All companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better. Insurance Companies must, in addition to State license, be incorporated and originating from within the United States. Offshore companies or internet companies are not acceptable. Contractor may obtain worker’s compensation insurance from an insurance company that has not been rated by A.M. Best, provided that such company (a) is domiciled in the state in which the Project is located, (b) is certified or authorized as a worker’s compensation insurance provider by the appropriate state agency, and (c) has been accepted to provide worker’s compensation insurance for similar projects by the state within the last 12 months.
- C. Alternative forms of insurance coverage, including but not limited to self-insurance and “Occupational Accident and Excess Employer’s Indemnity Policies,” are not sufficient to meet the insurance requirements of this Contract.
- D. Contractor shall deliver to Owner, with copies to each named insured and additional insured, minimum three (3) copies (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies

- of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- E. Failure of Owner to demand such certificates or other evidence of the Contractor's full compliance with these insurance requirements, or failure of Owner to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the Contractor's obligation to obtain and maintain such insurance.
 - F. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.
 - G. If Contractor does not purchase or maintain all of the insurance at the specified level by the Contract, Contractor shall notify Owner in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
 - H. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate Set-off against payment for any associated costs, and exercise Owner's termination rights under Article 16 of the General Conditions.
 - I. Without prejudice to any other right or remedy, if Contractor has failed to obtain or maintain required insurance, Owner may elect to obtain equivalent insurance to protect Owner's interests at the expense of the Contractor who was required to provide such coverage, and the Contract Price shall be adjusted accordingly with a Set-off.
 - J. Contractor shall require:
 - 1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and DIXON (and any other individuals or entities identified in these Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
 - 2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
 - K. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.
 - L. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability, or that of its subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract.
 - M. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the Contractor. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

- N. All policies apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable

SC-6.03 Contractor's Insurance

Insurance requirements are given in the attachment sample "Certificate of Liability Insurance".

Contractor waives all rights against Owner and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.

- A. Required Insurance: Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.
1. *Workers' Compensation and Employer's Liability*: Contractor shall purchase and maintain workers' compensation and employer's liability insurance, including, as applicable, stop-gap employer's liability coverage for monopolistic state, claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees.
 2. *Commercial General Liability*
 - a. *Claims Covered*: Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against claims for
 - 1) Damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employee
 - 2) Damages insured by reasonably available personal injury liability coverage, and
 - 3) Damages because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
 - b. *Form and Content*: Contractor's commercial liability policy must be written on a 1996 (or later) Insurance Services Organization, Inc. (ISO) commercial general liability form (occurrence form) and include the following coverages and endorsements:
 - 1) Products and completed operations coverage.

- Such insurance must be maintained for three years after final payment.
 - Contractor shall furnish Owner and each other additional insured (as identified in these Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter. Insurance shall remain in place as specified but delivery of Certificates of Insurance submittal for three years only required if specified here in the Supplemental Conditions.
- c. *Excluded Content:* The commercial general liability insurance policy, including its coverages, endorsements, and incorporated provisions, must not include any of the following:
- Any modification of the standard definition of “insured contract”
 - Any exclusion for water intrusion or water damage.
 - Any provisions resulting in the erosion of insurance limits by defense costs other than those already incorporated in ISO form CG 00 01
 - Any exclusion of coverage relating to earth subsidence or movement.
 - Any exclusion for the insured’s vicarious liability, strict liability, or statutory liability (other than worker’s compensation)
 - Any limitation or exclusion based on the nature of Contractor’s work.
3. *Automobile Liability:* Contractor shall purchase and maintain automobile liability insurance for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy must be written on an occurrence basis.
4. *Umbrella or Excess Liability:* Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer’s liability, commercial general liability, and automobile liability insurance described in the Paragraphs above. The coverage afforded must be at least as broad as that of each and every one of the underlying policies.
5. *Using umbrella or excess liability insurance to meet Contractor’s General Liability and other policy limit requirements:* Contractor may meet the policy limits specified for employer’s liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policy’s policy limits and partial attribution of the policy limits of an umbrella or excess liability policy that is at least as broad in coverage as that of the underlying policy, as specified herein. If such umbrella or excess liability policy was required under this contract, at a specified minimum policy limit, such umbrella or excess policy must retain a minimum limit of the specified amount after accounting for partial attribution of its limits to underlying policies, as allowed above.
- B. *Additional Insureds:* The Contractor’s commercial general liability, automobile liability, employer’s liability, umbrella or excess, and unmanned aerial vehicle liability policies, if required by this Contract, must:
1. Include and list as additional insureds Owner and DIXON, and any individuals or entities identified as additional insureds in the Supplementary Conditions.
 2. Include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds.

3. Afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);
4. Not seek contribution from insurance maintained by the additional insured; and
5. As to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

SC-6.04 *Builder's Risk and Other Property Insurance*

- A. **Builder's Risk:** Unless otherwise provided in these Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.
- B. **Property Insurance for Facilities of Owner Where Work Will Occur:** Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined.
- C. **The builder's risk insurance must be written on a builder's risk "all risk" policy form that at a minimum includes insurance for physical loss or damage to the Work. Material in storage or transit is at risk and protected as Contractor determines. The Owner does not take responsibility for storage, transit or while on site until installed. The policy may or the Contractor may self-insure for vandalism and malicious mischief; debris removal; and water damage (other than that caused by flood).**
 1. Such policy will include an exception that results in coverage for ensuing losses from physical damage or loss with respect to any defective workmanship, methods, design, or materials exclusions.
 2. Policy shall allow
 - a. for the waiver of the insurer's subrogation rights, as set forth in this Contract.
 - b. allow for partial occupancy or use by Owner by endorsement, and without cancellation or lapse of coverage.
 - c. be maintained in effect until the Work is complete, as set forth in Paragraph 15.06.D of the General Conditions, or until written confirmation of Owner's procurement of property insurance following Substantial Completion, whichever occurs first
 - d. either insure or self-insure for all "soft cost" losses, the Owner is not responsible for Soft Losses which result from an insurable event.
- D. **Contractor's failure to submit an "All Risk" policy form of the Builder's Risk Policy will be taken as an affirmation that the Contractor is self-insuring all risks and responsibilities listed in Article SC 6.04 Builders Risk and Other Property Insurance.**
 1. The Owner reserves the right to require verification that Contractor has the financial ability to self-insure Builder's Risk, including review of corporate financial statements.

SC-6.05 Property Losses; Subrogation

- A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04, will contain provisions to the effect that in the event of payment of any loss or damage the insurer or self-insured will have no rights of recovery against any insureds thereunder, or against DIXON or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.
 - 1. Contractor waives all rights against Owner and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.
- C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.
- D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.
- E. Failure of Contractor, if self-insured, to make appropriate payments for reparations will result in equitable Set-off by Owner.

SC-6.06 Receipt and Application of Property Insurance Proceeds

- A. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

SC-6.07 Indemnification moved from GC-7.18. Contractor is advised that the Owner may have made changes.

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself),

including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.

- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph SC 6.07.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

SC-7.13 Safety and Protection

- M. An Owner supplied Safety Program may be included in as a Contract Requirement. If such a Program is required, the intent is that the requirements of the Owner meet every Federal, State, and local safety laws. The Owner's Safety Program is intended to supplement the Contractor's Safety Program. All requirements of the Owner's Safety Program shall be followed.

SC-7.16 Submittals

- A. 4. A sample of the Owner's/Engineer's Submittal Checklist is included as an attachment. The checklist is intended for Engineers use, but is included as a reference for the Contractor. Contractor submittals are to include all items requested in the Technical Specifications whether listed in the Submittal Checklist or not.

ARTICLE 8 – OTHER WORK AT THE SITE

SC-8.02 Coordination

If there is other Work to be completed it will be discussed in Section 00 00 40 Project Explanation of the Specifications.

ARTICLE 9 – OWNER'S RESPONSIBILITIES

No Supplementary Conditions in this Article.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

No Supplementary Conditions in this Article.

ARTICLE 11 – CHANGES TO THE CONTRACT

No Supplementary Conditions in this Article.

ARTICLE 12 – CLAIMS

No Supplementary Conditions in this Article.

ARTICLE 13 – COST OF WORK; ALLOWANCES, UNIT PRICE WORK

No Supplementary Conditions in this Article.

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

No Supplementary Conditions in this Article.

ARTICLE 15 – PAYMENTS TO CONTRACTOR, SET-OFFS; COMPLETIONS; CORRECTION PERIOD

No Supplementary Conditions in this Article.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

No Supplementary Conditions in this Article.

ARTICLE 17 – FINAL RESOLUTIONS OF DISPUTES

No Supplementary Conditions in this Article.

ARTICLE 18 – MISCELLANEOUS

No Supplementary Conditions in this Article.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

Current

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Contractor's Insurance Agency	CONTACT NAME: Contractor's Insurance Agent Contract Information	
	PHONE (A/C, No. Ext):	FAX (A/C, No):
INSURED Contractor Information	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	
	INSURER A: Insurer must have an AM Best rating of A- and FSC	
	INSURER B: Class of VII or higher	
	INSURER C: Please Provide NAIC Numbers	
	INSURER D: (Specific carrier names must be listed) including	
INSURER E:		
INSURER F:		
NAIC #		

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						EACH OCCURRENCE	\$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 500,000
							MED EXP (Any one person)	\$ 15,000
							PERSONAL & ADV INJURY	\$ 1,000,000
							GENERAL AGGREGATE	\$ 5,000,000
							PRODUCTS - COMP/OP AGG	\$ 2,000,000
								\$
	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
							BODILY INJURY (Per person)	\$
							BODILY INJURY (Per accident)	\$
							PROPERTY DAMAGE (Per accident)	\$
								\$
	<input checked="" type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB DED RETENTION \$						EACH OCCURRENCE	\$ 2,000,000
							AGGREGATE	\$ 5,000,000
								\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						<input checked="" type="checkbox"/> WC STATUTORY LIMITS	OTHER
							E.L. EACH ACCIDENT	\$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	\$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Note that the Owner, it's officers, directors, and employees, and Dixon Engineering Inc. employees are to be added as Additional Insureds.

CERTIFICATE HOLDER**CANCELLATION**

Owner Information	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

SECTION 00 83 00
SUBMITTALS

PART 1 - GENERAL

1.01 GENERAL

- A. This Section 00 83 00 is comprised mostly of Articles taken from the General Conditions Section 00 72 00. If items concerning Submittals are still found in the General Conditions:
 - 1. And the items are not in conflict with any Item in this section, those remaining items are still in effect and are a requirement of this Contract.
 - 2. Where the remaining item may be in conflict with Articles in this Section, the Articles in this Section shall govern.
- B. Dixon has developed a Proprietary Construction Observation Computer program. That process is dependent upon completion of the Submittal Review process prior to scheduling of the Preconstruction Conference.
- C. Submittals include:
 - 1. Permits, as required by the Contract Documents. Submittal is required but will not be reviewed by the Engineer. Submitted Permits will be forwarded to the Owner. No further Contractor Responsibility for Permits will be required, nor discussed in the Section.
 - 2. Submittal Requirements and Responsibilities – Article 3.02 applies to all Submittals.
 - 3. Additional requirements per specific submittal type – Article 3.03
 - a. Shops, including Coating manufacturer Data sheets, and drawings – Article 3.03A
 - b. Samples Article 3.03 B
 - c. Proposed “or equal” or proposed as Substitute – Article 3.03 C
 - d. Delegation of Professional Design Services – Article 3.03 D
 - e. Submittals Other than Shop Drawings, Samples, “or equals”/Substitutions and the Owner-Delegated Designs Article 3.03 E
- D. Review of Submittals follow the same format:
 - 1. Review Procedures – Article 3.04 applies to all Submittals.
 - 2. Additional Review Procedures per specific submittal type – Article 3.05
 - a. Shops, including Coating manufacturer Data sheets and drawings – Article 3.05 A
 - b. Samples Article 3.05 B
 - c. Proposed “or equal” or proposed as Substitute – Article 3.05 C
 - d. Delegation of Professional Design Services – Article 3.05 D

- e. Submittals Other than Shop Drawings, Samples, “or equals”/Substitutions and the Owner-Delegated Designs Article 3.05 F

PART 2 – NOT APPLICABLE

PART 3 - EXECUTION

3.01 SUBMITTAL of CONSTRUCTION SCHEDULES

A. Schedules:

1. Progress Schedule: complete per Article 2 of the General Conditions – to be updated as Project progresses.
2. Final Schedule of Values – Submitted with Bid.
3. Submittal Schedule complete per Article 2, and this Section 00 83 00 (Submittal Schedule Form included at end of this Section.)

B. Acceptance of Schedules – per Article 2 of General Conditions Section 00 72 00

3.02 SUBMITTAL PROCEDURES

A. Includes documentation concerning Compliance with Products to be used. Submittals include Shops – drawings and manufacturers data, Samples, proposed Substitutes and “Or Equals”, the Owner Delegated Designs, and other requires Submittals, excluding Schedules. The following submittal requirements shall apply to Resubmittals where appropriate, as determined by the Engineer.

B. Contractor’s Responsibilities: Submittal Requirements and Responsibilities applies to all Submittals.

1. Include all required Submittals with the first submittal package and submit in electronic PDF format to the Engineer’s office. The first submittal, even if incomplete is to be considered a submittal, submittal of remaining material will count as second submittal. Contractor responsible for costs for Submittals after second package is submitted.
2. Be responsible for the accuracy and completeness with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data of the information contained in each submittal and shall assure that the material, equipment, or method of work shall be as described in the submittal.
3. Verify that the material and equipment described in each submittal conform to the requirements of the specifications and drawings.
4. Be responsible to check and verify all field measurements, all dimensions on shop drawings and all time coordination required for the work of all the various trades.
5. Give the Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents.

6. Submittals shall only be submitted by the Contractor and not by Suppliers or Subcontractors.
7. Submittals shall be submitted promptly and prior to Scheduling of the Preconstruction Conference. Where a Submittal is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to the Engineer's review and approval of the pertinent submittal, will be at the sole expense and responsibility of the Contractor, and removal of Work may be required.
8. If specified item is no longer reasonably available due to disconnection of manufacturing, embargos or other supply issues, an increase in price of the item will not be considered by the Engineer. The Contractor shall contact the Engineer for directions on proceeding.

3.03 CONTRACTOR SPECIFIC REQUIREMENTS and RESPONSIBILITIES for SPECIFIC SUBMITTALS

- A. Contractor Specific Requirements and Responsibilities for Shops including Manufacturer's Data Sheets.
 1. Exception to Article 3.02.A.6 and 7. Alternate Submittal Process, the Engineer has allowed submittals regarding coating and coating related material to be sent directly from Suppliers.
 - a. Material sent from supplier shall meet all of the requirements of this Section, including identification with Contractor's name and Project.
 - b. Submitted material from Supplier shall be copied to the Contractor.
 - c. The Contractor is responsible for submittal accuracy as if the Contractor had submitted the package directly to the Engineer themselves.
 - d. All submittals from Suppliers will be subject to review and processing as if submitted directly by the Contractor and subject to all of the same set-off liabilities.
- B. Contractor Specific Requirements and Responsibilities for Samples:
 1. Submit the number of Samples required in the Specifications.
 2. Clearly identify each Sample as to material, supplier, pertinent data such as catalog numbers, the use for which intended, and other data as the Engineer may require to enable the Engineer to review the submittal.
- C. Contractor Specific Requirements and Responsibilities for Substitutes – "Or Equals"
 1. The terms substitute and "or equal" shall be understood to mean the same, until it is determined that the item is not an "or equal." Then the term substitute shall apply.
 2. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a

particular supplier. Contractor shall base the Contract Price upon furnishing item as specified.

3. Contractor shall submit sufficient information as provided below to allow the Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor.
 4. The Engineer may require additional information.
 5. The Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than the Contractor.
 6. The requirements for review will be set forth by the Engineer as they decide appropriate for the specific substitution request.
 7. The Contractor shall make written application to the Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use.
- D. Contractor Specific Requirements and Responsibilities for Delegation of Professional Design Services.
1. The Owner may require the Contractor to provide professional design services for portion of the work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that the Contractor must furnish to the Engineer.
 2. The Standard of Care for all services performed or furnished by a professional under the Agreement will be the care and skill ordinarily used by members of this subject profession practicing under similar circumstances at the same time and in the same locality.
 3. Contractor shall require professional of such Owner Delegated Professional Design Services to add their signature and seal on all drawings, calculations, specifications, certifications, and submittals prepared by such design professional. Such design professional must issue all certifications of design requires by Laws and Regulations.
 4. The Owner and the Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and submittals prepared by such design professionals retained or employed by the Contractor under an Owner Delegated Design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.
- E. Contractor Specific Requirements and Responsibilities for Submittals other than shop drawings, samples, substitutes and Owner Delegated Designs.
1. Specific Requirements and Responsibilities for other Submittals will be detailed in the Section of technical Specifications for that item specifically.
 2. Unless stated otherwise in that Section of technical Specifications, all items detailed in Article 3.02.A. shall apply.

3.04 ENGINEER REVIEW

- A. Engineer's Review of submittals include Shops, Drawings and manufacturers data, Samples, Proposed Substitutes and "Or Equals", Owner Delegated Designs, and other required Submittals, excluding Schedules and Permits. The following Engineer's Review Procedures shall apply to Resubmittals where appropriate, as determined by the Engineer.
- B. Engineer's Review – applies to all Submittals:
1. Will determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.
 2. Will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 3. Will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
 4. The Engineer will be sole judge as to acceptability of a Submittal.
 5. Approval of a separate item will not indicate approval of the assembly in which the item functions.
 6. Approval of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change order.
 7. Stamp – the Engineer will provide timely review of Submittals in accordance with the Schedule of Submittals acceptable to the Engineer, within fourteen calendar days after receipt of Submittal package and Submittal Schedule and return the Submittal to the Contractor:
 - a. If the returned review indicates that the material, equipment or work method is in general conformance with the design concept, drawings and specifications, submittal copies will be marked "Review, No Exceptions Taken."
 - b. If the review indicates limited corrections are required, submitted copies will be marked "Reviewed, make Correction Noted."
 - c. If the review reveals that the submittal is insufficient or contains incorrect data, submitted copies will be marked "Rejected, Resubmit." The Contractor shall resubmit a corrected Submittal. If the review indicates that the material, equipment, or work method is not in general conformance with the drawings and specifications, copies of the submittal will be marked "Rejected, Resubmit."
 - d. If the review indicates that the material or equipment is not from an acceptable manufacturer, as indicated in the specifications, copies of the

submittal will be marked “rejected.’ Do not resubmit this submittal but resubmit a different and acceptable alternate submittal.

- e. If any such Submittal is not accepted, the Contractor shall confer with the Engineer regarding the reason for the non-acceptance and resubmit an acceptable document.
- f. Neither the Engineer’s receipt, review, acceptance, nor approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.

3.05 ENGINEER REVIEW SPECIFIC TO TYPE OF SUBMITTAL

A. Engineer’s Review Specific to Shops, Drawings, and Manufacturer’s data:

- 1. Shall not relieve the Contractor from responsibility for any variation from the requirements of the Contract Documents unless the Contractor has complied with the requirements of this Section and the Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. The Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.
- 2. Engineer’s approval:
 - a. Of a Shop Submittal shall not relieve the Contractor from responsibility for complying with the requirements of this Section. Or
 - b. Of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
- 3. The Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings, subject to the provisions of this Section.

B. Engineer’s review Specific to Samples:

- 1. The Engineer may require the Contractor to furnish additional data about the Sample and to obtain comments and direction from Owner.
- 2. The Engineer will be the sole judge of acceptability:

C. Engineer’s Review Specific to Substitutes – “Or Equals”:

- 1. The Engineer will be allowed additional reasonable amount of time to evaluate each “or-equal” request.
- 2. The Engineer may require the Contractor to furnish additional data about the proposed “or-equal” item and to obtain comments and direction from the Owner.
- 3. No “or-equal” item shall be ordered, furnished, installed, or utilized until the Engineer’s review is complete and the Engineer determines that the proposed item is an “or-equal,” which will be evidenced by an approved Shop Drawing or other written communication.

4. If the Engineer, in their sole discretion, determines that an item of material or equipment proposed by the Contractor is functionally equal to that named, and sufficiently similar so that no change in related Work will be required, the Engineer shall deem it an “or equal” item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if in the exercise of reasonable judgement, the Engineer determines that:
 - a. It is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics
 - b. It will reliability perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole.
 - c. It has a proven record of performance and availability of responsive service; and
 - d. It is not objectionable to the Owner.
5. The Contractor certifies that, if approved and incorporated into the Work the Submitted item will conform substantially to the detailed requirements of the item named in the Contract Documents.
6. Effect of Engineer’s Determination:
 - a. Neither approval nor denial of an “or-equal” request shall result in any change in Contract Price.
 - b. If the Engineer approves the substitution request, the Contractor shall execute the proposed Change Order and proceed with the substitution.
 - c. The Engineer’s denial of a substitution request shall be final and binding and may not be reversed through an appeal under any provision of the Contract Documents.
7. Contractor’s Expense:
 - a. The Contractor shall provide all data in support of any proposed “or equal” item at the Contractor’s expense.
 - b. Reimbursement of Engineer’s Cost: (Unless proprietary item specified is not available, with no consideration given to cost of said item). The Engineer will record the Engineer’s costs in evaluating a substitute proposed or submitted by the Contractor. Whether or not the Engineer approves a substitute so prosed or submitted by the Contractor, the Contractor shall reimburse the Owner (via Set-off) for the reasonable charges of the Engineer for evaluating each such proposed substitute. The Contractor shall also reimburse the Owner (via Set-off) for the reasonable charges of the Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with the Owner) resulting from the acceptance of each proposed substitute.

- i. The Engineer's minimum cost for reviewing a substitute will be \$1,000 lump sum (2 hours equivalent).
 - ii. If the Engineer exceeds two hours for review their rate will be \$500 per each additional or part of an hour.
 - 8. The Owner May require the Contractor to furnish at the Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. Engineer's Review Specific to Delegation of Professional Design Services:
 - 1. The Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by the Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - a. Checking for conformance with the requirements of this Section.
 - b. Confirming that the Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - c. Establishing that the design furnished by the Contractor is consistent with the design concept expressed in the Contract Documents.
- E. Engineer's Review Specific to Submittals Other than Shop Drawings, Samples, Substitutes and Owner-Delegated Designs.
 - 1. Determined by Submittal Requirements of specifications of pertinent Section of Technical Specifications.

3.06 RESUBMITTAL PROCEDURES AND POTENTIAL CONTRACTOR COSTS

- A. The Contractor shall make corrections required by the Engineer and shall return the required number of corrected copies of Shop Drawings and resubmit for review and approval. The Contractor shall direct specific attention in writing to revisions of previous submittals.
 - 1. All required resubmittals are also to be resubmitted as one package. Failure to do so will be considered reviewed and rejected.
 - 2. Follow all Submittal Procedure requirements of Article 3.02 above.
 - 3. The Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than two submittals.
- B. Engineer's review will per Article 3.04 and 3.05 above.
 - 1. Any resubmitted material (second submittal) that is rejected and that requires a resubmittal (a third and all subsequent submittals) shall:
 - a. Follow the same submittal Procedures and the Engineer Review Procedures.
 - b. The fees for review of the third submittal and all subsequent reviews will be the responsibility of the Contractor and are subject to Set-Off provisions.
 - 2. Should the Engineer be required to review a Submittal more than twice because of the Contractor's Submittal's failure to meet the requirements of the Contract Documents, the Engineer will record their time and expenses for performing all

additional reviews. The Engineer will record their time and expenses for performing all additional reviews of Shop Drawings, samples, or other item requiring approval, and the Contractor shall be responsible for the Engineer's charges to the Owner for such time. The Owner may impose a Set-off against payments caused by the Contractor to secure reimbursement for such charges.

3. Engineer's hourly rate for reviews of third and every subsequent review shall be \$1,000 Lump Sum for the first 2 hours and if more time is needed, then at \$500 for every, or part of hour over the initial 2 hours.
4. If the Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for the Engineer's charges to owner for their review time, (same fee schedules in B.3 above). The Owner may impose a Set-off against payments caused by the Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of the Contractor.

3.07 SCHEDULING PRECONSTRUCTION CONFERENCE

- A. After all submittal have been reviewed and approved, the Engineer will schedule the Preconstruction Conference at a time acceptable to the Owner, the Engineer, and the Contractor.

SUBMITTAL CHECKLIST

PROJECT: 400,000 Gallon Spheroid Rehabilitation

CONTRACTOR: _____

DIXON PROJECT MANAGER: _____

Specification Section	Title	Date Received	Date Reviewed	Accepted	Reviewed with Comments	Rejected
General Conditions	Progress Schedule					
Metal Repairs						
05 00 00	PDS and SDS - Welding Rod					
05 00 00	Welder's Certification					
05 00 00	PDS - Roof Hatch Gasket, PDS and SDS - Adhesive					
05 00 00	PDS - Vent Gasket					
05 00 00	PDS - Cathodic Clips and Pressure Fitting					
05 00 00	SDS - Joint Compound for Threaded Fittings and Rigging Couplings					
Steel Coating						
09 97 13	OSHA Safety and Health Program					
09 97 13	OSHA Safety Certifications for Site Personnel					
09 97 13	Designated OSHA Competent Person					
09 97 13	Fall Prevention Plan					
09 97 13	Site Specific Fall Prevention Plan					
09 97 13	Certifications for Spiders, Scaffolding, Stages, etc.					
09 97 13	SDS and PDS - Coatings, Thinners, Coating Additives, and Caulking					
09 97 13	SDS and PDS - Cleaners and Degreasers					
09 97 13	SDS and PDS - Chlorine					
09 97 13	SDS and PDS - Abrasives, Additives and Pretreatments					
Electrical Work						
16 05 01	Electrician Certifications or Electrical Sub-Contractor Name					
16 05 01	PDS - Aviation Light					
16 05 01	PDS and SDS - Light Bulbs					

**TABLE of CONTENTS
TECHNICAL SPECIFICATIONS**

Section 00 91 18 – Definitions for Technical Specifications1

Section 00 91 19.01 – Scheduling for RPR Services 2-7

Section 00 91 19.02 – Contractor’s Financial Responsibility for RPR..... 8-11

Section 01 50 00 – Temporary Construction Facilities and Utilities 12-14

Section 01 53 43 – Protection of Environment 15-18

Section 05 00 00 – Metal Repairs..... 19-24
 Drawing 01 Painter’s Rail Supports
 Drawing 02 Transition Cone Rigging Lug

Section 09 97 13 – Steel Coating 25-34

Section 09 97 13.10 – Steel Coating Surface Preparation..... 35-39

Section 09 97 13.19.01 – Dry Interior Steel Coating – Spot 2 Coat Epoxy 40-41

Section 09 97 13.24.11 – Exterior Steel Coating – 3 Coat Epoxy Urethane..... 42-43
 Overcoat

Section 09 97 23.23.01 – Concrete Foundation Coating – 2 Coat Epoxy44

Section 16 05 01 – Electrical Work..... 45-47

SECTION 00 91 18

DEFINITIONS FOR TECHNICAL SPECIFICATIONS

PART 1 – GENERAL

1.01 DEFINITIONS

- A. Wet Interior: Internal surfaces, excluding inaccessible areas, to the roof, shell, bottom, accessories, and appurtenances that are exposed to the stored water or its vapor. Examples are the interior of the roof, sidewall, transition cone, and exterior of the access tube within the tank.
- B. Dry Interior: Surfaces of the finished structure, excluding inaccessible areas, that are not exposed to the elemental atmosphere or the stored water or its vapor. Examples are the interior of the access tube, interior of the riser, and underside of the bowl above the riser.
- C. Exterior: External surfaces, excluding inaccessible areas, of the roof, sidewall, riser, accessories, and appurtenances that are exposed to the elemental atmosphere.
- D. Inaccessible Areas: Areas of the finished structure that, by virtue of the configuration of the completed structure, cannot be accessed to perform surface preparation or coating application (with or without the use of scaffolding, rigging, or staging). Inaccessible areas include such areas as the contact surfaces of roof plate lap joints, underside of roof plates where they cross supporting members, top surface of rafters directly supporting roof plates, contact surfaces of bolted connections, underside of column baseplates, contact surfaces of mating parts not intended to be removed or disassembled during routine operation or maintenance of the structure and inside of risers less than a nominal 36 in. diameter.
- E. Sidewall: Vertical walls to the weld seam of the roof.
- F. Access Tube: Cylindrical tube extending from top of the riser to the roof through the tank including all steel appurtenances (i.e., ladder, overflow pipe, brackets, etc.). There may be a transition cone that connects the bowl to the access tube
- G. Condensate Platform: Platform that covers entire area of the dry riser and used to collect and stop condensation from entering the basebell.
- H. Top Platform: Landing area directly under tank's access tube.
- I. Basebell: Conic surface that starts at the ground that supports the riser.
- J. Roof: Very top of the structure, including top seam of sidewall.
- K. Bottom: Lower area of the tank proper shaped like a bowl.
- L. Riser: Center support between the basebell and bowl.

SECTION 00 91 19.01
SCHEDULING FOR RPR SERVICES

PART 1 – COMMUNICATION

1.01 RESIDENT PROJECT REPRESENTATIVE (RPR) SERVICES

- A. DIXON provides three types of RPR services or any combination of the three:
1. Hold Point Site Visits (sometimes called Critical Phase Visits) where RPR Services are for defined Hold Point, where Work stops until that portion of Work is reviewed on Site by a professional RPR.
 2. Full Time RPR is a professional RPR staying in lodging away from home and living on per diem expenses.
 3. Daily RPR is a professional RPR living at home and traveling to Site on a daily basis.
 4. Based on the type of Project the RPR services may change from Daily or Full Time to Hold Point or from Hold Point to Daily or Full Time.
 5. Intended Beneficiary: The onsite observation services for this Project are for the benefit of the Owner. There are no intended benefits to the Contractor, or any other third parties. Contractor still provides quality control (QC).

1.02 HOLD POINT OBSERVATIONS AND MEETINGS

- A. Each Hold Point requires an onsite visit for Observation. Example: If the Contractor coats over, or otherwise makes Work inaccessible for Observation, the Work will be considered failed. Remove Work and recoat or repair in accordance with this specification. At least two (2) new Hold Points, surface preparation and coating, may be created when Work fails after the primer has been applied.
- B. Stop Work and schedule Observation times for the following Hold Points as a minimum. Additional Hold Points may be determined at the Preconstruction Meeting. Each Hold Point requires a Site visit and observation. Schedule of Hold Points – Preliminary:
1. Hold Point Meeting: The Preconstruction Meeting is the initial Hold Point. The Preconstruction Meeting will not be scheduled until five (5) days after all required submittals are received and reviewed by the Engineer and no exceptions are taken to the shop drawings.
 2. Hold Point - Prior to draining tank:
 - a. To ensure all Section of 01 50 00 and 01 53 43 environmental requirements are met.
 3. Hold Points – Section 05 00 00 – Metal Repairs:
 - a. To locate or quantify repairs as necessary.

- b. To review surface preparation prior to welding and review all products prior to installation.
- c. After welding is complete for quality assurance.
- 4. Hold Points – Sections 09 97 13 – Steel Coating and 09 97 13.10 Steel Coating Surface Preparation:
 - a. Prior to surface preparation to set the standard.
 - b. Prior to primer application to verify cleanliness, profile, thoroughness, and ambient conditions for coating application.
 - c. Prior to application of each successive coat for quality assurance and ambient conditions for the next coat.
 - d. Prior to application of the final coat to verify all non-conformance issues have been resolved.
 - e. Scheduled pre-final Observation: Allow engineer access to all locations so a complete punch list can be prepared. Final coat on ladders or other access points can be delayed until after this Observation and included as a punch list item.
 - f. Scheduled final Observation: After ALL punch list items have been completed (including painting ladders), provide access to all items on the punch list.
- 5. Hold Points – Section 16 05 00 - Electric Work:
 - a. Hold points will be included with welding and coating if applicable. No other hold points are included for this work, observation from an RPR can be performed after completion.

1.03 SCHEDULING FOR RPR SERVICES FOR HOLD POINT OBSERVATIONS

- A. Prior to First Observation 48 hours advance Notice is required
- B. All Subsequent Hold Points are to be scheduled by 6:00 P.M (Eastern Time) the previous day.
 - 1. Scheduling with a Central Contract Administrator. The names and phone numbers of a Contract Administrator and a Second Contract Administrator will be given to the Contractor during the Preconstruction Meeting.
- C. Scheduled observations are to be cancelled by 6:00 P.M (Eastern Time) the previous day.
- D. The Contract Administrator may be contacted by cell phone. If no answer a voice mail may be left with all details of RPR request included, or
- E. The Contract Administrator may be contacted by text to their cell phone.
- F. If the Contract Administrator is not available, DIXON’s Corporate Office may be contacted during regular working hours at 1-800-327-1578.
- G. Scheduling through a Project Manager is not an alternative.
- H. Scheduling through an RPR is not an alternative for Hold Point Observation.

1.04 SCHEDULING FOR RPR SERVICES FOR FULL TIME OR DAILY OBSERVATIONS

A. Productive Work

1. Do not start, continue, or complete any Productive Work if RPR is not present on the Project Site.
2. Productive Work includes, but is not limited to, all elements of abrasive blast cleaning, power washing, high pressure water jetting or high/low pressure water cleaning, power tool cleaning, rigging, painting, metal repairs, concrete repairs, punch list items, and clean-up.
3. Preparation, mobilization, containment erection, and other non-productive work does not require observation if completed before the structure is removed from service, nor does demobilization after tank is returned to service.
4. If containment erection is completed while other productive work progresses, then a RPR is required.
5. If welding is completed for contracted work (antenna rails, painter's rails, ladders, etc.) during containment erection welding, then contracted work is considered Productive Work and an RPR is to be present. Any spot painting during containment erection is also considered Productive Work.
6. After the Project has been completed and after all punch list items have been completed, cure time and site clean-up, excluding any waste coating or abrasive issues, are not considered Productive Work.
7. After the Project has been completed, complaints from Owner or neighbors concerning health, environmental, or damage issues, and any waste coating or waste abrasive issues, are considered Productive Work requiring a RPR even after the structure is returned to service.
8. Essentially all work completed between the out-of-service date and the Substantial Completion Date, excluding cure and disinfection, is considered Productive Work and requires the presence of a RPR.

1.05 SCHEDULING WITH A CENTRAL CONTRACT ADMINISTRATOR

- A. The Contract Administrator may be contacted by cell phone. If there is no answer, a voice mail may be left with all details of RPR request included, or
- B. The Contract Administrator may be contacted by text to their cell phone.
- C. If the Contract Administrator is not available, DIXON's Corporate Office may be contacted during regular working hours at 1-800-327-1578.
- D. Scheduling through a Project Manager is not an alternative.

1.06 SCHEDULING THROUGH ONSITE RPR

- A. Scheduling through an on-site RPR, completing Full Time or Daily RPR Services, may be considered a properly completed Request if completed by the Foreman and

RPR before leaving site. If it is not completed on site, then schedule through the Central Contract Administrator.

1.07 SUMMARY OF SCHEDULING HOLD POINT OBSERVATIONS

- A. Contract Administrator
 - 1. by phone
 - 2. by text
 - 3. by voice mail
- B. Second Contract Administrator
 - 1. by phone
 - 2. by text
 - 3. by voice mail
- C. Corporate Office during work hours
 - 1. by phone
 - 2. NO voicemail
- D. Do NOT contact Project Manager

1.08 SUMMARY OF SCHEDULING FOR FULL TIME OR DAILY OBSERVATIONS

- A. Contract Administrator
 - 1. by phone
 - 2. by text
 - 3. by voice mail
- B. Second Contract Administrator
 - 1. by phone
 - 2. by text
 - 3. by voice mail
- C. Corporate Office during work hours
 - 1. by phone
 - 2. NO voicemail
 - 3. RPR on site
- D. Do NOT contact Project Manager

1.09 CONTRACTOR'S RESPONSIBILITIES

- A. The Engineer and Owner are to have full access to the Site at reasonable times for their Observation, testing, and Contractor's personnel and equipment is to be available to the Owner and Engineer/RPR to expedite Observations. Provide Owner, Engineer/RPR proper and safe conditions for such access, including rigging, and advise them of Contractor's site safety procedures and programs so that they may comply as applicable.

- B. Contractor is responsible for all of Contractor's manpower needs and scheduling and work to be completed. RPR is to be available to expedite the Project and complete their services with minimal interference of the Contractor's Work. Successful Project completion is dependent on Contractor's proper scheduling and use of RPR services.
- C. The Contractor is financially responsible for efficient scheduling of RPR services, See Section 00 91 19.02.

1.10 DELAY IN ARRIVAL OF RPR

- A. RPRs for Hold Point, Full-Time or Daily observations may be delayed by traffic or other reason from arriving at the scheduled time. The Contractor is to contact the Contract Administrator immediately if the RPR has not arrived at the scheduled time.
- B. The Contract Administrator will locate the missing RPR, return to the Contractor with a revised arrival time, and discuss with the Contractor what other work can be completed until RPR arrives for Observation.

1.11 REJECTED DEFECTIVE WORK

- A. All Productive Work completed without an RPR present is to be considered Defective Work and rejected per the General Conditions. This includes work completed:
 - 1. Without proper scheduling an RPR
 - 2. Prior to the scheduled arrival of the RPR
 - 3. When Day has been scheduled as a No Workday
 - 4. When RPR is delayed, and Contract Administrator has not been notified.

1.12 NON-CONFORMANCE REPORTS (NCR)

- A. The RPR will issue a Non-Conformance Report for every performance item, material, or equipment supplied, and/or environmental situation that fails to meet the requirements of the specifications.
- B. All Work in non-conformance will be considered Defective Work to be replaced, repaired per terms of the General Conditions.
- C. Do not start Work until all required equipment and RPR are on-site.
- D. Immediately correct all environmental non-conformance to prevent an accident. If an incident has already occurred, contact the proper governmental environmental agency, and conduct an immediate clean-up per their direction.
- E. If the Nonconformance Report is issued because of equipment specified but not delivered, repaired, or replaced then the financial Set-off will be 140% * of the rental value of equipment in non-conformance (i.e., non-working decontamination trailer, hand wash facilities, air filtration units, etc.).
- F. If the Nonconformance Report issued is because of noncompliance with environmental equipment or practices, the Set-off will be 140%* of the estimated cost of compliance. *The costs of items E. and F. above are damage estimates. The cost

of equipment will be the rental charge from a reputable local dealer with 40% extra being for operation costs. Cost of environmental compliance is the estimated cost of compliance. The extra 40% is potential risk to the Owner for non-conformance. In no situation will the Owner assume liability.

- G. All additional Engineering/RPR expenses incurred because of a Non-Conformance Report is subject to Set-off by Owner.

SECTION 00 91 19 .02

CONTRACTOR'S FINANCIAL RESPONSIBILITY FOR RPR

PART 1 - PROGRESS SCHEDULE AND RPR SCHEDULE

1.01 GENERAL

- A. The Contractor is financially responsible for the proper and efficient use of RPR services.

1.02 PROGRESS SCHEDULE

- A. Per the General Conditions, a Progress Schedule is required to be submitted. At the Preconstruction Meeting the Contractor is to submit a preliminary Progress Schedule. This General Conditions of this Contract, as-bid, restricts Work to 40 hours/ 8 hours per day, 5 days per week. If the Owner has prior approved a more open schedule it is noted in the Project Summary. Whether prior approved in the Project Summary or not; a Progress Schedule more aggressive than Monday through Friday, regular working hours will require submittal and discussion at the Preconstruction Meeting.
- B. If the Owner, at the Preconstruction meeting, accepts a more aggressive schedule the Contractor is responsible for all of the Contractor's manpower scheduling and Critical Path Work to maintain the Schedule.
- C. The Contractor is to complete a minimum of 8 hours per day of Productive Work, which should be calculated into the Schedule.

1.03 HOLD POINTS AND RPR SERVICES

- A. Fees for Hold Point RPR Services are contracted with the Owner at a Unit Price and are calculated to include the following: travel time to and from Site, reimbursable expenses, observation and report time. Time required for Contractor to repair or redo small areas that failed Observation, are not included in the unit price. Failure may be minimal compared to all Work observed, but failed Work still must be observed before proceeding. For minor failures that can be quickly repaired, the Contractor may entirely at their option:
 - 1. Accept a Non-Conformance for failed Observation.
 - 2. Request the RPR wait for a reasonable period while repairs are completed.
 - 3. Proceed with the next phase for all areas which have not failed, and "work around" failed areas. The failed areas would then be observed at the next Hold Point.
- B. The Fee for extended onsite time, or a new Hold Point is the responsibility of the Contractor.

1.03.1 FULL TIME OR DAILY RPR SERVICES

- A. It is the intention of the Owner that the RPR fees be used to observe Productive Work. Productive Work is defined in previous Section 00 91 19.01 Scheduling for RPR Services, with examples. The Owner will pay for all RPR service fees generated by observing Productive Work that meets specification requirements. Normally this will be the first time for most observations.
- B. The Contractor will pay all RPR and/or Engineer fees generated by failed Observations of Productive Work.
- C. The availability of RPR and RPR's ability to timely perform the required Services are dependent on Contractor's communication. RPR is to be available to meet the Progress Schedule demands and complete RPR services with minimal interference of the Contractor's Work, if Contractor properly scheduled RPR Services.

1.03.2 FULL TIME OR DAILY RPR SERVICES

- A. Contractor Pays for RPR or Engineering Services resulting from:
 - 1. Productive Work on a Holiday
 - 2. Failed or Improper Scheduling,
 - 3. Failure to Request Observation per Section 00 91 19.01,
 - 4. Less than 8 hours per day or On-call Time as a result of:
 - a. Premature Request for RPR Services,
 - b. No show or late start,
 - c. Rejection of Work and/or Non-Conformance reports,
 - d. Equipment failure, insufficient manpower, materials, or equipment
 - e. Weather reasons per 1.04.B.03

1.04 RPR FEE CALCULATIONS FOR FAILED OBSERVATIONS

- A. The basis for Fees assessed to the Contractor is based on the Owner/DIXON contract. Fees will be calculated in the same manner as in the Owner/Engineer Agreement, i.e., if the RPR is working at an overtime rate for Owner, then the fee for unproductive services will be documented at the same rate.
 - 1. Hold Point for Welding or Coating Observation, or extra Progress Meetings
 - a. The same Unit Price Fee as would be charged to the Owner for each respective Observation or meeting. Note the fee will be determined by the Contract and may vary between types of Hold Point services.
 - b. Extended time at site charged at Regular Rate (See definition below)
 - 2. Daily Observation is to be the same fee as charged to the Owner from the Owner/DIXON contract.
 - a. Minimum workday is 8 hours plus travel time
 - b. reimbursable mileage

3. Full-time Observation Fee is to be the same as charged to Owner for the same Service.
 - a. Minimum workday is 8 hours
 - b. Minimum work week is 40 hours
 - c. Reimbursable expenses/ Per Diem
4. Fees common to Full Time, Daily and Hold Points with extended stays, and On-call Time
 - a. Regular Pay for RPR is charged at the rate matching the RPR's experience and qualifications.
 - b. Overtime Rate is 1.5 times Regular Rate
 - 1) For all time worked on the actual holiday
 - 2) Weekend work by RPR
 - 3) For time over 40 hours. (The standard work week for overtime [over 40] begins on Monday as Sunday is already paid for at the overtime rate.)
- B. Fees of misused or unnecessary Engineer/RPR Services will be documented and submitted to the Owner for Set-off. Set-off fees will be per the current Exhibit C-2, Standard Hourly Rate and Reimbursable Expense Schedule, or per Exhibit C-1 Summary of DIXON's Compensation Fee Schedule for Unit Price or Lump Sum items.
- C. The right to Set-off is a contracted right of the Owner per the General Conditions, or Additions to General Conditions, and the right to enforce those rights are at the Owner's discretion.

1.05 ON-CALL TIME

- A. RPR's are professional personnel that get paid a minimum of 8 hours per day even though the Contractor's operations or methods result in less than an 8-hour day.
- B. If the Contractor has scheduled a Workday, and if RPR is not free to spend the day at RPR's discretion or to be reassigned; then the RPR will be considered On-call.
 1. The RPR will be considered, if scheduled, On-call every morning and day unless work is cancelled per Section 00 91 19.01.
 2. For Daily observation the On-call time will not exceed 8 hours, any travel time should occur within those 8 hours.
 - a. Late Starts - Agreed start time will be scheduled with the Contract Administrator at the Preconstruction Meeting.
 - b. The RPR's On-call time starts at the agreed start time, if RPR is on Site and available to Work, and On-call time continues until Work starts.
 3. For weather reasons
 - a. 8 hours if adverse weather conditions were clearly forecast

- b. Two hours plus time worked up to 8 hours or actual time worked if greater, if the forecast was less than 20% weather meeting definition of a weather day (day where work could not be performed due to weather).
- 4. For reasons other than weather, eight (8) hours will be considered the minimum On-call Time. This includes, but is not limited to, equipment failure, insufficient materials, damaged containment, etc.
- C. The actual On-call time charged will be eight (8) hours, minus the number of hours actually worked.
- D. Overtime, Weekend, Holiday pay requirements apply to all On-call time pay. On-call hours will count towards forty (40) hours per week triggering overtime at forty (40) hours.
- E. If Work is cancelled per requirements in Section 00 91 19.01 (by prior night) in advance and RPR is notified in advance, there is no On-call time.
- F. If Contractor schedules days off per Scheduling requirements, the inspector will return to his/her home base and there will be no show time charges. Based on the Contract the RPR may be entitled to Mobilization or Demobilization.

SECTION 01 50 00

TEMPORARY CONSTRUCTION FACILITIES AND UTILITIES

PART 1 - GENERAL

1.01 SUMMARY

- A. The Contractor is fully responsible to provide and maintain temporary facilities and utilities required for construction as described herein, and to remove the same upon completion of work.

1.02 QUALITY ASSURANCE

- A. Regulatory Requirements:
 - 1. National Fire Protection Association (NFPA): NFPA No.70-93
 - 2. National Electrical Code (NEC) and local amendments thereto.
 - 3. Comply with all federal, state, and local codes and regulations, and utility company requirements.

PART 2 - PRODUCTS

2.01 TEMPORARY ELECTRICITY AND LIGHTING

- A. Supply temporary lighting sufficient to enable Contractor to safely access all work areas.
- B. Electrical requirements more than the capacity of existing electrical service is to be the responsibility of the Contractor.
- C. Provide, maintain, and remove temporary electric service facilities.
- D. Facilities exposed to weather is to be weatherproof-type and electrical equipment enclosure locked to prevent access by unauthorized personnel.
- E. The Contractor is to pay for and arrange for the installation of temporary services.
- F. Patch affected surfaces and structures after temporary services have been removed.
- G. Provide explosion proof lamps, wiring, switches, sockets, and similar equipment required for temporary lighting and small power tools.

2.02 WATER FOR CONSTRUCTION

- A. The Owner will provide water required for cleaning and other purposes.
- B. Water use is not to exceed usage that might endanger the Owner's water system's integrity.

2.03 SANITARY FACILITIES

- A. Provide temporary sanitary toilet facilities conforming to state and local health and sanitation regulations, in sufficient number for use by Contractor's employees.

- B. Maintain in sanitary condition and properly supply with toilet paper.
- C. Remove from site before final acceptance of work.

2.04 TEMPORARY FIRE PROTECTION

- A. Provide and maintain in working order a minimum of two fire extinguishers and such other fire protective equipment and devices as would be reasonably effective in extinguishing fires.

2.05 DAMAGE TO EXISTING PROPERTY

- A. The Contractor is responsible for replacing or repairing damage to existing buildings, sidewalks, roads, parking lot surfacing, turf, and other existing assets.
- B. The Owner has the option of contracting for such work and having cost deducted from contract amount if the Contractor is not qualified to complete repairs or fails to act in a timely manner.

2.06 SECURITY

- A. Security is not provided by Owner.
- B. The Contractor is to be responsible for loss or injury to persons or property where work is involved and is to provide security and take precautionary measures to protect Contractor's and Owner's interests.

2.07 TEMPORARY PARKING

- A. Parking for equipment and Contractor employees are to be designated and approved by the Owner.
- B. Make parking arrangements for employees' vehicles.
- C. Any costs involved in obtaining parking area is to be borne by the Contractor.

PART 3 - EXECUTION

3.01 GENERAL

- A. The Contractor is to maintain and operate all temporary systems to ensure continuous service.
- B. The Contractor is to modify and extend systems as work progress requires.

3.02 REMOVAL

- A. Completely remove temporary materials and equipment when no longer required.
- B. Clean and repair damage caused by temporary installation or use of temporary facilities.
- C. Restore existing or permanent facilities used for temporary service to specified or original condition.

3.03 BARRIERS AND ENCLOSURES

- A. The Contractor is to furnish, install, and maintain as long as necessary, required adequate barriers, warning signs or lights at all dangerous points throughout the work for protection of property, workers, and the public. The Contractor is to hold the Owner harmless from damage or claims arising out of any injury or damage that may be sustained by any person or persons as a result of the work under the Contract.

SECTION 01 53 43
PROTECTION OF ENVIRONMENT

PART 1 - GENERAL

1.01 SUMMARY

- A. The Contractor in executing work is to maintain work areas, on-and-off site in accordance with federal, state, or local regulations.
- B. The Contractor is responsible for any, and all clean-up of any hazardous waste that may be necessary, including all applicable costs for clean-up and disposal.

1.02 LAWS AND REGULATIONS

- A. Environmental regulations may be met with different available technologies. It is the Contractor's sole responsibility to comply with these and all applicable environmental regulations.
- B. If a release occurs, work will stop until corrective actions are complete as determined by the appropriate regulatory agency.

1.03 PROTECTION OF SEWERS

- A. Take adequate measures to prevent impairment of operation of existing sewer system. Prevent construction material, pavement, concrete, earth, or other debris from entering sewer or sewer structure.

1.04 PROTECTION OF WATERWAYS

- A. Observe rules and regulations of local and state agencies, and agencies of U.S. government prohibiting pollution of any lake, stream, river, or wetland by dumping of refuse, rubbish, dredge material, or debris therein.
- B. Provide containment that will divert flows, including storm flows and flows created by construction activity, to prevent loss of residues and excessive silting of waterways or flooding damage to property.
- C. Comply with procedures outlined in U.S. EPA manuals entitled "Guidelines for Erosion and Sedimentation Control Planning and Implementation," Manual EPA-72-015 and "Processes, Procedures, and Methods to Control Pollution Resulting from all Construction Activity," Manual EPA 43019-73-007.

1.05 DISPOSAL OF EXCESS EXCAVATED AND OTHER WASTE MATERIALS

- A. Dispose of waste material in accordance with federal and state codes, and local zoning ordinances.

- B. Unacceptable disposal sites include, but are not limited to, sites within wetland or critical habitat, and sites where disposal will have detrimental effect on surface water or groundwater quality.
- C. Make arrangements for disposal, subject to submission of proof to Engineer that Owner(s) of proposed site(s) has valid fill permit issued by appropriate government agency and submission of haul route plan, including map of proposed route(s).
- D. Provide watertight conveyance for liquid, semi-liquid, or saturated solids that have potential to leak during transport. Liquid loss from transported materials is not permitted, whether being delivered to construction site or hauled away for disposal. Fluid materials hauled for disposal must be specifically acceptable at selected disposal site.

1.06 PROTECTION OF AIR QUALITY

- A. Contain paint aerosols and VOCs by acceptable work practices.
- B. Minimize air pollution by requiring use of properly operating combustion emission control devices on construction vehicles and equipment used by Contractor and encouraging shutdown of motorized equipment not actually in use.
- C. Trash burning not permitted on construction site.
- D. If temporary heating devices are necessary for protection of work, they are not to cause air pollution.

1.07 PROTECTION FROM FUEL AND SOLVENTS

- A. Protect the ground from spills of fuel, oils, petroleum distillates, or solvents by use of containment system.
- B. Total paint, thinner, oils, and fuel delivered to and stored on-site cannot exceed supplied capacity of spill containment provided (i.e., fuel and oil to be sized to exceed possible spill).
- C. Provide proper containment units under fuel tank and oil reservoirs for all equipment and fuel storage tanks.
- D. Barrels of solvents, even for cleaning, are prohibited. Do not deliver paint thinners in containers greater than five (5) gallons.
- E. Disposal of waste fluids is to be in conformance with federal, state, and local laws and regulations.

1.08 USE OF CHEMICALS

- A. Chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant, or of other classification, must show approval of U.S. EPA, U.S. Department of Agriculture, state, or any other applicable regulatory agency.

- B. Use of such chemicals and disposal of residues are to be in conformance with manufacturers' written instructions and applicable regulatory requirements.

1.09 NOISE CONTROL

- A. Conduct operations to cause the least annoyance to residents in vicinity of work and comply with applicable local ordinances.
- B. Equip compressors, hoists, and other apparatus with mechanical devices necessary to minimize noise and dust. Equip compressors with silencers on intake lines.
- C. Equip gasoline or oil-operated equipment with silencers or mufflers on intake and exhaust lines.
- D. Route vehicles carrying materials over such streets as will cause least annoyance to public and do not operate on public streets between hours of 6:00 P.M. and 7:00 A.M., or on Saturdays, Sundays, or legal holidays unless approved by Owner.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

3.01 HAZARDOUS MATERIALS PROJECT PROCEDURES

- A. Applicable Regulations:
 - 1. RCRA, 1976 – Resource Conservation and Recovery Act: This federal statute regulates generation, transportation, treatment, storage, and disposal of hazardous wastes nationally.
 - 2. Act 64, 1979 – Michigan's Hazardous Waste Management Act: This statute regulates generation, transportation, treatment, storage, and disposal of hazardous wastes.
 - 3. Act 451, 1994 – Natural Resources and Environmental Protection Act: This statute regulates discharge of certain substances into the environment, regulates use of certain lands, waters and other natural resources.
 - 4. Act 641 as amended 1990 – Michigan's Solid Waste Act: This statute regulates generation, transportation, treatment, storage, and disposal of solid wastes.
- B. Use the Uniform Hazardous Waste Manifest (shipping paper) to use an off-site hazardous waste disposal facility.
- C. Federal, State and local laws and regulations may apply to the storage, handling and disposal of hazardous materials and waste. The list below includes the regulations which are most frequently encountered:

Topic	Agency and Telephone Number
Small quantity hazardous waste management, including hazardous waste stored in tanks	Hazardous Waste Division, EGLE (517) 373-2730 in Lansing, or District Office Certified County Health Department
Hazard Communication Standards (for chemical in the workplace)	Occupational Health Division, Michigan Department of Consumer, and Industrial Services (517) 373-1410
Burning of waste oil and other discharges to the air	Air Quality Division, EGLE (517) 322-1333 in Lansing, or District Office
Local fire prevention regulations and codes (including chemical storage requirements)	Local fire chief or fire marshal

D. Department of Environment, Great Lakes, and Energy

Hazardous Waste Division
Compliance Section District Offices

Lansing District Office
525 W. Allegan
Constitution Hall - 4th Floor North
P.O. Box 30242
Lansing, MI 489097973
(800) 662-9278

SECTION 05 00 00 **METAL REPAIRS**

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Steel and Miscellaneous Repairs.

1.02 REFERENCES

- A. AWWA D100 Weld Standard (latest version)
- B. AWS Weld Standard (latest version)
- C. API 650 Standard (latest version)

1.03 OMISSIONS

- A. The specifications include all work and materials necessary for completion of the Work. Any incidental item(s) of material, labor, or detail(s) required for the proper execution and completion of the Work are included.

1.04 DEFINITIONS

- A. Ground Flush: Ground even with adjacent metal with no transition. This preparation is intended for all removed items.
- B. Ground Smooth: Ground welds to the point that no cuts or scratches occur when rubbing your hand over the weld. Rebuild with weld any concavity discovered during grinding. This preparation is intended for all newly added steel.

1.05 WORK INCLUDED

- 1) Install a gasket on the wet interior roof hatch.
- 2) Install handholds at the roof hatches/painter's (bird) hatch.
- 3) Replace the gasket on the roof vent and install additional nuts and bolts.
- 4) Install cathodic clips and pressure fitting.
- 5) Install painter's railing stand-offs.
- 6) Weld a rigging lug on the transition cone.
- 7) Replace antenna cable penetration boots.

1.06 WORKMANSHIP

- A. Provide material and workmanship necessary to complete the Project to the specified standards.
- B. Remove all coating at and around weld location prior to welding.
- C. All weld spatter is to be removed prior to coating application.

- D. Welds at all removed steel items are to be ground flush with surrounding surface. All new welds are to be ground smooth.
- E. Removed items are to become the property of the Contractor. The Contractor is to properly dispose of all removed items.

1.07 WELDER QUALIFICATIONS

- A. Certified for the type and position of weld specified.
- B. The welder is to be specialized in industrial or heavy commercial welding and experienced in rigging and elevated work.

1.08 SUBMITTALS

- A. Provide an electronic copy to the Engineer. Note that the Contractor is to supply a separate copy of the SDS of each product at the job site that is accessible by their employees.
- B. No work may commence without the complete filing. All SDS shall conform to the requirements of SARA (EPCRA) Right-to-Know Act.
- C. Submit the following ten (10) days prior to the preconstruction meeting:
 - 1. Provide for employees one (1) copy of all data sheets at the job site for employee access.
 - 2. Safety Data Sheets (SDS) and Product Data Sheets:
 - a. Safety Data Sheets (SDS) for all chemicals or products that contain chemicals.
 - b. Product Data Sheets (PDS) or Technical Data Sheets (TDS) for all items.
 - 3. Welder's certification.

1.09 WORK SEQUENCING

- A. The Contractor is to monitor for flammable gases inside the tank prior to any welding or cutting. Monitoring is to be performed whether the tank is full or empty. Monitoring is also to be performed whether or not interior access is to be gained during welding and/or cutting.
- B. The following is NOT a ways-and-means decision of the Contractor. It is accepted and good painting practice and is to be completed by the Contractor in this specified fashion:
 - 1. Complete all surface preparation ahead of all cutting and welding, such as removal of heavy metal bearing coating in the immediate area.
 - 2. Complete all welding repairs prior to commencement of any power washing, surface preparation, or coating application.
 - 3. Do not install non-painted items (i.e., fall prevention devices, etc.) or store items on or in the tank until after painting has been completed.
 - 4. Remove existing items that are not to be painted after water cleaning, store in a secure location.

5. Disassemble appurtenances with mating surfaces (i.e., overflow flap gate, vent flange, etc.), surface prepare and coat mating surfaces and reassemble after topcoat is dry.
6. Remove fall prevention devices in areas to be coated before painting and reinstall after completion. Supply temporary fall prevention devices with steel cables during blasting and painting.

1.10 NEW STEEL COATING

- A. The new carbon steel and weld burn surfaces are to be prepared and coated in accordance with Sections 09 97 13 and 09 97 13.10.

PART 2 – PRODUCTS

2.01 SUBSTITUTIONS

- A. All products specified herein have been determined to meet a minimal standard. The products specified are the standard to which all proposed substitutions are to be compared.

2.02 STEEL PLATING AND OTHER STRUCTURAL SHAPES

- A. General Steel: ASTM – A36.
- B. General Stainless Steel: ASTM – 316.
- C. Threading on all couplings and plugs to meet NPT and FPT standards.

2.03 BOLTS and NUTS

- A. Stainless Steel
 1. ASTM F594G – 316 Stainless Steel Bolts.
 2. ASTM F594G – 316 Stainless Steel Nuts.
- B. Galvanized Steel
 1. ASTM A307 Grade A zinc coated Steel Bolts.
 2. ASTM A307 Grade A zinc coated Nuts.
- C. Carbon Steel
 1. ASTM A36 or ASTM F1554-36 anchor rods.

2.04 WELDING ROD

- A. Final – E70XX Electrodes.
- B. Root – E60XX Electrodes.
- C. Wire – ER70S Electrodes.

2.05 ROOF HATCH GASKET

- A. Roof hatch manway gaskets for access points above the high-water level.
- B. There are two options:
 - 1. Full sheet adhered to the interior of the hatch cover:
Gaskets to meet ASTM D2000 requirements. Gaskets to be ¼ inch thick Ethylene Propylene Diene (EPDM) AB-576 item number 386-16-482 as manufactured/supplied by American Biltrite www.american-biltrite.com (888) 275-7075 or approved equal.
 - 2. Gasket adhered to the edge of the hatch curb:
EPDM foam and vinyl rubber Water and Weather Resistant Rubber Push-on Seal as manufactured/supplied by McMaster-Carr. www.mcmaster.com (562) 692-5911 or approved equal.
- C. Adhesive for gasket to be 3M Super Weather strip and Gasket Adhesive as Manufactured by 3M www.3m.com (888) 364-3577 or approved equal.

2.06 VENT FLANGE GASKET

- A. Gasket to be full faced, with a minimum of 1/4-inch-thick Ethylene Propylene Diene Monomer (EPDM) that meet NSF 61/600 requirements as manufactured/supplied by Sur-Seal www.sur-seal.com (866) 915-4916 or approved equal.

2.07 CATHODIC CLIPS AND PRESSURE FITTING

- A. Manufactured/supplied by Aegion (Corrpro) www.aegion.com (866) CORRPRO [267-7776] or approved equal.

2.08 ANTENNA PENETRATION BOOTS

- A. Boots to be manufactured by Valmont Microflect, www.valmontstructures.com (800) 547-2151, or approved equal.
- B. Boots to be Fernco Quick Cap as manufactured by Fernco www.fernco.com (810) 503-9000, or approved equal.

PART 3 - EXECUTION

3.01 ROOF HATCH GASKET

- A. Install a gasket on the wet interior roof hatch cover (or opening curb) and on the bolted painter's hatch.
- B. Install the gasket after the exterior coating is dry to the touch. Apply roof hatch gasket using adhesive.
- C. If there is an existing gasket, it may be reinstalled if the Engineer approves.
- D. The hatch hasps may need to be modified/holes in the hasps enlarged to accept a lock once the gasket is installed. The cover is to seat flush with the curb with the gasket in

- place around the entire perimeter. Welding performed during any relocation of the hinges and/or hasp is to match the original condition.
- E. Payment is incidental to the Project.

3.02 HANDHOLDS

- A. Furnish and install a handhold on the roof at the access tube hatch, at the wet interior roof hatch, and above the bird hatch at the top platform.
- B. Handhold to be a ¾ in. diameter rod shaped into a 16 in. x 3 in. “U.” Weld using a ¼-in. continuous fillet.
- C. The handhold is to be located on the ladder side of the opening.
- D. Payment is incidental to the Project.

3.03 ROOF VENT GASKET, NUTS AND BOLTS

- A. Replace the gasket at the roof vent flange and install additional nuts and bolts.
- B. The nuts and bolts are to be installed evenly spaced between the existing nuts and bolts, doubling the amount of nuts and bolts at a minimum. The intention is to eliminate the gap between the flanges.
- C. The nuts and bolts are to be galvanized, size is to match the existing nuts and bolts.
- D. Payment is incidental to the Project.

3.04 CATHODIC CLIPS AND PRESSURE FITTING

- A. Weld clips and a pressure fitting for a cathodic protection system (future installation by others).
- B. Supply recommended quantity of clips and locate as directed by the supplier.
- C. Weld clips with ¼ in. fillet welds all around. No area may be left that may be susceptible to crevice corrosion.
- D. Weld a 3,000-psi pressure fitting coupling inside and outside with a ¼ in. fillet weld all around, and cap fitting as directed by supplier.
- E. Payment is a separate line item “Cathodic Clips and Pressure Fitting” which the Owner reserves the right to delete.

3.05 PAINTER’S RAILING STAND-OFFS

- A. Install a stand-off at the unsupported butt welds on the existing painter’s railing.
- B. There are five (5) unsupported butt welds, Contractor to field verify number of unsupported butt welds.
- C. See Drawing 01.
- D. Payment is a separate line item “Painter’s Railing Stand-offs” which the Owner reserves the right to delete.

3.06 TRANSITION CONE RIGGING LUG

- A. Install a lug on the transition cone above the top platform ladder opening.
- B. See Drawing 02.
- C. Payment is incidental to the Project.

3.07 ANTENNA PENETRATION BOOTS

- A. Install rubber boots on the existing roof penetrations where antenna cables are routed through. The caps on the unused penetrations are to remain.
- B. There are two (2) penetrations that require boots. Size of boots and number of holes required to be field determined.
- C. Install boots after the topcoat is dry.
- D. Payment is a separate line item “Antenna Cable Penetration Boots” which the Owner reserves the right to delete.

PART 4 – SPECIAL PROVISIONS

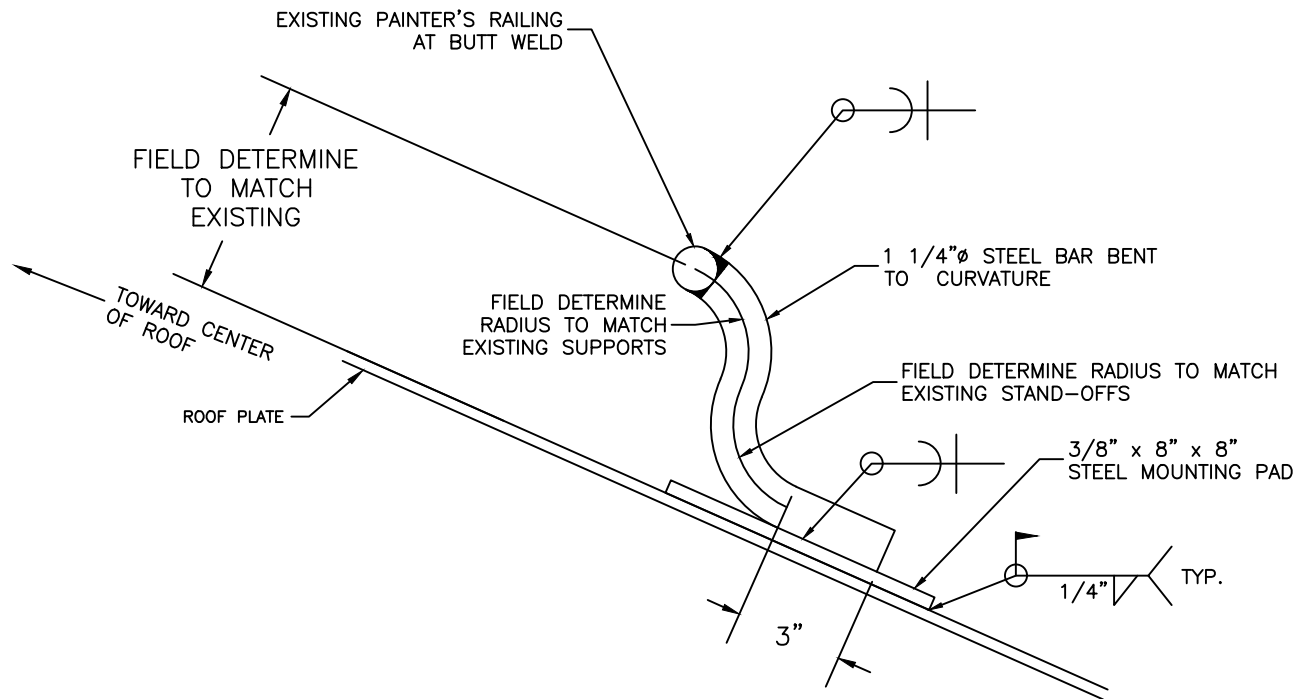
4.01 WELD PREPARATION PRIOR TO COATING

- A. Prepare all new welds per NACE SP0178 prior to coating application. Grind welds to category D.

4.02 COATING REPAIR – WET INTERIOR

- A. Complete all welding and cutting prior to any surface preparation for painting to avoid contamination of surfaces.
- B. Remove any residue and weld smoke by solvent cleaning.
- C. Power tool clean to a SSPC-SP11 finish all areas damaged by welding.
- D. Use 3M Scotch-Brite Clean’n Strip Discs.
- E. Feather edges of adjacent coating a minimum of ½ in. from exposed steel.
- F. Apply repair system at 4.0 - 6.0 mils per coat as follows:

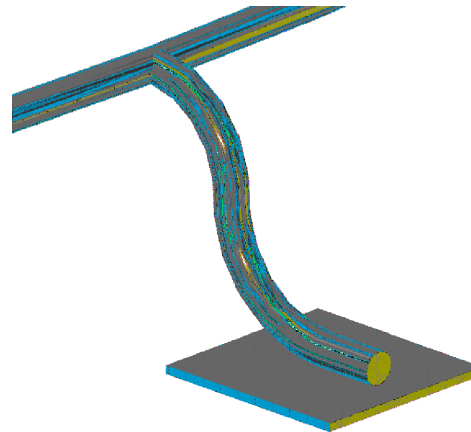
<u>Manufacturer</u>	<u>System</u>
Tnemec	21/21
Induron	PE-70/PE-70
Sherwin Williams	5500LT/5500LT
- G. The Contractor has the option to apply one (1) coat of PPG Aquatopoxy A-61 at 6.0-10.0 mils in lieu of the two-coat system.
- H. System to meet all National Sanitation Foundation 61 certification standards for potable water contact. Use only colors approved by NSF 61/600 are to be used in the wet interior.
- I. The Contractor is to follow relevant items from Sections 09 97 13 and 09 97 13.10.
- J. Payment is incidental to weld repairs.



SECTION VIEW

NOTES:

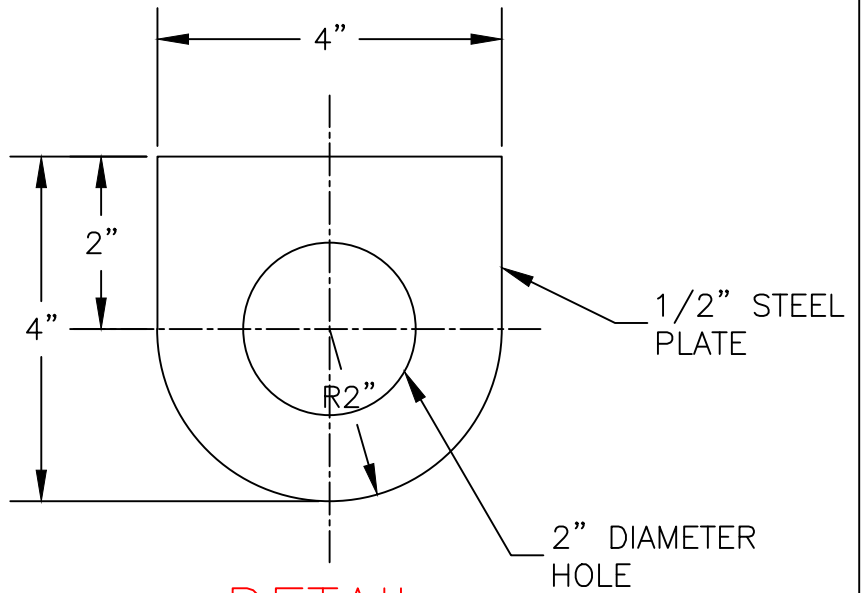
1. 8" DIA. BASEPLATES ARE ACCEPTABLE IN LIEU OF SQUARE SHAPED.
2. ONE STANDOFF WITHIN 3" OF EACH SIDE OF A BUTT JOINT (2 STANDOFFS AT EACH JOINT) IS ACCEPTABLE IN LIEU OF PLACING SUPPORT DIRECTLY AT BUTT JOINT.



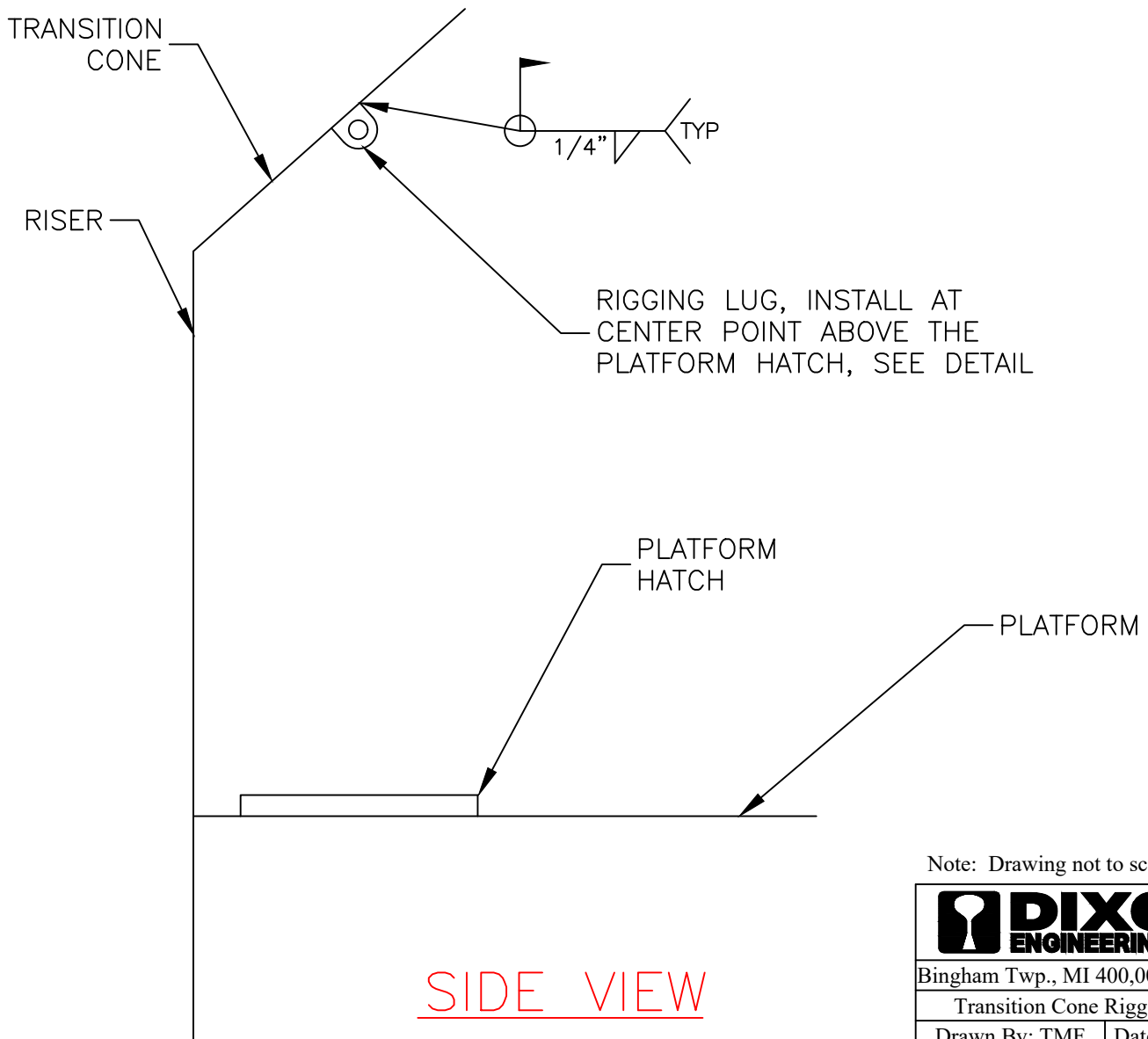
ISO VIEW

Note: Drawing not to scale.

DIXON ENGINEERING, INC.	
Bingham Twp., MI 400,000 Spheroid	
Painter's Railing Support	
Drawn By: TMF	Date: 03/13/26
Checked By: JVR	DWG: 01



DETAIL



SIDE VIEW

Note: Drawing not to scale.



Bingham Twp., MI 400,000 Spheroid	
Transition Cone Rigging Lug	
Drawn By: TMF	Date: 03/13/26
Checked By: JVR	DWG: 02

SECTION 09 97 13 **STEEL COATING**

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Painting of steel structures.
- B. Interior cleaning and disinfection.

1.02 REFERENCES

- A. AWWA Standards (latest versions):
 - 1. D102 – Painting Steel Water Storage Tanks.
 - 2. C652 – Disinfection of Water Storage Facilities.
 - 3. C655 – Field Dechlorination.
- B. NSF/ANSI (latest versions)
 - 1. NSF/ANSI 60/600 and 61/600.

1.03 WORK INCLUDED

- A. Exterior: Apply a three (3) coat epoxy urethane system.
- B. Dry Interior: Apply a spot two (2) coat epoxy system to the prepared surfaces.

1.04 EXISTING COATING CONDITIONS

- A. Exterior: Original urethane system applied in 2006. There is a clear coat over the lettering.
- B. Wet Interior: Original epoxy system applied in 2006.
- C. Dry Interior: Original epoxy system applied in 2006.
- D. Pit Piping: Original epoxy system applied in 2006.

1.05 OMISSIONS OR INCIDENTAL ITEMS

- A. It is the intent of these specifications to coat the structure for the purpose of corrosion protection on wet interior surfaces. It is the intent to coat the exterior for corrosion protection and aesthetics.
- B. Any minor or incidental items not specifically detailed in the schedule, but inherently a part of the work is included at no additional cost to the Owner.
- C. The Engineer, as interpreter of the specifications, will determine if disputed items fall under this category. Prevailing customs and trade practices will be considered in this determination.

1.06 PAINTER QUALIFICATIONS

- A. The Contractor is to complete all coating and surface preparation.

- B. All coating applicators are to be specialized in industrial or heavy commercial painting.
- C. ALL CONTRACTORS ARE TO BE PREQUALIFIED with Dixon Engineering for projects of this size and complexity.

1.07 SUBMITTALS

- A. Provide an electronic copy to the engineer. Note that the Contractor is to supply a separate copy of the SDS of each product at the job site that is accessible by their employees.
- B. No work may commence without the complete filing. All SDS shall conform to the requirements of SARA (EPCRA) Right-to-Know Act.
- C. Submit the following with the annual prequalification:
 - 1. Occupational Safety and Health Programs and certification that all site personnel have been trained as required by law.
- D. Submit the following ten (10) days prior to the preconstruction meeting:
 - 1. Safety Data Sheets (SDS) and Product Data Sheets:
 - a. Furnish from all suppliers Safety Data Sheets and product data sheets for all applicable materials including but not limited to: coatings, thinners, additives, cleaners, caulking, degreasers, chlorine, abrasives, abrasive additives, and pretreatments.
 - 2. Fall Prevention Plan and Site-Specific Fall Hazard Evaluation:
 - a. Site specific plan to contain a description and/or generic drawing of the existing structure and appurtenances of this structure and reflect safety changes specified for this Project.
 - b. Certifications for all spiders, scaffolding, stages, etc., to be used on the Project. All certifications to be current, less than one (1) year old.
- E. Submit the following at the preconstruction meeting:
 - 1. Designated OSHA Competent Person and qualifications, if not previously submitted.
- F. Submit the following within two (2) weeks of project completion with final pay request:
 - 1. Waste manifest, waste hauler and disposal facility. Required even if testing results indicate that the waste is non-hazardous.
 - 2. Waivers of lien.
 - 3. Copies of any formal worker safety or environmental citations received on the Project.

1.08 OWNER RESPONSIBILITY

- A. Drain the structure with seven (7) day notice after the Contractor meets all precedent conditions of the contract.

- B. Fill the structure and draw samples and test after chlorination; responsibility for passing test results remains with the Contractor. Failing test results could result in added costs to the Contractor, including re-chlorination, cost of water, plus possible liquidated damages.

1.09 DELIVERY and STORAGE of MATERIAL

- A. The Owner reserves the right to require that the Contractor is to have all of the required coating for the Project delivered to the site or to the Owner's storage facility prior to the structure being taken out of service and commencement of the Project.
- B. Submit the manufacturer's invoice, with or without paint cost, to the Engineer for review. This submittal will be used to identify the quantity of paint recommended by the manufacturer for a job of this size and design and will be used to check the quantity actually delivered to the Project.
- C. Cover bulk materials subject to deterioration because of dampness, weather, or contamination, and protect while in storage.
- D. Maintain materials in original, sealed containers, unopened and with labels plainly indicating the manufacturer's name, brand, type, grade of material, and batch numbers.
- E. Remove from the work site containers that are broken, opened, water marked, and/or contain caked, lumpy, or otherwise damaged materials. They are unacceptable.
- F. Store the material in a climate controlled designated area where the temperature will not exceed the manufacturer's storage recommendations. Heat the storage area to the manufacturer's recommended minimum mixing temperature.
- G. Keep equipment stored outdoors from contact with the ground, away from areas subject to flooding, and covered with weatherproof plastic sheeting or tarpaulins.
- H. Store all painting materials in a location outside the structure.
- I. Do not store or have on-site unapproved material, material from different manufacturers, or materials from different Projects.

1.10 ACCESS and RPR SAFETY

- A. Provide access to all portions of the Project where work is being completed. Access must be close enough and secure enough to allow the RPR to use equipment without extensions.
- B. Provide personnel to assist with access and to ensure the Contractor's access equipment is safely used.
- C. Provide separate fall protection devices and safety lines for the Owner and observers that meet all local and federal OSHA requirements.
- D. These specifications require the Contractor to supply a separate fall protection cable and safety grab for each tie-off point for the observer's use. The Contractor is encouraged to provide a separate cable and tie-off for each worker. The cables may

be connected to the same tie-off point as the RPR, but a separate cable and safety grab are required for each user.

1.11 OBSERVATION and TESTING

- A. Prior to the scheduled observation, remove all dust, spent abrasive, and foreign material from the surface to be coated.
- B. The Contractor is to furnish an instrument for measuring the wet film thickness, and also a calibrated instrument for measuring dry film thickness of each field coat of paint. The dry film thickness testing gauge to be the magnetic type as manufactured by Elcometer Co., or the Nordson Gauge Co.; spring loaded model with two percent (2%) accuracy margin over a range of one-to-twenty-one (1-100) mils or equal.
- C. The Engineer will furnish and operate observation equipment for their own use as quality assurance.
- D. Certify to the Owner that the specified paint has been applied at the paint manufacturer's recommended coverage, and to the specified thickness required. Also, certify that the paint has been applied in accordance with this Contract.
- E. Take all necessary steps, including dry striping by brush or roller, to ensure a holiday-free coating system.
- F. The wet interior coating repairs are subject to low or high voltage holiday testing.
- G. The Owner and Engineer reserve the right to perform destructive testing under conditions deemed necessary. Testing may include, but is not limited to, the Tooke thickness test and adhesion testing. Any damage caused by these tests will be corrected per these specifications by the Contractor at the Contractor's expense.

1.12 SCHEDULING

- A. Complete all welding and any other work before coating operations begin, including surface preparation that might damage the new coating system. The exception is coating removal in the weld area.
- B. If the Contractor wants a variance in this schedule, request the change and provide a reason in writing to the Owner. The Project Manager will reply with a written Field Order if the change is approved. The Engineer reserves the right to put further conditional restrictions in the Field Order. If the Contractor objects to restrictions, they may revert to the original specifications.

1.13 CLIMATIC CONDITIONS

- A. Do not apply paint when the temperature, as measured in the shade, is below the manufacturer's required ambient conditions and surface temperatures.
- B. Do not apply paint to wet or damp surfaces, or during rain, snow, or fog.
- C. Do not apply paint when it is expected the relative humidity will exceed 85%, or the surface temperature is less than 5° F above dew point, or the air temperature will drop

below the manufacturer's requirements for proper cure. Anticipate dew or moisture condensation, and if such conditions are prevalent, delay painting until the observer is satisfied that the surfaces are dry.

1.14 APPLICATION

- A. Complete all painting and surface preparation in strict accordance with these specifications, approved paint manufacturer's specifications, and good painting practices per SSPC.
- B. Apply each coating at the rate and in the manner specified by the manufacturer. Check the wet film thickness regularly during coating application to ensure each coat applied meets the dry film thickness range requirements.
- C. Allow sufficient time for each coat of paint to dry and cure. Allow a minimum of twenty-four (24) hours between coats, unless product requirements have a maximum time of less than 24 hours. Additional time may be necessary if low temperatures require an increase in the necessary cure time.
- D. Responsibility for damage caused by coating application and repair of coatings improperly applied is the responsibility of the Contractor, even with prior non objection to application procedures:
 - 1. Apply exterior coating by brush and roller only. Spray application is not permitted without prior approval of the Engineer.
 - 2. Coatings are to be applied using methods to eliminate roller or spray marks in the finished product on the exterior.
 - 3. Painting may be delayed because of poor coverage or the potential damage from overspray and/or dry spray.
 - 4. The Contractor is responsible for the appearance of the finished project and is advised to prevent contact with any freshly applied coating. Removal of rigging is to be completed so as not to damage the coating.
 - 5. Additional coats may be required for coverage or to eliminate roller marks, spray marks and to repair dry spray and overspray.
- E. Use of pole extensions on spray guns is prohibited for all paint applications.
- F. Mixing partial kits is not permitted. All partial coating containers must be removed from the site.
- G. Mixing blades to be clean. The Engineer has the right to reject mixing blades based on cleanliness or paint build-up. Do not use the same mixing blade for different coatings (i.e., epoxy and urethane coatings).

1.15 PRESSURE RELIEF VALVES

- A. Furnish two (2) pressure relief valves for the Owner to install.
- B. The valves are to be Aquatrol series 69F1 manufactured by Aquatrol Valve Company, Inc. www.aquatrol.com (800) 323-0688, or approved equal.

- C. Valves will need to be fitted with a hydrant thread adaptor. Valves to be adjustable with a range of 30 to 90 psi. Set the valve at 60 psi and the Owner will adjust the valves once installed.
- D. Supply three (3) days prior to draining of the structure.
- E. After work on the structure is complete with successful disinfection and dechlorination completed, the Owner will return the valves to the possession of the Contractor.
- F. Cost is incidental to the Project.

PART 2 – PRODUCTS

2.01 COLOR

- A. Exterior Coatings:
 - 1. Supply the Engineer with a color chart to allow the Owner ample time for the exterior topcoat color selection.
 - 2. Factory tint the intermediate coat(s) for all areas of the structure if similar to the finish coat. Tinting is to be sufficient to allow visibility of the dissimilar color from 1 ft., and from 100 ft.
 - 3. The Owner is to select or verify the topcoat color at the preconstruction meeting. The Contractor is responsible for verifying all topcoat colors with the Owner, even when specified, prior to ordering topcoat products.
 - a. All bids are to be based on Tnemec “07 White” color.
 - b. The Owner recognizes the additional cost for deep color paints. After the color has been selected, document the difference in cost and quantity used for the selected color and the Owner will issue a Change Order for the exact cost differential only.
 - c. Documentation of additional cost is the responsibility of the Contractor and must be supplied two (2) weeks before application. If necessary, documentation is not supplied, any additional cost will be borne by the Contractor. If selection/application time is less than two (2) weeks, then as soon as possible. The Owner has the right to switch to a less expensive color; therefore, the Contractor must submit cost before ordering paint.
 - d. At no additional cost, the Owner reserves the right to paint the tank two separate colors (i.e., white tank; green pedestal).
- B. Wet Interior and Dry Interior Coatings:
 - 1. The color is to be a different tint between coats. Tinting to be performed in the factory. The final color is to be white, blue, or off-white as selected by the Owner. The topcoat color is to be verified at the preconstruction meeting.
 - 2. Only colors approved by NSF 61/600 are to be used in the wet interior.

2.02 SUBSTITUTIONS

- A. All coatings specified and approved herein have met or exceeded a specified list of ASTM standards. The materials specified are the standard to which all others are to be compared.
- B. The purpose is to establish a standard of design and quality, and not to limit competition.
- C. Manufacturers wishing to have their products approved are to have their coatings tested using the same test methods.
- D. Approval by ANSI/NSF Standard 61/600 is also a requirement for potable water contact coatings.
- E. The selection of coatings and manufacturers have taken into consideration the manufacturer's current and past performance on availability, stocking, and shipping capabilities, ability to resolve disputes, and any applicable warranties.

2.03 EQUIPMENT COVERING

- A. Use material that is 8 – 10 mils thick, and 100% impermeable to all vulnerable equipment.
- B. Use material resistant to tear and/or rip by mechanical action from abrasive blasting during blasting operations.
- C. Make coverings airtight by the use of duct tape at the openings, or other suitable measures.
- D. Meet with the representative of equipment owners to verify covering will not damage equipment. This includes not only the Owner's equipment, but also telecommunication antennas, cables, buildings, controls, etc.

2.04 AIR DRYER FOR COMPRESSOR

- A. Use air dryers that are sufficient to remove 98% of the moisture from the compressed air. Size the dryers on total cfm using manufacturer supplied charts. Upon request, provide charts to the Engineer for verification.
- B. If the dryer fan is not operable, cease all blasting until the dryer is replaced or repaired.
- C. Supply air dryer with an air draw-off valve to check air for dryness, oil contamination, and cleanliness on the outlet side of the air dryer.
- D. For cleaning operations, draw clean air from the outlet side of the air dryer.

PART 3 – EXECUTION

3.01 DISINFECTION

- A. The Contractor is fully responsible for determining that the wet interior coating repairs have cured prior to disinfection and refilling the structure. The Contractor

shall perform an MEK Solvent Double Rub Test per ASTM D 5402 to verify the cure of the coating film prior to returning the tank to service. The Owner reserves the right to perform their own MEK Solvent Double Rub Test, but the conclusion of the test results is the sole responsibility of the Contractor.

- B. Disinfect the completely painted structure in accordance with AWWA Standard C652 Chlorination Method No. 3.
- C. Furnish the material and labor necessary to disinfect the structure in the required manner. Any chlorine products used shall be NSF 60/600 approved. Assist the Owner during filling and ensure that any manways are free of leaks after filling. The Contractor is to adjust the manways and replace gaskets as needed to ensure there are no leaks.
- D. Contractor shall never allow water to enter the distribution system until satisfactory bacteriological test results are received and any dechlorination requirements are met. Throughout the Project, only the Owner will operate valves allowing water back into the distribution system.
- E. The Owner is responsible for collecting two consecutive bacteriological samples, 24 hours apart, following disinfection. Satisfactory results are required before the tank can be returned to service.
- F. Water drained to waste may not contain any substances in concentrations that can adversely affect the natural environment. No total residual chlorine may be measured in water discharged to surface water. It is recommended that the water be dechlorinated per AWWA C655 Field Dechlorination.
- G. The Contractor shall pay all additional expenses if it is necessary to repeat the testing and disinfection procedure as a result of defective work, including Engineering fees.

3.02 PROTECTION OF NON-WORK AREAS

- A. Protect all non-blasted/painted surfaces prior to all abrasive blast cleaning/painting.
- B. Protect and seal all controls and electrical components (even if they are not in the immediate work area) that are in danger from the Project. Coordinate with the Owner so all controls are shut down and/or vented if necessary.

3.03 ANTENNA SYSTEM PROTECTION

- A. There are twenty-one (21) antennas mounted on the roof. The number of antennas listed are from the last known condition, the Contractor is to field verify number of antennas.
- B. There are cables routed from the ground up to the antennas with miscellaneous sensitive equipment mounted on the structure and control equipment/buildings located on the ground.
- C. Use material that is 100% impermeable to cover and protect all antennas, antenna cables, and antenna controls/buildings.

- D. Use material resistant to tear by mechanical action from abrasive blasting, power washing and coating application.
- E. Payment for damage to antennas, antenna cables, miscellaneous equipment and/or antenna controls/buildings is the responsibility of the Contractor.
- F. Contact the Owner of each set of antennas one (1) week prior to the beginning of construction to determine protection requirement. Names of antenna companies will be available at the preconstruction meeting.
- G. Antennas may remain in service during the Project. The Contractor is responsible for their own RF safety. Contractor to provide a minimum of one RF monitor for employees on site for the duration of the Project.

3.04 ANTENNA MOUNTING EQUIPMENT COATING

- A. Antenna mounting equipment is to be surface prepared and coated to match the exterior tank per these specifications including but not limited to brackets and mounting poles.
- B. Note that the antennas, radio heads, cables, etc. are not to be coated. Coating is limited to items that have previously been coated to match the tank.
- C. All previously coated items are to be coated per the exterior specifications. Any galvanized, stainless steel or other uncoated materials are to remain uncoated.
- D. Cable connections are to be removed during surface preparation and coating application. Temporary support may be needed to hold the cables in place during the Project. Reinstall the cable attachments or install new connections if the attachment is a zip-tie or electrical tape. Note that the antenna and any miscellaneous equipment attachment points are to remain in place throughout the Project.
- E. Cost is incidental to the Project.

3.05 HAND WASH FACILITY

- A. Provide an OSHA approved hand wash facility with running water. Hot water is not required.
- B. Stock facility with soap and towels and keep supply replenished.
- C. Test and dispose of the water properly after the Project is completed.

3.06 LIGHTING OF WORKSPACE

- A. Provide durable lighting fixtures designed for the intended work environment for use during blasting, painting, and during all observations.
- B. Encase portable lamps in a non-conductive, shatterproof material. Use only heavily insulated cable with an abrasive resistant casing.
- C. Install all temporary electrical items in accordance with all local, state, and federal codes, including OSHA.
- D. Protect from paint overspray and damage from abrasive materials.

- E. Measure required illumination during surface preparation and coating application at the work surface. Supply 20 ft. candles minimum illumination during blasting and painting, and 30 ft. candles minimum prior to and during observation, per SSPC-Guide 12. Inspect the prepared surface at the higher illumination prior to calling for observation. All work must conform to specification requirements prior to the scheduled observation.
- F. Measure the illumination at the work surface in the plane of the work.

PART 4 – SPECIAL PROVISIONS

4.01 ROOF RIGGING JOINT COMPOUND

- A. Apply joint compound on the roof rigging coupling threads prior to reinstallation of the plugs.
- B. Compound to meet requirements of NSF-61.
- C. Cost is incidental to the Project.

4.02 GRASS RESTORATION

- A. The Contractor is to report any damaged ground at the construction site in writing with photos, prior to mobilization of equipment, otherwise all repairs to the damaged ground will be the responsibility of the Contractor.
- B. Refill all holes, ruts etc. with clean topsoil, and level area around the construction site to the original grade.
- C. Fill material to be clean soil, no gravel, rocks, or construction debris is to be used as fill material without the Owner's consent.
- D. Bring soil to a friable condition by disking, harrowing, or otherwise loosening and mixing to a depth of 3 in. – 4 in. Thoroughly break all lumps and clods.
- E. Rake area to be seeded. Sow seed at a minimum rate of 220 lbs./acre. Use seed intended for the climate, and shall be approved by the Owner.
- F. Work to be completed to the Owner's satisfaction.
- G. Cost is incidental to the Project.

SECTION 09 97 13.10

STEEL COATING SURFACE PREPARATION

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Spot Field Abrasive Blast Cleaning.
- B. Power Tool Cleaning.
- C. High-pressure Water Cleaning.

1.02 REFERENCES

- A. AWWA Standards (latest version):
 - 1. D102 Painting Steel Water Storage Tanks.
- B. SSPC and NACE Standards (latest versions):
 - 1. SP11 – Power Tool Cleaning to Bare Metal.
 - 2. SP6/NACE No. 3 – Commercial Blast Cleaning.
 - 3. SP12/NACE No. 5 – Surface Preparation and Cleaning of Metals by Water Jetting Prior to Recoating.
 - 4. VIS 1 (Visual standard for abrasive blasted metal).
 - 5. VIS 3 (Visual standard for hand and power tool cleaned metal).

1.03 WORK INCLUDED – SURFACE PREPARATION

- A. Exterior: High-pressure water clean (5,000 to 10,000 psi), spot power tool clean to an SSPC-SP11 standard.
- B. Dry Interior: Spot abrasive blast clean the spot coating failures throughout to an SSPC-SP6 commercial standard.

PART 2 – PRODUCTS

2.01 EXTERIOR CLEANER

- A. United 727 Weather-Zyme or approved equal.
- B. Manufactured by United Laboratories www.unitedlabsinc.com (800) 323-2594.

2.02 ABRASIVE – COAL SLAG

- A. The coal slag is to be 20-40 grade, or 30-60 grade.
- B. The abrasive is to be free of moisture, water soluble contaminants, dust, and oil.
- C. The abrasive is to be stored and covered to prevent moisture contamination.
- D. All leaking or spilling bags are to be removed, and affected areas properly cleaned.
- E. All slag abrasive is to meet the requirements of SSPC-AB1 “Mineral and Slag Abrasive” Grade 3.

- F. The use of silica sand, flint sand, and glass beads is prohibited.
- G. Other types of blast media will be considered if submitted. All abrasive and grit material used, and all equipment supplied is to be subject to approval of the Engineer. The abrasive or grit is to be sharp enough and hard enough to remove the mill scale, rust, and paint.

2.03 RECYCLABLE STEEL GRIT – ALTERNATE

- A. Use recyclable steel grit size G-25 or G-50.
- B. The abrasive is to be free of moisture, water soluble contaminants, dust, and oil.
- C. The abrasive is to be stored and covered to prevent moisture contamination.
- D. All leaking or spilling containers are to be removed, and affected areas properly cleaned.
- E. All recyclable steel is to meet requirements of SSPC-AB3 “Ferrous Metallic Abrasive”.
- F. All abrasive and grit material used, and all equipment supplied is to be subject to approval of the Engineer. The abrasive or grit is to be sharp enough and hard enough to remove the mill scale, rust, and paint.
- G. Using steel grit in the dry interior will require extra clean-up when there is insulation on the fill pipe. The insulation and insulation jacketing on the fill/draw pipe will need to be removed for the sections within 4 feet above each platform. The removed insulation and jacketing is to be cleaned and reinstalled to original conditions.

PART 3 – EXECUTION

3.01 WET INTERIOR CLEANING

- A. Low-pressure water clean all surfaces and appurtenances at 3,500 to 5,000 psi to remove sediment, minerals, and other contaminants. Remove any remaining water.
- B. Staining may remain in place, the Engineer to approve cleanliness.
- C. The cost is incidental to the Project.

3.02 HIGH-PRESSURE WATER CLEANING (SSPC-SP12/NACE No. 5) - EXTERIOR

- A. Solvent clean all visible grease, oil, salt, algae, and residue in accordance with SSPC-SP1.
- B. High-pressure water clean all exterior surfaces and appurtenances at 5,000 – 10,000 psi per SSPC-SP12/NACE No. 5 HP WC to remove all dirt, chalk, algae, other foreign material, and all brittle or loose coating and rust.
- C. Operational pressure will be determined by the Engineer based on field conditions.
- D. Maintain a water jet nozzle distance of 2 in. – 10 in. away from the surface.
- E. Hold the water jet nozzle with 0° - 15° tip perpendicular (90°) to the surface at all times.

- F. Only use machines rated at and capable of achieving and maintaining 10,000 psi. Use of a rotating/reciprocating nozzle during water cleaning is permitted but not to increase the pressure of a washer rated lower than required.
- G. Do NOT exceed a rate of 10 sq. ft./minute.
- H. The gauge measuring time of use must be operational on the unit, if not operational the Contractor may be shut down and/or deducted price for rental of an operational unit from the final payment.
- I. Feather all edges using power tools per this specification.
- J. SURFACES WITH AN EXISTING CLEAR COAT WILL REQUIRE SANDING. ALL CLEAR COAT REMAINING AFTER POWER WASHING IS TO BE SCARIFIED AND SHARP EDGES ARE TO BE REMOVED USING 30-60 GRIT PAPER. SCARIFY THE SURFACE PRIOR TO THE APPLICATION OF THE FIRST FULL COAT.

3.03 POWER TOOL CLEAN (SSPC-SP11) - EXTERIOR

- A. Solvent clean all visible grease, oil, salts, and residue.
- B. Power tool clean all surfaces and appurtenances to bare metal (SSPC-SP11) in areas where steel is exposed or rusted, or where coating is abraded.
- C. Retain or produce a surface profile. Surface profile is to be greater than 1.0 mil.
- D. Edges of adjacent coating is to be feathered a minimum of ½ in. from the exposed steel with 3M Scotch-Brite Clean'n Strip discs.

3.04 COMMERCIAL BLAST (SSPC-SP6/NACE No. 3) SPOT – DRY INTERIOR

- A. Spot abrasive blast clean the spot coating failures throughout including appurtenances where steel is exposed or rusted, or where coating is abraded as specified to a commercial finish (SSPC-SP6/NACE No. 3).
- B. Maintain a profile of 1.0 – 2.0 mils on abrasive blast cleaned surfaces.
- C. Feather all edges of adjacent coating a minimum of ½ in. from the exposed steel with 3M Scotch-Brite Clean'n Strip discs.

3.05 NON-HAZARDOUS WASTE DISPOSAL

- A. If after testing of the spent abrasive material the TCLP tests indicate the abrasive is not a hazardous waste, dispose the abrasive in a waste disposal facility.
- B. All waste shall be handled by a licensed hauler. Supply the owner with all proper documentation from the final disposal site. The actual bill of lading and all manifests will be required prior to the final payment.
- C. Payment for non-hazardous waste disposal is incidental to the respective portions of the coating project.

3.06 WASTE DOCUMENTATION

- A. Supply proper documentation of storage, transportation, and treatment, or disposal of the waste to the Owner. The Owner will retain sufficient funds from the Contractor to pay for hazardous waste transportation, treatment, and any possible fines until all documentation has been received. This retainage will be held, even if the waste is tested as non-hazardous if documentation is not properly submitted.

3.07 TESTING AND CLEAN-UP OF WASTE

- A. Daily collect all spent abrasive and properly cover/store during non-work hours. Prior to receiving test results, spent abrasive is to be separated by portion of the Project. The exterior waste (if applicable) shall be stored on ground tarps and shall be covered and weighted down so no dust can be released. The interior waste shall be stored inside the structure.
- B. Furnish containers with proper labels for storage of the spent debris. Containers are to meet the requirements of the EPA (or their local counterpart) for hazardous waste disposal. The spent abrasive will be moved directly from the structure into the waste containers. Furnishing containers with covers will be incidental to respective repaint and will not be affected by the Owner's final selection of respective interior or exterior disposal.
- C. Waste to remain on-site in covered receptacles until waste test results are received.

3.08 WASTE SEPARATION

- A. The Owner is taking possession of the properly applied finished coating, on the structure only. All of the product that was not applied to the structure, all transport materials, (empty or partially filled coating and thinner pails, skids etc.) remain the property of the Contractor.
- B. If TCLP testing determines waste from some or all portions of the project are non-hazardous, then the abrasive and removed coating residue becomes the property of the Contractor. All project waste, that belongs to the Contractor, and which does not require special waste disposal, may be combined, as property of the Contractor. Dispose of waste per non-hazardous portion of these specifications.
- C. If TCLP testing determines waste from some portion or from all portions of the project, dispose of waste per Hazardous Waste Disposal portion of these specifications.

3.09 WASTE SAMPLING

- A. Sample spent abrasive waste from each portion of the Project with different existing coating systems. Keep waste from separate sections of the structure segregated from each portion of the Project. Send to a NLLAP certified lab and test for TCLP for eight

- (8) metals (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver).
- B. The Owner reserves the right to collect samples and to send them to their selected lab. This will be determined at the preconstruction meeting.
 - C. The Contractor is to pay all lab fees for eight (8) metals TCLP analysis on spent abrasive waste samples.
 - D. If TCLP determines waste from more than one portion of the Project is non-hazardous, those waste may be combined.

SECTION 09 97 13.19.01

DRY INTERIOR STEEL COATING – SPOT TWO COAT EPOXY

PART 1 – GENERAL

1.01 SECTION INCLUDES

A. Partial painting in the dry interior.

1.02 REFERENCES

A. SSPC and NACE Standards:

1. PA1 – Paint Application.
2. PA2 – Measurements and Calibration.
3. NACE RP 0178 Surface Finish Requirements.

1.03 WORK INCLUDED

A. Application of a spot epoxy system.

PART 2 – PRODUCTS

2.01 EPOXY SPOT SYSTEM

A. Approved suppliers and system:

<u>Manufacturer</u>	<u>System</u>
Tnemec	V69/V69
Induron	PE-70/PE-70
Sherwin Williams	646FC/646FC

PART 3 – EXECUTION

3.01 EPOXY SPOT SYSTEM

A. Apply to all prepared areas a spot two (2) coat epoxy system.

B. Surface preparation is defined in Section 09 97 13.10.

C. Apply each coat at the following rates:

<u>Coat</u>	<u>Minimum</u>	<u>Maximum</u>
	<u>D.F.T. (mils)</u>	<u>D.F.T. (mils)</u>
Primer (spot)	3.5	5.5
Topcoat (spot)	<u>3.5</u>	<u>5.5</u>
Total	7.0	11.0

D. Each coat to be a different color from the previous coat and is to be approved by the engineer. No color bleedthrough should occur if proper application rates are observed.

- E. Apply all coats in uniform color and sheen without streaks, laps, runs, sags, cloudy, or missed areas. Correct all defects before application of the successive coat.
- F. Allow a minimum of twenty-four (24) hours between coats. Additional time may be necessary if low temperatures require an increase in the necessary cure time.

3.02 SCHEDULE OF WORK

- A. Complete all exterior and interior welding prior to surface preparation.

SECTION 09 97 13.24.11
EXTERIOR STEEL COATING – THREE COAT EPOXY URETHANE
OVERCOAT

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Painting on the exterior.

1.02 REFERENCES

A. SSPC and NACE Standards:

- 1. PA1 – Paint Application.
- 2. NACE RP 0178 Surface Finish Requirements.

1.03 WORK INCLUDED

- A. Application of an epoxy urethane system.
- B. Application of lettering.

PART 2 – PRODUCTS

2.01 EPOXY URETHANE OVERCOAT SYSTEM

- A. The contractor is advised to follow all requirements for safety concerning isocyanates.
- B. Ultraviolet protection additives mixed at factory only. There will be no tinting or addition of any material other than the manufacturer's thinners.
- C. Approved suppliers and systems:

<u>Manufacturer</u>	<u>System</u>
Tnemec	V69(spot)/V69/1095/1094
Induron	PE-70 (spot)/PE-70/I-6600 Plus LV/I-6600 Plus LV
Sherwin Williams	646FC(spot)/646FC/Hi-Solids Poly-250/Hi-Solids Poly-250

PART 3 – EXECUTION

3.01 EPOXY URETHANE OVERCOAT SYSTEM

- A. Apply to all prepared surfaces a three (3) coat epoxy urethane system.
- B. Surface preparation is defined in Section 09 97 13.10.

C. Apply each coat at the following rates:

<u>Coat</u>	Minimum <u>D.F.T. (mils)</u>	Maximum <u>D.F.T. (mils)</u>
Primer (spot)	2.0	3.0
Epoxy Intermediate	2.0	3.0
Urethane Intermediate	2.0	3.0
Topcoat	<u>2.0</u>	<u>3.0</u>
Total	8.0	12.0

D. Each full coat to be a different color from the previous coat and is to be approved by the engineer. No color bleedthrough should occur if proper application rates are observed.

E. Apply all coats in uniform color and sheen without streaks, laps, runs, sags, cloudy, or missed areas. Correct all defects before application of the successive coat.

F. Allow a minimum of twenty-four (24) hours between coats. Additional time may be necessary if low temperatures require an increase in the necessary cure time.

3.02 LETTERING

A. Paint the name “Bingham Township” in two (2) locations on the tank.

B. Paint the lettering the same size and style as the existing lettering, and place the lettering in the same locations. Verify size and document locations for application purposes.

C. Approved Fluoropolymer urethane coating system.

<u>Manufacturer</u>	<u>System</u>
Tnemec	V700
Induron	Perma-Gloss LV
Sherwin Williams	Fluorokem HS 100

D. Apply lettering coating at 2.0 to 3.0 mils.

E. Payment is incidental to exterior repainting.

3.03 SCHEDULE OF WORK

A. Complete all exterior and interior welding prior to surface preparation.

SECTION 09 97 23.23.01

CONCRETE FOUNDATION COATING – TWO COAT EPOXY

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Painting of the concrete foundation.

1.02 REFERENCES

- A. SSPC and NACE Standards:
 - 1. PA1 – Paint Application.
 - 2. PA2 – Measurements and Calibration.

1.03 WORK INCLUDED

- A. Application of an epoxy system.

PART 2 – PRODUCTS

2.01 EPOXY SYSTEM

- A. Approved suppliers and manufacturers:

<u>Manufacturer</u>	<u>System</u>
Tnemec	V69/V69
Induron	PE-70/PE-70
Sherwin Williams	646FC/646FC

PART 3 – EXECUTION

3.01 EPOXY SYSTEM

- A. Apply to all prepared areas a two (2) coat epoxy system.
- B. Remove soil 3” below grade around the entire foundation prior to coating, backfill once the topcoat is dry to the touch.
- C. Foundations to be water cleaned at 3,500 to 5,000 psi to remove all contaminants. Coating is to be applied no sooner than 72 hrs. after water cleaning.

- D. Apply each coat at the following rates:

<u>Coat</u>	<u>Min. D.F.T. (mils)</u>	<u>Max. D.F.T. (mils)</u>
Primer	3.5	5.5
Topcoat	<u>3.5</u>	<u>5.5</u>
Total	7.0	11.0

- E. Allow the manufacturer’s minimum time between coatings.
- F. Cost is incidental to exterior painting.

SECTION 16 05 01
ELECTRICAL WORK

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Furnish and coordinate all labor, equipment, materials, tools, testing, and temporary work necessary to perform the repairs.

1.02 REFERENCES

- A. NEC.
- B. FAA.
- C. Local Codes and Regulations.

1.03 OMISSIONS

- A. The specifications include all work and materials necessary for completion of the work. Any incidental items of material, labor, or detail required for the proper execution and completion of the work are included.

1.04 WORK INCLUDED

- 1) Replace the aviation light.
- 2) Replace the dry interior light bulbs.

1.05 WORKMANSHIP

- A. Provide material and workmanship necessary to complete the Project to the specified standards.

1.06 ELECTRICIAN QUALIFICATIONS

- A. The electrician must conform to all licensing and/or certification requirements of the State.
- B. The electrician shall be experienced in rigging and elevated work.

1.07 SUBMITTALS

- A. Provide an electronic copy to the engineer. Note that the Contractor is to supply a separate copy of the SDS of each product at the job site that is accessible by their employees.
- B. No work may commence without the complete filing. All SDS shall conform to the requirements of SARA (EPCRA) Right-to-Know Act.
- C. Submit the following ten (10) days prior to the preconstruction meeting.
 - 1. Product Data Sheets (PDS) for aviation light.

2. Product Data Sheets (PDS) and Safety Data Sheets (SDS) for light bulbs.
3. Subcontracted Electrician name or electrician certifications if work is to be performed by General Contractor.

PART 2 – PRODUCTS

2.01 GENERAL

- A. Use electrical materials and equipment designed and manufactured with UL Label.
- B. Supply all new equipment and materials from products of the same manufacturer.
- C. Furnish all equipment and materials from an established, reputable manufacturer of quality construction, design, and guarantee to perform the service required.

2.02 CONDUIT

- A. Use rigid galvanized steel, stainless steel or aluminum conduit. The intention is to match what is currently on the structure if applicable, Contractor to field verify conditions.

2.03 CONDUIT FITTINGS and BOXES

- A. Use standard threaded type of cast ferrous alloy conduit fittings to suit the location and purpose. Use fittings manufactured by Crouse-Hinds, Appleton Electric, or equal.
- B. Use waterproof and insect proof galvanized malleable or cast iron, aluminum, or corrosion resistant stainless-steel boxes. Note that conduit materials are to match box and fitting materials. The intention is to match what is currently on the structure if applicable, Contractor to field verify conditions.

2.04 AVIATION LIGHT

- A. Double light fixture model L810LED Night Vision Compatible, with 120 V AC power, 1 in. bottom hub, and photocell #81021.
- B. Manufactured/supplied by Flight Light Inc., www.flightlight.com (800) 806-3548 or approved equal.

2.05 LIGHT BULBS

- A. Dry interior bulbs to be bright white LED bulbs with a minimum brightness of 800 lumens and a color of light at a minimum of 5,000K and a minimum rated life of 25,000 hours., size A19.

PART 3 – EXECUTION

3.01 AVIATION LIGHT REPLACEMENT

- A. Replace the aviation light on the antenna mast on the roof.
- B. Remove the aviation light. Furnish and install a new double red aviation light with universal relay and photoelectric sensor, following the manufacturer's recommendations for installation.
- C. The existing mounting pole and wiring can be reused if possible.
- D. All wiring is to be inside conduit and junction boxes as needed.
- E. Ensure the light operates correctly per FAA standard daytime/nighttime operations.
- F. The repair work is to be performed during daylight hours and must be completed in one day so there is an operational light once it's dark.
- G. Payment is a separate line item "Aviation Light" which the Owner reserves the right to delete.

3.02 REPLACE LIGHT BULBS

- A. Replace all dry interior bulbs with LED light bulbs.
- B. Change all of the bulbs whether the existing are operational or not. Change bulbs after all blasting and painting equipment has been removed from the tank.
- C. All bulbs are to have the same color and brightness throughout the dry interior.
- D. Payment is incidental to the Project.