

EXHIBIT "B"

Project Manual
Technical Specifications

FIRE STATION 14 TRAINING SITE PHASE 1

City of Madison Fire

Bid Documents
October 31, 2023

Contract #9329
Munis #14203



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

**FIRE STATION 14 TRAINING SITE PHASE 1
TABLE OF CONTENTS**

DIVISION 00 PROCUREMENT AND CONTRACTING REQUIREMENTS

00 31 46 – Permits

DIVISION 01 GENERAL REQUIREMENTS

01 26 13 – Request for Information (RFI)

01 26 46 – Construction Bulletin (CB)

01 26 57 – Change Order Request (COR)

01 26 63 – Change Order (CO)

01 29 73 – Schedule of Values

01 29 76 – Progress Payment Procedures

01 31 13 – Project Coordination

01 32 16 – Construction Progress Schedules

01 33 23 – Submittals

01 41 00 – Regulatory Requirements

01 50 00 – Temporary Facilities and Controls

01 60 00 – Product Requirements

01 76 00 – Protecting Installed Construction

01 78 39 – As-Built Drawings

END OF SECTION

**SECTION 00 31 46
PERMITS**

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58

PART 1 – GENERAL1
1.1. SUMMARY1
1.2. REFERENCES1
1.3. GENERAL CONTRACTORS REQUIREMENTS1
PART 2 – PRODUCTS – THIS SECTION NOT USED1
PART 3 – EXECUTION – THIS SECTION NOT USED1

PART 1 – GENERAL

1.1. SUMMARY

- A. Each project has varying requirements for permits, inspections, and fees based on the scope, size, and location of the project.
- B. The City of Madison (Owner) is subject to all permits, inspections and associated fees for construction, demolition, utility connection, storm water management, and other similar requirements that may be required to complete the scope of work associated with these contract documents.
- C. The General Contractor (GC) shall be responsible for obtaining all permits, inspections and paying for all associated fees unless specifically identified within this specification.

1.2. REFERENCES

- A. The following references are not intended to be all inclusive. It shall be the GC’s responsibility to determine all requirements based on the scope of work in the contract documents.
- B. City of Madison Ordinances: Review all ordinances that may require a permit or fee that may be connected with a required permit. Contact the following City Agencies to determine the exact requirements during bidding
 - 1. Building Inspection
 - 2. Zoning
 - 3. Engineering
 - 4. Water Utility
 - 5. Traffic Engineering
 - 6. Others as may be specified by the contract documents.
- B. State Statutes
- C. Other Regulatory Regulations
- D. Other Agencies or companies that may have related requirements
 - 1. Madison Metropolitan Sewerage District
 - 2. Local gas and electric utility companies
 - 3. Other utility companies

1.3. GENERAL CONTRACTORS REQUIREMENTS

- A. The GC shall be responsible for all of the following:
 - 1. Execute application for all required permits as may be required by the scope of work described within the contract documents.
 - 2. Scheduling all required inspections that may be conditions of any required permits.
 - 3. Paying for other permits not explicitly stated as excluded in this section.
- B. The GC is not responsible for paying for the City Building, City HVAC, City Electrical, City Plumbing, Madison Fire Department Sprinkler and Madison Fire Department Fire Alarm permits.
- C. The GC shall provide high quality scanned images of all required permits and inspections to the City Project Manager (CPM).

PART 2 – PRODUCTS – THIS SECTION NOT USED

PART 3 – EXECUTION – THIS SECTION NOT USED

END OF SECTION

**SECTION 01 26 13
REQUEST FOR INFORMATION (RFI)**

1
2
3
4 PART 1 – GENERAL1
5 1.1. SUMMARY1
6 1.2. RELATED SPECIFICATIONS1
7 1.3. PERFORMANCE REQUIREMENTS.....1
8 1.4. QUALITY ASSURANCE1
9 PART 2 – PRODUCTS.....1
10 2.1. REQUEST FOR INFORMATION FORM1
11 PART 3 - EXECUTION1
12 3.1. CONTRACTOR INITIATED RFI1
13 3.2. RFI RESPONSES2
14 3.3. COMMENCEMENT OF WORK RELATED TO AN RFI.....2
15

PART 1 – GENERAL

1.1. SUMMARY

- 19 A. Contractors shall use the RFI form/process to request additional information or clarification regarding the
20 construction documents.
21 B. Form will be provided by CPM.
22

1.2. RELATED SPECIFICATIONS

- 23 A. Section 01 26 46 Construction Bulletin (CB)
24 B. Section 01 26 57 Change Order Request (COR)
25 C. Section 01 26 63 Change Order (CO)
26
27

1.3. PERFORMANCE REQUIREMENTS

- 29 A. RFI issues initiated by any contractor shall be done through the General Contractor (GC).
30 1. RFIs submitted by any Sub-contractor under the GCs control shall be returned with no response.
31 B. Submit a new RFI for each issue. Only multiple questions that are of a similar nature may be combined into one
32 RFI shall be allowed and responded to.
33

1.4. QUALITY ASSURANCE

- 34 A. The GC shall be responsible for all of the following:
35 1. Ensure that any request for additional information is valid and the information being requested is not
36 addressed in the construction documents.
37 2. Ensure that all requests are clearly stated and the RFI form is completely filled out.
38 3. Ensure that all Work associated an RFI response is carried out as intended.
39 B. The Project Architect (PA) / Project Engineer (PE) shall be responsible for the following:
40 1. Ensure that all responses to contractor initiated RFIs are properly responded to in a timely fashion.
41 a. The CPM, Owner, consulting staff, and other City staff shall be responsible for the initial review of
42 the RFI. The PA/PE shall be responsible for codifying all consultant and Owner/City staff
43 comments into a unified RFI response.
44
45

PART 2 – PRODUCTS

2.1. REQUEST FOR INFORMATION FORM

- 46
47
48 A. Will be provided by CPM.
49
50

PART 3 - EXECUTION

3.1. CONTRACTOR INITIATED RFI

- 51
52
53 A. Immediately on discovery of the need for additional information or interpretation of the Contract Documents
54 any contractor may initiate an RFI for additional information or clarification through the GC.
55

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

3.2. RFI RESPONSES

- A. Responses to simple RFI issues shall use the response section of the RFI form and shall be completed within five (5) working days of the RFI form being submitted.
- B. Responses to more complex issues may require additional time or may require a Construction Bulletin to be published. The initial RFI shall be responded to within five (5) working days stating that the RFI is being reviewed and provide an estimated date for the response.
- C. The following GC generated RFIs will be returned without action:
 - 1. Requests for approval of submittals
 - 2. Requests for approval of substitutions
 - 3. Requests for approval of Contractor’s means and methods.
 - 4. Requests for coordination information already indicated in the Contract Documents.
 - 5. Requests for adjustments in the Contract Time or the Contract Sum.
 - 6. Requests for interpretation of A/E’s actions on submittals.
 - 7. Incomplete RFI or inaccurately prepared RFI.

3.3. COMMENCEMENT OF WORK RELATED TO AN RFI

- A. The GC shall only proceed with the Work of an RFI where, additional information is not required.
- B. The GC shall not proceed with any Work associated with an RFI while it is under review.
- C. The GC shall not proceed with any Work associated with an RFI that clearly states a CB will be issued in response to the RFI.
- D. The GC will be required to immediately remove and replace unauthorized Work and all costs required to conform to the Contract Documents shall be borne by the GC.

END OF SECTION

**SECTION 01 26 46
CONSTRUCTION BULLETIN (CB)**

1
2
3
4 PART 1 – GENERAL1
5 1.1. SUMMARY1
6 1.2. RELATED SPECIFICATIONS1
7 1.3. PERFORMANCE REQUIREMENTS.....1
8 1.4. QUALITY ASSURANCE1
9 PART 2 – PRODUCTS.....2
10 2.1. CONSTRUCTION BULLETIN FORM2
11 PART 3 - EXECUTION2
12 3.1. WRITING THE CONSTRUCTION BULLETIN2
13 3.2. EXECUTING THE CONSTRUCTION BULLETIN2
14

PART 1 – GENERAL

1.1. SUMMARY

- 18 A. Construction Bulletins (CB) are formal published construction documents that modify the original contract bid
19 documents after construction has commenced. CBs may be published for many reasons, including but not
20 limited to the following:
21 1. Clarification of existing construction documents including specifications, plans, and details
22 2. Change in product or equipment
23 3. A response to a Request for Information
24 4. Change in scope of the contract as either an add or a deduct of work
25 B. CBs provide a higher degree of detail in response to a Request for Information (RFI) through directives, revised
26 plans/details, and specifications as necessary.
27 C. The CB may change the original contract documents through additions or deletions to the Work.
28 D. Where the directives of a CB are significant enough to warrant a Change Order Request (COR) the GC shall use all
29 information provided in the CB to assemble all required back-up documentation for additions and deletions of
30 materials, labor and other related contract costs for the COR.
31

1.2. RELATED SPECIFICATIONS

- 32 A. Section 01 26 13 Request for Information (RFI)
33 B. Section 01 26 57 Change Order Request (COR)
34 C. Section 01 26 63 Change Order (CO)
35
36

1.3. PERFORMANCE REQUIREMENTS

- 37 A. The Project Architect (PA) / Project Engineer (PE): The PA/PE shall be the only person authorized to publish a CB
38 as needed for any reason indicated in section 1.1.A above. The PA/PE shall consult as necessary with any of the
39 following while drafting the CB and shall confirm final direction with the CPM prior to issuing a CB:
40 1. City Project manager (CPM)
41 2. Owner
42 3. Members of the consulting staff
43 4. Members of city staff
44 5. The General Contractor
45 6. Sub-contractors
46 B. General Contractor: The GC shall be responsible for the following as needed:
47 1. Executing the directives of the CB when they believes that no changes in labor, materials, equipment, or
48 contract duration will be required for additions or deletions.
49 2. Submit a COR when they believes that a change in labor, materials, equipment or contract duration will
50 be required for additions or deletions.
51
52

1.4. QUALITY ASSURANCE

- 53 A. The PA/PE shall be responsible for ensuring the final CB sufficiently provides direction, details, specifications and
54 other information as necessary for the GC to perform the intended Work.
55 B. The PA/PE shall be responsible for ensuring the final CB is published as expeditiously as practical based on the
56 complexity of the CB being written. CBs that may affect the GC critical path shall be given priority.
57
58

1 **PART 2 – PRODUCTS**

2

3 **2.1. CONSTRUCTION BULLETIN FORM**

4 A. Will be provided by CPM.

5

6 **PART 3 - EXECUTION**

7

8 **3.1. WRITING THE CONSTRUCTION BULLETIN**

9 A. The PA/PE shall draft a CB as needed using the form provided by CPM.

10 1. The PA/PE and/or consulting staff as necessary shall provide specifications, model numbers and
11 performance data, details and other such information necessary to clearly state the intentions of the CB.

12 2. The consulting staff, CPM, Owner, and other City Staff shall review the draft and recommend changes as
13 needed.

14 3. The PA/PE shall amend the draft as necessary into a final CB for review

15 B. Once the final CB has been approved the PA/PE shall submit it to the GC.

16

17 **3.2. EXECUTING THE CONSTRUCTION BULLETIN**

18 A. The GC shall acknowledge receipt of the CB.

19 B. The GC shall notify all Sub-contractors of the CB and publish the CB to all field sets of drawings and specifications
20 as appropriate.

21 C. The GC shall execute the directives of the CB or submit COR documentation as necessary during the execution
22 and implementation of the CB.

23 1. See Specification 01 26 57 Change Order Request (COR)

24

25

26

27

28

END OF SECTION

SECTION 01 26 57
CHANGE ORDER REQUESTS (COR)

1
2
3
4 PART 1 – GENERAL 1
5 1.1. SUMMARY 1
6 1.2. RELATED SPECIFICATION SECTIONS 2
7 1.3. DEFINITIONS AND STANDARDS 2
8 1.4. CONTRACT EXTENSION 3
9 1.5. OVERHEAD AND PROFIT MARKUP 3
10 1.6. PERFORMANCE REQUIREMENTS 3
11 1.7. QUALITY ASSURANCE 3
12 PART 2 – PRODUCTS 4
13 2.1. CHANGE ORDER REQUEST FORM 4
14 PART 3 - EXECUTION 4
15 3.1. ESTABLISHING A CHANGE ORDER REQUEST 4
16 3.2. CHANGE ORDER REQUEST REVIEW, APPROVAL, AND PROCESSING 4
17 3.3. EMERGENCY CHANGE ORDER REQUEST 4
18

PART 1 – GENERAL

1.1. SUMMARY

- 19
20
21
22 A. Except in cases of emergency no changes in the Work required by the Contract Documents may be made by
23 the General Contractor (GC) without having prior approval of the City Engineer or their representative.
24 B. The City may at any time, without invalidating the Contract and without Notice to Sureties, order changes in
25 the Work by written Change Order (CO). Such changes may include additions and/or deletions.
26 C. Where the City desires to make changes in the Work through use of written Change Order Request (COR), the
27 following procedures apply:
28 1. If requested by the City, the GC shall prepare and submit a detailed proposal, including all cost and time
29 adjustments to which the GC believes it will be entitled if the change proposed is incorporated into the
30 Contract. The City shall be under no legal obligation to issue a Change Order for such proposal.
31 2. The parties shall attempt in good faith to reach agreement on the adjustments needed to the Contract to
32 properly incorporate the proposed change(s) into the Work. In the event that the parties agree on such
33 adjustments, the City may issue a Change Order and incorporate such changes and agreed to
34 adjustments, if any.
35 3. In some instances, it may be necessary for the City to authorize Work or direct changes in Work for which
36 no final and binding agreement has been reached and for which unit prices are not applicable. In such
37 cases the following shall apply.
38 a. Upon written request by the City, the GC shall perform proposed Work
39 b. The cost of such change may be determined in accordance with this specification.
40 c. In the event agreement cannot be accomplished as contemplated herein, the City may authorize
41 the Work to be performed by City forces or to hire others to complete the Work. Such action on
42 the part of the City shall not be the basis of a claim by the GC for failure to allow it to perform the
43 changed Work.
44 D. Where changes in the Work are made by the City through use of a force account basis, the GC shall as soon as
45 practicable, and in no case later than ten (10) working days from the receipt of such order, unless another time
46 period has been agreed to by both parties, give the City written Notice, stating:
47 1. The date, circumstances and source of the extra work; and,
48 2. The cost of performing extra work described by such Order, if any; and,
49 3. Effect of the order on the required completion date of the Project, if any.
50 E. The giving of each Notice by the GC as prescribed by this specification, shall be a requirement to liability of the
51 City for payment of any additional costs incurred by the GC in implementing changes in the Work. Under this
52 specification, no order or statement of the City shall be treated as a Change Order, or shall entitle the GC to an
53 equitable adjustment of the terms of this Contract or damages for costs incurred by the GC on any activity for
54 which the Notice was not given.
55 F. In the event Work is required due to an emergency as described in this specification the GC must request an
56 equitable adjustment as soon as practicable, and in no case later than ten (10) working days of the
57 commencement of such emergency.

- 1 G. All GC requests for equitable adjustment shall be submitted to the CPM per the specifications below. Such
2 requests shall set forth with specificity the amount of and reason(s) for the proposed adjustment and shall be
3 accompanied by supporting information and documents.
4 H. No adjustment of any kind shall be made to this Contract, if asserted by the GC for the first time, after the date
5 of final payment.
6 I. This specification shall be used by the GC when preparing documentation for any COR to ensure each has been
7 properly and completely filled out as required by the City of Madison.
8

9 **1.2. RELATED SPECIFICATION SECTIONS**

- 10 A. Section 01 26 13 Request for Information (RFI)
11 B. Section 01 26 46 Construction Bulletins (CB)
12 C. Section 01 26 63 Change Order (CO)
13 D. Parts of this specification will reference articles within "The City of Madison FACILITIES MANAGEMENT
14 SPECIFICATIONS for Public Works Construction".
15 1. Use the following link to access the FACILITIES MANAGEMENT SPECIFICATIONS web page:
16 <http://www.cityofmadison.com/business/pw/specs.cfm>
17 a. Click on the "Part" chapter identified in the specification text. For example if the specification
18 says "Refer to City of Madison FACILITIES MANAGEMENT SPECIFICATION 210.2" click the link for
19 Part II, the Part II PDF will open.
20 b. Scroll through the index of Part II for specification 210.2 and click the text link which will take you
21 to the referenced text.
22

23 **1.3. DEFINITIONS AND STANDARDS**

- 24 A. LABOR: The amount of time and cost associated with the performance of human effort for a defined scope of
25 Work. Labor is further defined as follows:
26 1. Labor rate is the total hourly rate which includes the base rate of pay, fringe benefits plus each
27 company's cost of required insurance, also referred to as a reimbursable labor rate.
28 2. Unit labor is the labor hours anticipated to install the corresponding unit of material.
29 3. Labor cost is the labor hours multiplied by the hourly labor rates.
30 B. MATERIAL: Actual material cost is the amount paid, or to be paid, by the GC for materials, supplies and
31 equipment entering permanently into the Work, including cost of transportation and applicable taxes. The cost
32 shall not exceed the usual and customary cost for such items available in the geographical area of the project.
33 C. LARGE TOOLS AND MAJOR EQUIPMENT: Large tools and major equipment are those with an initial cost greater
34 than \$1,500, whether from the GC or other sources.
35 1. Tool and equipment use and time allowed is only for extra work associated with change orders.
36 a. Rental Rate is the machine cost associated with operating a piece of equipment for a defined
37 length of time (hour, day, week, or month) and shall not exceed the usual and customary amount
38 for such items available in the geographical area of the project.
39 b. Rental cost is the rental rate multiplied by the anticipated duration the equipment shall be
40 required.
41 2. The GC shall provide a breakdown of all rental rates to indicate what items and costs are associated with
42 the rate. Examples of items to include in the breakdown would be fuel consumption, lubrication,
43 maintenance and other similar expenses but not including profit and overhead.
44 3. When large tools and equipment needed for Change Order work are not already at the job site, the
45 actual cost to get the item there is also reimbursable.
46 D. BOND COST: The cost shall be calculated at 1% of the total proposed change order.
47 E. SUB-CONTRACTOR COSTS: Sub-contractor costs are for those labor, material, and equipment costs required by
48 subcontracted specialties to complete the Change Order work.
49 F. OVERHEAD AND PROFIT Markup: The allowable markup percentage to a COR by the GC and Sub-contractors for
50 overhead and profit. All of the following are expenses associated with overhead and profit and shall not be
51 reimbursable as individual items on any COR:
52 1. CHANGE ORDER PREPARATION: All costs associated with the preparing and processing of the change
53 order.
54 2. DESIGN, ESTIMATING, AND SUPERVISION: All such efforts, unless specifically requested by Owner as
55 additional Work to be documented as a COR or portion thereof.
56 3. INSTALLATION LAYOUT: The layout required for the installation of material and equipment, and the
57 installation design, is the responsibility of the GC.

- 1 4. SMALL TOOLS AND SUPPLIES: The cost of small hand tools with an initial cost of \$1,500 or less, along
2 with consumable supplies and expendable items such as drill bits, saw blades, gasoline, lubricating or
3 cutting oil, and similar items.
4 5. GENERAL EXPENSE: The general expense, which is those items that are a specific job cost not associated
5 with direct labor and material such as job trailers, foreman truck, and similar items.
6 6. RECORD DRAWINGS: The preparation of record or as-built drawings.
7 7. OTHER COSTS: Any miscellaneous cost not directly assessable to the execution of the Change Order
8 including but not limited to the following:
9 a. All association dues, assessments, and similar items.
10 b. All education, training, and similar items.
11 c. All drafting and/or engineering, unless specifically requested by Owner as additional Work to be
12 documented as a Change Order proposal or portion thereof.
13 d. All other items including but not limited to review, coordination, estimating and expediting, field
14 and office supervision, administrative work, etc.
15 G. Contract Extension: The necessary amount of time to be added to the contract deadlines for the completion of a
16 change order.
17

18 **1.4. CONTRACT EXTENSION**

- 19 A. The GC shall not assume that every COR will require a Contract Extension. If the GC feels a contract extension is
20 warranted they shall provide sufficient scheduling information that shows how the COR being requested impacts
21 the critical path of the project.
22 B. The City of Madison strongly encourages the GC to explore alternative methods and practices prior to submitting
23 a COR with a request for contract extension.
24

25 **1.5. OVERHEAD AND PROFIT MARKUP**

- 26 A. Pursuant to the City of Madison FACILITIES MANAGEMENT SPECIFICATIONS for Public Works Construction,
27 Section 104.7, Extra Work, the following maximum allowable markups shall be strictly enforced on all change
28 orders associated with the execution of this contract.
29 1. The total maximum overhead and profit shall not exceed fifteen percent (15%) of the total costs.
30 2. The total maximum overhead and profit shall be distributed as follows:
31 a. For work performed and materials provided solely by the General Contractor, fifteen percent
32 (15%) of the total costs.
33 b. For work performed and materials provided solely by Sub-contractors and supervised by the
34 General Contractor:
35 i. Supervision of the GC, five percent (5%) of the total Sub-contractor cost.
36 ii. Sub-contractors work and materials ten percent (10%) of the total Sub-contractor cost.
37

38 **1.6. PERFORMANCE REQUIREMENTS**

- 39 A. The GC shall become thoroughly familiar with this specification as it will identify procedures and expenses that
40 are or are not allowed under the Change Order and Change Order Request process.
41 B. The GC shall be responsible for all of the following:
42 1. Carefully reviewing the CB that is associated with the COR.
43 2. Collecting required supporting documentation from all contractors that quantify the need for a COR.
44 a. Labor hours and wage rates
45 b. Material costs
46 c. Equipment costs
47 C. The following shall apply to establishing prices for labor, materials, and equipment costs:
48 1. Where Work to be completed has previously been established by individual bid items in the contract bid
49 proposal the GC shall use the unit bid prices previously established.
50 2. Where Work to be completed was bid as a Lump Sum without individual bid items the GC shall provide a
51 breakdown of all labor, materials, equipment including unit rates and quantities required.
52 D. The completion date is determined by Owner. The schedule, however, is the responsibility of the GC. Time
53 extensions for extra Work will be considered when a schedule analysis of the critical path shows that the Change
54 Order Request places the Work beyond the completion date stated in the Contract.
55

56 **1.7. QUALITY ASSURANCE**

- 57 A. The GC shall be responsible for ensuring that all COR supporting documentation meets the following
58 requirements prior to completing the COR form:

- 1 1. Sufficiently indicates labor, material, and other expenses related to completing the intent of the CB.
- 2 2. No costs exceed the usual and customary amount for such items available in the geographical area of the
- 3 project, and no costs exceed those established under the contract.
- 4 B. The Project Architect (PA) / Project Engineer (PE), City Project Manager (CPM), other members of the consulting
- 5 staff, and city staff shall review all COR requests to ensure that the intent of the CB will be met under the
- 6 proposal of the COR or request additional information as necessary.

7
8 **PART 2 – PRODUCTS**

9
10 **2.1. CHANGE ORDER REQUEST FORM**

- 11 A. Will be provided by CPM.

12
13 **PART 3 - EXECUTION**

14
15 **3.1. ESTABLISHING A CHANGE ORDER REQUEST**

- 16 A. Upon receipt of a Construction Bulletin (CB) where the GC believes a significant change in contract scope
- 17 warrants the submittal of a COR the GC shall do all of the following within ten (10) working days after receipt of
- 18 the CB:
- 19 1. Review the CB with all necessary trades and sub-contractors required by the change in scope.
 - 20 a. Additions or deletions to the contract scope shall be as directed within the CB.
 - 21 b. Additions or deletions of labor and materials shall be determined by the GC based on the
 - 22 directives of the CB.
 - 23 2. Assemble all required back-up documentation for additions and deletions including material breakdown,
 - 24 labor breakdown and other related contract costs as previously outlined in this specification.
 - 25 3. Submit a COR request form.
- 26 B. Submitting a COR does not obligate the GC to complete the work associated with the COR nor does it obligate
- 27 the Owner to approve the COR as a change to the contract.
- 28

29 **3.2. CHANGE ORDER REQUEST REVIEW, APPROVAL, AND PROCESSING**

- 30 A. The PA/PE and CPM shall review all CORs submitted by the GC.
- 31 1. Additional consulting staff and city staff having knowledge of the components of the COR shall review
 - 32 and advise the PA/PE and CPM as to the accuracy of the items, quantities, and associated costs of the
 - 33 COR as directed by the CB.
 - 34 2. The CPM shall review the COR with the Owner.
- 35 B. If required the PA/PE and CPM, shall in good faith, further negotiate the COR with the GC as necessary. All
- 36 amendments to any COR shall be documented.
- 37 C. After final review of the COR the CPM and Owner may accept the COR.
- 38 D. The CPM shall prepare the COR in the form of an official Board of Public Works Change Order for final review and
- 39 approval as outlined in Section 01 26 63 Change Order (CO).
- 40 E. The GC shall not act upon any accepted COR until it has received final approval through the Public Works process
- 41 as an official CO to the Work unless instructed to do so by the CPM. Proceeding without the final approval of a
- 42 fully authorized Change Order is at the GC's own risk.
- 43

44 **3.3. EMERGENCY CHANGE ORDER REQUEST**

- 45 A. In the event Work is required due to an emergency as described in the Contract Documents, the GC must
- 46 request an equitable adjustment as soon as practicable, and in no case later than ten (10) working days of the
- 47 commencement of such emergency.
- 48 B. The GC shall provide full documentation of all labor, materials and equipment used during the period of
- 49 emergency as part of the COR submittal.
- 50

51
52
53 **END OF SECTION**

**SECTION 01 26 63
CHANGE ORDER (CO)**

1
2
3
4 PART 1 – GENERAL1
5 1.1. SUMMARY1
6 1.2. RELATED SPECIFICATION SECTIONS1
7 1.3. BOARD OF PUBLIC WORKS PROCEDURE1
8 PART 2 – PRODUCTS.....1
9 2.1. CHANGE ORDER FORM.....1
10 PART 3 - EXECUTION1
11 3.1. PREPARATION OF THE CHANGE ORDER2
12 3.2. EXECUTION OF THE CHANGE ORDER2
13

14 **PART 1 – GENERAL**

15
16 **1.1. SUMMARY**

- 17 A. Except in cases of emergency, no changes in the Work required by the Contract Documents may be made
18 by the General Contractor (GC) without having prior approval of the City Project Manager (CPM).
19 B. The City may at any time, without invalidating the Contract and without Notice to Sureties, order changes in
20 the Work by written Change Order. Such changes may include additions and/or deletions.
21 C. The Change Order (CO) is a Board of Public Works (BPW) form that is reviewed and approved by a specific
22 process.
23 D. The CO form is typically made up of multiple Change Order Requests (CORs) and/or Bid Items as appropriate
24 depending on the type of project and how the contract was bid.
25

26 **1.2. RELATED SPECIFICATION SECTIONS**

- 27 A. Section 01 26 13 Request for Information (RFI)
28 B. Section 01 26 46 Construction Bulletin (CB)
29 C. Section 01 26 63 Change Order Request (COR)
30

31 **1.3. BOARD OF PUBLIC WORKS PROCEDURE**

- 32 A. The Board of Public Works has a very explicit procedure for the review and approval of all change orders
33 associated with any Public Works Contract as follows:
34 1. The Supervisory Chain of the CPM shall review and approve any CO under \$20,000 provided it does not
35 include either of the following:
36 a. The CO does not request a time extension to the contract.
37 b. The CO does not cause the contract contingency sum to be exceeded.
38 2. The Board of Public Works shall review and approve any CO that requires any of the following:
39 a. Any CO over \$20,000.
40 b. Any CO requesting a time extension to the contract regardless of the monetary value of the CO.
41 c. Any CO that that causes the contract contingency sum to be exceeded.
42 B. The Board of Public Works generally meets every other week and only once in August and December. The GC is
43 cautioned that, under normal scheduling, a CO requiring a BPW review will take a minimum of two (2) weeks to
44 achieve final approval.
45 1. The City shall not be responsible for additional delays to the Work caused by the scheduling constraints
46 of the Board of Public Works.
47 C. ***SPECIAL NOTE:*** The GC is cautioned to never proceed unless told to do so by the CPM. Only in rare instances
48 may the CPM give a written notice to proceed on a COR without an approved CO. Proceeding without the
49 written notice of the CPM or an approved CO is at the GC’s own risk.
50

51 **PART 2 – PRODUCTS**

52
53 **2.1. CHANGE ORDER FORM**

- 54 A. Provided by CPM.
55

56 **PART 3 - EXECUTION**
57

1 **3.1. PREPARATION OF THE CHANGE ORDER**

- 2 A. The CPM shall prepare the required CO as follows:
- 3 1. Provide information for all contract information.
 - 4 2. Provide a general description of the items described within the change order.
 - 5 3. Provide detailed information for each Item on the CO form. At the option of the CPM they may include
 - 6 multiple Change Order Requests each as their own item.
 - 7 4. Provide required pricing breakdown and accounting information as needed for the item.
 - 8 5. Insert attachments of contractor/architect provided information that clarifies and quantifies the CO.
 - 9 Attachments may include but not be limited to material lists, estimated labor breakdown, revised details
 - 10 or specifications, and other documents that may be related to the requested change.
 - 11 6. Save the final version of the completed CO.

12
13 **3.2. EXECUTION OF THE CHANGE ORDER**

- 14 A. The GC shall do the following:
- 15 1. Review all items on the CO form.
 - 16 2. The GC shall notify the CPM immediately of any errors or discrepancies on the form and shall not sign or
 - 17 save it.
 - 18 a. The CPM shall make any corrections as needed, re-save the form, and notify the GC.
 - 19 3. If/when the GC concurs with the CO form as drafted the GC shall digitally sign the form.
- 20 B. The CPM shall do the following:
- 21 1. Monitor the review process
 - 22 2. Ensure that proper BPW procedures are executed as needed by the CO approval process.
 - 23 a. Schedule the CO on the next available BPW agenda if required.
 - 24 i. Attend the BPW meeting to speak on the CO to board members and answer questions.
 - 25 ii. The GC and/or Project Architect (PA)/Project Engineer (PE) may be required to attend the
 - 26 BPW meeting to address specific information as it relates to the Work and/or materials
 - 27 associated with the CO.
 - 28 3. Monitor final approval and distribution of the CO.
 - 29 4. Notify the GC that the CO has been completed.
 - 30 5. Ensure that the CO is posted to the next Public Works payment schedule.
 - 31 6. Verify that the GC's next Progress Payment-Schedule of Values show the CO as part of the contract sum.
- 32 C. Upon final approval of the CO the GC may proceed with executing the Work associated with the CO.
- 33
34
35
36
37

END OF SECTION

**SECTION 01 29 73
SCHEDULE OF VALUES**

1
2
3
4 PART 1 – GENERAL1
5 1.1. SUMMARY1
6 1.2. RELATED SPECIFICATIONS1
7 1.3. RELATED DOCUMENTS1
8 1.4. BASIS OF VALUES1
9 PART 2 – PRODUCTS – THIS SECTION NOT USED2
10 PART 3 - EXECUTION2
11 3.1. AIA DOCUMENT G702 – APPLICATION AND CERTIFICATE FOR PAYMENT2
12 3.2. AIA DOCUMENT G703 – CONTINUATION SHEET2
13 3.3. INITIAL SCHEDULE OF VALUES SUBMITTAL2
14 3.4. SOV FOR PROGRESS PAYMENT REQUESTS3
15

PART 1 – GENERAL

1.1. SUMMARY

- 19 A. The Schedule of Values (SOV) is a Contractor provided statement that allocates portions of the total contract
20 sum to various portions of the contracted work and shall be the basis for reviewing the Contractors Progress
21 Payment Requests.
22 B. AIA Document G702 – Application and Certificate for Payment and AIA Document G703 Continuation Sheet shall
23 be filled out in sufficient detail to be used as a guideline in determining work completed and materials stored on
24 site when verifying Progress Payment Requests.
25 C. The General Contractor shall be responsible for filling out, updating, and providing these work sheets with each
26 Progress Payment Request.
27

1.2. RELATED SPECIFICATIONS

- 29 A. Section 01 26 63 Change Order (CO)
30 B. Section 01 29 76 Progress Payment Procedures
31 C. Section 01 32 26 Construction Progress Reporting
32 D. Section 01 33 23 Submittals
33 E. Parts of this specification will reference articles within “The City of Madison FACILITIES MANAGEMENT
34 SPECIFICATIONS for Public Works Construction”.
35 1. Use the following link to access the FACILITIES MANAGEMENT SPECIFICATIONS web page:
36 <http://www.cityofmadison.com/business/pw/specs.cfm>
37 a. Click on the “Part” chapter identified in the specification text. For example if the specification
38 says “Refer to City of Madison FACILITIES MANAGEMENT SPECIFICATION 210.2” click the link for
39 Part II, the Part II PDF will open.
40 b. Scroll through the index of Part II for specification 210.2 and click the text link which will take you
41 to the referenced text.
42

1.3. RELATED DOCUMENTS

- 44 A. The following documents shall be used as the basis for initiating and maintaining the SOV worksheets throughout
45 the execution of this contract.
46 1. Drawing documents and specifications (including general provisions) as provided with the bid set
47 documents and any published addendums.
48 2. Documents associated with revisions or clarifications to number 1 above after awarding of the contract,
49 including but not limited to:
50 a. Construction Bulletins
51 b. Request for Information
52 c. Approved Change Orders
53 3. The latest daily/weekly Construction Progress Report
54 4. Other specifications as identified in Section 1.2 above

1
2 **1.4. BASIS OF VALUES**

- 3 A. The Contractor shall provide a breakdown of the Contract Sum in sufficient detail to assist the Engineer and City
4 Project Manager in evaluating Progress Payment Requests. The breakdown detail may require a labor and
5 material breakdown for each division of work or trade or as directed by the CPM.
6 B. The total sum of all items shall equal the Contract Sum.
7

8 **PART 2 – PRODUCTS – THIS SECTION NOT USED**

9
10 **PART 3 - EXECUTION**

11
12 **3.1. AIA DOCUMENT G702 – APPLICATION AND CERTIFICATE FOR PAYMENT**

- 13 A. The Contractor shall use AIA Document G-702 Application and Certificate for Payment with each Progress
14 Payment Request.
15 B. Completely fill out the Project Information section as follows:
16 1. TO OWNER; provide all owner related information as provided in the contract documents.
17 2. PROJECT; provide all contract information including contract number, title and address.
18 3. FROM CONTRACTOR; provide all contractor related information.
19 4. VIA ARCHITECT; provide all the architect's related information including the architect's project reference
20 number if different from the owners.
21 5. Indicate the current APPLICATION NO., PERIOD TO date, and CONTRACT DATE.
22 C. Completely fill out the Contractors Application for Payment section.
23 1. Fill out lines 1 through 9 to reflect the current status of the contract through the payment date being
24 requested.
25 2. The City of Madison calculates retainage on Public Works Contracts as follows:
26 a. In general, across the duration of the contract, 2.5% of the total contract sum, including change
27 orders, is withheld for retainage as referenced from the City of Madison FACILITIES
28 MANAGEMENT SPECIFICATION 110.2:
29 i. Beginning with Progress Payment 1, 5% retainage will be withheld until such time that 50%
30 of the total contract sum has been paid out.
31 ii. No additional retainage will be withheld after 50% of the total contract sum has been paid,
32 unless additional change orders have been approved after the 50% milestone has been
33 reached. Per City of Madison FACILITIES MANAGEMENT SPECIFICATION 110.2, additional
34 retainage up to 10%, may be held in the event there are holds placed by Affirmative Action
35 or liquidated damages by BPW.
36 iii. Retainage for additional change orders after the 50% milestone will be withheld at the rate
37 of 2.5% of the total cost of the change order.
38 iv. Retainage is based on the change orders posted to the City's contract worksheet at the
39 time the progress payment is processed.
40 D. Completely fill out the Change Order Summary section. Only change orders that have been finalized and posted
41 to the City of Madison's Application for Partial Payment worksheet may be itemized into the SOV documents.
42 E. The Contractor shall sign and date the application and it shall be properly notarized.
43 F. The Contractor shall not fill in any information in the Architects Certificate for Payment section.
44

45 **3.2. AIA DOCUMENT G703 – CONTINUATION SHEET**

- 46 A. The Contractor shall use AIA Document G-703 Continuation Sheet to itemize their SOV for this contract. Provide
47 additional sheets as necessary.
48 B. Provide information in Column A (Item No.), Column B (Description of Work), and Column C (Scheduled Value) by
49 any method that allocates portions of the total contract sum to various portions of the contracted work.
50 Possible methods include combinations of the following:
51 1. By division of work
52 2. By contractor, sub-contractor, sub sub-contractor
53 3. By specialty item or group
54 4. Other methods of breakdown as may be requested by the City Project Manager or City Construction
55 Manager at the pre-construction meeting.
56 C. Provide total cost of the item/description of work including proportionate shares of profit and overhead related
57 to the item.
58

1 **3.3. INITIAL SCHEDULE OF VALUES SUBMITTAL**

- 2 A. The Contractor shall provide their initial SOV to the CPM no later than five (5) working days after the Pre-
3 construction Meeting.
4 1. The initial SOV shall provide information in Column A (Item No.), Column B (Description of Work), and
5 Column C (Scheduled Value) only.
6 2. The level of detail shall be as described in section 3.2 above.
7 B. The Project Architect (PA) / Project Engineer (PE) and the City Project Manager (CPM) shall review the SOV as
8 any other submittal and may require modifications to reflect additional detail as necessary.
9 C. The Contractor shall resubmit the SOV as necessary until such time as the PA/PE and CPM have sufficient detail
10 for assessing and approving future Progress Payment Applications.
11 D. Progress Payment Application 1 will not be processed until such time as the Contractor has met this requirement
12 regardless of the amount of work completed per the application.
13

14 **3.4. SOV FOR PROGRESS PAYMENT REQUESTS**

- 15 A. The Contractor shall update the initial SOV with each Progress Payment Application as follows:
16 1. Initial items and values as part of Section 3.3 above will not be adjusted once the original Schedule of
17 Values submittal has been approved.
18 2. Change orders shall be added as additional items and values at the bottom of the SOV as they become
19 approved and posted to the City's contract worksheet. The value for each change order shall be the
20 value indicated on the SOV and shall stand alone. Values shall not be split out or combined with other
21 existing items with similar work descriptions on the original SOV.
22 3. Fill out Columns D, E, F and G to properly reflect the work completed and materials received since the last
23 Progress Payment Application.
24 4. Only materials delivered and stored on the project site may be reflected on SOV progress updates.
25 B. Provide updated G702 and G703 sheets with each Progress Payment application.
26 C. See Specification 01 29 76 Progress Payment Procedures for additional information on submitting Progress
27 Payment Applications.
28
29
30
31
32

END OF SECTION

SECTION 01 29 76
PROGRESS PAYMENT PROCEDURES

1
2
3
4 PART 1 – GENERAL1
5 1.1. SUMMARY1
6 1.2. RELATED SPECIFICATIONS1
7 1.3. RELATED DOCUMENTS1
8 1.4. PROGRESS PAYMENT MILESTONES1
9 1.5. PROGRESS PAYMENT SUBMITTAL4
10 PART 2 - PRODUCTS - THIS SECTION NOT USED4
11 PART 3 - EXECUTION4
12 3.1. GENERAL CONTRACTOR PROCEDURE4
13 3.2. PROJECT ARCHITECT PROCEDURE5
14 3.3. CITY PROJECT MANAGER PROCEDURE5
15

PART 1 – GENERAL

1.1. SUMMARY

- 19 A. The General Contractor (GC) shall review this and all related specifications prior to submitting progress payment
20 requests.
21 B. Progress payment requests (Partial Payment-PP) for this contract shall be submitted digitally by the GC to the
22 CPM.
23 C. The Project Architect (PA) / Project Engineer (PE) and City Project Manager (CPM) shall review and amend or
24 approve the PP as needed.
25 D. After approval of the PP by the CPM, they shall forward the PP to the appropriate agencies for BPW contractual
26 review and payment processing.
27

1.2. RELATED SPECIFICATIONS

- 29 A. Section 01 26 63 Change Order (CO)
30 B. Section 01 29 73 Schedule of Values
31 C. Section 01 31 19 Progress Meetings
32 D. Section 01 32 26 Construction Progress Reporting
33 E. Section 01 33 23 Submittals
34 F. Section 01 77 00 Closeout Procedures
35 G. Section 01 78 23 Operation and Maintenance Data
36 H. Section 01 78 36 Warranties
37 I. Section 01 78 39 As-Built Drawings
38 J. Section 01 79 00 Demonstration and Training
39

1.3. RELATED DOCUMENTS

- 41 A. The following documents shall be used when evaluating PP requests.
42 1. Construction progress reports filed since the last payment request.
43 2. Contractors Schedule of Values as updated from the last payment request. See Specification 01 29 73.
44 3. Any document that may be required to be submitted for review and approval, as noted by the
45 specifications listed in Section 1.2 above, or the Progress Payment Milestone Schedule in Section 1.4
46 below, to achieve a required bench mark of contract progression or contract requirement.
47

1.4. PROGRESS PAYMENT MILESTONES

- 49 A. City Engineering-Facility Management has developed the Project Payment Milestone Schedule (Section 1.4
50 below) to assist the GC in providing required construction specific documentation and general contractual
51 documentation in a timely manner.
52 B. The Progress Payment Milestone Schedule is not an all inclusive list. Multiple agencies review progress payment
53 requests and contract closeout requests. Missing, incomplete, or incorrect documentation for any agency may
54 be a cause for not processing progress payments. It shall be the sole responsibility of the Contractor for
55 providing documentation as required or requested to the appropriate agencies.
56 C. The milestone schedule is based on the contract total sum and shall be valid for most contracts. Milestone
57 submittals will be required with whatever progress payment hits the percentage of contract total indicated in
58 the schedule.

- 1 D. The CPM shall review the milestone schedule with each progress payment request and at their option may elect
 2 to hold processing the progress payment until such time as the contractor has met the requirements for
 3 providing construction specific documentation.
 4 E. It shall be the General Contractors responsibility to comply with all BPW Contract Administration requirements
 5 and related deadlines as outlined in the Award Letter, Award Checklist, and Start Work Letter.
 6

Progress Payment (PP) Milestone Schedule		
Milestone Description	Due Before	Remarks
BPW Contract Administration Documentation <ul style="list-style-type: none"> • Workforce profiles • Best Value Contracting Documentation • Sub-contractors prequalification approval & Affirmative Action plans • Other as may be required 	PP-1, or start work as applicable	<ul style="list-style-type: none"> • For GC and Sub-contractors before PP-1 regardless of scheduling • Sub-contractors (if applicable), due 10 days before they may start work • Sub-contractors (if applicable), due 10 days before they may start work
Required Construction Submittals/Administrative Documents <ul style="list-style-type: none"> • Contractors Project Directory • Schedule of Values • Submittals Schedule • • Closeout Requirement Checklist • Warranty Checklist 	PP-1	References <ul style="list-style-type: none"> • Specification 01 31 23 • Specification 01 29 73 • Specification 01 32 19 • • Specification 01 77 00 • Specification 01 78 36
Construction Progress Milestones <ul style="list-style-type: none"> • Early submittals, per submittal schedule • Detailed Contract Schedules 	PP-1	See specifications for specific requirements <ul style="list-style-type: none"> • Specification 01 32 19, Examples: concrete mix, structural steel, products with long lead times • See Specification 01 32 16
General Construction Progress Requirements are all up to date <ul style="list-style-type: none"> • Progress Schedules • Submittals/Re-submittals (ongoing) • Schedule of Values • Progress Reporting • • • QMOs are being addressed and closed • Progress Cleaning • As-Built Drawings 	Each future PP	Verified with each Progress Payment Request <ul style="list-style-type: none"> • Specification 01 32 16 • Specification 01 33 23 • Specification 01 29 73 • Specification 01 32 26 • • • Specification 01 45 16 • Specification 01 74 13 • Specification 01 78 39
* All of the above are updated as required		
BPW Contract Administration Documentation <ul style="list-style-type: none"> • Weekly payroll reports • Best Value Contracting Reports • SBE Reports 	25% CT or PP 2	See 1.4.E above. <i>This progress payment will be with held by BPW for any missing contractual documentation.</i>
Construction Progress Milestones <ul style="list-style-type: none"> • Construction/Contract Closeout Meeting #1 • Submittals/Re-submittals complete 	70% CT	<ul style="list-style-type: none"> • Specification 01 31 19 • Specification 01 33 23

Progress Payment (PP) Milestone Schedule		
Milestone Description	Due Before	Remarks
Operation and Maintenance (O & M) drafts	60% CT	Specification 01 78 23
BPW Contract Administration Documentation	80% CT	This is a recommendation to the GC and is not a requirement of this PP.
<ul style="list-style-type: none"> Request Finalization Review from BPW 		<ul style="list-style-type: none"> Specification 01 77 00
Construction Progress Milestones	80% CT	
<ul style="list-style-type: none"> Operation and Maintenance (O & M) finals, accepted All major QMO issues resolved As-Built Drawings, Division Trades ready for GC review 		<ul style="list-style-type: none"> Specification 01 78 23 Specification 01 45 16; Items that could prevent occupancy Specification 01 78 39
All of the following shall be completed for this PP:	90% CT	Contractor to determine the proper order of completion:
<ul style="list-style-type: none"> Regulatory Inspections completed All QMO reports closed Demonstration and Training completed Attic Stock completed Final Cleaning 		<ul style="list-style-type: none"> Governing ordinances and statutes Specification 01 45 16 Specification 01 79 00 Specification 01 78 43 Specification 01 74 13
Construction Closeout Procedures:	100% CT	See Specification 01 77 00
<ul style="list-style-type: none"> Letter of Substantial Compliance sent to BI and DHS as needed Certificate of Occupancy issued As-Built Drawings, finals, accepted City Letter of Substantial Completion Warranty letters dated and issued 		<ul style="list-style-type: none"> Generated/Signed by the Engineer Building Inspection Specification 01 78 39 Signed by the City Engineer Specification 01 78 36
* Completion of this begins the one year warranty.		
BPW Contract Administration Documentation Contract Closeout Procedures	Final	See Specification 01 77 00
<ul style="list-style-type: none"> Construction Closeout has been completed Contractor requests final payment of retainage upon receiving City Letter of Substantial Completion All BPW contractual requirements are verified 		<ul style="list-style-type: none"> Contractor must provide any missing BPW Contractual Documentation
* Completion of this closes the contract but not the warranty period/bond.		
NOTE: CT = Contract Total less held retainage		

1
2
3
4
5
6
7
8
9
10

1.5. PROGRESS PAYMENT SUBMITTAL

- A. Each progress payment submittal shall be:
1. Digital in PDF format
 2. PDF shall be in color
 3. Uploaded to the appropriate Project Management library and properly named per the tutorial instructions provided to the awarded contractor.
- B. Submit all required construction progress documentation
- C. In general the following shall apply to all PP requests:
1. Materials or products:

- 1 a. On order, being shipped, etc. may not be invoiced.
- 2 b. Received and stored on the project site may be invoiced.
- 3 c. Being manufactured off site at any location may not be invoiced (example: cabinetry, ductwork,
4 etc.)
- 5 d. Completed products stored off site locally waiting for delivery to the project site may be invoiced
6 with prior approval by the CPM. All of the following conditions must be met to be allowed:
7 i. Items must be visually inspected by CPM to verify product is complete.
8 ii. Item must be stored inside a compatible structure and the structure and contents must be
9 insured.
10 iii. Contractor is responsible for condition until installation is completed.
- 11 2. All labor and equipment, including rental time for the current progress period may be invoiced.
- 12 3. Only completed installations may be invoiced to 100% based on the Schedule of Values.
- 13 D. DO NOT submit BPW Contract Administration Documentation for review with Progress Payment Requests,
14 submit them directly to the correct agency and in the correct format as instructed from information in your BPW
15 Contract Award Packet instructions.
- 16

17 **PART 2 - PRODUCTS - THIS SECTION NOT USED**

18
19 **PART 3 - EXECUTION**

20
21 **3.1. GENERAL CONTRACTOR PROCEDURE**

- 22 A. The GC shall provide an updated version of their schedule of values (AIA documents G702 & G 703) with each PP
23 request.
 - 24 1. The AIA - Application and Certificate for Payment (G702) shall be properly filled out and prepared for the
25 Architects review. See specification 01 29 73, Schedule of Values for more information.
 - 26 2. The AIA - Continuation sheets (G703) shall be properly filled out and indicate the dollar value of the
27 completed work to date for each item on the form. See specification 01 29 73, Schedule of Values for
28 more information.
 - 29 a. The GC shall subtotal the work completed to date for all of the original Schedule of Value items.
 - 30 b. Divide the sub total of work completed by the Original Contract Total to obtain a percentage
31 complete of the original Lump Sum Bid. This percentage may be taken out to five (5) decimal
32 places (round fifth place up or down as needed).
 - 33 i. Example: \$5,192.55 of completed work divided by \$10,000 original Contract Total =
34 0.519255, round this to 0.51926
 - 35 c. Write the percentage in Column 10 on the City Tabular Sheet for the original lump sum bid item in
36 RED ink.
 - 37 3. Ensure that any newly posted change orders from the City of Madison provided tabulation sheet have
38 been entered on the G703 continuation sheets. Repeat steps a thru c above for each change order on
39 the schedule of values and the City Tabular Sheet.
- 40 B. The GC shall fill out the City of Madison Application and Certificate of Payment cover sheet as follows:
 - 41 1. The GC shall not change any pre-printed information and shall not write in the box that indicates previous
42 progress payments.
 - 43 2. The GC shall sign and date the form where indicated.
 - 44 3. The GC shall provide the dates from and to for the PP being requested.
 - 45 4. The GC shall provide the list of all contractors/sub-contractors that were actively working during the
46 dates indicated above.
 - 47 a. All contractors/sub-contractors named must be in compliance with all City requirements (Pre-
48 qualified, Affirmative Action Plan on file, etc). The PP will be held and not processed by the City of
49 Madison until all contractors/sub-contractors are in compliance.
 - 50 b. Do not list the names of suppliers or manufacturers, doing so will slow down processing and
51 require a re-submittal of the paperwork.
- 52 C. The General Contractor (GC) shall scan all of the documents listed below in the order shown, save the scan as a
53 single PDF file for each PP request.
 - 54 1. City cover sheet – Application and Certificate for Payment
 - 55 2. City tabulation sheet(s)
 - 56 3. AIA G702 - Application and Certificate for Payment
 - 57 4. AIA G703 - Continuation Sheet(s)
 - 58 5. Any miscellaneous documents that may be requested as backup documentation for the pay request.

**SECTION 01 31 13
PROJECT COORDINATION**

1
2
3
4 PART 1 – GENERAL1
5 1.1. SUMMARY1
6 1.2. RELATED SPECIFICATIONS1
7 1.3. GENERAL REQUIREMENTS.....1
8 1.4. GENERAL CONTRACTOR PERFORMANCE REQUIREMENTS2
9 1.5. SUB-CONTRACTOR PERFORMANCE REQUIREMENTS2
10 PART 2 – PRODUCTS – THIS SECTION NOT USED3
11 PART 3 – EXECUTION – THIS SECTION NOT USED3
12

PART 1 – GENERAL

1.1. SUMMARY

- 16 A. Project Coordination covers many areas within the execution of the Contract Documents and the requirements
17 of proper coordination are the applicable to all contractors executing the Work of this contract.
18 B. This specification provides general information regarding project coordination for the General Contractor and all
19 Sub-contractors. All contractors shall be familiar with project coordination requirements and responsibilities
20 that may be defined in other specification within these Contract Documents.
21 C. The General Contractor shall at all times be responsible for the project, project site, and execution of the
22 Contract Documents.
23

1.2. RELATED SPECIFICATIONS

- 24 A. Section 01 29 76 Progress Payment Procedures
25 B. Section 01 31 19 Progress Meetings
26 C. Section 01 32 16 Construction Progress Schedules
27 D. Section 01 32 19 Submittals Schedule
28 E. Section 01 33 23 Submittals
29 H. Section 01 60 00 Product Requirements
30 I. Section 01 77 00 Closeout Procedures, including all specifications referenced therein
31
32

1.3. GENERAL REQUIREMENTS

- 34 A. The following general requirements shall applicable to all contractors:
35 1. Cooperate with the Owner, all authorized Owner Representatives, Project Engineer and all consultants of
36 the Owner.
37 2. Materials, products, and equipment shall be new, as specified and to industry standards except where
38 otherwise noted.
39 3. Labor and workmanship shall be of a high quality and to industry standards.
40 B. Existing conditions:
41 1. Verify all existing conditions noted in the contract documents with actual filed locations. Verify
42 dimensions, sizes and locations, of structural, equipment, mechanical and utility components.
43 2. Report any inconsistencies, errors, omissions, or code violations in writing to the General Contractor (GC)
44 immediately.
45 3. Annotate any inconsistencies, errors, omissions on the GC As-Built record drawings immediately for
46 future reference.
47 C. Contract Documents:
48 1. The Contract Documents are intended to include everything necessary to perform the work. Every item
49 required may not be specifically mentioned, shown, or detailed.
50 a. Except where specifically stated all systems and equipment shall be complete, installed, and fully
51 operable.
52 b. If a conflict exists within the contract documents the contractor shall furnish the item, system, or
53 workmanship of the highest quality, largest, largest quantity, or most closely fits the intent of the
54 contract documents.
55 c. Manufacturers recommended installation details shall be verified and used prior to installation of
56 products and equipment so as to not void warranties.
57 D. Errors and Omissions
58 1. No Contractor shall take any advantage of any apparent error or omission in the construction documents.

- 1 2. The City of Madison shall be permitted to make such corrections and interpretations as may be deemed
2 necessary for the fulfillment of the intent of the construction documents.
3 E. Owners Representatives
4 1. All contractors shall be familiar with various Owner Representatives having Quality Management
5 responsibilities for the duration of this project including but not limited to the following:
6 a. Project Engineer, responsible for all decisions affecting the code compliance and design intent of
7 the construction documents.
8 b. Owner, the designated representative of the City Agency that will occupy the project upon
9 completion.
10 c. City Project Manager, responsible for all day to day decisions regarding the execution and
11 performance of this Public Works Contract.
12 d. Consulting City Staff, responsible for providing consulting services to the Project Engineer, Owner,
13 and City Project Manager, also responsible for Quality Management of the construction
14 documents.
15 2. Owner Representatives shall be attending progress meetings, pre-installation meetings, performing or
16 being present for final testing and acceptance and quality management reporting during the execution of
17 the contract documents as outlined in other specifications.
18

19 **1.4. GENERAL CONTRACTOR PERFORMANCE REQUIREMENTS**

- 20 A. Assume the responsibility for all Work specified in the Contract Documents except where specifically identified
21 to be performed by the Owner or other contractor separately hired by the Owner.
22 1. Coordinate all work by Owner, equipment provided Owner, or contractor hired by the Owner into the
23 project schedule.
24 B. Provide all construction management responsibilities as specified in other Division 1 specifications including but
25 not limited to:
26 1. Scheduling of work
27 2. Coordination of work between other Trades and Sub-contractors
28 3. Construction administration and management
29 4. Site layout, cleanliness, and protection of completed work/stored materials
30 5. Waste Management
31 6. Quality Assurance and Quality Control
32 C. Use Diggers Hotline and private utility locating companies to accurately locate all public and private utilities on
33 the property as needed. The GC is responsible for any repair or replacement to any public or private utility
34 damaged during the execution of the Work
35 D. Report any inconsistencies, errors, omissions, or code violations in writing to the Project Engineer immediately.
36 Failure to report inconsistencies prior to beginning work shall indicate that the GC accepted all existing
37 conditions.
38 E. The GC shall be responsible for assigning work and related responsibilities where the Contract Documents may
39 not clearly state who is responsible for providing the work, material, or product.
40 F. Provide construction management oversight of all items described in Section 1.5 below.
41

42 **1.5. SUB-CONTRACTOR PERFORMANCE REQUIREMENTS**

- 43 A. Be familiar with all of the contract documents as they pertain to your Work, adjacent work and the overall
44 progress of the project.
45 1. All Sub-contractors shall be familiar with all Division 1 specifications as they may apply to progress,
46 progress payments, quality control construction management, and closeout of the contract.
47 B. Coordinate your Work with all adjacent work and existing conditions.
48 1. Perform your work in proper sequence according to the GC's project schedule and in relation to the work
49 of other trades.
50 2. Notify other sub-contractors and trades whose work may be connected to, combined with, or influenced
51 by your work and allow them reasonable time and access to complete their work.
52 3. Join your work to the work of others in accordance with the intent of the Contract Documents.
53 4. Order materials and schedule deliveries to facilitate the general progress of the Work.
54 C. Cooperate with all other trades to facilitate the general progress of the work. This shall include providing every
55 reasonable opportunity for the installation of work by others and the storage of their materials and equipment.
56 1. In no case shall any contractor exclude from the premises or work any Sub-contractor or their employees.
57 2. In no case shall any contractor interfere with the execution or installation of Work by any other Sub-
58 contractor or their employees.

- 1 D. Arrange your work, equipment, and materials and dispose of your construction waste so as to not interfere with
- 2 the work or storage of materials of others.
- 3 E. Coordinate all work as indicated during pre-installation meetings with Owner Representatives, the GC and other
- 4 trades. Any work improperly coordinated shall be relocated as designated by the Owner Representative at no
- 5 additional cost to the City.
- 6

7 **PART 2 – PRODUCTS – THIS SECTION NOT USED**

8

9 **PART 3 – EXECUTION – THIS SECTION NOT USED**

10
11
12
13
14

END OF SECTION

**SECTION 01 32 16
CONSTRUCTION PROGRESS SCHEDULES**

1
2
3
4 PART 1 – GENERAL1
5 1.1. SCOPE1
6 1.2. RELATED SPECIFICATIONS1
7 PART 2 – PRODUCTS – THIS SECTION NOT USED1
8 PART 3 - EXECUTION1
9 3.1. OVERALL PROJECT SCHEDULE (OPS)1

10
11 **PART 1 – GENERAL**

12
13 **1.1. SCOPE**

- 14 A. This specification is to identify various project related schedules associated with indicating construction progress
15 and outlook. The following schedules are the responsibility of the General Contractor (GC).
16 1. Overall Project Schedule
17 B. This specification is not intended to include internal schedules generated by the contractors during their
18 planning and execution of the contract.

19
20 **1.2. RELATED SPECIFICATIONS**

- 21 A. Section 01 29 76 Progress Payment Procedures
22 B. Section 01 31 19 Progress Meetings
23 C. Section 01 74 13 Progress Cleaning
24 D. Section 01 77 00 Closeout Procedures
25 E. Section 01 78 23 Operation and Maintenance Data
26 F. Section 01 78 36 Warranties
27 G. Section 01 78 39 As-Built Drawings
28 H. Section 01 79 00 Demonstration and Training
29 I. Other specification within the construction documents that may indicate the need for scheduling any event with
30 Owner, Project Engineer, Owner Representatives, including any owner provided equipment.

31
32 **PART 2 – PRODUCTS – THIS SECTION NOT USED**

33
34 **PART 3 - EXECUTION**

35
36 **3.1. OVERALL PROJECT SCHEDULE (OPS)**

- 37 A. The GC shall prepare an OPS that covers the duration of the contract from the pre-construction meeting through
38 the end of construction to final contract closeout.
39 1. The GC shall review Specification 01 77 00 Closeout Procedures to become familiar with definitions,
40 differences, and requirements for closing out the construction and contract including the association with
41 progress payments.
42 B. The GC shall provide copies and lead a discussion on the OPS during the pre-construction meeting.
43 C. The OPS shall indicate start and end dates of each task associated with the project.
44 D. The OPS shall clearly indicate the critical path of the project.
45 E. The GC shall update the OPS as often as necessary during the duration of the project. Updates will be briefed as
46 needed during progress meetings.

47
48 **END OF SECTION**
49

SECTION 01 33 23
SUBMITTALS

1
2
3
4 PART 1 – GENERAL1
5 1.1. SUMMARY1
6 1.2. RELATED REFERENCES1
7 1.3. SUBMITTAL REQUIREMENTS1
8 PART 2 – PRODUCTS – THIS SECTION NOT USED2
9 PART 3 - EXECUTION2
10 3.1. GENERAL CONTRACTORS PROCEDURES2
11 3.2. SUBMITTAL REVIEW2
12 3.3. PROJECT ENGINEERS REVIEW2
13

PART 1 – GENERAL

1.1. SUMMARY

- 17 A. The General Contractor (GC) shall be responsible for providing submittals for review of all contractors and sub-
18 contractors as designated in the construction documents. Submittals shall include but not be limited to all of the
19 following:
20 1. Equipment specified and pre-approved in the specification; to ensure quality, construction, and
21 performance specifications have not changed since final design.
22 2. Equipment specified by performance in the specification; to ensure that the intended quality,
23 construction, and performance specified is met by the selected material or product.
24 3. Shop, piece, erection, and other such drawings as indicated in the specifications to ensure all structural,
25 dimensional, and assembly requirements are being met.
26 4. Submittals indicating installation sequencing
27 5. Submittals indicating control sequencing
28 6. Contractor licensing, certification, and other such regulatory documentation when required by a
29 specification.
30 7. Other submittals as may be required by individual specifications.
31 B. The submittal process shall not be used to determine alternates to specified products or equipment. All
32 considerations shall be reviewed during the bidding process and acceptable alternates shall be acknowledged by
33 addendum prior to the closing of bidding. See bidding instructions for the information on submitting alternates
34 for consideration.
35 D. In the event that a manufacturer has significantly changed a product (discontinued a model, changed dimension
36 or performance data changed available colors, etc.) since bid opening the GC shall submit a Request for
37 Information (RFI) to the Project Engineer requesting other approved alternates prior to uploading a digital
38 submittal.
39 E. Contractors and sub-contractors shall be responsible for knowing the submittal requirements of ALL sections
40 within their scope of work under the contract. The Owner reserves the right to request documentation on any
41 materials, equipment, or product being installed where a submittal is not on file. If the material, equipment, or
42 product installed is determined not to meet the intent of the specification the contractor/sub-contractor shall be
43 required to remove and replace the items involved. The GC shall be solely responsible for all costs associated
44 with the removal and replacement.
45

1.2. RELATED REFERENCES

- 46 A. Section 01 29 76 Progress Payment Procedures
47 B. Section 01 32 19 Submittals Schedule
48 C. Section 01 32 26 Construction Progress Reporting
49 D. All Technical Specifications, contract documents, construction drawings, and any published addendums during
50 the bidding process.
51 E. All contract documents generated during the execution of the contract including but not limited to Requests for
52 Information (RFI) and Construction Bulletins (CB).
53

1.3. SUBMITTAL REQUIREMENTS

- 54
55 A. A completed submittal shall meet the following requirements:
56 1. Digital submittal shall be original PDF of manufacturer’s data sheets or high quality color scan of the
57 same.
58

- 1 a. Submittals shall not include sales fliers or other similar documents that typically do not provide
- 2 complete manufacturers data.
- 3 2. Documents within the PDF submittal shall be printable to a sized sheet no less than 8-1/2 by 11 inches
- 4 and no larger than 24 by 36 inches.
- 5 3. At the beginning of each submittal the contractor shall identify the plan reference (WC-1, EF-3, etc.) in
- 6 RED block letters that the submittal is for.
- 7 4. Where multiple model numbers appear in a table the contractor shall identify the specific model being
- 8 submitted by using a RED square, box, or other designation to distinguish the correct model from others
- 9 on the page.
- 10 B. A complete submittal will include all information associated with the product or equipment as presented in
- 11 plans, equipment tables, and specifications. Information shall include but not be limited to the following:
- 12 1. Dimensional data
- 13 2. Performance data
- 14 3. Resource requirements, power, water, waste, etc
- 15 4. Clearance and maintenance requirements
- 16 5. Finish information, colors, textures, etc.
- 17 6. Warranty information
- 18 C. Where a submittal includes material samples (carpet, tile, paint draw downs, etc.) the contractor shall do the
- 19 following:
- 20 1. The Contractor shall submit the sample(s) as indicated in the specification.
- 21 2. The Contractor shall include a quality photograph(s) of the product with the digital submittal.
- 22 Photographs shall meet the following requirements:
- 23 a. Formatted to be between 500Kb and 1.0 Mb in file size
- 24 b. Have no glare or flash reflection on the sample
- 25 c. Sample fills the frame of the photo and shows detail as needed. Include multiple photos from
- 26 other angles as needed.
- 27 d. Scanned copies of products or photos are not acceptable.
- 28 D. Uploaded submittals should be relative and related to a specific written specification.
- 29 1. Do not upload submittals under a broad category or division (I.E. HVAC 23 00 00). Always upload by the
- 30 specific specification that identifies a required product or performance to be met.
- 31 2. Group related items together if the specification is written that way. (I.E. all of the plumbing fixtures and
- 32 trim relative to one specific specification should be submitted together).
- 33 3. Submittals shall be grouped and adhere to the divisions in the submittal schedule. Submittals that do not
- 34 conform to the submittal schedule and/or specification divisions will be rejected for re-submittal.
- 35

36 **PART 2 – PRODUCTS – THIS SECTION NOT USED**

37

38 **PART 3 - EXECUTION**

39

40 **3.1. GENERAL CONTRACTORS PROCEDURES**

- 41 A. All required submittals will be submitted electronically by the GC.
- 42 B. Uploading the submittal indicates that the GC has reviewed and approved the submittal against the contract
- 43 document requirements.
- 44 C. The GC shall discuss submittal status at all progress meetings and shall monitor submittal review/approval/re-
- 45 submittal so as to not incur delays in the project schedule.
- 46 D. The GC and sub-contractors shall provide re-submittals as required.
- 47

48 **3.2. SUBMITTAL REVIEW**

- 49 A. The submittal shall be reviewed internally by the required Architect/Engineer and Owner Representative in a
- 50 timely fashion and provide commentary on missing items, incorrect information, or incomplete shop drawings,
- 51 etc as needed.
- 52 B. When the internal review is completed the CPM will notify the Project Engineer the submittal is ready for final
- 53 review.
- 54 C. Information will be transmitted electronically.
- 55

1
2
3
4
5
6
7
8
9
10
11
12
13

3.3. PROJECT ENGINEERS REVIEW

- A. Upon completion of the internal review the Project Engineer shall review all internal review comments, confer with the CPM as needed and determine the appropriate disposition status for the submittal (approved or resubmit).
- B. The Project Engineer shall summarize final internal review comments onto the submittal cover sheet, provide a final disposition of the submittal and update the review status of the submittal to "Complete..." (with or w/o comments) or "Rejected".
- C. A completed Final Review status initiates the CPM to notify the GC and appropriate sub-contractor(s) that the review of the submittal has been completed.
- D. Information will be transmitted electronically.

END OF SECTION

**SECTION 01 41 00
REGULATORY REQUIREMENTS**

1
2
3
4 PART 1 – GENERAL1
5 1.1. REQUIREMENT INCLUDED.....1
6 1.2. PROCEDURES.....1
7 1.3. NOTICES1
8 1.4 PERMITS2
9 PART 2 – PRODUCTS - THIS SECTION NOT USED2
10 PART 3 – EXECUTION - THIS SECTION NOT USED2
11

PART 1 – GENERAL

1.1. REQUIREMENT INCLUDED

Unless otherwise specifically directed by Contractor each Subcontractor and each Sub-subcontractor shall comply with provisions of this Section as required for proper execution and completion of their Work or portions thereof

1.2. PROCEDURES

Comply with and give notices required by applicable laws, statutes, ordinances, codes, rules, and regulations, and lawful orders of public authorities having jurisdiction applicable to performance of the Work. Comply with and give notices required by Owner’s and Contractor’s insurance companies, local utilities and labor regulations relating to the performance of the Work, the protection of adjacent property, and the maintenance of passage ways, guard fences and other protective facilities.

The Contractor shall acquire all permits, licenses, and approvals necessary for the execution of this Contract and performance of the Work and provide evidence of such applicable permits, licenses, and approvals at the Pre-Construction Meeting or before commencement of the Work.

Where Contract Documents require abatement of asbestos containing materials, prior written Notice to the State of Wisconsin, Department of Natural Resources is required. The Contractor shall provide evidence of such Notice prior to commencement of the Work.

Procure all certificates of inspection, use, and occupancy, and all permits and licenses, pay all charges and fees and give all notices necessary and incidental to the due and lawful prosecution of the Work. Certificates of inspection, use and occupancy shall be delivered to the Owner upon completion of the Work in sufficient time for occupation of the Project in accordance with the approved schedule for the Work. The costs of such procurement, payment and delivery shall be included within the Base Bid.

Exercise precaution at all times for the protection of persons (including employees) and property. Observe the safety provisions of applicable laws, building and construction codes. Refer to the Manual of Accident Prevention in Construction, published by the Associated General Contractors of America.

It is not Contractor’s responsibility to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, and rules and regulations. However, if Contractor observes that portions of the Contract Documents are at variance therewith, Contractor shall promptly notify A/E and Owner in writing, and necessary changes shall be accomplished by appropriate Modification.

If Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities having jurisdiction, the Contractor shall assume full responsibility for such Work and shall bear the costs attributable to correction.

Refer to the Sections of the Work for referenced codes, standards, tests, etc., applicable to the Work.

1.3. NOTICES

Concealed or Unknown Conditions:

If the Contractor encounters conditions at the site are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual

1 nature, that differ materially from those ordinarily found to exist and generally recognized as inherent in construction
2 activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the
3 Owner and the Engineer before conditions are disturbed and in no event later than 21 days after first observance of the
4 conditions. The Engineer will promptly investigate such conditions and, if the Engineer determines that they differ
5 materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any of the
6 Work, will recommend and equitable adjustment in the Contract Sum or Contract Time, or both. If the Engineer
7 determines that the conditions at the site are not materially different from those indicated in the Contract Documents
8 and that no change in the terms of the Contract is justified, the Engineer shall promptly notify the Owner and Contractor
9 in writing, stating the reasons.

10
11 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers,
12 archaeological sites, or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend
13 any operations that would affect them and shall notify the Owner and Engineer. Upon receipt of such notice, the Owner
14 shall promptly take any action necessary to obtain governmental authorization required to resume operations. The
15 Contractor shall continue to suspend operations until otherwise instructed by the Owner but shall continue with all
16 other operations that do not affect those remains or features.

17
18 **1.4 PERMITS**

19 Permits, Fees, Licenses, and Inspections: Unless otherwise provided in the Contract Documents, Contractor shall secure
20 and pay for the building permit as well as for other permits, fees, licenses, inspections and approvals by government and
21 utility agencies, necessary for proper execution and completion of the Work that are customarily secured after
22 execution of the Contract and legally required at the time bids are received or negotiations concluded.

23
24 Owner will obtain plan approvals and pay all fees required by the Wisconsin Department of Safety and Professional
25 Services.

26
27 Contractor shall obtain all permits and pay all fees required by local utilities for permanent electric and gas service.

28
29 Contractor shall obtain copies of all required permits and certificates of inspection applicable to the work.

30
31 Contractor shall furnish A/E and Owner with copy of all required permits and certificates.

32
33 **PART 2 – PRODUCTS - THIS SECTION NOT USED**

34
35 **PART 3 – EXECUTION - THIS SECTION NOT USED**

36
37
38 **END OF SECTION**
39

SECTION 01 50 00
TEMPORARY FACILITIES AND CONTROLS

1
2
3
4 PART 1 – GENERAL 1
5 1.1. SUMMARY 1
6 1.2. RELATED SPECIFICATION SECTIONS 1
7 1.3. QUALITY ASSURANCE 1
8 1.4. TEMPORARY UTILITIES 1
9 1.5. BARRIERS 2
10 1.6. FENCING 2
11 1.7. EXTERIOR ENCLOSURES 2
12 1.8. SECURITY 2
13 1.9. VEHICULAR ACCESS AND PARKING 2
14 1.10. WASTE REMOVAL 2
15 1.11. PROJECT IDENTIFICATION 2
16 PART 2 - PRODUCTS 2
17 2.1. TEMPORARY PARTITIONS 2
18 2.2. EQUIPMENT 3
19 PART 3 - EXECUTION 3
20 3.1. TEMPORARY FIRE PROTECTION 3
21 3.2. COLLECTION AND DISPOSAL OF WASTE 3
22 3.3. ENVIRONMENTAL PROTECTION 3
23

PART 1 – GENERAL

1.1. SUMMARY

- 27 A. This Section includes general procedural requirements for temporary facilities and controls including, but not
28 limited to the following:
29 1. Temporary Utilities
30 2. Barriers
31 3. Fencing
32 4. Exterior Enclosures
33 5. Security
34 6. Vehicular Access and Parking
35 7. Waste Removal
36 8. Project Identification
37

1.2. RELATED SPECIFICATION SECTIONS

- 39 A. Section 01 31 19 Progress Meetings
40 B. Section 01 74 19 Construction Waste Management and Disposal
41

1.3. QUALITY ASSURANCE

- 43 A. Regulations: Comply with industry standards and applicable laws and regulations if authorities having
44 jurisdiction, including but not limited to:
45 1. Building Code requirements
46 2. Health and safety regulations
47 3. Utility company regulations
48 4. Police, Fire Department and Rescue Squad rules
49 5. Environmental protection regulations
50 6. Joint Commission - Hospital Accreditation Standards
51 B. Standards: Comply with NFPA 241 "Standard for Safeguarding Construction, Alterations, and Demolition
52 Operations," ANSI A10 Series standards for "Safety Requirements for Construction and Demolition," and NECA
53 Electrical Design Library "Temporary Electrical Facilities".
54 C. Electrical Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service.
55 Install service in compliance with NFPA 70 "National Electric Code".
56

1.4. TEMPORARY UTILITIES

- 58 A. Owner will provide the following:

- 1. Electrical power and metering, consisting of existing facilities.
- 2. Water supply, consisting of existing facilities.
- B. General:
 - 1. Existing facilities may be used.
 - 2. New permanent facilities may be used.
- C. Water Service: water is available from existing building services.
 - 1. Use trigger-operated nozzles for water hoses, to avoid waste of water.
- D. Temporary Electric Power Service: Electrical Contractor shall extend temporary power from existing building services.

1.5. BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public and to protect existing facilities and adjacent properties from damage from construction operations and demolition.

1.6. FENCING

- A. Construction: Contractors option.

1.7. EXTERIOR ENCLOSURES

- A. Provide temporary weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.

1.8. SECURITY

- A. Provide security and facilities to protect Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.

1.9. VEHICULAR ACCESS AND PARKING

- A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.
- B. Coordinate access and haul routes with governing authorities and Owner.
- C. Provide and maintain access to fire hydrants, free of obstructions.

1.10. WASTE REMOVAL

- A. See Section 01 74 19 - Waste Management, for additional requirements.
- B. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- C. Provide containers with lids. Remove trash from site periodically.
- D. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.
- E. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.11. PROJECT IDENTIFICATION

- A. Provide project identification sign of design and construction indicated in Section 01 58 13.
- B. Erect on site at location determined by Owner .
- C. No other signs are allowed without Owner permission except those required by law.

PART 2 - PRODUCTS

2.1. TEMPORARY PARTITIONS

- A. Provide dustproof partitions to limit dust and dirt migration and to separate occupied areas from fumes and noise.
 - 1. Non-fire rated partitions, standard
 - a. Wood stud framing, 6-mil polyethylene

1
2 **2.2. EQUIPMENT**

- 3 A. Temporary Lifts and Hoists: Contractors requiring temporary lifts and hoists shall provide facilities for hoisting
4 materials and employees.
5 B. Electrical Outlets: Electrical Contractor shall provide properly configured NEMA polarized outlets to prevent
6 insertion of 110-120 volt plugs into higher voltage outlets. Provide receptacle outlets equipped with ground-fault
7 circuit interrupters, reset button and pilot light, for connection of power tools and equipment.
8 C. Electrical Power Cords: Contractors requiring power cords shall provide grounded extension cords; use "hard-
9 service" cords where exposed to abrasion and traffic. Provide waterproof connectors to connect separate
10 lengths of electric cords, if single lengths will not reach areas where construction activities are in progress. Do
11 not exceed safe length-voltage ratio.
12 D. Lamps and Light Fixtures: Electrical Contractor shall provide general service incandescent lamps of wattage
13 required for adequate illumination. Provide guard cages or tempered glass enclosures, where exposed to
14 breakage. Provide exterior fixtures where exposed to moisture.
15 E. Heating Units: General Contractor shall provide temporary heating units that have been tested and labeled by
16 UL, FM or another recognized trade association related to the type of fuel being consumed.
17 F. First Aid Supplies: General Contractor shall provide first aid supplies complying with governing regulations.
18 G. Fire Extinguishers: General Contractor shall provide hand-carried, portable UL-rated, fire extinguishers of NFPA
19 recommended classes for the exposures, extinguishing agent and size required by location and class of fire
20 exposure.
21

22 **PART 3 - EXECUTION**

23
24 **3.1. TEMPORARY FIRE PROTECTION**

- 25 A. Until fire protection needs are supplied by permanent facilities, General Contractor shall install and maintain
26 temporary fire protection facilities of the types needed to protect against reasonably predictable and
27 controllable fire losses.
28 B. Comply with NFPA 10 "Standard for Portable Fire Extinguishers," and NFPA 241 "Standard for Safeguarding
29 Construction, Alterations and Demolition Operations".
30 C. Locate fire extinguishers where convenient and effective for their intended purpose.
31 D. Store combustible materials in containers in fire-safe locations.
32 E. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire protection facilities, stairways
33 and other access routes for fighting fires.
34 F. Prohibit smoking on the premises.
35 G. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition
36 according to requirements of authorities having jurisdiction.
37 H. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site
38 I. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods
39 and procedures. Post warnings and information.
40

41 **3.2. COLLECTION AND DISPOSAL OF WASTE**

- 42 A. Collect waste from construction areas and elsewhere daily
43 B. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce
44 requirements strictly.
45 C. Do not hold materials more than 7 days during normal weather or 3 days when the temperature is expected to
46 rise above 80 deg F.
47 D. Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing
48 properly. Dispose of material in a lawful manner.
49

50 **3.3. ENVIRONMENTAL PROTECTION**

- 51 A. Provide protection, operate temporary facilities and conduct construction in ways and by methods that comply
52 with environmental regulations, and minimize the possibility that air, waterways and subsoil might be
53 contaminated or polluted, or that other undesirable effects might result.
54 B. Avoid use of tools and equipment which produce harmful noise.
55 C. Restrict use of noise making tools and equipment to hours that will minimize complaints from persons or firms
56 near the site.
57

58 **END OF SECTION**

**SECTION 01 60 00
PRODUCT REQUIREMENTS**

1
2
3
4 PART 1 – GENERAL 1
5 1.1. SUMMARY 1
6 1.2. RELATED SPECIFICATIONS 1
7 1.3. QUALITY ASSURANCE 1
8 PART 2 – PRODUCTS – THIS SECTION NOT USED 2
9 PART 3 - EXECUTION 2
10 3.1. GENERAL CONTRACTOR REQUIREMENTS 2
11 3.2. BULK MATERIAL 3
12 3.3. DRY PACKAGED MATERIAL 3
13 3.4. STRUCTURAL AND FRAMING MATERIAL 3
14 3.5. EQUIPMENT 3
15 3.6. FINISH PRODUCTS 3
16 3.7. DUCTWORK, PIPING, AND CONDUIT 3
17 3.8. OWNER PROVIDED, CONTRACTOR INSTALLED EQUIPMENT 4
18

PART 1 – GENERAL

1.1. SUMMARY

- 22 A. The purpose of this specification is to provide general guidelines and responsibilities related to the receiving,
23 handling, and storage of all materials and products from arrival on the job site through installation.
24 1. Immediate inspection of delivered goods means a timely replacement if damaged.
25 2. Proper storage helps prevent damage and loss by weather, vandalism, theft, and job site accidents.
26 3. Proper storage helps with job site performance and safety.
27 4. Proper handling helps prevent damage and job site accidents.
28 B. Each Contractor shall be directly responsible for the receiving, handling, and storage of all materials and
29 products associated with the Work of their Division or Trade.
30 C. Each Contractor responsible for Work associated with Owner provided materials or products shall be responsible
31 for the receiving, handling and storage of the material/product as outlined in Section 3.8 below..
32

1.2. RELATED SPECIFICATIONS

- 34 A. Parts of this specification will reference articles within “The City of Madison FACILITIES MANAGEMENT
35 SPECIFICATIONS for Public Works Construction”.
36 1. Use the following link to access the FACILITIES MANAGEMENT SPECIFICATIONS web page:
37 <http://www.cityofmadison.com/business/pw/specs.cfm>
38 a. Click on the “Part” chapter identified in the specification text. For example if the specification
39 says “Refer to City of Madison FACILITIES MANAGEMENT SPECIFICATION 210.2” click the link for
40 Part II, the Part II PDF will open.
41 b. Scroll through the index of Part II for specification 210.2 and click the text link which will take you
42 to the referenced text.
43 c. City Standard Detail Drawings (SDD) may be located from the index in Part VIII.
44 B. Section 01 74 13 Progress Cleaning
45 C. Section 01 76 00 Protecting Installed Construction
46 D. Other Divisions and Specifications that may address more specifically the requirements for the storage and
47 handling of materials and products associated Work of other Divisions or Trades.
48

1.3. QUALITY ASSURANCE

- 50 A. The GC shall be responsible for ensuring that these minimum storage and handling requirements are met by all
51 contractors on the project site including but not limited to the following:
52 1. Receiving deliveries of materials, products, and equipment.
53 a. Inspect all deliveries upon arrival for damage, completeness, and compliance with the
54 construction documents.
55 i. Deliveries shall remain in original packaging or crates, shipping manifest shall be kept with
56 the delivery and the packaging shall have visible identification of the items within the
57 packaging.

- 1 b. Immediately report any damaged products or equipment to the GC, begin arrangements for
- 2 immediate replacement.
- 3 c. Materials or equipment that have been damaged, are incomplete, or do not comply with the
- 4 construction documents shall not be permitted to be installed.
- 5 2. All materials and products shall be stored within the designated limits of the project site. Only store the
- 6 amount of material necessary for upcoming operations so as not to interfere with other construction
- 7 activities and access to Work by the Owner and Engineer. Any offsite storage shall be at the expense of
- 8 the contractor storing the material or product. All offsite storage requirements shall comply with this
- 9 specification. All offsite storage of materials is subject to Owner Representative Quality Management
- 10 review at any time.
- 11 3. Large storage containers may be used but shall be weather tight, securable, placed on concrete blocks,
- 12 timbers, or jack stands and shall be level.
- 13 4. When lifting equipment is required the equipment rating shall be greater than the loading requirements
- 14 of the item being lifted. In addition all of the following shall apply as necessary:
- 15 a. Only designated and/or designed lift points shall be used.
- 16 b. Large items shall have tag lines and handlers at all times during lifting operations.
- 17 c. Lift at multiple points as needed to prevent bending.
- 18 5. Materials and products stored inside of the structure shall comply with all of the following:
- 19 a. Storage shall not be allowed to impede the flow of work in progress.
- 20 b. Storage shall not be allowed to hide completed work from review and inspections.
- 21 c. Storage shall not exceed the design loads of the structural components it is being stored upon.
- 22 6. All materials and products shall be stored according the manufacturers minimum recommended
- 23 requirements. All of the following shall be considered before storing any product or material:
- 24 a. Dust and dirt
- 25 b. Moisture and humidity, including rain and snow
- 26 c. Excessive temperatures, direct sun, etc
- 27 d. Product or material weight and size
- 28 e. Potential for breakage
- 29 f. Product incompatibility with other products such as corrosiveness, chemical reactions,
- 30 flammability, etc.
- 31 g. Product or material value and replacement cost
- 32 7. The Contractor shall be responsible for providing fully functional tarps or plastic wrap, to protect
- 33 materials and products from the weather. All coverings shall be free of large holes and tears, and shall be
- 34 tied, strapped, or weighted down to resist blowing.
- 35 8. The Contractor shall be responsible for any temporary heating, cooling, or other utility requirement that
- 36 may be associated with the storage of a material or product.
- 37 9. The Contractor shall be responsible for securing materials and products of value such as copper, A/V
- 38 equipment, etc. Such items shall be stored in securable shipping containers, job trailers or other such
- 39 storage devices. Container shall be kept secured when not in use.
- 40 B. The GC shall inspect the job site daily to ensure that all products and materials stay weather tight and are
- 41 secured against vandalism or theft as required by this specification.
- 42 C. The Owners Representative may at any time request improvements regarding storage of any material or product
- 43 being provided under these construction documents.
- 44

PART 2 – PRODUCTS – THIS SECTION NOT USED

PART 3 - EXECUTION

3.1. GENERAL CONTRACTOR REQUIREMENTS

- 50 A. Designate material storage and handling areas as needed including all of the following:
- 51 1. Designate specific areas of the site for delivery and storage of materials to be used during the execution
- 52 of the Work.
- 53 2. Designated areas shall not be located so as to interfere with the installation of any Work including Work
- 54 by others such as the installation of utilities or the maintenance of existing utilities. This shall include not
- 55 storing items in active utility easements as designated by the site plan.
- 56 B. Arrange for openings in the building as needed to allow delivery and installation of large items. Openings shall
- 57 be appropriately sized to include the use of booms, slings, and other such lifting devices that may be larger than
- 58 the item being installed.

- 1 1. When openings are required in completed Work (new or existing) the GC shall be responsible for
2 providing an appropriate opening and for restoring the opening to the original or better condition upon
3 completion. Restoration shall be weather tight and complete.
- 4 C. Repeated moving and handling of items being stored shall not be allowed. The GC shall be responsible for any
5 damage and replacement because of mishandling or excessive handling.
- 6
- 7 **3.2. BULK MATERIAL**
- 8 A. Bulk material such as sand, gravel, top soil and other types of fill shall be stored away from the construction area
9 and shall be stock piled as follows:
- 10 1. All bulk material shall be piled safely and efficiently in as small an area as practical. Only store the
11 amount of material necessary for upcoming operations so as not to interfere with other construction
12 activities and access to Work by the Owner and Engineer.
- 13 2. All stock piles shall have silt fence/sock properly installed around the perimeter to prevent erosion and
14 loss of material. Refer to City of Madison FACILITIES MANAGEMENT SPECIFICATION Section 210.1(f) and
15 other related specification or details.
- 16 3. Fine grained material shall be protected with tarps to prevent blowing. Tarps shall be weighted or staked
17 to stay in place.
- 18 B. Bulk material such as brick, concrete block, stone, and other palletized materials shall be stored on original
19 shipping pallets until ready for use.
- 20
- 21 **3.3. DRY PACKAGED MATERIAL**
- 22 A. Dry packaged material such as cement, mortar, etc shall be stored on pallets, on slightly elevated ground or clear
23 stone pad to keep water away from the base of the material being stored. Protect from moisture.
- 24
- 25 **3.4. STRUCTURAL AND FRAMING MATERIAL**
- 26 A. All structural and framing material shall be stored in an organized manner arranged by type, size and dimension.
27 Materials shall be stored on pallets or timbers as necessary and shall not be allowed to lie directly on the ground.
- 28 B. Long and heavy items shall be supported at several points to prevent bending and warping.
- 29
- 30 **3.5. EQUIPMENT**
- 31 A. Equipment delivered to the site shall be stored away from all construction activities until the item can either be
32 moved inside or properly installed.
- 33 B. Equipment shall be stored on slightly elevated ground or clear stone pad to keep water away from the base of
34 the equipment.
- 35
- 36 **3.6. FINISH PRODUCTS**
- 37 A. Finish products such as flooring, tile, counters, lockers, toilets, partitions, lighting, and other similar items should
38 not be delivered and stored until the structure has been enclosed, is weather tight, temperature controlled and
39 the contractor is ready for such items to be installed.
- 40 1. Storage of finished products outside for any length of time shall not be allowed.
- 41 B. Products that cannot be stored inside the structure shall be stored in secured containers or job trailers until such
42 time as they are ready to be installed.
- 43 C. Products with a high potential for breakage such as glass, mirrors, tiles, toilet fixtures, etc. shall be stored with
44 additional protection as necessary such as but not limited to the following:
- 45 1. Store in original shipping containers until ready for installation.
- 46 2. Do not store in high traffic areas.
- 47 3. Shield with other materials such as cardboard, plywood, or similar products.
- 48
- 49 **3.7. DUCTWORK, PIPING, AND CONDUIT**
- 50 A. All piping and conduit shall be stored horizontally unless otherwise specified by the manufacturer or Division and
51 Trade Specifications.
- 52 1. Do not store directly on grade.
- 53 2. Cover metal pipes and tubes to prevent rust and corrosion, allow ventilation to prevent condensation.
- 54 3. Whenever possible use pipe stands for storing pipe and conduit to prevent tripping and rolling hazards.
- 55 B. All ductwork shall be stored horizontally or vertically as necessary unless otherwise specified by the
56 manufacturer or Division and Trade Specifications.
- 57 1. During storage, both ends of each duct shall be protected with plastic sheathing to prevent dust and dirt
58 from getting inside the duct. Sheathing shall be sufficiently taped to the duct.

SECTION 01 76 00
PROTECTING INSTALLED CONSTRUCTION

1
2
3
4 PART 1 – GENERAL1
5 1.1. SUMMARY1
6 1.2. QUALITY ASSURANCE1
7 1.3. RELATED SPECIFICATIONS2
8 PART 2 - PRODUCTS2
9 2.1. FENCING MATERIALS AND BARRICADES2
10 2.2. EROSION CONTROL PROTECTION2
11 2.3. INTERIOR FINISH PROTECTION MATERIALS2
12 PART 3 - EXECUTION3
13 3.1. GENERAL EXECUTION REQUIREMENTS3
14 3.2. PROTECT ADJACENT PROPERTIES3
15 3.3. PROTECT LANDSCAPING FEATURES3
16 3.4. PROTECT UTILITIES4
17 3.5. PROTECT PUBLIC RIGHT OF WAY4
18 3.6. PROTECT STORED MATERIALS.....5
19 3.7. PROTECT WORK - EXTERIOR.....5
20 3.8. PROTECT WORK - INTERIOR5
21

PART 1 – GENERAL

1.1. SUMMARY

- 25 A. The purpose of this specification is to provide clear responsibilities, guide lines, and requirements related to
26 providing protection to already installed construction.
27 B. Already installed construction shall include but not be limited to the following:
28 1. Any existing site feature such as pavement, curbs, drainage features, utilities, landscaping features (trees,
29 shrubbery, plantings, flagpoles, etc) and other such exterior items not associated with the building
30 whether on or adjacent to the project site.
31 2. Any existing structure on or adjacent to the project site.
32 3. Any existing interior work that may be adjacent to the new work including all paths of ingress/egress to
33 areas associated with accessing the Work.
34 4. Any existing feature of any kind within the public right-of-way that may be on the project site property,
35 adjacent to the project site or across the street from the project site.
36 C. All contractors shall be familiar with the specifications of their Division of Work for specific requirements on
37 protection of the Work.
38 D. The requirements noted within this specification do not relieve any contractor of the responsibility for
39 compliance with any code, statute, ordinance, or other such regulatory requirement having jurisdictional
40 authority over these contract documents.
41

1.2. QUALITY ASSURANCE

- 43 A. It shall be the responsibility of every contractor and worker assigned to the project to be diligent in protecting all
44 existing work, and newly installed construction.
45 B. It shall be the General Contractors’ (GC) responsibility under the contract to provide all reasonable protection
46 methods, materials, or precautionary measures required to protect new or existing construction as described in
47 within this specification to the project as a whole.
48 1. The GC shall be responsible to ensure any damaged new or existing construction is repaired or replaced
49 at no additional cost to the Contract.
50 2. The GC at their discretion may direct other contractors to provide and maintain protection of completed
51 work associated with their Division of Work. I.E.: The carpet installer may be required by the GC to
52 provide carpet protection along traveled paths, ingress/egress, etc after installation.
53 C. It shall be the responsibility of the GC to ensure that all materials being used to protect installed construction are
54 compatible with, and/or adjacent to, the materials being protected. This shall include but not be limited to the
55 material used as covering, tapes used to fasten protective materials, etc.

1
2 **1.3. RELATED SPECIFICATIONS**

- 3 A. Parts of this specification will reference articles within “The City of Madison FACILITIES MANAGEMENT
4 SPECIFICATIONS for Public Works Construction”.
- 5 1. Use the following link to access the FACILITIES MANAGEMENT SPECIFICATIONS web page:
6 <http://www.cityofmadison.com/business/pw/specs.cfm>
- 7 a. Click on the “Part” chapter identified in the specification text. For example if the specification
8 says “Refer to City of Madison FACILITIES MANAGEMENT SPECIFICATION 210.2” click the link for
9 Part II, the Part II PDF will open.
- 10 b. Scroll through the index of Part II for specification 210.2 and click the text link which will take you
11 to the referenced text.
- 12 c. City Standard Detail Drawings (SDD) may be located from the index in Part VIII.
- 13 B. Section 01 60 00 Product Requirements
- 14 C. Section 01 74 13 Progress Cleaning
- 15

16 **PART 2 - PRODUCTS**

17

18 **2.1. FENCING MATERIALS AND BARRICADES**

- 19 A. Except where noted in other areas of the construction documents the responsible contractor may provide any of
20 the following that sufficiently provide a sturdy physical barrier and/or visual barrier as necessary for the
21 intended application.
- 22 1. Standard orange construction barrels each with a standard rubber base ring and reflective tape
23 a. Provide flashing amber lights as needed to increase night time visibility
- 24 2. Steel “T” style fence posts
- 25 3. 4’0” high standard orange construction fence
- 26 4. Traffic barricades
- 27 5. Jersey barriers
- 28 6. Other types of fencing or barricades typically used in the construction industry
- 29 B. The contractor responsible for providing the fencing materials and barricades shall also be responsible for
30 maintaining them. This shall include but not limited to fixing damaged fencing, standing up barrels that have
31 been knocked over, realigning barrels, and ensuring flashing lights are fully operational at all times.
- 32 C. The following fencing and barricade designations, and their use descriptions shall be used throughout this
33 specification to provide uniformity in describing protection requirements.
- 34 1. Type A, Jersey Barriers, to be used as permanent blocking devices to deny access to alternate project site
35 entrances or exits.
- 36 2. Type B, Traffic Barricades, to be used as temporary blocking devices to deny access to alternate project
37 site entrances or exits.
- 38 3. Type C, Construction Barrels without construction fencing shall be used for lane closures, temporary
39 blocking devices to deny access and the protection of single locations (I.E. identify the location of an
40 access structure) that do not require fencing.
- 41 4. Type D, Construction Barrels with construction fencing where it becomes necessary to surround an object
42 with a complete visual barricade and it is impractical or unacceptable to install fence posts. The surround
43 shall be constructed in such a manner as to provide a buffer zone around and access to the item being
44 protected.
- 45 5. Type E, Steel “T” Fence Posts with construction fencing to surround an object with a complete visual
46 barricade and it is practical to install fence posts. The surround shall be constructed in such a manner as
47 to provide a buffer zone around and access to the item being protected.
- 48 6. Type X, Other fencing or barricade types that may be designated and detailed within the construction
49 documents shall use additional alpha numeric designations.
- 50

51 **2.2. EROSION CONTROL PROTECTION**

- 52 A. Refer to City of Madison FACILITIES MANAGEMENT SPECIFICATION 210.2 for authorized materials associated
53 with erosion control materials.
- 54

55 **2.3. INTERIOR FINISH PROTECTION MATERIALS**

- 56 A. Except where noted in other areas of the construction documents or this specification the responsible
57 contractor:
- 58 1. Shall not provide the cheapest or least effective method as an effort to meet any protection requirement.

- 1 2. Shall provide materials of sufficient quality, and durability to provide adequate protection based on the
- 2 seasonal conditions and the anticipated duration at the time the protection will be needed.
- 3 3. Shall provide sufficient quantity of protection material to protect the construction as needed.
- 4 B. Prior to installing protective measures the responsible contractor shall propose to the GC, Project Architect (PA)
- 5 / Project Engineer (PE) and City Project Manager (CPM) the proposed plan for protection, materials to be used
- 6 and samples as necessary.
- 7 1. The PA/PE and CPM reserve the right to disapprove any proposed method and/or material and/or make
- 8 alternate proposals.
- 9

10 **PART 3 - EXECUTION**

11

12 **3.1. GENERAL EXECUTION REQUIREMENTS**

- 13 A. The GC shall be responsible for ensuring all of the following procedures and requirements are implemented as
- 14 needed for the duration of the Work performed under this contract.
- 15 B. The GC shall also be responsible for the following:
- 16 1. Reporting any incident of damage to existing property, right-of-way, or utility to the CPM immediately
- 17 upon rendering the incident safe, and notifying emergency response teams, and emergency utility crews
- 18 as needed.
- 19 2. Conduct a site walk through prior to leaving at the end of each day to assess:
- 20 a. Protection measures are properly in place, provide correction actions as necessary.
- 21 b. Note damage to existing completed work and schedule repair/replacement as needed.
- 22 3. Ensure all contractors and workers are being diligent in protecting existing work, and newly installed
- 23 construction.
- 24

25 **3.2. PROTECT ADJACENT PROPERTIES**

- 26 A. Whenever possible through the design process the City of Madison shall have previously provided notice to
- 27 adjacent property owners that work will be occurring on or near their property. The City of Madison shall also
- 28 have obtained any permanent or temporary easements that may be necessary to complete any Work on
- 29 adjacent properties.
- 30 B. It shall be the responsibility of the GC to do the following for all Work under this contract being performed on or
- 31 adjacent to the property line:
- 32 1. Contact the adjacent property owner and provide them with information on the work to be done,
- 33 equipment to be used, and estimated duration of the work. Information to be updated and
- 34 communicated to property owner(s) as construction progresses and site conditions change.
- 35 a. If any adjacent property is a rented or leased space the GC shall also make contact and provide
- 36 the same information to the tenants.
- 37 b. Determine from the owner and/or tenants if there are any concerns for children, pets, special
- 38 plantings, or other concerns.
- 39 2. Discuss the following with all contractors performing work on or near the property line.
- 40 a. Work to be completed and timeline.
- 41 b. Concerns of adjacent property owners/tenants from item 1 above.
- 42 c. Which protective measures will be necessary to protect adjacent properties and address the
- 43 concerns of adjacent property owners/tenants.
- 44 3. Ensure all protective measures are placed and maintained during the execution of Work on or adjacent to
- 45 the property line. Interact with the adjacent property owners/tenants as needed.
- 46 C. Any contractor doing work on or adjacent to the property line shall install and maintain any protective measure
- 47 identified in the contract documents, this specification, or as directed by the GC.
- 48 D. The GC shall be responsible for restoring any damage to structure and property located on or adjacent to the
- 49 property line.
- 50 1. Restoration shall include but not be limited to repair or replacement using like materials and finishes to
- 51 its original condition or better.
- 52 2. Restoration of landscaping materials shall include watering of any seed, sod, or other planting of any kind
- 53 for a reasonable period of time to encourage germination and root development.
- 54 E. The GC shall keep the CPM informed directly to any issues pertaining to adjacent property owners and tenants.
- 55

56 **3.3. PROTECT LANDSCAPING FEATURES**

- 57 A. Except where specifically stated in other areas of the construction documents the following minimal protection
- 58 requirements shall apply under this section.

- 1 1. Whenever possible do not install new landscape features until exterior building construction has been
- 2 completed, equipment such as scaffolding and lifts are no longer needed and have been removed, and
- 3 heavy equipment operation is no longer required.
- 4 2. Whenever possible remove and temporarily store all existing landscape features such as benches, waste
- 5 receptacles, signage, and other such features that will be within the area of Work that can be removed.
- 6 3. Landscape features that cannot be removed such as flag poles, light poles, light bollards, etc. shall be
- 7 protected with Type D fencing for areas on pavement or Type E fencing for areas on soil.
- 8 4. Planting beds shall be protected using Type E fencing around the exposed perimeter of the planting bed
- 9 as needed.
- 10 5. The City of Madison FACILITIES MANAGEMENT SPECIFICATION 107.13 shall apply to all tree protection in
- 11 and around the project site at all times.
- 12

13 3.4. PROTECT UTILITIES

- 14 A. The contractor shall be responsible for notifying all utilities to determine emergency response procedures and
- 15 protection requirements prior to installing any construction protection.
- 16 1. This includes requesting utility marking through Diggers Hotline.
- 17 a. Call 811 or 1-800-242-8511 to request a public utility locate
- 18 b. For emergency locate call (262) 432-7910 or (877) 500-9592
- 19 2. Contact the Owner and CPM for any available private utility information on the property that may be
- 20 available prior to calling a private utility locating company.
- 21 B. Except where specifically stated in other areas of the construction documents the following minimal protection
- 22 requirements shall apply under this section.
- 23 1. Hydrants, lamp posts, electrical transformers, and other utility pedestals shall be protected with Type D
- 24 fencing for areas on pavement or Type E fencing for areas on soil. Fence posts shall be located so as to
- 25 not be directly over the utility main.
- 26 2. Storm sewer structures in pavement shall have proper inlet protection according to City of Madison
- 27 FACILITIES MANAGEMENT SPECIFICATION 210.1(g) and Type C Construction Barrels when necessary.
- 28 3. Storm sewer structures in turf and other landscaped areas shall have proper inlet protection according to
- 29 City of Madison FACILITIES MANAGEMENT SPECIFICATION 210.1(g) and Type E fencing for areas on soil.
- 30 4. Stormwater management features such as greenways, retention/detention ponds, bio-filtration ponds
- 31 and other such features shall be properly protected according to the appropriate erosion control
- 32 measure specified on the Erosion Control Plan. See multiple sections of City of Madison FACILITIES
- 33 MANAGEMENT SPECIFICATION 210.1
- 34 a. For the protection of hard to see items such as structures, castings, inlets, etc. in grassy areas
- 35 provide Type E fencing for areas on soil.
- 36 c. For the protection of storm water management features having special soils and plants such as
- 37 bio-filtration ponds provide Type E fencing for areas on soil.
- 38 5. Other structures and covers including but not limited to cleanouts, wiring hand holes, valve boxes, access
- 39 structures, grease trap structures, etc shall be protected as follows:
- 40 a. Provide Type E fencing for areas on soil.
- 41 b. When paving operations are complete provide a construction barrel or cone near structures as
- 42 necessary depending on required heavy construction traffic.
- 43

44 3.5. PROTECT PUBLIC RIGHT OF WAY

- 45 A. Except where specifically stated in other areas of the construction documents the following minimal protection
- 46 requirements shall apply under this section.
- 47 1. All public right-of-way (area from behind the sidewalk to the centerline of the street) shall remain open
- 48 and accessible except during periods of active work. At such times the public right of way shall be
- 49 properly closed and signed as referenced in City of Madison FACILITIES MANAGEMENT SPECIFICATION
- 50 107.9.
- 51 2. Bus stops and bus stop structures shall remain accessible at all times.
- 52 3. Traffic signage and traffic signals, traffic control boxes shall be protected with Type D fencing for areas on
- 53 pavement or Type E fencing for areas on soil.
- 54 a. Protection at traffic signage/signals shall not obstruct the viewing of the sign/signal for its
- 55 intended purpose at any time.
- 56 B. When additional protection for traffic control is required, the use of barricades, guardrails, lane closures and
- 57 other such procedures will be detailed within the construction documents.

1 C. When additional protection for overhead sidewalk cover is required the contract documents shall indicate the
2 specific location and structural requirements of the protective structure.
3

4 **3.6. PROTECT STORED MATERIALS**

5 A. All contractors shall refer to Specification 01 60 00 Product Requirements for all storage and protection
6 requirements of building materials and products delivered to the site.
7

8 **3.7. PROTECT WORK - EXTERIOR**

9 A. Provide all temporary services that may be required to protect the installed material from heat, cold, humidity,
10 etc, while materials such as concrete, mortar, sealants, paints, etc, are drying and/or curing.

11 B. Open trenches, pits, and other such excavations shall be properly covered, lined, or shored as needed during
12 periods of inclement weather to prevent the caving of soils onto existing work in progress. Refer to the
13 appropriate specifications and/or regulatory requirements governing this type of work as necessary.

14 C. Provide adequate protection at all openings with heavy duty tarps, plastic sheathing, or wood framing and
15 sheathing as needed to protect interior work in progress from inclement weather as needed.

16 D. Protect exterior finishes of all kinds with heavy duty tarps or plastic sheathing as needed while landscaping is
17 being installed through full germination of seeded areas or installation of filter fabric and mulches to keep dust,
18 dirt, and mud off of finished exterior surfaces.

19 E. Designate specific curb mounting points and provide wood blocking where small vehicles, skid loaders and other
20 such equipment may need access to areas being landscaped.

21 F. Provide plywood turning pads for skid loaders to turn on to prevent tire marking on new pavement.

22 G. Do not permit the parking of vehicles with any kind of fluid leaks to park on new pavement.

23 H. The contractor shall be responsible for cleaning, repairing, or replacing any completed work or work in progress
24 under this specification as deemed necessary by the CPM without additional cost to the contract.
25

26 **3.8. PROTECT WORK - INTERIOR**

27 A. The GC shall do all of the following:

28 1. Provide all temporary services that may be required to protect the installed material from heat, cold,
29 humidity, etc, while materials such as concrete, mortar, sealants, paints, etc, are drying and/or curing.

30 2. Provide adequate visual and/or physical protection as needed to protect newly completed interior work
31 such as paint, flooring material, sealants, grouts, etc that may be drying and/or curing.

32 3. Provide adequate space and materials for cleaning boots, tool boxes, supplies, and other items coming
33 into the project site once finish work has begun.

34 4. Clean dirtied areas and repair/replace damaged areas immediately.

35 B. The contractors responsible for interior work shall be responsible for protecting their work and finishes from dirt,
36 mud, snow, spills, splatters, and physical damage after installation as follows:

37 1. Protect vinyl composite, rubber composite, painted/stained concrete, and tiled flooring as follows:

38 a. Define foot traffic areas and protect with Ramboard Temporary Floor Protection products as a
39 minimum basis of design or other protection product(s) compatible with installed flooring product
40 if Ramboard is not compatible. Products to be used shall be new.

41 i. Tape all edges, seams, etc with a good quality tape that does not leave sticky residue. Do
42 not allow any debris or other material between the installed flooring and the protection
43 material.

44 ii. Repair tears immediately, replace worn areas with like material as necessary.

45 2. Protect carpeted areas as follows:

46 a. Define foot traffic areas and protect with a minimum of 6mil, clear, polyethylene sheeting 3 feet
47 wide. Products to be used shall be new.

48 i. Tape all edges, seams, etc with a good quality tape that does not leave sticky residue. Do
49 not allow any debris or other material between the installed flooring and the protection
50 material.

51 ii. Repair tears immediately, replace worn areas with like materials as necessary.

52 3. Protect all finished walls in high traffic areas with Ramboard Temporary Wall protection products or
53 approved equal.

54 i. Tape all edges, seams, etc with a good quality tape that does not leave sticky residue. Do
55 not allow any debris or other material between the installed flooring and the protection
56 material.

57 ii. Repair tears immediately, replace worn areas with like materials as necessary.

- 1 3. Protect counter tops, cabinets, and other finished surfaces with large sheets of thick cardboard or
2 Ramboard products. Do not allow toolboxes, finish materials, parts and other such items to be placed on
3 finished materials.
4 C. All protection shall stay in place until the CPM, PA/PE, and GC mutually deem the project is ready for Final
5 Cleaning. The contractors responsible for protecting the work shall be responsible for removing the protection
6 and removing any adhesive residue at that time. Contractors shall only use manufacturer authorized cleaning
7 materials for removing adhesives, etc.
8 D. Contractors doing work in un-protected areas of finished work shall be required to provide drop cloths and other
9 protection as noted within this specification for the duration of their work.
10 1. Finished areas shall be sufficiently covered to accommodate all equipment, and materials being used to
11 complete the work being done.
12 2. Finished areas shall be sufficiently covered to prevent splatters, over spray, etc when doing touch-up
13 work.
14 3. Contractors who do not provide sufficient protection under this sub-section shall be responsible for any
15 costs associated with cleaning, repairing or replacing already finished construction at no additional cost
16 to the contract.
17
18
19

20 **END OF SECTION**
21

**SECTION 01 78 39
AS-BUILT DRAWINGS**

1
2
3
4 PART 1 – GENERAL 1
5 1.1. SUMMARY 1
6 1.2. RELATED SPECIFICATIONS 1
7 1.3. RELATED DOCUMENTS 1
8 1.4. PERFORMANCE REQUIREMENTS 1
9 1.5. QUALITY ASSURANCE 2
10 PART 2 – PRODUCTS 2
11 2.1. OFFICE SUPPLIES 2
12 PART 3 - EXECUTION 2
13 3.1. FIELD DOCUMENT AS-BUILTS 2
14 3.2. SITE SURVEY AS-BUILT 3
15 3.3. MASTER AS-BUILT DOCUMENT SET 3
16 3.4. AS-BUILT REVIEW AND ACCEPTANCE 4
17 3.5. CHANGES AFTER ACCEPTANCE 4
18

PART 1 – GENERAL

1.1. SUMMARY

- 22 A. This specification is intended to provide clear guidelines and identify the responsibilities of all contractors as they
23 pertain to City of Madison contract procedures regarding the accurate recording of the Work associated with the
24 execution of this contract. This shall include but not be limited to work that will be hidden, concealed, or buried.
25 B. Each contractor shall be responsible for maintaining an accurate record of all installations, locations, and
26 changes to the contract documents during the execution of this contract as it may relate to their specific division
27 or trade.
28 C. The General Contractor (GC) shall be responsible for ensuring all contractors provide as-built record information
29 to the Master As-Built Document Set as described in this specification.
30

1.2. RELATED SPECIFICATIONS

- 32 A. 01 26 13 Request for Information
33 B. 01 31 23 Construction Bulletin
34 C. 01 26 63 Change Orders
35 D. 01 29 76 Progress Payment Procedures
36 E. 01 33 23 Submittals
37 F. 01 77 00 Closeout Procedures
38 G. Other Divisions and Specifications that may address more specifically the requirements for field recording the
39 installation of all items associated with the execution of this contract by Division or Trade.
40

1.3. RELATED DOCUMENTS

- 42 A. Other related documents shall include but not be limited to the following:
43 1. Bidding documents including drawings, specifications, and addenda.
44 2. Required regulatory documents of conditional approval.
45 3. Field orders, verbal or written by inspectors having regulatory jurisdiction.
46 4. Shop drawings and installation drawings.
47

1.4. PERFORMANCE REQUIREMENTS

- 49 A. The GC shall be responsible for maintaining the “Master As-Built Document Set” at all times during the execution
50 of this contract. This document set shall include all of the following:
51 1. Master As-Built Plan Set
52 2. Master As-Built Specification Set
53 3. Other Document Sets
54 B. The GC shall designate one person of the GC staff to be responsible for maintaining the Master As-Built
55 Document Set. This shall include, posting updates, revisions, deletions and the monitoring of all contractors
56 posting as-built information as described in this specification.

- 1 C. All contractors shall use this specification as a general guideline regarding the requirements for documenting
2 their completed Work. Contractors shall explicitly follow additional specification requirements within their own
3 Division of Trade as it may apply to this specification.
4

5 **1.5. QUALITY ASSURANCE**

- 6 A. The GC shall be responsible for all of the following:
7 a. Spot checking all sub-contractors field documents to insure daily information is being recorded as
8 work progresses.
9 b. Discuss as-built recording to the plan set at weekly job meetings with all sub-contractors on site.
10 c. Schedule time with sub-contractors in the job trailer for recording as-built information to the plan
11 set.
12 d. Insure that all sub-contractors are providing clear and accurate information to the plan set in a
13 neat and organized manner.
14 e. Insure sub-contractors who have completed work have finalized recording all as-built information
15 to the plan set before releasing them from the project site.
16 B. The Project Engineer, the City Project Manager, and other design team staff will perform random checks of the
17 Master As-Built Document Set during the execution of this contract to ensure as-built information is being
18 recorded in a timely fashion as the Work progresses. An updated and current Master As-Built Document Set is a
19 stipulation for approval of the progress payment.
20

21 **PART 2 – PRODUCTS**

22
23 **2.1. OFFICE SUPPLIES**

- 24 A. The GC shall provide a sufficient supply of office products at all times for all contractors to use in recording as-
25 built information into the plan set. This shall include but not be limited to the following:
26 a. Red ink pens, medium point. Pens that bleed through paper, markers, and felt tips will not be
27 accepted.
28 b. The use of highlighters is acceptable. Assign colors to various trades for consistency in recording
29 information.
30 c. Straight edges of various lengths for drawing dimension, extension and other lines.
31 d. Civil and Architectural scales
32 e. Clear transparent, non-yellowing, single sided tape.
33 f. Correction tape or correction fluid for correcting small errors.
34

35 **PART 3 - EXECUTION**

36 **3.1. FIELD DOCUMENT AS-BUILTS**

- 37 A. The GC and all Sub-contractors shall be responsible for keeping their own field set of as-built documents
38 including plans, specifications and published changes.
39 B. Field sets shall be kept dry and in good condition at all times.
40 C. No Work shall be buried, covered, or hidden, by any additional Work, regardless of Contractor or Trade, until
41 locations of all materials and equipment has been properly documented as described below.
42 D. All contractors shall be required to record the following as-built information:
43 a. Notes on the daily installation of materials and equipment.
44 b. Sketches, corrections, and markups indicating final location, positioning, and arrangement of
45 materials and equipment such as pipes, conduits, valves, cleanouts, pull boxes and other such
46 items. Note all final locations on plan sheets, indicate dimension off identifiable building features.
47 Riser diagrams need only be corrected for significant changes in locations, routing or
48 configuration.
49 i. The use of photographs in lieu of hand drawn sketches is acceptable.
50 ii. Photos shall be taken according to Specification 01 32 33 Photographic Documentation
51 iii. Print photo and markup with dimensions or notes as necessary.
52 c. Identify by the use of existing plan symbology and notes the size, type, quantity, and use as
53 applicable of materials such as pipes, valves, conduits, etc.
54 d. Note whether horizontal runs are below slab or above ceiling, include dimensions above or below
55 finished floor elevation.
56 E. All contractors shall be responsible for transferring the information from their field set of documents to the
57 Master As-Built Plan Set kept in the GC job trailer. See Section 3.3.D. below for the proper procedure.
58 F. All contractors shall update the GC Master Plan Set as often as necessary, but not less than once per work week.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58

3.2. SITE SURVEY AS-BUILT

- A. The Land Surveyor Sub-Contractor shall provide digital as-built information including but not be limited to the following:
 - a. For underground buried utility laterals and services of all types locate all of the following that may apply:
 - i. Connection points at all mains
 - ii. Storm discharge points to open air
 - iii. All corners and bends regardless of angle, large radius sweeps shall have multiple point locations sufficient to define the sweep.
 - iv. All vertical drops
 - v. All wells
 - vi. Private buried utilities such as buried electrical cables, irrigation systems, etc.
 - v. Other information that may need to be located in the future by the owner prior to digging
 - b. Record all surface features including but not limited to the following:
 - i. Building corners, pavement edges, and other permanent structural features.
 - ii. All surface covers for inlets, catch basins, cleanouts, access structures, curb stops and other such devices.
 - iii. Other permanent surface features such as hydrants, lamp posts, and other permanent site amenities.
 - c. The following data shall be recorded while locating items in sub-sections 3.2.a and 3.2.b above:
 - i. Flow lines at both ends of pipes
 - ii. Pipe sizes and material types
 - iii. Rim elevations for all covers
 - iv. Sump elevations and invert elevations of all structures
 - v. Spot elevations for all pads, driveways, walks, stoops, and floors
- B. The Surveyor shall provide the final digital as-built on a media and in a format specified in Specification 00 31 21 Survey Information to the GC for turn in to the Project Engineer and the Civil Engineer.
- C. The Surveyor shall provide two printed as-built site plans to the GC for inclusion in the Master As-Built Plan Set as follows:
 - 1. One sheet to show all features (but not contour information) with text neatly organized for each item identified.
 - 2. One sheet showing contours, contour labels, and features from item 1 above, but with no additional text.

3.3. MASTER AS-BUILT DOCUMENT SET

- A. The GC shall be responsible for maintaining the Master As-Built Document Set in the job trailer at all times.
 - 1. The Master As-Built Plan Set (Plan Set) shall begin with one complete bid set of drawings and any additional sheets that were supplied by published addenda during the bidding process. The cover sheet shall be titled as the "Master As-Built Plan Set" in large bold red letters approximately 2" in height and shall not be used for any other purpose.
 - a. The Plan Set shall be kept dry, legible, and in good condition at all times.
 - b. The Plan Set shall be kept up to date with new revisions within two (2) working days of supplemental drawings being issued. Revisions shall be posted as follows:
 - i. Insert new, revised sheets into the plan set. Void old sheets but do not remove them from the plan set. Indicate date received and what document (RFI, CB, CO, etc) caused the change.
 - ii. Insert new, revised individual details into the plan set. Void old details, tape new details over the old details with a "tape hinge" to allow them to be viewed. Indicate date received and what document (RFI, CB, CO, etc) caused the change.
 - iii. Add new details in appropriate white space on relevant sheets. If no space is available use the back side of the previous sheet or insert a new sheet. Indicate date received and what document (RFI, CB, CO, etc) caused the change.
 - c. The Plan Set shall be available at anytime for easy reference during progress meetings and for emergency location information of new work already completed.
 - 2. The Master As-Built Specification Set (Spec Set) shall begin with one complete bid set of specifications and any additional specifications that were supplied by published addenda during the bidding process. The Spec Set shall be provided in three "D" ring type binders of sufficient thickness to accommodate the specification set. Multiple binders are allowed as necessary. Label the front cover and binding edge with

- 1 “Master As-Built Specifications” in bold red letters. Provide other information as necessary to distinguish
2 the contents of multi-volume sets.
- 3 a. The Spec Set shall be kept dry, legible, and in good condition at all times.
4 b. The Spec Set shall be kept up to date with new revisions within two (2) working days of
5 supplemental drawings being issued.
6 c. The Spec Set shall be available at anytime for easy reference during progress meetings.
- 7 3. Other Document Sets may be kept at the GCs option in three “D” ring type binders of sufficient thickness
8 to accommodate the documentation. Other documentation sets may include but not be limited to RFIs,
9 CBs, COs, etc.
- 10 C. The Land Surveyor Sub-Contractor shall be required to use digital surveying for all exterior site surveying, and
11 provide deliverable digital as-builts as specified in Specification 00 31 21 Survey Information. As soon as practical
12 the surveyor shall provide the GC with a preliminary copy of installed buried utilities for inclusion with the plan
13 set in the job trailer. The surveyor shall provide final digital as builts as per section 3.2 above.
- 14 D. All contractors shall be responsible for updating the Plan Set from their field sets at least once per work week.
15 Updates shall include but not be limited to the following procedures:
- 16 a. All updates shall be done only in red ink. Place a “cloud” around small areas of correction to call
17 attention to the change.
- 18 b. Whenever possible place general work notes, field sketches, supplemental details, photos, and
19 other such information on the reverse side of the preceding sheet. Installation notes including
20 dates shall be kept neatly organized in chronological order as necessary.
- 21 c. Accurately locate items on the plan set as follows:
- 22 i. For items that are located as dimensioned provide a check mark or circle indicating the
23 dimension was verified.
- 24 ii. For items that are within 5 feet of the location indicated on the plans leave as shown and:
- 25 • Provide correct dimensions to existing dimension strings or,
26 • Accurately locate with new dimension strings
- 27 iii. For items that are more than 5 feet from the location indicated on the plans
- 28 • Accurately draw the items in the new location as installed and,
29 • Accurately locate with new dimension strings and,
30 • Note that the existing location is void.
- 31 d. Include dimensioned locations for items that will be buried, concealed, or hidden in the ground,
32 under floors, in walls or above ceilings.
- 33 i. Dimensions shall be pulled from identifiable building features, not from centers of columns
34 or other buried features.
- 35 ii. When necessary pull more dimensions as needed from opposing directions to properly
36 locate single items.
37

38 3.4. AS-BUILT REVIEW AND ACCEPTANCE

- 39 A. The GC shall provide the Master As-Built Plan Set to the Project Architect (PA) / Project Engineer (PE), the City
40 Project Manager (CPM), and other design team staff for content review prior to the Progress Payment Milestone
41 indicated in Specification 01 29 76 Progress Payment Procedures. The submitted plan set shall include the digital
42 survey information produced under Section 3.2 above.
- 43 1. If the plan set is not approved:
- 44 a. The PA/PE and CPM shall only be required to generalize deficiencies by trade there shall be no
45 requirement or expectation to generate a “punch list” of required corrections.
- 46 b. The GC and Sub-contractors as necessary shall be responsible for inspecting the installation and
47 correcting the drawings as needed.
- 48 c. The GC shall re-submit the plan set for review.
- 49 2. If the plan set is approved the PA/PE shall take possession of the plan set to be used in providing the
50 owner with digital CAD record drawings. Upon completion of transferring the information to CAD the
51 PA/PE shall provide the Owner with CAD record drawings, record PDFs, and the Master As-Built Plan Set.
52

53 3.5. CHANGES AFTER ACCEPTANCE

- 54 A. No Contractor shall be responsible for making changes to the As-Built record documents after acceptance by the
55 PA/PE and CPM except when necessitated by changes resulting from any Work made by the Contractor as part
56 of their guarantee.
57

58 **END OF SECTION**