



# Existing Conditions Assessment

Frederick Manfred House Visitor Center  
Blue Mounds State Park

April 20, 2020

for the



DNR Project No.169731  
TKDA Project No.17782.000



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April 20, 2020

Mr. Joe Cartwright  
Project Architect  
Operations Services  
Minnesota Department of Natural Resources  
1601 Minnesota Drive  
Brainerd, MN 56401

RE: Frederick Manfred House Visitor Center  
Existing Conditions Assessment  
DNR Project No.169731  
TKDA Project No.17782.000

Dear Mr. Cartwright:

Per your request, TKDA has conducted an **Existing Conditions Assessment** for the Frederick Manfred House Visitor Center, (Visitor Center) located at Blue Mounds State Park, 1410 161st Street, Luverne, Minnesota 56156. The survey was conducted Tuesday February 4, 2020 by Kathleen Anglo, PLA [MN No.43242], Heather Erickson, PE [MN No.43388], and Andrew Gardner, Associate AIA, of the TKDA Saint Paul office.

The area surveyed, referred to as **Eagle Rock Vista Trailhead**, includes the Visitor Center. The area was outlined on the enclosed site plan. Our observations were documented within the attached report. TKDA staff were not allowed entry into the Visitor Center due to unsafe conditions under the direction of the Minnesota Department of Natural Resources (DNR) staff. Our survey relies on exterior visual assessment, building plans, and photos provided by DNR staff. We also address mechanical and electrical issues based on the few observations noted.

The Existing Conditions Assessment has been formatted for ease of use by dividing our observations by project discipline and again by building elements. Comments noted in previous reports and not visually noted during the February 4, 2020 site visit have also been included here as an Appendix to this report to establish an ongoing history of the structure.

If you have any questions, please contact me directly at 651.292.4471 or [kathleen.anglo@tkda.com](mailto:kathleen.anglo@tkda.com).

Thank you.

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KWA:ADG:amc

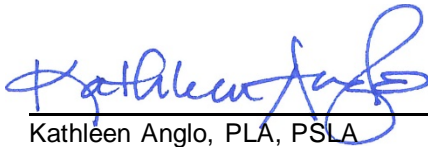
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Frederick Manfred House Visitor Center  
Existing Conditions Assessment  
Blue Mounds State Park

DNR No.169731  
TKDA Project No.17782.000

April 20, 2020

I hereby certify this report was prepared by me or under my direct supervision, and I am a duly Registered Landscape Architect under the laws of the State of Minnesota.



Kathleen Anglo, PLA, PSLA  
Project Manager

Date: April 2020

Lic. No.: 43242

Reviewed By: Andrew D. Gardner, Assoc. AIA

Date: April 2020

TKDA  
444 Cedar Street - Suite 1500  
Saint Paul, MN 55101



# Executive Summary

## Minnesota Department of Natural Resources

### Blue Mounds State Park Frederick Manfred House Visitor Center

The building under consideration in the following report is the Frederick Manfred House Visitor Center (herein after referred to as the “visitor center”). The visitor center is part of the Eagle Rock Vista Trailhead (herein after referred to as the “trailhead”) at Blue Mounds State Park in southwest Minnesota.

The visitor center and surrounding site was assessed visually and examined for any signs of architectural deterioration and structural deficiency that would be cause for safety concerns. Previous building plans, assessments, and recommendations were also reviewed for supporting documentation of recommendations. Visual assessments of the mechanical and electrical systems were also included as far as photographs taken and reviewed by TKDA Engineering Specialist II Steven Fluger and Electrical Assistant Group Manager Randy Jacobs could determine component and system condition, age, and suitability for continued use. Fire and life safety items are not addressed specifically in this review. Likewise, the TKDA Water/Wastewater Group Manager, Dan Nesler, provided a high-level assessment of the feasibility and costs required to bring City, County, or rural water to the site in order to replace the current water supply which is drawn from two nearby wells containing contaminated water. In the following pages, the visitor center and trailhead were assessed for site and building conditions. The report is laid out by project discipline; however, within each discipline, TKDA included subheadings for observations noting building components, documented changes, current conditions, and suitability for future use followed by photograph documentation. Recommendations follow each section and again at the end of this report.

Based on the conditions noted, if the visitor center were to become a functional facility, keeping within its original design, the structure would need to be demolished and rebuilt to all applicable building codes. The stone walls and fireplace may be salvaged if further investigation deemed them structurally sufficient. The mechanical, electrical, and septic systems would need to be replaced and a new water supply would be required for potable water. We anticipate this reconstruction of the structure to code could cost approximately \$2,000,000.



# Table of Contents

Letter of Transmittal  
Certification Page  
Executive Summary  
Table of Contents

	Page
<b>1.0 Introduction.....</b>	<b>1</b>
1.1 History .....	1
1.2 Documented Problems .....	1
1.3 Goals .....	1
1.4 Site Visit Observations.....	2
<b>2.0 Site .....</b>	<b>2</b>
2.1 Access Drive & Parking .....	2
2.2 Accessibility.....	4
2.3 Landscape .....	5
2.4 Recommendations .....	5
<b>3.0 Architecture.....</b>	<b>6</b>
3.1 Roof .....	7
3.1.1 Documented Changes from Original Design.....	7
3.1.2 Current Condition .....	8
3.1.3 Suitability for Future Use.....	8
3.2 Exterior Walls.....	9
3.2.1 Current Condition .....	9
3.2.2 Suitability for Future Use.....	10
3.3 Openings .....	10
3.3.1 Current Condition .....	10
3.3.2 Suitability for Future Use.....	10
3.4 Masonry .....	11
3.4.1 Current Condition .....	11
3.4.2 Suitability for Future Use.....	12
3.5 Interior Walls.....	12
3.5.1 Documented Changes & Updates .....	12
3.5.2 Current Condition .....	13
3.5.3 Suitability for Future Use.....	13
3.6 Flooring .....	14
3.6.1 Current Condition .....	14
3.6.2 Suitability for Future Use.....	14
3.7 Recommendations .....	14
<b>4.0 Structural.....</b>	<b>15</b>
4.1 Structural Components .....	15
4.1.1 Current Condition .....	16
4.1.2 Suitability for Future Use.....	18
4.2 Recommendations .....	18
<b>5.0 Mechanical, Electrical and Water Delivery Systems:.....</b>	<b>18</b>
5.1 HVAC.....	18
5.2 Plumbing .....	19

# Table of Contents (Continued)

5.3	Electrical.....	20
5.4	Site Water Service.....	21
5.5	Recommendations .....	21
<b>6.0</b>	<b>Summary .....</b>	<b>22</b>
6.1	Recommendations and Assumptions .....	22

## List of Photographs

<b>Photo 1</b>	Access Drive & Parking Photograph.....	3
<b>Photo 2</b>	Access Drive & Parking Photograph.....	3
<b>Photo 3</b>	Access Drive & Parking Photograph.....	3
<b>Photo 4</b>	Access Drive & Parking Photograph.....	4
<b>Photo 5</b>	Access Drive & Parking Photograph.....	4
<b>Photo 6</b>	Blue Mounds SP Visitors Center .....	5
<b>Photo 7</b>	Blue Mounds SP Visitors Center .....	6
<b>Photo 8</b>	Roof Photograph .....	7
<b>Photo 9</b>	Roof Photograph .....	8
<b>Photo 10</b>	Exterior Wall Photograph.....	9
<b>Photo 11</b>	Exterior Wall Photograph.....	9
<b>Photo 12</b>	Openings Photograph .....	10
<b>Photo 13</b>	Openings Photograph .....	11
<b>Photo 14</b>	Masonry Photograph.....	11
<b>Photo 15</b>	Masonry Photograph.....	12
<b>Photo 16</b>	Interior Walls Photograph .....	13
<b>Photo 17</b>	Interior Walls Photograph .....	13
<b>Photo 18</b>	Flooring Photograph .....	14
<b>Photo 19</b>	Shoring to support beams rotting at bearing. The un-circled posts are original construction .....	16
<b>Photo 20</b>	Rotting roof beam at building exterior .....	17
<b>Photo 21</b>	Rotting roof beam at building exterior .....	17
<b>Photo 22</b>	Failing interior concrete slab .....	18
<b>Photo 23</b>	Mechanical Photograph.....	19
<b>Photo 24</b>	Mechanical Photograph.....	19
<b>Photo 25</b>	Electrical Photograph .....	20
<b>Photo 26</b>	Electrical Photograph .....	21

## List of Appendices

Appendix A	Cost Estimate
Appendix B	Additional Information
Appendix C	2017 Interpretive Center Restoration Bid Package
Appendix D	2016 Structural Calculations - Interpretive Center Roof Repair

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# Existing Conditions Assessment

## Frederick Manfred House Visitor Center

Prepared for Minnesota Department of Natural Resources

### 1.0 Introduction

#### 1.1 History

The Blue Mounds State Park Frederick Manfred House Visitor Center, formerly the home of the author Frederick Manfred and his family, has been a fixture in the rural southwest Minnesota landscape for the last 60 years. The author built the approximately 3,500-square-foot home between 1960 and 1961 along the Sioux Quartzite bluffs, where he and his family lived for about seven years. The author fell into financial difficulty and sold the home and land to the Minnesota Parks Foundation (MPF) at an unknown date. In 1972, the Minnesota Department of Natural Resources (DNR) acquired the property from the MPF. In the mid-1970s, the DNR began using the house as a park visitor center at the southern edge of Blue Mounds State Park, near Luverne, Minnesota. However, after years of continued water infiltration due to the geology of the area, the siting of the building, the construction methods used, and inadequate mechanical systems installed; the structure has suffered from rot, dry rot, mold and mildew, and has become unsafe to occupy. The visitor center was closed to park staff and visitors in 2015. A DNR Facility Advisor has deemed the building unsafe for entry since 2018.

#### 1.2 Documented Problems

The buildings problems have been well documented, even since its earliest days, by the family that built it and then by the DNR. These include but are not limited to:

- Frederick Manfred's daughter Freya has written of water intrusion issues with the house dating to the early 1960s, soon after construction was completed.
- The DNR provided documentation outlining necessary structural stabilization. Refer to **Appendix C**.
- The DNR-provided document outlining structural analysis indicating deficient members not capable of sustaining modern loading requirements. We believe shoring of those members occurred in 2017. Refer to **Appendix D**.
- DNR staff recall stormwater running down the bluff face and through the house during a large rain event in 2014.

#### 1.3 Goals

The DNR is considering various alternatives for enhancing the natural landscape and space for public use, education, and appreciation at the trailhead. This includes an assessment of the current visitor center for continued use as a visitor center, possible preservation of a portion of the structure for education and interpretation, or disposition of the structure entirely.

The trailhead provides a stepping off point for park users entering the southern portion of the Blue Mounds State Park trail system. Trailhead design may include basic park amenities such as: wayfinding signage, informational kiosk, interpretive signage, pedestrian connections, seating, gathering area for small events or park interpretive programming, shelter(s) for 4-6 picnic tables (with power), toilet facility, and related landscaping.

TKDA will develop 3 solutions for the trailhead that respond to the Minnesota DNR project budget of \$500,000 with a tiered approach and prioritized levels of implementation.



## 1.4 Site Visit Observations

On February 4, 2020, the project team from TKDA met with representatives from the DNR in Luverne, Minnesota and at the project site in Blue Mounds State Park to discuss the department's vision for the project and the site overall. As part of the contract, TKDA was engaged to perform an existing conditions assessment of the Frederick Manfred House Visitor Center and the adjacent site areas. What follows are TKDA's findings and recommendations.

## 2.0 Site

The project area is located on the southern edge of Blue Mounds State Park approximately 2 miles north of Luverne, Minnesota in Rock County. The surrounding landscape is dominated by farms, yet cropland is limited due to the Sioux Quartzite bedrock that occurs at or near the ground surface. Prior to agricultural development, the area was predominantly tall-grass prairie. Access to the visitor center and trailhead occurs from 141st Street. A wooden access gate is used to control access and a bituminous drive winds its way up 125 feet in elevation for approximately 1/2-mile along the Sioux Quartzite bluffs. It includes an interpretive pull-off near the site of an old Sioux Quartzite quarry. The drive ends at a paved 21-car parking lot that provides pull-through and drop-off access to a bituminous trail and park pay-box. This trail leads you to the visitor center and interpretive node with a wayfinding map and interpretive panels. Just south of the building is the Carrie Nelson Memorial Garden not included in the assessment and subsequent renovation area.

A small pond to the west of the building holds water most of the year. Due to the low-infiltration capacity of the surrounding bedrock/soil, most water flows overland or is captured in small depressions in the earth. Park amenities, such as moveable wooden picnic tables, a small stone gathering circle, flagpole, and trash receptacles are located on the south side of the building. The picnic tables are in fair condition and may be replaced, if desired. The stone gathering circle is in good condition and is to remain. The trash receptacle should be replaced with the trailhead renovation. The interpretive and wayfinding signage is in good condition and can either remain in their current location or be salvaged and reinstalled with the renovation.

Views from the trailhead and visitor center are a significant resource of the site. You can see for miles in all directions. The orientation of the visitor center is toward the south, with views to Iowa across the rural landscape. There is a power pole to the east of the visitor center that is a visual obtrusion within the viewshed.

See Site Analysis in **Appendix B**.

## 2.1 Access Drive & Parking

Gate condition: constructed of pressure-treated lumber, appears in serviceable condition. There is some slight deterioration and lichen/moss growth at vertical post tops. Hardware exhibits light rusting, foundation and base condition looks in good condition. Gate posts and cross arms host a number of park signs pertaining vehicular traffic; each appear in good condition with the exception of some sun fading on the affixed reflective markers.

Bituminous roadway, parking lot, and turnaround condition: the current state of the bituminous surfacing is poor. It appears as though these surfaces have not been maintained since they were installed in 1986. After 34 years, the surfaces are rough, disintegrating, marked by several potholes, spalls, and stress cracking; essentially these areas are returning to aggregate. All painting or parking markings are faded or worn away.



Photo 1 Access Drive & Parking Photograph



Photo 2 Access Drive & Parking Photograph



Photo 3 Access Drive & Parking Photograph





Photo 4 Access Drive & Parking Photograph



Photo 5 Access Drive & Parking Photograph

## 2.2 Accessibility

The trail from the parking lot to the visitor center is within the allowable slope for an accessible route and is in a good, smooth condition.



Photo 6 Blue Mounds SP Visitors Center

## 2.3 Landscape

The area is known for its native prairie species and Sioux Quartzite outcroppings. Overgrazing by domestic livestock once reduced the prairie species populations and currently the park is undergoing restoration of the native grasses and wildflowers. There is a small remaining remnant of a tall-grass prairie within the park. The outcroppings hold water after a rain event and are home to various lichen species. The park is also home to two native species of Prickly Pear cacti: the *Opuntia fragilis* and the *Opuntia macrorhiza*.

Directly adjacent to the building is mown turf grass. There is a large cottonwood tree to the south of the building along with a handful of bur oak along the lower bluff edge that are in good condition. There are plum shrubs located in a line along the upper bluff to the north of the building. They are not native to the area and most likely were planted by the Manfred family. Due to the winter conditions, we could not identify any other non-native ground plantings near the building, but did not notice any formal foundation or landscape beds. We have been told there may be some daylilies and other non-native domestic species planted in various areas.

## 2.4 Recommendations

The access drive and parking lot should be renovated (mill and overlay), restriped, and signed for accessibility. The pay-box kiosk could be replaced with an electronic pay station and wayfinding signage. The trail should remain and other paved circulation routes added to the design for accessibility to other park amenities and/or programming. A shade shelter or shelters should be provided for picnicking or gathering areas. If the existing visitor center is removed, consider an overlook or feature capturing views of the landscape that provided Frederick Manfred his inspiration as he wrote from his writer's room.

The natural landscape should be preserved as much as possible and any invasive non-native vegetation that could negatively impact this landscape should be removed. However, the mound is covered in plum thickets, and while not native to the Blue Mound prairie, removing these thickets need not be a high priority as this would not make a noticeable dent in the existing seed



source and may actually be a good way to reference the presence of Manfred and his family on the site, through the landscape. New park amenities should be provided as part of the trailhead renovation, such as seating, picnic tables, shade structures, drinking fountain, toilet facilities, and signage that enhances the user experience as they set off into the park.



Photo 7 Blue Mounds SP Visitors Center

### 3.0 Architecture

The visitor center was designed by Frederick Manfred as a family home. The architectural drawings were prepared by Kehne and Carmody Architects in Saint Paul, Minnesota. The design of the home was meant to become part of the natural landscape, using the quartzite bluff as part of the structure and orienting the building to the south to capture the expansive views and southern exposure.

The Sioux Quartzite bluff serves as the back wall of the building. Wood timber beams are built into and supported by a quartzite masonry wall built on top of the bluff. The beams extend to the south supporting the roof, with additional columns. Exterior walls are typical residential wood construction with wood siding. Along the eastern half of the building there is a quartzite stone foundation wall 3-4 feet off the ground with a limestone lintel.

The 3,500-square-foot one-and-a-half-story home was built with four bedrooms, a kitchen, a dining room, and music room divided by a large triangular fireplace, a hexagonal Sunken Living Room or “Kiva”, as noted on the building plans. The Sunken Living Room includes a large boulder in the center and is surrounded by seating, 1 bathroom, a laundry room, a pump room, a storage room, and a second floor hexagonal Writer’s Room or “Tipi”. The second floor Writer’s Room is accessed via a spiral staircase in the back of the building or through an exterior door on top of the bluff.

Originally designed and constructed in the early 1960s the property was first sold to the MPF and then again in 1972 to the DNR. As early as 1976 the Manfred House was put into use as a visitor center. Over the ensuing years the DNR has undertaken several renovations of varying scales further transforming the house to better serve as a visitor center, updating



mechanical systems and renovating the laundry room into another bathroom to create both men's and women's facilities. TKDA has not received documentation which dates any other significant renovations. However, other alterations have been observed and discussed in the following report sections.

The architectural observations that follow have been broken out by building elements to assess the current condition of each of the structure's major components.

### 3.1 Roof

#### 3.1.1 Documented Changes from Original Design

- The original documents, produced by Kehne and Carmody Architects out of Saint Paul, Minnesota in 1960, indicate the existence of a row of clerestory windows facing south and spanning from the stone chimney to the foundation of the Writer's Room.
- This span has since been removed during subsequent remodels and re-roofs. The change is visible on either end of the span where stepped flashing and exterior cladding now appear.



Photo 8 Roof Photograph



Photo 9 Roof Photograph

### 3.1.2 Current Condition

- The composition appears to be a standard residential roof typical of the time period during which it was built.
- It is unknown whether past projects have replaced any roofing elements not visible during this assessment (such as decking material, etc.).
- The asphalt shingles appear to be nearing the end of their expected life, with a majority of them losing their aggregate top coat and some shingles near the high point on the roof's north side exhibiting cracked or missing chunks. Additionally, 90-95% of the shingles along the south facing ridgeline over the Sunken Living Room are severely warped and curling.
- The coping, drip edges, and flashing appear to be in fair to good condition; they are light in color and do not show much fading although a few portions of drip edge over the Sunken Living Room appear to be coming loose.
- Metal gutters added at the fascia appear in good condition with a slight sag near the middle to of the longest run along the southwest elevation of the house.
- The painted wooden fascia boards not covered by sections of metal gutter appear in fair condition but most are flaking and losing their painted finish.
- Painted wooden soffits appear in fair condition as well, however, there are areas where the presence of black mold and mildew can be observed coming through the painted finish.

### 3.1.3 Suitability for Future Use

The impact of water infiltration, although not always visible, cannot be underestimated. With no mechanism to impede, contain, redirect, or remove water from the interior of the house, the constant ebb and flow on moisture levels within the structure have led to several of the hazardous conditions mentioned above. Namely, they are structural deterioration and dangerous indoor air quality issues due to inadequate mechanical systems to control moisture, which leads to mold and mildew.



## 3.2 Exterior Walls

### 3.2.1 Current Condition

- The wood siding is original construction. Visibly, the siding looks to be in in fair condition. From historic photos, the house has received many coats of paint over the years. We were not able to physically remove any siding for further investigation of condition.
- There appeared to be mold and mildew on the south west exterior walls below where it was observed on the soffits. Additionally, many of the sill boards (just above the masonry foundation) were showing signs of rot and decay.



Photo 10 Exterior Wall Photograph



Photo 11 Exterior Wall Photograph

### 3.2.2 Suitability for Future Use

Visually exhibiting mold or mildew penetration on the exterior of the exterior walls indicates several deficiencies including:

- Inadequate insulation
- Inadequate ventilation
- Pervasive moisture intrusion

Taking these into consideration, reuse of the exterior wall assemblies would not be advised. Any attempt to salvage the use of these walls should be prefaced on exploratory demolition in order to ascertain what materials, if any, could be preserved.

## 3.3 Openings

### 3.3.1 Current Condition

- The windows all appear to be original. There are two main types, consisting of large, inoperable picture windows and single or double casement windows.
- As noted previously, there have been many coats of paint over the years which may reduce operability.
- It was not observed whether the existing windows were double pane, however, even if they were, they are long overdue for replacement.
- It was observed one of the south casement windows was damaged, from the inside, by rodents attempting to get in or out. The frame, casing and trim have all been chewed on and the glass was broken. DNR has boarded this window temporarily.
- DNR staff replaced the front door within the last 20 years and discovered it was of a non-standard height. It is unknown whether the remaining existing doors are original, however, the storm doors at all openings appear to be later additions.

### 3.3.2 Suitability for Future Use

The windows would need to be evaluated individually, as it may be cost prohibitive to replace some of the largest picture windows. However, to restore operability and increase energy efficiency replacement of all standard sized windows would be advisable.



Photo 12 Openings Photograph





Photo 13 Openings Photograph

### 3.4 Masonry

#### 3.4.1 Current Condition

- Currently, the masonry at the southern foundation and along the top of the rock ledge and into the Writer's Room to the north appears to remain very solid and in excellent condition.
- There is little evidence of spalling or mortar loss as observed on the exterior.
- The concrete topping along the north wall and above the chimney is in excellent condition with only minor deterioration at the end of the wall to the south west.
- From the exterior, the most obvious deterioration in the masonry occurs at the transition from the Sioux Quartzite foundation to the wood framed walls. At this location, a limestone was used as a coping ledge and set at a slight angle to provide drainage. It is this area that has been most exposed to water, snow, and the freeze/thaw cycle. There is evidence several of these pieces of stone have either been replaced or covered with another thin stone veneer.



Photo 14 Masonry Photograph



Photo 15 Masonry Photograph

### **3.4.2 Suitability for Future Use**

There is little visual evidence of masonry deterioration, making the stonework at the visitor center appear to be one of the most stable elements. These portions of wall may no longer be appropriate for structural bearing, however, and further investigation into how they are integrated with other building elements (foundations, wood framing, etc.) should take place regarding the viability using them as such at some point in the future.

## **3.5 Interior Walls**

### **3.5.1 Documented Changes & Updates**

It has been observed alterations were planned as early as 1974 in order to convert the house into a visitor center and some interior walls and mechanical equipment were removed or relocated.

A 1986 project upgraded the restroom facilities.





Photo 16 Interior Walls Photograph



Photo 17 Interior Walls Photograph

### 3.5.2 Current Condition

Our team was allowed limited visual access from the doorway of the house due to indoor air quality concerns. Moisture intrusion has been occurring over the life span of the building due to the use of the natural bluff as a part of the structure. The bluff has no waterproofing membrane to stop water from entering the building, in turn, water enters the building during rain events and the bluff continually has condensation during the summer months. It was observed the typical gypsum board interior walls are harboring mold and mildew as a result of the moisture infiltration. This is visible and documented in several of the photographs. TKDA was not able to assess whether mold and mildew was growing within the walls or the condition of the walls with paneling.

### 3.5.3 Suitability for Future Use

Considering the pervasive mold and mildew growth, replacement of interior wall structures and finishes would be the safest course.

## 3.6 Flooring

### 3.6.1 Current Condition

The floor slab is cracking, spalling and crumbling. This would again indicate the presence of water, whether above the slab, below the slab or both. Water below the slab may be trapped and expanding during the freeze/thaw cycle, causing the floor slab to heave. There does not appear to be any waterproofing applied to the floor slab. There are several approaches to the flooring throughout the house.

The Sunken Living Room appears to have been tiled with a bold pattern not original to the house.

There is evidence of carpet and tile flooring in the main entry. The carpet appears to have been removed.



Photo 18 Flooring Photograph

### 3.6.2 Suitability for Future Use

The floor slab appears to have failed at multiple locations. The slab should be removed. The cause of the failures needs to be investigated and mitigated before the installation of another slab at this location. Flooring that remains is unsuitable for reuse and new flooring should be installed upon renovation of the visitor center.

## 3.7 Recommendations

Based on a visual assessment of existing conditions, the visitor center's architectural elements (including the roof, exterior walls, openings, interior walls, masonry and flooring) appear to be failing, deteriorating or damaged beyond the point of reuse. Barring the results of any exploratory demolition or extreme remediation and abatement from harmful substances including, but not limited to black mold and mildew, TKDA recommends the visitor center structure be removed and rebuilt.

New construction would need to include a strategy that manages water intrusion along the bluff face. A waterproofing system of this nature might take a few forms: **System 1**) a membrane system could be directly applied to the bluff face, allowing the bluff face to remain an internal element or **System 2**) an independent envelope component system could be introduced that allows water through the bluff in a natural way but interrupts that water before it enters into the building envelope.



#### System 1: Waterproofing Membrane—Pros & Cons

- **Pro:** Create a barrier against moisture intrusion into the structure.
- **Pro:** The bluff face remains an internal element within the structure.
- **Con:** Effectiveness—a waterproofing membrane applied directly to a natural stone formation with unknown conditions behind creates unknown challenges and difficulties in ensuring long-term success.
- **Con:** Labor Intense—filling every crevice of a natural rock formation in order to create conditions suitable to apply a waterproofing membrane is time consuming, specialized, and potentially cost-prohibitive work.
- **Con:** Appearance—the natural or raw bluff face which comprises a majority of the northern wall, running through many rooms, is the defining feature of this unique structure. The membrane waterproofing systems needed to provide the most effective barrier against moisture are **not** simply transparent “sealers” which can be painted, sprayed or otherwise applied. It is likely an application of this kind will be opaque and conceal the visual nature of the rock beyond.
- **Con:** Longevity—a membrane waterproofing system of this specialized nature will require a long-term maintenance plan.

#### System 2: Independent Envelope Component—Pros & Cons

- **Pro:** Introducing a new envelope system to create internal separation from the natural bluff face would allow better management of water infiltration within the structure.
- **Pro:** A new envelope system at the bluff face would allow for increased thermal separation of the structure and add an insulation factor to that face of the building which had previously been a heat sink that removed heat from the inside of the structure and made management of moisture and humidity a challenge.
- **Pro:** Appearance—this new system could be comprised of insulated glazing and provide a clear view of the bluff face which makes this structure so unique. Although visitors may no longer be able to touch the rock from the inside of the building, the visual connection to this prominent natural feature would be only minimally impacted. The rock face could be artificially reconstructed inside the building, but you lose the authentic connection to the land.
- **Con:** Cost—the expense for the components of an insulated glazing system running the entire length of the building could be cost-prohibitive.
- **Con:** (Re) Engineering—in order to maintain separation from both the bluff face and the exterior elements, the structure of the building would need to be re-engineered in a way that it would be free and independent. Additional site and civil engineering could be necessary, both above and at the foot of the bluff to divert and redirect water away from structural elements, walls and the floor slab.

TKDA would not recommend the bluff be open to the new structure, like the current condition, due to the inability to mechanically control moisture in the quartzite bedrock and, for purposes of our cost estimate has assumed that some variation of system 2 would be pursued. However, due to the reasons listed above, neither of these options may be desirable or feasible.

## 4.0 Structural

### 4.1 Structural Components

Prior to TKDA’s site visit, the Minnesota DNR provided TKDA with existing drawings of the Manfred House which included a foundation plan, elevations and sections, roof framing plan, and various architectural details. The roof framing primarily consists of 3x13 wood beams

spaced at 4 feet on center with 2x6 purlins spanning over the beams spaced at 24 inches on center. The 3x13 beams have spans of approximately 15 and 18 feet and bear at the wood framed exterior wall, at an interior wood beam and column line and on a single course of masonry on the rock bluff at the rear of the house. The exterior wall is supported on a combined concrete and stone masonry foundation wall atop a concrete strip footing. The interior column bearing line is supported on a thickened slab footing along the middle of the building.

#### 4.1.1 Current Condition

Prior to the visit, TKDA had been informed water intrusion from the rear bluff wall and from below the interior floor had been a problem for the life of the structure. As a result, portions of the wood roof framing was severely damaged. Due to concerns about air quality from mold and structural safety due to the rotting roof beams, the DNR limited access to the interior of the building, allowing those observing to stand just a few feet inside the doorway.



**Photo 19** Shoring to support beams rotting at bearing.  
The un-circled posts are original construction

During the site visit, TKDA observed wood roof beams exhibiting severe rotting both at bearing locations (**Photo 19** above) and at the exposed, cantilevered ends supporting the eaves at the building's exterior (**Photo 20 & 21**). As a result, shoring has been added to provide additional support to interior beams. **Photo 19** shows two shoring posts adjacent to an existing column.



Photo 20 Rotting roof beam at building exterior



Photo 21 Rotting roof beam at building exterior

The concrete floor slab at the interior of the building has failed as shown in **Photo 22**. There are various accounts both of when and how this might have occurred. It may have been a problem as far back as the 1960s, as relayed by Manfred's daughter Freya in her memoir. DNR staff, at least, recall the floor heaving long before the Visitor Center was closed. This may have occurred after a failed experiment to heat the building with a new furnace over the course of one winter season nearly 20 years ago, as a result of renovations and wall removals over time, as a result of water infiltration and natural freeze/thaw cycles, or some combination of all of these. Regardless of how, or how long ago, this damage occurred, if the building is to be reused we recommend removing the entire existing concrete floor and replacing it with a new concrete slab with under slab drainage and water barrier.





Photo 22 Failing interior concrete slab

The existing stone masonry appeared to be in good condition with little to no deterioration evident at the joints. We were unable to observe condition of the exterior wood framed bearing walls which were covered with gypsum sheathing on the interior and wood siding on the exterior of the building.

The Writer's Room structure projects above the main building roof with the floor supported on the rock bluff. Access to the writer's room is via a spiral staircase. Walls are constructed with 2x4 wood framing and 3-1/2-inch steel pipe posts at the window jambs. The hexagonal, sloped roof has 3x8 beams at the ridge lines and 2x6 wood purlins sloping down from the wood beams and cantilevering over the wall framing to the edge of the eaves. The underside of the beams are visible and their condition looks good, but the purlins and wall framing are covered by gypsum sheathing, making it difficult to fully assess their condition.

#### **4.1.2 Suitability for Future Use**

Due to limited access TKDA was unable to observe the majority of the roof beams, but DNR staff relayed a large percentage of the wood roof structure is damaged from water intrusion. Therefore, we recommend if the building is to remain the entire roof structure be removed and reconstructed. This will be easier than selectively replacing most of the roof beams and could allow for easier installation of a mechanical system to divert water seeping through the rear bluff supporting the structure.

#### **4.2 Recommendations**

Based on the visual assessment TKDA was able to perform of the structural roofing and framing members, and taking into account the architectural assessment and recommendation, TKDA recommends the existing visitor center be removed and rebuilt ensuring proper framing and protection from water intrusion on the site.

### **5.0 Mechanical, Electrical and Water Delivery Systems:**

#### **5.1 HVAC**

The HVAC system includes a residential quality heating and air conditioning system and ductwork. There is a propane tank located to the east of the structure. All mechanical systems appear to be past their useful lifespan. The existing system is not able to control the amount of moisture entering the house through the bluff face and therefore poor indoor air-quality makes the building uninhabitable. A new HVAC system would need to be designed to adequately control moisture to avoid mold and mildew growth and deterioration of the structure.



Photo 23 Mechanical Photograph



Photo 24 Mechanical Photograph

## 5.2 Plumbing

The plumbing systems including water heater, plumbing fixtures, and hot/cold water piping all appear to be older and past their useful lifespans. They should be replaced with new updated plumbing systems. See section 5.4 for TKDA's assumptions regarding potable water delivery to the trailhead site.



### 5.3 Electrical

A pole mounted transformer with overhead primary and a secondary that drops below grade services this building. The service is 120/240V single phase service. The overhead primary appears to be a single phase radial feed. The building has one service panel that appears to still be located in Exhibit Room 7. Light fixtures are Edison based lamp residential grade fixtures. The receptacles appear to be grounded 15amp receptacles with a mix of surface raceway (wiremold) and recessed in walls.

Some or all equipment may be up to approximately 60 years old. Based on the age, it is recommended to replace all electrical equipment, including branch circuits. At this age conductors will often show signs of heating at the terminations resulting in drying out conductor insulation which can become brittle and make reuse with renovation difficult at best. To renovate the building will require bringing the building to current codes and based on 1960s construction as a residence we anticipate the following short comings:

- Inadequate use of GFCI receptacles (outdoors, unfinished basements, garages, kitchens, laundry areas, and restrooms). This GFCI protection has developed in the codes since the original construction.
- Excessive lighting power density. Existing fixtures are incandescent fixtures and should be replaced with LED fixtures to meet current energy code allowed lighting power density. This building would also switch from the residential energy code to the commercial energy code which brings in additional requirements.
- Inadequate lighting controls. The commercial energy code will require automatic means of lighting shutoff. This is typically accomplished with the use of occupancy sensors or timeclock control, of which neither would have been seen in 1960s residential construction.
- Lack of egress lighting. As required by the commercial building code, egress lighting of public spaces is required (defined path of egress). There does not appear to be any egress lighting battery units. Any which were installed have not had the manufacturer recommended monthly and annual maintenance performed.



Photo 25 Electrical Photograph



Photo 26 Electrical Photograph

## 5.4 Site Water Service

TKDA reached out to the City of Luverne regarding the connection of the trailhead to the City water system. The trailhead is located about 2.2 miles from the nearest connection to the City water system. At that distance, TKDA estimates the cost to make that connection will be in the \$200,000–300,000 range. Additionally, when considering a pipe run of that length and the minimal or sporadic use the trailhead area may have, the water quality is likely to poor. This may not make connecting to the City water system the best option for potable water at the site; however, TKDA did include this cost in our estimate. Further investigation into, or confirmation of, the source of the well water contamination may also be required before investigating if a new well could be drilled into a different/deeper aquifer. This would most likely be a more economical solution. A third option to consider would be the installation of a potable water tank system and engaging water delivery service.

## 5.5 Recommendations

If the structure is renovated and reconstructed to a like-new, light commercial-level property for continued use by the DNR as a visitor center, all HVAC, plumbing, septic, water supply and electrical systems would need to be replaced. For this assessment, TKDA has assumed the necessary water supply will be coming from the City water system and piped to the site. If so, it would provide an added benefit in the opportunity to bury the power supply lines along with the water utility trenching, and thereby eliminate the on-site power pole obstructing the natural viewshed.

## 6.0 Summary

### 6.1 Recommendations and Assumptions

On February 4, 2020, TKDA representatives traveled to Blue Mounds State Park to perform an Existing Conditions Assessment of the Frederick Manfred House Visitor Center and surrounding trailhead area. The Visitor Center and surrounding site was assessed visually and examined for any signs of architectural deterioration, structural deficiency, and condition of existing mechanical and electrical systems. Additionally, the TKDA Municipal Group provided a high-level assessment of the feasibility and costs required to bring City, County or rural water to the site in order provide safe clean water for park guests. Each discipline involved encountered the extreme challenges presented by the current conditions of the Frederick Manfred House Visitor Center; whether it was the structure age, unique construction methods or components, exposure to moisture, or the geology of the site itself.

The following are the TKDA recommendations pertaining to the Manfred House Visitor Center:

1. If the building is to remain a functioning Visitor Center, it would require complete reconstruction to remove all roofing, all materials showing moisture damage, damaged structural members, rotting windows, out-of-date mechanical, plumbing, and electrical systems, and flooring to the sub-floor. It may be possible to salvage the stone walls and fireplace to be incorporated in a reconstructed facility if further structural investigation is conducted. The intent would be to rebuild the facility to the original design into the side of the Sioux Quartzite bluff. The biggest challenge is controlling the moisture intrusion. This requires waterproofing measures and higher grade mechanical systems. Waterproofing typically consists of a multi-layered membrane that covers the surface being waterproofed, in this case, the bluff. Covering the quartzite bluff is not a desired aesthetic. This waterproofing system also requires on-going maintenance for long-term performance and is not a 100% guarantee for the prevention of moisture entering the building. Another option could be to build the structure separate from the bluff and the bluff is artificially recreated inside the building. Upgraded mechanical systems would be required to remove moisture from the air on a continual basis. Also, if the building is to be fully functional, a clean water supply would be required. New wells have been drilled within the northern portion of the park, with no success. We have assumed that water would need to come from a municipal or rural supply. All of these considerations means a reconstructed Manfred House Visitor's Center could cost over \$2,000,000.00. These assumptions are the basis for the cost estimate provided in **Appendix A**.
2. The Manfred House could be disposed of with the stone walls and fireplace left to remain as an interpretive element or integrated into a new park shelter.
3. The Manfred House could be disposed of in its entirety.

KWA:ADG:amc





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## Appendix A

### Cost Estimate



**BUILDING CONDITION ASSESSMENT  
ESTIMATED PROJECT COST  
MnDNR - BLUE MOUNDS STATE PARK  
FREDERICK MANFRED HOUSE VISITOR CENTER RECONSTRUCTION**

**TOTAL CONSTRUCTION COST ESTIMATE  
TKDA PROJECT NO. 17782.000**

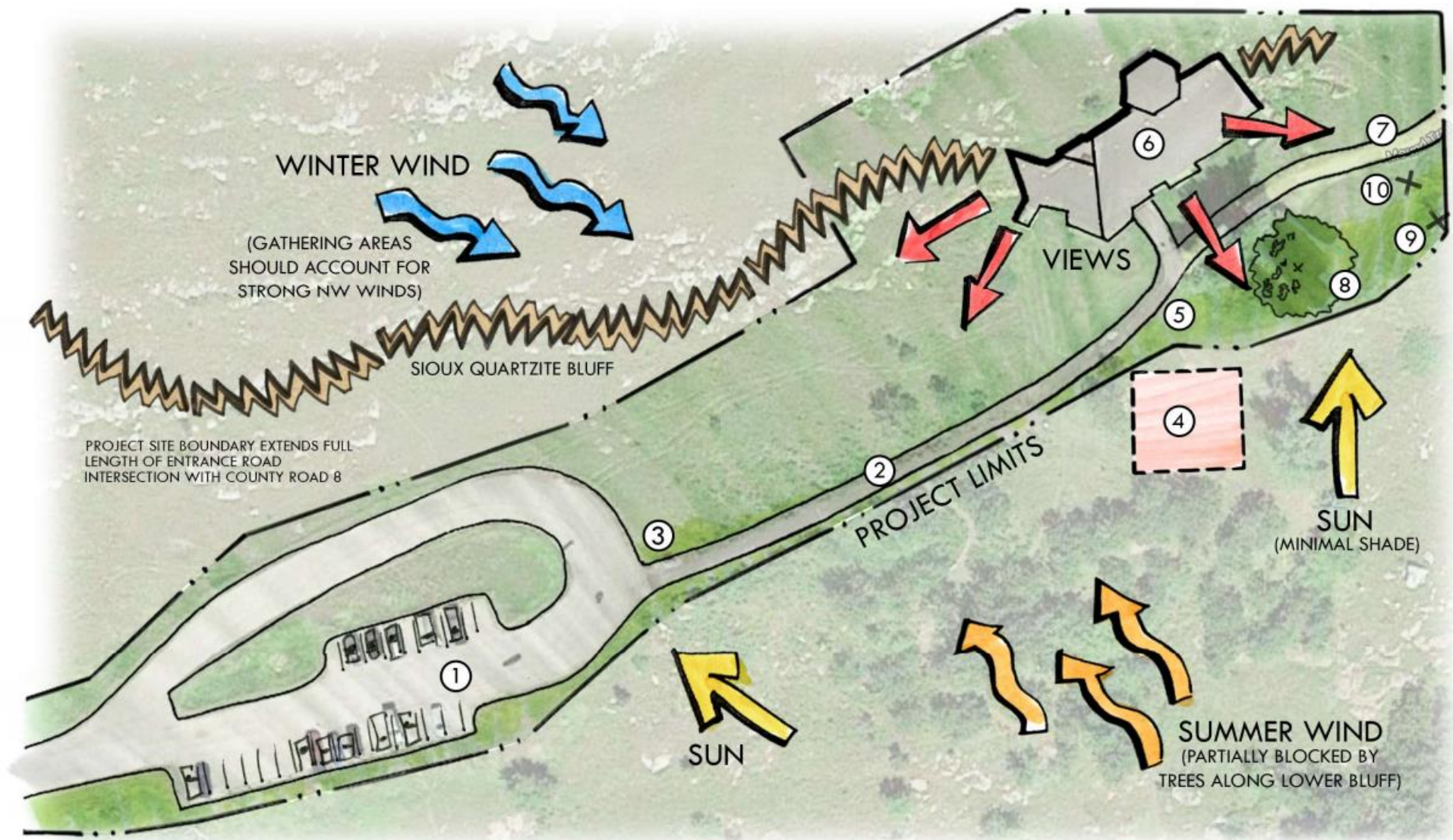
ITEM NO.	DESCRIPTION	ESTIMATED COST
	Site (LA) - Removals, Plantings, Lot: mill, overlay & striping <b>NOT INCLD.</b>	\$ -
	Roof (AR)	\$ 36,407.90
	Exterior Walls (AR)	\$ 70,090.00
	Openings (AR)	\$ 178,480.00
	Masonry (AR)	\$ 23,988.00
	Interior Walls (AR) - incl. waterproofing measures	\$ 509,800.00
	Flooring (AR)	\$ 57,387.50
	Structural	\$ 100,000.00
	Mechanical & Electrical	\$ 114,650.00
	Civil/Municipal - incl. connection to city water supply & new septic field	\$ 350,000.00
	<b>Subtotal</b>	<b>\$ 1,440,803.40</b>
	General Conditions (8%)	\$ 115,264.27
	Overhead and Profit (10%)	\$ 144,080.34
	Bonds and Taxes (7%)	\$ 100,856.24
	Contingency (15%)	\$ 216,120.51
	<b>Total</b>	<b>\$ 2,017,124.76</b>



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## Appendix B

### Site Analysis



FREDERICK MANFRED HOUSE VISITORS CENTER  
EAGLE ROCK VISTA TRAILHEAD  
SITE ANALYSIS  
03.17.2020



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## Appendix C

2017 Interpretive Center Restoration Bid Package



**PROJECT MANUAL AND REQUEST FOR BIDS**

**FOR**

**SOLICITATION NUMBER 2017-092-04-8H880**

**Blue Mounds State Park  
Interpretive Center Repairs  
Luverne, Rock County  
SPK.00121.07.00.53/8H880**

**CONTRACTING AGENCY:**

**STATE OF MINNESOTA  
DEPARTMENT OF NATURAL RESOURCES (DNR)  
DIVISION OF PARKS AND TRAILS**

**SECTION 00 01 05****CERTIFICATION PAGE****CIVIL ENGINEER**

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

DATE 5/4/17 LICENSE NO. 42006

SIGNATURE 

NAME Jeff Erickson



**SECTION 00 01 10****TABLE OF CONTENTS****DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS**

00 01 01	Project Title Page
00 01 05	Certifications Page
00 01 10	Table of Contents
00 11 14	Solicitation Advertisement Information
00 21 23	Instructions to Responders
1.01	Definitions
1.02	Preferences
1.03	Examination of Site and Documents
1.04	Solicitation Security Requirements
1.05	Interpretations and Changes by Addenda
1.06	Preparation of Response
1.07	Responsible Contractor Requirement
1.08	Laws and Regulation
1.09	Qualified Responses
1.10	Solicitation Dispute Resolution Procedures
1.11	Delivery of Responses, Late Submissions, Modification of Response
1.12	Withdrawal of Response
1.13	Response opening
1.14	Solicitation Results
1.15	Consideration of Responses
1.16	Unit Prices
1.17	State Excise and Use Tax
1.18	Award
1.19	Contract
1.20	Subcontractual Relations
1.21	Assurance of Completion (Payment and Performance Bond)
1.22	Limit of Time to Bring Action (Payment and Performance Bond)
1.23	Certification Regarding Fed. Debarment, Suspension, Ineligibility & Voluntary Exclusion
1.24	Work Force Compliance
1.25	Products containing types of Polybrominated Diphenyl Ether Banned
1.26	Coal Tar Sealant Use and Sale Prohibited
1.27	Equal Pay Certification
1.28	Publicity
1.29	Organizational Conflicts of Interest
1.30	Compliance with Tax Law Requirements
00 21 26	Supplementary Instructions to Responder
1.01	Building Construction Contractor Registration
1.02	Special Instructions, Non-Minnesota Contractors, SDE Form and Instructions
00 41 73	Response Form, Prime Contractor
	Attachment A – Responsible Contractor Compliance Verification Form
	Attachment B – Prime Contractor Tax Identification & Registration Form
	Attachment C – Affidavit of Noncollusion
	<del>Attachment D – Prime Contractor Qualification Form</del> N/A
	Attachment E – Veteran-Owned Preference Form
	Attachment F – Work Force Certification Form
	Attachment G – Equal Pay Certification Form
00 43 14	Solicitation Bond Forms
00 72 00	AIA Document A201, 2007 Edition General Conditions of the Contract for Construction
00 73 03	Supplementary Conditions



- 00 73 16 Insurance Requirements
- 00 73 17 Sample Insurance Certificate Form
- 00 73 35 Notice, Affirmative Action
- 00 73 35 Standard State Equal Employment Opportunity (EEO)
- 00 73 37 Monthly Utilization Report for (EEO)
- 00 73 39 Eligible Targeted Group and Economically Disadvantaged Small Businesses
- 00 73 43 Prevailing Wage Requirements for State Funded Projects
- 00 73 46 Prevailing Wage Rates

**DIVISION 01 – GENERAL REQUIREMENTS****DIVISION 02 – SITE CONSTRUCTION**

024118 – Demolition and Salvage

**DIVISION 05- METALS**

051200 – Structural Steel

**DIVISION 9 – FINISHES**

099123 - Interior Painting

**SCHEDULE OF DRAWINGS**

<b><u>Plan Sheet No.</u></b>	<b><u>Sheet Title or Description</u></b>	<b><u>Size</u></b>
<b>S-001</b>	<b>Title Sheet</b>	<b>11" X 17"</b>
<b>S-101</b>	<b>Existing Roof Conditions</b>	<b>11" X 17"</b>
<b>S-102</b>	<b>Proposed Roof Repairs</b>	<b>11" X 17"</b>
<b>S-501</b>	<b>Repair Details</b>	<b>11" X 17"</b>

**SECTION 00 11 14****SOLICITATION ADVERTISEMENT INFORMATION**Solicitation No. **2017-092-04-8H880**

Sealed Responses for **Interpretive Center Repairs** at **Blue Mounds State Park, 1410 161st Luverne, Rock County, MN 56156** will be received by **the Department of Natural Resources, Southern Regional Business Office** located at: **21371 State Hwy 15 New Ulm, MN 56073**, hereinafter referred to as the Contracting Agency, until **2:00 p.m. on May 18, 2017** and will then be opened and publicly read aloud.

**PRE-BID MEETING INFORMATION:**1. PRE-BID MEETING (check one):   X   NO        YES

Plans and Specifications were prepared by **Jeff Erickson, P.E., DNR Operations Services Division 2508 Hannah Ave NW Bemidji, MN 56601, phone 218-308-2637, e-mail: [jeff.m.erickson@state.mn.us](mailto:jeff.m.erickson@state.mn.us)**.

Plans and Specifications may be viewed, without charge, on the Office of State Procurement website <http://www.mmd.admin.state.mn.us/solicitations.htm>, then click on Virtual Plan Room – Construction Contracts, then click in the blue box “To view projects as a guest without logging into the site: **Click Here**”. Plans and specifications can be downloaded for a non-refundable charge of \$7.00. Plan Holders are parties that have downloaded the plans and specifications. Plan Holders will be notified via email as addenda are issued. Parties that download the plans and specifications and need to have them printed elsewhere are solely responsible for those printing costs. Note: Paper copies of plans and specifications will not be distributed by the Owner or its agent(s). Please contact Franz Reprographics at 763.503.3401 or [support@franzrepro.com](mailto:support@franzrepro.com) for assistance in downloading and working with this digital project information.

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**1.01 SUMMARY OF WORK (SEE SECTION 01 10 00 FOR FULL SCOPE OF WORK)**

- A. The work will be done under one prime contract.
- B. The following summary is a general guide to the scope of work. It should not be construed as a detailed list of work included in the contract.
  - 1. **Remove existing rotted timber roof beam.**
  - 2. **Install new steel roof beam.**
  - 3. **Fabricate and install new steel plate timber beam connectors to existing rock wall for existing timber beams.**

**Project technical information is available from Jeff Erickson, P.E. Telephone number: 218-308-2637**  
**Email: [jeff.m.erickson@state.mn.us](mailto:jeff.m.erickson@state.mn.us)**

**Regional Business Office contact:**

REGIONAL BUSINESS OFFICE  
Minnesota Dept. of Natural Resources  
c/o Cathy Forstner, Contract Officer  
21371 State Hwy 15  
New Ulm MN 56073-5228  
Telephone (507) 359-6009  
Fax: (507) 359-6045

**SECTION 00 21 23****INSTRUCTIONS TO RESPONDERS****1.01 DEFINITIONS**

The following definitions apply. For additional definitions refer to the AIA A201 General Conditions of the Contract for Construction.

- A. **Agency:** Any state officer, employee, board, commission, authority, department, entity, or organization of the executive branch of state government. [Minn. Stat. § 16C.02, subd.2]
- B. **American-made Steel:** Steel for which all manufacturing processes must take place domestically. Manufacturing is any process that modifies the chemical content; physical shape or size; or final finish of a product. Manufacturing begins with the initial melting and mixing, and continues through the bending and coating stages. If a domestic product is taken out of the US for any process, it becomes foreign source material.
- C. **AMS:** Acquisition Management Specialist is the person delegated the authority from the Commissioner of Administration to manage the procurement process, award contracts, approve supplements and provides oversight for the life of the contract.
- D. **Architect/Engineer:** The Architect, Engineer, Designer, or other person or entity designated by the Owner to perform the Architect's role required by the Contract Documents. [AIA Document A201 Article 4.1.1]
- E. **Award:** A commissioner's written acceptance of a bid or proposal to provide goods, services, or utilities. [Minn. Stat. § 16C.02, subd.3]
- F. **Best Value; construction:** For purposes of construction, building, alteration, improvement, or repair services, "best value" describes the result determined by a procurement method that considers price and performance criteria. [Minn. Stat. § 16C.28, subd.16]
- G. **Construction contract:** A contract or subcontract of any tier for work on a project. [Minn. Stat. § 16C.285, subd. 1(b)]
- H. **Contract:** Any written instrument or electronic document containing the elements of offer, acceptance, and consideration to which an agency is a party, including an amendment to or extension of a contract. [Minn. Stat. § 16C.02, subd.6]
- I. **Contracting Agency:** The agency which solicits and receives responses, awards and administers the contract.
- J. **Contracting Authority:** A state agency that enters into a construction contract or authorizes or directs entering into a construction contract. [Minn. Stat. § 16C.285, subd. 1(d)]
- K. **Contract Documents:** The Contract Documents (hereinafter Contract, Contract Documents or Agreement) consist of the Agreement between the Owner and Contractor, the Payment and Performance Bond, the Corporate Acknowledgement or Individual and Co partnership Acknowledgement, or Limited Liability Acknowledgement, the General, Supplementary and Special Conditions of the Contract, drawings, specifications (project manual), bidding documents, addenda, other documents listed in the Agreement, and modifications issued and duly authorized after execution of the agreements. [AIA Document A201Art1.1.1]
- L. **Contractor:** A business that is engaged in construction such as general, mechanical, or electrical contracting. [Minn. R. 1230.0150, subp.5]

**Contractor:** A prime contractor or subcontractor or motor carrier, and does not include a design professional or a material supplier. A "design professional" is a business or natural person retained to perform services on the project for which licensure is required by section 326.02. A "material supplier" is a business or natural person that supplies materials, equipment, or supplies to a subcontractor or contractor on a project, including performing delivery or unloading services in connection with the supply of materials, equipment, or

- supplies; provided, however, that a material supplier does not include a natural person or business that delivers mineral aggregate such as sand, gravel, or stone that is incorporated into the work under the contract by depositing the material substantially in place, directly or through spreaders, from the transporting vehicle. [Laws of Minnesota 2015, chapter 64, section 1 [Minn. Stat. § 16C.285, subd. 1(c)]
- M. **Design-Build Contract:** A contract between the commissioner and a design-builder to furnish the architectural, engineering, and related design services as well as the labor, materials, supplies, equipment, and construction services for a project. [Minn. Stat. § 16C.32, subd.1 (9)]
- N. **Encumbrance:** The commitment of a portion or all of an allotment in order to meet an obligation that is expected to be incurred to pay for goods or services received by the state or to pay a grant. [Minn. Stat. § 16A.011, subd.11]
- O. **Fiscal year:** (State) The period beginning at midnight between June 30 and July 1 and ending 12 months later. [Minn. Stat. § 16A.011, subd.14]
- P. **Managing Agency:** The agency responsible for project management.
- Q. **Motor carrier:** A business or natural person providing for-hire transportation of materials, equipment, or supplies for a project. [Laws of Minnesota 2015, chapter 64, section 1 (Minn. Stat. § 16C.285, subd. 1(e))]
- R. **Paying Agency:** The agency responsible for issuing payments.
- S. **Prime contractor:** A vendor that submits a bid or proposal or otherwise responds to a solicitation document of a contracting authority for work on a project or is awarded a construction contract by a contracting authority for work on a project. [Minn. Stat. § 16C.285 subd. 1(f)]
- T. **Principle:** An owner holding at least a 25 percent ownership interest in a business. [Minn. Stat. § 16C.285 subd. 1(g)]
- U. **Project:** Means building, erection, construction, alteration, remodeling, demolition, or repair of buildings, real property, highways, roads, bridges, or other construction work performed pursuant to a construction contract. [Minn. Stat. § 16C.285 subd. 1(h)]
- V. **Related entity:** 1) firm, partnership, corporation, joint venture, or other legal entity substantially under the control of a contractor or vendor; 2) a predecessor corporation or other legal entity having one or more of the same principals as the contractor or vendor; 3) a subsidiary of a contractor or vendor; 4) one or more principals of a contractor or vendor; and 5) a person, firm, partnership corporation, joint venture, or other legal entity that substantially controls a contractor or vendor. [Minn. Stat. § 16C.285 subd. 1(i)]
- W. **Responder:** A person who provides an offer in response to a solicitation. [Minn. R. 1230.0150, subp. 19a]
- X. **Responsible contractor:** A contractor that conforms to the responsibility requirements in the solicitation document for its portion of the work on the project and verifies that it meets the minimum criteria as defined in Minn. Stat. § 16C.285 subd. 3 (1)-(7). [Minn. Stat. § 16C.285 subd. 3]
- Y. **Solicitation:** The process used to communicate procurement requirements and to request responses from interested vendors. A solicitation may be, but is not limited to, a request for bid and request for proposal. [Minn. Stat. § 16C.02, subd. 19]
- Z. **Solicitation document:** An invitation to bid, bid specifications, request for proposals, request for qualifications, or other solicitation of contractors for purposes of a construction contract. [Minn. Stat. § 16C.285 subd. 1]



- AA. **Solicitation-Formal:** A solicitation which requires a sealed response. [Minn. Stat. § 16C.02, subd. 7]
- BB. **Subcontractor:** A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term “Subcontractor” is referred to throughout the Contract Documents as if singular in number and means a subcontractor or an authorized representative of the subcontractor. The term “Subcontractor” does not include a separate contractor or subcontractors of a separate contractor. [AIA Document A201Art 5.1.1]
- Subcontractor:** A vendor that seeks to enter into a subcontract or enters into a subcontract for work on a project. [Minn. Stat. § 16C.285 subd. 1(i)]
- CC. **Vendor:** A business, including a construction contractor or a natural person, and includes both if the natural person is engaged in a business. [Minn. Stat. § 16C.02, subd. 21]

## 1.02 PREFERENCES

- A. **TARGETED GROUP AND ECONOMICALLY DISADVANTAGED SMALL BUSINESSES PREFERENCE.** Unless a greater preference is applicable and allowed by law, in accordance with Minn. Stat. § 16C.16, Subds. 6 and 7, eligible certified targeted group (TG) businesses will receive a 6 percent preference and certified economically disadvantaged (ED) businesses will receive a 6 percent preference, in the evaluation of their response. The preference is applied only to the first \$1,000,000 of the response. At the time of the solicitation opening date and time, eligible TG or ED businesses must be currently certified by the Office of State Procurement.

To verify TG/ED certification, refer to the Office of State Procurement’s web site at [www.mmd.admin.state.mn.us](http://www.mmd.admin.state.mn.us) under “Vendor Information, Directory of Certified TG/ED Vendors.”

To verify TG eligibility for preference, refer to the Office of State Procurement’s web site under “Vendor Information, Targeted Groups Eligible for Preference in State Purchasing” or call the Division’s HelpLine at 651.296.2600.

- B. **VETERAN-OWNED SMALL BUSINESS PREFERENCE.** Unless a greater preference is applicable and allowed by law, in accordance with Minn. Stat. § 16C.16, subd. 6a, the Commissioner of Administration will award a 6% preference in the amount bid on state procurement to certified small businesses that are majority owned and operated by veterans.

A small business qualifies for the “veteran-owned” preference when it meets one of the following requirements. 1) The business has been certified by the Office of State Procurement as being a veteran-owned or service-disabled veteran-owned small business. 2) The principal place of business is in Minnesota AND the United States Department of Veterans Affairs verifies the business as being a veteran-owned or service-disabled veteran-owned small business under Public Law 109-461 and Code of Federal Regulations, title 38, part 74 (Supported By Documentation). See Minn. Stat. § 16C.19(d).

Submit the appropriate documentation with the solicitation response to claim the veteran-owned preference. Statutory requirements and documentation must be met by the solicitation response due date and time to be awarded the preference. The preference applies only to the first \$1,000,000 of a solicitation response.

- C. **RECIPROCAL PREFERENCE.** In accordance with Minn. Stat. §16C.06, subd 7, a Resident Vendor shall be allowed a preference over a non-resident vendor from a state that gives or requires a preference to vendors from that state. The preference shall be equal to the preference given or required by the state of the non-resident vendor. If you wish to be considered a Minnesota Resident vendor you must claim that by filling out the Resident Vendor information within the Prime Contractor Response Form included.

## 1.03 EXAMINATION OF SITE AND DOCUMENTS

- A. Responders shall examine all documents, (specifications, drawings, and instruction), shall visit the site and record their own investigations, and shall inform themselves of all conditions

under which the work is to be performed at the site of the work, the structure of the ground, the obstacles which may be encountered, all of the conditions of the documents, including, but not limited to, superintendence of the work, requirements of temporary heat, time of completion, furnishing a list of subcontractors, and all other relevant matters which may affect the work or the responses.

- B. The Responder shall base the response on materials complying with the plans and specifications. The responder will be required to make its own estimates of the actual quantities involved and to calculate its price accordingly. Qualified and/or alternate responses will not be considered (see 1.09).

#### 1.04 SOLICITATION SECURITY REQUIREMENTS

- A. Each **Prime Response** must be accompanied by a certified check, cashier's check, or money order made payable to the State of Minnesota; or a surety bond of a surety company duly authorized to do business in the State of Minnesota; in an amount equal to five percent (5%) of the total amount of the response, which is submitted as a solicitation security conditioned upon the Responder entering into a contract with the State of Minnesota in accordance with the terms of the solicitation. It is agreed that said solicitation security of the successful Responder will constitute liquidated damages, not a penalty, for the failure or refusal of the successful Responder to execute and deliver the contractual documents, in a correct form, within seven (7) calendar days after receipt of the contract documents.

#### 1.05 INTERPRETATIONS AND CHANGES BY ADDENDA

- A. If any planholder is in doubt as to the meaning of any part of the Plans and Specifications, submit a written request to the Architect for an interpretation of that part. Any interpretation or change will be made only by addendum numbered, dated, and shall be made available on the Office of State Procurement web site. The State or Architect will not be responsible for any other explanations or interpretations of the documents.
- B. Any information obtained by, or provided to, a Responder other than by formal addenda to the solicitation shall not constitute a change to the solicitation.
- C. If this solicitation is amended, all terms and conditions which are not modified remain unchanged.
- D. Responders are responsible for checking all addenda to verify that they are submitting the latest version of the Response Form that has been issued for this solicitation. Responses received on forms that are not the latest version of the form may be rejected.
- E. Responders shall acknowledge receipt of all addenda's to this solicitation by identifying the addendum number(s) on the response form. The State must receive acknowledgement by the time and at the place specified for Delivery of Response. Responses which fail to acknowledge any addenda which affects price will be rejected.

#### 1.06 PREPARATION OF RESPONSE

- A. The Responder shall submit their response on the furnished forms and all the forms must be filled in correctly and signed. If the solicitation requires providing a response on all items, failure to do so will cause the response to be rejected.
- B. A bid containing an alteration or erasure of any price contained in the bid which is used in determining the lowest responsible bid must be rejected unless the alteration or erasure is corrected in a manner that is clear and authenticated by an authorized representative of the Responder.
- C. The Responder shall submit with its response all catalogues, drawings, specifications, descriptive information, samples, and other details of special material or equipment proposed to be furnished if the specification so requires, such that the merits of the submittals may be determined by the Architect. Failure to comply may be cause for rejection.

- D. An authorized signature is required. The response must be signed by an officer or other authorized representative. Proof of authority of the person signing the response shall be furnished upon request. Acceptable proof of authority is as follows: If the Responder is a corporation, a secretarial certificate of an excerpt of the corporate minutes showing that the signing officer has authority to contractually obligate the corporation shall be furnished. Where the corporation has designated an attorney-in-fact, the ordinary power of attorney should be furnished. If the Responder is a partnership, a letter of authorization shall be furnished, signed by one of the general partners. If the Responder is a proprietor, and the person signing the response is other than the owner, a letter of authorization signed by the owner shall be furnished.

#### **1.07 RESPONSIBLE CONTRACTOR REQUIREMENT**

- A. Responsible Contractor Requirement (Minn. Stat. § 16C.285, Subd. 3). The Prime Contractor shall submit the attached "Attachment A - Responsible Contractor Compliance Verification" signed by an owner or officer verifying compliance with each of the minimum criteria in subdivision 3, with the exception of clause (7).

Attachment A - Responsible Contractor Compliance Verification form must be submitted with the response to this solicitation. A solicitation response received without this form, will be rejected.

- B. The Prime Contractor shall submit "Attachment A-1 First-Tier Subcontractor List" naming all First-Tier Subcontractors that it intends to retain for work on the project prior to execution of the contract.
- C. If a prime contractor or any subcontractor retains additional subcontractors on the project after submitting its verification of compliance, the prime contractor or subcontractor shall obtain verifications of compliance from each additional subcontractor with which it has a direct contractual relationship and shall submit "Attachment A-2 Additional Subcontractors List" confirming compliance with subdivision 3, clause (7), within 14 days of retaining the additional subcontractors.
- D. A Prime Contractor shall submit to the contracting authority upon request copies of the signed verifications of compliance from all subcontractors of any tier pursuant to subdivision 3, clause (7). A Prime Contractor and subcontractors shall not be responsible for the false statements of any subcontractor with which they do not have a direct contractual relationship. A Prime Contractor and subcontractors shall be responsible for false statements by their first-tier subcontractors with which they have a direct contractual relationship only if they accept the verification of compliance with actual knowledge that it contains a false statement.

#### **1.08 LAWS AND REGULATIONS**

- A. Any and all services, articles or equipment offered and furnished must comply fully with all local, State, and federal laws and regulations, including Minn. Stat. § 181.59 prohibiting discrimination.

#### **1.09 QUALIFIED RESPONSES**

- A. The Responder shall not stipulate in the response any condition not contained in the specifications and other documents submitted for the solicitation.

#### **1.10 SOLICITATION DISPUTE RESOLUTION PROCEDURES**

- A. Any issue a Responder has with the solicitation document, which includes, but is not limited to, the terms, conditions, and specifications, must be submitted in writing to the AMS prior to the solicitation opening due date and time. Any issue a responder has with the official bid tabulation must be submitted in writing to the AMS within five working days from the time the bid tabulation is made public. The State will respond to any protest received that follows the above procedure.

**1.11 DELIVERY OF RESPONSES**

- A. Each response and all papers bound and attached to it, together with solicitation security (if required) shall be placed in an envelope and securely sealed therein. The envelope should be marked to indicate the following.
1. The name and address of the Responder
  2. The name of the project, location, and project number
  3. The solicitation opening date and time
- B. The envelope shall be addressed to the **Minnesota Department of Natural Resources, Regional, Business Office, Address as indicated on the Prime Contractor Response Form** (Section 00 41 73), hereinafter referred to as the Contracting Agency, and responses must be received by the Contracting Agency and time stamped before the time set for the opening of the responses. In accordance with Minn. Stat. § 13.591, subd. 3. LATE RESPONSES WILL NOT BE CONSIDERED.
- C. Responses arriving by mail or otherwise after the time designated for the opening of the responses will not be considered and will be returned unopened. Responses faxed to the Contracting Agency, oral responses, E-mail responses, and telephone responses will not be accepted.
- D. Responses may be modified by fax. No oral or e-mail modifications will be accepted. Such fax modifications must show the amount by which a price is increased or decreased; it must not reveal either the original or the new bid price. Fax additions/deductions will be accepted if the fax is physically received by the Contracting Agency and time stamped no later than the time set for the opening of responses, with a written confirmation of modification signed by the Responder if requested by the Contracting Agency. It will be the Responders responsibility to adjust their bid security appropriately for the increase or decrease of its price prior to the date and time set for the opening of responses. **The Contracting Agency fax number is the Regional Business Office Fax number listed in the Solicitation Advertisement Information** (00 11 14).

**1.12 WITHDRAWAL OF RESPONSE**

- A. A Responder may withdraw its response at any time before the date and time set for the opening of the responses by written notification to the Contracting Agency of the desire to withdraw, by appearing in person at the address of the solicitation opening, or by writing, or facsimile received by the Contracting Agency.
- B. Subsequent to the opening of the responses, a Responder may request to withdraw a response only upon a showing that an obvious error exists in the response. The showing and request for withdrawal must be made in writing to the Contracting Agency within a reasonable time after the opening of the response and prior to the State's detrimental reliance on the response.
- C. A response may be withdrawn after the time period stated on the solicitation response form if the State has not acted thereon.

**1.13 RESPONSE OPENING**

- A. Responses will be publicly opened and read aloud as specified in the solicitation. Responders and other interested persons may be present.

**1.14 SOLICITATION RESULTS**

- A. Solicitation (bid) results can be obtained in the following ways:
1. By attending the solicitation opening
  2. On Office of State Procurement website [www.mmd.admin.state.mn.us/solicitations.htm](http://www.mmd.admin.state.mn.us/solicitations.htm) and click on Virtual Plan Room – Construction Contracts, then click in the blue box “To view projects as a guest without



*logging into the site: **Click Here***, then click on the *“Show Closed Bids & Project Results”*.

### **1.15 CONSIDERATION OF RESPONSES**

- A. After the Prime responses have been opened, the apparent low Prime response and possible low Prime responses with alternates will be checked for responsiveness. All other prime responses will not be checked for responsiveness until such time as they may become apparent low.
- B. The State reserves the right to accept or reject any or all responses, or parts of responses, and to waive informalities or minor irregularities therein.
- C. For the purpose of determining the lowest responsible Responder, the State reserves the right to accept any or all alternates in the numerical order in which they appear on the Solicitation form and as it may consider in the best interests of the State.

### **1.16 UNIT PRICES**

- A. In cases where any part of the response is to be received on the unit price basis, the quantities stated are approximate only, and will be used in making a comparison of responses. In case of error in an extension, the unit price prevails. A response of unit prices may be rejected if it is found to be unbalanced.

### **1.17 STATE EXCISE AND USE TAX**

- A. The Responder is to include in the response price all applicable State or Federal sales, excise or use tax on all materials, supplies and equipment that are to be utilized on this project.

### **1.18 AWARD**

- A. The award will be made to the lowest responsible Prime Contractor who conforms to the language of the specifications, terms of delivery, and any other conditions imposed herein.
- B. Low-tied responses will be referred to the director of OSP. The director or delegate may enter into negotiation with the low-tied responders when the director deems such action to be in the best interest of the State.

### **1.19 CONTRACT**

- A. The successful Responder, if awarded a contract, shall sign a contract with the State and furnish a payment bond, performance bond, and insurance in conformance with the solicitation and specifications. Responder to execute and deliver the contractual document in correct form within ten (10) calendar days after receipt of the contract documents. No such contract shall be in force and effect until it is executed by all parties, the full amount of the contract liability of the State has been encumbered by the State, and payment bond and performance bond have been approved.
- B. The State shall not permit the Contractor on the job site for any reason until the Contractor has provided a payment bond, performance bond, and certificates of insurance, all of which are subject to the State's review and approval. This Contract expressly excludes any payments or any on-site work until all bond and insurance requirements have been met.
- C. If the Contract, payment bond, performance bond, and insurance submitted by the Contractor are approved by the Contracting Agency a Final Notice to Proceed will be sent to the Contractor and all requirements of the contract (including site work) may commence.
- D. The State reserves the right to terminate the contract without obligation to the Contractor if all payment bond, performance bond, and insurance requirements are not met.
- E. The Contractor shall, within 10 days of signing the contract, submit in writing to the Architect a complete list of all items of work that they propose to subcontract and the names of the

subcontractors to whom they propose to subcontract such work. The subcontractors named shall be of recognized standing with a record of satisfactory performance. The Contractor shall not employ any subcontractor or use any material to which the Architect may object as incompetent, unfit, or where there is reason to assume the work will not be accomplished in accordance with the Contract Documents. Failure of the Owner or Architect to reply within the 14 day period shall constitute notice of no reasonable objection.

## **1.20 SUBCONTRACTUAL RELATIONS**

- A. The Contractor shall make available to each proposed Subcontractor, prior to execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors. The Contractor and subcontractors shall be in compliance with Article 5.3 of the AIA A201-2007 edition as modified by the State.

## **1.21 ASSURANCE OF COMPLETION (PAYMENT AND PERFORMANCE BOND)**

- A. The Payment and Performance Bonds, each equal to 100 percent of the total contract value, shall be in compliance with the AIA A201-2007 edition as modified by the State, Article 11.4 Performance Bond and Payment Bond.

## **1.22 LIMIT OF TIME TO BRING ACTION (PAYMENT AND PERFORMANCE BOND)**

- A. Limit of time to bring action shall be in compliance with Minn. Stat. § 574.31, Subd. 1 Claims on performance bonds and Subd. 2 Claims on payment bonds and in compliance with the AIA A201-2007 edition as modified by the State, Article 5.1.3.

## **1.23 CERTIFICATION REGARDING FEDERAL DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION**

- A. A contract resulting from this solicitation may be a covered transaction for purposes of federal debarment and suspension regulations. By submission of its response, the responder certifies that neither it, nor its principals or subcontractors, are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency. The responder further certifies that it will include this provision in any subcontracts resulting from this solicitation. If the responder knowingly renders an erroneous certification, in addition to remedies available to the Minnesota Department of Administration, the Federal Government may pursue available remedies, including but not limited to suspension or debarment.

## **1.24 WORK FORCE COMPLIANCE.**

- A. If the solicitation response is in excess of \$100,000, the State of Minnesota – Affirmative Action Certification form is required. Vendors are cautioned to read closely the section listed elsewhere in this specification titled, “Notice to Prime Contractors, Affirmative Action Certificate of Compliance”, Division 00 73 35.

## **1.25 PRODUCTS CONTAINING CERTAIN TYPES OF POLYBROMINATED DIPHENYL ETHER BANNED.**

- A. By signing and submitting a response to this solicitation, Contractor/Responder certifies that they have read and will comply with Minn. Stat. § 325E.385-325E.388.

## **1.26 COAL TAR SEALANT USE AND SALE PROHIBITED**

- A. By submitting a response to this solicitation, the Responder certifies that coal tar sealant products are not included in its response. “Coal tar sealant product” means a surface applied sealing product containing coal tar, coal tar pitch, coal tar pitch volatiles, or any variation assigned the Chemical Abstracts Service (CAS) number 65996-93-2, 65996-89-6, or 8007-45-

2. Coal tar sealants must not be used or sold for application on asphalt-paved surfaces. See Minn. Stat. § 116.201.

### 1.27 EQUAL PAY CERTIFICATION

- A. If the Response to this solicitation could be in excess of \$500,000, the Responder must obtain an Equal Pay Certificate from the Minnesota Department of Human Rights (MDHR) or claim an exemption prior to contract execution. A responder is exempt if it has not employed 40 or more full-time employees on any single working day during the previous 12 months in Minnesota or the state where it has its primary place of business. Please contact MDHR with questions at: 651-539-1095 (metro), 1-800-657-3704 (toll free), 711 or 1-800-627-3529 (MN Relay) or at [compliance.MDHR@state.mn.us](mailto:compliance.MDHR@state.mn.us)

### 1.28 PUBLICITY

- A. The Contractor shall make no representations of the State's opinion or position as to the quality or effectiveness of the products and/or services that are the subject of this Contract without the prior written consent of the contracting authority. Representations include any publicity, including but not limited to advertisements, notices, press releases, reports, and similar public notices.

### 1.29 ORGANIZATIONAL CONFLICTS OF INTEREST

- A. The responder warrants that, to the best of its knowledge and belief, and except as otherwise disclosed, there are no relevant facts or circumstances which could give rise to organizational conflicts of interest. An organizational conflict of interest exists when, because of existing or planned activities or because of relationships with other persons:

- a Contractor is unable or potentially unable to render impartial assistance or advice to the State;
- the Contractor's objectivity in performing the work is or might be otherwise impaired; or
- the Contractor has an unfair competitive advantage.

The Contractor agrees that if an organizational conflict of interest is discovered after award, an immediate and full disclosure in writing shall be made to the Assistant Director of the Department of Administration's Office of State Procurement that shall include a description of the action the Contractor has taken or proposes to take to avoid or mitigate such conflicts. If an organizational conflict of interest is determined to exist, the State may, at its discretion, cancel the Contract. In the event the Contractor was aware of an organizational conflict of interest prior to the award of the Contract and did not disclose the conflict to the AMS, the State may terminate the Contract for default. The provisions of this clause shall be included in all subcontracts for work to be performed, and the terms "Contract," "Contractor," and "AMS" modified appropriately to preserve the State's rights.

### 1.30 COMPLIANCE WITH TAX LAW REQUIREMENTS

- A. The State cannot make final payment to the Contractor until the Contractor demonstrates that it and all its subcontractors have complied with the Income Tax withholding requirements of Minnesota Statutes, section 290.92 for wages paid for work performed under the contract. To establish compliance, the Contractor must submit a "Contractor Affidavit" either online or in paper form (IC134) to the Minnesota Department of Revenue. The Contractor will receive written certification of compliance when the Department of Revenue determines that all withholding tax returns have been filed and all withholding taxes attributable to the work performed on the contract have been paid. The Contractor must then provide this written certification to the Architect/Engineer to receive final payment.
- B. Every subcontractor working on the Project must submit an approved "Contractor Affidavit" from the Minnesota Department of Revenue to the Contractor before the Contractor can file its own Contractor Affidavit. **The Contractor is strongly encouraged to obtain the certification from each Contractor immediately following the Subcontractor's completion of work on the project. Delays in completing the forms until after the project**

**is complete may result in significant additional work for the Contractor in collecting the required forms.**

- C. The Department of Revenue, in association with the Department of Employment and Economic Development, offers a free seminar to help contractors understand tax law requirements. The Department strongly urges the Contractor and all subcontractors to attend the "Employment Taxes & Employer Responsibilities Seminar" or similarly offered classes. You can find a schedule and more information on the Department's website at: <http://www.revenue.state.mn.us/businesses/withholding/Pages/EducationandOutreach.aspx> Complying with this requirement is considered part of the Work under this Contract. Contractor delay in complying with this requirement may cause the State to delay final payment and Contract Acceptance. The State may also report non-compliance to the Department of Revenue, which may result in enforcement action by the Department of Revenue



**SECTION 00 21 26****SUPPLEMENTARY INSTRUCTIONS TO RESPONDER****1.01 BUILDING CONSTRUCTION CONTRACTOR REGISTRATION**

- A. Per Minn. Stat. § 326B.701, unless exempt, any Person, as defined by Minn. Stat. § 181.723, subd. 1(a), who performs public or private construction services must register with the Department of Labor and Industry (DLI). Registration is required prior to receiving a contract award. For additional information, and to register, go to [www.dli.mn.gov/register](http://www.dli.mn.gov/register) or call [651.284.5074](tel:651.284.5074).
1. Building construction contractors, including independent contractors, subcontractors, and business entities providing public or private sector commercial or residential building construction or improvement services must be registered with the Department of Labor and Industry (DLI).
  2. The registration requirement does not apply to workers and businesses that are already licensed, registered, or certified with the Department of Labor and Industry (DLI), nor does it apply to employees.
  3. General or Prime Contractors will be able to verify that subcontractors are registered on the searchable Department of Labor and Industry Contractor Look-Up web site.
  4. The law provides for penalties for failure to register, hiring unregistered contractors, misclassifying employees, and coercing others to form a business entity.

**1.02 SPECIAL INSTRUCTIONS, NON-MINNESOTA CONTRACTORS**

- A. Minn. Stat. § 290.9705 requires public entities to deduct and withhold eight (8) percent of payments made to the contractor if the value of the contract exceeds \$50,000.
- B. Exemptions from this requirement are allowed under specific circumstances that are listed in the "Reason for Exemption" section of the Exemption from Surety Deposits for Non-Minnesota Contractors (SDE) form (attached).
- C. One reason that Revenue allows for an exemption is that the Non-Minnesota Contractor will be providing a Payment Bond and Performance Bond to the government contracting agency. Such bonds are required for this Contract. The contractor must file a separate application for exemption for each project.
- D. In order to formalize this exemption you must, prior to being sent a Notice to Proceed, complete Form SDE (attached), or available at [http://www.revenue.state.mn.us/Forms\\_and\\_Instructions/sde.pdf](http://www.revenue.state.mn.us/Forms_and_Instructions/sde.pdf), and submit to Minnesota Revenue. If approved, provide the contracting agency with a copy executed by Minnesota Revenue. If your request for exemption is based on the fact that you are providing a Payment Bond and a Performance Bond for this Contract, note in the bonding company information section what State Department the bonds are being sent to (Dept. of Admin., MN Dept. of Transportation, Dept. of Natural Resources, and Dept. of Military Affairs). In this case a copy of the bond to the SDE form is required.
- E. Send these forms for execution to:  
Minnesota Revenue; Mail Section 5410; St. Paul, MN 55146-5410

## MINNESOTA REVENUE

SDE

## Exemption from Surety Deposits for Non-Minnesota Contractors

Please type or print clearly. This information will be used for returning the form to you.

Contractor Information	Contractor		Total contract amount	Minnesota tax ID number
	Address		\$	
	City	State	ZIP code	Daytime phone
	Contract starting date		Projected completion date	
	Business type (check one): <input type="checkbox"/> Corporation <input type="checkbox"/> S corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Sole proprietor			

Project Information	Name of business or government agency		Contact person	Daytime phone
	Contract owner's address	City	State	ZIP Code
	Project location address	City	State	ZIP code

I request exemption from surety deposits under Minnesota law (M.S. 290.9705) for the following reason (check one box only and complete the information requested):

- ☐ I have a cash surety or a bond secured by an insurance company licensed in Minnesota. The bond must be 8 percent of the total contract amount. **Attach a copy of Form SDB, Non-Minnesota Contractor's Bond.**

Bonding company	Bonding agent
Address	Daytime phone
City	State
ZIP code	Period of bond (month/day/year)
From / /	To / /

- ☐ I have done construction work in Minnesota during the past three calendar years and have fully complied with Minnesota law regarding Minnesota income, sales and use, corporate franchise and withholding taxes.
- ☐ I am performing work for a government agency and have a payment and performance bond.
- ☐ I am performing work for a government agency and have a cash surety issued by a state bank, national bank, or savings and loan association doing business in Minnesota.

I declare this information is true and complete to the best of my knowledge and belief. I authorize the Department of Revenue to send a copy of this form to the contract owner and discuss this case and related taxes with the bonding company.

Sign Here	Contractor's signature	Title	Date

**Mail to:** Minnesota Revenue, Mail Station 5410, St. Paul, MN 55146-6501

## Department of Revenue Approval

The above-named non-Minnesota contractor is exempt from the surety requirements of Minnesota Statute 290.9705 for this project.

Department of Revenue approval

Date

(Rev. 1/14)

## MINNESOTA • REVENUE

## Form SDE Instructions

*Unless the non-Minnesota construction contractor is approved for exemption, any person or business that hires or contracts with the contractor must withhold 8 percent of their compensation as a Minnesota surety deposit.*

*The withholding amount is deposited with the department and is used as a surety to guarantee that the contractor has fulfilled the requirements for withholding, sales and use, corporate franchise and income taxes.*

*For additional information regarding the 8 percent withholding, see Fact Sheet 12, Surety Deposits for Non-Minnesota Construction Contractors.*

### Purpose of Form SDE

If you are a non-Minnesota construction contractor and you want to apply for an exemption from the surety deposit (see "Exemption Requirements" below), complete and file Form SDE with the department before you start the project.

If approved, give the original, signed Form SDE to the person or business for whom you are doing the work to show you are exempt from the 8 percent surety deposit.

### Surety Deposit Law

If you hire or contract with a non-Minnesota contractor to perform construction work in Minnesota, you must withhold 8 percent (.08) of their compensation as a Minnesota surety deposit. Payments are subject to 8 percent withholding only if the work was performed in Minnesota and the value of the contract exceeds \$50,000.

### Exemption Requirements

A non-Minnesota construction contractor may qualify for an exemption from the surety deposit if one of the following requirements are met:

- The contractor gives the department a bond that is secured by an insurance company licensed in Minnesota and is equal to 8 percent of the contract. The bond remains in effect until the contractor satisfies all tax liabilities. You may choose to complete Form SDB, *Non-Minnesota Contractor's Bond*, to submit to the department.

- The contractor gives the department a cash surety. A cash surety is evidence of a savings account, deposit or certificate of deposit in, or issued by, a state bank, national bank or savings and loan association doing business in Minnesota. Interest and dividends earned on the principal amount may be retained by the contractor.
- The contractor is performing work for a government agency and has a payment and performance bond.
- The contractor has done construction work in Minnesota during the past three calendar years and has fully complied with Minnesota laws regarding withholding, sales and use, corporate franchise and income taxes.

If a non-Minnesota contractor is hired or contracted to perform construction work in Minnesota, the person or business who is paying the contractor must withhold 8 percent of the payment as a Minnesota surety deposit.

Unless the contractor has received exemption from surety deposits, payments made to the contractor are subject to 8 percent withholding, if:

- the construction work was performed in Minnesota; and
- the value of the contract exceeds \$50,000.

### Who can apply?

A non-Minnesota contractor can apply for an exemption if your contract exceeds or is expected to exceed \$50,000.

### Before You Start

You must have a Minnesota tax ID number from the Department of Revenue to request an exemption from surety deposit.

If you don't have a Minnesota ID number, you may apply online at [www.revenue.state.mn.us](http://www.revenue.state.mn.us) or by calling our Business Registration Office at 651-282-5225 or 1-800-657-3605.

### How to Apply

To apply for an exemption from Minnesota surety deposits, file Form SDE before you start the project.

Mail this form and any required attachments to the address on the front.

### If You're Approved

If we approve the exemption, we will sign the bottom of the form and return it to you. Make a copy for your records and give the original to the business for whom you are doing the work.

### If You're Not Approved

If we determine you're not eligible for exemption, 8 percent of each payment made to you must be withheld by the business for whom you are doing the work and deposited with the Department of Revenue.

To apply for a refund, complete Form SDR, *Refund of Surety Deposits for Non-Minnesota Contractors*. When the project is complete, and we determine that you have complied with Minnesota income, withholding, corporate franchise and sales and use tax laws, you'll receive a refund plus interest.

### Information and Assistance

Additional forms and information, including fact sheets and frequently asked questions, are available on our website.

Website: [www.revenue.state.mn.us](http://www.revenue.state.mn.us)

Email: [withholding.tax@state.mn.us](mailto:withholding.tax@state.mn.us)

Phone: 651-282-9999 or 1-800-657-3594.  
(TTY: Call 711 for Minnesota Relay)

We'll provide information in other formats upon request to persons with disabilities.

### Use of Information

All information on this form is required except for your phone number.

All information, except your Minnesota tax ID number, is private by state law. It cannot be given to others without your permission, except to the Internal Revenue Service, other states that guarantee the same privacy, the contract owner or bonding company and certain government agencies as provided by law.

**SECTION 00 41 73****PRIME CONTRACTOR RESPONSE FORM****VERSION: ORIGINAL**

DEPARTMENT OF NATURAL RESOURCES  
**REGIONAL BUSINESS OFFICE**  
21371 State Hwy 15  
New Ulm, MN 56073-5228

SOLICITATION NUMBER: **2017-092-04-8H880**  
OPENING TIME: **2:00 P.M.**  
OPENING DATE: **May 18, 2017**

Response Received from: \_\_\_\_\_  
Complete Name of Company

**1.01 PRICING**

- A. The undersigned, being familiar with the local conditions affecting the cost of the work and with the contract Documents, including the Solicitation Advertisement, Solicitation Form, General and Supplementary Conditions, Drawings, and Addenda, and in accordance with the provisions thereof, hereby proposes to furnish all labor and materials and equipment necessary for:

**Blue Mounds State Park**  
**Interpretive Center Repairs**

The State requires this project be built with American-made steel. American-made steel is identifiable as that steel for which all manufacturing processes take place domestically. Manufacturing is any process that modifies the chemical content; physical shape or size; or final finish of a product. Manufacturing begins with the initial melting and mixing, and continues through the bending and coating stages. If a domestic product is taken out of the US for any process, it becomes foreign source material.

For purposes of this solicitation, verification of American-made steel use will be limited to that steel found in Division 5 – Metals. Contractors are encouraged to use American-made steel whenever possible in the other divisions. If a responder discovers that American-made steel is not available for a specific item while preparing their response, immediately notify the State in writing prior to the bid due date and request acceptance of substitute products by addendum.

By signing this document, the responder certifies this response uses only American-made steel in Division 5.

**BASE PRICE (Lump Sum):**

\$ \_\_\_\_\_  
Numeric U.S. Dollar Amount (Alterations/Erasures – See 00-21 23, 1.06, B)

**B. Alternates. N/A**

- C. List all addenda numbers that have been included in the price quoted above: \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_,  
Responses that do not list addenda numbers that go to price will be rejected.

D. **NOTE:** Federal Equal Opportunity Requirements (**do not**) apply to this contract.

**E. Work Commencement and Completion:**

1. Work cannot commence before: **Notice to Proceed.**
2. The project shall be substantially complete no later than **August 24, 2017**
3. Final completion of the work shall be on or before **August 31, 2017**



- F. In submitting this response it is understood that the right is reserved by the State of Minnesota to reject any and all responses and it is agreed that this response may not be withdrawn for a period of thirty (30) days after date of filing same.
- G. **Resident Vendor:** In accordance with Minn. Stat. § 16C.02, subd. 13, a "Resident Vendor" means a person, firm, or corporation that:

- (1) is authorized to conduct business in the state of Minnesota on the date a solicitation for a contract is first advertised or announced. It includes a foreign corporation duly authorized to engage in business in Minnesota;
- (2) has paid unemployment taxes or income taxes in this state during the 12 calendar months immediately preceding submission of the bid or proposal for which any preference is sought;
- (3) has a business address in the state; and
- (4) has affirmatively claimed that status in the bid or proposal submission.

To receive recognition as a Minnesota Resident Vendor ("Resident Vendor"), your company must meet each element of the statutory definition above by the solicitation opening date and time. If you wish to affirmatively claim Resident Vendor status, you should do so by submitting this form with your bid or proposal.

**Resident Vendor status may be considered for purposes of resolving tied low bids or the application of a reciprocal preference.**

**I hereby Certify that my company:**

1. Is authorized to conduct business in the State of Minnesota on the date a solicitation for a contract is first advertised or announced. (This includes a foreign corporation duly authorized to engage in business in Minnesota.)  
☐ Yes ☐ No
2. Has paid unemployment taxes or income taxes in the State of Minnesota during the 12 calendar months immediately preceding submission of the bid or proposal for which any preference is sought.  
☐ Yes ☐ No
3. Has a business address in the State of Minnesota.  
☐ Yes ☐ No
4. Has affirmatively claimed that status in this bid submission.  
☐ Yes ☐ No
5. Agrees to submit documentation, if requested, as part of the bid or proposal process, to verify compliance with the above statutory requirements.  
☐ Yes ☐ No
6. By checking "Yes" to all five previous items and signing this solicitation form, my company is certifying compliance with the requirements set forth herein and claiming Resident Vendor status in this bid submission.

- H. **ATTACHMENT CHECKLIST:** Please place a check mark by the forms that are included with your response.

___ ATTACHMENT A	RESPONSIBLE CONTRACTOR COMPLIANCE VERIFICATION FORM
___ ATTACHMENT B	TAX IDENTIFICATION & REGISTRATION FORM
___ ATTACHMENT C	AFFIDAVIT OF NONCOLLUSION FORM
<u>N/A</u> ATTACHMENT D	PRIME CONTRACTOR QUALIFICATION FORM
___ ATTACHMENT E	VETERAN-OWNED PREFERENCE FORM

\_\_\_ ATTACHMENT F      WORK FORCE CERTIFICATION FORM

\_\_\_ ATTACHMENT G      EQUAL PAY CERTIFICATION FORM

**1.02 CERTIFICATION**

A. BY SIGNING THIS RESPONSE THE CONTRACTOR CERTIFIES THAT THE INFORMATION PROVIDED IS ACCURATE.

OFFICIAL ADDRESS

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

OFFICIAL FIRM NAME (Complete Firm Name)

\_\_\_\_\_

By: \_\_\_\_\_ Date: \_\_\_\_\_  
(signature)

Print name: \_\_\_\_\_

Title: \_\_\_\_\_

MAIL TO ADDRESS (if different from above)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail address: \_\_\_\_\_

By: \_\_\_\_\_ Date: \_\_\_\_\_  
(signature)

Print name: \_\_\_\_\_

Title: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail address: \_\_\_\_\_

**ATTACHMENT A**  
**PRIME CONTRACTOR RESPONSE**

**Responsible Contractor Compliance Verification**  
**Minn. Stat. § 16C.285**

**PROJECT NUMBER 2017-092-04-8H880**  
**PROJECT NAME: Blue Mounds State Park Interpretive Center Repairs**

The undersigned is an owner or officer of the company named below (the "Company") and signs this statement under oath verifying that at the time it responded to the solicitation document on the above-referenced project ("Project"), the Company was in compliance with each of the minimum criteria in Minn. Stat. § 16C.285, subd. 3 (hereinafter "subdivision 3"), with the exception of clause (7).

Any prime contractor or subcontractor or motor carrier that does not meet the minimum criteria in subdivision 3 or fails to verify that it meets those criteria is not a responsible contractor and is not eligible to be awarded a construction contract for the project or to perform work on the project.

A false statement under oath verifying compliance with any of the minimum criteria shall render the prime contractor or subcontractor or motor carrier that make the false statement ineligible to be awarded a construction contract on the project and may result in termination of a contract awarded to a prime contractor or subcontractor or motor carrier that submits a false statement.

Prior to execution of the construction contract for the Project, the Prime Contractor will submit to the contracting authority a supplemental verification confirming compliance with Minn. Stat. § 16C.285, subd. 3, clause (7), (see Attachment A-1). If the Prime Contractor retains additional subcontractors with which it will have a direct contractual relationship following contract award, the Prime Contractor will submit any supplemental verification confirming compliance with Minn. Stat. § 16C.285, subd. 3, clause (7) within 14 days after retaining any such additional subcontractors (see Attachment A-2).

A prime contractor shall submit to the contracting authority upon request copies of the signed verifications of compliance from all subcontractors of any tier and motor carriers, pursuant to subdivision 3, clause (7).

**I certify by signing this form under oath that I am an owner or officer of the company, and that:**

- 1) My company meets each of the Minimum Criteria to be a responsible contractor as defined and is in compliance with Minn. Stat. § 16C.285,
- 2) If my company is awarded a contract, I will submit Attachment A-1 prior to contract execution, and
- 3) If my company is awarded a contract, I will also submit Attachment A-2 as required.

\_\_\_\_\_  
Authorized Signature of Owner or Officer

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

**ATTACHMENT A-1  
FIRST-TIER SUBCONTRACTORS LIST**

**A-1 FORM MUST BE COMPLETED PRIOR TO CONTRACT EXECUTION**

**PROJECT NUMBER 2017-092-04-8H880**

**PROJECT NAME: Blue Mounds State Park Interpretive Center Repairs**

FIRST TIER SUBCONTRACTOR NAMES (Legal name of company as registered with the Secretary of State)	Name of city where company home office is located	% of value of Contract	*Is the First Tier Subcontractor a TG/ED/VO?

Attach additional sheets as needed for submission of all first-tier subcontractors.

\*TG/ED/ VO = Certified Targeted Group Business, Economically Disadvantaged Business, and Veteran-Owned Business

**I certify by signing this form under oath that I am an owner or officer of the company, and that:**

All first-tier subcontractors listed on attachment A-1 have verified through a signed statement under oath by an owner or officer that they meet the minimum criteria to be a responsible contractor as defined in **Minn. Stat. § 16C.285**. A prime contractor shall submit to the contracting authority upon request copies of the signed verifications of compliance from all subcontractors of any tier and motor carriers, pursuant to subdivision 3, clause (7).

\_\_\_\_\_  
Authorized Signature of Owner or Officer

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title



**ATTACHMENT A-2**  
**ADDITIONAL SUBCONTRACTORS LIST**

**SUBMIT WITHIN 14 DAYS OF RETAINING ADDITIONAL SUBCONTRACTORS DURING PROJECT**

This form must be submitted to the Project Manager or individual as identified in the solicitation document.

**PROJECT NUMBER 2017-092-04-8H880**

**PROJECT NAME: Blue Mounds State Park Interpretive Center Repairs**

Minn. Stat. § 16C.285, subd. 5. Subcontractor Verification. If a prime contractor or any subcontractor retains additional subcontractors on the project after submitting its verification of compliance, the prime contractor or subcontractor shall obtain verifications of compliance from each additional subcontractor with which it has a direct contractual relationship and shall submit a supplemental verification confirming compliance with subdivision 3, clause (7), within 14 days of retaining the additional subcontractors...

FIRST TIER SUBCONTRACTOR NAMES (Legal name of company as registered with the Secretary of State)	Name of city where company home office is located	% of value of Contract	*Is the First Tier Subcontractor a TG/ED/VO?

Attach additional sheets as needed for submission of all first-tier subcontractors.

\*TG/ED/ VO = Certified Targeted Group Business, Economically Disadvantaged Business, and Veteran-Owned Business

**I certify by signing this form under oath that I am an owner or officer of the company, and that:**

All additional subcontractors listed on Attachment A-2 have verified through a signed statement under oath by an owner or officer that they meet the minimum criteria to be a responsible contractor as defined in **Minn. Stat. § 16C.285**. A prime contractor shall submit to the contracting authority upon request copies of the signed verifications of compliance from all subcontractors of any tier and motor carriers, pursuant to subdivision 3, clause (7).

\_\_\_\_\_  
Authorized Signature of Owner or Officer

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

**ATTACHMENT B  
PRIME CONTRACTOR RESPONSE****TAX IDENTIFICATION AND REGISTRATION FORM**

OFFICIAL NAME OF COMPANY: \_\_\_\_\_

A. If a Corporation, what is the state of Incorporation? \_\_\_\_\_

B. If a Partnership, state full names of Copartners: \_\_\_\_\_  
\_\_\_\_\_

C. If a Limited Liability Company, what is the state in which formed: \_\_\_\_\_

D. If a sole proprietorship, are you an independent contractor? \_\_\_\_ Yes \_\_\_\_ No

E. SOCIAL SECURITY OR FEDERAL TAX I.D. # \_\_\_\_\_

MINNESOTA STATE TAX I.D. # \_\_\_\_\_

Minn. Stat. § 270C.65, Subd.3, Minnesota Contract Vendors are required to provide their Minnesota Tax Identification Number (or and Federal Employer Identification Number (or Social Security Number). Non-Minnesota Contract Vendors are required to provide their Federal Employer I.D. Number (or Social Security Number) only. This information may be used in the enforcement of Federal and State Tax Laws. Supplying these numbers could result in action to require a Contract Vendor to file tax returns and pay delinquent State Tax Liabilities. These numbers will be available to Federal and State Tax Authorities and State personnel involved in the payment of State obligations.

F. BUILDING CONSTRUCTION CONTRACTOR REGISTRATION #: \_\_\_\_\_

Or LICENSE #: \_\_\_\_\_ TYPE OF LICENSE: \_\_\_\_\_

Per Minn. Stat. § 326B.701, unless exempt, any Person, as defined by Minn. Stat. § 181.723, subd. 1(a), who performs public or private construction services must register with the Department of Labor and Industry (DLI). Registration is required prior to receiving a contract award. For additional information, and to register, go to [www.dli.mn.gov/register](http://www.dli.mn.gov/register) or call 651-284-5074.

G. STATE OF MINNESOTA VENDOR ID# \_\_\_\_\_

Contractors are required to have a Minnesota Vendor ID prior to receiving a Contract Award. For information on requesting or registering your Minnesota Vendor ID: <https://www.mn.gov/mmb/accounting/swift/vendor-resources/>

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**ATTACHMENT C**  
**PRIME CONTRACTOR RESPONSE**

**AFFIDAVIT OF NONCOLLUSION**

I hereby affirm under the penalty of perjury:

1. That I am the Responder (if the Responder is an individual), a partner in the company (if the Responder is a partnership), or an officer or employee of the responding corporation having authority to sign on its behalf (if the Responder is a corporation);
2. That the attached response has been arrived at by the Responder independently and has been submitted without collusion with and without any agreement, understanding or planned common course of action with any other vendor designed to limit fair or open competition;
3. That the contents of this response have not been communicated by the Responder or its employees or agents to any person not an employee or agent of the Responder and will not be communicated to any such persons prior to the official opening of the responses; and
4. I certify that the statements in this affidavit are true and accurate.

Authorized Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Firm Name: \_\_\_\_\_

Subscribed and sworn to me this \_\_\_\_\_ day of \_\_\_\_\_

\_\_\_\_\_  
Notary Public

My commission expires

**ATTACHMENT E  
PRIME CONTRACTOR RESPONSE**

**STATE OF MINNESOTA  
VETERAN-OWNED PREFERENCE FORM**

Unless a greater preference is applicable and allowed by law, in accordance with Minn. Stat. §16C.16, subd. 6a, the Commissioner of Administration will award a 6% preference on state procurement to certified small businesses that are majority owned and operated by veterans.

Veteran-Owned Preference Requirements - See Minn. Stat. § 16C.19 (d):

- 1) The business has been certified by the Office of State Procurement as being a veteran-owned or service-disabled veteran-owned small business.

**or**

- 2) The principal place of business is in Minnesota AND the United States Department of Veterans Affairs verifies the business as being a veteran-owned or service-disabled veteran-owned small business under Public Law 109-461 and Code of Federal Regulations, title 38, part 74 (Supported By Documentation).

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Statutory requirements and appropriate documentation must be met **by the solicitation response due date and time** to be awarded the veteran-owned preference. The preference applies only to the first \$1,000,000 of a solicitation response.

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**Claim the Preference**

**By signing below I confirm that:**

My company is claiming the veteran-owned preference afforded by Minn. Stat. § 16C.16, subd. 6a. By making this claim, I verify that:

- The business has been certified by the Office of State Procurement as being a veteran-owned or service-disabled veteran-owned small business.

**or**

- My company's principal place of business is in Minnesota **and** the United States Department of Veteran's Affairs verifies my company as being a veteran-owned or service-disabled veteran-owned small business. (Supported By Attached Documentation)

Name of Company: \_\_\_\_\_

Date: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Telephone: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

---

**Attach documentation, sign, and return this form with your solicitation response to claim the veteran-owned preference.**



**ATTACHMENT F****STATE OF MINNESOTA – WORK FORCE CERTIFICATE INFORMATION****Required by state law for ALL bids or proposals that could exceed \$100,000**

**Complete this form and return it with your bid or proposal. The State of Minnesota is under no obligation to delay proceeding with a contract until a company becomes compliant with the Workforce Certification requirements in Minn. Stat. §363A.36.**

**BOX A – MINNESOTA COMPANIES that have employed more than 40 full-time employees within this state on any single working day during the previous 12 months, check one option below:**

- ☐ Attached is our current Workforce Certificate issued by the Minnesota Department of Human Rights (MDHR).
- ☐ Attached is confirmation that MDHR received our application for a Minnesota Workforce Certificate on \_\_\_\_\_ (date).

**BOX B – NON-MINNESOTA COMPANIES that have employed more than 40 full-time employees on a single working day during the previous 12 months in the state where it has its primary place of business, check one option below:**

- ☐ Attached is our current Workforce Certificate issued by MDHR.
- ☐ We certify we are in compliance with federal affirmative action requirements. Upon notification of contract award, you must send your federal or municipal certificate to MDHR at [compliance.MDHR@state.mn.us](mailto:compliance.MDHR@state.mn.us). If you are unable to send either certificate, MDHR may contact you to request evidence of federal compliance. The inability to provide sufficient documentation may prohibit contract execution.

**BOX C – EXEMPT COMPANIES that have not employed more than 40 full-time employees on a single working day in any state during the previous 12 months, check option below if applicable:**

- ☐ We attest we are exempt. If our company is awarded a contract, we will submit to MDHR within 5 business days after the contract is fully signed, the names of our employees during the previous 12 months, the date of separation, if applicable, and the state in which the persons were employed. Send to [compliance.MDHR@state.mn.us](mailto:compliance.MDHR@state.mn.us).

By signing this statement, you certify that the information provided is accurate and that you are authorized to sign on behalf of your company.

Name of Company: \_\_\_\_\_ Date \_\_\_\_\_

Authorized Signature: \_\_\_\_\_ Telephone number: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

**For assistance with this form, contact:**

Minnesota Department of Human Rights, Compliance Services

Web: <http://mn.gov/mdhr/>

TC Metro: 651-539-1095

Toll Free: 800-657-3704

Email: [compliance.mdhr@state.mn.us](mailto:compliance.mdhr@state.mn.us)

TTY: 651-296-1283

Workforce Certification, Revised 10/16

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**ATTACHMENT G**  
**PRIME CONTRACTOR RESPONSE FORM****State of Minnesota – Equal Pay Certificate**

If your response could be in excess of \$500,000, please complete and submit this form with your submission. **It is your sole responsibility to provide the information requested and when necessary to obtain an Equal Pay Certificate (Equal Pay Certificate) from the Minnesota Department of Human Rights (MDHR) prior to contract execution. You must supply this document with your submission.** Please contact MDHR with questions at: 651-539-1095 (metro), 1-800-657-3704 (toll free), 711 or 1-800-627-3529 (MN Relay) or at [compliance.MDHR@state.mn.us](mailto:compliance.MDHR@state.mn.us).

**Option A** – If you have employed 40 or more full-time employees on any single working day during the previous 12 months in Minnesota or the state where you have your primary place of business, please check the applicable box below:

- ☐ Attached is our current MDHR Equal Pay Certificate.
- ☐ Attached is MDHR's confirmation of our Equal Pay Certificate application.

**Option B** – If you have not employed 40 or more full-time employees on any single working day during the previous 12 months in Minnesota or the state where you have your primary place of business, please check the box below.

- ☐ We are exempt. We agree that if we are selected we will submit to MDHR within five (5) business days of final contract execution, the names of our employees during the previous 12 months, date of separation if applicable, and the state in which the persons were employed. Documentation should be sent to [compliance.MDHR@state.mn.us](mailto:compliance.MDHR@state.mn.us).

The State of Minnesota reserves the right to request additional information from you. **If you are unable to check any of the preceding boxes, please contact MDHR to avoid a determination that a contract with your organization cannot be executed.**

Your signature certifies that you are authorized to make the representations, the information provided is accurate, the State of Minnesota can rely upon the information provided, and the State of Minnesota may take action to suspend or revoke any agreement with you for any false information provided.

---

Authorized Signature	Printed Name	Title
<hr/>		
Organization	MN/FED Tax ID#	Date
<hr/>		
Issuing Entity	Project # or Lease Address	

**SECTION 00 43 14****SOLICITATION BOND****STATE OF MINNESOTA  
DEPARTMENT OF ADMINISTRATION****SOLICITATION BOND TO ACCOMPANY CONSTRUCTION  
AND MAINTENANCE RESPONSES**

KNOW ALL MEN BY THESE PRESENTS, that we

\_\_\_\_\_ as Principal, and

\_\_\_\_\_ as Surety, are held and firmly bound unto the State of Minnesota as Obligee, in the sum of **5% of the bid amount** for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, and firmly by these presents.

Dated this \_\_\_\_ day of \_\_\_\_\_ A. D. 20\_\_\_\_.

The condition of this obligation is such that whereas the Principal has submitted the accompanying response for the articles described in **Solicitation No. and/or Project Title**

**2017-092-04-8H880/Blue Mounds State Park Interpretive Center Repairs**

NOW, THEREFORE, if the aforesaid Principal shall be awarded a contract upon said response, and shall within the required number of days after the notice of such award, enter into a contract with the State of Minnesota, and give bond for the faithful performance of the contract as may be required, then this obligation shall be null and void; otherwise the Principal and Surety will pay unto the Obligee the sum of **5% of the bid amount** not as a penalty, but as liquidated damages sustained by the State of Minnesota as a result of such failure.

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Surety

\_\_\_\_\_  
Attorney-in-fact

**INDIVIDUAL AND CO-PARTNERSHIP ACKNOWLEDGMENT**

STATE \_\_\_\_\_

COUNTY \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ before me personally appeared

\_\_\_\_\_

\_\_\_\_\_ to me known to be the person(s) described in and who executed the foregoing bond, and acknowledged that he/she/they executed the same as a free act and deed.

(Notarial Seal)

(Notary Signature) \_\_\_\_\_

**LIMITED LIABILITY COMPANY ACKNOWLEDGMENT FOR PRINCIPAL**

STATE \_\_\_\_\_

COUNTY \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ before me appeared

\_\_\_\_\_ and

\_\_\_\_\_, to me personally known, who being by me duly sworn, did say

that they are respectively \_\_\_\_\_ and

\_\_\_\_\_ of \_\_\_\_\_, a Limited Liability Company; and

that said instrument was executed on behalf of the Limited Liability Company by authority of its Management Committee;

and they acknowledged said instrument to be the free act and deed of the Limited Liability Company.

(Notarial Seal)

(Notary Signature) \_\_\_\_\_

**CORPORATE ACKNOWLEDGMENT FOR PRINCIPAL**

STATE \_\_\_\_\_

COUNTY \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ before me appeared

\_\_\_\_\_ and

\_\_\_\_\_, to me personally known, who being by me duly sworn, did say

that they are respectively \_\_\_\_\_ and

\_\_\_\_\_ of \_\_\_\_\_, a Corporation; and that said instrument

was executed on behalf of the Corporation by authority of its Board of Directors; and they acknowledged said instrument

to be the free act and deed of the Corporation.

(Notarial Seal)

(Notary Signature) \_\_\_\_\_



**AFFIX HERE ACKNOWLEDGMENT OF CORPORATE SURETY**

The form of this bond has been prescribed by the Commissioner of Administration and approved by the Attorney General of Minnesota.

Full Name of Surety Co. \_\_\_\_\_

Home Office Address (Street) \_\_\_\_\_

City, State and ZIP Code \_\_\_\_\_

Name of Attorney-in-fact \_\_\_\_\_

Name of Local Agency \_\_\_\_\_

Address of Local Agency (Street) \_\_\_\_\_

City, State and ZIP Code \_\_\_\_\_

**SECTION 00 72 00**

**AIA DOCUMENT A201, 2007 EDITION,  
GENERAL CONDITIONS OF THE CONTRACT  
FOR CONSTRUCTION AS AMENDED BY THE STATE**

- 1.01 The AIA A201 General Conditions of the Contract for Construction, 2007 Edition as modified by the State of Minnesota are hereby made part of these specifications, except as amended by the Supplementary Conditions or Special Conditions..



# Document A201™ – 2007

## General Conditions of the Contract for Construction

for the following PROJECT:

*(Name and location or address)*

Blue Mounds State Park Interpretive Center Repairs

THE OWNER:

*(Name, legal status and address)*

State of Minnesota Department of Natural Resources (DNR)

THE ARCHITECT:

*(Name, legal status and address)*

### TABLE OF ARTICLES

- |    |  |
|----|--|
| 1  | GENERAL PROVISIONS                               |
| 2  | OWNER  |
| 3  | CONTRACTOR                                       |
| 4  | ARCHITECT  |
| 5  | SUBCONTRACTORS                                   |
| 6  | CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS |
| 7  | CHANGES IN THE WORK                              |
| 8  | TIME   |
| 9  | PAYMENTS AND COMPLETION                          |
| 10 | PROTECTION OF PERSONS AND PROPERTY               |
| 11 | INSURANCE AND BONDS                              |
| 12 | UNCOVERING AND CORRECTION OF WORK                |
| 13 | MISCELLANEOUS PROVISIONS                         |
| 14 | TERMINATION OR SUSPENSION OF THE CONTRACT        |
| 15 | CLAIMS AND DISPUTES                              |

### ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed. A vertical line in the left margin of this document indicates where the author has added necessary information and where the author has added to or deleted from the original AIA text.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

## INDEX

(Numbers and Topics in Bold are Section Headings)

### **Acceptance of Nonconforming Work**

9.6.6, 9.9.3, **12.3**

Acceptance of Work

9.6.6, 9.8.2, 9.9.3, 9.10.1, 9.10.3, **12.3**

### **Access to Work**

**3.16**, 6.2.1, **12.1**

Accident Prevention

10

Acts and Omissions

3.2, 3.3.2, 3.12.8, 3.18, 4.2.3, 8.3.1, 9.5.1, 10.2.5,  
10.2.8, 13.4.2, 13.7.1, 14.1, 15.2

Addenda

1.1.1, 3.11.1

Additional Costs, Claims for

3.7.4, 3.7.5, 6.1.1, 7.3.7.5, 10.3, 15.1.4

### **Additional Inspections and Testing**

9.4.2, 9.8.3, 12.2.1, **13.5**

Additional Insured

11.1.4

### **Additional Time, Claims for**

3.2.4, 3.7.4, 3.7.5, 3.10.2, 8.3.2, **15.1.5**

### **Administration of the Contract**

3.1.3, **4.2**, 9.4, 9.5

Advertisement or Invitation to Bid

1.1.1

Aesthetic Effect

4.2.13

### **Allowances**

**3.8**, 7.3.8

All-risk Insurance

11.3.1, 11.3.1.1

### **Applications for Payment**

4.2.5, 7.3.9, 9.2, **9.3**, 9.4, 9.5.1, 9.6.3, 9.7.1, 9.10,

11.1.3

Approvals

2.1.1, 2.2.2, 2.4, 3.1.3, 3.10.2, 3.12.8, 3.12.9, 3.12.10,  
4.2.7, 9.3.2, 13.5.1

### **Arbitration**

8.3.1, 11.3.10, 13.1.1, 15.3.2, **15.4**

## **ARCHITECT**

**4**

**Architect**, Definition of

### **4.1.1**

Architect, Extent of Authority

2.4.1, 3.12.7, 4.1, 4.2, 5.2, 6.3.1, 7.1.2, 7.3.7, 7.4,  
9.2.1, 9.3.1, 9.4, 9.5, 9.6.3, 9.8, 9.10.1, 9.10.3, 12.1,  
12.2.1, 13.5.1, 13.5.2, 14.2.2, 14.2.4, 15.1.3, 15.2.1

Architect, Limitations of Authority and

Responsibility

2.1.1, 3.12.4, 3.12.8, 3.12.10, 4.1.2, 4.2.1, 4.2.2,  
4.2.3, 4.2.6, 4.2.7, 4.2.10, 4.2.12, 4.2.13, 5.2.1, 7.4.1,  
9.4.2, 9.5.3, 9.6.4, 15.1.3, 15.2

Architect's Additional Services and Expenses

2.4.1, 11.3.1.1, 12.2.1, 13.5.2, 13.5.3, 14.2.4

Architect's Administration of the Contract

3.1.3, 4.2, 3.7.4, 15.2, 9.4.1, 9.5

Architect's Approvals

2.4.1, 3.1.3, 3.5.1, 3.10.2, 4.2.7

Architect's Authority to Reject Work

3.5.1, 4.2.6, 12.1.2, 12.2.1

Architect's Copyright

1.1.7, 1.5

Architect's Decisions

3.7.4, 4.2.6, 4.2.7, 4.2.11, 4.2.12, 4.2.13, 4.2.14,  
6.3.1, 7.3.7, 7.3.9, 8.1.3, 8.3.1, 9.2.1, 9.4.1, 9.5, 9.8.4,  
9.9.1, 13.5.2, 15.2, 15.3

Architect's Inspections

3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 13.5

Architect's Instructions

3.2.4, 3.3.1, 4.2.6, 4.2.7, 13.5.2

Architect's Interpretations

4.2.11, 4.2.12

Architect's Project Representative

4.2.10

Architect's Relationship with Contractor

1.1.2, 1.5, 3.1.3, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.4.2, 3.5.1,  
3.7.4, 3.7.5, 3.9.2, 3.9.3, 3.10, 3.11, 3.12, 3.16, 3.18,  
4.1.2, 4.1.3, 4.2, 5.2, 6.2.2, 7, 8.3.1, 9.2, 9.3, 9.4, 9.5,  
9.7, 9.8, 9.9, 10.2.6, 10.3, 11.3.7, 12, 13.4.2, 13.5,  
15.2

Architect's Relationship with Subcontractors

1.1.2, 4.2.3, 4.2.4, 4.2.6, 9.6.3, 9.6.4, 11.3.7

Architect's Representations

9.4.2, 9.5.1, 9.10.1

Architect's Site Visits

3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.5.1, 9.9.2, 9.10.1, 13.5

Asbestos

10.3.1

Attorneys' Fees

3.18.1, 9.10.2, 10.3.3

Award of Separate Contracts

6.1.1, 6.1.2

### **Award of Subcontracts and Other Contracts for Portions of the Work**

## **5.2**

### **Basic Definitions**

## **1.1**

Bidding Requirements

1.1.1, 5.2.1, 11.4.1

Binding Dispute Resolution

9.7.1, 11.3.9, 11.3.10, 13.1.1, 15.2.5, 15.2.6.1, 15.3.1,  
15.3.2, 15.4.1

### **Boiler and Machinery Insurance**

## **11.3.2**

Bonds, Lien

7.3.7.4, 9.10.2, 9.10.3

### **Bonds, Performance, and Payment**

7.3.7.4, 9.6.7, 9.10.3, 11.3.9, **11.4**



Building Permit

3.7.1

Building Security Features

2.2.6

## **Capitalization**

1.3

Certificate of Substantial Completion

9.8.3, 9.8.4, 9.8.5

## **Certificates for Payment**

4.2.1, 4.2.5, 4.2.9, 9.3.3, 9.4, 9.5, 9.6.1, 9.6.6, 9.7.1,

9.10.1, 9.10.3, 14.1.1.3, 14.2.4, 15.1.3

Certificates of Inspection, Testing or Approval

13.5.4

Certificates of Insurance

9.10.2, 11.1.3

## **Change Orders**

1.1.1, 2.4.1, 3.4.2, 3.7.4, 3.8.2.3, 3.11.1, 3.12.8, 4.2.8,

5.2.3, 7.1.2, 7.1.3, 7.2, 7.3.2, 7.3.6, 7.3.9, 7.3.10,

8.3.1, 9.3.1.1, 9.10.3, 10.3.2, 11.3.1.2, 11.3.4, 11.3.9,

12.1.2, 15.1.3

**Change Orders, Definition of**

7.2.1

## **CHANGES IN THE WORK**

2.2.1, 3.11, 4.2.8, 7, 7.2.1, 7.3.1, 7.4, 7.4.1, 8.3.1,

9.3.1.1, 11.3.9

**Claims, Definition of**

15.1.1

## **CLAIMS AND DISPUTES**

3.2.4, 6.1.1, 6.3.1, 7.3.9, 9.3.3, 9.10.4, 10.3.3, 15,

15.4

Claims and Timely Assertion of Claims

15.4.1

## **Claims for Additional Cost**

3.2.4, 3.7.4, 6.1.1, 7.3.9, 10.3.2, 15.1.4

## **Claims for Additional Time**

3.2.4, 3.7.4.6.1.1, 8.3.2, 10.3.2, 15.1.5

## **Concealed or Unknown Conditions, Claims for**

3.7.4

Claims for Damages

3.2.4, 3.18, 6.1.1, 8.3.3, 9.5.1, 9.6.7, 10.3.3, 11.1.1,

11.3.5, 11.3.7, 14.1.3, 14.2.4, 15.1.6

Claims Subject to Arbitration

15.3.1, 15.4.1

## **Cleaning Up**

3.15, 6.3

Commencement of the Work, Conditions Relating to

2.2.1, 3.2.2, 3.4.1, 3.7.1, 3.10.1, 3.12.6, 5.2.1, 5.2.3,

6.2.2, 8.1.2, 8.2.2, 8.3.1, 11.1, 11.3.1, 11.3.6, 11.4.1,

15.1.4

**Commencement of the Work, Definition of**

8.1.2

## **Communications Facilitating Contract**

### **Administration**

3.9.1, 4.2.4

Completion, Conditions Relating to

3.4.1, 3.11, 3.15, 4.2.2, 4.2.9, 8.2, 9.4.2, 9.8, 9.9.1,

9.10, 12.2, 13.7, 14.1.2

## **COMPLETION, PAYMENTS AND**

9

Completion, Substantial

4.2.9, 8.1.1, 8.1.3, 8.2.3, 9.4.2, 9.8, 9.9.1, 9.10.3,

12.2, 13.7

Compliance with Laws

1.6.1, 3.2.3, 3.6, 3.7, 3.12.10, 3.13, 4.1.1, 9.6.4,

10.2.2, 11.1, 11.3, 13.1, 13.4, 13.5.1, 13.5.2, 13.6,

14.1.1, 14.2.1.3, 15.2.8, 15.4.2, 15.4.3

Concealed or Unknown Conditions

3.7.4, 4.2.8, 8.3.1, 10.3

Conditions of the Contract

1.1.1, 6.1.1, 6.1.4

Consent, Written

3.4.2, 3.7.4, 3.12.8, 3.14.2, 4.1.2, 9.3.2, 9.8.5, 9.9.1,

9.10.2, 9.10.3, 11.3.1, 13.2, 13.4.2, 15.4.4.2

## **Consolidation or Joinder**

15.4.4

## **CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS**

1.1.4, 6

**Construction Change Directive, Definition of**

7.3.1

## **Construction Change Directives**

1.1.1, 3.4.2, 3.12.8, 4.2.8, 7.1.1, 7.1.2, 7.1.3, 7.3,

9.3.1.1

Construction Schedules, Contractor's

3.10, 3.12.1, 3.12.2, 6.1.3, 15.1.5.2

## **Contingent Assignment of Subcontracts**

5.4, 14.2.2.2

## **Continuing Contract Performance**

15.1.3

**Contract, Definition of**

1.1.2

## **CONTRACT, TERMINATION OR SUSPENSION OF THE**

5.4.1.1, 11.3.9, 14

Contract Administration

3.1.3, 4, 9.4, 9.5

Contract Award and Execution, Conditions Relating  
to

3.7.1, 3.10, 5.2, 6.1, 11.1.3, 11.3.6, 11.4.1

## **Contract Documents, The**

1.1.1

Contract Documents, Copies Furnished and Use of

1.5.2, 2.2.5, 5.3

**Contract Documents, Definition of**

1.1.1

## **Contract Sum**

3.7.4, 3.8, 5.2.3, 7.2, 7.3, 7.4, 9.1, 9.4.2, 9.5.1.4,

9.6.7, 9.7, 10.3.2, 11.3.1, 14.2.4, 14.3.2, 15.1.4,

15.2.5

**Contract Sum, Definition of**

9.1

Contract Time  
3.7.4, 3.7.5, 3.10.2, 5.2.3, 7.2.1.3, 7.3.1, 7.3.5, 7.4,  
8.1.1, 8.2.1, 8.3.1, 9.5.1, 9.7.1, 10.3.2, 12.1.1, 14.3.2,  
15.1.5.1, 15.2.5

**Contract Time, Definition of**

**8.1.1**

## **CONTRACTOR**

**3**

**Contractor, Definition of**

**3.1, 6.1.2**

**Contractor's Construction Schedules**

**3.10, 3.12.1, 3.12.2, 6.1.3, 15.1.5.2**

**Contractor's Employees**

**3.3.2, 3.4.3, 3.8.1, 3.9, 3.18.2, 4.2.3, 4.2.6, 10.2, 10.3,  
11.1.1, 11.3.7, 14.1, 14.2.1.1,**

**Contractor's Liability Insurance**

**11.1**

**Contractor's Relationship with Separate Contractors  
and Owner's Forces**

**3.12.5, 3.14.2, 4.2.4, 6, 11.3.7, 12.1.2, 12.2.4**

**Contractor's Relationship with Subcontractors**

**1.2.2, 3.3.2, 3.18.1, 3.18.2, 5, 9.6.2, 9.6.7, 9.10.2,  
11.3.1.2, 11.3.7, 11.3.8**

**Contractor's Relationship with the Architect**

**1.1.2, 1.5, 3.1.3, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.4.2, 3.5.1,  
3.7.4, 3.10, 3.11, 3.12, 3.16, 3.18, 4.1.3, 4.2, 5.2,  
6.2.2, 7, 8.3.1, 9.2, 9.3, 9.4, 9.5, 9.7, 9.8, 9.9, 10.2.6,  
10.3, 11.3.7, 12, 13.5, 15.1.2, 15.2.1**

**Contractor's Representations**

**3.2.1, 3.2.2, 3.5.1, 3.12.6, 6.2.2, 8.2.1, 9.3.3, 9.8.2**

**Contractor's Responsibility for Those Performing the  
Work**

**3.3.2, 3.18, 5.3.1, 6.1.3, 6.2, 9.5.1, 10.2.8**

**Contractor's Review of Contract Documents**

**3.2**

**Contractor's Right to Stop the Work**

**9.7**

**Contractor's Right to Terminate the Contract**

**14.1, 15.1.6**

**Contractor's Submittals**

**3.10, 3.11, 3.12.4, 4.2.7, 5.2.1, 5.2.3, 9.2, 9.3, 9.8.2,  
9.8.3, 9.9.1, 9.10.2, 9.10.3, 11.1.3, 11.4.2**

**Contractor's Superintendent**

**3.9, 10.2.6**

**Contractor's Supervision and Construction**

**Procedures**

**1.2.2, 3.3, 3.4, 3.12.10, 4.2.2, 4.2.7, 6.1.3, 6.2.4,  
7.1.3, 7.3.5, 7.3.7, 8.2, 10, 12, 14, 15.1.3**

**Contractual Liability Insurance**

**11.1.1.8, 11.2**

**Coordination and Correlation**

**1.2, 3.2.1, 3.3.1, 3.10, 3.12.6, 6.1.3, 6.2.1**

**Copies Furnished of Drawings and Specifications**

**1.5, 2.2.5, 3.11**

**Copyrights**

**1.5, 3.17**

**Correction of Work**

**2.3, 2.4, 3.7.3, 9.4.2, 9.8.2, 9.8.3, 9.9.1, 12.1.2, 12.2**

**Correlation and Intent of the Contract Documents  
1.2**

**Cost, Definition of**

**7.3.7**

**Costs**

**2.4.1, 3.2.4, 3.7.3, 3.8.2, 3.15.2, 5.4.2, 6.1.1, 6.2.3,  
7.3.3.3, 7.3.7, 7.3.8, 7.3.9, 9.10.2, 10.3.2, 10.3.6,  
11.3, 12.1.2, 12.2.1, 12.2.4, 13.5, 14**

**Cutting and Patching**

**3.14, 6.2.5**

**Damage to Construction of Owner or Separate  
Contractors**

**3.14.2, 6.2.4, 10.2.1.2, 10.2.5, 10.4, 11.1.1, 11.3,  
12.2.4**

**Damage to the Work**

**3.14.2, 9.9.1, 10.2.1.2, 10.2.5, 10.4.1, 11.3.1, 12.2.4**

**Damages, Claims for**

**3.2.4, 3.18, 6.1.1, 8.3.3, 9.5.1, 9.6.7, 10.3.3, 11.1.1,  
11.3.5, 11.3.7, 14.1.3, 14.2.4, 15.1.6**

**Damages for Delay**

**6.1.1, 8.3.3, 9.5.1.6, 9.7, 10.3.2**

**Date of Commencement of the Work, Definition of  
8.1.2**

**Date of Substantial Completion, Definition of  
8.1.3**

**Day, Definition of**

**8.1.4**

**Decisions of the Architect**

**3.7.4, 4.2.6, 4.2.7, 4.2.11, 4.2.12, 4.2.13, 15.2, 6.3,  
7.3.7, 7.3.9, 8.1.3, 8.3.1, 9.2.1, 9.4, 9.5.1, 9.8.4, 9.9.1,  
13.5.2, 14.2.2, 14.2.4, 15.1, 15.2**

**Decisions to Withhold Certification**

**9.4.1, 9.5, 9.7, 14.1.1.3**

**Defective or Nonconforming Work, Acceptance,  
Rejection and Correction of**

**2.3.1, 2.4.1, 3.5.1, 4.2.6, 6.2.5, 9.5.1, 9.5.2, 9.6.6,  
9.8.2, 9.9.3, 9.10.4, 12.2.1**

**Defective Work, Definition of**

**3.5.1**

**Definitions**

**1.1, 2.1.1, 3.1.1, 3.5.1, 3.12.1, 3.12.2, 3.12.3, 4.1.1,  
15.1.1, 5.1, 6.1.2, 7.2.1, 7.3.1, 8.1, 9.1, 9.8.1**

**Delays and Extensions of Time**

**3.2., 3.7.4, 5.2.3, 7.2.1, 7.3.1, 7.4.1, 8.3, 9.5.1, 9.7.1,  
10.3.2, 10.4.1, 14.3.2, 15.1.5, 15.2.5**

**Disputes**

**6.3.1, 7.3.9, 15.1, 15.2**

**Documents and Samples at the Site**

**3.11**

**Drawings, Definition of**

**1.1.5**

**Drawings and Specifications, Use and Ownership of  
3.11**

**Effective Date of Insurance**

**8.2.2, 11.1.2**

## **Emergencies**

**10.4**, 14.1.1.2, 15.1.4

Employees, Contractor's

3.3.2, 3.4.3, 3.8.1, 3.9, 3.18.2, 4.2.3, 4.2.6, 10.2, 10.3.3, 11.1.1, 11.3.7, 14.1, 14.2.1.1

Equipment, Labor, Materials or

1.1.3, 1.1.6, 3.4, 3.5.1, 3.8.2, 3.8.3, 3.12, 3.13.1, 3.15.1, 4.2.6, 4.2.7, 5.2.1, 6.2.1, 7.3.7, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2, 10.2.1, 10.2.4, 14.2.1.1, 14.2.1.2

Execution and Progress of the Work

1.1.3, 1.2.1, 1.2.2, 2.2.3, 2.2.5, 3.1, 3.3.1, 3.4.1, 3.5.1, 3.7.1, 3.10.1, 3.12, 3.14, 4.2, 6.2.2, 7.1.3, 7.3.5, 8.2, 9.5.1, 9.9.1, 10.2, 10.3, 12.2, 14.2, 14.3.1, 15.1.3

Extensions of Time

3.2.4, 3.7.4, 5.2.3, 7.2.1, 7.3, 7.4.1, 9.5.1, 9.7.1, 10.3.2, 10.4.1, 14.3, 15.1.5, 15.2.5

**Failure of Payment**

9.5.1.3, **9.7**, 9.10.2, 13.6, 14.1.1.3, 14.2.1.2

Faulty Work

(See Defective or Nonconforming Work)

**Final Completion and Final Payment**

4.2.1, 4.2.9, 9.8.2, **9.10**, 11.1.2, 11.1.3, 11.3.1, 11.3.5, 12.3.1, 14.2.4, 14.4.3

Financial Arrangements, Owner's

2.2.1, 13.2.2, 14.1.1.4

Fire and Extended Coverage Insurance

11.3.1.1

## **GENERAL PROVISIONS**

**1**

**Governing Law**

**13.1**

Guarantees (See Warranty)

**Hazardous Materials**

10.2.4, **10.3**

Identification of Subcontractors and Suppliers

5.2.1

**Indemnification**

3.17.1, **3.18**, 9.10.2, 10.3.3, 10.3.5, 10.3.6, 11.3.1.2, 11.3.7

**Information and Services Required of the Owner**

2.1.2, **2.2**, 3.2.2, 3.12.4, 3.12.10, 6.1.3, 6.1.4, 6.2.5, 9.6.1, 9.6.4, 9.9.2, 9.10.3, 10.3.3, 11.2, 11.4, 13.5.1, 13.5.2, 14.1.1.4, 14.1.4, 15.1.3

**Initial Decision**

**15.2**

**Initial Decision Maker, Definition of**

1.1.8

Initial Decision Maker, Decisions

14.2.2, 14.2.4, 15.2.1, 15.2.2, 15.2.3, 15.2.4, 15.2.5

Initial Decision Maker, Extent of Authority

14.2.2, 14.2.4, 15.1.3, 15.2.1, 15.2.2, 15.2.3, 15.2.4, 15.2.5

**Injury or Damage to Person or Property**

**10.2.8**, 10.4.1

Inspections

3.1.3, 3.3.3, 3.7.1, 4.2.2, 4.2.6, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 12.2.1, 13.5

Instructions to Bidders

1.1.1

Instructions to the Contractor

3.2.4, 3.3.1, 3.8.1, 5.2.1, 7, 8.2.2, 12, 13.5.2

**Instruments of Service, Definition of**

**1.1.7**

Insurance

3.18.1, 6.1.1, 7.3.7, 9.3.2, 9.8.4, 9.9.1, 9.10.2, **11**

**Insurance, Boiler and Machinery**

**11.3.2**

**Insurance, Contractor's Liability**

**11.1**

Insurance, Effective Date of

8.2.2, 11.1.2

**Insurance, Loss of Use**

**11.3.3**

**Insurance, Owner's Liability**

**11.2**

**Insurance, Property**

10.2.5, **11.3**

Insurance, Stored Materials

9.3.2, 11.4.1.4

## **INSURANCE AND BONDS**

**11**

Insurance Companies, Consent to Partial Occupancy

9.9.1, 11.4.1.5

Insurance Companies, Settlement with

11.4.10

Intent of the Contract Documents

1.2.1, 4.2.7, 4.2.12, 4.2.13, 7.4

**Interest**

**13.6**

**Interpretation**

1.2.3, **1.4**, 4.1.1, 5.1, 6.1.2, 15.1.1

Interpretations, Written

4.2.11, 4.2.12, 15.1.4

Judgment on Final Award

15.4.2

**Labor and Materials, Equipment**

1.1.3, 1.1.6, **3.4**, 3.5.1, 3.8.2, 3.8.3, 3.12, 3.13, 3.15.1, 4.2.6, 4.2.7, 5.2.1, 6.2.1, 7.3.7, 9.3.2, 9.3.3, 9.5.1.3, 9.10.2, 10.2.1, 10.2.4, 14.2.1.1, 14.2.1.2

Labor Disputes

8.3.1

Laws and Regulations

1.5, 3.2.3, 3.6, 3.7, 3.12.10, 3.13.1, 4.1.1, 9.6.4, 9.9.1, 10.2.2, 11.1.1, 11.3, 13.1.1, 13.4, 13.5.1, 13.5.2, 13.6.1, 14, 15.2.8, 15.4

Liens

2.1.2, 9.3.3, 9.10.2, 9.10.4, 15.2.8

Limitations, Statutes of

12.2.5, 13.7, 15.4.1.1

Limitations of Liability

2.3.1, 3.2.2, 3.5.1, 3.12.10, 3.17.1, 3.18.1, 4.2.6, 4.2.7, 4.2.12, 6.2.2, 9.4.2, 9.6.4, 9.6.7, 10.2.5, 10.3.3, 11.1.2, 11.2, 11.3.7, 12.2.5, 13.4.2

Limitations of Time  
2.1.2, 2.2, 2.4, 3.2.2, 3.10, 3.11, 3.12.5, 3.15.1, 4.2.7,  
5.2, 5.3.1, 5.4.1, 6.2.4, 7.3, 7.4, 8.2, 9.2.1, 9.3.1,  
9.3.3, 9.4.1, 9.5, 9.6, 9.7.1, 9.8, 9.9, 9.10, 11.1.3,  
11.3.1.5, 11.3.6, 11.3.10, 12.2, 13.5, 13.7, 14, 15

#### **Loss of Use Insurance**

##### **11.3.3**

#### **Material Suppliers**

1.5, 3.12.1, 4.2.4, 4.2.6, 5.2.1, 9.3, 9.4.2, 9.6, 9.10.5

#### **Materials, Hazardous**

##### **10.2.4, 10.3**

#### **Materials, Labor, Equipment and**

1.1.3, 1.1.6, 1.5.1, 3.4.1, 3.5.1, 3.8.2, 3.8.3, 3.12,  
3.13.1, 3.15.1, 4.2.6, 4.2.7, 5.2.1, 6.2.1, 7.3.7, 9.3.2,  
9.3.3, 9.5.1.3, 9.10.2, 10.2.1.2, 10.2.4, 14.2.1.1,  
14.2.1.2

#### **Means, Methods, Techniques, Sequences and Procedures of Construction**

3.3.1, 3.12.10, 4.2.2, 4.2.7, 9.4.2

#### **Mechanic's Lien**

2.1.2, 15.2.8

#### **Mediation**

8.3.1, 10.3.5, 10.3.6, 15.2.1, 15.2.5, 15.2.6, **15.3**,  
15.4.1

#### **Minor Changes in the Work**

1.1.1, 3.12.8, 4.2.8, 7.1, **7.4**

#### **MISCELLANEOUS PROVISIONS**

##### **13**

#### **Modifications, Definition of**

##### **1.1.1**

#### **Modifications to the Contract**

1.1.1, 1.1.2, 3.11, 4.1.2, 4.2.1, 5.2.3, 7, 8.3.1, 9.7.1,  
10.3.2, 11.3.1

#### **Mutual Responsibility**

##### **6.2**

#### **Nonconforming Work, Acceptance of**

9.6.6, 9.9.3, **12.3**

#### **Nonconforming Work, Rejection and Correction of**

2.3.1, 2.4.1, 3.5.1, 4.2.6, 6.2.4, 9.5.1, 9.8.2, 9.9.3,  
9.10.4, 12.2.1

#### **Notice**

2.2.1, 2.3.1, 2.4.1, 3.2.4, 3.3.1, 3.7.2, 3.12.9, 5.2.1,  
9.7.1, 9.10, 10.2.2, 11.1.3, 11.4.6, 12.2.2.1, 13.3,  
13.5.1, 13.5.2, 14.1, 14.2, 15.2.8, 15.4.1

#### **Notice, Written**

2.3.1, 2.4.1, 3.3.1, 3.9.2, 3.12.9, 3.12.10, 5.2.1, 9.7.1,  
9.10, 10.2.2, 10.3, 11.1.3, 11.3.6, 12.2.2.1, **13.3**, 14,  
15.2.8, 15.4.1

#### **Notice of Claims**

3.7.4, 4.5, 10.2.8, **15.1.2**, 15.4

#### **Notice of Testing and Inspections**

13.5.1, 13.5.2

#### **Observations, Contractor's**

3.2, 3.7.4

#### **Occupancy**

2.2.2, 9.6.6, 9.8, 11.3.1.5

#### **Orders, Written**

1.1.1, 2.3, 3.9.2, 7, 8.2.2, 11.3.9, 12.1, 12.2.2.1,  
13.5.2, 14.3.1

#### **OWNER**

##### **2**

#### **Owner, Definition of**

##### **2.1.1**

#### **Owner, Information and Services Required of the**

2.1.2, **2.2**, 3.2.2, 3.12.10, 6.1.3, 6.1.4, 6.2.5, 9.3.2,  
9.6.1, 9.6.4, 9.9.2, 9.10.3, 10.3.3, 11.2, 11.3, 13.5.1,  
13.5.2, 14.1.1.4, 14.1.4, 15.1.3

#### **Owner's Authority**

1.5, 2.1.1, 2.3.1, 2.4.1, 3.4.2, 3.8.1, 3.12.10, 3.14.2,  
4.1.2, 4.1.3, 4.2.4, 4.2.9, 5.2.1, 5.2.4, 5.4.1, 6.1, 6.3.1,  
7.2.1, 7.3.1, 8.2.2, 8.3.1, 9.3.1, 9.3.2, 9.5.1, 9.6.4,  
9.9.1, 9.10.2, 10.3.2, 11.1.3, 11.3.3, 11.3.10, 12.2.2,  
12.3.1, 13.2.2, 14.3, 14.4, 15.2.7

#### **Owner's Financial Capability**

2.2.1, 13.2.2, 14.1.1.4

#### **Owner's Liability Insurance**

##### **11.2**

#### **Owner's Loss of Use Insurance**

##### **11.3.3**

#### **Owner's Relationship with Subcontractors**

1.1.2, 5.2, 5.3, 5.4, 9.6.4, 9.10.2, 14.2.2

#### **Owner's Right to Carry Out the Work**

2.4, 14.2.2

#### **Owner's Right to Clean Up**

##### **6.3**

#### **Owner's Right to Perform Construction and to Award Separate Contracts**

##### **6.1**

#### **Owner's Right to Stop the Work**

##### **2.3**

#### **Owner's Right to Suspend the Work**

14.3

#### **Owner's Right to Terminate the Contract**

14.2

#### **Ownership and Use of Drawings, Specifications and Other Instruments of Service**

1.1.1, 1.1.6, 1.1.7, **1.5**, 2.2.5, 3.2.2, 3.11.1, 3.17.1,  
4.2.12, 5.3.1

#### **Partial Occupancy or Use**

9.6.6, **9.9**, 11.3.1.5

#### **Patching, Cutting and**

**3.14**, 6.2.5

#### **Patents**

3.17

#### **Payment, Applications for**

4.2.5, 7.3.9, 9.2.1, **9.3**, 9.4, 9.5, 9.6.3, 9.7.1, 9.8.5,  
9.10.1, 14.2.3, 14.2.4, 14.4.3

#### **Payment, Certificates for**

4.2.5, 4.2.9, 9.3.3, **9.4**, 9.5, 9.6.1, 9.6.6, 9.7.1, 9.10.1,  
9.10.3, 13.7, 14.1.1.3, 14.2.4

#### **Payment, Failure of**

9.5.1.3, **9.7**, 9.10.2, 13.6, 14.1.1.3, 14.2.1.2

Payment, Final  
4.2.1, 4.2.9, 9.8.2, 9.10, 11.1.2, 11.1.3, 11.4.1, 11.4.5,  
12.3.1, 13.7, 14.2.4, 14.4.3

**Payment Bond, Performance Bond and**  
7.3.7.4, 9.6.7, 9.10.3, 11.4.9, 11.4

**Payments, Progress**  
9.3, 9.6, 9.8.5, 9.10.3, 13.6, 14.2.3, 15.1.3

**PAYMENTS AND COMPLETION**  
9

Payments to Subcontractors  
5.4.2, 9.5.1.3, 9.6.2, 9.6.3, 9.6.4, 9.6.7, 11.4.8,  
14.2.1.2

PCB  
10.3.1

**Performance Bond and Payment Bond**  
7.3.7.4, 9.6.7, 9.10.3, 11.4.9, 11.4

**Permits, Fees, Notices and Compliance with Laws**  
2.2.2, 3.7, 3.13, 7.3.7.4, 10.2.2

**PERSONS AND PROPERTY, PROTECTION**  
**OF**  
10

Polychlorinated Biphenyl  
10.3.1

**Prevailing Wage Rate Requirements** 9.11.3

**Product Data**, Definition of  
3.12.2

**Product Data and Samples, Shop Drawings**  
3.11, 3.12, 4.2.7

**Progress and Completion**  
4.2.2, 8.2, 9.8, 9.9.1, 14.1.4, 15.1.3

**Progress Payments**  
9.3, 9.6, 9.8.5, 9.10.3, 13.6, 14.2.3, 15.1.3

**Project**, Definition of the  
1.1.4

**Project Management Software**  
1.7

Project Representatives  
4.2.10

**Property Insurance**  
10.2.5, 11.3

**PROTECTION OF PERSONS AND PROPERTY**  
10

Recycling and Waste Management  
3.4.5

Regulations and Laws  
1.5, 3.2.3, 3.6, 3.7, 3.12.10, 3.13, 4.1.1, 9.6.4, 9.9.1,  
10.2.2, 11.1, 11.4, 13.1, 13.4, 13.5.1, 13.5.2, 13.6, 14,  
15.2.8, 15.4

Rejection of Work  
3.5.1, 4.2.6, 12.2.1

Releases and Waivers of Liens  
9.10.2

Representations  
3.2.1, 3.5.1, 3.12.6, 6.2.2, 8.2.1, 9.3.3, 9.4.2, 9.5.1,  
9.8.2, 9.10.1

Representatives  
2.1.1, 3.1.1, 3.9, 4.1.1, 4.2.1, 4.2.2, 4.2.10, 5.1.1,  
5.1.2, 13.2.1

Responsibility for Those Performing the Work  
3.3.2, 3.18, 4.2.3, 5.3.1, 6.1.3, 6.2, 6.3, 9.5.1, 10

Retainage  
9.3.1, 9.6.2, 9.8.5, 9.9.1, 9.10.2, 9.10.3

**Review of Contract Documents and Field**  
**Conditions by Contractor**

3.2, 3.12.7, 6.1.3  
Review of Contractor's Submittals by Owner and  
Architect  
3.10.1, 3.10.2, 3.11, 3.12, 4.2, 5.2, 6.1.3, 9.2, 9.8.2  
Review of Shop Drawings, Product Data and  
Samples by Contractor  
3.12

**Rights and Remedies**  
1.1.2, 2.3, 2.4, 3.5.1, 3.7.4, 3.15.2, 4.2.6, 4.5, 5.3, 5.4,  
6.1, 6.3, 7.3.1, 8.3, 9.5.1, 9.7, 10.2.5, 10.3, 12.2.2,  
12.2.4, 13.4, 14, 15.4

**Royalties, Patents and Copyrights**  
3.17

Rules and Notices for Arbitration  
15.4.1

**Safety of Persons and Property**  
10.2, 10.4

**Safety Precautions and Programs**  
3.3.1, 4.2.2, 4.2.7, 5.3.1, 10.1, 10.2, 10.4

**Samples**, Definition of  
3.12.3

**Samples, Shop Drawings, Product Data and**  
3.11, 3.12, 4.2.7

**Samples at the Site, Documents and**  
3.11

**Schedule of Values**  
9.2, 9.3.1

Schedules, Construction  
3.10, 3.12.1, 3.12.2, 6.1.3, 15.1.5.2

Separate Contracts and Contractors  
1.1.4, 3.12.5, 3.14.2, 4.2.4, 4.2.7, 6, 8.3.1, 11.4.7,  
12.1.2

**Shop Drawings**, Definition of  
3.12.1

**Shop Drawings, Product Data and Samples**  
3.11, 3.12, 4.2.7

**Site, Use of**  
3.13, 6.1.1, 6.2.1

Site Inspections  
3.2.2, 3.3.3, 3.7.1, 3.7.4, 4.2, 9.4.2, 9.10.1, 13.5

Site Visits, Architect's  
3.7.4, 4.2.2, 4.2.9, 9.4.2, 9.5.1, 9.9.2, 9.10.1, 13.5

Special Inspections and Testing  
4.2.6, 12.2.1, 13.5

**Specifications**, Definition of the  
1.1.6

**Specifications, The**  
1.1.1, 1.1.6, 1.2.2, 1.5, 3.11, 3.12.10, 3.17, 4.2.14



Statute of Limitations

13.7, 15.4.1.1

Stopping the Work

2.3, 9.7, 10.3, 14.1

Stored Materials

6.2.1, 9.3.2, 10.2.1.2, 10.2.4, 11.4.1.4

**Subcontractor**, Definition of

**5.1.1**

**SUBCONTRACTORS**

**5**

Subcontractors, Work by

1.2.2, 3.3.2, 3.12.1, 4.2.3, 5.2.3, 5.3, 5.4, 9.3.1.2, 9.6.7

**Subcontractual Relations**

**5.3**, 5.4, 9.3.1.2, 9.6, 9.10, 10.2.1, 11.4.7, 11.4.8, 14.1, 14.2.1

Submittals

3.10, 3.11, 3.12, 4.2.7, 5.2.1, 5.2.3, 7.3.7, 9.2, 9.3, 9.8, 9.9.1, 9.10.2, 9.10.3, 11.1.3

Submittal Schedule

3.10.2, 3.12.5, 4.2.7

**Subrogation, Waivers of**

6.1.1, 11.4.5, **11.3.7**

**Substantial Completion**

4.2.9, 8.1.1, 8.1.3, 8.2.3, 9.4.2, **9.8**, 9.9.1, 9.10.3, 12.2, 13.7

**Substantial Completion**, Definition of

**9.8.1**

Substitution of Subcontractors

5.2.3, 5.2.4

Substitution of Architect

4.1.3

Substitutions of Materials

3.4.2, 3.5.1, 7.3.8

**Sub-subcontractor**, Definition of

**5.1.2**

Subsurface Conditions

3.7.4

**Successors and Assigns**

**13.2**

**Superintendent**

**3.9**, 10.2.6

**Supervision and Construction Procedures**

1.2.2, **3.3**, 3.4, 3.12.10, 4.2.2, 4.2.7, 6.1.3, 6.2.4, 7.1.3, 7.3.7, 8.2, 8.3.1, 9.4.2, 10, 12, 14, 15.1.3

Surety

5.4.1.2, 9.8.5, 9.10.2, 9.10.3, 14.2.2, 15.2.7

Surety, Consent of

9.10.2, 9.10.3

Surveys

2.2.3

**Suspension by the Owner for Convenience**

**14.3**

Suspension of the Work

5.4.2, 14.3

Suspension or Termination of the Contract

5.4.1.1, 11.4.9, 14

**Taxes**

3.6, 3.8.2.1, 7.3.7.4

**Termination by the Contractor**

**14.1**, 15.1.6

**Termination by the Owner for Cause**

5.4.1.1, **14.2**, 15.1.6

**Termination by the Owner for Convenience**

**14.4**

Termination of the Architect

4.1.3

Termination of the Contractor

14.2.2

**TERMINATION OR SUSPENSION OF THE CONTRACT**

**14**

**Tests and Inspections**

3.1.3, 3.3.3, 4.2.2, 4.2.6, 4.2.9, 9.4.2, 9.8.3, 9.9.2, 9.10.1, 10.3.2, 11.4.1.1, 12.2.1, **13.5**

**TIME**

**8**

**Time, Delays and Extensions of**

3.2.4, 3.7.4, 5.2.3, 7.2.1, 7.3.1, 7.4.1, **8.3**, 9.5.1, 9.7.1, 10.3.2, 10.4.1, 14.3.2, 15.1.5, 15.2.5

Time Limits

2.1.2, 2.2, 2.4, 3.2.2, 3.10, 3.11, 3.12.5, 3.15.1, 4.2, 4.4, 4.5, 5.2, 5.3, 5.4, 6.2.4, 7.3, 7.4, 8.2, 9.2, 9.3.1, 9.3.3, 9.4.1, 9.5, 9.6, 9.7, 9.8, 9.9, 9.10, 11.1.3, 11.4.1.5, 11.4.6, 11.4.10, 12.2, 13.5, 13.7, 14, 15.1.2, 15.4

**Time Limits on Claims**

3.7.4, 10.2.8, **13.7**, 15.1.2

Title to Work

9.3.2, 9.3.3

**Transmission of Data in Digital Form**

**1.6**

**UNCOVERING AND CORRECTION OF WORK**

**12**

**Uncovering of Work**

**12.1**

Unforeseen Conditions, Concealed or Unknown

3.7.4, 8.3.1, 10.3

Unit Prices

7.3.3.2, 7.3.4

Use of Documents

1.1.1, 1.5, 2.2.5, 3.12.6, 5.3

**Use of Site**

**3.13**, 6.1.1, 6.2.1

**Values, Schedule of**

**9.2**, 9.3.1

Waiver of Claims by the Architect

13.4.2

Waiver of Claims by the Contractor

9.10.5, 11.4.7, 13.4.2, 15.1.6

Waiver of Claims by the Owner

9.9.3, 9.10.3, 9.10.4, 11.4.3, 11.4.5, 11.4.7, 12.2.2.1, 13.4.2, 14.2.4, 15.1.6

Waiver of Consequential Damages

14.2.4, 15.1.6

Waiver of Liens

9.10.2, 9.10.4

**Waivers of Subrogation**

6.1.1, 11.4.5, 11.3.7

**Warranty**

3.5, 4.2.9, 9.3.3, 9.8.4, 9.9.1, 9.10.4, 12.2.2, 13.7.1

Weather Delays

15.1.5.2

**Work, Definition of**

1.1.3

Written Consent

1.5.2, 3.4.2, 3.7.4, 3.12.8, 3.14.2, 4.1.2, 9.3.2, 9.8.5,  
9.9.1, 9.10.2, 9.10.3, 11.4.1, 13.2, 13.4.2, 15.4.4.2

Written Interpretations

4.2.11, 4.2.12

Written Notice

2.3, 2.4, 3.3.1, 3.9, 3.12.9, 3.12.10, 5.2.1, 8.2.2, 9.7,  
9.10, 10.2.2, 10.3, 11.1.3, 11.4.6, 12.2.2, 12.2.4, 13.3,  
14, 15.4.1

Written Orders

1.1.1, 2.3, 3.9, 7, 8.2.2, 11.4.9, 12.1, 12.2, 13.5.2,  
14.3.1, 15.1.2

## **ARTICLE 1 GENERAL PROVISIONS**

### **§ 1.1 BASIC DEFINITIONS**

#### **§ 1.1.1 THE CONTRACT DOCUMENTS**

The Contract Documents (hereinafter Contract, Contract Documents or Agreement) consist of the Agreement between the Owner and Contractor, the Payment and Performance Bond, the Corporate Acknowledgement or Individual and Co partnership Acknowledgement, or Limited Liability Acknowledgement, the General, Supplementary and Special Conditions of the Contract, drawings, specifications, bidding documents, addenda, other documents listed in the Agreement, and modifications issued and duly authorized after execution of the agreements.

.1.a. For purposes of this document, the term "Architect" shall mean "Architect or Engineer of Record.

.1.b. For purposes of this document the term "Change Order" shall be shall be defined as "Supplemental Agreement"..

#### **§ 1.1.2 THE CONTRACT**

The Contract Documents form the Contract for Construction. The Contract represents the entire integrated agreement between the parties hereto and supersedes prior negotiations, representations, agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect, (2) between the Owner and a Subcontractor or a sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants or (4) between any persons or entities other than the Owner and the Contractor. The Architect shall however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

#### **§ 1.1.3 THE WORK**

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

#### **§ 1.1.4 THE PROJECT**

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner and by separate contractors.

#### **§ 1.1.5 THE DRAWINGS**

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.

#### **§ 1.1.6 THE SPECIFICATIONS**

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

#### **§ 1.1.7 INSTRUMENTS OF SERVICE**

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.7.1. The Project Manual is a volume assembled for the Work which includes bidding requirements, sample forms, General Conditions of the Contract and Specifications or other Instruments of Service.

#### **§ 1.1.8 INITIAL DECISION MAKER – NOT USED**

#### **§ 1.1.9 BIDDING DOCUMENTS**

The Bidding Documents are the advertisement for bids, the instructions to bidders, sample forms, the Contractor's bid and addenda relating to any of these.

#### **§1.1.10 ADDENDUM OR ADDENDA**

The addendum or addenda are any written changes, bulletins, revisions or clarifications of the Contract Documents which have been duly issued by the Architect to prospective bidders prior to the time of the Owner receiving bid proposals.

#### **§1.1.11 MODIFICATION**

A modification is (1) a Change Order (Supplemental Agreement), (2) a Construction Change Directive, (3) or a written order for a - change in the work issued by the Architect and approved by Owner, pursuant to Article 7.4 or a written order for a change in the work or contract issued by the Owner..pursuant to Article 7.4.

### **§ 1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS**

**§ 1.2.1** The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results. In the event of an inconsistency between the drawings and specifications, or within either, where the inconsistency is not clarified by addendum, the better quality or greater quantity of work shall be required as determined by the Architect. Addenda and modifications of the Contract Documents, as defined in Section 1.1.10 and 1.1.11 shall take precedence over the original Contract Documents.

**§ 1.2.2** Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

**§ 1.2.3** Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

### **§ 1.3 CAPITALIZATION**

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles or (3) the titles of other documents published by the American Institute of Architects.

### **§ 1.4 INTERPRETATION**

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

### **§ 1.5 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE**

**§ 1.5.1** Any and all documents produced for the State become the property of the State and the State therefore maintains any copyright on these documents. The Contract Documents, in whole or in part, and copies thereof, are to be used by the Contractor only in respect to this project and shall not be used by the Contractor for any other purpose.

**§ 1.5.2** The Contractor, Subcontractors, Sub-subcontractors and material or equipment suppliers are authorized to use and reproduce the Instruments of Service provided to them solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers may not use the Instruments of Service on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner, Architect and the Architect's consultants.

### **§ 1.6 TRANSMISSION OF DATA IN DIGITAL FORM**

If the parties intend to transmit Instruments of Service or any other information or documentation in digital form, they shall establish necessary protocols governing such transmissions, unless otherwise already provided in the Agreement or the Contract Documents.

### **§ 1.7 USE OF STATE PROJECT MANAGEMENT SOFTWARE**

The Owner may, at its sole option, direct the Architect, Construction Manager, Contractor (as applicable), and/or other Project participants to utilize the internet-based Project Management Software selected by the Owner. The

functionality of this software may include, but is not limited to, the processing of the Plan Reviews, Purchase Orders, Change Orders, Payment Applications, Requests for Information, and Document and Schedule Management related to the Project.

If the Owner chooses to utilize Project Management Software selected by the Owner, the Owner will provide or arrange for a login license for the applicable parties, at no cost to the applicable parties.

The Owner will provide or arrange for initial software training to the applicable parties. Except for licenses and initial training, the Owner assumes no responsibility for any real or potential costs associated with the use of the software by the applicable parties.

## **ARTICLE 2 OWNER**

### **§ 2.1 GENERAL**

**§ 2.1.1** The terms "Owner", "State", or "State of Minnesota" wherever they appear in the Contract Documents is the State of Minnesota. The authorized representative for the State of Minnesota is the Commissioner of Administration or his/her representative. Unless noted otherwise, the Commissioner's representative for the discharge of this Contract is the Division of Real Estate and Construction Services.

### **§ 2.1.2 NOT USED**

### **§ 2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER**

#### **§ 2.2.1 NOT USED**

**§ 2.2.2** Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

**§ 2.2.3** The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site and any other information it has available. Within 20 days of receipt, the Contractor is required to review any materials (such as surveys, soil tests, existing structures or conditions, locations of utilities, etc) furnished by the Owner, and notify the Owner of the discovery of any inaccuracy. The furnishing of this material by the Owner shall not relieve the Contractor of its responsibilities under the Contract Documents. The Owner will provide any information required by the Contract Documents reasonably necessary to execute the work. The Owner makes no representations, warranties or guarantees as to the accuracy of information provided to the contractor.

**§ 2.2.4** The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

**§ 2.2.5** Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

**§ 2.2.6** Security features of building plans, specifications, and drawings of state owned facilities and non-state owned facilities leased by the state are classified as nonpublic data when maintained by the Department of Administration and may be shared with anyone as needed to perform duties of the commissioner. However, consultants and contractors shall not release these plans and specifications to anyone without the Owner's approval.

### **§ 2.3 OWNER'S RIGHT TO STOP THE WORK**

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.



## **§ 2.4 OWNER'S RIGHT TO CARRY OUT THE WORK**

If the Contractor fails or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of written notice from the Owner to commence and continue correction of such failure or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect's additional services made necessary by such default, neglect or failure. The amounts charged to the Contractor are subject to prior approval of the Architect. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. Article 15, Claims and Disputes does not apply to a request by the Owner that the Architect approve the use of the remedy provided in Section 2.4.

## **§2.5 OWNER'S USE OF THE PROJECT**

The Owner shall have the right to take possession of and use completed or partially completed portions of the work even though the time of completing the entire work, or such portion thereof, may not have expired, and such use shall not constitute acceptance thereof. The Owner's possession will not interfere with the Contractor's work. The Owner may engage in move-in activities such as furniture installation but will not physically occupy the work until such work is accepted by, and occupancy permit is issued by, the code jurisdiction of authority.

## **ARTICLE 3 CONTRACTOR**

### **§ 3.1 GENERAL**

**§ 3.1.1** The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

**§ 3.1.2** The Contractor shall perform the Work in accordance with the Contract Documents. The Contractor shall not perform any work unless and until the Contractor is in compliance with Article 3.11.1 -Documents and Samples at the Site.

**§ 3.1.3** The Contractor, when requested by the Architect, shall meet with the Architect and the Architect's representative and consultants, at reasonable times and furnish all information requested. The Contractor shall allow the Architect, the Architect's representatives and consultants full access to the work to facilitate inspection of the Work. Neither the Owner nor Architect shall be liable to the Contractor for extra compensation or damages for interference or delays on account of any meeting, and, the supply of information, tests or inspections. The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Owner, the Architect, in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by the Owner, the Architect, or persons or entities other than the Contractor. Claims may be made in accordance with Article 15 of the AIA A201.

**§ 3.1.4** The contractor shall employ and/or subcontract with subcontractors that are qualified to successfully complete the Work indicated in the Contract Documents and within the contract time specified.

### **§ 3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR**

**§ 3.2.1** Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.

**§ 3.2.2** Because the Contract Documents are complementary, the Contractor shall make every effort to identify inconsistencies that may exist. Before starting each portion of the Work, carefully study and compare the Drawings, Specifications, Addenda and other Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.2.3, and shall observe and take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. The Contractor shall promptly report in writing to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the Architect may require. The Architect

will respond pursuant to Sections 4.2.11 and 4.2.12. The Contractor shall not start any portion of the Work if uncertain about the meaning or intent of the Contract Documents. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

**§ 3.2.3** If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2, 3.2.3 and 3.2.5, the Contractor shall make claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 and 3.2.3, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations.

**§ 3.2.4** The Contractor shall be responsible for accurately staking new work on the site, and shall run the axis lines locating the work, establish correct datum points, and check each line and point on the site to ensure accuracy. All such lines and points shall be carefully preserved throughout construction. The Contractor shall (1) lay out all work from dimensions given on drawings, (2) take measurements and verify dimensions of existing or old work, if any, that affect the work or to which its work is to be fitted, (3) be responsible for the correctness of all measurements and shall verify all grades, lines, levels, elevations and dimensions shown on the drawings, and (4) report any errors or inconsistencies to the Architect prior to commencing work in the form as the Architect may require.

**§ 3.2.5** No Change to the Contract Sum will be allowed on account of minor differences between actual field conditions and the Contract Documents. A minor difference is defined as a requirement in the contract documents that is not materially different from the actual field condition(s).

### **§ 3.3 SUPERVISION AND CONSTRUCTION PROCEDURES**

**§ 3.3.1** The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the Owner and Architect and shall not proceed with that portion of the Work without further written instructions from the Architect. The Owner or the Architect, shall be responsible for damages arising from the Owner, or the Architect, respectively, for knowingly directing the Contractor to perform unsafe work. Nothing in this Section 3.3.1 shall be construed as limiting any claims the Owner or Contractor may have against the Architect for any such loss or damages.

**§ 3.3.2** The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

**§ 3.3.3** The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

### **§ 3.4 LABOR AND MATERIALS**

**§ 3.4.1** Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work. Should the Contract Documents specifically require work to be performed beyond normal working hours, weekends or holidays, or should the completion time require work to be performed at said times, or, should the Contractor elect to perform work at said times, with the permission of the Owner, any additional costs resulting from working at said times are the Contractor's sole responsibility.

**§ 3.4.2** Except in the case of minor changes in the Work authorized by the Architect in accordance with Sections 3.12.8 or 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the

Architect and in accordance with a Change Order or Construction Change Directive. By making a request for a substitution, the Contractor:

- .1 Represents that the Contractor has personally investigated the proposed substitute item, material and/or process, and determined that it is equal or superior in all respects to that specified.
- .2 Represents that the Contractor will provide the same or better warranty for the substitute item than that provided with the specified item.
- .3 Certifies that the cost data presented at the time of the request is complete and includes all related costs under this contract, including the Architect's review and redesign costs, and waives all other claims for additional costs related to the substitution that are not presented with the request.
- .4 Will coordinate the installation of the accepted substitute, implementing minor changes that are required for the work to be completed, in accordance with Article 7.4

The above representations, certifications and agreement to coordinate do not obligate the Owner to consent to the substitution. Owner consent to the substitution does not constitute approval of the cost data submitted, unless the cost data is specifically approved in writing.

**§ 3.4.3** The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them. The Contractor shall, upon the Owner's request, remove any subcontractor that is unqualified, intemperate, disorderly, is performing work in an unsafe manner, or has failed to comply with the terms of any permit applicable to the Work or requirements applicable to the work".

#### **§ 3.4.4 HAZARDOUS MATERIALS BANNED**

##### **§ 3.4.4.1 PRODUCTS CONTAINING CERTAIN TYPES OF POLYBROMINATED DIPHENYL ETHER BANNED.**

Contractor certifies that it has read and will comply with Laws of Minnesota, 2007, Chapter 57 (to be codified at Minn. Stat. §§ 325E.385-325E.388) as provided below.

##### **§ 3.4.4.2 ASBESTOS CONTAINING MATERIALS BANNED**

No asbestos containing materials shall be brought on the project site, installed on the project, or used in the installation of Work for the project. See Section 10.3 – Hazardous Materials.

##### **§ 3.4.4.3 RESTRICTIONS ON PURCHASING AND USE OF UNDILUTED COAL TAR SEALERS**

Undiluted coal tar sealers will not be used on the project. Undiluted coal tar sealers are defined as any sealant containing coal tar that has not been mixed with asphalt and is intended for use on asphalt surfaces, including driveways and parking lots. See the 2009 MN Statutes §116.201.

#### **§ 3.4.5 RECYCLING AND WASTE MANAGEMENT**

For all State bonded construction, renovation, or demolition projects costing \$5,000,000.00 or greater that are located within 40 miles of a construction and demolition waste recycling facility, the Contractor and any subcontractors must divert from deposit in a landfill and must recycle at least 50 percent of the nonhazardous construction and demolition waste, measured by tonnage or volume, produced by the project or demonstrate that the waste was delivered to construction and demolition waste recycling facilities that maintain a 50 percent annual recycling rate. The Contractor shall submit a Waste Management and Recycling Program Plan for these projects to the Architect who shall review and submit it to the State for final approval. If the project plans and specifications for the project carry a more stringent requirement for recycling as it applies to quantity recycled, project cost, project funding source, or haul distance to a recycling facility, the more stringent requirement will apply.

#### **§ 3.5 WARRANTY**

The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of specified or superior quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. The warranty is not limited by the provisions of Section 12.2. Guarantees required by the Contract

Documents shall not exclude or otherwise limit the Owner's possible remedies at law and shall not be construed as a waiver by the Owner of any other remedy.

### § 3.6 TAXES

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

### § 3.7 PERMITS, FEES, NOTICES, AND COMPLIANCE WITH LAWS

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as for all other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received. **All such fees, including sewer and water access charges, Minnesota Pollution Control Agency general storm water permits, and Federal Water Permits, , shall be paid by the Contractor and failure to account for all such charges shall not increase the Contract Sum unless allowances were identified in the construction documents.** Total fees charged for a Building Permit may not exceed the amount prescribed in the latest edition of the Minnesota State Building Code. Procurement of permits does not relieve the Contractor of the requirement for complying with the Contract Documents that exceed the requirement of governing laws, ordinances and statutes.

#### §3.7.1.1 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

(NPDES) PERMIT. Pollution of natural resources of air, land and water by operations under this Contract shall be prevented, controlled, and abated in accordance with the rules, regulations, and standards adopted and established by the Minnesota Pollution Control Agency (M.P.C.A.) and the following:

.1 By signing the Contract and completing the NPDES permit application, the Contractor is a co-permittee with the Owner to ensure compliance with the terms and conditions of the General Storm Water Permit for Construction Activity (MN R100001) and is responsible for those portions of the permit where the operator is referenced. This Permit establishes conditions for discharging storm water to waters of the State from construction activities disturbing one acre or more of total land area. A copy of the "General Permit Authorization to Discharge Storm Water Associated with a Construction Activity Under the National Pollutant Discharge Elimination System (NPDES)/State Disposal System Permit Program" is available at:

<http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/construction-stormwater/construction-stormwater.html>

.2 The Contractor shall apply and pay for the NPDES Permit on this Project. Payment for the application shall be incidental to the Contract and no direct compensation will be made. The Owner will provide the Contractor information on how to complete the Owner's portion.

.3 No work which disturbs soil and/or work in waters of the state will be allowed on this Project until the NPDES Permit is in effect and the department has received the required documentation.

.4 The Contractor shall be solely responsible for complying with the requirements listed in Part II.B and Part IV of the General Permit.

.5 The Contractor shall be responsible for providing all inspections, documentation, record keeping, maintenance, remedial actions, and repairs required by the permit. All inspections, maintenance, and records required in the General Permit Paragraph IV.E, shall be the sole responsibility of the Contractor. The word "Permittee" in these referenced paragraphs shall mean "Contractor". Standard forms for logging all required inspection and maintenance activities shall be used by the Contractor. All inspection and maintenance forms used on this Project shall be turned over to the Architect/Engineer every two weeks for retention in accordance with the permit.

.6 The Contractor shall have all logs, documentation, inspection reports on site for the Architect/Engineer's review and shall post the permit and MPCA's letter of coverage on site. Meetings with the MPCA, Watershed District, WMO, or any local authority shall be attended by both the

Architect/Engineer and the Contractor or their representatives; the Contractor and/or the Architect/Engineer shall contact the Owner prior to a scheduled meeting. No work required by said entities, and for which the Contractor would request additional compensation from the Owner, shall be started without approval from the Architect/Engineer. No work required by said entities and for which the changes will impact the design or requirements of the Contract documents shall be started without approval from the Engineer.

.7 The Contractor shall immediately notify the Engineer of any site visits by Local Permitting Authorities performed in accordance with Part V.H.

.8 Emergency Best Management Practices must be enacted to help minimize turbidity of surface waters and relieve runoff from extreme weather events. It is required to notify the MPCA Regional contact person within 2 days of an uncontrolled storm water release.

.9 The names and phone numbers of the MPCA Regional Contact personnel can be found at: <http://www.pca.state.mn.us/water/stormwater/stormwater-c.html>. The Contractor is reminded, during emergency situations involving uncontrolled storm water releases that the State Duty Office must be contacted immediately at 1-800-422-0798 or 1-651-649-5451.

.10 The Contractor shall review and abide by the instructions contained in the permit package. The contractor shall hold the Owner harmless for any fines or sanctions caused by the Contractor's actions or inactions regarding compliance with the permit or erosion control provisions of the Contract Documents.

**§ 3.7.2** The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work. Except in those Municipalities that provide State-approved electrical inspection, all installation of electrical work shall be inspected by the Minnesota Board of Electricity. The Contractor shall procure and pay for all required electrical inspections.

**§ 3.7.3** If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction. This requirement does not relieve the Contractor of the responsibility for complying with the Contract Documents if the Contract Documents requirements exceed those of governing codes and regulations.

**§ 3.7.4 Concealed or Unknown Conditions.** If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those affirmatively indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, that could not have been anticipated and which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, or (3) are not observable prior to bidding or inferable by the type of construction, the Contractor shall promptly provide notice to the Owner and the Architect before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those affirmatively indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor in writing, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may proceed as provided in Article 15.

**§ 3.7.5** If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, or archaeological sites not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15. Additionally, Contractors shall comply with Minnesota Statute 307.08

### **§ 3.8 ALLOWANCES**

**§ 3.8.1** The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

**§ 3.8.2** Unless otherwise provided in the Contract Documents,

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

**§ 3.8.3** Materials and equipment under an allowance shall be selected by the Owner with reasonable promptness.

### **§ 3.9 SUPERINTENDENT**

**§ 3.9.1** The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall be assigned continuously to the work from Notice to Proceed until Final Completion. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. The Contractor shall communicate with the Owner through the Architect.

**§ 3.9.2** The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Architect the name and qualifications of a proposed superintendent. The Architect may reply within 14 days to the Contractor in writing stating (1) whether the Owner or the Architect has reasonable objection to the proposed superintendent or (2) that the Architect requires additional time to review. Failure of the Architect to reply within the 14 day period shall constitute notice of no reasonable objection.

**§ 3.9.3** The Contractor shall not employ a proposed superintendent to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed, and, the Contractor shall not change the Superintendent unless the Superintendent ceases to be employed by the Contractor."

### **§ 3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES**

**§ 3.10.1** The Contractor, no later than ten (10) days following the date on which the Contractor received written notice to proceed from the Owner, shall prepare and submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

**§ 3.10.2** The Contractor shall prepare and keep current, for the Architect's approval, a schedule of submittals which is coordinated with the Contractor's construction schedule and allows the Architect reasonable time to review submittals.

**§ 3.10.3** The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Architect.

**§3.10.4** The schedule submitted by the Contractor shall have a completion date that corresponds to the completion date set forth in the Contract Documents. The Contractor is responsible for meeting this schedule without any adjustment to the Contract Sum, and by executing the Contract, the Contractor confirms that it is capable of properly completing the work within the completion date set forth in the Contract Documents."



**§3.10.5** The Contractor must provide a minimum of five working days prior notice for specified testing or inspections that are to be performed by the Owner or Separate Contractors. Such testing and inspections shall be included in the Contractor's schedule."

**§3.10.6** If the Contractor, Architect, or Owner determines at any time, and for any reason, that the work has fallen fifteen (15) calendar days or ten (10) working days, behind the scheduled contract time, milestone date, phased work completion date, critical path date, or work indicated on the latest submitted schedule, the Contractor shall submit a Recovery Schedule within seven (7) calendar days of the Architect's written request or date the Contractor has knowledge that the work has fallen behind. The Contractor shall also submit a Recovery Plan indicating actions to be taken to recover the schedule. The Recovery Plan shall document the following:

- .1 Description of work that is behind schedule
- .2 Reason for work being behind schedule. If the Contractor claims that the delay is due to an event or condition that was outside the Contractor's ability to control, the Contractor shall include all documentation sufficient to justify the delay in accordance with Articles 8.3.1, 8.3.2, and 8.3.3.
- .3 Identification of all resources necessary to recover the schedule including all materials, labor, equipment and changes in operations.
- .4 Detail of all additional resources necessary to recover the schedule including, but not limited to additional quantities of manpower, overtime, increased number of hours per day, increased number of work shifts per day, increased number of work days per week.
- .5 Duration of time necessary to Recover the Schedule.

The Contractor shall implement the Recovery Plan and recover the schedule at no cost to the owner and no additional contract time unless the claim is substantiated and approved in accordance with Section 8.3 and Article 15.

A breach and default of contract shall result from the Contractor's failure to provide the Architect and Owner with the Recovery Plan and Recovery Schedule and/or failure to implement the Recovery Plan.

Should the Contractor claim and provide sufficient documentation to substantiate that the delay was beyond the control of the Contractor the Owner shall reserve the right, in its best interest, to determine if the Recovery Plan and Schedule shall be implemented.

### **§ 3.11 DOCUMENTS AND SAMPLES AT THE SITE**

The Contractor shall maintain at the site for the Owner one copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and one copy of approved Shop Drawings, Product Data, Samples and similar required submittals. These shall be available to the Architect and shall be delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

### **§ 3.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

**§ 3.12.1** Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

**§ 3.12.2** Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

**§ 3.12.3** Samples are physical examples that illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

**§ 3.12.4** Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. Their purpose is to demonstrate the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. Informational submittals

upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.

**§ 3.12.5** The Contractor shall review for compliance with the Contract Documents, approve and submit to the Architect Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors.

**§ 3.12.6** By submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents including future and related work contained in the Contract Documents.

**§ 3.12.7** The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Architect.

**§ 3.12.8** The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Architect in writing of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect's approval thereof.

**§ 3.12.9** The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Architect on previous submittals. In the absence of such written notice, the Architect's approval of a resubmission shall not apply to such revisions.

**§ 3.12.10** The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. The Contractor shall not be required to provide professional services in violation of applicable law. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor all performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review, approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Contractor shall not be responsible for the adequacy of the performance and design criteria specified in the Contract Documents.

### **§ 3.13 USE OF SITE**

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

### **§ 3.14 CUTTING AND PATCHING**

**§ 3.14.1** The Contractor is responsible for all cutting, patching, drilling, fastening, anchoring of all new and existing construction required to complete the work. All areas shall be restored to the condition existing prior to the cutting, patching, drilling, fastening, anchoring, and fitting unless otherwise required by the Contract Documents.

**§ 3.14.2** The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or separate contractors by cutting, patching or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the Owner or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the Owner or a separate contractor the Contractor's consent to cutting or otherwise altering the Work.

### **§ 3.15 CLEANING UP**

**§ 3.15.1** The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials from and about the Project.

**§ 3.15.2** The cost of cleanup performed by the Owner as a result of the Contractor's failure to provide the cleanup required by the Contract Documents, shall be deducted from the Contract Sum.

### **§ 3.16 ACCESS TO WORK**

The Contractor shall provide the Owner, Architect, their consultants, other persons authorized by the Owner and Authorities having jurisdiction over the work, access at all times to the project site and to Work in progress, in preparation or completed. The Contractor shall provide safe and proper facilities for such access and for testing, inspections and separate Contracts and shall secure and protect samples and testing equipment.

### **§ 3.17 ROYALTIES, PATENTS AND COPYRIGHTS**

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner or Architect. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a copyright or a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Architect.

### **§ 3.18 INDEMNIFICATION**

**§ 3.18.1** To the fullest extent permitted by law, and in accordance with Article 11, the Contractor shall indemnify and hold harmless the Owner, Owners' Representatives, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section 3.18.

**§ 3.18.2** In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

**§3.18.3** The obligations of the Contractor under this Section 3.18 shall not negate, abridge or reduce the liability of the Architect, the Architect's consultants and agents and employees of any of them.

## ARTICLE 4 ARCHITECT

### § 4.1 GENERAL

§ 4.1.1 The term or word "Architect" or "Architect of Record" used in the Contract Documents shall mean Architect, Engineer, Designer, or other person or entity designated by the Owner to perform the Architect's role required by the Contract Documents.

§ 4.1.2 The Owner shall have sole authority to modify or extend the authority of the Architect.

§ 4.1.3 If the Architect of record for the Contract is no longer employed by the Owner or is otherwise unable to fulfill the required obligations of the Contract, the Owner shall designate a responsible party to fulfill the obligations under the Contract. The Owner reserves the right to designate itself.

### § 4.2 ADMINISTRATION OF THE CONTRACT

§ 4.2.1 The Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's representative during construction until the date the final payment is due. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect will not have control over, charge of, or responsibility for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, except as provided in Section 3.3.1.

§ 4.2.3 On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and report to the Owner (1) known deviations from the Contract Documents and from the most recent construction schedule submitted by the Contractor, and (2) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of and will not be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work. However, where the Architect observes deficiencies in the Work, or where the Architect observes the Contractor or Subcontractor failing to execute the work in accordance with the Contract Documents, the Architect shall, within 24 hours, notify the Contractor and Owner, in writing, of all such deficiencies. The Architect shall promptly notify the Owner when, in the Architect's opinion, the work should be stopped. Authority to stop the work shall rest with the Owner.

§ 4.2.4 Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate with each other through the Architect about matters arising out of or relating to the Contract. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Owner. The Owner may communicate directly with the Contractor and Subcontractors and advise the Architect of those communications.

§ 4.2.5 Based on project site observations and evaluations of the Contractor's application for payment, the Architect shall determine the amount owing to the Contractor and shall sign and issue the application and certificate for payment. Such signature and issuance shall constitute a representation by the Architect to the Owner that, in the Architect's professional opinion, the work has progressed to the point indicated, the quality of the work is in accordance with the Contract Documents, and the Contractor is entitled to payment in the amount certified. The Architect is responsible for deducting from the Contractor's Application for Payment the value of work not completed, not conforming to Contract Documents, or otherwise in dispute.

§ 4.2.6 The Architect has authority and responsibility to reject Work that does not conform to the Contract Documents. All such rejected work shall be removed from the site as soon as possible at no expense to the Owner. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or

testing of the Work in accordance with Sections 13.5.2 and 13.5.3, whether or not such Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons or entities performing portions of the Work.

**§ 4.2.7** The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5 and 3.12. The Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect, of any construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

**§ 4.2.8** The Architect will prepare Change Orders and Construction Change Directives, and may authorize minor changes in the Work as provided in Section 7.4. The Architect will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

**§ 4.2.9** The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; will receive, review and forward to the Owner, for the Owner's review and records, written warranties, operations and maintenance manuals, and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10. The Architect will determine substantial completion date(s) in accordance with Article 9.8.

**§ 4.2.10** If the Owner and Architect agree, the Architect will provide one or more project representatives to assist in carrying out the Architect's responsibilities at the site. The duties, responsibilities and limitations of authority of such project representatives shall be as set forth in an exhibit to be incorporated in the Contract Documents.

**§ 4.2.11** The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

**§ 4.2.12** Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. If a question, dispute or controversy between the Owner and Contractor arises out of a provision of the Contract Documents, or the Architect's interpretation thereof, for which a decision process is not otherwise prescribed in the Contract Documents and which the parties are unable to resolve through Change Order or otherwise, the Owner and the Contractor may exercise legal remedies available to them.

**§ 4.2.13** The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

**§ 4.2.14** The Architect will review and respond to requests for information about the Contract Documents. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

## ARTICLE 5 SUBCONTRACTORS

### § 5.1 DEFINITIONS

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.1.3 The Contractor shall include the following in any Contract with a Subcontractor: The attention of the Subcontractor is directed to Minnesota Statutes, Chapter 574, which requires the prime Contractor to file a payment and performance bond for the project with the State of Minnesota. Section 574.31 of that Chapter states the limit of time within which a subcontractor must take certain actions specified therein to preserve a claim for nonpayment against the payment bond surety. Subcontractors of any tier may not bring claims against the Owner.

### § 5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

§ 5.2.1 Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, no later than ten (10) days following the date on which the Contractor received written notice to proceed from the Owner, shall furnish in writing to the Owner through the Architect the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Architect may reply within 14 days to the Contractor in writing stating (1) whether the Owner or the Architect has reasonable objection to any such proposed person or entity or (2) that the Architect requires additional time for review. Failure of the Owner or Architect to reply within the 14 day period shall constitute notice of no reasonable objection.

§ 5.2.1.1 Verification of Compliance with Minn. Stat. § 16C.285, Subd. 3, **Responsible Contractor Requirement:** Signed verification was required in the solicitation response for all of the Contractor's first-tier subcontractors that the Contractor intended to retain for work on the project. If the prime contractor or any subcontractor retains additional subcontractors on the project, the prime contractor or subcontractor shall obtain verifications of compliance from each additional subcontractor with which it has a direct contractual relationship and shall submit a supplemental verification list naming the added subcontractors which verifies the subcontractors have certified they are in compliance within 14 days of retaining the additional subcontractors. Upon request from the Owner, the prime contractor shall submit copies of the signed certifications of compliance from all subcontractors of any tier.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person or entity previously selected if the Owner or Architect makes reasonable objection to such substitution.

### § 5.3 SUBCONTRACTUAL RELATIONS

By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities,



including the responsibility for safety of the Subcontractor's Work, which the Contractor, by these Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

#### **§ 5.4 CONTINGENT ASSIGNMENT OF SUBCONTRACTS**

**§ 5.4.1** Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor in writing; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

**§ 5.4.2** Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases or decreases in cost resulting from the suspension.

**§ 5.4.3** Upon such assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

### **ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS**

#### **§ 6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS**

**§ 6.1.1** The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Article 15.

**§ 6.1.2** When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

**§ 6.1.3** Where multiple Contracts are in effect or the Owner is utilizing its own forces for a portion of the Work, the Contractor's schedule and progress shall govern the work of other Contractors. The Contractor shall provide reasonable advance notice to other Contractors and the Owner regarding the schedule and Work to be performed by them. The other Contractors and/or the Owner's forces shall, after such notification, diligently proceed with their portion of the Work, including furnishing, installation, laying out or incorporation of Work, so as not to delay or impede the Contractor or its job progress.

#### **§ 6.1.4 NOT USED**

## **§ 6.2 MUTUAL RESPONSIBILITY**

**§ 6.2.1** The Contractor shall afford the Owner and separate contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

**§ 6.2.2** If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Architect apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acknowledgment that the Owner's or separate contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.

**§ 6.2.3** The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a separate contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a separate contractor's delays, improperly timed activities, damage to the Work or defective construction.

**§ 6.2.4** The Contractor shall promptly correct damage the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or separate contractors as provided in Section 10.2.5.

**§ 6.2.5** The Owner's own forces and each separate contractor shall have the same responsibilities for cutting and patching for their work as are described for the Contractor in Section 3.14.

**§ 6.2.6** Claims and disputes between the Contractor and separate Contractors are subject to the provisions of Article 15. The Contractors will indemnify, defend and hold harmless the State, and any of its consultants or agents against any claims arising from any such dispute. Notwithstanding the foregoing, any legal representation to defend the Owner is subject to the approval of the Minnesota Attorney General, and, at the Owner's discretion, the Contractor will pay the attorney fees in lieu of defending the Owner.

## **§ 6.3 OWNER'S RIGHT TO CLEAN UP**

If a dispute arises among the Contractor, separate contractors and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Architect will assess the cost to those responsible.

**ARTICLE 7 CHANGES IN THE WORK** In Article 7, and throughout the contract documents, whenever the term "Change Order" is used, it shall be substituted with the term "Supplemental Agreement". This includes all companion documents utilized for construction contract administration.

## **§ 7.1 GENERAL**

**§ 7.1.1** Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive, written approval from the Owner, or written order for a change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

**§ 7.1.2** A Change Order shall be based upon agreement among the Owner, Contractor and Architect; a Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor; a written order for a change in the Work may be issued by the Architect alone along with written approval from the Owner; a written approval from the Owner may be issued by the Owner alone.

**§ 7.1.3** Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive or order for a minor change in the Work.

## **§ 7.2 CHANGE ORDERS**

**§ 7.2.1** A Change Order is a written instrument prepared by the Architect and signed by the Owner, Contractor and Architect stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and

**.3 The extent of the adjustment, if any, in the Contract Time.**

**§ 7.2.2** Methods and requirements used in determining adjustments to the Contract Sum shall include those listed in Sections 7.3.3 and 7.3.7. The Contractor shall provide costs broken down into material and labor units with their respective unit costs in accordance with Section 7.3.7. The Owner shall not be obligated to make payment for change orders or be liable for late payments and interest on changes until the Contractor provides cost breakdowns as required by Section 7.3.7 and until a Change Order is executed.

**§ 7.2.3** The Contract sum and Contract time shall be adjusted only by Change Order and the Contractor shall provide documentation of changes in accordance with Section 7.3.3 and 7.3.7. The Contractor shall itemize the costs of the changes and provide material and labor cost breakdowns to support the costs being claimed as a result of the change. The signature of the Contractor on the Change Order binds the Contractor to all terms thereof and shows the Contractor's complete agreement therewith.

**§ 7.3 CONSTRUCTION CHANGE DIRECTIVES**

**§ 7.3.1** A Construction Change Directive is a written order prepared by the Architect and signed by the Owner and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and Contract Time being adjusted accordingly. The Contract Sum and Time can only be changed by a subsequent Change Order.

**§ 7.3.2** A Construction Change Directive shall be used in the absence of agreement on the terms of a Change Order.

**§ 7.3.3** If the Construction Change Directive provides for an adjustment to the Contract Sum, the change shall be incorporated into the contract by Change Order and the adjustment shall be based on one of the following methods:

- .1** Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data provided in accordance with Section 7.3.7, to permit evaluation;
- .2** Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3** **NOT USED**
- .4** As provided in Section 7.3.7.

**§ 7.3.4** If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed in a proposed Change Order or Construction Change Directive so that application of such unit prices to quantities of Work proposed will cause substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

**§ 7.3.5** Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

**§ 7.3.6** A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and a subsequent Change Order shall be executed. A Construction Change Directive signed only by Owner and Architect constitutes a Change in the Contract which the Owner recognizes that the Contractor may be entitled to an adjustment to the Contract Sum if substantiated by the Contractor.

**§ 7.3.7** If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall determine the method and the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.7 shall be limited to the following:

- .1 labor costs are limited to the published and specified prevailing hourly basic rate or the negotiated hourly rate whichever is higher plus applicable multipliers for overtime, weekends and holidays, plus labor burden including: social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and workers' compensation insurance; and actual net payroll taxes. Further markups to labor are not permitted. The Contractor may express labor burden as a fixed percentage of the base hourly rate, however, such percentage is subject to review and adjustment by the Owner at any time. Labor hours may include only workers and working foreman directly involved in performing the Change Order work. Supervision above working foreman (such as general foreman, superintendent, project manager, etc.) is considered to be included in overhead and profit, and not allowed as a line item.
- .2 net actual Contractor or Subcontractor costs of itemized materials including applicable sales taxes, supplies and equipment, including cost of transportation, whether incorporated or consumed;
- .3 rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others; equipment with an original purchase cost of more than \$500 and when rented from the Contractor or Subcontractor(s), the maximum rate is limited to 75% of the rental rate as set forth in Rental Rate Blue Book for Construction Equipment by Dataquest (latest edition) and shall include fuel and maintenance;
- .4 costs of bond premiums, permit fees and taxes incurred by the contractor as a result of additional work that is approved by the owner. Payment for bond premium increases and additional permit fees will be made in accordance with Article 7.2 and upon presentation by the Contractor of proof of payment, or invoice related to the additional Work;
- .5 It is the policy of the Owner to pay direct costs for supplemental work plus a reasonable amount for Overhead and Profit (OH&P). In addition to the costs provided for above, Contractors and subcontractors may add up to 10% of the direct cost of their own labor, 5% of the direct cost of materials and equipment, and 5% of the cost of subcontractors or sub-subcontractors. The total mark-up for OH&P for all tiers involved in a change to the contract sum shall not exceed 20 percent. OH&P may be less than the foregoing amounts depending on the nature, extent or complexity of the change when it is not commensurate with the responsibility and administration involved with the change, such as the Contractor merely processing a substantial Change Order to a Subcontractor or the Contractor processing a Change Order for additional equipment required by the change. Costs for material distribution, tool and equipment fees, project difficulty, warranties, supervisory equipment, Change Order pricing and preparation or similar fees are defined as overhead cost.
- .6 The documentation for adjustment to the Contract sum shall include the following for each Contractor and subcontractor of any tier and must be in form provided by or agreed to by the Owner.
  - a. Name of Project
  - b. Name of the Contractor or Subcontractors
  - c. Name of material and equipment suppliers
  - d. A detailed description of the work performed and reference to proposal requests and Change Order Directives
  - e. Breakdown of labor and material costs are mandatory, including subcontractor and material supplier costs.
    1. Labor costs shall include number of hours and hourly rate based on certified payroll.
    2. Material costs shown separately and individually by unit and unit price. The Owner reserves the right to require the submittal of supplier's invoices.
    3. Calculation of the amount of OH&P added; see 7.3.7.5 for OH&P calculation requirements.
    4. Signature of Contractor and involved subcontractors
- .7 The Owner may, at the Owner's sole discretion, waive the requirement for the cost breakdown of changes that total \$1,500.00 or less and utilize a lump sum.

**§ 7.3.8** The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

**§ 7.3.9** Pending final determination of the total cost of a Construction Change Directive to the Owner, amounts not in dispute for such changes in the Work shall be included in Applications for Payment accompanied by a Change

Order indicating the parties' agreement with part or all of such costs. For any portion of such cost that remains in dispute, the Architect will make an interim determination for purposes of monthly certification for payment for those costs. That determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a claim in accordance with Article 15..

#### **§ 7.3.10 NOT USED**

#### **§ 7.4 MINOR CHANGES IN THE WORK**

The Architect has authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes will be effected by written order signed by the Architect and shall be binding on the Owner and Contractor. A subsequent Change Order shall be executed. When a minor change involves an additional cost and adjustment in the Contract Sum or extension of the Contract Time, the change shall require an approval by the Owner. Any change involving product substitutions shall be approved by the Architect and Owner.

#### **§ 7.5 OWNER'S RIGHT TO PERFORM CHANGES IN THE WORK**

Notwithstanding Article 6, if the Owner does not agree to the Contractor's proposal to perform changes in the work, or if the Owner does not deem it advisable or expedient to proceed on the basis of the proposal, the Owner reserves the right to perform changes in the work with its own forces, or to contract with others to perform the changes.

### **ARTICLE 8 TIME**

#### **§ 8.1 DEFINITIONS**

**§ 8.1.1** Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

**§ 8.1.2** The date of commencement of the Work is the date established in the Agreement.

**§ 8.1.3** The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

**§ 8.1.4** The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

**§ 8.1.5** Where the performance of any act is directed, the time shall be computed so as to exclude the first and include the last day of the prescribed period. When the last day of the period falls on Saturday, Sunday or a legal holiday, that day shall be omitted from the computation.

#### **§ 8.2 PROGRESS AND COMPLETION**

**§ 8.2.1** Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

**§ 8.2.2** The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor and Owner. The date of commencement of the Work shall not be changed by the effective date of such insurance.

**§ 8.2.3** The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

#### **§ 8.3 DELAYS AND EXTENSIONS OF TIME**

**§ 8.3.1** If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner or Architect, or of an employee of either, or of a separate contractor employed by the Owner; or by changes ordered in the Work; or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control; or by delay authorized by the Owner for causes that the Architect determines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15. Extensions of Time will be considered and allowed only under the following conditions and/or circumstances, and only if the construction schedule is adversely affected by the change:

- .1 Only those conditions enumerated in Section 8.3.1 above, over which the Contractor has no control will be considered. The burden of proof for the change in time shall rest with the Contractor, including documentation that the condition was beyond its control and documentation as to the extent of the proposed extension.
- .2 A delay in the process of the work actually occurs as a result of one of the valid causes for extension.
- .3 An unusual delay in delivery occurs solely due to delay in common transport beyond the Contractor's control. An extension of time will not be granted for delays in delivery where the delivery was not properly scheduled or an order not placed at an appropriate time to allow delivery or an order is improperly placed.
- .4 With respect to a Change Order proposal for an extension of time due to climatic conditions, the parties shall consider the location of the site and the type of work affected, and shall recognize only unusually severe variations from average conditions. The Contractor must submit, with the request, local U.S. Weather Bureau climatological reports for the period involved plus a report indicating the average precipitation, temperature, wind velocity, etc. for the past 10 years from the nearest reporting station. Foul weather in itself will not be a valid reason for time extension. Requests for time extensions due to weather extremes will only be considered for the overall project based on analysis of the project schedule and will not be considered unless a substantial variation from seasonal average weather conditions occurred for a significant period of time and operations were necessarily affected. If the Contractor encounters unusually favorable weather subsequent to the issuance of a time extension for weather, the Contractor shall cooperate with the Owner and Architect to determine a time reduction based on the same analysis of the construction schedule.
- .5 For changes in the work which significantly affect the time and process of the entire work and where the anticipated delay period can be reasonably calculated at the time the change is requested, any time extension shall be made no later than when the change is authorized by the Owner, and such extension shall be for such reasonable time as the Architect may determine upon analysis of the project schedule. Where the period of delay cannot be reasonably determined at the time the Owner authorizes the change, the Contractor shall estimate the time period of delay, and propose a potential mechanism for the Architect to identify a reasonable extension to Contract time. For changes in the work which do not affect the process of the entire work, the Owner reserves the right to grant a time extension only for area, phase, activity or element in the Work affected by the change. Any approved time extension shall be implemented by a Change Order.
- .6 A request for an extension of time made as a result of a labor dispute shall not exceed the actual period of the dispute, plus reasonable mobilization time. Any related, approved extension may be less than the period of dispute, depending on the actual effect the dispute had on the progress of the Work. Lockouts over which the Contractor has control will not be a valid reason for time extension.
- .7 No time extension will be granted for delays resulting from improper scheduling or failure to have shop drawings or samples submitted to the Architect in ample time for a review.
- .8 Delays caused by Subcontractors will be considered for time extension only under the same conditions defined above.
- .9 Except for changes in the work, all requests for extension of time shall be made in writing to the Architect not more than 21 calendar days after the beginning of the first occurrence of the delay. No request will be considered beyond the stated time without the consent of the Owner.
- .10 No time extensions will be granted for delays from failure by the Contractor to schedule inspections, testing and the work of separate contracts.
- .11 Contractor "float" time built into the project schedule may be proportionately deducted from any approved extension.

§ 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

## ARTICLE 9 PAYMENTS AND COMPLETION

### § 9.1 CONTRACT SUM

The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.



## **§ 9.2 SCHEDULE OF VALUES**

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit to the Architect, no later than ten (10) days following the date on which the Contractor received written notice to proceed from the Owner, a schedule of values allocating the entire Contract Sum to the various portions of the Work and prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.

## **§ 9.3 APPLICATIONS FOR PAYMENT**

**§ 9.3.1** At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment prepared in accordance with the schedule of values, if required under Section 9.2., for completed portions of the Work. Such application shall be notarized, and on an Owner prescribed form, and supported by such data substantiating the Contractor's right to payment as the Owner or Architect may require, such as copies of requisitions from Subcontractors and material suppliers, and shall reflect retainage if provided for in the Contract Documents.

### **§ 9.3.1.1 NOT USED**

### **§ 9.3.1.2 NOT USED**

**§ 9.3.1.3** The Contractor shall comply with Section 9.11 and, shall submit payroll records as prescribed therein and in the Contract Documents and the Contractor shall bind all labor and material subcontractors to this requirement for this project and submit subcontractor payroll records as prescribed in Section 9.11 and the Contract Documents.

**§ 9.3.2** Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage and transportation to the site for such materials and equipment stored off the site. Should the Owner approve and pay for materials stored in an off site location, the Contractor shall insure the off site materials in such a manner as to protect the interest of the Owner against loss of stored materials and against loss of title to and ownership of stored materials.

**§ 9.3.3** The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

## **§ 9.4 CERTIFYING APPLICATIONS FOR PAYMENT**

**§ 9.4.1** The Architect will, within seven days after receipt of the Contractor's Application for Payment, certify the Application for Payment, with a copy to the Contractor, for such amount as the Architect determines is properly due, or notify the Contractor and Owner in writing of the Architect's reasons for withholding certification in whole or in part as provided in Section 9.5.1.

**§ 9.4.2** Certifying the Application for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data comprising the Application for Payment, that the Work has progressed to the point indicated and that the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion and to specific qualifications expressed by the Architect. Certifying an Application for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified. The Architect is responsible for deducting from the Contractor's

Application for Payment, the value of the work not completed, not conforming to the Contract Documents, or otherwise in dispute. To the extent this Section 9.4.2 is inconsistent with Article 15, as amended herein, Article 15 shall govern and be incorporated by reference into this Section 9.4.2.

#### **§ 9.5 DECISIONS TO WITHHOLD CERTIFICATION**

**§ 9.5.1** The Architect may withhold an Application for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly certify an Application for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold certification on an Application for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of an Application for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a separate contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.

**§ 9.5.2** When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

#### **§ 9.5.3 NOT USED**

#### **§ 9.6 PROGRESS PAYMENTS**

**§ 9.6.1** After the Architect has certified an Application for Payment, the Owner shall make payment in accordance with Minnesota Statutes 16A.124 which states that the Owner shall make payment within 30 days of receipt by the Owner of non-contested invoices. For this contract, an invoice is defined as an Application for Payment.

**§ 9.6.1.1** Unless otherwise provided in the Contract Documents, the Owner shall follow the requirements of MN Statute 15.72 Subd.1 and Subd. 2, and MN Statute 15.73 Subd. 1, Subd. 2, Subd. 3, and Subd. 4. The Owner, in making partial payments, will retain five (5) percent of the duly approved value of the work performed under the Contract Documents as the date of the Contractor's Application for Payment until final completion and acceptance of all work covered by the Contract. The Contractor has the option, with Owner's consent, of depositing bonds or securities in a Bank or Trust Company to be held for the benefit of the Owner, in lieu of cash retainage. In that event, the Owner shall reduce the retainage in an amount equal to the value of the bonds or securities. Interest on the bonds or securities shall be payable to the Contractor as it accrues. Bonds and securities deposited or acquired in lieu of retainage, shall be of a character approved by the State Treasurer, including but not limited to:

- .1 Bills, certificates, note or bonds of the United States.
- .2 Other obligations of the United States or its agencies.
- .3 Obligations of any corporation wholly owned by the Federal Government.
- .4 Indebtedness of the Federal national Mortgage Association.

**§ 9.6.1.2** If the Owner incurs additional cost as a result of the exercise of the option described above, the Owner may recover the costs from the Contractor by reducing the final payment due under the Contract. As work on the Contract progresses, the Owner shall, upon demand, inform the Contractor of all accrued costs.

§ 9.6.1.3 If, after the work provided for in the Contract shall have been fifty (50) percent completed, and performed to the satisfaction of the architect, the retainage may be reduced to zero (0) percent on payments for the remaining work. The reduction amount is determined at the sole discretion of the Owner, and requires certification by the architect that the Contractor is properly and continuously expediting the work. The Owner reserves the right to retain all or part of retainage after substantial completion until all Contractual obligations are completed in accordance with Section 9.8.5. Partial use or occupancy of the project by the Owner is not sufficient cause for reduction of retainage.

§ 9.6.2 The Contractor shall pay each Subcontractor no later than seven days after receipt of payment from the Owner the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.2.1 In accordance with Minnesota Statutes 16A.1245, the Contractor shall, within 10 days of receipt of a progress payment, pay all Subcontractors and suppliers having an interest in the Contract their prorated share of the payment for all undisputed services provided by the Subcontractors and suppliers.

§ 9.6.2.2 The Contractor may withhold as retainage from Subcontractor(s) progress payments an amount not to exceed five (5) percent of the payment. The Contractor shall reduce or eliminate the retainage for a Subcontractor in the same manner that the Owner reduces or eliminates the retainage for the Contractor.

§ 9.6.2.3 The enforcement of these conditions shall be the responsibility of the Subcontractor(s) working through the Contractor and the Contractor's surety. To facilitate the resolution of any problems relating to these provisions, the Contractor shall furnish the Subcontractor(s) with the name, address and telephone number of the Contractor's surety within ten (10) days of the date on which the Contractor signs a Contract with the Owner.

§ 9.6.3 The Architect will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Architect and Owner on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and material and equipment suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors to ascertain whether they have been properly paid. Neither the Owner nor Architect shall have an obligation to pay or to see to the payment of money to a Subcontractor.

§ 9.6.5 Contractor payments to material and equipment suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 9.6.6 Payment by the Owner, based on an Application for Payment, or a Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 NOT USED

§ 9.7 NOT USED

## § 9.8 SUBSTANTIAL COMPLETION

§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

**§ 9.8.3** After validating the Contractor's claim of Substantial Completion and accompanying list, the Architect will perform site inspections to verify work completion and prepare a supplemental comprehensive list of items to be completed prior to Substantial Completion and prior to final payments.

**§ 9.8.4** When the Work or designated portion thereof is substantially complete, the Architect will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion, shall establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

**§ 9.8.5** The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in such Certificate. Upon such acceptance and consent of surety, if any, the Owner may, at the sole discretion of the Owner, make payment of retainage applying to such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete, defective, not in accordance with the requirements of the Contract Documents, or unsettled claims, and shall include the cost of any third party to finish incomplete, incorrect or defective work, and compensation and expenses of the Architect and Owner for work related thereto.

#### **§ 9.9 PARTIAL OCCUPANCY OR USE**

**§ 9.9.1** The Owner may with the consent of Contractor's surety, if required, and consent of authorities having jurisdiction of the work, if required, use or occupy any portion of the work whether or not substantially complete in accord with Sections 9.8 and 2.5.1.

**§ 9.9.2** Immediately prior to such partial occupancy or use, the Owner, Contractor and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work. The Architect shall prepare an itemized list of incomplete and defective work based on the Architect's observations and inspections of the work.

**§ 9.9.3** Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

#### **§ 9.10 FINAL COMPLETION AND FINAL PAYMENT**

**§ 9.10.1** Upon receipt of the Contractor's written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection and, when the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled. If the work is determined not to be complete, the Owner may deduct from the Contractor's final payment the cost of all subsequent inspections by the Architect.

**§ 9.10.1.1** In the event incomplete, incorrect or defective work is not completed to the Owner's satisfaction within 30 calendar days of the architect's notice to the Contractor that such Work is incomplete, incorrect or defective, the Owner must notify the Contractor per Section 2.4.1, and may complete and correct work and deduct from the final payment any and all costs incurred by the Owner in completing such Work.

**§ 9.10.2** Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by

the Contract Documents, (4) consent of surety, if any, to final payment (5), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner, and (6) Contractor has submitted all closeout items required by the Contract Documents, including, but not limited to, Operations & Maintenance Manuals, As-Built drawings, and properly executed Department of Revenue IC-134 forms. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

**§ 9.10.3** If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

**§ 9.10.4** The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents; or
- .3 terms of special warranties required by the Contract Documents.
- .4 faulty or defective Work appearing after Substantial Completion

**§ 9.10.5** Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

#### **§ 9.10.6 LIQUIDATED DAMAGES**

**§ 9.10.6.1** If provided for in the Special Conditions, the Owner will be entitled to deduct liquidated damages from the final payment for failure of the Contractor to complete the projects by the date specified in the Contract. The Contractor will be assessed a charge in the amount specified, not as a penalty, but as liquidated damages to compensate the Owner for all additional costs incurred.

**§ 9.10.6.2** The reasonableness of the charge is presumed, and the amount assessed is in addition to any other remedies available to the Owner. The charge will be assessed for each period the entire project is not suitable for use and/or occupancy measured from the first day after the date of Substantial Completion. No liquidated damages will accrue as a result of periods of authorized delays or suspension wherein each day of an authorized delay or suspension will excuse a day of the liquidated damage charge. The charge will be as scheduled in the Supplementary Conditions or Special Conditions.

**§ 9.10.6.3** The Owner may waive any portion of or all of the accrued liquidated damages provided (a) the project is ready for use and/or occupancy by the Owner or (b) available for the next stage construction as determined by the Owner.

**§ 9.10.6.4** The Owner does not waive any rights under the Contract by the collection of liquidated damages. Liquidated damages will continue to be charged to the Contractor or the Contractor's Surety in the event of Contractor default and Owner continuing or supplementing the work with its own forces or separate Contractors.

#### **§ 9.11 PREVAILING WAGES**

**§ 9.11.1** Pursuant to Minnesota Statutes 177.41 to 177.44 and corresponding Minnesota Rules 5200.1000 to 5200.1120, this contract is subject to the prevailing wages as established by the Minnesota Department of Labor and Industry. Specifically, all contractors and subcontractors must pay all laborers and mechanics the established prevailing wages for work performed under the contract. Failure to comply with the aforementioned may result in civil or criminal penalties.

The prevailing hours of labor may not be more than eight hours per day or more than 40 hour per week. Pursuant to Minnesota Statutes 177.43, "No laborer or mechanic employed directly on the project work site by the Contractor or any subcontractor, agent or other person doing or contracting to do all or a part of the work of the project, is permitted or required to work more hours than the prevailing hours of labor, unless paid for all hours in excess of the prevailing hours at a rate of at least 1-1/2 times the hourly basic rate of pay; and a laborer or mechanic may not be paid a lesser rate of wages than the prevailing wage rate in the same or most similar trade or occupation in the area." Nothing in this Contract shall be construed as prohibiting the Contractor or subcontractor paying a higher negotiated wage rate. This requirement does not apply to wage rates and hours of employment of laborers or mechanics who process or manufacture materials or products or to the delivery of materials or products by or for commercial establishments which have a fixed place of business from which they regularly supply processed or manufactured materials or products. This section applies to laborers or mechanics who deliver mineral aggregate such as sand, gravel, or stone which is incorporated into the work under the contract by depositing the material substantially in place, directly or through spreaders, from the transporting vehicle.

**§ 9.11.2** To facilitate compliance pursuant to the State Statutes, wage determinations (prevailing wages) were prepared for different trades for each county from which labor for said project would be secured and are included and published in the Contract Specifications. Any wage determinations that are found not to be so promulgated do not relieve the Contractor from any responsibility for paying the prevailing wage rate of the trade in question. All laborers, workers, and mechanics must be paid the prevailing wage rate for work performed on the project. If the wage certification or published prevailing wages do not include a rate for a classification of work used on the project, the contractor shall contact the Department of Labor and Industry to obtain a rate.

**§ 9.11.3** In accordance with Minnesota Statutes 177.30 Sub. 4 and 177.43 Sub. 3, the Contractor and Subcontractor shall furnish to the Contracting Authority and the Project Owner all payrolls, of all workers on the project, via E-mail as attachments, a State of Minnesota Prevailing Wage Payroll Report as a Microsoft Excel file and Statement of Compliance Form as a PDF file to the appropriate E-mail address:

.1 for Dept. of Administration, Materials Management Division and Real Estate & Construction Services projects use [PrevailingWage.PayrollForm@state.mn.us](mailto:PrevailingWage.PayrollForm@state.mn.us), and [RECS.PrevailingWageForm@state.mn.us](mailto:RECS.PrevailingWageForm@state.mn.us)

.2 FOR OTHER STATE AGENCIES use the E-mail address provided in their solicitation.

The State of Minnesota Prevailing Wage Payroll Report and Statement of Compliance Form are available on the MMD website at [www.mmd.admin.state.mn.us/mn02000.htm](http://www.mmd.admin.state.mn.us/mn02000.htm). Submit the completed and signed State of Minnesota Prevailing Wage Payroll Report as a Microsoft Excel file and the Statement of Compliance Form as a PDF file, no other payroll forms will be accepted to meet this requirement.

These completed forms must be furnished not more than 14 days after the end of each pay period.

The Subject Line on the Contractor's and Subcontractor's E-mail must show the Firm name, the Contract Number or Purchase Order Number and the pay period ending date.

Failure to maintain records as required by Minnesota Statutes 2008, Section 177.30 may be fined up to \$1,000 for each failure to maintain said records. This penalty is in addition to any penalties provided under section 177.32, Subd. 1. Contractors and subcontractors must keep these records for three years after the contracting authority has made final payment on the public works project.

For questions regarding the Prevailing Wage Laws, contact the Department of Labor and Industry at 651.284.5091.

**§ 9.11.4** The Contractor is solely responsible for payment of all required Prevailing Wage rates. Further, the State will not be liable for increased labor cost, errors in the rates or classifications, or changes to same prior to the awarding of Contracts. Information pertaining to the prevailing wage rates, prevailing hours of labor and hourly basic rates are included in this specification. Said wage rates must be posted in at least one conspicuous place for the employees working on the project.

**§ 9.11.5** Any Contractor, subcontractor, or agent, who, after executing a contract in compliance with this section, pays to any laborer, workman, or mechanic employed directly on the project, a lesser wage for work done on the project than the prevailing wage rate, shall be subject to fine and imprisonment. This misdemeanor is punishable by a fine of not more than \$700, or imprisonment for not more than 90 days, or both. Each agent or subcontractor shall furnish to the contractor evidence of compliance with this section. Each day a violation of this section



continues is a separate offense.

**§ 9.11.6** In accordance with Minnesota Statutes 177.43, sub. 6a, upon issuance of a notice of a compliance order and withholding order issued by the Department of labor and Industry to the Contractor of subcontractor or another employer pursuant to section 177.27, sub. 4 for violation of sections 177.41 to 177.44, the Owner, as the contracting authority shall withhold payment of sufficient sum to the prime or general contractor on the project to satisfy the back wages assessed or otherwise cure the violation, and the owner must withhold the sum ordered until the compliance order has become a final order and has been fully paid or otherwise resolved by the Contractor.

## **ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY**

### **§ 10.1 SAFETY PRECAUTIONS AND PROGRAMS**

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract.

### **§ 10.2 SAFETY OF PERSONS AND PROPERTY**

**§ 10.2.1** The Contractor shall take reasonable, and legally required, precautions for safety of, and shall provide reasonable, and legally required, protection to prevent damage, injury or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

**§ 10.2.2** The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.

- .1 **Hotworks:** In addition to legally required and specified protection requirements, the Contractor is responsible for obtaining the Owner's Personnel/Property protection requirements from the facility in which the Contractor is performing the work and to implement a "hotworks" safety program during the performance of their work. Hotworks is defined as use of any equipment or tools capable of producing heat and ignition sources sufficient to start fires or ignite explosives. The local Facility Manager or Safety Director shall be informed in advance of any hotworks necessary for the project. Safety precautions may include the removal or relocation of fire hazards, the provision of guards and fire blankets, coordination and verification of sprinkler systems and a fire watch that extends a minimum of 30 minutes past the conclusion of any hotworks.
- .2 **Safety Program:** The Contractor shall implement and provide documentation on a Safety Program such as AWAIR (A Workplace Accident Injury Reduction Act) program and:
  - .1 Post Emergency phone numbers and procedures at the project site.
  - .2 Provide and Post the Contractor's Safety Director's name and phone number
  - .3 Provide and Post the Contractor's on-site safety representative's name, title and phone number
  - .4 Conduct weekly Safety Meetings during the performance of the contract and allow owner's safety representatives to be present during the Safety Meetings.The owner assumes no obligation or liability for safety on the project site or legal and insurance requirements involving safety.

**§ 10.2.3** The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.

**§ 10.2.3.1** In the event the owner, owner's representative, or architect observe an unsafe or hazardous condition on the project site, they shall have the right, but not an obligation, to stop work until such hazard or safety condition is remedied by the contractor.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel and comply with applicable regulations, laws pertaining to the storage, handling, use, transportation of explosives, hazardous materials or equipment.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3, except damage or loss attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

#### § 10.2.8 INJURY OR DAMAGE TO PERSON OR PROPERTY

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

#### § 10.3 HAZARDOUS MATERIALS

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner and Architect in writing.

§ 10.3.2 All Contractors shall fully comply with the requirements of Minnesota Statutes, Sections 326.70 through 326.81 and Minnesota Rules, parts 4620.3000 to 4620.3700.

§ 10.3.3 Any Contractor who performs any asbestos-related work or asbestos management activity shall be licensed or certified by the Minnesota Commissioner of Health under Minnesota Statutes Sections 326.70 through 326.81, and shall perform such work or activity in accordance with rules prescribed by the Minnesota Commissioner of Health related to asbestos abatement and asbestos management activity. Without waiver of other provisions in this Article 10.3, the Contractor is not responsible for damages, costs, fines or penalties caused by the handling of pre-existing hazardous materials and substances, except to the extent of the contractor's fault or negligence in the handling of such substances.

§ 10.3.4 If there is a Contract involving existing construction, the Owner will provide to the Contractor an Asbestos Survey Report identifying the building materials containing asbestos. The Contractor shall read and understand the content of the Report and examine the site and facilities as necessary to develop a full understanding of the extent, location, quantity, and conditions of any potential asbestos containing material identified in the Report.

§ 10.3.5 Where potentially hazardous substances have been partially removed from any work area, either prior to or in conjunction with, the construction required under the asbestos abatement Contract, the Owner will provide to the Contractor a copy of the drawings, specifications, or other Documents which indicate the extent of removal work anticipated to be performed prior to the work of the Contractor. The Contractor shall review and fully understand the extent of the provided Documents and shall make appropriate inspections to ascertain that potential asbestos

containing materials have been removed from affected work areas or that they have been encapsulated and will not pose a hazard to employees on the job site.

**§ 10.3.6** All Contractors shall know and understand that where asbestos materials may have been partially or fully removed to facilitate the work of the Contractor, that such prior work is not a guarantee that all asbestos containing materials have been completely removed from all areas that might be affected by the work of the Contractor. The Contractor shall protect any asbestos materials that were left in place or that were not shown on the asbestos removal plans as scheduled to be removed.

**§ 10.3.7** In responding for this project, the Contractor shall know and understand that it may encounter potential asbestos containing materials that may impede the progress of construction, require changes in the project schedule or changes in the sequences of work, or result in delays in completion. If such an event occurs, the Owner will grant a reasonable Contract time extension, but only if the Contractor could not reasonably have foreseen such conditions and could not reasonably adjust its project schedule to avoid any delays in completion.

**§ 10.3.8 NOT USED**

**§ 10.3.9** The Owner shall not be responsible under Section 10.3 for materials and substances brought to the site by the Contractor or any tier of subcontractor unless such materials or substances were required by the Contract Documents.

**§ 10.4 EMERGENCIES**

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

**ARTICLE 11 INSURANCE AND BONDS**

**§ 11.1 CONTRACTOR'S INSURANCE**

**§ 11.1.1** The Contractor shall

*(Paragraphs deleted)*

not commence work under the Contract until it has obtained all the insurance required by the specifications and such insurance has been approved by the State of Minnesota, Materials Management Division. All policies and certificates shall provide that the policies shall remain in force and effect throughout the term of the contract.

**§ 11.1.2 COMMERCIAL GENERAL LIABILITY**

**§ 11.1.2.1** Contractor shall maintain insurance to cover claims arising from operations under this Contract, whether such operations are by the Contractor, Subcontractor, Sub-Subcontractor or by anyone directly or indirectly employed under this Contract. Unless otherwise specified, the insurance **minimum** limits of liability shall be as follows:

\$2,000,000 – Per Occurrence

\$2,000,000 – Annual Aggregate applying per project or location

\$2,000,000 – Annual Aggregate applying to Products and Completed Operations

\$50,000 – Fire Damage (any one fire)

\$5,000 – Medical Expense (any one person per occurrence)

**§ 11.1.2.2** The following coverages shall be included:

- Premises and Operations Bodily Injury and Property Damage
- Personal Injury & Advertising Injury
- Products and Completed Operations Liability, to be maintained for at least 3 years after completion of the work under this contract.
- Contractual Liability as provided in ISO form CG 00 01 12 04 13 or its equivalent
- Pollution exclusion with standard exception as per Insurance Services Office  
(ISO) Commercial General Liability Coverage Form – CG 00 01 12 04 13 or equivalent
- Independent Contractors – Let or Sublet work
- Waiver of Subrogation in favor of the State of Minnesota

Contractor agrees it's coverage will not contain any restrictive endorsement(s) excluding or limiting Broad Form

Property Damage (BFPD) or Explosion, Collapse, Underground (XCU).

§ 11.1.2.3 Officers and Employees of the State of Minnesota, the Architect and its agents shall be named as Additional Insureds, to the extent permitted by law, for claims arising out of the Contractor's negligence or the negligence of those for whom the Contractor is responsible for both ongoing and completed operations.

**§ 11.1.3 BUSINESS AUTOMOBILE LIABILITY**

§ 11.1.3.1 Contractor shall maintain insurance to cover liability arising out of the operations, use, or maintenance of all owned, non-owned and hired vehicles. Unless otherwise specified, the insurance **minimum** limits shall be as follows:

\$2,000,000 – Per Occurrence combined Single Limit Bodily Injury and Property Damage.

§ 11.1.3.2 The following coverages shall be included:

- Owned Automobiles
- Hired Automobiles
- Non-owned Automobiles
- Waiver of subrogation in favor of the State of Minnesota

**§ 11.1.4 PROFESSIONAL LIABILITY – DESIGN ERRORS AND OMISSIONS**

§ 11.1.4.1 If the Owner specifies that the Contractor provide design and related services and, pursuant to Section 3.12.10, the Contractor provides such services with its employees, the Contractor shall maintain insurance covering negligent acts, errors or omissions, arising out of the performance of, or the failure to perform, such professional services included in the Contract Documents. Additionally, the Contractor shall require its Architectural and Engineering consultants and their subconsultants, if any, to maintain professional liability insurance. All such insurance shall be maintained for a minimum of five (5) years, if commercially available, otherwise a minimum of three (3) years following completion or earlier termination of the Project. Unless otherwise specified, the insurance minimum shall be as follows:

§ 11.1.4.2 Minimum limit of liability of \$2,000,000 per claim and \$2,000,000 annual aggregate. Any deductible will be the sole responsibility of the Contractor and may not exceed \$50,000 without the written approval of the Owner.

§ 11.1.4.3 If the policy is claims made, it shall contain the following language:

Prior acts or retroactive date of coverage shall not be subsequent to the effective date of this Contract and Contractor shall maintain such insurance for a period of at least five (5) years, if commercially available, otherwise a minimum period of three (3) years, following completion or earlier termination of the Project. If such insurance is discontinued, extended reporting period coverage must be obtained to fulfill this requirement.

Evidence of insurance shall be filed with the Owner prior to start of design services if they are to be provided.

**§ 11.1.5 WORKERS' COMPENSATION**

§ 11.1.5.1 Contractor shall provide workers' compensation insurance for all employees and shall require any Subcontractor to provide workers' compensation insurance in accordance with the statutory requirements of the State of Minnesota and must include:

- a. Part 2, Employers Liability including Stop Gap Liability for monopolistic states, at limits of not less than:
  - \$100,000 – Bodily Injury by disease per employee
  - \$500,000 – Bodily Injury by disease aggregate
  - \$100,000 – Bodily Injury by accident
- b. Coverage C: All States Coverage
- c. If applicable, USL&H, Maritime, Voluntary and Foreign Coverage.
- d. A waiver of subrogation in favor of the State of Minnesota, as Owner.

§ 11.1.5.2 If Contractor is self-insured for its obligation under the Workers' Compensation Statutes in the jurisdiction where the project is located, a Certification of the Authority to Self-Insure such obligations shall be provided.

Evidence of Subcontractor insurance shall be filed with the Contractor.

**§ 11.1.6 AVIATION AND/OR MARINE PUBLIC LIABILITY**

**§ 11.1.6.1** Should aircraft or watercraft of any kind be used by the Contractor, any tier of Subcontractor or by anyone else on their behalf, Contractor or Subcontractor shall maintain or cause the operator of the aircraft/watercraft to maintain aircraft/watercraft public liability insurance including bodily injury, property damage and passenger liability, as respects any aircraft/watercraft owned, used, operated or hired in connection with the work by the Contractor, Subcontractor or anyone else in the following limits:

**§ 11.1.6.2** Aircraft/ Watercraft Liability - \$10,000,000 Per Occurrence combined Single Limit Bodily Injury and Property Damage.

Evidence of insurance shall be filed with the Owner prior to use of equipment on project.

**§ 11.1.7 UMBRELLA OR EXCESS LIABILITY**

**§ 11.1.7.1** The Contractor shall provide Umbrella or Excess Liability Insurance with limits of not less than \$2,000,000 per occurrence and \$2,000,000 aggregate and with coverage at least as broad as the primary coverages of Commercial General Liability, Employer's Liability and Automobile Liability set forth in Article 11 or use Umbrella or Excess Liability Insurance to supplement the primary policy limits to satisfy the full policy limits required by the Contract. Officers and employees of the State of Minnesota, the Architect and its agents shall be named as Additional Insureds, to the extent permitted by law, for claims arising out of the Contractor's negligence or the negligence of those for whom the Contractor is responsible for both ongoing and completed operations.

**§ 11.1.8 ADDITIONAL INSURANCE CONDITIONS**

**§ 11.1.8.1** Primary and Non-Contributory - Contractor's policy(ies) shall be primary and non-contributory insurance to any other valid and collectible insurance available to the State of Minnesota or self-insurance maintained by the State of Minnesota with respect to any claim arising out of this Contract.

**§ 11.1.8.2** Contractor is responsible for payment of contract related insurance premiums and deductibles.

**§ 11.1.8.3** Insurance Companies must either (1) have an AM Best rating of A- (minus) and a Financial Size Category of VII or better, and be authorized to do business in the State of Minnesota or (2) be domiciled in the State of Minnesota and have a Certificate of Authority/Compliance from the Minnesota Department of Commerce if they are not rated by AM Best.

**§ 11.1.8.4** Insurance Companies waive their rights to assert the immunity of the State as a defense to any claims arising out of this Contract.

**§ 11.1.8.5** The above establishes minimum insurance requirements. It is the sole responsibility of the Contractor to determine the need for and to procure additional insurance that may be needed in connection with this contract.

**§ 11.1.8.6** Certificates of Insurance acceptable to the State of Minnesota shall be submitted prior to commencement of the work under this contract. If the Contractor receives a cancellation notice from an insurance carrier affording coverage herein, the Contractor agrees to notify the State of Minnesota within five (5) business days with a copy of the cancellation notice, unless the Contractor's policy(ies) contain a provision that coverage afforded under the policy(ies) will not be canceled without at least thirty (30) days advance written notice to the State of Minnesota.

**§ 11.1.8.7** Coverage under the General Liability policy(ies) of the Contractor will be as broadly construed for the Owner as is available to the Contractor.

**§ 11.1.8.8** The liability limits specified by the contract are the minimum limits required, and any and all additional limits provided to the Contractor will be available on an excess, umbrella or other basis, to the Additional Insured for any and all covered claims.

**§ 11.1.8.9** The insurance and insurance limits required herein shall not be deemed as a limitation on the Contractor's liability with regard to the indemnities granted to the Owner under the contract.

§ 11.2 Owner's Liability Insurance: The Owner will be responsible for maintaining its own liability insurance or self insurance program and, at its option, may purchase and maintain such insurance as will protect the Owner against claims which may arise from operations under the Contract.

*(Paragraph deleted)*

#### § 11.3.1 BUILDER'S RISK – NOT REQUIRED

*(Paragraphs deleted)*

#### § 11.4 PERFORMANCE BOND AND PAYMENT BOND

§ 11.4.1 Unless otherwise exempted in these Contract Documents, the Contractor shall furnish a Performance Bond and a Labor and Material Payment Bond (individually a "Bond" and collectively "Bonds") to the Owner. The Performance Bond shall be in an amount equal to 100% of the full amount of the Contract sum as security for the faithful performance of the Contract, and the Labor and Material Payment Bond shall be in an amount equal to 100% of the full amount of the Contract sum as security for the payment of all persons performing labor and furnishing materials in connection with the Contract Documents. Such Bonds shall be on forms approved by or provided by the Owner and shall name the Owner as primary Obligee.

§ 11.4.2 The surety issuing the Bonds shall be satisfactory to the Owner, be licensed to issue Bonds in the State of Minnesota, shall be rated by A.M. Best an A-(minus) or better, and shall be within the limit set by the Treasury Department as the net limit on any single risk for the surety, or if co-sureties are utilized, the amount of each Bond shall be within the total of such limits set for a surety and any such co-sureties. There shall be no affiliation between the Contractor and any bonding agencies or agent used.

§ 11.4.3 In the event of change orders that result in an increase in the Contract Sum, the penal sum of each Bond shall increase in the amount of such change in the Contract sum without obtaining the surety's consent up to a maximum of 10% of the penal sum. Any aggregate increase in the excess of 10% of the original penal sum shall require the surety's written consent. The Contractor shall be responsible for getting the consent, and shall submit a copy of such consent to the Owner.

§ 11.4.4 If the Owner determines that the surety providing the bonds no longer meets the requirements of Section 11.4.2, the Contractor shall obtain an adequate replacement surety that will provide acceptable bonds in the same form and amount as the bonds issued by the original surety. The Contractor shall pay the premium(s) on such new Bond(s). The Contractor acknowledges that further payments to the Contractor may not be made until the new surety has been qualified and approved.

### ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

#### § 12.1 UNCOVERING OF WORK

§ 12.1.1 If a portion of the Work is covered contrary to the Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Architect, be uncovered for the Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Architect has not specifically requested to examine prior to its being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be at the Owner's expense. If such Work is not in accordance with the Contract Documents, such costs and the cost of correction shall be at the Contractor's expense unless the condition was caused by the Owner or a separate contractor in which event the Owner shall be responsible for payment of such costs.

#### § 12.2 CORRECTION OF WORK

##### § 12.2.1 BEFORE OR AFTER SUBSTANTIAL COMPLETION

The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Architect's services and expenses made necessary thereby, shall be at the Contractor's expense. The costs of corrections include labor, material, equipment, safety precautions in accordance with the Contract Documents.



### **§ 12.2.2 AFTER SUBSTANTIAL COMPLETION**

**§ 12.2.2.1** In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties or special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.4. Notice of discovery and required correction may be given by either the Owner or the Architect.

**§ 12.2.2.2** The one-year period for correction of Work shall be extended with respect to portions of Work first performed and accepted after Substantial Completion by the period of time between Substantial Completion and the actual completion and acceptance of that portion of the Work.

**§ 12.2.2.3** The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

**§ 12.2.3** The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

**§ 12.2.4** The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate contractors caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

**§ 12.2.5** Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

**§ 12.2.6** The Contract Documents survive final payment and are applicable to the performance of all corrective work required, regardless of time.

**§ 12.2.7** The obligation of the Contractor to perform corrective work shall survive final completion of the work and final payment under the Contract.

**§ 12.2.8** The Owner does not waive any remedies for the cost of performing corrective work the Contractor neglects or refuses to perform in a timely manner.

### **§ 12.3 ACCEPTANCE OF NONCONFORMING WORK**

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made. If the Owner chooses to accept nonconforming work pursuant to this provision, then the Contractor shall warrant the accepted work for the period stated in Section 12.2 as amended. The adjusted Contract Sum, when determined after final payment, shall be reimbursed to the Owner by the Contractor.

## **ARTICLE 13 MISCELLANEOUS PROVISIONS**

### **§ 13.1 GOVERNING LAW**

The laws of the State of Minnesota shall govern the Contract and the venue for any claims or actions shall be Ramsey County, Minnesota.

## **§ 13.2 SUCCESSORS AND ASSIGNS**

**§ 13.2.1** The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to covenants, agreements and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

## **§ 13.2.2 NOT USED**

## **§ 13.3 WRITTEN NOTICE**

Written notice shall be deemed to have been duly served if delivered in person to the individual, to a member of the firm or entity, or to an officer of the corporation for which it was intended; or if delivered at, or sent by registered or certified mail or by courier service providing proof of delivery to, the last business address known to the party giving notice. Normal communication between parties may be by US Mail, email or fax.

## **§ 13.4 RIGHTS AND REMEDIES**

**§ 13.4.1** Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.

**§ 13.4.2** No action or failure to act by the Owner, Architect or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach there under, except as may be specifically agreed in writing.

## **§ 13.5 TESTS AND INSPECTIONS**

**§ 13.5.1** Tests, inspections and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures. The Owner shall bear costs of (1) tests, inspections or approvals that do not become requirements until after bids are received or negotiations concluded, and (2) tests, inspections or approvals where building codes or applicable laws or regulations prohibit the Owner from delegating their cost to the Contractor.

**§ 13.5.1.1** The requirements of 13.5.1 may be superseded by the project General Requirements, and by project specifications providing for the Owner to obtain and pay for specific testing and special inspections. Tests and inspections otherwise required by codes, laws, ordinances, rules or regulations of any authority having jurisdiction over the project shall be provided and paid for by the Contractor using entities acceptable to said authority. The Contractor shall schedule all tests and inspections with the providing party so as not to delay the project.

**§ 13.5.2** If the Architect, Owner or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection or approval not included under Section 13.5.1, the Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Architect of when and where tests and inspections are to be made so that the Architect may be present for such procedures. Such costs, except as provided in Section 13.5.3, shall be at the Owner's expense.

**§ 13.5.3** If such procedures for testing, inspection or approval under Sections 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure including those of repeated procedures and compensation for the Architect's services and expenses shall be at the Contractor's expense.

**§ 13.5.4** Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

§ 13.5.5 If the Architect is to observe tests, inspections or approvals required by the Contract Documents, the Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.5.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

## § 13.6 NOT USED

## § 13.7 TIME LIMITS ON CLAIMS

The Owner and Contractor shall commence all claims and causes of action, whether in contract, tort, breach of warranty or otherwise, against the other arising out of or related to the Contract in accordance with the requirements of the final dispute resolution method selected in the Agreement within the time period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all claims and causes of action not commenced in accordance with this Section 13.7.

## § 13.8 ASSIGNMENT OF ANTITRUST CLAIMS

§ 13.8.1 The Contractor hereby assigns to the State of Minnesota any and all claims for overcharges as to goods and materials purchased in connection with this order or Contract resulting from antitrust violations which arise under the antitrust laws of the State of Minnesota. In addition, Contractor warrants and represents that each of their first tier suppliers and Subcontractors shall assign any and all such claims to the State of Minnesota. By signing the Solicitation, the Contractor agrees with the following statement:

- .1 I/We certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition; that no attempt has been made to induce any other person or firm to submit or not to submit a solicitation response; that this solicitation response has been independently arrived at without collusion with any other vendor, competitor, or potential competitor; that this solicitation response has not been knowingly disclosed prior to the opening of solicitation responses of any other vendor or competitor; and that the above statement is accurate under penalty of perjury.

## § 13.9 RECYCLING

§ 13.9.1 In accord with the State of Minnesota's sustainability guidelines, it is in the best interest of the State that scrap, waste and demolished materials be recycled. All Contractors, to the extent commercially available, are required to recycle recyclable scrap materials generated on State of Minnesota building projects. A recycling plan may be required by the General Requirements and Specifications. If the Owner discovers that the Contractor is not utilizing commercially available recycling the project may be stopped until recycling provisions are implemented by the Contractor. When waste and demolished materials contain or are suspected of containing legally defined hazardous compounds, legal and proper disposal by qualified and licensed personnel is required.

## § 13.10 RECORDS

§ 13.10.1 The books, records, documents, bid preparation documents, and accounting procedures and practices of the Contractor and its employees, agent, or subcontractors relevant to the Contract must be made available to and subject to examination by the Owner, Legislative Auditor and/or the State Auditor for a minimum of six years after the end of the contract. The Contractor shall maintain all documentation, at its expense, in the event of a claim giving rise to a litigation hold order.

## § 13.11 GOVERNMENT DATA PRACTICES ACT

§ 13.11.1 The Contractor and the Owner must comply with the Minnesota Government Data Practices Act, Minn. Statute Ch 13, as it applies to all data provided by the Owner, and as it applies to all data created collected, received, stored, used, maintained or disseminated by the Contractor under this Contract. The civil remedies of Minn. Statute 13.08 apply to the release of all data by either the Contractor or the Owner.

§ 13.11.2 If the Contractor receives a request to release data, the Contractor must immediately notify the Owner before releasing any data. The Owner will give the Contractor instructions concerning the release of the data to the requesting party.

### **§ 13.13 LABOR AND WAGES NONDISCRIMINATION**

**§ 13.13.1** The Contract shall conform with and agree to provisions of Minnesota Statutes section 181.59 that prohibits discrimination in the hiring of labor by reason of race, creed or color, which section is reproduced below:

**§ 13.13.2 181.59 DISCRIMINATION ON ACCOUNT OF RACE, CREED, OR COLOR PROHIBITED IN CONTRACT.** Every contract for or on behalf of the State of Minnesota, or any county, city, town, township, school, school district, or any other district in the State, for materials, supplies or construction shall contain provisions by which the Contractor agrees:

- .1 That, in hiring of common or skilled labor for the performance of any work under any Contract, or any subcontract, no Contractor, Material Supplier, or Vendor shall, by reason of race, creed, or color discriminate against the person or persons who are citizens of the United States or resident aliens who are qualified and available to perform the work to which the employment relates;
- .2 That no Contractor, Material Supplier, or Vendor shall, in any manner, discriminate against or intimidate, or prevent the employment of any person or persons identified in the clause (1) of this section, or on being hired, prevent, or conspire to prevent, the person or persons from the performance of work under any Contract on account of race, creed, or color;
- .3 That a violation of this Section is a misdemeanor; and
- .4 That this Contract may be canceled or terminated by the State, county, city, town, school board, or any other person authorized to grant the Contracts for employment, and all money due, or to become due under the contract, may be forfeited for a second or any subsequent violation of the terms and conditions of this Contract.

## **ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT**

### **§ 14.1 TERMINATION BY THE CONTRACTOR**

**§ 14.1.1** The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency that requires all Work to be stopped;
- .3 **NOT USED**
- .4 **NOT USED**

**§ 14.1.2** The Contractor may terminate the Contract if, through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, repeated suspensions, delays or interruptions of the entire Work by the Owner as described in Section 14.3 constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

**§ 14.1.3** If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' written notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed, including reasonable overhead and profit, costs incurred by reason of such termination, and damages.

### **§ 14.1.4 NOT USED**

### **§ 14.2 TERMINATION BY THE OWNER FOR CAUSE**

**§ 14.2.1** The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials; or
- .2 fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors; or
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents; or
- .5 files a bankruptcy petition or has a bankruptcy action commenced against it that is not discharged within 30 days of commencement of same, makes an assignment for the benefit of its creditors, has a receiver appointed to manage the Contractor's assets or otherwise is becoming insolvent; or

- .6 materially fails to comply with interim or final completion dates as required by the Contract Documents, or materially fails to comply with design requirements of the Contract Documents, or persistently fails to perform the work in accordance with the Contract Documents.
- .7 fails to maintain the required insurance.

§ 14.2.2 When any of the above reasons exist, the Owner, may by giving the Contractor and the Contractor's surety, if any, written notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum the direct and indirect consequential costs of completing the Work, including but not limited to fees and charges of Architects, Engineers, Attorneys, other professionals and court costs, and other damages incurred by the Owner, such excess will be paid to the Contractor. If such costs and damages exceed such unpaid balance, the Contractor shall pay the difference to the Owner. Such costs incurred by the Owner will be approved as to reasonableness by the Owner, but when exercising any rights or remedies under this article, the Owner shall not be required to obtain the lowest price for the work performed. This obligation for payment shall survive termination of the Contract, final completion of work and final payment.

§14.2.5 If a court determines that the termination was not supported by at least one of the reasons stated in Section 14.2.1, the termination shall be deemed a termination for the Owner's convenience and be governed by Section 14.4.

#### § 14.3 SUSPENSION BY THE OWNER FOR CONVENIENCE

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay or interruption as described in Section 14.3.1. Adjustment of the Contract Sum shall not include profit. No adjustment shall be made to the extent

- .1 that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

#### § 14.4 TERMINATION BY THE OWNER FOR CONVENIENCE

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination. The Contractor may not recover Overhead and Profit for Work not performed.

## ARTICLE 15 CLAIMS AND DISPUTES

### § 15.1 CLAIMS

#### § 15.1.1 DEFINITION

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, extension of time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. Arbitration and Mediation, mandated or otherwise required, as a method of dispute and/or claim resolution, wherever referenced in Article 15, do not apply to this Contract or any Contract with the State of Minnesota. This Article 15 is modified to exclude all references to arbitration and mediation and to substitute the following:

The Contractor and the State may exercise those legal remedies in District Court as may be available to them in connection with any dispute arising out of this agreement which cannot be settled by the parties.

In case any question, dispute or controversy arises between the Contractor and Owner, or Contractors separately employed by the State, such dispute or controversy shall be referred to the Commissioner of Administration or the Commissioner of Administration's designee.

The venue of any proceedings is herein agreed to be Ramsey County, State of Minnesota, unless otherwise specifically agreed.

The Contractor shall carry on the work and maintain the progress schedule during any proceedings or disputes, unless otherwise instructed by the Owner in writing.

#### § 15.1.2 NOTICE OF CLAIMS

Claims by the Contractor must be initiated by written notice to the Owner with a copy sent to the Architect. Claims must be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the Contractor first recognizes the condition giving rise to the Claim, whichever is later. For purposes of this section, communication regarding contractor's claims may be communicated by the Owner, Architect, Owner's Representative or other agent of the Owner acting on behalf of the owner.

Claims not initiated by the contractor within 21 days after occurrence of the event giving rise to such claim or within 21 days after the contractor first recognizes the condition giving rise to the claim are waived.

.1 A Notice of Claim is not an "invoice" or application for payment for the purposes of Section 15.1.2 nor for purposes of Minnesota Statutes Section 16A.124.

#### § 15.1.3 CONTINUING CONTRACT PERFORMANCE

Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents. The Architect will prepare Change Orders and issue Certificates for Payment in accordance with the decisions of the Owner.

#### § 15.1.4 CLAIMS FOR ADDITIONAL COST

If the Contractor wishes to make a Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

#### § 15.1.5 CLAIMS FOR ADDITIONAL TIME

§ 15.1.5.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

§ 15.1.5.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated and had an adverse effect on the scheduled construction, in accordance with Section 8.3.2.4.



#### **§ 15.1.6 CLAIMS FOR CONSEQUENTIAL DAMAGES**

*(Paragraphs deleted)*

Waiver of Consequential Damages is NOT USED. The Owner reserves the right to invoke consequential damages as an additional remedy for the Owner.

#### **§ 15.1.7 CLAIMS FOR CONCEALED OR UNKNOWN CONDITIONS**

If conditions are encountered at the site which are (1) subsurface or otherwise fully concealed physical conditions which differ materially from those affirmatively indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, that could not have been anticipated and which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents (3) are not observable prior to bidding or inferable by the type of construction, then notice by the observing party shall be given to the other party promptly before conditions are disturbed and in no event later than 21 days after first observance of the conditions. If notice is not given by the Contractor within 21 days after first observance of the condition, all claims by the contractor that arise from the condition are waived. The Architect will promptly investigate such conditions and, if they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall so notify the Owner and Contractor in writing, stating the reasons. Claims by either party in opposition to such determination must be made within 21 days after the Architect has given notice of the decision. If the conditions encountered are materially different, the Contract Sum and Contract Time shall be equitably adjusted, but if the Owner and Contractor cannot agree on an adjustment in the Contract Sum or Contract Time, the adjustment shall be referred to the Architect for initial determination, subject to further proceedings pursuant to Section 15.2.

#### **§ 15.2 RESOLUTION OF CLAIMS AND DISPUTES**

**§ 15.2.1** Claims, disputes and other matters in question between the Contractor and the Owner relating to the execution or progress of the work or interpretation of the Contract Documents, along with supporting documents, shall be referred initially to the Architect for decision which the Architect will render in writing within a reasonable time. The Contractor shall promptly furnish all information requested by the Architect so the Architect can make an informed decision. The Architect's decision shall be binding but does not abridge any legal remedies afforded the parties under the Contract Sections 15.2.9 and 15.2.10.

**§ 15.2.2 NOT USED**

**§ 15.2.3 NOT USED**

**§ 15.2.4 NOT USED**

**§ 15.2.5 NOT USED**

**§ 15.2.6 NOT USED**

**§ 15.2.6.1 NOT USED**

**§ 15.2.7 NOT USED**

**§ 15.2.8 NOT USED**

**§ 15.2.9** Arbitration and Mediation as a method of dispute resolution, wherever referenced in Article 15 or elsewhere in the Contract Documents, do not apply to this Contract. Any unresolved issue, dispute or controversy arising between the Contractor and Owner, Architects, or Contractors separately employed by the Owner shall first be referred to the Commissioner of Administration or its designated representative.

§ 15.2.10 The Contractor and Owner may exercise those legal remedies in District Court as may be available to them in connection with any dispute arising out of this agreement which cannot be settled by the parties subject to the conditions in Section 13.7.

The venue of any proceedings shall be Ramsey County, State of Minnesota, unless otherwise agreed in writing.

The Contractor and Subcontractors shall carry on the work and maintain the progress schedule during any proceedings, unless otherwise instructed by the Owner in writing.

§ 15.3 MEDIATION – NOT USED

§ 15.3.1 NOT USED

§ 15.3.2 NOT USED

§ 15.3.3 NOT USED

§ 15.4 ARBITRATION - NOT USED

§ 15.4.1 NOT USED

§ 15.4.1.1 NOT USED

§ 15.4.2 NOT USED

§ 15.4.3 NOT USED

§ 15.4.4 CONSOLIDATION OR JOINDER - NOT USED

§ 15.4.4.1 NOT USED

§ 15.4.4.2 NOT USED

§ 15.4.4.3 NOT USED

**SECTION 00 73 03****SUPPLEMENTARY CONDITIONS****1.01 GENERAL**

- A. The following Supplementary Conditions shall supplement and supersede the General Conditions of the Contract, A201, wherever the two are in conflict.
- B. The General Conditions of the Contract, A201, and these Supplementary Conditions are a part of the contract Documents.

**1.02 OWNER**

- A. Article 2.1.1: The authorized representative for the State of Minnesota is the Commissioner of Administration. The Commissioner's representative for the discharge of this Contract is the DEPARTMENT OF NATURAL RESOURCES, Operations Services Division.

**1.03 LIQUIDATED DAMAGES**

- A. Article 9.10.6: The contractor will be assessed liquidated damages in the amount of **\$25/day**.

**1.04 TIME OF COMPLETION**

- A. Completion of the work shall be as set forth in Section 00 41 73 Prime Contractor Response Form

**1.05 AWARDED CONTRACTOR PROVIDED SPECIFICATIONS AND DRAWINGS FOR PROJECT CONSTRUCTION**

- A. The Owner (or owner's agent) will provide to the Prime Contractor that is awarded this project a complete pdf digital project plan set and any ongoing changes in a pdf digital file format for their construction use. AutoCAD file format (.dwg) may be provided to the awarded Prime Contractor only upon the State Project Manager's written approval. The Prime Contractor will provide to their subcontractors, etc. all printed paper project plan specifications and drawings required for the construction for the project. All printing and distribution costs incurred will be at the Prime Contractor's expense.

**1.07 FINAL PAYMENT INFORMATION**

- A. Article 9.10.2 and 1.30 of the Instructions to Responder references the IC-134 "Withholding Affidavit for Contractors" form. The instructions and form is available at the following URL: <http://www.revenue.state.mn.us/businesses/withholding/Pages/File-and-Pay.aspx>. (Click on "Contractor Affidavit Information for Government Projects" then click on "Submit Contractor Affidavit Electronically")

**1.08 AMERICAN-MADE STEEL**

- A. This project requires use of American-made steel. American-made Steel is defined as steel for which all manufacturing processes must take place domestically. Manufacturing is any process that modifies the chemical content; physical shape or size; or final finish of a product. Manufacturing begins with the initial melting and mixing, and continues through the bending and coating stages. If a domestic product is taken out of the US for any process, it becomes foreign source material.
- B. For purposes of this solicitation, the tracking of American-made steel use will be limited to that steel found in Division 5 – Metals. Contractors are encouraged to use American-made steel whenever possible in the other divisions. The prime contractor must submit proof of origin of steel materials in Division 5 for acceptance as part of the project's submittal processes. Submittals without acceptable documentation of the steel origin as American-made will be rejected. If a responder discovers that American-made Steel is not available for a specific item while preparing their response, immediately notify the State in writing prior to the bid due date and request acceptance of substitute products by addendum.
- C. Post-award substitution requests: Documentation that American-made steel is not available for a particular product must be submitted for consideration of substitute products. See substitution requirements for process instructions.

**SECTION 00 73 16****INSURANCE REQUIREMENTS**

- 1.01 The AIA A201, Article 11, Insurance and Bonds are hereby made a part of these specifications and contract requirements. The following Insurance Requirements shall supplement the General Conditions of the Contract, A201.
- 1.02 Article 11.3. Property Insurance
- A. Builders Risk is not required.
- 1.03 Article 11.1.2 Business Automobile Liability
- A. The Contractor shall provide and maintain Pollution Liability Auto Endorsements. The following coverage's are also required:
1. CA 9948 Endorsement – Pollution Liability – Broadened Coverage (or equivalent)
    - a. CA 9948 is an endorsement that is attached to an Automobile Liability policy for Contractors who are handling pollutants. This endorsement extends the Automobile Liability policy to cover liabilities incurred as a result of the discharge, dispersal, seepage, migration, release or escape of pollutants that are part of the contract work, which are being transported, towed by, handled, stored, disposed of or processed in or upon a covered vehicle, if they are upset or overturned.
  2. MCS 90 Endorsement
    - a. MCS-90 is an endorsement that is attached to the Automobile Liability policy of motor carriers as set forth by the Motor Carrier Act of 1980. The endorsement assures compliance by the insured, within the limits stated therein, with Sections 29 and 30 of the Motor Carrier Act of 1980 and the rules and regulations of the Federal Highway Administration (FHWA) and the Interstate Commerce Commission (ICC).
- 1.04 Pollution Liability Insurance
- A. The Contractor shall provide and maintain Pollution Liability Insurance (or equivalent pollution liability coverage endorsed on another form of liability coverage, such as general liability or professional errors and omissions policy) and in case any work is subcontracted, the Contractor will require the subcontractor to provide Pollution Liability insurance, unless the requirement is noted as waived in these specifications for specific types of work. Unless otherwise specified the insurance minimum limits of liability shall be as follows:
- \$2,000,000 – Per Occurrence  
\$2,000,000 – Annual Aggregate
- The following coverage's shall be included:
- Policy will include non-owned disposal site Pollution Liability.
  - Policy will not contain a lead exclusion.
  - Waiver of subrogation in favor of the State of Minnesota.
- Officers and Employees of the State of Minnesota, the Architect and its agents shall be named as Additional Insured, by endorsement, to the extent permitted by law, for claims arising out of the Contractor's negligence or the negligence of those for whom the Contractor is responsible for both ongoing and completed operations.
- 1.05 Professional Liability – Design Errors and Omissions coverages are not required.

<b>CERTIFICATE OF LIABILITY INSURANCE</b>						DATE (MM/DD/YY) Date Cert. Typed	
PRODUCER  Agent/Broker Name & Address				THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.			
INSURED  Contractor/Vendor Name & Address				INSURER A _____ INSURER B _____ INSURER C _____ INSURER D _____			
COVERAGES							
THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OF CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO IT. THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.							
INS R	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS		
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR  <input checked="" type="checkbox"/> CONTRACTUAL LIABILITY	Policy Number	Effective date of policy	Expiration date of policy	EACH OCCURENCE		\$2,000,000
	FIRE DAMAGE (Any one fire)				\$ 50,000		
	MED EXP (Any one person)				\$ 5,000		
	PERSONAL & ADVERTISING INJURY				\$2,000,000		
	GENERAL AGGRREGATE				\$2,000,000		
	PRODUCTS-COMP/OP AGG				\$2,000,000		
	DEDUCTIBLE BI AND/OR PD _____						
	GENERAL AGGREGATE APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC						
B	AUTOMOBILE LIABILITY  <input type="checkbox"/> ANY AUTO <input checked="" type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS <input checked="" type="checkbox"/> * CA 99 48 Endorsement <input checked="" type="checkbox"/> * MCS-90 Endorsement	Policy Number  *If required in special terms & conditions.	Effective date of policy	Expiration date of policy	COMBINED SINGLE LIMIT (Ea accident)		\$2,000,000
	BODILY INJURY (Per person)				\$		
	BODILY INJURY (Per accident)				\$		
	PROPERTY DAMAGE (Per accident)				\$		
	EACH OCCURENCE				\$ **		
C	EXCESS LIABILITY <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE <input type="checkbox"/> RETENTION \$	PART 2 - Policy Number <i>(**Excess/Umbrella may be used to supplement the GL &amp; Auto limits, to satisfy policy limits requirements.)</i>	Effective date of policy	Expiration date of policy	AGGREGATE		\$ **
	EACH OCCURENCE				\$		
	AGGREGATE				\$		
	EACH OCCURENCE				\$		
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	Policy Number	Effective date of policy	Expiration date of policy	<input checked="" type="checkbox"/> WC STATU-ORY LIMITS	<input type="checkbox"/> OTH-ER	
	E.L. EACH ACCIDENT				\$100,000		
	E.L. DISEASE-EA EMPLOYEE				\$100,000		
	E.L. DISEASE - POLICY LIMIT				\$500,000		
	* POLLUTION LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> NON-OWNED DISPOSAL SITES  <input checked="" type="checkbox"/> NO LEAD EXCLUSION	Policy Number  *If required in special terms & conditions.	Effective date of policy	Expiration date of policy	Each Occurrence Aggregate		\$2,000,000 \$2,000,000
	BUILDERS RISK LIMIT-EQUAL TO CONTRACT AMOUNT				\$		
	DEDUCTIBLE, IF ANY				\$		
E	BUILDER'S RISK- If required in Article 11.3.1 of solicitation <input checked="" type="checkbox"/> "All Risk" <input checked="" type="checkbox"/> Named Perils				BUILDERS RISK LIMIT-EQUAL TO CONTRACT AMOUNT		\$
	DEDUCTIBLE, IF ANY				\$		
<b>PART 3 - DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS</b> - The State of Minnesota is named as an Additional Insured on a primary and non-contributory basis for ongoing and completed operations under Commercial General Liability, Umbrella or Excess Liability, and *Pollution Liability. - Insurance companies waive any rights to assert the immunity of the state as a defense. - A waiver of subrogation applies in favor of the certificate holder on all policies listed above.							
CERTIFICATE HOLDER		<input checked="" type="checkbox"/> ADDITIONAL INSURED; INSURER LETTER: _____ CANCELLATION					
The State of Minnesota Name of State Agency Street Address of State Agency City, State, & Zip Code of State Agency (See bid form for agency name & address.)				SHOULD ANY OF THE ABOVE POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE			

**SECTION 00 73 35****NOTICE, AFFIRMATIVE ACTION****1.01 NOTICE TO PRIME CONTRACTORS AFFIRMATIVE ACTION CERTIFICATE OF COMPLIANCE**

1. It is hereby agreed between the parties that MN Statutes, Section 363A.36 and MN Rules, Parts 5000.3400 to 5000.3600 are incorporated into any contract between these parties based upon this specification or any modification of it.

**1.02 NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY**

1. The offeror's or Responder's attention is called to the "equal opportunity clause" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade on all construction work in the covered area are as follows:

Timetables	Goals for minority participation for each trade	Goals for female participation in each trade
Insert the time- tables as determined under part 5000.3520	SEE NEXT PAGE FOR MINORITY PARTICIPATION GOALS	SEE NEXT PAGE FOR FEMALE PARTICIPATION GOAL

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

The contractor's compliance with MN Statutes, Section 363A.36 and part 5000.3520 shall be based on its implementation of the equal opportunity clause, specific affirmative action obligations required by the specifications in part 5000.3540, and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, MN Statutes, Section 363A.363 and part 5000.3520. Compliance with the goals will be measured against the total work hours performed



**DEPARTMENT OF HUMAN RIGHTS  
CONTRACT COMPLIANCE PROGRAM  
NOTICE OF MINORITY AND WOMEN PARTICIPATION  
GOALS IN STATE CONSTRUCTION**

Notice is hereby given that the Commissioner of the Minnesota Department of Human Rights has issued revised goals for minority participation rates in state construction, pursuant to Minnesota Rules parts 5000.3520 through 5000.3530.

**Timetables:** Upon publication until further notice.

**Goals** for minority participation are divided into seven categories:

	<u>Minorities</u>
<b>Hennepin &amp; Ramsey Counties</b>	<b>32%</b>
<b>Five County Area</b>	<b>22%</b>
Anoka, Carver, Dakota, Scott, Washington	
<b>For participation by women for the seven categories</b>	<b>6%</b>
<b>Central MN</b>	<b>3%</b>
Benton, Chisago, Isanti, Kanabec, Kandiyohi, McLeod, Meeker, Mille Lacs, Pine, Renville, Sherburne, Stearns, Wright	
<b>Southwest MN</b>	<b>4%</b>
Big Stone, Blue Earth, Brown, Chippewa, Cottonwood, Faribault, Jackson, Lac qui Parle, Le Sueur, Lincoln, Lyon, Martin, Murray, Nicollet, Nobles, Pipestone, Redwood, Rock, Sibley, Swift, Waseca, Watonwan, Yellow Medicine	
<b>Southeast MN</b>	<b>4%</b>
Dodge, Fillmore, Freeborn, Goodhue, Houston, Mower, Olmsted, Rice, Steele, Wabasha, Winona	
<b>Northeast MN</b>	<b>5%</b>
Aitkin, Carlton, Cook, Itasca, Koochiching, Lake, Saint Louis	
<b>Northwest MN</b>	<b>6%</b>
Becker, Beltrami, Cass, Clay, Clearwater, Crow Wing, Douglas, Grant, Hubbard, Kittson, Mahnommen, Lake of the Woods, Marshall, Morrison, Norman, Ottertail, Pennington, Polk, Pope, Red Lake, Roseau, Stevens, Todd, Traverse, Wadena, Wilkin	

Commissioner, Dept. of Human Rights

3. The contractor shall provide written notification to the Compliance Division of the Minnesota Department of Human Rights within 10 working days of award of any construction subcontract at any tier for construction work under the contract resulting from the solicitation. The notification must list the name, address and telephone number of the subcontractor; employer identification number, estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.
4. As used in this notice, and in the contract resulting from this solicitation, the "covered area" is the geographical area where the contract is to be performed. The contracting state agency shall insert the description of the geographical areas where the contract is to be performed describing the State, County, City, Town, or Municipality of the geographical area in this notice and in the contract resulting from this solicitation.

### 1.03 DISABLED INDIVIDUAL CLAUSE

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

- B. The contractor agrees to comply with the rules and relevant order of the Minnesota Department of Human Rights issued pursuant to the Minnesota Human Rights Act.
- C. In the event of the contractor's noncompliance with the requirements of this clause, actions for non-compliance may be taken in accordance with Minnesota Statutes, Section 363A.36 and the rules and relevant orders of the Minnesota Department of Human Rights issued pursuant to the Minnesota Human Rights Act.
- D. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the commissioner of the Minnesota Department of Human Rights. Such notices shall state the contractor's obligation under the law to take affirmative action to employ and advance in employment qualified disabled employees and applicants for employment, and the rights of applicants and employees.
- E. The contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the contractor is bound by the terms of Minnesota Statutes, Section 363A.36 of the Minnesota Human Rights Act and is committed to take affirmative action to employ and advance in employment physically and mentally disabled individuals.

#### **1.04 STANDARD STATE EQUAL EMPLOYMENT OPPORTUNITY**

- 1. The contractor shall implement the specific affirmative action standards provided in paragraphs 4(a) through (o) of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor shall reasonably be able to achieve in each construction trade in which it has employees in the covered area. The contractor shall make substantially uniform progress toward its goals in each craft during the period specified.
- 2. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the contractor's obligations under these specification, Minnesota Statutes, Section 363A.36 of the Minnesota Human Rights Act, of the rules adopted under the act.
- 3. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the contractor during the training period, and the contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained according to training programs approved by the Minnesota Department of Human Rights, the Minnesota Department of Labor and Industry, or the United States Department of Labor.
- 4. The contractor shall take specific affirmative action to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications must be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
  - (a) Make a good faith effort to maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
  - (b) Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
  - (c) Maintain a current file of the names, address, and telephone numbers of each minority and female off-the street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If the individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefore; along with whatever additional actions the contractor may have taken.

- (d) Provide immediate written notification to the commissioner of the Minnesota Department of Human Rights when the union or unions with which the contractor has a collective bargaining agreement has not referred to the contractor a minority person or woman sent by the contractor, or when the contractor has other information that the union referral process has impeded the contractor's efforts to meet its obligations.
  - (e) Develop on-the-job training opportunities and/or participate in training programs for the areas which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the State of Minnesota. The contractor shall provide notice of these programs to the sources compiled under (b).
  - (f) Disseminate the contractor's equal employment opportunity policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report etc., by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company equal employment opportunity policy on bulletin boards accessible to all employees at each location where construction work is performed.
  - (g) Review, at least annually, the company's equal employment opportunity policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assigning, layoff, termination, or other employment decisions including specific review of these items with on-site supervisory personnel such as superintendents, general foremen, etc., prior to the first day of construction work at any job site. A written record shall be made and subject matter discussed and disposition of the subject matter.
  - (h) Disseminate the contractor's equal employment opportunity policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's equal employment opportunity policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.
  - (i) Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source the contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
  - (j) Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a contractor's work force.
  - (k) Conduct, at least annually an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek to prepare for, through appropriate training, such opportunities.
  - (l) Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the equal employment opportunity policy and the contractor's obligations under these specifications are being carried out.
  - (m) Ensure that all facilities and company activities are non-segregated except the separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
  - (n) Document and maintain a record of all solicitations of offers for subcontract from minority and female construction contractors and suppliers, including circulation of solicitation to minority and female contractor associations and other business associations.
  - (o) Conduct a review, at least annually, of all supervisors' adherence to and performance under the contractor's equal employment opportunities policies and affirmative action obligations.
4. Contractors are encouraged to participate in voluntary associations that assist in fulfilling one or more of their affirmative action obligations (4(a) to (o)).
5. The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 4(a) to (o) of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, insures that the concrete benefits of the program are reflected in the

- contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply shall not be defense for the contractor's noncompliance.
6. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the contractor may be in violation of part 5000.3520 if a particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally, the contractor may be in violation of part 5000.5320 if a specific minority group of women is underutilized).
  7. The contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, creed, religion, sex, national origin, and marital status, status with regard to public assistance, disability, age, or sexual orientation.
  8. The contractor shall not enter into any subcontract with any person or firm debarred from government contracts under the federal Executive Order 11246 or a local human rights ordinance, or whose certificate of compliance has been suspended or revoked pursuant to Minnesota Statutes 363A.36.
  9. The contractor shall carry out such sanctions for violation of these specifications and of the equal opportunity clause, including suspension, termination, and cancellation of existing contracts as may be imposed or ordered pursuant to Minnesota Statutes, 363A.36, and its implementing rules. Any contractor who fails to carry out such sanctions shall be in violation of these specifications and Minnesota Statutes, Section 363A.36.
  10. The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 4, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of Minnesota Statutes, Section 363A.36, its implementing rules, or these specifications, the commissioner shall proceed in accordance with part 5000.3570.
  11. The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company equal employment opportunity policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Minnesota Department of Human Rights, and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (for example, mechanic, apprentice trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay and locations at which the work was performed.  
Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
  12. Nothing herein provided in this part shall be construed as a limitation upon the application of other state or federal laws that establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents.

MINNESOTA DEPARTMENT OF HUMAN RIGHTS  CONTRACT COMPLIANCE UNIT		MONTHLY UTILIZATION REPORT  EMPLOYMENT AND TRAINING		REPORTING PERIOD:  FROM: TO:		CURRENT GOALS  MINORITY: FEMALE:												
<p>This Monthly Utilization Report is required by MN State 363A. Failure to report can result in cancellation, termination, or suspension of the contract; and the contractor may be declared ineligible for further State construction projects.</p> <p>Return completed report to: MN Department of Human Rights</p> <p style="text-align: center;">Contract Compliance Unit</p> <p style="text-align: center;">625 Robert Street</p> <p style="text-align: center;">St. Paul, Minnesota 55155</p>						NAME AND ADDRESS OF CONTRACTING FIRM:  LOCATION OF PROJECT:												
A. HOURS OF EMPLOYMENT ON PROJECT								B. TOTAL NUMBER OF EMPLOYEES										
CONSTRUCTION  TRADE*	CLASSIFI-  CATION	TOTAL EMPLOYEE HOURS BY TRADE		TOTAL MINORITY EMPLOYEE HOURS BY TRADE								TOTAL MINORITY HOUR PERCENTAGE	TOTAL FEMALE HOUR PERCENTAGE	TOTAL NUMBER OF EMPLOYEES		TOTAL NUMBER OF MINORITY EMPLOYEES		
				B		H		AI/AN		A/PI				Male	Female	Male	Female	
		M	F	M	F	M	F	M	F	M	F							
	Journey												%	%				
	Apprentice												%	%				
	Trainee												%	%				
	Sub-Total												%	%				
TOTAL JOURNEY HOURS													%	%				
TOTAL APPRENTICE HOURS													%	%				
TOTAL TRAINEE HOURS													%	%				
GRAND TOTAL HOURS													%	%				
COMPANY OFFICIAL=S SIGNATURE AND TITLE:				TELEPHONE NUMBER:  ( )				DATE SIGNED:  _ 20				PAGE:  _OF						

One sheet required for each trade with Total hours on first sheet only.

**SECTION 00 73 39****TABLE OF ELIGIBLE TARGETED GROUP AND ECONOMICALLY DISADVANTAGED BUSINESSES****STATE OF MINNESOTA  
DEPARTMENT OF ADMINISTRATION****TABLE OF GROUPS EXPERIENCING DISPARITY  
IN STATE OF MINNESOTA PURCHASING & CONTRACTING  
CONDUCTED UNDER MINN. STAT. CHAPTER 16C  
(Based on the 2009 Disparity Study)**

	<b>Construction Prime Contracts</b>	<b>Construction Subcontracts</b>	<b>Professional Services</b>	<b>Other Services</b>	<b>Goods &amp; Supplies</b>
African American	X	X			X
American Indian	X	X	X		X
Asian American	X		X		X
Hispanic American	X	X	X	X	X
Nonminority Women	X	X	X	X	X
Disabled	X	X	X	X	X

**SECTION 00 73 43****PREVAILING WAGE REQUIREMENTS  
FOR STATE FUNDED PROJECTS**

- A. Prevailing Wage Requirements are shown in AIA A201 2007, General Conditions of the Contract for Construction, Article 9.11 [AIA Document A201Art9.11] that is included in this solicitation.
- B. Submit Payroll Reports and Statement of Compliance Forms to: [prevailingwage.dnr@state.mn.us](mailto:prevailingwage.dnr@state.mn.us). The Subject line on the Contractor's and Subcontractor's E-mail must give the Solicitation Number first followed by the Firm Name second. Prevailing Wage Payroll forms are attached to this solicitation and are available on the OSP Website at [www.mmd.admin.state.mn.us/mn02000.htm](http://www.mmd.admin.state.mn.us/mn02000.htm).



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**SECTION 00 73 46**

**PREVAILING WAGE RATES**

- 1.01 The prevailing wage rates for the county/region in which the work is to be performed are included in this division.

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



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

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**Construction Type: Highway and Heavy**

**Region Number: 10**

Counties within region:

- BROWN-08
- COTTONWOOD-17
- JACKSON-32
- MARTIN-45
- NOBLES-53
- ROCK-67
- WATONWAN-83

Effective: 2016-11-07    Revised: 2016-12-27

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

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

Violations should be reported to:

Department of Transportation  
Office of Construction  
Transportation Building MS650  
John Ireland Blvd  
St. Paul, MN 55155  
(651) 366-4209

Refer questions concerning the prevailing wage rates to:

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

**LABOR CODE AND CLASS**

		<b>EFFECT DATE</b>	<b>BASIC RATE</b>	<b>FRINGE RATE</b>	<b>TOTAL RATE</b>
<b>LABORERS (101 - 112) (SPECIAL CRAFTS 701 - 730)</b>					
101	LABORER, COMMON (GENERAL LABOR WORK)	2016-11-07	25.88	16.57	42.45
102	LABORER, SKILLED (ASSISTING SKILLED CRAFT JOURNEYMAN)	2016-11-07	25.88	16.57	42.45
103	LABORER, LANDSCAPING (GARDENER, SOD LAYER AND NURSERY OPERATOR)	2016-11-07	15.00	0.00	15.00
104	FLAG PERSON	2016-11-07	13.94	0.00	13.94
105	WATCH PERSON	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>			
106	BLASTER	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>			
107	PIPELAYER (WATER, SEWER AND GAS)	2016-11-07	25.88	16.57	42.45
108	TUNNEL MINER	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>			
109	UNDERGROUND AND OPEN DITCH LABORER (EIGHT FEET BELOW STARTING GRADE LEVEL)	2016-11-07	26.58	16.57	43.15
110	SURVEY FIELD TECHNICIAN (OPERATE TOTAL STATION, GPS RECEIVER, LEVEL, ROD OR RANGE POLES, STEEL TAPE MEASUREMENT; MARK AND DRIVE STAKES; HAND OR POWER DIGGING FOR AND IDENTIFICATION OF MARKERS OR MONUMENTS; PERFORM AND CHECK CALCULATIONS; REVIEW AND UNDERSTAND CONSTRUCTION PLANS AND LAND SURVEY MATERIALS). THIS CLASSIFICATION DOES NOT APPLY TO THE WORK PERFORMED ON A	2016-11-07	28.67	7.77	36.44

PREVAILING WAGE PROJECT BY A LAND SURVEYOR  
WHO IS LICENSED PURSUANT TO MINNESOTA  
STATUTES, SECTIONS 326.02 TO 326.15.

111	TRAFFIC CONTROL PERSON (TEMPORARY SIGNAGE)	2016-11-07	20.94	11.11	32.05
112	QUALITY CONTROL TESTER (FIELD AND COVERED OFF-SITE FACILITIES; TESTING OF AGGREGATE, ASPHALT, AND CONCRETE MATERIALS); LIMITED TO MN DOT HIGHWAY AND HEAVY CONSTRUCTION PROJECTS WHERE THE MN DOT HAS RETAINED QUALITY ASSURANCE PROFESSIONALS TO REVIEW AND INTERPRET THE RESULTS OF QUALITY CONTROL TESTERS. SERVICES PROVIDED BY THE CONTRACTOR.	2016-11-07	16.49	0.00	16.49

**SPECIAL EQUIPMENT (201 - 204)**

201	ARTICULATED HAULER	2016-11-07	25.11	18.90	44.01
		2017-05-01	25.31	19.70	45.01
202	BOOM TRUCK	2016-11-07	25.11	18.90	44.01
		2017-05-01	25.31	19.70	45.01
203	LANDSCAPING EQUIPMENT, INCLUDES HYDRO SEEDER OR MULCHER, SOD ROLLER, FARM TRACTOR WITH ATTACHMENT SPECIFICALLY SEEDING, SODDING, OR PLANT, AND TWO-FRAMED FORKLIFT (EXCLUDING FRONT, POSIT-TRACK, AND SKID STEER LOADERS), NO EARTHWORK OR GRADING FOR ELEVATIONS	2016-11-07	15.00	0.00	15.00
204	OFF-ROAD TRUCK	2016-11-07	25.11	18.90	44.01
		2017-05-01	25.31	19.70	45.01
205	PAVEMENT MARKING OR MARKING REMOVAL EQUIPMENT (ONE OR TWO PERSON OPERATORS); SELF-PROPELLED TRUCK OR TRAILER MOUNTED UNITS.	2016-11-07	26.29	15.98	42.27

**HIGHWAY/HEAVY POWER EQUIPMENT OPERATOR**

<b>GROUP 2</b>	2016-11-07	26.35	18.90	45.25
	2017-05-01	26.55	19.70	46.25
302 HELICOPTER PILOT (HIGHWAY AND HEAVY ONLY)				
303 CONCRETE PUMP (HIGHWAY AND HEAVY ONLY)				
304 ALL CRANES WITH OVER 135-FOOT BOOM, EXCLUDING JIB (HIGHWAY AND HEAVY ONLY)				
305 DRAGLINE, CRAWLER, HYDRAULIC BACKHOE (TRACK OR WHEEL MOUNTED) AND/OR OTHER SIMILAR EQUIPMENT WITH SHOVEL-TYPE CONTROLS THREE CUBIC YARDS AND OVER MANUFACTURER.S RATED CAPACITY INCLUDING ALL ATTACHMENTS. (HIGHWAY AND HEAVY ONLY)				
306 GRADER OR MOTOR PATROL				
307 PILE DRIVING (HIGHWAY AND HEAVY ONLY)				
308 TUGBOAT 100 H.P. AND OVER WHEN LICENSE REQUIRED (HIGHWAY AND HEAVY ONLY)				
<b>GROUP 3</b>	2016-11-07	25.42	18.90	44.32
	2017-05-01	25.62	19.70	45.32
309 ASPHALT BITUMINOUS STABILIZER PLANT				
310 CABLEWAY				
311 CONCRETE MIXER, STATIONARY PLANT (HIGHWAY AND HEAVY ONLY)				
312 DERRICK (GUY OR STIFFLEG)(POWER)(SKIDS OR STATIONARY) (HIGHWAY AND HEAVY ONLY)				
313 DRAGLINE, CRAWLER, HYDRAULIC BACKHOE (TRACK OR WHEEL MOUNTED) AND/OR SIMILAR EQUIPMENT WITH SHOVEL-TYPE CONTROLS, UP TO THREE CUBIC YARDS MANUFACTURER.S RATED CAPACITY INCLUDING ALL ATTACHMENTS (HIGHWAY AND HEAVY ONLY)				
314 DREDGE OR ENGINEERS, DREDGE (POWER) AND ENGINEER				
315 FRONT END LOADER, FIVE CUBIC YARDS AND OVER INCLUDING ATTACHMENTS. (HIGHWAY AND HEAVY ONLY)				
316 LOCOMOTIVE CRANE OPERATOR				
317 MIXER (PAVING) CONCRETE PAVING, ROAD MOLE, INCLUDING MUCKING OPERATIONS, CONWAY OR SIMILAR TYPE				
318 MECHANIC . WELDER ON POWER EQUIPMENT (HIGHWAY AND HEAVY ONLY)				
319 TRACTOR . BOOM TYPE (HIGHWAY AND HEAVY ONLY)				
320 TANDEM SCRAPER				
321 TRUCK CRANE . CRAWLER CRANE (HIGHWAY AND HEAVY ONLY)				
322 TUGBOAT 100 H.P AND OVER (HIGHWAY AND HEAVY ONLY)				

<b>GROUP 4</b>	2016-11-07	25.11	18.90	44.01
	2017-05-01	25.31	19.70	45.01
323 AIR TRACK ROCK DRILL				
324 AUTOMATIC ROAD MACHINE (CMI OR SIMILAR) (HIGHWAY AND HEAVY ONLY)				
325 BACKFILLER OPERATOR				
326 CONCRETE BATCH PLANT OPERATOR (HIGHWAY AND HEAVY ONLY)				
327 BITUMINOUS ROLLERS, RUBBER TIRED OR STEEL DRUMMED (EIGHT TONS AND OVER)				
328 BITUMINOUS SPREADER AND FINISHING MACHINES (POWER), INCLUDING PAVERS, MACRO SURFACING AND MICRO SURFACING, OR SIMILAR TYPES (OPERATOR AND SCREED PERSON)				
329 BROKK OR R.T.C. REMOTE CONTROL OR SIMILAR TYPE WITH ALL ATTACHMENTS				
330 CAT CHALLENGER TRACTORS OR SIMILAR TYPES PULLING ROCK WAGONS, BULLDOZERS AND SCRAPERS				
331 CHIP HARVESTER AND TREE CUTTER				
332 CONCRETE DISTRIBUTOR AND SPREADER FINISHING MACHINE, LONGITUDINAL FLOAT, JOINT MACHINE, AND SPRAY MACHINE				
333 CONCRETE MIXER ON JOBSITE (HIGHWAY AND HEAVY ONLY)				
334 CONCRETE MOBIL (HIGHWAY AND HEAVY ONLY)				
335 CRUSHING PLANT (GRAVEL AND STONE) OR GRAVEL WASHING, CRUSHING AND SCREENING PLANT				
336 CURB MACHINE				
337 DIRECTIONAL BORING MACHINE				
338 DOPE MACHINE (PIPELINE)				
339 DRILL RIGS, HEAVY ROTARY OR CHURN OR CABLE DRILL (HIGHWAY AND HEAVY ONLY)				
340 DUAL TRACTOR				
341 ELEVATING GRADER				
342 FORK LIFT OR STRADDLE CARRIER (HIGHWAY AND HEAVY ONLY)				
343 FORK LIFT OR LUMBER STACKER (HIGHWAY AND HEAVY ONLY)				
344 FRONT END, SKID STEER OVER 1 TO 5 C YD				
345 GPS REMOTE OPERATING OF EQUIPMENT				
346 HOIST ENGINEER (POWER) (HIGHWAY AND HEAVY ONLY)				
347 HYDRAULIC TREE PLANTER				
348 LAUNCHER PERSON (TANKER PERSON OR PILOT LICENSE)				
349 LOCOMOTIVE (HIGHWAY AND HEAVY ONLY)				
350 MILLING, GRINDING, PLANING, FINE GRADE, OR TRIMMER MACHINE				
351 MULTIPLE MACHINES, SUCH AS AIR COMPRESSORS, WELDING MACHINES, GENERATORS, PUMPS (HIGHWAY AND HEAVY ONLY)				
352 PAVEMENT BREAKER OR TAMPING MACHINE (POWER DRIVEN) MIGHTY MITE OR SIMILAR TYPE				

- 353 PICKUP SWEEPER, ONE CUBIC YARD AND OVER HOPPER CAPACITY(HIGHWAY AND HEAVY ONLY)
- 354 PIPELINE WRAPPING, CLEANING OR BENDING MACHINE
- 355 POWER PLANT ENGINEER, 100 KWH AND OVER (HIGHWAY AND HEAVY ONLY)
- 356 POWER ACTUATED HORIZONTAL BORING MACHINE, OVER SIX INCHES
- 357 PUGMILL
- 358 PUMPCRETE (HIGHWAY AND HEAVY ONLY)
- 359 RUBBER-TIRED FARM TRACTOR WITH BACKHOE INCLUDING ATTACHMENTS (HIGHWAY AND HEAVY ONLY)
- 360 SCRAPER
- 361 SELF-PROPELLED SOIL STABILIZER
- 362 SLIP FORM (POWER DRIVEN) (PAVING)
- 363 TIE TAMPER AND BALLAST MACHINE
- 364 TRACTOR, BULLDOZER (HIGHWAY AND HEAVY ONLY)
- 365 TRACTOR, WHEEL TYPE, OVER 50 H.P. WITH PTO UNRELATED TO LANDSCAPING (HIGHWAY AND HEAVY ONLY)
- 366 TRENCHING MACHINE (SEWER, WATER, GAS) EXCLUDES WALK BEHIND TRENCHER (HIGHWAY AND HEAVY ONLY)
- 367 TUB GRINDER, MORBARK, OR SIMILAR TYPE
- 368 WELL POINT DISMANTLING OR INSTALLATION (HIGHWAY AND HEAVY ONLY)

<b>GROUP 5</b>	2016-11-07	23.40	18.90	42.30
	2017-05-01	23.60	19.70	43.30

- 369 AIR COMPRESSOR, 600 CFM OR OVER (HIGHWAY AND HEAVY ONLY)
- 370 BITUMINOUS ROLLER (UNDER EIGHT TONS)
- 371 CONCRETE SAW (MULTIPLE BLADE) (POWER OPERATED)
- 372 FORM TRENCH DIGGER (POWER)
- 373 FRONT END, SKID STEER UP TO 1C YD
- 374 GUNITE GUNALL (HIGHWAY AND HEAVY ONLY)
- 375 HYDRAULIC LOG SPLITTER
- 376 LOADER (BARBER GREENE OR SIMILAR TYPE)
- 377 POST HOLE DRIVING MACHINE/POST HOLE AUGER
- 378 POWER ACTUATED AUGER AND BORING MACHINE
- 379 POWER ACTUATED JACK
- 380 PUMP (HIGHWAY AND HEAVY ONLY)
- 381 SELF-PROPELLED CHIP SPREADER (FLAHERTY OR SIMILAR)
- 382 SHEEP FOOT COMPACTOR WITH BLADE . 200 H.P. AND OVER



- 383 SHOULDERING MACHINE (POWER) APS CO OR SIMILAR TYPE INCLUDING SELF-PROPELLED SAND AND CHIP SPREADER
- 384 STUMP CHIPPER AND TREE CHIPPER
- 385 TREE FARMER (MACHINE)

<b>GROUP 6</b>	2016-11-07	22.80	18.90	41.70
	2017-05-01	23.00	19.70	42.70
387 CAT, CHALLENGER, OR SIMILAR TYPE OF TRACTORS, WHEN PULLING DISK OR ROLLER				
388 CONVEYOR (HIGHWAY AND HEAVY ONLY)				
389 DREDGE DECK HAND				
390 FIRE PERSON OR TANK CAR HEATER (HIGHWAY AND HEAVY ONLY)				
391 GRAVEL SCREENING PLANT (PORTABLE NOT CRUSHING OR WASHING)				
392 GREASER (TRACTOR) (HIGHWAY AND HEAVY ONLY)				
393 LEVER PERSON				
394 OILER (POWER SHOVEL, CRANE, TRUCK CRANE, DRAGLINE, CRUSHERS, AND MILLING MACHINES, OR OTHER SIMILAR HEAVY EQUIPMENT) (HIGHWAY AND HEAVY ONLY)				
395 POWER SWEEPER				
396 SHEEP FOOT ROLLER AND ROLLERS ON GRAVEL COMPACTION, INCLUDING VIBRATING ROLLERS				
397 TRACTOR, WHEEL TYPE, OVER 50 H.P., UNRELATED TO LANDSCAPING				

## TRUCK DRIVERS

<b>GROUP 1</b>	2016-11-07	20.67	12.75	33.42
601 MECHANIC . WELDER				
602 TRACTOR TRAILER DRIVER				
603 TRUCK DRIVER (HAULING MACHINERY INCLUDING OPERATION OF HAND AND POWER OPERATED WINCHES)				
<b>GROUP 2</b>	2016-11-07	16.82	0.00	16.82
604 FOUR OR MORE AXLE UNIT, STRAIGHT BODY TRUCK				
<b>GROUP 3</b>	2016-11-07	14.57	0.00	14.57
605 BITUMINOUS DISTRIBUTOR DRIVER				
606 BITUMINOUS DISTRIBUTOR (ONE PERSON OPERATION)				
607 THREE AXLE UNITS				

<b>GROUP 4</b>	2016-11-07	30.37	17.90	48.27
608 BITUMINOUS DISTRIBUTOR SPRAY OPERATOR (REAR AND OILER)				
609 DUMP PERSON				
610 GREASER				
611 PILOT CAR DRIVER				
612 RUBBER-TIRED, SELF-PROPELLED PACKER UNDER 8 TONS				
613 TWO AXLE UNIT				
614 SLURRY OPERATOR				
615 TANK TRUCK HELPER (GAS, OIL, ROAD OIL, AND WATER)				
616 TRACTOR OPERATOR, UNDER 50 H.P.				

#### **SPECIAL CRAFTS**

701 HEATING AND FROST INSULATORS	2016-11-07	16.00	0.00	16.00
702 BOILERMAKERS	2016-11-07	35.15	27.02	62.17
703 BRICKLAYERS	2016-11-07	23.44	4.18	27.62
704 CARPENTERS	2016-11-07	27.46	16.11	43.57
705 CARPET LAYERS (LINOLEUM)	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLIPREVIEW@STATE.MN.US">DLIPREVIEW@STATE.MN.US</a>			
706 CEMENT MASONS	2016-11-07	41.41	7.89	49.30
707 ELECTRICIANS	2016-11-07	30.00	7.62	37.62
711 GROUND PERSON	2016-11-07	18.00	0.00	18.00
712 IRONWORKERS	2016-11-07	36.00	24.90	60.90
713 LINEMAN	2016-11-07	16.50	0.00	16.50
714 MILLWRIGHT	2016-11-07	35.13	21.03	56.16
	2017-05-01	37.08	21.03	58.11

715	PAINTERS (INCLUDING HAND BRUSHED, HAND SPRAYED, AND THE TAPING OF PAVEMENT MARKINGS)	2016-11-07	27.64	12.09	39.73
716	PILEDRIIVER (INCLUDING VIBRATORY DRIVER OR EXTRACTOR FOR PILING AND SHEETING OPERATIONS)	2016-11-07	27.46	16.11	43.57
717	PIPEFITTERS . STEAMFITTERS	2016-11-07	42.76	24.38	67.14
719	PLUMBERS	2016-11-07	31.34	20.00	51.34
		2017-05-01	32.94	20.00	52.94
721	SHEET METAL WORKERS	2016-11-07	28.40	16.54	44.94
723	TERRAZZO WORKERS	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>			
724	TILE SETTERS	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>			
725	TILE FINISHERS	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>			
727	WIRING SYSTEM TECHNICIAN	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>			
728	WIRING SYSTEMS INSTALLER	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>			
729	ASBESTOS ABATEMENT WORKER	FOR RATE CALL 651-284-5091 OR EMAIL <a href="mailto:DLI.PRE VWAGE@STATE.MN.US">DLI.PRE VWAGE@STATE.MN.US</a>			
730	SIGN ERECTOR				

FOR RATE CALL 651-284-5091 OR  
EMAIL  
[DLLPREVWAGE@STATE.MN.US](mailto:DLLPREVWAGE@STATE.MN.US)

## **DIVISION 1 GENERAL REQUIREMENTS**

### **SECTION 1.000 SPECIAL CONDITIONS/SITE CONDITIONS**

1.001	Contract Documents
1.002	Authority and Duties of the Engineer, Architect, Landscape Architect and Facilities Advisor
1.006	Federal-Aid Provisions
1.008	Employee Health and Safety
1.009	Public Convenience and Safety
1.010	Protection and Restoration of Property
1.011	Consideration of Responses
1.012	Examination of Plans, Specifications and Site of Work
1.013	Utility Property and Service
1.016	Coordination of Plans and Specifications
1.019	Hours of Work

### **SECTION 1.040 COORDINATION OF THE WORK**

1.041	Cooperation by Contractors
1.042	Supervision by Contractor
1.045	Cutting and Patching

### **SECTION 1.060 REGULATORY REQUIREMENT**

1.061	Laws to be Observed
1.062B	Codes and Regulatory Requirements

### **SECTION 1.150 MEASUREMENT AND PAYMENT**

1.151A	Measurement and Payment-Lump Sum Contracts
1.151D	Payment for Materials Stored Onsite

### **SECTION 1.200 PROJECT MEETINGS**

1.202	Preconstruction Meeting
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### **SECTION 1.300 SUBMITTALS**

1.301B	Submittal Information
1.320	Progress Schedule
1.330	Substitutions
1.340B	Shop Drawings, Schedules, and Samples

### **SECTION 1.400 QUALITY CONTROL**

1.410	Workmanship & Supervision by Contractor
1.420B	Materials and Systems

### **SECTION 1.500 CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS**

1.510	Field Office
1.512	Temporary Utility Service
1.530B	Protection
1.532	Tree and Plant Protection
1.570	Signs and Barricades

<u>SECTION</u>	<u>1.700 CONTRACT CLOSEOUT</u>
1.701	As-Built Drawings
1.702	Final Submittals
1.703	Project Tour
1.705	Maintenance
1.706B	Waste Management, Recycling and Clean-Up
1.707B	Substantial Completion, Final Completion and One-year Warranty

## **SECTION 1.000 SPECIAL CONDITIONS/SITE CONDITIONS**

### **1.001 CONTRACT DOCUMENTS:**

Division 0, AIA Document A201, and subsequent Divisions in the Project Manual and the plans shall govern the construction of the project.

Any specific reference to a MNDOT Specification number shall refer to The Minnesota Department of Transportation Standard Specification for Construction, 2016 edition, and all related Special Provisions and Supplements. Only those MNDOT Specifications specifically referenced in the Project Manual or on the plans as supplemented or modified by Division 0, AIA Document A201 or subsequent Divisions in the Project Manual, shall govern the construction of the project.

In case of discrepancy:

Federal regulations contained in or referenced in the Project Manual shall govern over Division Zero, AIA Document A201 and subsequent Divisions of the Project Manual.

Division Zero and subsequent Divisions of the Project Manual shall govern over the General Conditions (AIA Documents A201) and the MNDOT Specifications.

Division 0, AIA Document A201, and subsequent Divisions in the Project Manual shall govern over the plans.

### **1.002 AUTHORITY AND DUTIES OF THE ENGINEER/ARCHITECT/LANDSCAPE ARCHITECT/FACILITIES ADVISOR:**

The authority and duties of the Engineer, Architect, Landscape Architect and Facilities Advisor shall be in accordance with Mn/DOT 1501 and 1509 and the following:

Reference to ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, PROJECT ENGINEER, PROJECT MANAGER or FACILITIES ADVISOR shall mean the Design and Construction Manager or the Facilities Manager of the Minnesota Department of Natural Resources, Operation Services Division, Management Resources Section or their authorized representative(s). Their authorized representative(s) shall be as listed below.

The authorized representative for Contract Document inquiries during bidding and shop drawing and sample submittals during construction will be:

*Mn/DNR – Management Resources  
Jeffrey Erickson, P.E. Senior Engineer  
2508 Hannah Ave. NW, Bemidji, MN 56601  
Phone (218)-308-2637  
jeff.m.erickson@state.mn.us*

The authorized representative during construction for Contract Administration, Contract Document inquiries, Construction Inspection, Construction Staking and all other inquiries and coordination will be:

*Mn/DNR – Management Resources  
Shane Rustin P.E., Regional Engineer  
21371 State Highway 15, New Ulm, MN 56073  
(507)-359-6029  
shane.rustin@state.mn.us*

Interpretive Center Repairs                      Division 1 - 3  
Blue Mounds State Park  
SPK.00121.07.00.53/8H880



#### 1.006 FEDERAL-AID PROVISIONS:

The Contractor shall comply with the Federal-Aid Provisions contained in Mn/DOT 1705 and the following:

If the use of Federal funds for the work required by this Contract is indicated in the Response Form, the Contractor shall comply with all requirements of these Specifications relating to their use.

1.008 EMPLOYEE HEALTH AND SAFETY: The Contractor shall comply with the provisions of Mn/DOT 1706 and the following:

The Contractor shall be strictly responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work. Conditions at the work site that the Engineer suspects are in violation of safety laws and regulations may be reported to the appropriate enforcement authorities.

#### 1.009 PUBLIC CONVENIENCE AND SAFETY:

The Contractor shall comply with the provisions of Mn/DOT 1707 and the following:

The Contractor shall be strictly responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work. Conditions at the work site that the Engineer suspects are in violation of safety laws and regulations may be reported to the appropriate enforcement authorities.

#### 1.010 PROTECTION AND RESTORATION OF PROPERTY:

The Contractor shall comply with the provisions of Mn/DOT 1712.

#### 1.011 CONSIDERATION OF RESPONSES:

Consideration of Responses shall be in accordance with Mn/DOT 1301 and the following:

The Department of Natural Resources (DNR) reserves the right, after the bid opening and prior to award, to require supplemental information deemed appropriate to determine the bidder's qualifications to execute the work. Supplemental information shall be delivered to the Engineer within seven (7) calendar days of request.

#### 1.012 EXAMINATION OF PLANS, SPECIFICATIONS AND SITE OF WORK:

The Contractor shall comply with the provisions of Mn/DOT 1205 and the following:

Before submitting a Response on the work defined in these documents, each Responder shall visit the site, take their own measurements and thoroughly familiarize themselves with all existing conditions and limitations pertaining to the work herein contemplated. No additional compensation will be allowed because of the Contractor's misunderstanding as to the amount of work involved or a lack of knowledge of the existing conditions.

#### 1.013 UTILITY PROPERTY AND SERVICE:

The Contractor shall comply with the provisions of Mn/DOT 1507 and the following:

Utilities may or may not be shown in the contract documents. The DNR does not guarantee their location. The Contractor shall be solely responsible for locating and verifying the exact location of ALL utilities, without additional compensation. The Contractor shall call Gopher State One Call System, 1-800-252-1166. The DNR does not guarantee that all known utility companies have been contacted during the design of the project. DNR owned utilities may be present, which are not located by Gopher State One Call and shall be located by the Contractor.

Prior to the start of any construction, the Contractor shall notify all utility companies having utilities in the project area. The Contractor shall have sole responsibility for providing temporary support and for protecting and maintaining all existing utilities in the project area during the entire period of construction, including but not limited to the period of excavation, backfill, and compaction. In carrying out this responsibility, the Contractor shall exercise particular care, wherever underground utility lines are crossed, to provide compacted backfill or other stable support for such lines to prevent any detrimental displacement, rupture or other failure. The Contractor shall not damage any existing utilities, which are in the same vicinity as the project whether or not they are shown on the plan or located at time of construction. Any utility damage due to Contractor's operations shall be repaired at the Contractor's cost.

#### 1.016 COORDINATION OF PLANS AND SPECIFICATIONS:

Coordination of Plans and Specifications shall be in accordance with Mn/DOT 1504 and the following:

Contractors and suppliers shall notify the Designer, 7 days or more prior to the bid opening, of any and all alleged discrepancies in the project documents that affect the cost or completed project performance. No extras will be allowed for failure to comply.

#### 1.019 HOURS OF WORK:

Hours of work on the project shall be 7:00 AM to 6:00 PM Monday through Friday. No work will be allowed outside of these hours, during hours of darkness, on weekends or holidays unless specifically authorized by the Engineer.

### **SECTION 1.040 COORDINATION OF THE WORK:**

#### 1.041 COOPERATION BY CONTRACTORS:

The Contractor shall comply with the provisions of Mn/DOT 1505.

#### 1.042 SUPERVISION BY CONTRACTOR

The Contractor shall comply with the provisions of Mn/DOT 1506 and the following:

The Contractor is solely responsible for the coordination of the work of all trades including any work separately contracted by the Owner.

The Contractor shall advise the Engineer not less than 48 hours in advance of all onsite observations that are required or necessary for execution of the work.

Each Contractor shall locate all general reference points, verify existing conditions and dimensions and lay out his own work in coordination with others and is solely responsible for correctness of same.

The Contractor shall coordinate carefully with Owner at least one day (24 hours) in advance, of any downtime of mechanical and electrical systems. The Contractor shall establish sequences to minimize downtime such as utilizing caps, bypasses, etc. Overnight downtime is not permitted without prior consent of the Owner.

#### **1.045 CUTTING AND PATCHING:**

Each Contractor and Sub-Contractor is responsible for cutting and drilling necessary to execute his portion of the work. All cuts shall be sawn or drilled and limited to the minimum required. Trades shall share openings whenever possible and legally acceptable. All exposed cuts shall be covered with escutcheons or other suitable trim.

The Contractor is solely responsible for coordinating all cutting and patching. Each Contractor and Sub-Contractor is responsible for patching all excessive cuts or other damages with like material so that the patch is not visible.

Notify the Engineer for approval prior to cutting any structural element or finish material.

### **SECTION 1.060 REGULATORY REQUIREMENTS:**

#### **1.061 LAWS TO BE OBSERVED:**

The contractor shall comply with the provisions of Mn/DOT 1701.

#### **1.062B CODES AND REGULATORY REQUIREMENTS:**

The DNR will secure and pay for building and zoning permits. All other permits, licenses, inspection fees, dewatering permits, or other requirements of governing bodies that have jurisdiction over the project, shall be secured and paid for by the Contractor. The Contractor shall furnish the Engineer with evidence of compliance with the permits, licenses, etc. It is the intent of these drawings and Specifications to provide the complete installation as shown and described in accordance with all governing regulations and minimum standards. If in any instance the drawings and/or Specifications conflict with regulations and standards established by ordinance, then the ordinance shall take precedence. This, however, shall not be construed as relieving the Contractor from complying with any requirements of the drawings and Specifications that may be in excess of the ordinance requirements and not contrary to same.

### **SECTION 1.150 MEASUREMENT AND PAYMENT:**

#### **1.151A MEASUREMENT AND PAYMENT-LUMP SUM CONTRACTS:**

##### **GENERAL:**

The lump sum bid amount shall be full compensation for a complete Project as shown on the drawings and described in the specifications. No extras will be allowed due to the Contractor's lack of knowledge and understanding of existing conditions. As mutually agreed upon by both the Engineer and the Contractor,

Interpretive Center Repairs  
Blue Mounds State Park  
SPK.00121.07.00.53/8H880

Division 1 - 6

payment will either be made on a lump sum basis upon full completion and acceptance of the project or partial payments will be issued as work progresses and final payment will be issued upon full completion and acceptance of the project.

Units of measure, where shown, may be abbreviated as follows: Acres, A.; Board Foot, FBM.; Cubic Yards, C.Y.; Gallon, Gal.; Hour, Hr.; Lineal Foot, L.F.; Lump Sum, L.S.; Pound, lbs.; Square Foot, S.F.; Square Yard, S.Y.; Thousand Board Feet, MFBM; Ton, T.; Staked Quantities, S.Q; Compacted Volume (CV); Loose Volume (LV); Plan Quantity (P).

Quantities shown in these drawings and specifications are based on field calculations and are not certified to be complete or accurate, but to give the general scope of the project. The Contractor is required to visit the site and verify the amount of work involved in the contract.

Work done contrary to instructions of the Engineer and any work done beyond that which is specified or ordered, will be considered as Unauthorized Work and will not be paid for under the provisions of the Contract. Unauthorized work shall be removed by the Contractor at his expense upon receipt of a written order from the Engineer.

#### **1.151D PAYMENT FOR MATERIALS STORED ONSITE:**

The Engineer shall have sole discretion whether or not to pay for Materials Stored Onsite. If the Engineer approves payment for Materials Stored Onsite, the materials must be properly stored and protected in a secure area. Prior to payment, the Contractor shall provide the Engineer with a copy of the invoice for the materials and a schedule defining when the materials will be incorporated into the project. Payment for Stored Materials cannot exceed the price bid for that item. The Engineer reserves the right to authorize payment for an amount less than the invoice amount in order to protect the Owner's interests.

### **SECTION 1.200 PROJECT MEETINGS:**

#### **1.202 PRECONSTRUCTION MEETING:**

After the Notice to Proceed has been issued but before construction commences, the Engineer will advise the Contractor of the time and location of a preconstruction meeting. The onsite superintendent must be present at the preconstruction meeting. The Engineer will provide a list of items to be discussed to the contractor.

### **SECTION 1.300 SUBMITTALS**

#### **1.301B SUBMITTAL INFORMATION:**

The Contractor shall submit to the person named in 1.002 a list of proposed subcontractors, suppliers, name of the onsite job superintendent, and a cost breakdown of the project (by division and/or subcontractor) and any other supplemental information requested within ten (10) days after the award has been issued.

#### **1.320 PROGRESS SCHEDULE:**

The Contractor shall, prior to commencement of work, submit for review (1) a construction schedule showing the order in which he proposes to carry on the work indicating the periods during which he will perform work

Interpretive Center Repairs  
Blue Mounds State Park  
SPK.00121.07.00.53/8H880

Division 1 - 7

on each item listed in the Response Form; and (2) the hours and days in which he proposes to carry on the work.

If, in the opinion of the Engineer, the Contractor falls behind the approved construction schedule, the Contractor shall take such steps as may be necessary to improve his progress. The Engineer may require him to either increase the number of shifts, days or hours of work, or the amount of construction planned, or all of them, and to submit for approval such revised construction schedule as may be deemed necessary to show the manner in which the agreed rate of progress will be regained, all without additional cost to the State of Minnesota. If the Contractor fails to submit a revised construction schedule within the time specified by the Engineer, the Engineer may withhold approval of progress payments and/or take such other actions as provided in this Contract until such time as the Contractor submits the required construction schedule.

Failure of the Contractor to comply with the requirements of the Engineer under this clause shall be grounds for determination by the Engineer that the Contractor is not prosecuting the work with such diligence as will insure completion within the time specified. Upon such determination, the Engineer may terminate the Contractor's right to proceed with the work, or any separable part thereof.

The Contractor shall submit an updated construction schedule with each payment application. Failure to do so will result in withholding payment.

#### 1.330 SUBSTITUTIONS:

These Specifications or the drawings may specify certain equipment or material deemed most suitable for the service anticipated. This is not done, however, to eliminate others equally as good and efficient. For the purpose of determining the low bid response, the Contractor shall prepare the Response on the basis of the particular equipment or materials specified. The awarding of the Contract shall constitute a contractual obligation to furnish the specified equipment and materials.

If, after signing of the Contract, the Contractor requests to provide materials or equipment that are different than what was specified, the Contractor shall submit four (4) copies of literature, completely describing the proposed substitution(s) and any decrease in costs, to the Engineer for approval. The substitution(s) must be equal or superior to the materials or equipment specified. The Contractor shall not proceed with the substitution(s) until the Engineer has provided written approval for the substitution(s). All costs for changes necessary for the incorporation of such substitution(s) into the work shall be borne by the Contractor. Also see Article 1 of the Supplemental Conditions.

The standard of acceptance for substitutions will be the requirements set forth in these contract documents whether generic or proprietary in nature. When proprietary names are used herein the standard is that manufacturer or suppliers published literature including all A.N.S.I., A.S.T.M., F.M., U.L., Federal Spec; commercial and association standards, codes, warranties and ratings contained therein.

#### 1.340B SHOP DRAWINGS, SCHEDULES, AND SAMPLES: (Buildings)

Submittals are required for all manufactured, custom fabricated, and/or equipment items regardless of whether the item is furnished as specified or the item is a substitution for a specified item.

Submittals shall be made within 30 days after the bid award has been issued.

Submit all shop drawings, layouts, schedules, materials and color samples to the Engineer. Shop drawings shall include and conform to the following:

- ❑ Published standard literature, custom layouts, shop drawings, schedules.
- ❑ Color samples, swatches, chips, etc. - submit full range of available colors.
- ❑ Sizes: For photocopies - 8½x11 thru 11x17. For plan sheets - any size up to 24x36
- ❑ Each sheet of (or) indexed cover sheet of submittals shall have a 4"x5" space reserved for comments.
- ❑ Dimensions requiring job verification shall be included with the shop drawing submittal by the Contractor.
- ❑ Include specifications, performance, fabrication, installation details, dimensions, warranties and all other data necessary to assess applicability for the project.

Review of shop drawings by the Engineer or Designer, shall be only for general conformance with the design concept and general compliance with the information given in the Contract Documents. It shall not include review of quantities, dimensions, weights or gauges, fabrication processes, construction methods, coordination with the work of other trades, or construction safety precautions, all of which are the sole responsibility of the Contractor. Review of a specific item shall not indicate acceptance of an assembly of which the item is a component.

The submittal schedule if contained in the specifications or provided by the Contractor Administrator, is for convenience only. The Engineer reserves the right to demand all information necessary for complete project documentation whether or not specified or scheduled.

Submittals via fax and photocopies of faxed submittals will not be accepted.

Also see Section 1.700 for close-out submittals.

## **SECTION 1.400 QUALITY CONTROL:**

### **1.410 WORKMANSHIP AND SUPERVISION BY THE CONTRACTOR:**

Workmanship and supervision by the Contractor shall be in accordance with Mn/DOT 1506 and the following:

The Contractor shall employ workers skilled and experienced for the specific task required. Licensed journeyman shall be employed where required by law. Workmanship shall be of the highest quality and performed in a neat and expeditious manner. Qualified supervision shall be at the site when the work is progressing.

### **1.420B MATERIALS AND SYSTEMS:**

All materials, equipment, fixtures, apparatus, etc., shall be new unless specifically indicated otherwise. Materials, equipment, etc., specified shall be manufactured, installed or applied in accord with the directions

of the manufacturer, governing association and/or laws, unless specifically shown otherwise. The generally recognized governing association guidelines and instructions will be the basis for review whether or not contractor or manufacturer subscribes or belongs to said association.

## **SECTION 1.500 CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS:**

### **1.510 FIELD OFFICE:**

Contractor shall furnish as necessary to execute the work, pay all charges for and remove/disconnect/restore site upon job completion: job office; telephone (with answering device); electricity; temporary heat; fuel; water; lighting; toilet, and weatherproof and secure storage facilities for all materials requiring protection.

Personnel access, parking, deliveries, and storage locations shall be designated by and coordinated with the Engineer.

### **1.512 TEMPORARY UTILITY SERVICE:**

The building and/or site are currently served by some or all of the following utility services: telephone; electricity and lighting; heat and fuel; sewer and toilet; water. The Contractor may utilize these existing utility services as necessary to execute the work and the Owner will pay the costs of these utility services. If modifications are required to the utility services or if additional utility services are required in order to execute the work, the Contractor shall furnish and pay for any modifications to and/or additional utility services, pay all charges for and shall restore modifications to utility services and remove and disconnect any additional utility services upon job completion. If the billings for utility services exceed the normal monthly cost of these services by more than 25%, the Owner reserves the right to back charge the Contractor for the additional cost of the utility services.

### **1.530B PROTECTION:**

The Contractor shall erect and maintain secure fences, barricades, locked temporary closures, exhaust systems and other devices required to protect all persons from undue noise, dust, odors or physical hazards. Lock and secure all tools, equipment, and apparatus against unauthorized operation. Maintain legally required exits, fire lanes, and emergency equipment access.

Where asbestos or other legally defined hazardous materials are encountered or suspected, do not remove or handle, refer to the Engineer for direction for proper disposal.

Temporary closures in the exterior shell of existing buildings shall be secure against unauthorized entry, watertight and weatherproof. Closures at heated or cooled buildings shall have an overall average R factor of 10.

The Contractor shall protect the DNR's entire site against damage resulting from his operations. The Contractor shall repair or replace without cost to the DNR all paving, buildings, fences, trees, shrubs, lawns, equipment, services or amenities in or on the site damaged as a result of his operations.

The Contractor shall maintain a neat and orderly job site and shall promptly remove all debris and dispose of debris legally off site. The Contractor shall remove all temporary enclosures, fences, barricades, signs, etc. upon completion of the work.



#### 1.532 TREE AND PLANT PROTECTION:

The Contractor shall protect trees and root systems from damage from construction equipment or damage due to soil compaction. The Contractor shall erect snow fences around any trees or plants designated on the plans to be protected or at other locations as directed by the Engineer.

#### 1.570 SIGNS AND BARRICADES:

Prior to construction, the Contractor shall place, maintain and remove all traffic control devices as necessary to safely allow movement of the public around or through the project area. The Contractor shall comply with the provisions of Mn/DOT 1710.1, 1710.2 and the "Minnesota Manual on Uniform Traffic Control Devices" especially Part VI, Traffic Controls for Street and Highway Construction and Maintenance Operations. Signage shall be in accordance with the Mn/DOT "Standard Signs Manual". The Contractor shall be responsible for all costs to place, maintain and remove all traffic control devices and no compensation will be made for this work unless there is a specific bid item in the Response Form.

### **SECTION 1.700 CONTRACT CLOSEOUT:**

#### 1.701 AS-BUILT DRAWINGS:

Each Contractor shall maintain an as-built set of drawings and specifications that includes: the locations of concealed connections, raceways and piping; all changes in the work and final product selections.

The Contractor shall submit all as-built drawings to Engineer upon project completion.

#### 1.702 FINAL SUBMITTALS:

The Contractor shall assemble in booklet form (three (3) bound copies and three (3) electronic copies on DVD) and submit to the Engineer for the following:

All guarantees, warranties and bonds for all materials and equipment indicated or inferred in project documents. They shall be made out in the DNR's name and endorsed by installing Contractor where applicable.

Maintenance, operation manuals and parts lists for all equipment, materials, hardware, etc.

#### 1.703 PROJECT TOUR:

Pertinent contractors shall tour the project, review operation manuals and instruct the DNR personnel in the proper operation and maintenance procedures for the project including all equipment .

#### 1.705 MAINTENANCE:

The Contractor will be required to maintain all finished work until final acceptance by the Engineer. All expenses for this maintenance shall be borne by the Contractor.

#### 1.706B WASTE MANAGEMENT, RECYCLING AND CLEAN-UP:

“Waste Materials”: New materials or materials salvaged from the existing construction which are unused or in excess to the contract requirements and generally include trimmings, cuttings and damaged goods resulting from demolition or new installations, which cannot be effectively used in the Work.

This Section includes salvage and recycling of waste materials and applies to all waste materials produced during the course of the Work. Such materials included but is not limited to:

1. Concrete and other inert materials.
2. Metal scrap including iron, steel, copper, brass, aluminum and tin.
3. Untreated and unpainted dimensional lumber, plywood, oriented strand board, masonite, particle board and wood shipping pallets.
4. Salvageable materials including reusable lumber, sheathings, fixtures and building supplies.
5. Paper and clean corrugated cardboard used for packaging, shipping and/or manufacturers literature.
6. Plastic buckets used for various liquid or semi-solid construction materials.
7. Aluminum, glass and plastic beverage containers.
8. Other mixed Construction and Demolitions Waste: Solid Waste materials, resulting solely from construction or demolition operations included in the Work.

Construction Waste Management Plan: Before start of construction, submit for the approval of the Project Manager, a Construction Waste Management Plan indicating how the Contractor proposes to collect, segregate and dispose of all construction wastes and debris produced by the Work. Include a list of recycling facilities to which indicated materials will be distributed. Identify materials that are not recyclable that must be disposed of in a landfill. List permitted landfills and/or other disposal means to be employed. Show compliance with regulations. Indicate any instances where compliance with requirements of this specification does not appear possible and request direction from the Project Manager.

Delivery Receipts: Provide to the Project Manager all delivery receipts for waste materials salvaged and sent to permitted waste materials processors or recyclers within 10 working days of that delivery that indicated the firm accepting recyclable waste materials, net weights and types of materials delivered and delivery date.

Regulatory Requirements: Comply with all applicable requirements of the State of Minnesota, Pollution Control Administration, and Department of Health and Human Services. Comply with all local ordinances and regulations not in conflict with the above.

Deliver waste to Disposal Sites, Recyclers and Waste Processors properly licensed by the State of Minnesota and Permitted by local Governing Agencies.

Pre-Construction Conference: Review the Construction Waste Management Plan and discuss procedures, schedules and specific requirements for waste materials recycling and disposal. Discuss coordination and interface between the Contractor, sub-contractors and suppliers. Review for compliance with requirements.

Attendees: The Contractor and related personnel associated with the work of this section, including personnel to be in charge of the waste management program; the Project Manager and the Owner's representative.

Plan Revision: Make any revisions to the Construction Waste Management Plan agreed upon during the meeting and incorporate resolutions agreed to be made subsequent to the meeting. Submit the revised plan to the Project Manager.

Implementation: Designate an on-site party responsible for instructing workers and implementing the Construction Waste Management Plan. Distribute copies of the Construction Waste Management Plan to the job site foreman and each subcontractor. Provide on-site instruction on appropriate separation, handling, recycling, and salvaging methods to be used by all parties at the appropriate stages of the work at the site. Include waste management and recycling discussion in pre-fabrication meetings with subcontractors and fabricators. Also include discussion of waste management and recycling in regular job meetings conducted during the course of work at the site.

Site Storage: Remove all indicated recyclable materials from the work location to approved containers daily.

Position covered containers for recyclable waste materials at a designated location on the Project Site. Select a location for the recyclable materials containers separated from general waste and rubbish containers. Provide separate collection containers for the following materials: untreated lumber, paper, paper products, and cardboard, plastics, metals, glass.

Empty loaded containers, as demand requires but not less than weekly.

Deposit all indicated recyclable materials in a clean (no mud, adhesives, solvents or petroleum contamination) debris free condition.

Transport all Construction Waste from the Site to approved disposal locations in covered and secured vehicles to prohibit loose or falling debris while in transit.

Bond paper and Newsprint: Collect in a single location and deposit daily in the appropriate recycling container.

Recyclable Packing Material: Cardboard and paperboard cartons, boxes and bumpers: Knock down, fold flat and deposit in the appropriated recycling container. Newsprint used as packing: deposit in recycling container for newsprint. Plastic (polystyrene peanuts, banding materials) deposited into the recycling container for plastics. Metal banding, staples and fasteners: Cut all items to lengths and sizes to fit within the container provided when necessary. Where there is sufficient quantity of a specific recyclable waste that cutting become impractical (i.e.: salvaged metal roofing panels), make special arrangements for items to be bundled, banded or tied and stack in a designated locations for special pick-up

Plastics: Collect recyclable plastics daily from work areas and deposit in appropriated recycling container.

Glass: Collect waste glass products (sheet, bottles, etc.) daily from the work area and deposit in appropriate recycling container. Separate by color where required by local ordinance.

Where classification of any given waste material is unclear, verify with Engineer.

On or before completion of all work, or as may be directed by the Engineer, the Contractor shall remove from the premises and legally dispose of all rubbish or debris caused by him, leaving the site in a clean and presentable condition.

The Contractor shall perform final cleaning of all floors, walls, ceilings, windows, fixtures, cabinets, etc., so that the Project will be completely ready for normal use by the Owner without further cleaning. The standard of acceptance of cleaning operation will be that which the Owner would normally be expected to provide for his continued operations. The cleaning will include the removal of dust from walls, ceilings and other vertical

and horizontal surfaces, washing of all windows and door glass or plastic and the cleaning, waxing or sealing of all floors as specified for the various floor materials.

1.707B SUBSTANTIAL COMPLETION, FINAL COMPLETION AND ONE-YEAR WARRANTY:

When the Contractor considers that the work, or a portion thereof which the DNR agrees to accept separately, is substantially complete, the Contractor in conjunction with the Engineer shall prepare a comprehensive list of all items to be completed or corrected and submit it to the Engineer provided for in the General Conditions. This list, together with such other incomplete or incorrect items added to it by the Engineer shall comprise a "punch list" and shall be used as provided for in the General Conditions. The one-year warranty period begins on the date of Substantial Completion, as noted on the Certificate of Substantial Completion (AIA Form G704 or equivalent) prepared by the Engineer, and as described in the General Conditions.

The Engineer will promptly make a final inspection of the work upon receipt from the Contractor of written notice that the work is ready for acceptance and upon receipt of a final Application for Payment from the Contractor as provided for in the General Conditions. If upon such an inspection the Engineer determines that the work has not been completed in accordance with the Contract Documents, all costs for subsequent re-inspections will be borne by the Contractor, with amounts deducted by Change Order from the Contract sum.

## SECTION 024118 – DEMOLITION, SALVAGE AND DISPOSAL

### PART 1 - GENERAL:

#### 1.1 SUMMARY

- A. This Section applies to all demolition, salvage, and disposal of items indicated in the Plans and Specifications or as directed by the Engineer.
- B. Demolition, salvage, and disposal shall include all labor, equipment, materials, accessories and all else necessary to perform the work in accordance with the Plans and Specifications and as directed by the Engineer.
- C. Items designated shall be removed and disposed of in accordance with all applicable laws and regulations. Items designated for salvage or reuse shall be carefully removed and safely stored. The DNR reserves the right to identify additional items to be salvaged by the Contractor. Salvaged items shall remain the property of the DNR.
- D. The Contractor shall make every effort to reuse or recycle all materials scheduled for disposal with the exception of bridge structures.
- E. Codes
  - 1. Before the work of this Section is started, the Contractor shall obtain all permits required by Federal, State, and local jurisdictions for all phases and operations of the work, and shall perform the work in accordance with all applicable Federal, State, and local codes and restrictions.
    - a. MPCA Notification of Intent to Perform a Demolition
    - b. Minnesota Pollution Control Agency Chapter 7080

#### 1.2 MEASUREMENT AND PAYMENT

- A. Measurement and payment for all demolition, salvage, and disposal items will be as indicated in the Proposal for Contract Work and completed in accordance with the Plans and Specifications and as directed by the Engineer. The Engineer will designate those items to be salvaged.
- B. Measurement and payment for preparing and submitting the “MPCA – Notification of Intent to Perform a Demolition” will be lump sum as indicated in the Proposal for Contract Work and completed in accordance with the Plans and Specifications and as directed by the Engineer.
- C. Measurement and payment for performing the Regulated Asbestos-Containing Material Inspection and issuing the report will be lump sum as indicated in the Proposal for Contract Work and completed in accordance with the Plans and Specifications and as directed by the Engineer.
- D. Measurement and payment for performing the Lead Paint Inspection and issuing the report will be lump sum as indicated in the Proposal for Contract Work and completed in accordance with the Plans and Specifications and as directed by the Engineer.

## PART 2 - PRODUCTS N/A

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Structures and facilities that are to remain in place will be indicated in the Contract or designated by the Engineer. The Engineer may determine that the existence of a structure or an obstruction does not interfere with, endanger, or detract from the new construction in any way, and therefore, may remain in place. Prior to commencing any demolition the Contractor shall install erosion and sediment control measures as indicated on the Plans in the Specifications or as directed by the Engineer.

### 3.2 INSTALLATION

- A. The Contractor shall remove and dispose of all structures and obstructions as indicated on the Plans in the Specifications except those that are specified to be removed by others or that are permitted to remain by the Engineer.
- B. Removal operations that may endanger new construction shall be completed prior to construction of the affected work. Materials that have been designated for salvage shall be removed in a manner that will not result in unwarranted damage. The salvaged material shall be dismantled into section or assembly units as required to facilitate removing in undamaged condition and permit convenient handling. Pipe materials shall be completely emptied of infiltrated material prior to being stockpiled.
- C. Remaining Portion of Structure
  1. Where a portion of an existing structure is to be retained for use, that portion shall not be damaged during removal operations. Where a portion of a reinforced concrete structure is to be removed and the structure extended, existing reinforcement bars shall be left in place for a distance of not less than 40 bar diameters from the face of the cut, to provide bond between the old and new concrete. Where a concrete box culvert is to be extended, the old structure shall be removed to the extent shown on the Plans in the Specifications.
- D. MPCA – Notification of Intent to Perform a Demolition.
  1. The demolition contractor shall prepare and submit to MPCA a “MPCA – Notification of Intent to Perform a Demolition” a minimum of ten (10) working days prior to commencing demolition of the structure.
  2. The Notification form can be downloaded from the MPCA website. The web address is [http://www.pca.state.mn.us/programs/asbestos\\_p.html](http://www.pca.state.mn.us/programs/asbestos_p.html)
- E. Regulated Asbestos-Containing Material (RACM) Inspection
  1. Prior to submission of the “MPCA – Notification of Intent to Perform a Demolition”, the Contractor shall arrange to have the structure inspected by a U.S. Environmental Protection Agency (EPA) and/or Minnesota Department of Health certified inspector to determine if the structure contains any Regulated Asbestos-Containing Material (RACM).
  2. The inspector shall issue a report directly to both the Engineer and the Contractor indicating whether or not RACM is contained in the structure and if so, where the RACM is located within the structure. The Engineer will then make arrangements for the removal and abatement of the RACM.
- F. Regulated Asbestos-Containing Material (RACM) Inspection

1. If any not previously identified RACM is uncovered during the demolition, the contractor shall immediately notify the Engineer of the additional identified or suspected RACM.

G. Lead Paint Inspection

1. The Contractor shall have the structure inspected to determine if lead paint exists. The Inspector shall issue a report directly to both the Engineer and the Contractor indicating whether or not lead paint is present and if so, in what items. The contractor shall make arrangements to remove and dispose of all items identified as containing lead paint in accordance with all applicable laws and regulations.
2. If any additional items containing lead paint are uncovered during the demolition, the contractor shall immediately notify the Engineer of the additional items identified or suspected of containing lead paint.

3.3 FIELD QUALITY CONTROL

3.4 REPAIR AND RESTORATION

- A. The Contractor shall be responsible to repair or replace any items that are damaged by the Contractor's operations at no additional expense to the DNR. The DNR shall determine whether the items are repaired or replaced.

END OF SECTION 024118

## SECTION 051200 – STRUCTURAL STEEL

### PART 1 - GENERAL:

#### 1.1 SUMMARY

- A. This section applies to the construction of the Structural Steel.
- B. The work under this section shall consist of furnishing all labor, materials, tools, equipment, transportation and incidentals necessary and required to place the Structural Steel, Handrails, and Grating as shown on the drawings and/or specified below.

#### 1.2 MEASUREMENT AND PAYMENT

- A. Measurement and payment will be made on a lump sum basis for the Structural Steel indicated in the Proposal for Contract Work and installed in accordance with the Plans and Specifications.

#### 1.3 SUBMITTALS

- A. The Contractor shall submit an electronic set of shop drawings to the Engineer for the following:
  - 1. Structural Steel

#### 1.4 QUALITY ASSURANCE

- A. Comply with applicable provisions of the following:
  - 1. AISC 303.
  - 2. AISC 360.
  - 3. AWS D1.1

### PART 2 - PRODUCTS

#### 2.1 MATERIALS:

- A. W-Shapes: ASTM A 992, Grade 50
- B. Channels, Angles: ASTM A 36
- C. Plate and Bar: ASTM A 36
- D. High Strength Bolts, Nuts, and Washers: A307



## 2.2 Anchor Rods: ASTM A36

1. Nuts: ASTM A 563 hex carbon steel.
2. Plate Washers: ASTM A 36/A 36M carbon steel.
3. Washers: ASTM F 436 Type 1, hardened carbon steel.
4. Epoxy: Hilti Hit HY200 or approved equal.

## 2.3 FINISHES

- A. All steel fabrications shall be hot-dip galvanized after fabrication, ASTM A123.
- B. Prepare galvanized surface for paint per ASTM D6386.

# PART 3 - EXECUTION

## 3.1 FABRICATION

- A. Structural Steel: Fabricate and assemble in shop to greatest extent possible. Fabricate according to AISC 303 and AISC 360.
- B. Weld Connections: Comply with AWS D1.1/D1.1M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.

## 3.2 ERECTION

- A. Set structural steel accurately in locations and to elevations indicated and according to AISC 303 and AISC 360.
- B. Align and adjust various members forming part of complete frame or structure before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that will be in permanent contact with members. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
- C. Do not use thermal cutting during erection
- D. High-Strength Bolts: Install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.
- E. Weld Connections: Comply with AWS D1.1/D1.1M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.

## 3.3 REPAIR AND RESTORATION

- A. Materials not meeting the specifications shall be rejected and replaced by the Contractor, or repaired by a method acceptable to the Engineer.

END OF SECTION 051200

## SECTION 099123 - INTERIOR PAINTING

### PART 1 - GENERAL

#### 1.1 SECTION REQUIREMENTS

- A. Submittals:
  - 1. Product Data.
  - 2. Samples for color evaluation.
- B. Extra Materials: Deliver to Owner 1 quart (0.9 L) of each color and type of finish-coat paint used on Project, in containers, properly labeled and sealed.

### PART 2 - PRODUCTS

#### 2.1 PAINT

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - 1. Sherwin-Williams Company (The).
  - 2. Benjamin Moore & Co.
- B. MPI Standards: Provide materials that comply with MPI standards indicated and listed in its "MPI Approved Products List."
  - 1. Block Filler, Latex: MPI #4.
  - 2. Primer Sealer, Latex: MPI #50.
  - 3. Primer, Alkali Resistant, Water Based: MPI #3.
  - 4. Primer Sealer, Institutional Low Odor/VOC: MPI #149.
  - 5. Primer, Latex, for Interior Wood: MPI #39.
  - 6. Primer Sealer, Alkyd, Interior: MPI #45.
  - 7. Primer, Bonding, Water Based: MPI #17.
  - 8. Primer, Bonding, Solvent Based: MPI #69.
  - 9. Primer, Alkyd, Anticorrosive: MPI #79.
  - 10. Primer, Galvanized, Water Based: MPI #134.
  - 11. Primer, Quick Dry, for Aluminum: MPI #95.
  - 12. Latex, Interior, Flat, (Gloss Level 1): MPI #53.
  - 13. Latex, Interior, (Gloss Level 2): MPI #44.
  - 14. Latex, Interior, (Gloss Level 4): MPI #43.
  - 15. Latex, Interior, Semigloss, (Gloss Level 5): MPI #54.
  - 16. Latex, Interior, Gloss, (Gloss Level 6, except Minimum Gloss of 65 Units at 60 Degrees): MPI #114.
  - 17. Latex, Institutional Low Odor/VOC, Flat (Gloss Level 1): MPI #143.

18. Latex, Institutional Low Odor/VOC, (Gloss Level 2): MPI #144.
19. Latex, Institutional Low Odor/VOC, Semigloss (Gloss Level 5): MPI #147.
20. Latex, High-Performance Architectural, (Gloss Level 2): MPI #138.
21. Latex, High-Performance Architectural, Semigloss (Gloss Level 5): MPI #141.
22. Alkyd, Interior, Flat (Gloss Level 1): MPI #49.
23. Alkyd, Interior, Semigloss (Gloss Level 5): MPI #47.
24. Alkyd, Interior, Gloss (Gloss Level 6): MPI #48.
25. Alkyd, Quick Dry, Semigloss (Gloss Level 5): MPI #81.
26. Alkyd, Quick Dry, Gloss (Gloss Level 7): MPI #96.
27. Floor Paint, Latex, Low Gloss (Maximum Gloss Level 3): MPI #60.
28. Floor Enamel, Alkyd, Gloss (Gloss Level 6): MPI #27.

C. Material Compatibility: Provide materials that are compatible with one another and with substrates.

1. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

D. Paints and coatings shall comply with the following limits for VOC content:

1. Flat Paints and Coatings: 50 g/L.
2. Nonflat Paints, Coatings: 150 g/L.
3. Primers, Sealers, and Undercoaters: 200 g/L.
4. Anticorrosive and Antirust Paints Applied to Ferrous Metals: 250 g/L.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Galvanized metal surface to be painted must be prepared by SSPC-SP7 prior to priming.
- B. Comply with recommendations in MPI's "MPI Architectural Painting Specification Manual" applicable to substrates indicated.
- C. Remove hardware, lighting fixtures, and similar items that are not to be painted. Mask items that cannot be removed. Reinstall items in each area after painting is complete.
- D. Clean and prepare surfaces in an area before beginning painting in that area. Schedule painting so cleaning operations will not damage newly painted surfaces.

### 3.2 APPLICATION

- A. Comply with recommendations in MPI's "MPI Architectural Painting Specification Manual" applicable to substrates indicated.
- B. Paint exposed surfaces, unless otherwise indicated.

- C. Apply paints according to manufacturer's written instructions.
  - 1. Use brushes only where the use of other applicators is not practical.
  - 2. Use rollers for finish coat on interior walls and ceilings.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
  - 1. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

### 3.3 INTERIOR PAINT APPLICATION SCHEDULE

- A. Galvanized Metal:
  - 1. Semigloss Interior Acrylic Enamel: Two coats over galvanized-metal primer recommended by manufacturer: MPI INT 5.3J.
- B. Color: As selected to match adjacent finish.

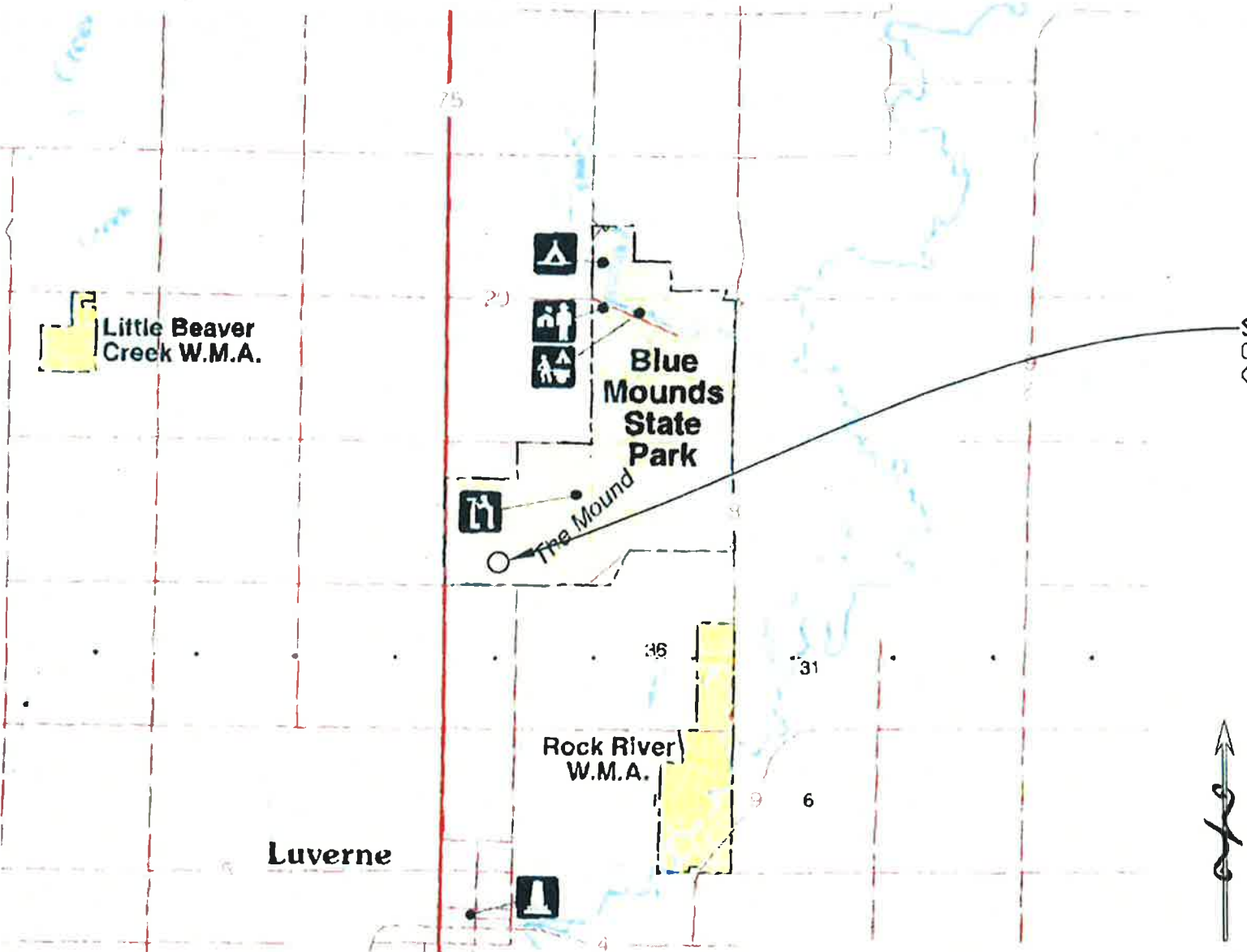
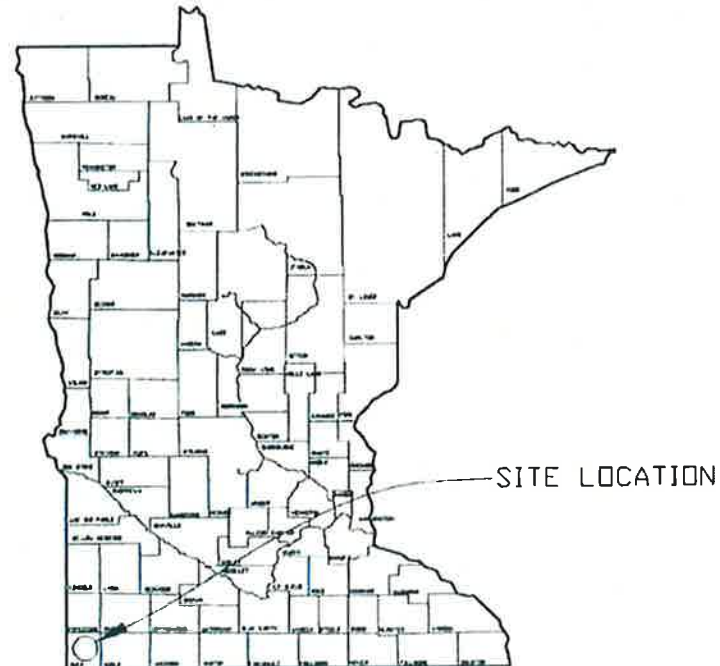
END OF SECTION 099123

MINNESOTA DEPARTMENT OF NATURAL RESOURCES - DIVISION OF PARKS AND TRAILS

BLUE MOUNDS STATE PARK  
INTERPRETIVE CENTER REPAIRS

SHEET INDEX

- S-001 Title Sheet
- S-101 Existing Roof Conditions
- S-102 Proposed Roof Repairs
- S-501 Repair Details



SITE LOCATION  
GPS COORDINATES:  
(43.69123,-96.19684)

NOTES:

1. EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY GOPHER STATE ONE-CALL 1-800-252-1166 OR 651-454-0002.
2. THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."
3. THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS IN PROJECT MANUAL, DIVISION 1, SECTION 1.531 (01 30 00) INVASIVE SPECIES PREVENTION IN COMPLETING THE WORK

CALL BEFORE YOU DIG



VERIFY ALL DIMENSIONS AND LOCATIONS ON THE JOB. REPORT ALL DISCREPANCIES TO MANAGEMENT RESOURCES  
DO NOT SCALE DRAWINGS

Approval  
*Kathy Dummer* 5-2-17  
Division of Parks and Trails  
*Jeffrey M. Erickson* 5-3-17  
Operations Services Division



I hereby certify that this plan, specification or report was prepared by me or under my direct supervision, and that I am a duly licensed professional engineer under the laws of the State of Minnesota  
Name: *Jeffrey M. Erickson* License #: 42006  
Date: 4.27.2017

Operations Services  
Safety  
Facilities  
Materials  
Equipment  
Field Operations  
Information Management

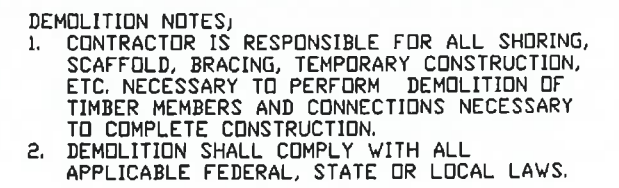
INTERPRETIVE CENTER REPAIRS  
BLUE MOUNDS STATE PARK  
DNR Division of Parks and Trails  
Rock County Section: 23 Township: 103N Range: 45W

Revisions	
Date	By

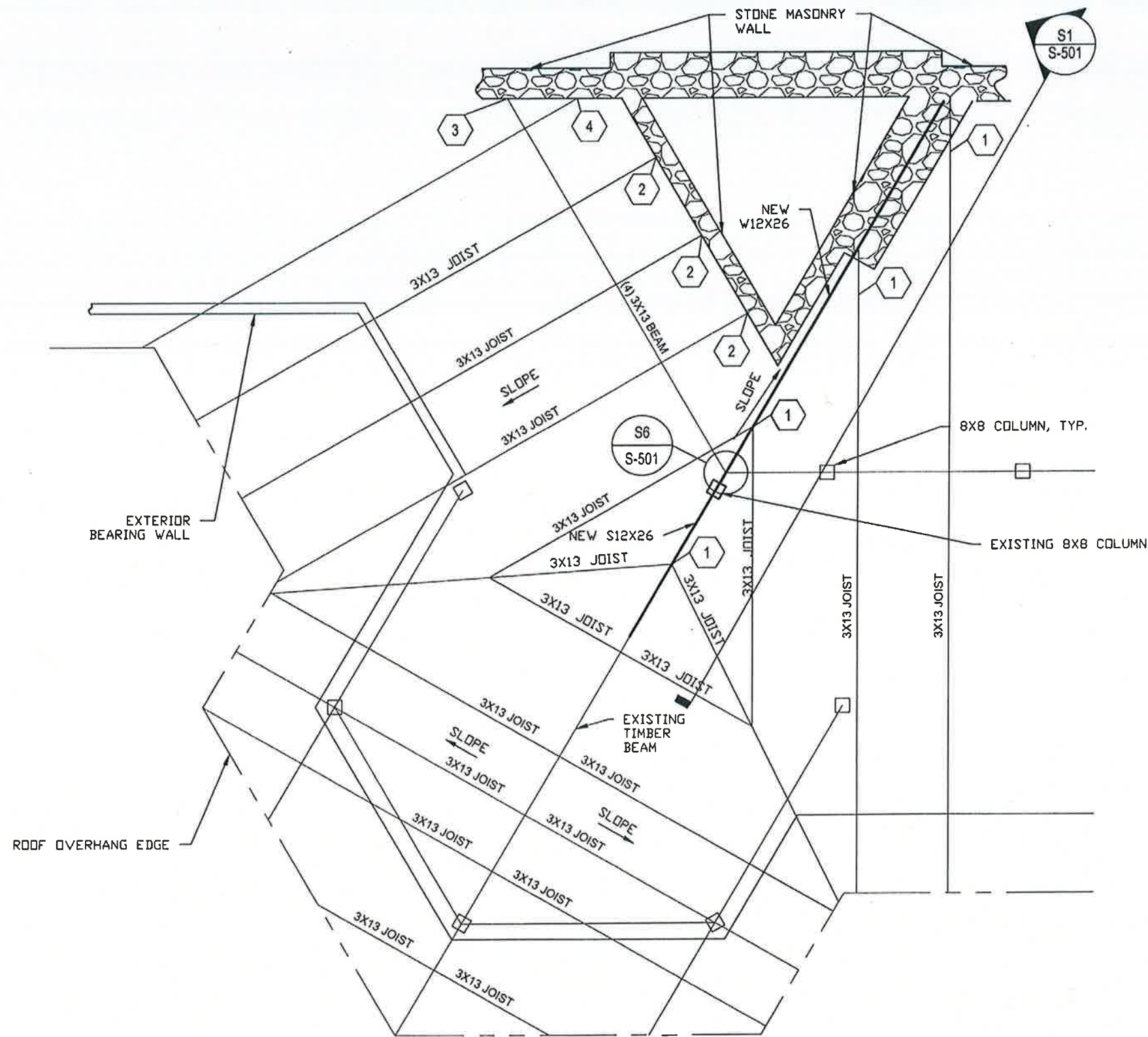
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Horz datum:	None	Vert datum:	None

Sheet: S-001  
CC2: 8H880  
File #: SPK.00121.07.00.53





 DEPARTMENT OF NATURAL RESOURCES	I hereby certify that this plan, specification or report was prepared by me or under my direct supervision, and that I am a duly licensed professional engineer under the laws of the state of Minnesota. Name: <u>Jeffrey M. Erickson</u> License #: <u>42006</u> Date: <u>3.22.2017</u>	Operations Services Safety Facilities Materials Equipment Field Operations Information Management	INTERPRETIVE CENTER REPAIRS BLUE MOUNDS STATE PARK DNR Division of Parks and Trails Rock County      Township: 103N      Range: 45W Section: 23	Revisions Date      By _____ _____ _____ _____ _____	Title: EXISTING ROOF CONDITIONS Survey: XX XX/XX      Designed: JME 03/17 Drawn: XX XX/XX      Drawn: JME 03/17 Checked: XX XX/XX      Checked: XX XX/XX Horz. datum: None      Vert. datum: None	Sheet: <b>S-101</b> CC2: <b>8H880</b> File #: <b>SPK.00121.07.00.53</b>
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#### TYPICAL NOTES

1. THESE NOTES SPECIFY THE REQUIREMENTS FOR THE DESIGN REPRESENTED IN THESE DOCUMENTS. THE CONSTRUCTION AND MATERIALS SHALL COMPLY WITH ALL THE PERTINENT CODES AND REFERENCES, PLANS, AND DETAILS, INCLUDING (BUT NOT LIMITED TO) THOSE SHOWN IN ARCHITECTURAL, CIVIL, MECHANICAL AND ELECTRICAL.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD THAT AFFECT CONSTRUCTION PRIOR TO COMMENCING WORK ON THE AFFECTED ELEMENTS OR SHOP DRAWINGS SUBMITTALS. RESOLVE ANY DISCREPANCIES WITH THE ARCHITECT PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR IS RESPONSIBLE FOR BRACING AND SHORING (WITHOUT OVERSTRESSING) ALL STRUCTURAL ELEMENTS AS NECESSARY AT ANY STAGE OF CONSTRUCTION UNTIL COMPLETION OF THE PROJECT. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CONTRACTORS MEANS, METHODS, SEQUENCES OR PROCEDURES OF CONSTRUCTION.
4. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL LAWS REGARDING SAFETY AND WORKING ENVIRONMENT ON THE JOB SITE. THE CONTRACTOR SHALL CONFORM TO ALL OSHA REGULATIONS.
5. ALL SHOP DRAWINGS REQUIRED BY THESE SPECIFICATIONS SHALL BE REVIEWED AND STAMPED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR ALL FIELD VERIFICATION REQUIRED ON THE SHOP DRAWINGS.

#### STRUCTURAL STEEL NOTES:

1. DESIGN CODE: 'SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS', (AISC) LATEST ADOPTION
2. MATERIALS (UNLESS NOTED OTHERWISE):
  - 2.1. WIDE FLANGE SHAPES: ASTM A992, 50 KSI YIELD
  - 2.2. OTHER STRUCTURAL SHAPES AND PLATES: ASTM A36
3. ALL STRUCTURAL STEEL SHALL BE DESIGNED, FABRICATED AND ERECTED ACCORDING TO THE AISC MANUAL, LATEST ADOPTION AND IBC.
4. ALL WELDING SHALL BE DONE WITH THE SHIELD ARC PROCESS, USING E70 ELECTRODES.
5. ALL WELDERS SHALL BE CERTIFIED ACCORDING TO THE RULES OF THE AMERICAN WELDING SOCIETY (AWS).
6. STRUCTURAL WELDING SHALL BE IN ACCORDANCE WITH THE 'STRUCTURAL WELDING CODE-STEEL', ANSI/AWS D1.1 AS AMENDED BY THE IBC.
7. STEEL ERECTOR SHALL PROVIDE THE NECESSARY BRACING FOR STRUCTURE STABILITY DURING ERECTION AND UNTIL ALL MEMBERS ARE SECURE.
8. SUBMIT SHOP DRAWINGS OF ALL STRUCTURAL STEEL COMPONENTS INCLUDING ERECTION PLANS, COMPLETE DIMENSIONS, DETAILS AND ALL CONNECTIONS. DO NOT FABRICATE UNTIL SHOP DRAWINGS ARE REVIEWED AND ACCEPTED BY THE ENGINEER.

#### STRUCTURAL TESTING AND INSPECTION

DESCRIPTION	CONTINUOUS	PERIODIC	INSPECTOR
STEEL WELDING AND BOLTS PER ACI 360-10		X	TECHNICAL AGENCY

#### KEY NOTES:

1. ATTACH TIMBER JOIST PER DETAIL S7/S-501
2. ATTACH TIMBER JOIST TO STONE WALL PER DETAIL S8/S-501.
3. ATTACH TIMBER BEAM TO STONE WALL PER DETAIL S9/S-501.
4. ATTACH TIMBER JOIST TO STONE WALL PER DETAIL S10/S-501.

S1

## PARTIAL ROOF PLAN W/ REPAIRS

3/16" = 1'-0"

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision, and that I am a duly licensed professional engineer under the laws of the state of Minnesota.  
 Name: Jeffrey M. Erickson License #: 42006  
 Date: 3.22.2017

Operations Services  
 Safety  
 Facilities  
 Materials  
 Equipment  
 Field Operations  
 Information Management

INTERPRETIVE CENTER REPAIRS  
 BLUE MOUNDS STATE PARK  
 DNR Division of Parks and Trails

Rock County Section: 23 Township: 103N Range: 45W

Revisions  
 Date By

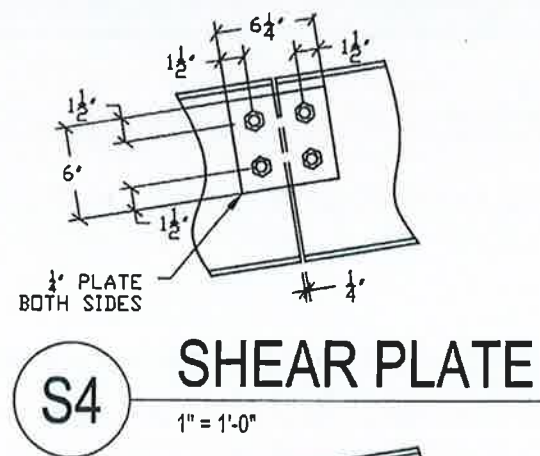
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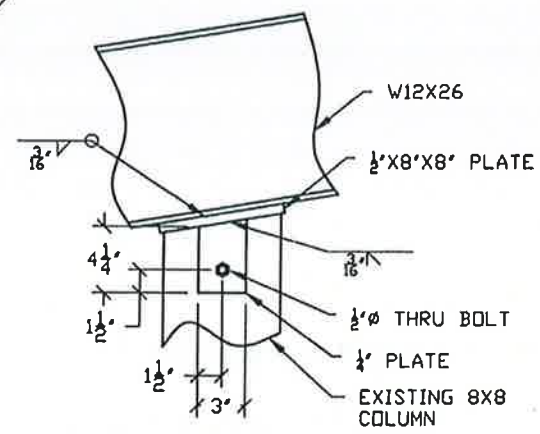
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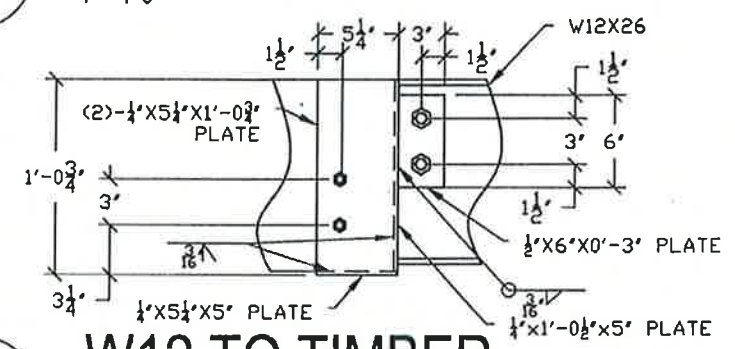




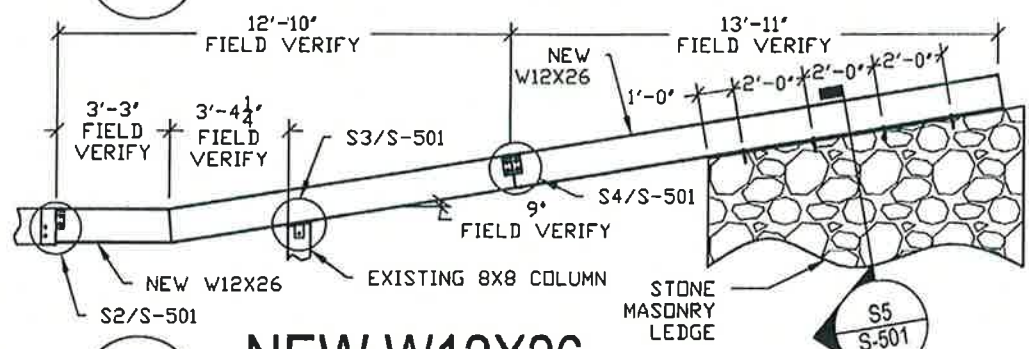
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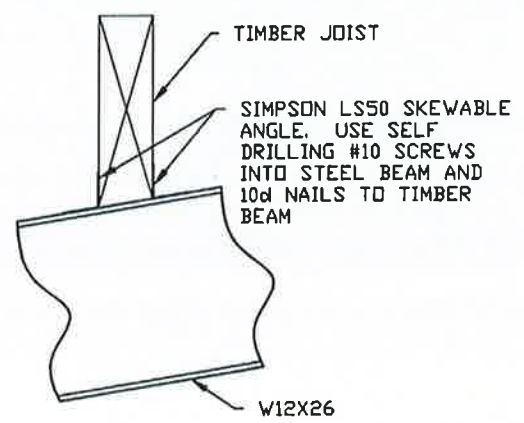
**S3 COLUMN CAP**  
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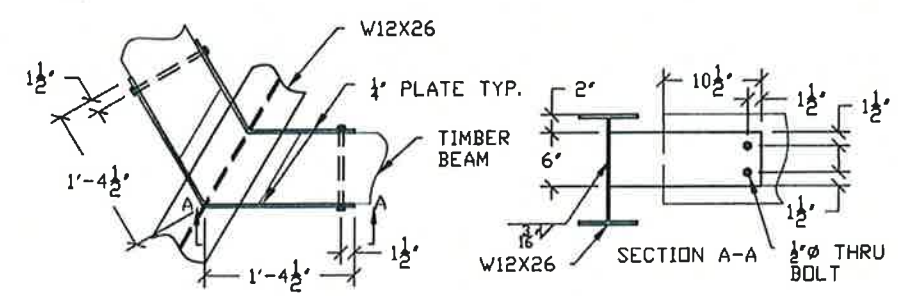
**S2 W12 TO TIMBER**  
1" = 1'-0"



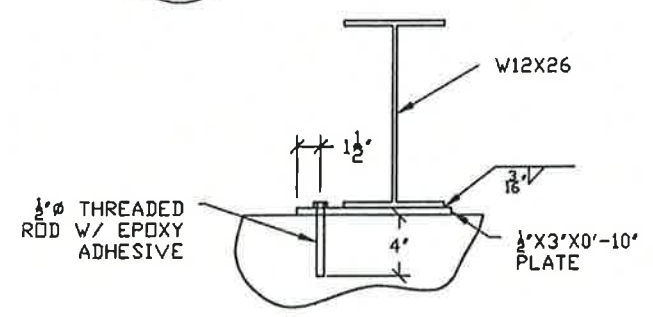
**S1 NEW W12X26**  
3/16" = 1'-0"



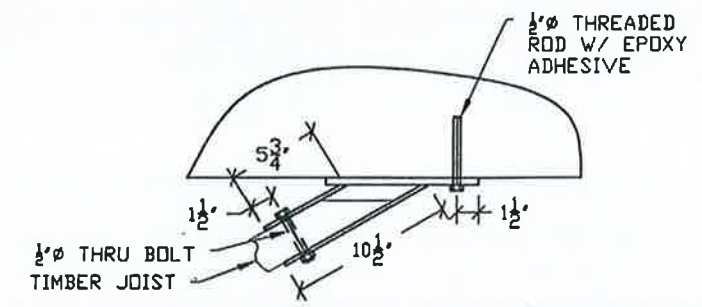
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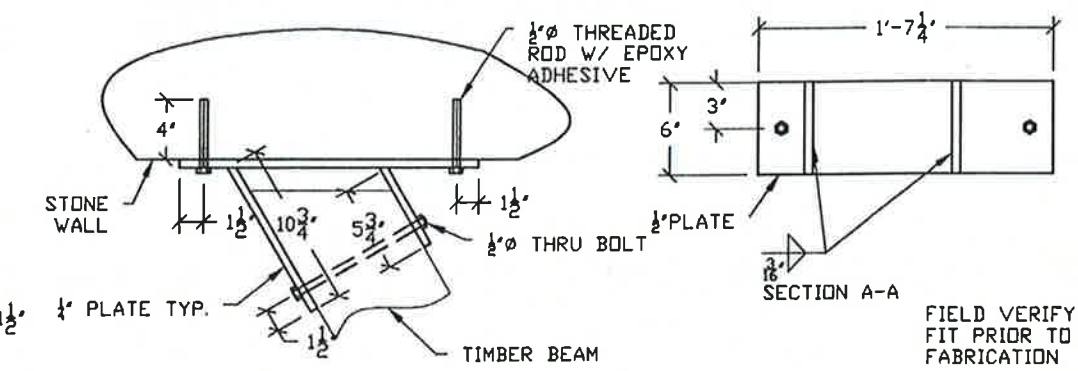
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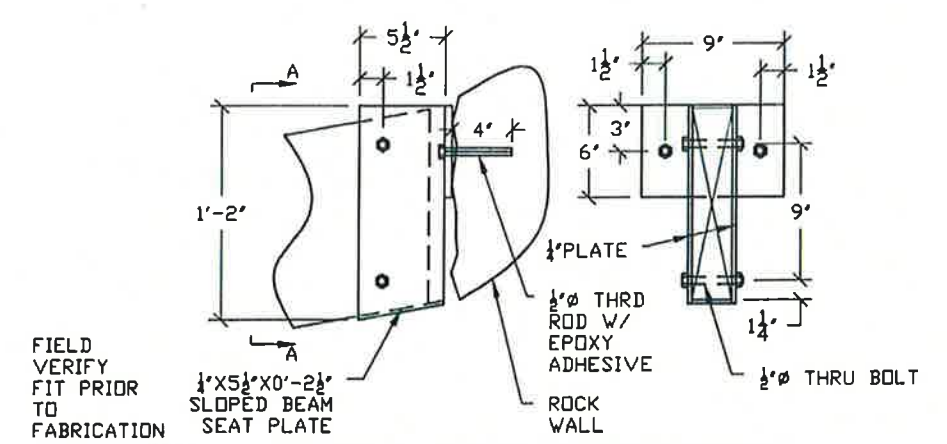
**S5 W12 TO ROCK**  
1" = 1'-0"



**S10 WALL CONNECTION**  
1" = 1'-0"



**S9 WALL CONNECTION**  
1" = 1'-0"



**S8 WALL CONNECTION**  
1" = 1'-0"



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## Appendix D

### 2016 Structural Calculations - Interpretive Center Roof Repair



**STRUCTURAL CALCULATIONS  
INTERPRETIVE CENTER ROOF REPAIR  
BLUE MOUNDS STATE PARK**

SPK00121.07.00.53/8H880

**STRUCTURAL ENGINEER**

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

DATE: April 24, 2017

LICENSE NO: 42006

SIGNATURE

A handwritten signature in blue ink, appearing to read 'Jeffrey Erickson', written over a horizontal line.

NAME: Jeffrey Erickson



Blue Mounds State Park  
Visitor Center

SNOW LOADS! PER ASCE 7-10

$$P_f = 0.7 \cdot C_e \cdot C_t \cdot I_s \cdot P_g$$

$$P_g = 50 \text{ psf}$$

$$C_e = 0.9 \quad \text{FULLY EXPOSED IN CAT C}$$

$$C_t = 1.0$$

$$I_s = 1.0$$

$$P_f = \underline{\underline{31.5 \text{ psf}}}$$

DRIFTING SNOW

$$h_d = 0.43 \times \sqrt[3]{L_u} \sqrt[4]{P_g + 10} - 1.5$$

$$L_u = 20 \text{ ft}$$

$$P_g = 50 \text{ psf}$$

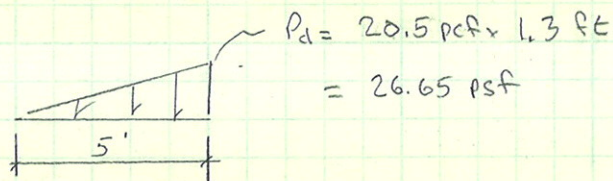
$$h_d = 1.74 \text{ ft (FOR LOWER ROOFS)}$$

$$3/4 h_d = 1.3 \text{ ft (FOR ROOF PROJECTIONS)}$$

$$h_c = 1/2 - 3 \text{ ft}$$

$$h_b = 31.5 \text{ psf} / 20.5 \text{ psf} = 1.5 \text{ ft}$$

$$W = 4 h_d = 4 \times 1.3 \text{ ft} = 5.2 \text{ ft}$$



DRIFT @ CHIMNEY

DEAD LOADS

$$\text{ASPHALT} = 2 \text{ psf}$$

$$\text{DECKING} = 9 \text{ psf}$$

$$\text{INSUL.} = 5 \text{ psf}$$

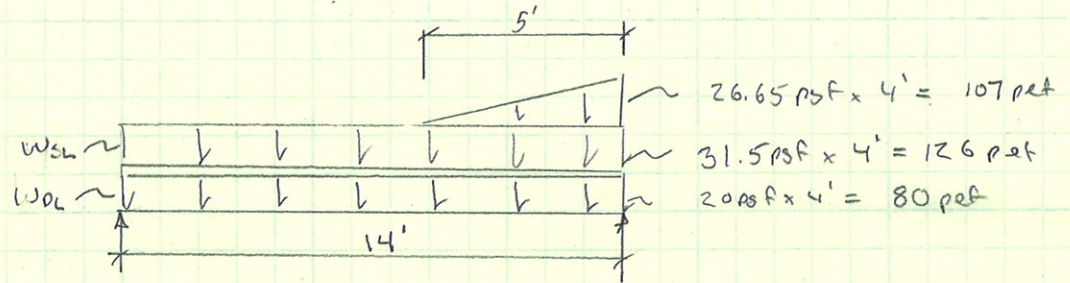
$$\text{ELEC + MECH} = 2 \text{ psf}$$

$$\text{TOTAL} = 20 \text{ psf}$$

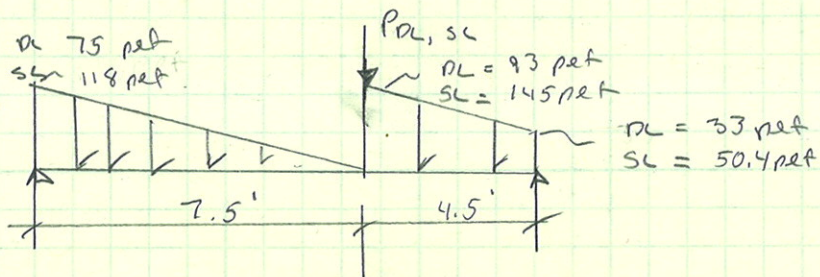


CHECK EXIST.  $2\frac{1}{2}" \times 12\frac{1}{2}"$  BEAMS

CHECK 14 FT SPAN (CHECK w/ 17.5' SPAN)



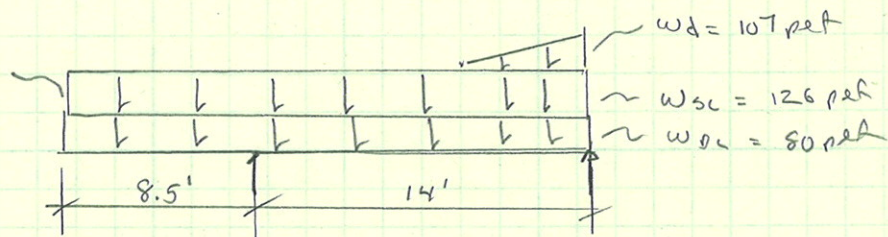
CHECK 12' SPAN w/ POINT LOAD



$$P_{DL} = 590 \text{ lbs}$$

$$P_{SL} = 930 \text{ lbs}$$

CHECK 14' SPAN w/ CANTILEVER





## Wood Beam

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1.EC6  
ENERCALC, INC. 1983-2015, Build:6.15.12.9, Ver:6.15.12.31

Lic. #: KW-06008351

Licensee: MN NORTHWEST REGION MGMT

Description: --None--

### CODE REFERENCES

Calculations per NDS 2012, IBC 2012, CBC 2013, ASCE 7-10

Load Combination Set: ASCE 7-10

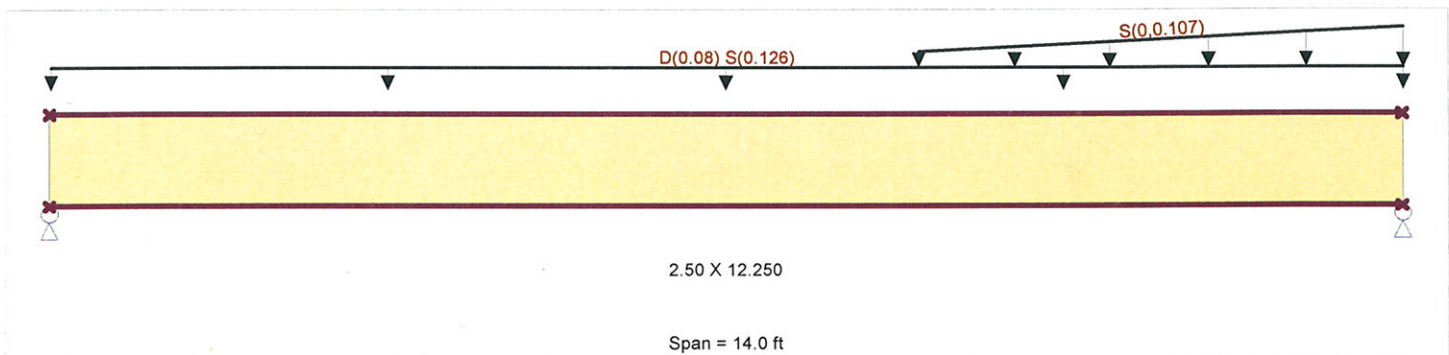
### Material Properties

Analysis Method: Load Resistance Factor D  
Load Combination ASCE 7-10

Wood Species: Spruce - Pine - Fir (South)  
Wood Grade: No.1

Beam Bracing: Beam is Fully Braced against lateral-torsion buckling

Fb - Tension 875 psi  
Fb - Compr 875 psi  
Fc - Prll 1050 psi  
Fc - Perp 335 psi  
Fv 135 psi  
Ft 400 psi  
E: Modulus of Elasticity  
Ebend-xx 1200ksi  
Eminbend-xx 440ksi  
Density 22.46pcf



### Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Uniform Load: D = 0.080, S = 0.1260, Tributary Width = 1.0 ft

Varying Uniform Load: S(S,E) = 0.0->0.1070 k/ft, Extent = 9.0 --> 14.0 ft, Trib Width = 1.0 ft

### DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio	=	0.972	1	Maximum Shear Stress Ratio	=	0.424	1
Section used for this span		2.50 X 12.250		Section used for this span		2.50 X 12.250	
fb: Actual	=	1,468.61	psi	fv: Actual	=	99.00	psi
FB: Allowable	=	1,511.30	psi	Fv: Allowable	=	233.28	psi
Load Combination		+1.20D+0.50L+1.60S+1.60H		Load Combination		+1.20D+0.50L+1.60S+1.60H	
Location of maximum on span	=	7.153	ft	Location of maximum on span	=	13.029	ft
Span # where maximum occurs	=	Span # 1		Span # where maximum occurs	=	Span # 1	

### Maximum Deflection

Max Downward Transient Deflection	0.258	in	Ratio =	651
Max Upward Transient Deflection	0.000	in	Ratio =	0 < 360
Max Downward Total Deflection	0.409	in	Ratio =	410
Max Upward Total Deflection	0.000	in	Ratio =	0 < 180

### Maximum Forces & Stresses for Load Combinations

Load Combination		Max Stress Ratios										Moment Values			Shear Values		
Segment Length	Span #	M	V	$\lambda$	$C_{FN}$	$C_i$	$C_r$	$C_m$	$C_t$	$C_L$	Mu	fb	Fb	Vu	fv	Fv	
+1.40D+1.60H														0.00	0.00	0.00	
Length = 14.0 ft	1	0.465	0.189	0.60	1.000	1.00	1.00	1.00	1.00	1.00	2.74	526.63	1133.48	0.68	33.07	174.96	
+1.20D+0.50Lr+1.60L+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00	
Length = 14.0 ft	1	0.299	0.122	0.80	1.000	1.00	1.00	1.00	1.00	1.00	2.35	451.40	1511.30	0.58	28.35	233.28	
+1.20D+1.60L+0.50S+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00	
Length = 14.0 ft	1	0.509	0.216	0.80	1.000	1.00	1.00	1.00	1.00	1.00	4.01	769.17	1511.30	1.03	50.43	233.28	
+1.20D+1.60Lr+0.50L+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00	
Length = 14.0 ft	1	0.299	0.122	0.80	1.000	1.00	1.00	1.00	1.00	1.00	2.35	451.40	1511.30	0.58	28.35	233.28	
+1.20D+1.60Lr+0.50W+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00	
Length = 14.0 ft	1	0.299	0.122	0.80	1.000	1.00	1.00	1.00	1.00	1.00	2.35	451.40	1511.30	0.58	28.35	233.28	
+1.20D+0.50L+1.60S+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00	

## Wood Beam

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1\EC6  
ENERCALC, INC. 1983-2015, Build:6.15.12.9, Ver:6.15.12.31

Lic. # : KW-06008351

Licensee : MN NORHTWEST REGION MGMT

Description : --None--

Load Combination		Max Stress Ratios									Moment Values			Shear Values		
Segment Length	Span #	M	V	$\lambda$	$C_{FV}$	$C_i$	$C_r$	$C_m$	$C_t$	$C_L$	Mu	fb	Fb	Vu	fv	Fv
Length = 14.0 ft	1	0.972	0.424	0.80	1.000	1.00	1.00	1.00	1.00	1.00	7.65	1,468.61	1511.30	2.02	99.00	233.28
+1.20D+1.60S+0.50W+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 14.0 ft	1	0.972	0.424	0.80	1.000	1.00	1.00	1.00	1.00	1.00	7.65	1,468.61	1511.30	2.02	99.00	233.28
+1.20D+0.50Lr+0.50L+W+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 14.0 ft	1	0.239	0.097	1.00	1.000	1.00	1.00	1.00	1.00	1.00	2.35	451.40	1889.13	0.58	28.35	291.60
+1.20D+0.50L+0.50S+W+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 14.0 ft	1	0.407	0.173	1.00	1.000	1.00	1.00	1.00	1.00	1.00	4.01	769.17	1889.13	1.03	50.43	291.60
+1.20D+0.50L+0.20S+E+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 14.0 ft	1	0.306	0.128	1.00	1.000	1.00	1.00	1.00	1.00	1.00	3.01	578.48	1889.13	0.76	37.18	291.60
+0.90D+W+0.90H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 14.0 ft	1	0.179	0.073	1.00	1.000	1.00	1.00	1.00	1.00	1.00	1.76	338.55	1889.13	0.43	21.26	291.60
+0.90D+E+0.90H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 14.0 ft	1	0.179	0.073	1.00	1.000	1.00	1.00	1.00	1.00	1.00	1.76	338.55	1889.13	0.43	21.26	291.60

### Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+S+H	1	0.4093	7.051		0.0000	0.000

### Vertical Reactions

Support notation : Far left is #1

Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	1.474	1.678
Overall MINimum	0.336	0.336
+D+H	0.560	0.560
+D+L+H	0.560	0.560
+D+Lr+H	0.560	0.560
+D+S+H	1.474	1.678
+D+0.750Lr+0.750L+H	0.560	0.560
+D+0.750L+0.750S+H	1.245	1.398
+D+0.60W+H	0.560	0.560
+D+0.70E+H	0.560	0.560
+D+0.750Lr+0.750L+0.450W+H	0.560	0.560
+D+0.750L+0.750S+0.450W+H	1.245	1.398
+D+0.750L+0.750S+0.5250E+H	1.245	1.398
+0.60D+0.60W+0.60H	0.336	0.336
+0.60D+0.70E+0.60H	0.336	0.336
D Only	0.560	0.560
Lr Only		
L Only		
S Only	0.914	1.118
W Only		
E Only		
H Only		



## Wood Beam

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1\EC6  
ENERCALC, INC. 1983-2015, Build:6.15.12.9, Ver:6.15.12.31

Lic. #: KW-06008351

Licensee: MN NORTHWEST REGION MGMT

Description: --None--

### CODE REFERENCES

Calculations per NDS 2012, IBC 2012, CBC 2013, ASCE 7-10

Load Combination Set: ASCE 7-10

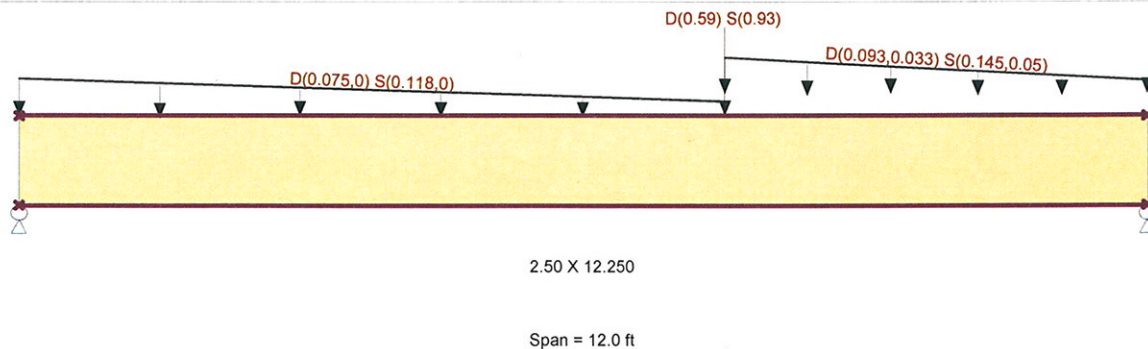
### Material Properties

Analysis Method: Load Resistance Factor D  
Load Combination ASCE 7-10

Wood Species: Spruce - Pine - Fir (South)  
Wood Grade: No.1

Beam Bracing: Beam is Fully Braced against lateral-torsion buckling

Fb - Tension 875 psi E: Modulus of Elasticity  
Fb - Compr 875 psi Ebend-xx 1200ksi  
Fc - Prll 1050 psi Eminbend-xx 440ksi  
Fc - Perp 335 psi  
Fv 135 psi  
Ft 400 psi Density 22.46pcf



### Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Load for Span Number 1

Varying Uniform Load: D(S,E) = 0.0750->0.0, S(S,E) = 0.1180->0.0 k/ft, Extent = 0.0 --> 7.50 ft, Trib Width = 1.0 ft

Point Load: D = 0.590, S = 0.930 k @ 7.50 ft

Varying Uniform Load: D(S,E) = 0.0930->0.0330, S(S,E) = 0.1450->0.050 k/ft, Extent = 7.50 --> 12.0 ft, Trib Width = 1.0 ft

### DESIGN SUMMARY

### Design N.G.

Maximum Bending Stress Ratio	=	1.124	1	Maximum Shear Stress Ratio	=	0.474	1
Section used for this span		2.50 X 12.250		Section used for this span		2.50 X 12.250	
fb: Actual	=	1,698.33	psi	fv: Actual	=	110.69	psi
FB: Allowable	=	1,511.30	psi	Fv: Allowable	=	233.28	psi
Load Combination		+1.20D+0.50L+1.60S+1.60H		Load Combination		+1.20D+0.50L+1.60S+1.60H	
Location of maximum on span	=	7.489	ft	Location of maximum on span	=	10.993	ft
Span # where maximum occurs	=	Span # 1		Span # where maximum occurs	=	Span # 1	
Maximum Deflection							
Max Downward Transient Deflection		0.183	in	Ratio =		786	
Max Upward Transient Deflection		0.000	in	Ratio =		0 < 360	
Max Downward Total Deflection		0.300	in	Ratio =		480	
Max Upward Total Deflection		0.000	in	Ratio =		0 < 180	

### Maximum Forces & Stresses for Load Combinations

Load Combination	Segment Length	Span #	Max Stress Ratios		$\lambda$	$C_{FV}$	$C_i$	$C_r$	$C_m$	$C_t$	$C_L$	Moment Values			Shear Values		
			M	V								Mu	fb	Fb	Vu	fv	Fv
+1.40D+1.60H	Length = 12.0 ft	1	0.565	0.239	0.60	1.000	1.00	1.00	1.00	1.00	1.00	3.34	640.16	1133.48	0.85	41.78	174.96
+1.20D+0.50Lr+1.60L+1.60H	Length = 12.0 ft	1	0.363	0.154	0.80	1.000	1.00	1.00	1.00	1.00	1.00	2.86	548.71	1511.30	0.73	35.81	233.28
+1.20D+1.60L+0.50S+1.60H	Length = 12.0 ft	1	0.601	0.254	0.80	1.000	1.00	1.00	1.00	1.00	1.00	4.73	907.96	1511.30	1.21	59.21	233.28
+1.20D+1.60Lr+0.50L+1.60H	Length = 12.0 ft	1	0.363	0.154	0.80	1.000	1.00	1.00	1.00	1.00	1.00	2.86	548.71	1511.30	0.73	35.81	233.28
+1.20D+1.60Lr+0.50W+1.60H						1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00

## Wood Beam

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1\EC6  
ENERCALC, INC. 1983-2015, Build:6.15.12.9, Ver:6.15.12.31

Lic. #: KW-06008351

Licensee: MN NORTHWEST REGION MGMT

Description: --None--

Load Combination		Max Stress Ratios					Moment Values							Shear Values		
Segment Length	Span #	M	V	$\lambda$	$C_{FN}$	$C_i$	$C_r$	$C_m$	$C_t$	$C_L$	Mu	fb	Fb	Vu	fv	Fv
Length = 12.0 ft	1	0.363	0.154	0.80	1.000	1.00	1.00	1.00	1.00	1.00	2.86	548.71	1511.30	0.73	35.81	233.28
+1.20D+0.50L+1.60S+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 12.0 ft	1	1.124	0.474	0.80	1.000	1.00	1.00	1.00	1.00	1.00	8.85	1,698.33	1511.30	2.26	110.69	233.28
+1.20D+1.60S+0.50W+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 12.0 ft	1	1.124	0.474	0.80	1.000	1.00	1.00	1.00	1.00	1.00	8.85	1,698.33	1511.30	2.26	110.69	233.28
+1.20D+0.50Lr+0.50L+W+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 12.0 ft	1	0.290	0.123	1.00	1.000	1.00	1.00	1.00	1.00	1.00	2.86	548.71	1889.13	0.73	35.81	291.60
+1.20D+0.50L+0.50S+W+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 12.0 ft	1	0.481	0.203	1.00	1.000	1.00	1.00	1.00	1.00	1.00	4.73	907.96	1889.13	1.21	59.21	291.60
+1.20D+0.50L+0.20S+E+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 12.0 ft	1	0.367	0.155	1.00	1.000	1.00	1.00	1.00	1.00	1.00	3.61	692.41	1889.13	0.92	45.17	291.60
+0.90D+W+0.90H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 12.0 ft	1	0.218	0.092	1.00	1.000	1.00	1.00	1.00	1.00	1.00	2.14	411.53	1889.13	0.55	26.86	291.60
+0.90D+E+0.90H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
Length = 12.0 ft	1	0.218	0.092	1.00	1.000	1.00	1.00	1.00	1.00	1.00	2.14	411.53	1889.13	0.55	26.86	291.60

### Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+S+H	1	0.2995	6.350		0.0000	0.000

### Vertical Reactions

Support notation: Far left is #1

Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	1.300	1.666
Overall MINimum	0.303	0.390
+D+H	0.506	0.649
+D+L+H	0.506	0.649
+D+Lr+H	0.506	0.649
+D+S+H	1.300	1.666
+D+0.750Lr+0.750L+H	0.506	0.649
+D+0.750L+0.750S+H	1.102	1.412
+D+0.60W+H	0.506	0.649
+D+0.70E+H	0.506	0.649
+D+0.750Lr+0.750L+0.450W+H	0.506	0.649
+D+0.750L+0.750S+0.450W+H	1.102	1.412
+D+0.750L+0.750S+0.5250E+H	1.102	1.412
+0.60D+0.60W+0.60H	0.303	0.390
+0.60D+0.70E+0.60H	0.303	0.390
D Only	0.506	0.649
Lr Only		
L Only		
S Only	0.795	1.017
W Only		
E Only		
H Only		



## Wood Beam

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1\EC6

ENERCALC, INC. 1983-2015, Build:6.15.12.9, Ver:6.15.12.31

Lic. #: KW-06008351

Licensee: MN NORHTWEST REGION MGMT

Description: 3x13 w/ cantilever

### CODE REFERENCES

Calculations per NDS 2012, IBC 2012, CBC 2013, ASCE 7-10

Load Combination Set: ASCE 7-10

### Material Properties

Analysis Method: Load Resistance Factor D  
Load Combination: ASCE 7-10

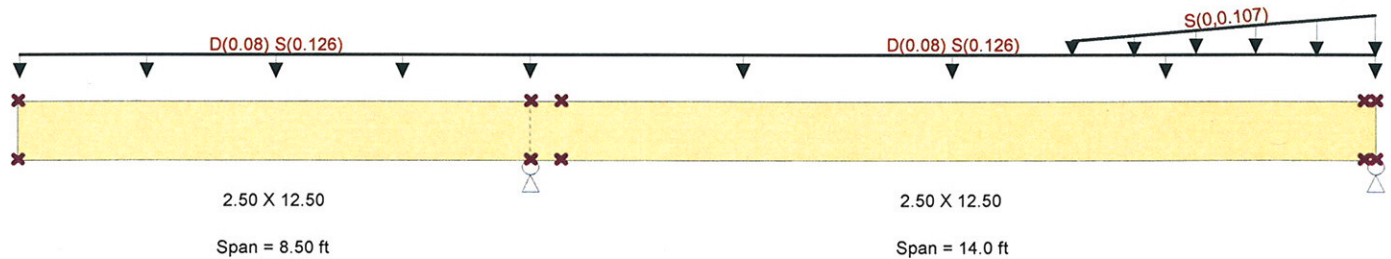
Fb - Tension	1300 psi	E : Modulus of Elasticity	
Fb - Compr	1300 psi	Ebend- xx	1300ksi
Fc - Prll	1200 psi	Eminbend - xx	470ksi
Fc - Perp	335 psi		
Fv	135 psi		
Ft	575 psi	Density	22.46pcf

Wood Species: Spruce - Pine - Fir (South)  
Wood Grade: Select structural

Beam Bracing: Beam bracing is defined Beam-by-Beam

### Unbraced Lengths

Span # 1, Defined Brace Locations, First Brace at 8.50 ft, Second Brace at 0.0 ft, Third Brace at 0  
Span # 2, Defined Brace Locations, First Brace at 0.50 ft, Second Brace at 13.80 ft, Third Brace at



### Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Load for Span Number 1

Uniform Load: D = 0.080, S = 0.1260, Tributary Width = 1.0 ft

Load for Span Number 2

Uniform Load: D = 0.080, S = 0.1260, Tributary Width = 1.0 ft

Varying Uniform Load: S(S,E) = 0.0->0.1070 k/ft, Extent = 9.0 --> 14.0 ft, Trib Width = 1.0 ft

### DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio	=	0.902	1	Maximum Shear Stress Ratio	=	0.535	1
Section used for this span		2.50 X 12.50		Section used for this span		2.50 X 12.50	
fb : Actual	=	1,981.59psi		fv : Actual	=	124.77 psi	
FB : Allowable	=	2,196.59psi		Fv : Allowable	=	233.28 psi	
Load Combination		+1.20D+0.50L+1.60S+1.60H		Load Combination		+1.20D+0.50L+1.60S+1.60H	
Location of maximum on span	=	8.500ft		Location of maximum on span	=	8.500 ft	
Span # where maximum occurs	=	Span # 1		Span # where maximum occurs	=	Span # 1	

### Maximum Deflection

Max Downward Transient Deflection	0.432 in	Ratio =	472
Max Upward Transient Deflection	-0.015 in	Ratio =	11296
Max Downward Total Deflection	0.723 in	Ratio =	282
Max Upward Total Deflection	-0.028 in	Ratio =	6032

### Maximum Forces & Stresses for Load Combinations

Load Combination	Max Stress Ratios											Moment Values			Shear Values		
Segment Length	Span #	M	V	$\lambda$	$C_{FN}$	$C_i$	$C_r$	$C_m$	$C_t$	$C_L$	Mu	fb	Fb	Vu	fv	Fv	
+1.40D+1.60H														0.00	0.00	0.00	
Length = 8.50 ft	1	0.453	0.263	0.60	1.000	1.00	1.00	1.00	1.00	0.98	4.05	745.76	1647.45	0.96	46.04	174.96	
Length = 0.4693 ft	2	0.443	0.263	0.60	1.000	1.00	1.00	1.00	1.00	1.00	4.05	745.76	1682.54	0.96	46.04	174.96	
Length = 13.296 ft	2	0.406	0.263	0.60	1.000	1.00	1.00	1.00	1.00	0.96	3.55	655.22	1612.32	0.96	46.04	174.96	



## Wood Beam

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1\EC6  
ENERCALC, INC. 1983-2015, Build:6.15.12.9, Ver:6.15.12.31

Lic. #: KW-06008351

Licensee: MN NORTHWEST REGION MGMT

Description: 3x13 w/ cantilever

Load Combination	Segment Length	Span #	Max Stress Ratios					Moment Values							Shear Values		
			M	V	$\lambda$	$C_{FV}$	$C_i$	$C_r$	$C_m$	$C_t$	$C_L$	$\mu_u$	$f_b$	$F_b$	$V_u$	$f_v$	$F_v$
+1.20D+0.50Lr+1.60L+1.60H	Length = 0.2346 ft	2	0.012	0.263	0.60	1.000	1.00	1.00	1.00	1.00	1.00	0.11	20.84	1683.28	0.38	46.04	174.96
	Length = 8.50 ft	1				1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
	Length = 0.4693 ft	2	0.291	0.169	0.80	1.000	1.00	1.00	1.00	1.00	0.98	3.47	639.22	2196.59	0.82	39.46	233.28
	Length = 13.296 ft	2	0.285	0.169	0.80	1.000	1.00	1.00	1.00	1.00	1.00	3.47	639.22	2243.38	0.82	39.46	233.28
	Length = 0.2346 ft	2	0.261	0.169	0.80	1.000	1.00	1.00	1.00	1.00	0.96	3.05	561.62	2149.76	0.82	39.46	233.28
+1.20D+1.60L+0.50S+1.60H	Length = 0.2346 ft	2	0.008	0.169	0.80	1.000	1.00	1.00	1.00	1.00	1.00	0.10	17.86	2244.38	0.33	39.46	233.28
	Length = 8.50 ft	1				1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
	Length = 0.4693 ft	2	0.482	0.283	0.80	1.000	1.00	1.00	1.00	1.00	0.98	5.74	1,058.71	2196.59	1.38	66.12	233.28
	Length = 13.296 ft	2	0.472	0.283	0.80	1.000	1.00	1.00	1.00	1.00	1.00	5.74	1,058.71	2243.38	1.38	66.12	233.28
	Length = 0.2346 ft	2	0.432	0.283	0.80	1.000	1.00	1.00	1.00	1.00	0.96	5.04	928.80	2149.76	1.38	66.12	233.28
+1.20D+1.60Lr+0.50L+1.60H	Length = 0.2346 ft	2	0.015	0.283	0.80	1.000	1.00	1.00	1.00	1.00	1.00	0.19	34.41	2244.38	0.61	66.12	233.28
	Length = 8.50 ft	1				1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
	Length = 0.4693 ft	2	0.291	0.169	0.80	1.000	1.00	1.00	1.00	1.00	0.98	3.47	639.22	2196.59	0.82	39.46	233.28
	Length = 13.296 ft	2	0.285	0.169	0.80	1.000	1.00	1.00	1.00	1.00	1.00	3.47	639.22	2243.38	0.82	39.46	233.28
	Length = 0.2346 ft	2	0.261	0.169	0.80	1.000	1.00	1.00	1.00	1.00	0.96	3.05	561.62	2149.76	0.82	39.46	233.28
+1.20D+1.60Lr+0.50W+1.60H	Length = 0.2346 ft	2	0.008	0.169	0.80	1.000	1.00	1.00	1.00	1.00	1.00	0.10	17.86	2244.38	0.33	39.46	233.28
	Length = 8.50 ft	1				1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
	Length = 0.4693 ft	2	0.291	0.169	0.80	1.000	1.00	1.00	1.00	1.00	0.98	3.47	639.22	2196.59	0.82	39.46	233.28
	Length = 13.296 ft	2	0.285	0.169	0.80	1.000	1.00	1.00	1.00	1.00	1.00	3.47	639.22	2243.38	0.82	39.46	233.28
	Length = 0.2346 ft	2	0.261	0.169	0.80	1.000	1.00	1.00	1.00	1.00	0.96	3.05	561.62	2149.76	0.82	39.46	233.28
+1.20D+0.50L+1.60S+1.60H	Length = 0.2346 ft	2	0.008	0.169	0.80	1.000	1.00	1.00	1.00	1.00	1.00	0.10	17.86	2244.38	0.33	39.46	233.28
	Length = 8.50 ft	1				1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
	Length = 0.4693 ft	2	0.902	0.535	0.80	1.000	1.00	1.00	1.00	1.00	0.98	10.75	1,981.59	2196.59	2.60	124.77	233.28
	Length = 13.296 ft	2	0.883	0.535	0.80	1.000	1.00	1.00	1.00	1.00	1.00	10.75	1,981.59	2243.38	2.60	124.77	233.28
	Length = 0.2346 ft	2	0.808	0.535	0.80	1.000	1.00	1.00	1.00	1.00	0.96	9.42	1,736.61	2149.76	2.60	124.77	233.28
+1.20D+1.60S+0.50W+1.60H	Length = 0.2346 ft	2	0.032	0.535	0.80	1.000	1.00	1.00	1.00	1.00	1.00	0.38	70.83	2244.38	1.23	124.77	233.28
	Length = 8.50 ft	1				1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
	Length = 0.4693 ft	2	0.902	0.535	0.80	1.000	1.00	1.00	1.00	1.00	0.98	10.75	1,981.59	2196.59	2.60	124.77	233.28
	Length = 13.296 ft	2	0.883	0.535	0.80	1.000	1.00	1.00	1.00	1.00	1.00	10.75	1,981.59	2243.38	2.60	124.77	233.28
	Length = 0.2346 ft	2	0.808	0.535	0.80	1.000	1.00	1.00	1.00	1.00	0.96	9.42	1,736.61	2149.76	2.60	124.77	233.28
+1.20D+0.50Lr+0.50L+W+1.60H	Length = 0.2346 ft	2	0.032	0.535	0.80	1.000	1.00	1.00	1.00	1.00	1.00	0.38	70.83	2244.38	1.23	124.77	233.28
	Length = 8.50 ft	1				1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
	Length = 0.4693 ft	2	0.233	0.135	1.00	1.000	1.00	1.00	1.00	1.00	0.98	3.47	639.22	2745.74	0.82	39.46	291.60
	Length = 13.296 ft	2	0.228	0.135	1.00	1.000	1.00	1.00	1.00	1.00	1.00	3.47	639.22	2804.23	0.82	39.46	291.60
	Length = 0.2346 ft	2	0.209	0.135	1.00	1.000	1.00	1.00	1.00	1.00	0.96	3.05	561.62	2687.20	0.82	39.46	291.60
+1.20D+0.50L+0.50S+W+1.60H	Length = 0.2346 ft	2	0.006	0.135	1.00	1.000	1.00	1.00	1.00	1.00	1.00	0.10	17.86	2805.47	0.33	39.46	291.60
	Length = 8.50 ft	1				1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
	Length = 0.4693 ft	2	0.386	0.227	1.00	1.000	1.00	1.00	1.00	1.00	0.98	5.74	1,058.71	2745.74	1.38	66.12	291.60
	Length = 13.296 ft	2	0.378	0.227	1.00	1.000	1.00	1.00	1.00	1.00	1.00	5.74	1,058.71	2804.23	1.38	66.12	291.60
	Length = 0.2346 ft	2	0.346	0.227	1.00	1.000	1.00	1.00	1.00	1.00	0.96	5.04	928.80	2687.20	1.38	66.12	291.60
+1.20D+0.50L+0.20S+E+1.60H	Length = 0.2346 ft	2	0.012	0.227	1.00	1.000	1.00	1.00	1.00	1.00	1.00	0.19	34.41	2805.47	0.61	66.12	291.60
	Length = 8.50 ft	1				1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
	Length = 0.4693 ft	2	0.294	0.172	1.00	1.000	1.00	1.00	1.00	1.00	0.98	4.38	807.02	2745.74	1.04	50.13	291.60
	Length = 13.296 ft	2	0.288	0.172	1.00	1.000	1.00	1.00	1.00	1.00	1.00	4.38	807.02	2804.23	1.04	50.13	291.60
	Length = 0.2346 ft	2	0.264	0.172	1.00	1.000	1.00	1.00	1.00	1.00	0.96	3.84	708.49	2687.20	1.04	50.13	291.60
+0.90D+W+0.90H	Length = 0.2346 ft	2	0.009	0.172	1.00	1.000	1.00	1.00	1.00	1.00	1.00	0.13	24.48	2805.47	0.44	50.13	291.60
	Length = 8.50 ft	1				1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
	Length = 0.4693 ft	2	0.175	0.101	1.00	1.000	1.00	1.00	1.00	1.00	0.98	2.60	479.42	2745.74	0.62	29.60	291.60
	Length = 13.296 ft	2	0.171	0.101	1.00	1.000	1.00	1.00	1.00	1.00	1.00	2.60	479.42	2804.23	0.62	29.60	291.60
	Length = 0.2346 ft	2	0.157	0.101	1.00	1.000	1.00	1.00	1.00	1.00	0.96	2.29	421.21	2687.20	0.62	29.60	291.60
+0.90D+E+0.90H	Length = 0.2346 ft	2	0.005	0.101	1.00	1.000	1.00	1.00	1.00	1.00	1.00	0.07	13.40	2805.47	0.25	29.60	291.60
	Length = 8.50 ft	1				1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00
	Length = 0.4693 ft	2	0.175	0.101	1.00	1.000	1.00	1.00	1.00	1.00	0.98	2.60	479.42	2745.74	0.62	29.60	291.60
	Length = 13.296 ft	2	0.171	0.101	1.00	1.000	1.00	1.00	1.00	1.00	1.00	2.60	479.42	2804.23	0.62	29.60	291.60
	Length = 0.2346 ft	2	0.157	0.101	1.00	1.000	1.00	1.00	1.00	1.00	0.96	2.29	421.21	2687.20	0.62	29.60	291.60

## Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+S+H	1	0.7233	0.000		0.0000	0.000

## Wood Beam

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1\EC6  
ENERCALC, INC. 1983-2015, Build:6.15.12.9, Ver:6.15.12.31

Lic. #: KW-06008351

Licensee: MN NORTHWEST REGION MGMT

Description: 3x13 w/ cantilever

### Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+S+H	2	0.0724	9.307	+D+S+H	-0.0278	1.799

### Vertical Reactions

Support notation: Far left is #1

Values in KIPS

Load Combination	Support 1	Support 2	Support 3
Overall MAXimum		3.756	1.146
Overall MINimum		0.868	0.212
+D+H		1.446	0.354
+D+L+H		1.446	0.354
+D+Lr+H		1.446	0.354
+D+S+H		3.756	1.146
+D+0.750Lr+0.750L+H		1.446	0.354
+D+0.750L+0.750S+H		3.179	0.948
+D+0.60W+H		1.446	0.354
+D+0.70E+H		1.446	0.354
+D+0.750Lr+0.750L+0.450W+H		1.446	0.354
+D+0.750L+0.750S+0.450W+H		3.179	0.948
+D+0.750L+0.750S+0.5250E+H		3.179	0.948
+0.60D+0.60W+0.60H		0.868	0.212
+0.60D+0.70E+0.60H		0.868	0.212
D Only		1.446	0.354
Lr Only			
L Only			
S Only		2.310	0.793
W Only			
E Only			
H Only			



## Wood Beam

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1\EC6

ENERCALC, INC. 1983-2015, Build:6.15.12.9, Ver:6.15.12.31

Licensee : MN NORTHWEST REGION MGMT

Lic. # : KW-06008351

Description : 3x13

### CODE REFERENCES

Calculations per NDS 2012, IBC 2012, CBC 2013, ASCE 7-10

Load Combination Set : ASCE 7-10

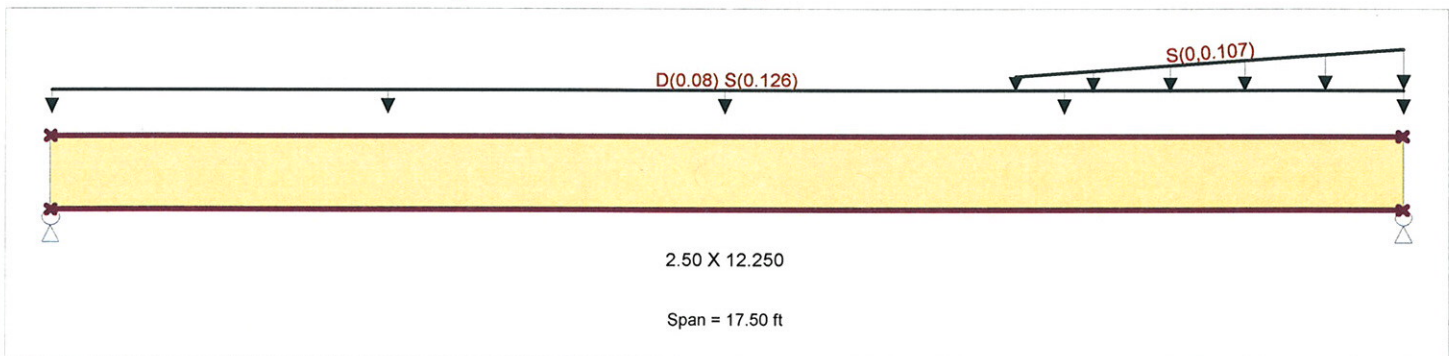
### Material Properties

Analysis Method : Load Resistance Factor D  
Load Combination : ASCE 7-10

Fb - Tension 1,300.0 psi E : Modulus of Elasticity  
Fb - Compr 1,300.0 psi Ebend- xx 1,300.0ksi  
Fc - Prll 1,200.0 psi Eminbend - xx 470.0ksi  
Fc - Perp 335.0 psi  
Fv 135.0 psi  
Ft 575.0 psi Density 22.460pcf

Wood Species : Spruce - Pine - Fir (South)  
Wood Grade : Select structural

Beam Bracing : Beam is Fully Braced against lateral-torsion buckling



### Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Uniform Load : D = 0.080, S = 0.1260, Tributary Width = 1.0 ft

Varying Uniform Load : S(S,E) = 0.0->0.1070 k/ft, Extent = 12.50 --> 17.50 ft, Trib Width = 1.0 ft

### DESIGN SUMMARY

### Design N.G.

Maximum Bending Stress Ratio	=	1.004	1	Maximum Shear Stress Ratio	=	0.537	1
Section used for this span		2.50 X 12.250		Section used for this span		2.50 X 12.250	
fb : Actual	=	2,255.43psi		fv : Actual	=	125.28 psi	
FB : Allowable	=	2,245.36psi		Fv : Allowable	=	233.28 psi	
Load Combination	+1.20D+0.50L+1.60S+1.60H			Load Combination	+1.20D+0.50L+1.60S+1.60H		
Location of maximum on span	=	8.878ft		Location of maximum on span	=	16.542ft	
Span # where maximum occurs	=	Span # 1		Span # where maximum occurs	=	Span # 1	

### Maximum Deflection

Max Downward Transient Deflection	0.566 in	Ratio =	371
Max Upward Transient Deflection	0.000 in	Ratio =	0 < 240
Max Downward Total Deflection	0.907 in	Ratio =	231
Max Upward Total Deflection	0.000 in	Ratio =	0 < 180

### Maximum Forces & Stresses for Load Combinations

Load Combination		Max Stress Ratios										Moment Values			Shear Values		
Segment Length	Span #	M	V	$\lambda$	$C_{FN}$	$C_i$	$C_r$	$C_m$	$C_t$	$C_L$	Mu	fb	Fb	Vu	fv	Fv	
+1.40D+1.60H																	
Length = 17.50 ft	1	0.489	0.244	0.60	1.000	1.00	1.00	1.00	1.00	1.00	4.29	822.86	1684.02	0.00	0.00	0.00	
+1.20D+0.50Lr+1.60L+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00	
Length = 17.50 ft	1	0.314	0.157	0.80	1.000	1.00	1.00	1.00	1.00	1.00	3.68	705.31	2245.36	0.75	36.64	233.28	
+1.20D+1.60L+0.50S+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00	
Length = 17.50 ft	1	0.530	0.276	0.80	1.000	1.00	1.00	1.00	1.00	1.00	6.20	1,189.65	2245.36	1.31	64.34	233.28	
+1.20D+1.60Lr+0.50L+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00	
Length = 17.50 ft	1	0.314	0.157	0.80	1.000	1.00	1.00	1.00	1.00	1.00	3.68	705.31	2245.36	0.75	36.64	233.28	
+1.20D+1.60Lr+0.50W+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00	
Length = 17.50 ft	1	0.314	0.157	0.80	1.000	1.00	1.00	1.00	1.00	1.00	3.68	705.31	2245.36	0.75	36.64	233.28	
+1.20D+0.50L+1.60S+1.60H					1.000	1.00	1.00	1.00	1.00	1.00			0.00	0.00	0.00	0.00	

## Wood Beam

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1\EC6

ENERCALC, INC. 1983-2015, Build:6.15.12.9, Ver:6.15.12.31

Lic. #: KW-06008351

Licensee: MN NORHTWEST REGION MGMT

Description: 3x13

Load Combination		Max Stress Ratios									Moment Values			Shear Values		
Segment Length	Span #	M	V	$\lambda$	$C_{FV}$	$C_i$	$C_r$	$C_m$	$C_t$	$C_L$	Mu	fb	Fb	Vu	fv	Fv
Length = 17.50 ft +1.20D+1.60S+0.50W+1.60H	1	1.004	0.537	0.80	1.000	1.00	1.00	1.00	1.00	1.00	11.75	2,255.43	2245.36	2.56	125.28	233.28
					1.000	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00			
Length = 17.50 ft +1.20D+0.50Lr+0.50L+W+1.60H	1	1.004	0.537	0.80	1.000	1.00	1.00	1.00	1.00	1.00	11.75	2,255.43	2245.36	2.56	125.28	233.28
					1.000	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00			
Length = 17.50 ft +1.20D+0.50L+0.50S+W+1.60H	1	0.251	0.126	1.00	1.000	1.00	1.00	1.00	1.00	1.00	3.68	705.31	2806.70	0.75	36.64	291.60
					1.000	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00			
Length = 17.50 ft +1.20D+0.50L+0.20S+E+1.60H	1	0.424	0.221	1.00	1.000	1.00	1.00	1.00	1.00	1.00	6.20	1,189.65	2806.70	1.31	64.34	291.60
					1.000	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00			
Length = 17.50 ft +0.90D+W+0.90H	1	0.320	0.164	1.00	1.000	1.00	1.00	1.00	1.00	1.00	4.68	899.02	2806.70	0.97	47.72	291.60
					1.000	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00			
Length = 17.50 ft +0.90D+E+0.90H	1	0.188	0.094	1.00	1.000	1.00	1.00	1.00	1.00	1.00	2.76	528.98	2806.70	0.56	27.48	291.60
					1.000	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00			
Length = 17.50 ft	1	0.188	0.094	1.00	1.000	1.00	1.00	1.00	1.00	1.00	2.76	528.98	2806.70	0.56	27.48	291.60

### Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+S+H	1	0.9071	8.814		0.0000	0.000

### Vertical Reactions

Support notation: Far left is #1

Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	1.828	2.045
Overall MINimum	0.420	0.420
+D+H	0.700	0.700
+D+L+H	0.700	0.700
+D+Lr+H	0.700	0.700
+D+S+H	1.828	2.045
+D+0.750Lr+0.750L+H	0.700	0.700
+D+0.750L+0.750S+H	1.546	1.708
+D+0.60W+H	0.700	0.700
+D+0.70E+H	0.700	0.700
+D+0.750Lr+0.750L+0.450W+H	0.700	0.700
+D+0.750L+0.750S+0.450W+H	1.546	1.708
+D+0.750L+0.750S+0.5250E+H	1.546	1.708
+0.60D+0.60W+0.60H	0.420	0.420
+0.60D+0.70E+0.60H	0.420	0.420
D Only	0.700	0.700
Lr Only		
L Only		
S Only	1.128	1.345
W Only		
E Only		
H Only		



# POINT LOADS TO MAIN ROOF BEAM (4) 3x13's

LETTER DESIGNATION CORRESPONDS w/ SAP GRID

$$\begin{aligned} \text{PB} \quad \text{DL} &= 20 \text{ psf} \times \left[ (3.3' \times 5.8' \times \frac{1}{2}) \times 2 + (2.5' \times 5.8') \times 2 \right] \times 2 \\ &= 962 \text{ lbs} \end{aligned}$$

$$\begin{aligned} \text{SL} &= 962 \text{ lbs} \times 31.5 \text{ psf} / 20 \text{ psf} \\ &= 1516 \text{ lbs} \end{aligned}$$

$$\begin{aligned} \text{PD} \quad \text{DL} &= 20 \text{ psf} \times (2.5' + 1.45') \times 9.6' / 2 \times 2 \quad 0.42 \\ &= 760 \text{ lbs} \end{aligned}$$

$$\begin{aligned} \text{SL} &= 760 \text{ lbs} \times 31.5 \text{ psf} / 20 \text{ psf} \\ &= 1,197 \text{ lbs} \end{aligned}$$

$$\begin{aligned} \text{PE} \quad \text{DL} &= 20 \text{ psf} \times (3') \times 9.6' / 2 \quad 0.56 \\ &= 580 \text{ lbs} \end{aligned}$$

$$\begin{aligned} \text{SL} &= 580 \text{ lbs} \times 31.5 \text{ psf} / 20 \text{ psf} \\ &= 908 \text{ lbs} \end{aligned}$$

$$\begin{aligned} \text{PF} \quad \text{DL} &= 400 \text{ lbs} \times 2 = 800 \text{ lbs} \quad 0.71 \\ \text{SL} &= 625 \text{ lbs} \times 2 = 1,050 \text{ lbs} \end{aligned}$$

$$\begin{aligned} \text{PG} \quad \text{DL} &= 280 \text{ lbs} \times 2 = 560 \text{ lbs} \quad 0.97 \\ \text{SL} &= 440 \text{ lbs} \times 2 = 880 \text{ lbs} \end{aligned}$$

$$\begin{aligned} \text{PH} \quad \text{DL} &= 506 \text{ lbs} \times 2 = 1,012 \text{ lbs} \\ \text{SL} &= 800 \text{ lbs} \times 2 = 1,600 \text{ lbs} \end{aligned}$$

$$\begin{aligned} \text{PL} \quad \text{DL} &= 420 \text{ lbs} \times 2 = 840 \text{ lbs} \\ \text{SL} &= 662 \text{ lbs} \times 2 = 1,324 \text{ lbs} \end{aligned}$$

## General Beam Analysis

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1\EC6  
ENERCALC, INC. 1983-2015, Build:6.15.12.9, Ver:6.15.12.31

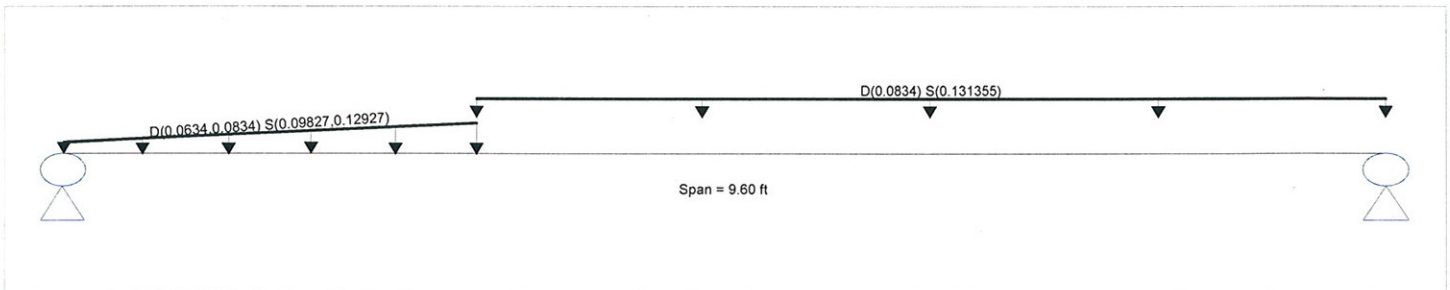
Lic. #: KW-06008351

Licensee: MN NORTHWEST REGION MGMT

Description: ~~beam 0~~ REACTIONS FOR PF

### General Beam Properties

Elastic Modulus 29,000.0 ksi  
Span #1 Span Length = 9.60 ft Area = 10.0 in<sup>2</sup> Moment of Inertia = 100.0 in<sup>4</sup>



### Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Load for Span Number 1

Varying Uniform Load: D(S,E) = 0.020->0.020, S(S,E) = 0.0310->0.0310 ksf, Extent = 0.0 ->> 3.0 ft, Trib Width = 3.170 ft

Uniform Load: D = 0.020, S = 0.03150 ksf, Extent = 3.0 ->> 9.60 ft, Tributary Width = 4.170 ft

### DESIGN SUMMARY

<b>Maximum Bending =</b>	<b>2.431 k-ft</b>	<b>Maximum Shear =</b>	<b>1.022 k</b>
Load Combination	+D+S+H	Load Combination	+D+S+H
Location of maximum on span	4.848 ft	Location of maximum on span	9.600 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
<b>Maximum Deflection</b>			
Max Downward Transient Deflection	0.009 in	13489	
Max Upward Transient Deflection	0.000 in	0	
Max Downward Total Deflection	0.014 in	8240	
Max Upward Total Deflection	0.000 in	0	

### Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+S+H	1	0.0140	4.848		0.0000	0.000

### Vertical Reactions

Support notation: Far left is #1

Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	0.957	1.022
Overall MINimum	0.224	0.238
+D+H	0.373	0.397
+D+L+H	0.373	0.397
+D+Lr+H	0.373	0.397
+D+S+H	0.957	1.022
+D+0.750Lr+0.750L+H	0.373	0.397
+D+0.750L+0.750S+H	0.811	0.866
+D+0.60W+H	0.373	0.397
+D+0.70E+H	0.373	0.397
+D+0.750Lr+0.750L+0.450W+H	0.373	0.397
+D+0.750L+0.750S+0.450W+H	0.811	0.866
+D+0.750L+0.750S+0.5250E+H	0.811	0.866
+0.60D+0.60W+0.60H	0.224	0.238
+0.60D+0.70E+0.60H	0.224	0.238
D Only	0.373	0.397
Lr Only		
L Only		
S Only	0.584	0.625
W Only		
E Only		
H Only		



## General Beam Analysis

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1.EC6  
ENERCALC, INC. 1983-2015, Build:6.15.12.9, Ver:6.15.12.31

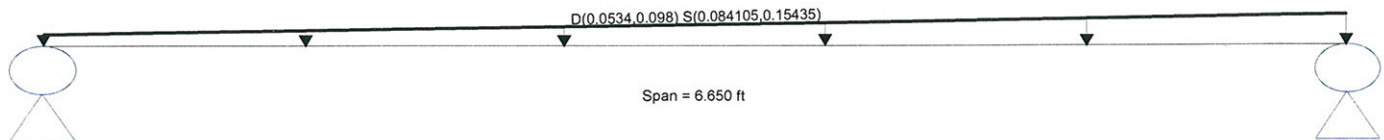
Lic. #: KW-06008351

Licensee: MN NORTHWEST REGION MGMT

Description: ~~beam~~ REACTIONS FOR PG

### General Beam Properties

Elastic Modulus = 29,000.0 ksi  
Span #1 Span Length = 6.650 ft Area = 10.0 in<sup>2</sup> Moment of Inertia = 100.0 in<sup>4</sup>



### Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Load for Span Number 1

Varying Uniform Load: D(S,E) = 0.020->0.020, S(S,E) = 0.03150->0.03150 ksf, Extent = 0.0 --> 6.650 ft, Trib Width = 2.670 ft

### DESIGN SUMMARY

<b>Maximum Bending =</b>	1.080 k-ft	<b>Maximum Shear =</b>	0.7118 k
Load Combination	+D+S+H	Load Combination	+D+S+H
Location of maximum on span	3.491 ft	Location of maximum on span	6.650 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
<b>Maximum Deflection</b>			
Max Downward Transient Deflection	0.002 in	43761	
Max Upward Transient Deflection	0.000 in	0	
Max Downward Total Deflection	0.003 in	26766	
Max Upward Total Deflection	0.000 in	0	

### Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+S+H	1	0.0030	3.392		0.0000	0.000

### Vertical Reactions

Support notation: Far left is #1

Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	0.584	0.712
Overall MINimum	0.136	0.166
+D+H	0.227	0.276
+D+L+H	0.227	0.276
+D+Lr+H	0.227	0.276
+D+S+H	0.584	0.712
+D+0.750Lr+0.750L+H	0.227	0.276
+D+0.750L+0.750S+H	0.495	0.603
+D+0.60W+H	0.227	0.276
+D+0.70E+H	0.227	0.276
+D+0.750Lr+0.750L+0.450W+H	0.227	0.276
+D+0.750L+0.750S+0.450W+H	0.495	0.603
+D+0.750L+0.750S+0.5250E+H	0.495	0.603
+0.60D+0.60W+0.60H	0.136	0.166
+0.60D+0.70E+0.60H	0.136	0.166
D Only	0.227	0.276
Lr Only		
L Only		
S Only	0.358	0.435
W Only		
E Only		
H Only		

## General Beam Analysis

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1.EC6  
ENERCALC, INC. 1983-2015, Build:6.15.12.9, Ver:6.15.12.31

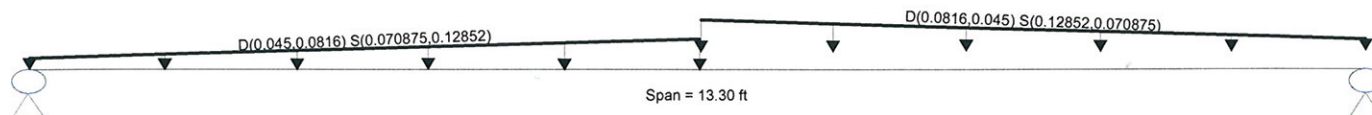
Lic. #: KW-06008351

Licensee: MN NORTHWEST REGION MGMT

Description: ~~beam~~ REACTIONS FOR PL

### General Beam Properties

Elastic Modulus 29,000.0 ksi  
Span #1 Span Length = 13.30 ft Area = 10.0 in<sup>2</sup> Moment of Inertia = 100.0 in<sup>4</sup>



### Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Load for Span Number 1

Varying Uniform Load: D(S,E) = 0.020->0.020, S(S,E) = 0.03150->0.03150 ksf, Extent = 0.0 --> 6.650 ft, Trib Width = 2.250 ft  
Varying Uniform Load: D(S,E) = 0.020->0.020, S(S,E) = 0.03150->0.03150 ksf, Extent = 6.670 --> 13.30 ft, Trib Width = 4.080 ft

### DESIGN SUMMARY

<b>Maximum Bending =</b>	<b>3.940 k-ft</b>	<b>Maximum Shear =</b>	<b>1.082 k</b>
Load Combination	+D+S+H	Load Combination	+D+S+H
Location of maximum on span	6.650 ft	Location of maximum on span	13.300 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
<b>Maximum Deflection</b>			
Max Downward Transient Deflection	0.026 in	6066	
Max Upward Transient Deflection	0.000 in	0	
Max Downward Total Deflection	0.043 in	3710	
Max Upward Total Deflection	0.000 in	0	

### Overall Maximum Deflections

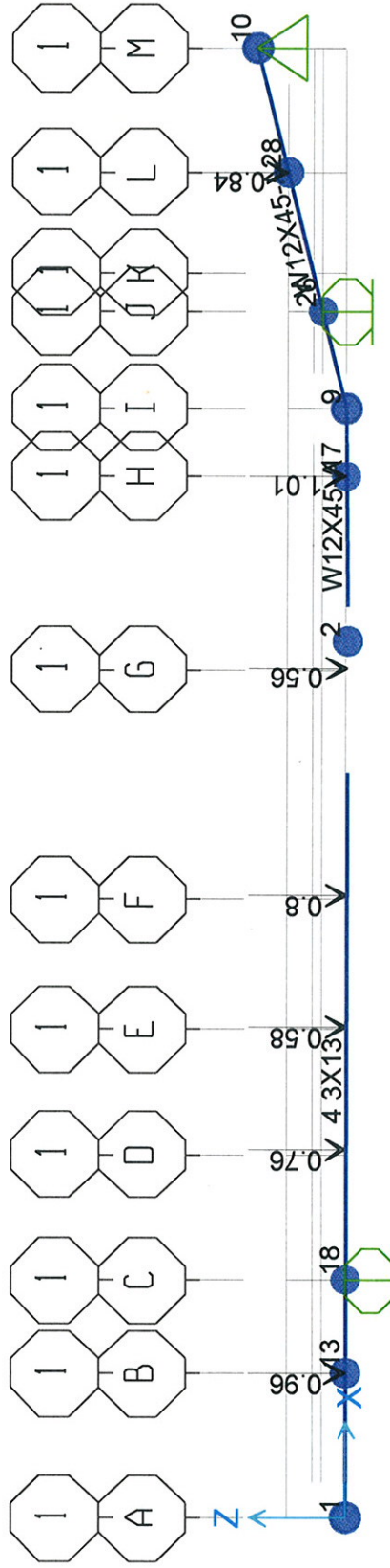
Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+S+H	1	0.0430	6.717		0.0000	0.000

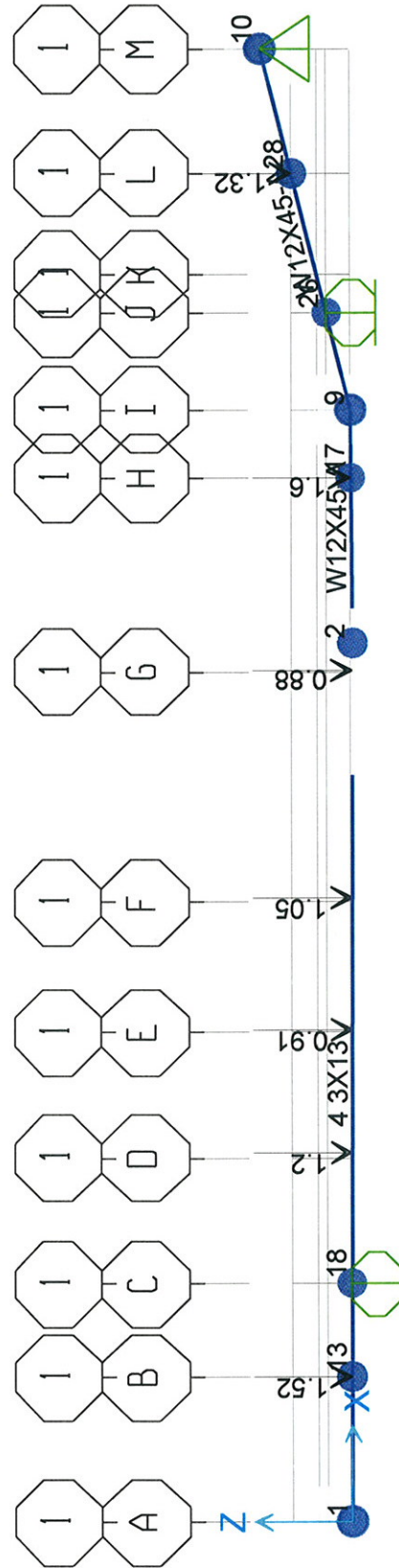
### Vertical Reactions

Support notation: Far left is #1

Values in KIPS

Load Combination	Support 1	Support 2
Overall MAXimum	1.082	1.082
Overall MINimum	0.252	0.252
+D+H	0.420	0.420
+D+L+H	0.420	0.420
+D+Lr+H	0.420	0.420
+D+S+H	1.082	1.082
+D+0.750Lr+0.750L+H	0.420	0.420
+D+0.750L+0.750S+H	0.917	0.917
+D+0.60W+H	0.420	0.420
+D+0.70E+H	0.420	0.420
+D+0.750Lr+0.750L+0.450W+H	0.420	0.420
+D+0.750L+0.750S+0.450W+H	0.917	0.917
+D+0.750L+0.750S+0.5250E+H	0.917	0.917
+0.60D+0.60W+0.60H	0.252	0.252
+0.60D+0.70E+0.60H	0.252	0.252
D Only	0.420	0.420
Lr Only		
L Only		
S Only	0.662	0.662
W Only		
E Only		
H Only		







ANALYZE W12x26

MOMENT LOADS FROM SAP 2000 MODEL

$$M_{OL} = 16.06 \text{ K-ft}$$

$$M_{SL} = 20.3 \text{ K-ft}$$

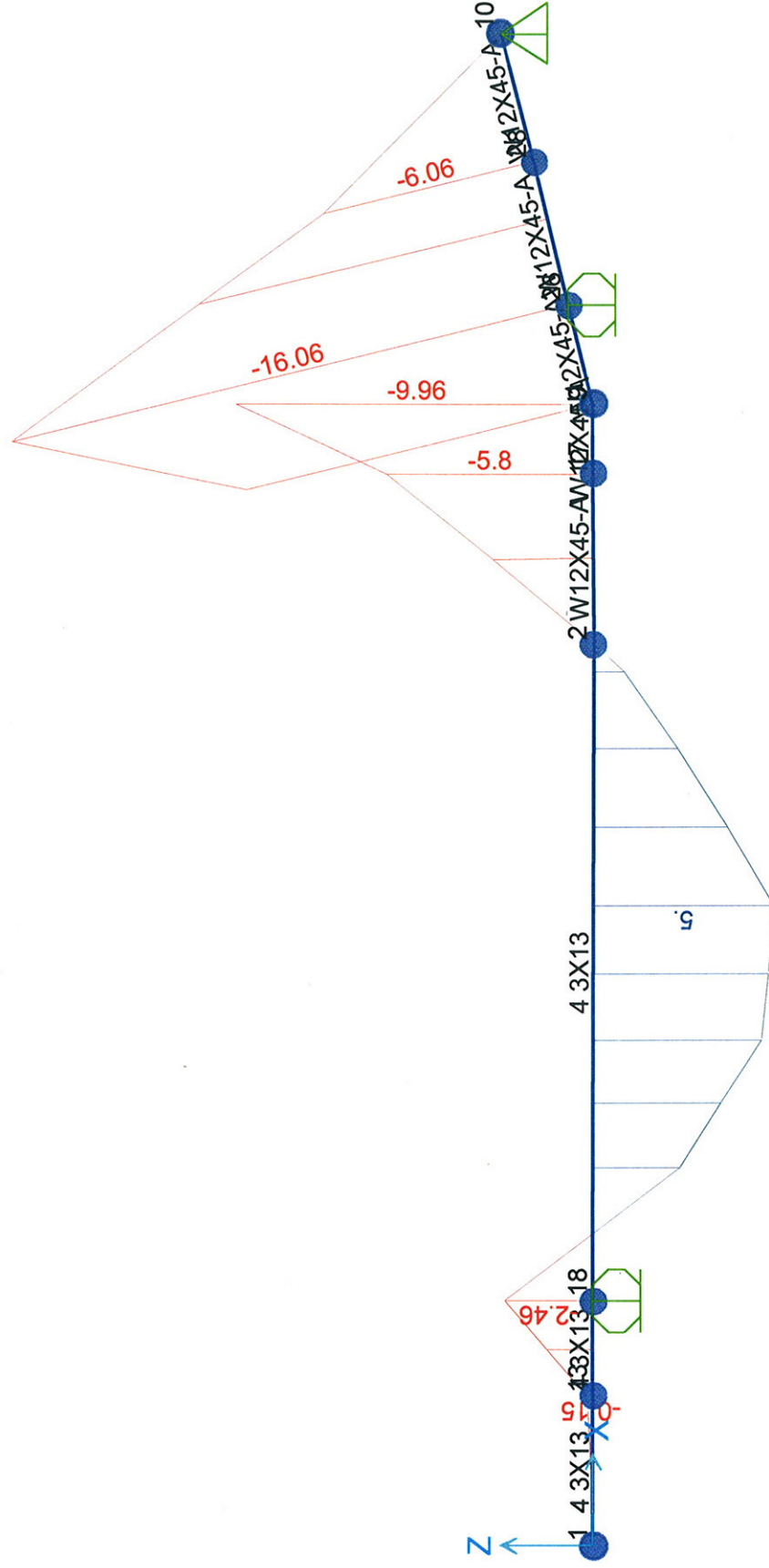
DET. MOMENT CAPACITY PER AISC -10

SEE ATTACHED CHART FOR CAPACITY CHECK

FROM SAP MODEL

$$\begin{aligned}\Delta_{OL} + \Delta_{SL} &= 0.16" + 0.20" \\ &= 0.36"\end{aligned}$$

$$\Delta_{all} = \frac{22' \times 12''}{240} = 1.1" \geq \Delta_{act} \therefore \text{O.K.}$$

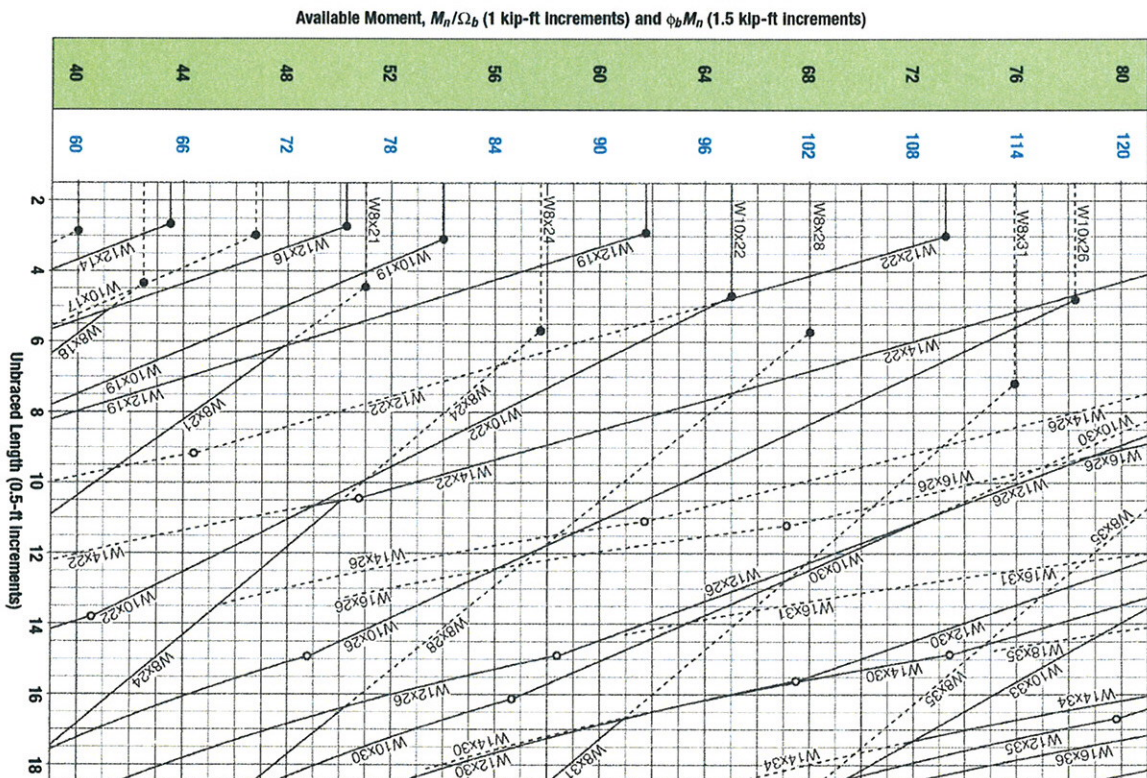






$F_y = 50 \text{ ksi}$ $C_b = 1$	$\phi_b M_n$ kip-ft	$\phi_b M_n$ kip-ft
ASD	LFRD	LFRD

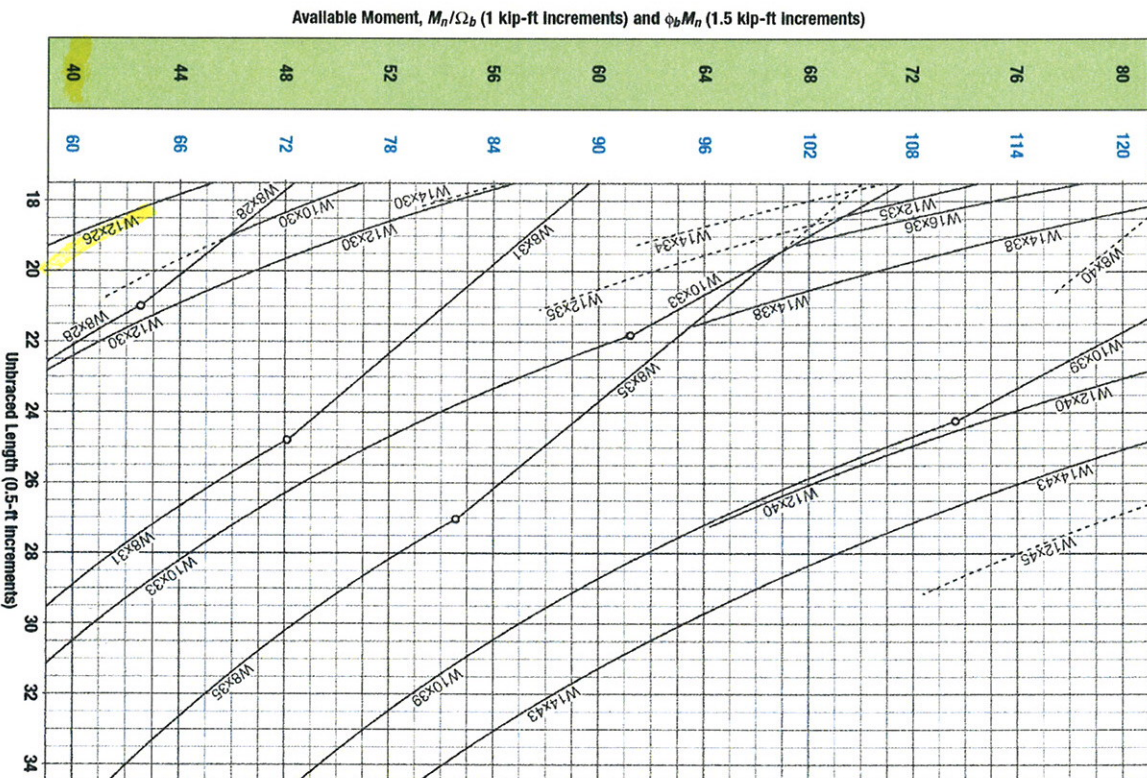
Table 3-10 (continued)  
**W-Shapes**  
Available Moment vs. Unbraced Length



AMERICAN INSTITUTE OF STEEL CONSTRUCTION

$F_y = 50 \text{ ksi}$ $C_b = 1$	$\phi_b M_n$ kip-ft	$\phi_b M_n$ kip-ft
ASD	LFRD	LFRD

Table 3-10 (continued)  
**W-Shapes**  
Available Moment vs. Unbraced Length



AMERICAN INSTITUTE OF STEEL CONSTRUCTION



## Wood Column

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1\EC6  
ENERCALC, INC. 1983-2017, Build:6.17.1.16, Ver:6.17.1.16

Lic. #: KW-06008351

Licensee: MN NORTHWEST REGION MGMT

Description: 8x8 column near fire place

### Code References

Calculations per 2012 NDS, IBC 2012, CBC 2013, ASCE 7-10  
Load Combinations Used: ASCE 7-10

### General Information

Analysis Method :	Allowable Stress Design			Wood Section Name	8x8		
End Fixities	Top & Bottom Pinned			Wood Grading/Manuf.	Graded Lumber		
Overall Column Height	12.0 ft			Wood Member Type	Sawn		
( Used for non-slender calculations )							
Wood Species	Spruce - Pine - Fir			Exact Width	7.50 in	Allow Stress Modification Factors	
Wood Grade	No. 1/No. 2			Exact Depth	7.50 in	Cf or Cv for Bending	1.0
Fb - Tension	875 psi	Fv	135 psi	Area	56.250 in^2	Cf or Cv for Compression	1.0
Fb - Compr	875 psi	Ft	450 psi	Ix	263.672 in^4	Cf or Cv for Tension	1.0
Fc - Prll	1150 psi	Density	26.21 pcf	Iy	263.672 in^4	Cm : Wet Use Factor	1.0
Fc - Perp	425 psi					Ct : Temperature Factor	1.0
E : Modulus of Elasticity . . .	x-x Bending	y-y Bending	Axial			Cfu : Flat Use Factor	1.0
Basic	1400	1400	1400 ksi			Kf : Built-up columns	1.0 NDS 15.3.2
Minimum	510	510				Use Cr : Repetitive ?	No
Brace condition for deflection (buckling) along columns :							
X-X (width) axis :					Unbraced Length for X-X Axis buckling = 12.0 ft, K = 1.0		
Y-Y (depth) axis :					Unbraced Length for X-X Axis buckling = 12.0 ft, K = 1.0		

### Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Column self weight included : 122.859 lbs \* Dead Load Factor

AXIAL LOADS . . .

Axial Load at 12.0 ft, D = 5.70, S = 7.410 k

### DESIGN SUMMARY

#### Bending & Shear Check Results

<b>PASS</b>	Max. Axial+Bending Stress Ratio =	<b>0.2794 : 1</b>	<b>Maximum SERVICE Lateral Load Reactions . .</b>			
	Load Combination	+D+S+H	Top along Y-Y	0.0 k	Bottom along Y-Y	0.0 k
	Governing NDS Formula	Comp Only, $f_c/F_c'$	Top along X-X	0.0 k	Bottom along X-X	0.0 k
	Location of max.above base	0.0 ft	<b>Maximum SERVICE Load Lateral Deflections . .</b>			
	At maximum location values are . . .		Along Y-Y	0.0 in	at	0.0 ft above base
	Applied Axial	13.233 k	for load combination : $n/a$			
	Applied Mx	0.0 k-ft	Along X-X	0.0 in	at	0.0 ft above base
	Applied My	0.0 k-ft	for load combination : $n/a$			
	Fc : Allowable	842.05 psi	<b>Other Factors used to calculate allowable stresses . .</b>			
			<u>Bending</u>	<u>Compression</u>	<u>Tension</u>	
<b>PASS</b>	Maximum Shear Stress Ratio =	<b>0.0 : 1</b>				
	Load Combination	+0.60D+0.70E+0.60H				
	Location of max.above base	12.0 ft				
	Applied Design Shear	0.0 psi				
	Allowable Shear	216.0 psi				

### Load Combination Results

Load Combination	C <sub>D</sub>	C <sub>P</sub>	Maximum Axial + Bending Stress Ratios			Maximum Shear Ratios		
			Stress Ratio	Status	Location	Stress Ratio	Status	Location
+D+H	0.900	0.723	0.1384	PASS	0.0 ft	0.0	PASS	12.0 ft
+D+L+H	1.000	0.687	0.1310	PASS	0.0 ft	0.0	PASS	12.0 ft
+D+Lr+H	1.250	0.605	0.1190	PASS	0.0 ft	0.0	PASS	12.0 ft
+D+S+H	1.150	0.637	0.2794	PASS	0.0 ft	0.0	PASS	12.0 ft
+D+0.750Lr+0.750L+H	1.250	0.605	0.1190	PASS	0.0 ft	0.0	PASS	12.0 ft
+D+0.750L+0.750S+H	1.150	0.637	0.2403	PASS	0.0 ft	0.0	PASS	12.0 ft
+D+0.60W+H	1.600	0.511	0.1101	PASS	0.0 ft	0.0	PASS	12.0 ft
+D+0.70E+H	1.600	0.511	0.1101	PASS	0.0 ft	0.0	PASS	12.0 ft
+D+0.750Lr+0.750L+0.450W+H	1.600	0.511	0.1101	PASS	0.0 ft	0.0	PASS	12.0 ft
+D+0.750L+0.750S+0.450W+H	1.600	0.511	0.2151	PASS	0.0 ft	0.0	PASS	12.0 ft
+D+0.750L+0.750S+0.5250E+H	1.600	0.511	0.2151	PASS	0.0 ft	0.0	PASS	12.0 ft
+0.60D+0.60W+0.60H	1.600	0.511	0.06604	PASS	0.0 ft	0.0	PASS	12.0 ft

## Wood Column

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1\EC6  
ENERCALC, INC. 1983-2017, Build:6.17.1.16, Ver:6.17.1.16

Lic. #: KW-06008351

Licensee: MN NORTHWEST REGION MGMT

Description: 8x8 column near fire place

### Load Combination Results

Load Combination	C <sub>D</sub>	C <sub>P</sub>	Maximum Axial + Bending Stress Ratios			Maximum Shear Ratios		
			Stress Ratio	Status	Location	Stress Ratio	Status	Location
+0.60D+0.70E+0.60H	1.600	0.511	0.06604	PASS	0.0 ft	0.0	PASS	12.0 ft

### Maximum Reactions

Note: Only non-zero reactions are listed.

Load Combination	X-X Axis Reaction		Y-Y Axis Reaction		Axial Reaction
	@ Base	@ Top	@ Base	@ Top	
+D+H		k		k	5.823 k
+D+L+H		k		k	5.823 k
+D+Lr+H		k		k	5.823 k
+D+S+H		k		k	13.233 k
+D+0.750Lr+0.750L+H		k		k	5.823 k
+D+0.750L+0.750S+H		k		k	11.380 k
+D+0.60W+H		k		k	5.823 k
+D+0.70E+H		k		k	5.823 k
+D+0.750Lr+0.750L+0.450W+H		k		k	5.823 k
+D+0.750L+0.750S+0.450W+H		k		k	11.380 k
+D+0.750L+0.750S+0.5250E+H		k		k	11.380 k
+0.60D+0.60W+0.60H		k		k	3.494 k
+0.60D+0.70E+0.60H		k		k	3.494 k
D Only		k		k	5.823 k
Lr Only		k		k	k
L Only		k		k	k
S Only		k		k	7.410 k
W Only		k		k	k
E Only		k		k	k
H Only		k		k	k

### Maximum Deflections for Load Combinations

Load Combination	Max. X-X Deflection	Distance	Max. Y-Y Deflection	Distance
+D+H	0.0000 in	0.000 ft	0.000 in	0.000 ft
+D+L+H	0.0000 in	0.000 ft	0.000 in	0.000 ft
+D+Lr+H	0.0000 in	0.000 ft	0.000 in	0.000 ft
+D+S+H	0.0000 in	0.000 ft	0.000 in	0.000 ft
+D+0.750Lr+0.750L+H	0.0000 in	0.000 ft	0.000 in	0.000 ft
+D+0.750L+0.750S+H	0.0000 in	0.000 ft	0.000 in	0.000 ft
+D+0.60W+H	0.0000 in	0.000 ft	0.000 in	0.000 ft
+D+0.70E+H	0.0000 in	0.000 ft	0.000 in	0.000 ft
+D+0.750Lr+0.750L+0.450W+H	0.0000 in	0.000 ft	0.000 in	0.000 ft
+D+0.750L+0.750S+0.450W+H	0.0000 in	0.000 ft	0.000 in	0.000 ft
+D+0.750L+0.750S+0.5250E+H	0.0000 in	0.000 ft	0.000 in	0.000 ft
+0.60D+0.60W+0.60H	0.0000 in	0.000 ft	0.000 in	0.000 ft
+0.60D+0.70E+0.60H	0.0000 in	0.000 ft	0.000 in	0.000 ft
D Only	0.0000 in	0.000 ft	0.000 in	0.000 ft
Lr Only	0.0000 in	0.000 ft	0.000 in	0.000 ft
L Only	0.0000 in	0.000 ft	0.000 in	0.000 ft
S Only	0.0000 in	0.000 ft	0.000 in	0.000 ft
W Only	0.0000 in	0.000 ft	0.000 in	0.000 ft
E Only	0.0000 in	0.000 ft	0.000 in	0.000 ft
H Only	0.0000 in	0.000 ft	0.000 in	0.000 ft



## Wood Column

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1\EC6  
ENERCALC, INC. 1983-2017, Build:6.17.1.16, Ver:6.17.1.16

Lic. # : KW-06008351

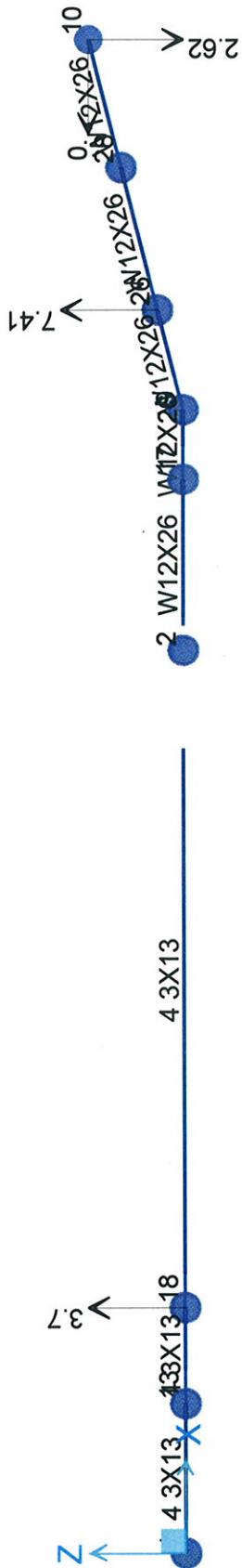
Licensee : MN NORTHWEST REGION MGMT

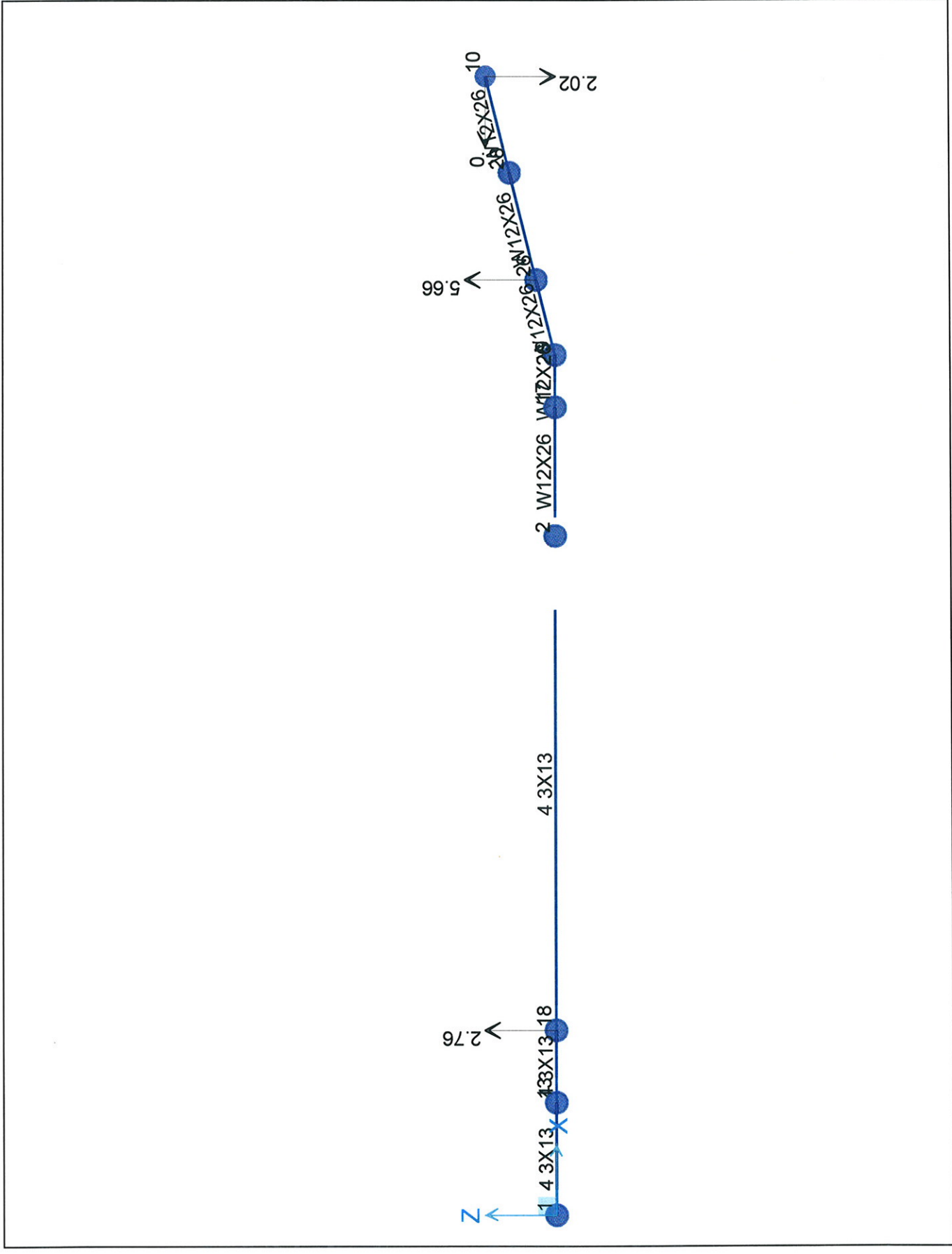
Description : 8x8 column near fire place

### Sketches



Loads are total entered value. Arrows do not reflect absolute direction.





## Steel Beam

File = d:\Users\jeericks\DOCUME~1\ENERCA~1\BLUEMO~1\EC6  
ENERCALC, INC. 1983-2017, Build:6.17.1.16, Ver:6.17.1.16

Lic. #: KW-06008351

Licensee: MN NORTHWEST REGION MGMT

Description: --None--

### CODE REFERENCES

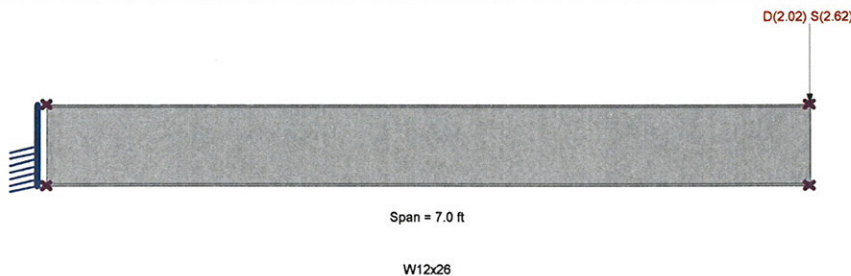
Calculations per AISC 360-10, IBC 2012, ASCE 7-10

Load Combination Set: ASCE 7-10

### Material Properties

Analysis Method: Allowable Strength Design  
Beam Bracing: Completely Unbraced  
Bending Axis: Major Axis Bending

Fy: Steel Yield: 50.0 ksi  
E: Modulus: 29,000.0 ksi



### Applied Loads

Service loads entered. Load Factors will be applied for calculations.

Beam self weight NOT internally calculated and added  
Load(s) for Span Number 1  
Point Load: D = 2.020, S = 2.620 k @ 7.0 ft

### DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio =	0.374 : 1	Maximum Shear Stress Ratio =	0.083 : 1
Section used for this span	W12x26	Section used for this span	W12x26
Ma: Applied	32.480 k-ft	Va: Applied	4.640 k
Mn / Omega: Allowable	86.805 k-ft	Vn / Omega: Allowable	56.120 k
Load Combination	+D+S+H	Load Combination	+D+S+H
Location of maximum on span	0.000 ft	Location of maximum on span	0.000 ft
Span # where maximum occurs	Span # 1	Span # where maximum occurs	Span # 1
Maximum Deflection			
Max Downward Transient Deflection	0.087 in	Ratio =	1,924 >= 180.
Max Upward Transient Deflection	0.000 in	Ratio =	0 < 180.0
Max Downward Total Deflection	0.155 in	Ratio =	1087 >= 180
Max Upward Total Deflection	0.000 in	Ratio =	0 < 180

### Maximum Forces & Stresses for Load Combinations

Load Combination		Span #	Max Stress Ratios		Summary of Moment Values						Summary of Shear Values			
Segment Length			M	V	Mmax +	Mmax -	Ma Max	Mnx	Mnx/Omega	Cb	Rm	Va Max	Vnx	Vnx/Omega
+D+H														
Dsgn. L =	7.00 ft	1	0.163	0.036		-14.14	14.14	144.96	86.80	1.00	1.00	2.02	84.18	56.12
+D+L+H														
Dsgn. L =	7.00 ft	1	0.163	0.036		-14.14	14.14	144.96	86.80	1.00	1.00	2.02	84.18	56.12
+D+Lr+H														
Dsgn. L =	7.00 ft	1	0.163	0.036		-14.14	14.14	144.96	86.80	1.00	1.00	2.02	84.18	56.12
+D+S+H														
Dsgn. L =	7.00 ft	1	0.374	0.083		-32.48	32.48	144.96	86.80	1.00	1.00	4.64	84.18	56.12
+D+0.750Lr+0.750L+H														
Dsgn. L =	7.00 ft	1	0.163	0.036		-14.14	14.14	144.96	86.80	1.00	1.00	2.02	84.18	56.12
+D+0.750L+0.750S+H														
Dsgn. L =	7.00 ft	1	0.321	0.071		-27.90	27.90	144.96	86.80	1.00	1.00	3.99	84.18	56.12
+D+0.60W+H														
Dsgn. L =	7.00 ft	1	0.163	0.036		-14.14	14.14	144.96	86.80	1.00	1.00	2.02	84.18	56.12
+D+0.70E+H														
Dsgn. L =	7.00 ft	1	0.163	0.036		-14.14	14.14	144.96	86.80	1.00	1.00	2.02	84.18	56.12
+D+0.750Lr+0.750L+0.450W+H														
Dsgn. L =	7.00 ft	1	0.163	0.036		-14.14	14.14	144.96	86.80	1.00	1.00	2.02	84.18	56.12
+D+0.750L+0.750S+0.450W+H														
Dsgn. L =	7.00 ft	1	0.321	0.071		-27.90	27.90	144.96	86.80	1.00	1.00	3.99	84.18	56.12
+D+0.750L+0.750S+0.5250E+H														
Dsgn. L =	7.00 ft	1	0.321	0.071		-27.90	27.90	144.96	86.80	1.00	1.00	3.99	84.18	56.12
+0.60D+0.60W+0.60H														
Dsgn. L =	7.00 ft	1	0.098	0.022		-8.48	8.48	144.96	86.80	1.00	1.00	1.21	84.18	56.12

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Description : --None--

Load Combination	Segment Length	Span #	Max Stress Ratios		Summary of Moment Values						Summary of Shear Values			
			M	V	Mmax +	Mmax -	Ma Max	Mnx	Mnx/Omega	Cb	Rm	Va Max	Vnx	Vnx/Omega
+0.60D+0.70E+0.60H														
Dsgn. L = 7.00 ft		1	0.098	0.022		-8.48	8.48	144.96	86.80	1.00	1.00	1.21	84.18	56.12

### Overall Maximum Deflections

Load Combination	Span	Max. "-" Defl	Location in Span	Load Combination	Max. "+" Defl	Location in Span
+D+S+H	1	0.1546	7.000		0.0000	0.000

### Vertical Reactions

Load Combination	Support 1	Support 2
Overall MAXimum	4.640	
Overall MINimum	1.212	
+D+H	2.020	
+D+L+H	2.020	
+D+Lr+H	2.020	
+D+S+H	4.640	
+D+0.750Lr+0.750L+H	2.020	
+D+0.750L+0.750S+H	3.985	
+D+0.60W+H	2.020	
+D+0.70E+H	2.020	
+D+0.750Lr+0.750L+0.450W+H	2.020	
+D+0.750L+0.750S+0.450W+H	3.985	
+D+0.750L+0.750S+0.5250E+H	3.985	
+0.60D+0.60W+0.60H	1.212	
+0.60D+0.70E+0.60H	1.212	
D Only	2.020	
Lr Only		
L Only		
S Only	2.620	
W Only		
E Only		
H Only		