GENERAL NOTES

A. 

1. ELECTRONICS FOR SIGN OR GRIP IN MATERIAL. SHALL COMPLY WITH THE CODE OF REGULATIONS OF THE CITY WHERE THE SIGN OR GRIP IS TO BE LOCATED. SHALL NOT BE MORE THAN 70% OF THE SIGN OR GRIP LUMINOUS.

2. TENSILE MEMBRANE SYSTEMS

A. TENSILE MEMBRANE TYPES

1. TYPE I - PLAIN COATED FABRIC. REFER TO PLANS FOR LOCATION.

2. TYPE II - TEXTURED MEMBRANE. REFER TO PLANS FOR LOCATION.

B. INSTALLATION OF TENSILE MEMBRANE SYSTEMS

1. ALL WORK SHALL COMPLY WITH ASME IN TENSILE MEMBRANE STRUCTURES.

C. INSTALLATION OF TENSILE MEMBRANES

1. A TENSILE MEMBRANE SYSTEM shall be designed to withstand the following:

   a. Loads from wind: UDI 1.0
   b. Loads from snow: UDI 1.0
   c. Loads from ice: UDI 1.0

D. VERTICAL LOADS

1. NECK AND CLAMPING: 1.0 POUND PER SQUARE FOOT.

E. CABLES: AS CALCULATED BASED ON Cable size.

F. LINE LOADS

1. DRAWING NO., SHEET NO.:

G. Sheet loads based on the world of the structural beam load, which is 6.00 KSI, and other conservative elements which are necessary to be used to the following:

H. Sheet loads based on the following of the structural member load, which is 6.00 KSI, and other conservative elements which are necessary to be used to the following:

I. Structural Member Requirements

1. THE STRUCTURAL AND COMPONENTS OF THE MEMBERS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:

   a. ANSI A570, A131
   b. AISC 360
   c. AASHTO M270
   d. AASHTO M270
   e. MC-2017

J. Structural Member Requirements

1. ALL CONSTRUCTION MATERIALS, EXCEPT AS NOTED OTHERWISE, SHALL BE BEARING STRUCTURAL STEEL.

K. Structural Member Requirements

1. THE STRUCTURAL MEMBERS SHALL COMPLY WITH THE CODE OF REGULATIONS OF THE CITY WHERE THE STRUCTURAL MEMBERS ARE TO BE LOCATED.

L. Structural Member Requirements

1. NECK AND CLAMPING: 1.0 POUND PER SQUARE FOOT.

M. Structural Member Requirements

1. ALL WORK SHALL COMPLY WITH ASME IN TENSILE MEMBRANE STRUCTURES.

N. Structural Member Requirements

1. A TENSILE MEMBRANE SYSTEM shall be designed to withstand the following:

   a. Loads from wind: UDI 1.0
   b. Loads from snow: UDI 1.0
   c. Loads from ice: UDI 1.0

O. Structural Member Requirements

1. VERTICAL LOADS

   a. NECK AND CLAMPING: 1.0 POUND PER SQUARE FOOT.

P. Structural Member Requirements

1. ALL WORK SHALL COMPLY WITH ASME IN TENSILE MEMBRANE STRUCTURES.

Q. Structural Member Requirements

1. A TENSILE MEMBRANE SYSTEM shall be designed to withstand the following:

   a. Loads from wind: UDI 1.0
   b. Loads from snow: UDI 1.0
   c. Loads from ice: UDI 1.0

R. Structural Member Requirements

1. VERTICAL LOADS

   a. NECK AND CLAMPING: 1.0 POUND PER SQUARE FOOT.

S. Structural Member Requirements

1. ALL WORK SHALL COMPLY WITH ASME IN TENSILE MEMBRANE STRUCTURES.

T. Structural Member Requirements

1. A TENSILE MEMBRANE SYSTEM shall be designed to withstand the following:

   a. Loads from wind: UDI 1.0
   b. Loads from snow: UDI 1.0
   c. Loads from ice: UDI 1.0

U. Structural Member Requirements

1. VERTICAL LOADS

   a. NECK AND CLAMPING: 1.0 POUND PER SQUARE FOOT.

V. Structural Member Requirements

1. ALL WORK SHALL COMPLY WITH ASME IN TENSILE MEMBRANE STRUCTURES.

W. Structural Member Requirements

1. A TENSILE MEMBRANE SYSTEM shall be designed to withstand the following:

   a. Loads from wind: UDI 1.0
   b. Loads from snow: UDI 1.0
   c. Loads from ice: UDI 1.0

X. Structural Member Requirements

1. VERTICAL LOADS

   a. NECK AND CLAMPING: 1.0 POUND PER SQUARE FOOT.

Y. Structural Member Requirements

1. ALL WORK SHALL COMPLY WITH ASME IN TENSILE MEMBRANE STRUCTURES.

Z. Structural Member Requirements

1. A TENSILE MEMBRANE SYSTEM shall be designed to withstand the following:

   a. Loads from wind: UDI 1.0
   b. Loads from snow: UDI 1.0
   c. Loads from ice: UDI 1.0

AA. Structural Member Requirements

1. VERTICAL LOADS

   a. NECK AND CLAMPING: 1.0 POUND PER SQUARE FOOT.

BB. Structural Member Requirements

1. ALL WORK SHALL COMPLY WITH ASME IN TENSILE MEMBRANE STRUCTURES.

CC. Structural Member Requirements

1. A TENSILE MEMBRANE SYSTEM shall be designed to withstand the following:

   a. Loads from wind: UDI 1.0
   b. Loads from snow: UDI 1.0
   c. Loads from ice: UDI 1.0

DD. Structural Member Requirements

1. VERTICAL LOADS

   a. NECK AND CLAMPING: 1.0 POUND PER SQUARE FOOT.

EE. Structural Member Requirements

1. ALL WORK SHALL COMPLY WITH ASME IN TENSILE MEMBRANE STRUCTURES.

FF. Structural Member Requirements

1. A TENSILE MEMBRANE SYSTEM shall be designed to withstand the following:

   a. Loads from wind: UDI 1.0
   b. Loads from snow: UDI 1.0
   c. Loads from ice: UDI 1.0

GG. Structural Member Requirements

1. VERTICAL LOADS

   a. NECK AND CLAMPING: 1.0 POUND PER SQUARE FOOT.

HH. Structural Member Requirements

1. ALL WORK SHALL COMPLY WITH ASME IN TENSILE MEMBRANE STRUCTURES.

II. Structural Member Requirements

1. A TENSILE MEMBRANE SYSTEM shall be designed to withstand the following:

   a. Loads from wind: UDI 1.0
   b. Loads from snow: UDI 1.0
   c. Loads from ice: UDI 1.0

JJ. Structural Member Requirements

1. VERTICAL LOADS

   a. NECK AND CLAMPING: 1.0 POUND PER SQUARE FOOT.

KK. Structural Member Requirements

1. ALL WORK SHALL COMPLY WITH ASME IN TENSILE MEMBRANE STRUCTURES.

LL. Structural Member Requirements

1. A TENSILE MEMBRANE SYSTEM shall be designed to withstand the following:

   a. Loads from wind: UDI 1.0
   b. Loads from snow: UDI 1.0
   c. Loads from ice: UDI 1.0

MM. Structural Member Requirements

1. VERTICAL LOADS

   a. NECK AND CLAMPING: 1.0 POUND PER SQUARE FOOT.

NN. Structural Member Requirements

1. ALL WORK SHALL COMPLY WITH ASME IN TENSILE MEMBRANE STRUCTURES.

OO. Structural Member Requirements

1. A TENSILE MEMBRANE SYSTEM shall be designed to withstand the following:

   a. Loads from wind: UDI 1.0
   b. Loads from snow: UDI 1.0
   c. Loads from ice: UDI 1.0

PP. Structural Member Requirements

1. VERTICAL LOADS

   a. NECK AND CLAMPING: 1.0 POUND PER SQUARE FOOT.

QQ. Structural Member Requirements

1. ALL WORK SHALL COMPLY WITH ASME IN TENSILE MEMBRANE STRUCTURES.

RR. Structural Member Requirements

1. A TENSILE MEMBRANE SYSTEM shall be designed to withstand the following:

   a. Loads from wind: UDI 1.0
   b. Loads from snow: UDI 1.0
   c. Loads from ice: UDI 1.0

SS. Structural Member Requirements

1. VERTICAL LOADS

   a. NECK AND CLAMPING: 1.0 POUND PER SQUARE FOOT.

TT. Structural Member Requirements

1. ALL WORK SHALL COMPLY WITH ASME IN TENSILE MEMBRANE STRUCTURES.

UU. Structural Member Requirements

1. A TENSILE MEMBRANE SYSTEM shall be designed to withstand the following:

   a. Loads from wind: UDI 1.0
   b. Loads from snow: UDI 1.0
   c. Loads from ice: UDI 1.0

VV. Structural Member Requirements

1. VERTICAL LOADS

   a. NECK AND CLAMPING: 1.0 POUND PER SQUARE FOOT.
NOTES:

1. NEW FALL PROTECTION NOT SHOWN FOR CLARITY. SEE FP SERIES SHEETS.

COLD LIQUID APPLIED WATERPROOFING TO THE EXISTING CANOPY ROOF
COLD LIQUID APPLIED WATERPROOFING APPLIED TO THE EXISTING BOX BEAM, HATCH & LADDER IN EXISTING OPENING

EXISTING SEALANT JOINT, TYP.
EXISTING STEEL TRUSS, TYP.
CONCRETE PENETRATING SEALER APPLIED TO THE EXISTING POST-TENSIONED BEAM

NEW ROOF HATCH & LADDER IN EXISTING OPENING
ROOF DRAIN, TYP.

KEY PLAN
EXTENT OF THE REINFORCED COLD LIQUID APPLIED WATERPROOFING TO THE TOP SURFACE OF THE EXISTING BOX BEAM AND THE CANOPY ROOF.
EXTENT OF THE SEALER COATING APPLIED TO THE EXPOSED SURFACES OF THE EXISTING POST-TENSIONED RING BEAM.
NOTES:

1. NEW FALL PROTECTION NOT SHOWN FOR CLARITY. SEE SHEET S1.02

KEY PLAN

- PVC MEMBRANE ROOF
- TENSIONED FABRIC ROOF
- PVC MEMBRANE LOWER GUTTER ROOF

EXISTING ROOF DRAIN TO REMAIN, TYP.

EXISTING SINGLE MEMBRANE OUTER ROOF

EXTENT OF PVC MEMBRANE ROOFING TO REPLACE EXISTING SINGLE PLY ROOF.

EXTENT OF PFTE LAMINATED FIBERGLASS MESH (ARCHITECTURAL MEMBRANE TYPE II) - HIGH TRANSLUCENCY

EXTENT OF PFTE COATED FIBERGLASS FABRIC (ARCHITECTURAL MEMBRANE TYPE I) - STANDARD TRANSLUCENCY

Seal and Signature:

Issues/Revisions

No.

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ENGINEER OF RECORD, P.E.

PROJECT APPROVED

DRAWN

CHECKED BY:

Sheet No.:

Filename:

DESIGN DEVELOPMENT

DESCRIPTION

CONSULTANTS / ARCHITECTS:

CLIENT:

PROJECT:

UNI - DOME FABRIC ROOF REPLACEMENT

THE UNIVERSITY OF NORTHERN IOWA CEDAR FALLS, IOWA

UNI - DOME FABRIC ROOF REPLACEMENT

THE UNIVERSITY OF NORTHERN IOWA CEDAR FALLS, IOWA

S1.01

UPPER ROOF PLAN

NOT FOR CONSTRUCTION

To the best of the engineer's knowledge, the plans and specifications comply with the applicable minimum building codes.
UNI - DOME FABRIC ROOF REPLACEMENT
THE UNIVERSITY OF NORTHERN IOWA CEDAR FALLS, IOWA

NOTES:
1. SPEAKER CLUSTERS NOT SHOWN FOR CLARITY.

FIELD LEVEL
916'-8"

CONCOURSE LEVEL
945'-7"

UPPER GUTTER ROOF
1043'-5"

LOWER GUTTER ROOF
986'-11"

CUPOLA
1074'-7"

EXISTING EXPOSING OPPOSING CABLE
EXISTING VTC SERIES FABRIC CABLES
EXISTING PYLON BASE

NOTE:

SEAL AND SIGNATURE:

ISSUES/REVISIONS

NUMBER

DRAWING TITLE:

DATE

CERTIFICATION STATEMENT:

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DESIGN DEVELOPMENT

NOTES:

KEYPLAN:

CLIENT:

PROJECT:

UNI - DOME FABRIC ROOF REPLACEMENT
THE UNIVERSITY OF NORTHERN IOWA CEDAR FALLS, IOWA

S2.00

BUILDING SECTION

UNIVERSITY OF NORTHERN IOWA CEDAR FALLS, IOWA

NOT FOR CONSTRUCTION

NOTES:

BUILDING SECTION

1 7/29/22 SCHEMATIC DESIGN
2 9/23/22 DESIGN DEVELOPMENT

1/16" = 1'-0"
EXISTING ARCHED TRIANGULAR STEEL TRUSS RIDGE SUPPORTING THE FABRIC, TYPICAL

EXISTING PYLON FRAMING, TYPICAL

EXISTING MAIN ROOF CABLES

EXISTING OPPOSING CABLE GRID.

EXISTING EXISTING VALLEY TIE DOWN CABLE TO PYLON BASE, VTC SERIES, TYP

EXISTING OUTER ROOF DRAIN TO REMAIN

EXISTING STEEL ROOF TRUSS

EXISTING ROOF DRAIN TO REMAIN

S5.00
EXISTING ROOF MEMBRANE CABLE SCHEDULE

<table>
<thead>
<tr>
<th>Cable ID</th>
<th>Location</th>
<th>Diameter</th>
<th>Tension [lbs]</th>
<th>End Fillings</th>
</tr>
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<tbody>
<tr>
<td>PE-1</td>
<td></td>
<td>3/4</td>
<td>35,000</td>
<td>Open Socket Open Socket</td>
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<td>Open Socket Open Socket</td>
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<tr>
<td>PE-4</td>
<td></td>
<td>1/2</td>
<td>10,000</td>
<td>Open Socket Open Socket</td>
</tr>
</tbody>
</table>

NOTES:
1. ALL EXISTING CABLES TO REMAIN.
2. ALL CABLES ASTM A586 SPIRAL STRAND GALVANIZED CLASS C.

PARTIAL FABRIC ROOF REPLACEMENT: ROOF TO BE REPLACED IN KIND WITH ONLY ARCHITECTURAL MEMBRANE TYPE I.
EXISTING STEEL TRUSS

EXISTING FABRIC MEMBRANE TO BE REMOVED AFTER INSTALLATION OF NEW FABRIC MEMBRANE

NEW LOCK NUTS TO BE INSTALLED AT TURNBUCKLES

REMOVE AND REINSTALL EXISTING TURNBUCKLES FOR INSTALLATION OF MISSING JAM NUTS

EXISTING OPPOSING MAIN CABLE (1 3/4" DIAMETER)

EXISTING ORIGINAL MAIN CABLE (2 7/8" DIAMETER)

To the best of the engineer's knowledge, the plans and specifications comply with the applicable minimum building codes.
1. The existing coating to be removed on the box beam topping slab and all surfaces to receive the cold liquid applied waterproofing. See specifications concrete surface preparation (03 01 01) for further requirements.

2. Deterioration to the box beam topping slab to be repaired prior to the application of the new cold liquid applied waterproofing.

3. See concrete repair details (10 & 11/S5.02) for further requirements.

4. The canopy roof to be removed from the existing box beam. See notes 1 & 2.

5. The canopy roof to be replaced, typical.

6. The existing box beam to be removed from the existing concrete topping slab. See notes 1 & 2.

7. Not for construction.

8. The applicable minimum building codes.

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10. The concrete to be removed on the box beam topping slab and all surfaces to receive the cold liquid applied waterproofing. See specifications concrete surface preparation (03 01 01) for further requirements.

11. Certification statement:
IF TRAFFIC COATING WILL BE APPLIED, INSTALL SEALANT FLUSH AROUND PATCH PERIMETER.

GROUND OR SAW CUTTING FOR AT LEAST 1/2" BEYOND SHALL BE PERPENDICULAR.

VARIES

NOTES:

TO SURFACE (TYP)

1 1/2" = 1'-0"

INSULATION WITH PRECAST MEMBER, AND DESIGN OF SUPPLEMENTARY REINFORCEMENT.

ALL EXPOSED REINFORCEMENT.

DO NOT DAMAGE PRECAST MEMBER DURING REMOVAL OF TOPPING.

TERM “REINFORCEMENT” SHALL MEAN REINFORCING BARS OR WELDED WIRE FABRIC (WWF).

NEW PATCH SHALL MATCH EXISTING FINISH.

SUPPLEMENTARY REINFORCEMENT MAY BE REQUIRED. REPORT TO ENGINEER FOR REVIEW SPECIFIED IN SECTION “SURFACE PREPARATION FOR PATCHING.”

PROVIDE 3/4" CLEARANCE AROUND ALL EXPOSED REINFORCEMENT WHERE REQUIRED AS PROTECT EXISTING WWF OR REINFORCEMENT FROM DAMAGE DURING CHIPPING, GRINDING.
1. CONTRACTOR SHALL NOT DAMAGE EXISTING STANCHION FLASHING. REPORT WITHIN PLATE 8"-12" = 1'-0".

2. CONTRACTOR SHALL PROVIDE PROTECTIVE MEASURES FROM FIELD WELDING.

3. NEW STIFFENER PL ON EA SIDE OF HLL CONNECTION. COPE AS REQUIRED.

4. CONTRACTOR SHALL FIELD VERIFY THE EXISTING TOP OF TUBE CONDITION PRIOR TO INSTALLATION.

5. EXPANDING FOAM FILL NEW ANCHOR WITH 1 1/2" = 1'-0".

6. GALVANIZED.

7. ALL NEW STEEL MEMBERS AND CONNECTION MATERIAL SHALL BE HOT DIPPED, DURABLE AND SECURELY ATTACHED TO PREVENT FUTURE REMOVAL.

8. CONTRACTOR SHALL TAG TIE OFF POINT AS FOLLOWS: "DO NOT USE AS FALL ARREST ANCHOR INSTALLATION.

9. REMOVE EXISTING ROOFING SYSTEM AS NECESSARY TO PROVIDE FALL ARREST LINE AT BOTTOM OF LOWER ROOF INSTALLED AT FOUR CORNERS OF CUPOLA.

10. SCHEMATIC ISOMETRIC OF NEW FALL ARREST ANCHOR TO BE CONSULTANTS / PROJECT: UNI - DOME FABRIC ROOF REPLACEMENT.

11. THE EXISTING SHEET METAL FLASHING TO BE REMOVED AT TOP OF EXIST COPULA.

12. REMOVE EXISTING ROOFING TO EXPOSE COPULA FRAME.