



THE ARIZONA BOARD OF REGENTS

for and on behalf of

NORTHERN ARIZONA UNIVERSITY

**REQUEST FOR QUALIFICATIONS
for
DESIGN-BUILD SERVICES**

**SKYDOME ROOF REPLACEMENT
Project No. 09.001.231**

DUE DATE/TIME: Thursday, October 6, 2022, at 2:00PM

**ARIZONA BOARD OF REGENTS TRI UNIVERSITY MASTER CONTRACTS
STANDARD FORM 2023 EDITION**

Pre-Qualifications Meeting by ZOOM (Optional)

Wednesday, September 14, 2022, at 11:AM

Deadline for Inquiries

Wednesday, September 28, 2022, at 12:00PM

Time and Date Set for Submittal

Thursday, October 6, 2022, at 2:00PM

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DIVISION I - ADVERTISEMENT

Arizona Board of Regents (ABOR) for and on behalf of Northern Arizona University ("Owner" or "University") requests interested Design-Build Teams to submit, in writing, their qualifications to provide Design-Build Services relating to the **Skydome Roof Replacement - Project #09.001.231** on the NAU Flagstaff Mountain Campus. This solicitation follows the methodology prescribed by Section 3-804 of the University Procurement Code.

This project scope of work includes all design and engineering services, provision of construction documentation, construction management, bidding, construction, and related services to evaluate and repair any structural elements of the Skydome, and replace the existing failed roofing membrane system. The construction budget is approximately \$5.5 Million dollars. The project site is located at the J. Lawrence Walkup Skydome located at 1701 S. San Francisco Street, Flagstaff, Arizona 86011.

For this Request for Qualifications (RFQ), The University is seeking a Design-Build Team with experience in construction of similar projects. Firms submitting Qualifications in response to this RFQ must demonstrate comparable project-type experience and capability utilizing the Design-Build project delivery method, or comparable capability. The successful firm awarded a contract may be awarded additional work at NAU's discretion for any other modifications or renovations at the project site through the warranty period of the project.

Any individual(s) or firm(s) proposing to perform pre-construction and construction services must be appropriately licensed/registered in the State of Arizona at the time of submission of the Qualifications.

SCHEDULE OF DEADLINES – ALL TIMES ARE ARIZONA LOCAL TIME

Advertise for Services:	Thursday, September 8, 2022
Pre-Qualifications Zoom Meeting (Optional):	Wednesday, September 14, 2022, 11:00AM
Deadline for Inquiries:	, Wednesday, September 28, 2022, 12:00PM
Qualifications Due:	Thursday, October 6, 2022, 2:00PM
Interviews with Shortlisted Firms (Optional):	Tuesday, November 8, 2022 (Tentative)
Begin Contract Period:	January 2023

The Offeror's Request for Qualification packages and any published addenda may be obtained from the University Planning, Design and Construction website at <https://in.nau.edu/facility-services/bids-rfq/> after 3:00PM Arizona Local Time on Friday, September 9, 2022. It is the sole responsibility of the Respondent to obtain, review, and acknowledge any addenda that may be published on the website.

A pre-qualifications meeting will be held on Wednesday, September 14, 2022, at 11:00AM via Zoom video conference. Information on how to join the video conference is located in Division III of the RFQ.

Qualifications are due no later than Thursday, October 6, 2022, at 2:00PM. Responses to the RFQ shall be received in Facility Services, Building #77, at the Front Reception Desk, 501 E. Pine Knoll Drive, Flagstaff, Arizona 86011 (<https://nau.edu/maps>) or mail to :Northern Arizona University, Box 6016, Flagstaff, Arizona, 86011. **Attention: Judith Scholar Winfield, Contracts Analyst, PDC.** If mailing the Qualification by courier (ex. FedEx, UPS) please use the street address noted above.

No telephonic, electronic, or facsimile Offer shall be considered. Offers received after the date and time set for opening will be rejected. The University reserves the right to extend the time and date set for opening.

The Board of Regents reserves the right to reject any or all Statements of Qualifications, to waive or decline, to waive irregularities in any Statement of Qualifications, or to withhold the award for any reason it may determine. Women owned and minority owned firms are encouraged to apply. Persons with a disability may request a reasonable accommodation.

All correspondence relating to this Request for Qualifications should be addressed to:

NAU Facility Services – Planning, Design & Construction
Attention: Judith Scholar Winfield
PO Box 6016
Northern Arizona University
Flagstaff, Arizona 86011
Email address: judith.scholarwinfield@nau.edu

ARIZONA BOARD OF REGENTS

By: Bjorn Flugstad

SVP, University Finance and Business Services

DIVISION II – PROJECT DESCRIPTION AND SCOPE OF SERVICES

Northern Arizona University (“Owner” or “University”) extends an invitation to interested and qualified Design-Build Teams to submit in writing their qualifications to provide Design-Build Services relating to the **Skydome Roof Replacement Project - #09.001.231**, on the NAU Flagstaff Mountain Campus. This project will be built using a Design-Build delivery method.

The Arizona Revised Statutes require that each entity proposing to perform professional design services is properly registered to perform such services in the State of Arizona, as required by the Board of Technical Registration. Arizona requires professional registration of Individuals, as well as Firms. Included among the disciplines registered by the Board in Arizona, and generally pertinent to design and construction projects are architects, engineers, and landscape architects.

The Arizona Revised Statutes also require that each entity proposing to perform construction services and construction is properly licensed to perform such services in the State of Arizona, as required by the Registrar of Contractors. Any individual(s) or firm(s) proposing to perform Design-Build services must be appropriately licensed/registered in the State of Arizona by the Registrar of Contractors at the time of submission of the Qualifications.

Project Description

This project is for the design and installation of a new roof on the J. Lawrence Walkup Skydome (Building 73) on the Flagstaff Mountain Campus. A preliminary design for replacement of the roof, which has come to the end of its useful life, was done in 2017. As part of this project, the selected Team will review the 2017 design and either confirm its usefulness and/or suggest improvements to the design or devise a completely alternate design. The final project scope will be determined during early Conceptual Design phase when the selection will be made of the design to be implemented.

These 2017 preliminary design drawings are included in Attachment E.

Project Goals and Objectives

The goals of this project are to replace the failed roofing system and ensure structural integrity of the dome as a whole. This project construction will occur while the building is occupied with multiple events. A strategy to minimally impact the occupants during construction is a priority.

Site Description

Northern Arizona University is located on a volcanic plateau at the base of the San Francisco Peaks, the highest mountains in Arizona. The 805-acre main campus is located in Flagstaff, Arizona. Flagstaff is a four-season city located at an elevation of 7,000 feet. Because the campus is at an elevation of 7000 feet, the climate is vigorous, with cold winters and mild summers. Diurnal temperature changes are considerable, resulting in average first and last occurrences of 32° F. in September and June. Temperature extremes range from -32° F. to 97° F., with average minimums in January of 14° F. The mountain campus includes approximately 170 buildings with over 6 million square feet, including buildings in the Arizona Normal School Historic District which exceeds 90 years of age. The University is governed by the Arizona Board of Regents (ABOR) and is a fully accredited institution of higher learning supported by the State of Arizona.

Scope of Services

The Scope of Services to be provided by the successful Offeror shall include those services as required to complete the project. The successful Offeror shall provide all design and construction services necessary to complete the requirements outlined under the project. The Offeror may deem it necessary to include consultants as part of Offeror's Design-Build Team in order to provide all services

1) DESIGN SERVICES:

- a) Participate in program development and/or refinement of existing programming and making recommendations for various solutions to meet Owner's needs.
 - i) Advise the University of ways to gain efficiencies in all aspects of the project.
 - ii) Innovation in design.
- b) Provide schematic and design development drawings, including compliance requirements for all state and local building codes. The design drawings shall consider Owner Design Guidelines and Technical Standards.
 - i) Advise the team on choosing sustainable building materials and suppliers in an effort to meet University's commitment to its Climate Action Plan;
 - ii) Provide alternate systems evaluation and constructability studies;
 - iii) Provide long-lead procurement studies and initiate procurement of long-lead items.
- c) Prepare construction documents, including detailed specifications and drawings.
- d) Provide detailed cost estimating and knowledge of marketplace conditions.
- e) Determine construction phasing and scheduling to minimize interruption to University operations.
- f) Provide project planning and scheduling.
- g) Assist with the development of budgets and schedules.
- h) Assist with pre-construction conferences.
- i) Develop guaranteed maximum price for the project.
- j) Participate with the Owner in a process to set goals and prequalification meetings for subcontractor participation.
 - i) Attendance at proposal openings, analysis of proposal documents and preparation of results.
 - ii) Bid award, and manage all construction related contracts while meeting the University bid requirements including Subcontractor participation goals.
- k) Protect the Owner's expectations of quality and safety, and sensitivity to environmental factors.
- l) Obtain all required Owner, State and Federal permits prior to construction starting.
- m) Any other services as required by contract or NAU Design Guidelines and Technical Standards

2) CONSTRUCTION SERVICES:

- a) Construct the project on schedule and within budget.
- b) Bond and insure the construction.
- c) Arrange for timely procurement of materials and equipment.
- d) Schedule and manage site operations.
- e) Provide quality control.
- f) Observation of the construction, as required, in conjunction with Owner Project Manager.
- g) Work in a cooperative manner to address any changes that might arise during construction.
- h) Provide all required closeout materials to Owner
- i) Provide warranty evaluations
- j) Prepare meeting minutes and maintain records in a timely fashion.
- k) Maintain a safe work site for all project participants
- l) Any other services as required by contract or NAU Design Guidelines and Technical Standards

Draft Project Schedule

Start Design	January 2023
Conceptual & Schematic Design Complete	February 10, 2023
Design Documents Complete	March 31,2023
Construction Documents Complete	May 5, 2023
Construction	May 15, 2023
Substantial Completion	October 27,2023
Final Completion	January 12, 2024

DIVISION III – PRE-SUBMITTAL ZOOM CONFERENCE (OPTIONAL)

An optional Pre-Qualifications Conference to be held at:

DATE:	Wednesday, September 14, 2022
TIME:	11:00AM Arizona Local Time
LOCATION:	<p>ZOOM Video Conference</p> <p>Advanced registration is required. Register using the link below:</p> <p>https://nau.zoom.us/meeting/register/tZwvd-2rpz4jE9zg_v7M_0QHs7Nez1p6y42e</p> <p>After registering, you will receive a confirmation email containing information about joining the meeting.</p>

The ZOOM platform will allow up to 100 participants per conference.

The conference may be recorded and may be posted following the conference on the following webpage:

<https://in.nau.edu/facility-services/bids-rfq/> .

At this pre-submittal conference, University staff will discuss the scope of work, general contract issues, and respond to questions from the attendees. As University staff will not be available to respond to individual inquiries regarding the project outside of this pre-submittal conference, it is strongly recommended that interested firms attend the pre-submittal conference.

Neither Offerors, nor members of their team, shall communicate concerning this project with selection committee members, students, and employees of the University, except as stipulated above. **Failure to abide by this requirement may result in rejection of the Offeror's Statement of Qualifications.**

DIVISION IV – SELECTION CRITERIA AND SUBMITTAL REQUIREMENTS

The Owner intends to utilize a Design-Build design and construction delivery process for this project. In this delivery method, the Design-Build Team is selected using a qualifications-based selection process. The Owner is seeking the most responsive, and best qualified Design Build Team to collaborate with in achieving the successful realization of this project. Such Teams should be multi-faceted and should be assembled to address the unique requirements of this project as outlined in the Project Description published elsewhere in this RFQ.

Upon selection of the most-qualified Design-Build Team, the Owner will negotiate a fixed-fee for Pre-Construction Phase services. During the Pre-Construction Phase a Guaranteed Maximum Price (GMP) will be prepared and negotiated.

In addition to the Design Professional and the General Contractor, the Design-Build Team should include entities who Offerors identify as bringing relevant expertise in the following pertinent areas:

- 1) All required Design and Engineering Subconsultants
- 2) Any specialty consultants included in the Design Build Team to address design issues raised by the requirements of this particular project.

A Selection Committee will evaluate the Statement of Qualifications submitted in response to this RFQ. The evaluation criteria will relate to the qualifications of the Offeror to perform the services under this RFQ. The Statement of Qualifications submitted in response to this RFQ should be fully self-contained and include the information requested below in order and index tabbed the same. The evaluation will be based on the criteria outlined in points 1) to 10) on pages 10 through 14 of this RFQ. The maximum point values for each of the Evaluation Criteria are as follows:

1) Introduction	0
2) Firm Project Experience	20
3) Additional Project Experience	5
4) Key Individuals' Experience	25
5) Design-Build Project Management Approach	20
6) Understanding of the Project	20
7) Work Location	5
8) Overall Evaluation of the Team	5
9) Additional Required Information	0
10) Resumes	0
TOTAL POINTS VALUE	100

1) Introduction – 0 Points (excluded from page count)

- a) Please provide an introductory one-page cover letter highlighting the composition of the Design-Build team.
 - i) Outline which firm will be the contract holder with the University.
 - ii) Additionally, provide a highlight of qualifications for this particular project.
 - iii) Provide a general description of the firm that is proposing to provide construction management services and general construction services.
 - iv) Also indicate the name, telephone number and direct e-mail address for the primary point(s)-of-contact of the prime firm. If your firm is teaming with another firm, the relationship shall be clearly identified in this letter.
- b) Provide an organization chart that represents the intended roles, responsibilities, authorities, and relationships. Please include all key subconsultant and subcontractor members of the team. If the sub firms are not yet determined, please state as such, but list the key discipline for each.
- c) Provide the following information:
 - i) List the Arizona professional and contractor licenses held by the firm/team and the key personnel who will be assigned to this project. Provide the license number and explain if held by an individual or the firm.
 - ii) Identify any contract or subcontract held by the firm or officers of the firm, which has been terminated within the last five years. Identify any claims arising from a contract which resulted in litigation or arbitration within the last three years. Briefly describe the circumstances and the outcomes.
- d) Provide a statement on surety letterhead from an A- or better surety company describing the Company's bonding capacity

2) Firm Project Experience – 20 Points

- a) Identify a minimum of three (3) and maximum of five (5) comparable projects in which the firms, the general contractor and the architect, either as a team or separately, served as the Design-Builder. Special consideration will be given to firms that have provided Design-Build services on similar successful projects that include Higher Education construction of similar sized and programmed buildings in a similar climate. The listed projects must demonstrate, through previously completed work, that the firm has developed expertise to provide design phase (pre-construction) and construction services as required for this project.
- b) For each project listed, please provide:
 - i. A description of the project and photographs.
 - ii. The role of the firms on the project. Identify the percent of work self-performed (if any). Also specify services provided during design phase, i.e., cost estimating, scheduling, value engineering, etc.)
 - iii. The original construction budget per the construction agreement, actual bid or GMP amount, and the final construction amount. If final construction amount is greater than bid/GMP amount, differentiate between Owner-requested Change Orders and those attributable to construction costs.
 - iv. Identify how this project was innovative.
 - v. The original project schedule by listing Design Phase Start Date, Construction Start Date, and Substantial Completion Date. Compare the contractual dates with actual respective dates. Explain any differences between original and actual project schedule milestones.

- vi. The name and role of individuals from the proposed team who worked on each project listed in this section.
- vii. The name and current phone number of the Owner's Project Manager or other representative for the project.

3) Additional Project Experience – 5 Points

- a) List all Design-Build projects awarded to your firm by Northern Arizona University, Arizona State University and / or the University of Arizona during the last two years, all projects currently ongoing, and / or all projects for which your firm has been selected but are not yet under contract. For each project provide the project description, award date (note if pending), construction cost, status of completion, and estimated completion date.
- b) List all Design-Build projects awarded to your firm by other entities during the last two years, all projects currently ongoing, and / or all projects for which your firm has been selected but are not yet under contract. For each project provide the project description, award date (note if pending), construction cost, status of completion, and estimated completion date.
- c) As part of our selection process, the University has the responsibility of taking into account the size and complexity of the project under consideration, the resource investment of the firm in current work, and the amount or quality of previous work recently performed for the University, in order to extend opportunities to a broad representation of qualified firms.

4) Key Individuals Experience - 25 points

Be sure to address the experience of **both** the design and construction elements of the Design-Build Firm/Team.

Identify the specific key individuals from the Design, Construction Management, and Construction members of the Design-Build Firm/Team, who are proposed to be assigned and contractually obligated to this project, during the pre-construction and construction phases. Include those individuals who will be assigned to the project to help provide responsiveness and knowledge of local conditions. The University values the increased levels of responsiveness and local conditions knowledge typically provided by Northern Arizona Firms, and desires to maximize local business participation using local workforces, thereby improving economic and employment conditions in Northern Arizona. Please provide a short narrative of how your Firm/Team will maximize local participation, including a description of local team member roles and responsibilities that will be included in your local teaming agreement.

Utilizing comparable projects, clearly demonstrate the special expertise, qualifications, and experience, of those individuals, relevant to the specific requirements of this project as enumerated in this RFQ.

Identify how long each individual has been employed by the responding Firm/Team in the capacity of responsibility proposed for this project, and location where each individual currently resides. Provide resumes in an Appendix of all the identified individuals focusing on special expertise, qualifications, and experience relevant to the specific requirements of this project.

Clarify whether this special expertise, qualifications, and experience is through projects completed with the current proposed Firm/Team, or if not, by properly identifying the individual's specific responsibilities with other Firms/Teams by listing those Firm's name, the project name, and a reference point-of-contact with those other Firms.

Clearly identify the following specific individuals / roles:

- the one person responsible for day-to-day coordination and communication with the University, during all phases of design and construction, with decision-making authority for the Design-Build Firm/Team
- the person or persons who will lead the Design Professional design effort
- the person or persons who will lead the Specialty and Engineering design efforts
- the person or persons who will lead the project documentation effort
- the person or persons who will lead the project estimating effort
- the person or persons who will lead the project scheduling effort
- the site construction superintendent
- the one person who will represent the Design Professional Firm/Team on-site during the construction phase, with decision-making authority for the Design Professional Firm/Team
- the one person who will represent the Construction Firm/Team on-site during the construction phase, with decision-making authority for the Construction Firm/Team

Describe the anticipated leadership responsibilities of each identified individual, and how they will monitor the process to assure the University receives complete, thorough, highest quality professional services.

These individuals should relate back to the organizational chart provided in the introduction.

Provide a graphic indicating the percentage of time each of the identified individuals will be dedicated to this project, for each phase of the project

Please note that Team Members proposed for this project, and the percentage of time to be dedicated to the project, may not be changed during the life of the project without approval of the University.

5) Design-Build Project Management Approach - 20 points

This project will utilize the Design-Build project delivery method. The success of the project is contingent upon a functional and effective working relationship between the Design Professional and the Construction Contractor.

- a) Describe both the Design Firm's/Team's and the Construction Firm's/Team's understanding of their responsibilities under, and preparedness to work within, the Design-Build project delivery process.
- b) Describe your Firm's/Team's approach to a project of this type, size and complexity.
- c) Describe the Design-Build Firm's/Team's approach to project team-building, and local responsiveness to needs and requests of the University. Describe how you can successfully lead the Firm/Team and manage communications among all members of the D-B Firm/Team, from both interpersonal and technological perspectives. If multiple Firms or Team Members will share responsibilities for aspects of the project, describe the roles and responsibilities of each entity, and how they will work together in a cohesive and effective manner.
- d) Describe, and if possible, provide examples of, successful working relationships among the Design and Construction Firms/Teams during the design and construction phases of previous Design-Build projects.
- e) In accordance with ABOR Policy Manual section 3-804(B)(4)(a), Offerors selected to perform Construction Services, must select Subcontractors based on qualifications alone or on a

combination of qualifications and price, and not solely on price. In support of this, describe your Subcontractor selection plan for the construction phase of the project.

- f) Maintaining the project within the established budget is a fundamental responsibility of the Design-Builder. Describe your Firm's/Team's budget management and cost control processes, including how you perform conceptual estimating, and how you develop and maintain early design phase cost models and contingency allowances. Describe how the Design Firm/Team and the Construction Firm/Team will work together to manage project costs throughout the design phase. Describe how your Firm/Team ensures that the evolving design is one which the University can afford; that cost estimates are complete, accurate, and in compliance with the established budget at all points during the design process; how you transition from cost estimates to the final Guaranteed Maximum Price; and how you ensure that the final GMP is acceptable and comes with "no surprises".
- g) Summarize your quality control process as it will apply to this project. During the design phase, clearly describe how University design review comments will be addressed and incorporated into each subsequent phase of design evolution, and how you will incorporate the review comments into the evolving construction cost and schedule projections. Also, clearly describe how your quality control process ensures that at each phase of the design, the document deliverables are completely coordinated between the Design Firm/Team and the Construction Firm/Team, and across all design disciplines.
- h) During the construction administration phase, clearly describe how your quality control process minimizes RFIs and Change Orders, and how clear, succinct and accurate communications are implemented and maintained between the Design Firm/Team, the Construction Firm/Team, and the University.

6) Understanding of the project – 20 Points

- a) Describe your understanding of the goals of this project and what steps your firm will do to achieve them.
- b) Discuss the major opportunities and challenges your team has identified on this project describe how you intend to address those issues.
- c) Discuss the approach your team uses to ensure the most efficient use of budget.

7) Work location – 5 Points

- a) Each Offeror must have or be committed to establish an Arizona office.
- b) Indicate the proximity of the Offeror's office to the Northern Arizona University campus in Flagstaff, Arizona and the home office location of key staff on this project.
- c) Define the team's familiarity of the project area and its knowledge of the local labor and materials markets.

8) Overall evaluation of the team – 5 Points (excluded from page count)

- a) This is the overall evaluation of the firm/team and its perceived ability to provide the required services, as determined by the selection panel members. No submittal response is required.
- b) Additional information received or obtained by the Committee along with any client references obtained by the committee or given by the Design Professional.

9) Additional required information – 0 Points (excluded from page count)

- a) Provide current proof of insurance.
- b) Address your Firm's/Team's program for / commitment to Veteran employment.

- c) Submittal certification – Include Attachment A of this Request for Qualifications as the last item in this section.

10) Resumes – 0 Points (excluded from page count)

- a) As an appendix, provide resumes for each key team member. This shall contain only employee information and no additional company information. Resumes shall be limited to a maximum of two pages.
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DIVISION V – STATEMENT OF QUALIFICATIONS REQUIREMENTS

Submit RFQ response using the below format, listed in order and index tabbed to match. Failure to follow instructions regarding format may result in rejection of Offer.

RFQ responses to be submitted as:

- One (1) complete SOQ in an 8.5" x 11" format, using double-sided printing, spiral bound, and clearly marked as original and two (2) copies clearly marked as copies for a total of three (3).
- One (1) digital copy of the complete SOQ in a single PDF file on a USB flash drive.
- Use a font size no less than 10 points.
- Limit SOQ to twenty-five (25) pages for Division V Items 2 through 7. Item 8 – Overall Evaluation of the Firm does not require a response. Item 9 – Additional Required Information and Item 10 – Resumes are excluded in the twenty-five (25) page count. A page is defined as any side of the paper that has content (i.e., a piece of paper printed with information on both sides is considered two pages). **Front and back covers, Table of Contents pages and tabbed divider pages will not be counted if they do not contain submittal information. Resumes should not include project pictures or general firm information.**
- On the outside of the submittal package display the Offeror's name, project title and project number.

RFQ responses to be sent or delivered to:

Facility Services Building, Building No. 77
Front Reception Desk
Flagstaff, Arizona (southwest corner of Pine Knoll Drive and San Francisco Drive)

- or -

NAU Facility Services
PO Box 6016
Flagstaff, Arizona, 86011

- or for FedEx/UPS/Other Courier -

NAU Facility Services
501 E. Pine Knoll Dr.
Building 77, Main Entrance Reception Desk
Flagstaff, Arizona, 86011

Attention: Judith Scholar Winfield, Contracts Analyst, Planning, Design & Construction

Note: **THE OFFEROR SHALL NOT SUBMIT OR COMMUNICATE, IN ANY FORM TO THE UNIVERSITY, ANY INFORMATION ON FEES, PRICE (HOURLY RATES), MAN-HOURS OR ANY OTHER ASSOCIATED COST INFORMATION. ARIZONA LAW PROHIBITS THE UNIVERSITY FROM CONSIDERING ANY INFORMATION ON FEES, PRICE (HOURLY RATES), MAN-HOURS OR ANY OTHER COST INFORMATION DURING THE REQUEST FOR QUALIFICATIONS (RFQ) COMPETITION.** Accordingly, any sealed formal qualifications that contain any information of this type will be deemed non-responsive, will not be considered, and will be returned to the Offeror. This exclusion of information applies to the Offeror's formal sealed qualifications, to any discussion/interview and to all other aspects of the RFQ competition.

Please be advised that failure to comply with the following criteria may be grounds for disqualification:

- The number of originals and/or copies of the RFQ response specified.
 - Adherence to the maximum page requirement for the SOQ.
 - Deposit of qualifications in correct location.
 - Submitting pricing information, which is not allowed at the RFQ stage.
 - Failure to provide required information
 - Inappropriate communication (see Division VII – Restriction on Communications)
-

DIVISION VI – THE SELECTION PROCESS AND PROJECT SCHEDULE

SELECTION PROCESS. A Selection Committee will evaluate and score each submitted Statement of Qualifications to arrive at a shortlist of no less than three (3) and no more than five (5) Offerors, who may be required to participate in interviews. The interview process may consist of one or more phases and may be conducted virtually, in-person or a combination of the two. The University reserves the right to determine the interview process as an optional component and proceed, at its discretion, to verify references. If an interview is held, the Selection Committee may secure additional information, conduct additional reference checks and/or visit completed projects following the interview.

SCHEDULE OF DEADLINES

Advertise for Services:	Thursday, September 8, 2022
Pre-Qualifications ZOOM Meeting:	Wednesday, September 14, 2022, at 11:00AM
Deadline for Inquiries:	Wednesday, September 28, 2022, at 12:00PM
Qualifications Due:	Thursday, October 6, 2022, at 2:00PM Facility Services – Building 77 Front Reception Desk 501 E. Pine Knoll Drive Flagstaff, AZ 86011
Interviews with Shortlisted Firms (Optional):	Tuesday, November 8, 2022 (Tentative)
Begin Contract Period:	January 2023
Construction Start:	May 15, 2023
Substantial Completion:	October 27, 2023

DIVISION VII – GENERAL INFORMATION

DEFINITIONS. All definitions are per ABOR Policy, the Construction Agreement, and NAU's Design Guidelines and Technical Standards, unless otherwise defined within.

SOLICITATION OF STATEMENT OF QUALIFICATIONS BY FACILITY SERVICES. All solicitations are performed in accordance with University policies and procedures.

INFORMAL QUESTIONS. If you have informal questions about technical formatting regarding this Request for Qualifications or if you have informal questions about the purchasing process, please contact:

Judith Scholar Winfield Tel: (928) 523-4468

NAU will answer informal questions verbally. NAU makes no warranty of any kind as to the correctness of any verbal answers and uses this process solely to provide minor clarifications rapidly. Verbal statements or instructions shall not constitute an amendment to this RFQ. Offerors shall not rely on any verbal responses from NAU. If you have formal questions about any part of this Request for Qualifications, which could result in a material issue or a formal amendment to this RFQ, see INTERPRETATIONS AND ADDENDA below.

INTERPRETATIONS AND ADDENDA. Should an Offeror find any ambiguity, inconsistency or error in the Request for Qualifications, or should the Offeror be in doubt as to its meaning, he/she shall at once notify the Contract Administrator, in writing, who will send a written addendum by email to all Offerors who are on record with Facility Services as having requested to be on the NAU Design Professional or Contractor Listserv, as appropriate for this RFQ. . All addenda will also be posted on NAU's website <https://in.nau.edu/facility-services/bids-rfq/> Neither NAU nor its representatives will be responsible for verbal instructions or information. Interpretation or correction of the RFQ will be made only by written addendum. The University is not responsible for any other explanations or interpretations of the RFQ.

If an Offeror on the Final Shortlist fails to receive any addendum, or should fail to acknowledge receipt of same, the Offeror shall have the option of staying on the Final Shortlist under the terms of the Request for Qualifications or of withdrawing from the Final Shortlist in which event the next most qualified Offeror may be added to the Final Shortlist. The Owner is not responsible for assuring delivery of addenda to any Offeror. Failure to receive addenda or failure to acknowledge receipt shall not constitute a basis for claim, protest, or reissue of the Request for Qualifications.

This RFQ, the Qualifications of the successful Offeror(s) and any addenda issued by the Owner during the RFQ period are to be included in and will become a part of the agreement when awarded. Offeror to acknowledge receipt of addenda on the Certification form in the space provided, on the RFQ Qualifications Certification, see Attachment A.

All formal inquiries or requests for significant or material clarification or interpretation, or notification to NAU of errors or omissions relating to this RFQ must be directed, in writing via email, to:

Judith Scholar Winfield, Contracts Analyst
Planning, Design and Construction
Email address: judith.scholarwinfield@nau.edu

Such requests must be submitted on a copy of the Qualifications Inquiry Form in Attachment B of this RFQ. All formal inquiries must be submitted before the time and date set for this RFQ. Failure to submit inquiries by the deadline may result in the inquiry not being answered.

RESTRICTION ON COMMUNICATIONS. Neither Offerors nor members of their team shall communicate concerning this Project with Selection Committee members, students, and employees of NAU, except as stipulated above. **Failure to abide by this requirement may result in rejection of the Offeror's Statement of Qualifications.**

PROPRIETARY INFORMATION. If Offeror submits any information considered proprietary, it must be placed in a separate envelope and marked "Proprietary Information". If Owner concurs, this information will not be considered public information. Owner's Legal Counsel is the final authority as to the extent to which material is considered

proprietary or confidential. The Owner assumes no liability for disclosure or use of unmarked data. Unless identified, information submitted in response to this RFQ may be disclosed pursuant to the applicable Arizona Public Records Law and applicable Arizona Revised Statutes.

PROFESSIONAL LICENSE/REGISTRATION IN ARIZONA. Any individual or firm that is proposing to perform construction services must be appropriately licensed / registered in the State of Arizona at the time of submission of the Statement of Qualifications.

ARIZONA OFFICE. The successful Offeror will be required establish an office, if one does not already exist, in the State of Arizona. Compliance with this requirement can be satisfied in either of two ways.

- Before the Offeror submits a Statement of Qualifications in response to this Request, it may associate with a firm having an office within the state of Arizona, to be evidenced by a written association agreement and included with your RFQ response
- After an Offeror is selected and prior to execution of the Agreement, the Offeror will have established an office in Arizona. An office within the state is evidenced by a mailing address, telephone number, payment of utilities, registration with the Corporation Commission, and possession of appropriate business licenses.

RELATED WORK. The successful firm awarded a contract may be awarded additional work at Owner's discretion for any other modifications or renovations at the project site through the warranty period of the project, which may be authorized under a separate contract.

OFFERORS INTERESTED IN MORE THAN ONE RFQ RESPONSE. No person, firm, partnership, or corporation, shall be allowed to submit as a prime firm/team member on more than one (1) Statement of Qualifications for architectural and engineering services on the same project. A person, firm, partnership, or corporation, who has submitted as a sub-consultant to an Offeror, is disqualified from submitting a Statement of Qualifications for the project as a prime Offeror. A person, firm, partnership, or corporation shall be allowed to submit a sub-consultant Statement of Qualifications to more than one (1) Offeror.

OBLIGATIONS. This RFQ does not obligate the Owner to pay any costs incurred in the preparation and submission of Statement of Qualifications nor to enter into a Then agreement with any of the applicants.

WITHDRAWAL OF STATEMENT OF QUALIFICATIONS. Statement of Qualifications may be withdrawn either personally or by written request any time before the scheduled date and time set for receipt.

RETURN OF STATEMENT OF QUALIFICATIONS. Owner will not return any Statement of Qualifications that are submitted.

AWARD OR REJECTION OF STATEMENT OF QUALIFICATIONS. Owner has the right to cancel this Request for Qualifications, to reject any or all Statement of Qualifications, and to waive or decline to waive any irregularities in any submitted Statement of Qualifications, or to withhold the award for any reason it may determine in the best interest of Owner and also reserves the right to hold open any or all Statement of Qualifications for a period of NINETY (90) DAYS after the date of opening thereof and the right to accept a Statement of Qualifications not withdrawn before the scheduled opening date.

DELIVERY OF INSURANCE POLICIES OR CERTIFICATES AND EXECUTION OF AGREEMENT. **Within ten days of receipt of notice of the award, the successful Offeror shall deliver to NAU the required insurance policies or certificates in a form satisfactory to NAU. Failure to do so may result in rejection of the successful Offeror's Proposal and withdrawal of the award.**

Promptly after NAU receives satisfactory insurance policies or certificates NAU will deliver to the successful Offeror the form of Agreement to be executed by the successful Offeror. This form of Agreement will be the form in Attachment C or NAU's current form of agreement. The successful Offeror shall execute and return to NAU the Agreement within ten (10) days after receipt of the Agreement. Failure to return the executed copies of the Agreement may result in rejection of the successful Proposer's Proposal and withdrawal of the award.

NEGOTIATION OF THE AGREEMENT. The University may proceed to negotiate a contract for services at a compensation which the University determines to be fair and reasonable. In making this decision, the University may take into account the estimated value of the scope of services, the complexity, and the professional nature of the services to be rendered. If the University is unable to negotiate a satisfactory contract with the firm considered to be the most qualified, at a price determined to be fair and reasonable, negotiations with that firm will be formally terminated. The University may then undertake negotiations with the next most qualified firm in sequence until an agreement is reached or a determination is made to reject all proposals. The University will negotiate a fee for preconstruction/design services. Prior to any construction, a guaranteed maximum price (GMP) and construction phase fee will be negotiated. If a GMP is successfully negotiated, the preconstruction contract will be amended to incorporate the established construction phase fee and GMP into the Agreement.

When a Guaranteed Maximum Price is agreed upon by the Owner and the Design Build Team, the contract will become a contract for construction. If negotiations for a Guaranteed Maximum Price are not successful, the Owner may terminate the contract.

SITE VISIT. In advance of negotiating an agreement for preconstruction services, the highest ranked Offeror will be requested to participate in a site visit with representatives of the University to become familiar with the project site and to discuss the University's needs. The Offeror's key team members for the project, including those from each of the sub-consulting firms, shall attend the meeting. Prior to the meeting, the highest ranked Offeror will have received from the Owner available project documentation, including estimates budgets, drawing formats and other relevant information that the Owner deems appropriate.

OWNERSHIP OF DOCUMENTS. The Offeror's attention is directed to the Design-Build Agreement, concerning ownership and use of the Offeror's documents.

REGULATIONS. Should fee negotiations result in an agreement, the agreement will be subject to all the provisions of the University Procurement Code as issued by the Arizona Board of Regents, and will include all the terms, clauses, and conditions required by the University Procurement Code.

SMALL AND SMALL DISADVANTAGED BUSINESS. Owner is committed to the development of Small Business and Small Disadvantaged Business (SB & SDB) suppliers. If subcontracting is necessary, the successful Offeror will make every effort to use SB & SDB in the performance of any contract resulting from this Request for Qualifications. Include a statement within your firm's Statement of Qualifications as to whether or not any of your sub-consultants falls under into either of these categories.

POLICIES. Owner's policies are listed online at: <https://nau.edu/university-policy-library/>. Offeror to abide by Owner's policies when performing work on behalf of Owner.

PROTESTS. Owner believes that it can best maintain its reputation for treating contractors and/or suppliers in a fair, honest, and consistent manner by conducting solicitations in good faith and by granting competitors an equal opportunity to win an award. If Offeror feels that Owner has fallen short of these goals, Offeror may submit a protest pursuant to the Arizona Board of Regents procurement procedures, Section 3-809, in particular Section 3-809C. This paragraph does not include all of the provisions of the Regents procedures, but it does provide the information to initiate a protest. First, the individual or group has to be an "interested party". "An interested party" is an actual or prospective contractor submitting a Statement of Qualifications whose direct economic interest may be affected by the issuance of a solicitation, the award of a Then agreement, or by the failure to award a Then agreement. Whether an actual prospective contractor has a *direct* economic interest will depend upon the circumstances in each case. At a minimum, the interest must be substantial and must be tangibly affected by the administrative action or proposed action concerned in the case. Second, the protest must be submitted in a timely manner. In procurements requesting Statements of Qualifications, protests based upon alleged errors, irregularities or improprieties in a solicitation that are apparent before the closing date for receipt of initial Statement of Qualifications shall be filed before the closing date for receipt of initial Statement of Qualifications.

Protests concerning improprieties that do not exist in the initial solicitation, but that are subsequently incorporated into the solicitation, shall be filed by the next closing date for receipt of Statement of Qualifications following the incorporation. In cases other than those just covered, protests shall be filed no later than ten (10) days after a Then agreement is awarded in connection with the procurement action. Failure to file a protest in a timely manner shall be

deemed a waiver of all rights. Third, and finally, protests shall be in writing and shall include the following information: (1) The name, address, area code, telephone number, and fax number of the protestor; (2) The signature of the protestor or its representative; (3) Identification of the solicitation or Then agreement number; (4) Detailed statement of the legal and factual grounds of the protest including copies of relevant documents; and (5) The response or relief requested. Protests should be directed to:

Becky McGaugh
Office of the Associate Vice President of Procurement
Northern Arizona University
Building 98B
Box 4124
545 E. Pine Knoll Drive
Flagstaff AZ 86011

Tel: (928) 523-6415
Fax: (928) 523-9441
Email address: becky.mcgaugh@nau.edu

Please note that as Owner takes protests very seriously, we expect Offerors to do so as well. Frivolous protests will not result in gain for the Offeror And shall not be considered.

ATTACHMENT A – RFQ SUBMITTAL CERTIFICATION

☐ There is no officer or employee of Northern Arizona University who has, or whose relative has, a substantial interest in any agreement award subsequent to this proposal/bid.

☐ The names of any and all public officers or employees of Northern Arizona University who have, or whose relative has, a substantial interest in any Then agreement award subsequent to this proposal/bid are identified by name as part of this submittal.

The undersigned further certifies that their firm ☐ IS or ☐ IS NOT currently debarred, suspended, or proposed for debarment by any federal entity. The undersigned agrees to notify the University of any change in this status, should one occur, until such time as an award has been made under this procurement action.

The undersigned further agrees that their firm or individual warrants to the University, that they have completed an internal manpower loading plan and their firm has the personnel and resources to complete this project, should their firm or an individual be awarded this project.

In compliance with **NAU PROJECT: 09.001.231 – Skydome Roof Replacement** project and after carefully reviewing all the terms, conditions and requirements contained therein, the undersigned agrees to furnish such goods/services in accordance with the specifications/scope of work.

THE FOLLOWING ADDENDA ARE HEREBY ACKNOWLEDGED AS FOLLOWS:

ADDENDUM NUMBER: _____ DATED: _____ ADDENDUM NUMBER: _____ DATED: _____

ADDENDUM NUMBER: _____ DATED: _____ ADDENDUM NUMBER: _____ DATED: _____

FORM OF AGREEMENT. The undersigned certifies that the undersigned has read Owner's current pro forma of Agreement Between Owner and Design Professional (Construction Manager at Risk) including the contract with the construction manager at risk and general conditions, which contain provisions applicable to the design professional, all of which are attached to the RFQ. If selected as the design professional for this project, the undersigned agrees to execute this agreement, subject only to the exceptions listed in the space below. The undersigned understands that any exceptions taken to the agreement that are not accepted and/or approved by the Owner may be a basis for rejection of the undersigned's Proposal as non-responsive. The undersigned also understands that Owner may make changes in the standard form of agreement and that therefore the form of agreement presented to the successful Offeror may be different from the agreement attached to the RFQ, in which case the successful Offeror will be given the opportunity to review the changes.

List any objections to agreement here or attach a separate sheet behind this certification:

(Firm)

(Address)

(Signature required)

(Phone no.)

(Print name)

(Fax no.)

(Title)

(Fed. tax id no.)

(Date certified)

(Email Address)

ATTACHMENT B – SUBMITTAL INQUIRY FORM

(Pre-submittal Questions, General Clarifications, etc.)

PROJECT NAME: Skydome Roof Replacement

PROJECT NUMBER: 09.001.231

INQUIRY DEADLINE: Wednesday, September 28, 2022, at 12:00PM

QUESTIONS ON: ORIGINAL RFQ PACKET or ADDENDUM NO.

SECTION NUMBER: _____

WRITER: _____

FAX NO. _____ PHONE NO. _____

COMPANY: _____

COMPANY E-MAIL ADDRESS: _____

DATE: _____

QUESTIONS:

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

ATTACHMENT C – FS 113 PARTICIPATION IN BOYCOTT OF ISRAEL FORM

Legislation has been enacted to prohibit the University from contracting with firms currently engaged in a Boycott of Israel. To ensure compliance with A.R.S. §35-393 and §35-393.01 this form to be completed and returned with Bid Package

By signing this form, Bidder certifies that it is not currently engaged in and agrees, for the duration of the Contract, to not engage in a Boycott of Israel.

Name of Offeror		
Name of Contact		Title of Contact
Address 1		Address 2
City	State	Zip Code
		-
Telephone Number		E-mail address, if available
() -		() -
Print Name of Offeror's Authorized Agent		Signature of Offeror's Authorized Agent
Title of Offeror's Authorized Agent		Date
AN AUTHORIZED AGENT OF THE OFFEROR		
SHALL SIGN THE PARTICIPATION IN BOYCOTT OF ISRAEL FORM (FS113)		

ATTACHMENT D – FORM OF AGREEMENT

The Form of Agreement is currently undergoing its final drafting. The intention is to make it available as an addendum to this RFQ. Northern Arizona University reserves the right to issue the form of agreement after the qualifications deadline, if necessary.

ATTACHMENT E – SKYDOME ROOF DESIGN 2017

NORTHERN ARIZONA UNIVERSITY

WALKUP SKYDOME

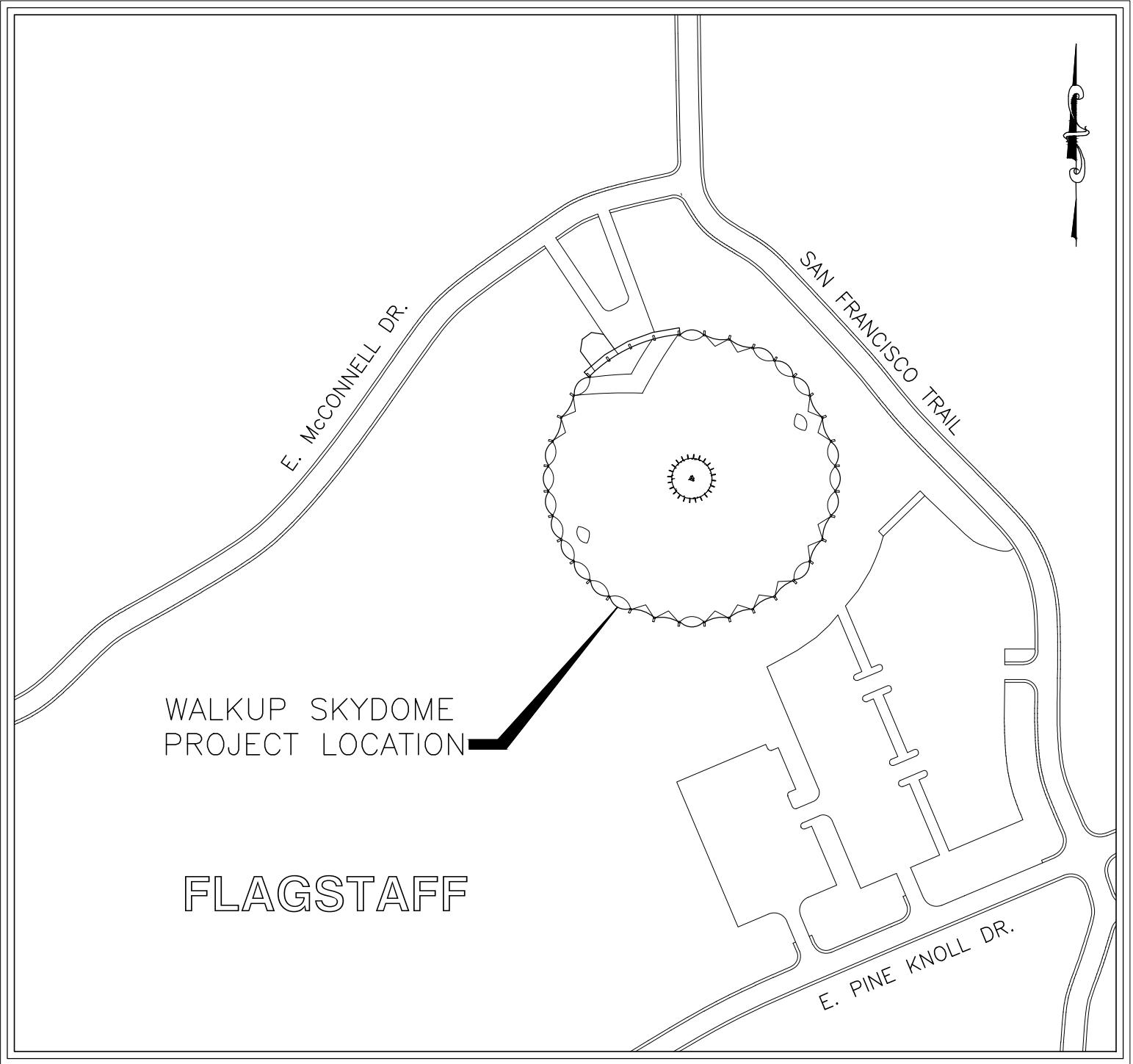
ROOF REPLACEMENT PROJECT 2017

FLAGSTAFF, AZ

APRIL, 2017

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LOCATION
N.T.S.



HQ. 38112 Second Street . Willoughby, OH 44094 W. TechnicalAssurance.com
P. 440.953.3147 TF. 866-953-3147 E. info@technicalassurance.com



Project No.
09.001.168
Sheet No.
G-001

ROOFING QUESTIONS

1. THE CONTRACTOR SHALL RESOLVE ANY AND ALL QUESTIONS REGARDING THE INTENT OF THE PROJECT, OR CONFLICTS WITH THE ROOF SYSTEM MANUFACTURER’S REQUIREMENTS, WITH THE CONSULTANT PRIOR TO SUBMITTING CONTRACTOR’S PROPOSAL.
2. ALL QUESTIONS PERTAINING TO THE BIDDING/CONTRACT DOCUMENTS FOR THIS PROJECT SHALL BE DIRECTED TO THE CONSULTANT AND NOT TO THE OWNER THROUGHOUT THE COURSE OF THE WORK.

DOCUMENT EXAMINATION

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE BIDDING DOCUMENTS TO OBTAIN ESSENTIAL KNOWLEDGE OF PROPOSED CONDITIONS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR VERIFICATION OF DESIGN INTENT AND PROPOSED CONDITIONS; NO ADDITIONAL COSTS WILL BE APPROVED FOR CONDITIONS THAT COULD REASONABLY BE DETERMINED AT THE TIME OF BIDDING.
4. THE CONTRACTOR SHALL INCLUDE, IN CONTRACTOR’S PROPOSAL AMOUNT, ANY AND ALL COSTS INCURRED IN COMPLYING WITH THE BIDDING DOCUMENTS. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, HANDLING, DISCONNECTION AND RECONNECTION OF ROOFTOP EQUIPMENT/PENETRATIONS, CRANE COSTS, ELECTRICAL WORK, MECHANICAL WORK, TEMPORARY STORAGE, ETC.

COMPLIANCE

5. THE CONTRACTOR REPRESENTS THAT THE CONTRACTOR HAS FAMILIARIZED ONESELF WITH THE LOCAL CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, SATISFIED ONESELF OF THE CONDITION OF DELIVERY, HANDLING AND STORAGE OF MATERIALS, AND ALL OTHER MATTERS THAT MAY BE INCIDENTAL TO THE WORK, BEFORE SUBMITTING CONTRACTOR’S PROPOSAL.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND COMPLYING WITH ALL ORDINANCES, CODES, AND LAWS GOVERNING BUSINESS PRACTICES AND CONSTRUCTION IN THE PROJECT LOCATION, INCLUDING THE ACQUISITION OF ALL NECESSARY PERMITS.
7. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY AND LIABILITY FOR COMPLIANCE WITH ALL STANDARDS PERTAINING TO WORK PRACTICES, HAULING, DISPOSAL, PROTECTION OF WORKERS, VISITORS TO THE SITE, AND PERSONS OCCUPYING AREAS ADJACENT TO THE SITE. THE CONTRACTOR SHALL HOLD THE OWNER AND OWNER’S REPRESENTATIVES HARMLESS FOR FAILURE TO COMPLY WITH ANY APPLICABLE STANDARD ON THE PART OF THE CONTRACTOR, THE CONTRACTOR’S EMPLOYEES OR THE CONTRACTOR’S SUBCONTRACTORS.
8. OSHA AND THE OWNER’S SAFETY RULES AND REGULATIONS MUST BE STRICTLY ENFORCED AND ADHERED TO BY THE CONTRACTOR, AND ANY CONTRACTOR SUB-PARTY AT ALL TIMES. NO DEVIANCE FROM KNOWN SAFETY PERFORMANCE STANDARDS AND DIRECTIVES WILL BE PERMITTED.
9. THE CONTRACTOR SHALL CONSIDER THE SAFE IMPLEMENTATION OF DAILY WORK ACTIVITY PARAMOUNT, AND AT NO TIME SHALL THE SAFETY OF THE WORKER BE COMPROMISED TO ACCOMMODATE OTHER CONSTRUCTION CONSTRAINTS.
10. UPON REQUEST, THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT A SITE SPECIFIC SAFETY PLAN FOR THIS PROJECT. THE PLAN SHALL OUTLINE THE ACTIVITIES, THE HAZARDS ASSOCIATED WITH THE ACTIVITIES AND THE CONTROLS TO BE USED TO ADDRESS THE HAZARD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS.
11. EXCEPT WHERE SPECIFICATIONS INDICATE EXACT STANDARDS OF WORKMANSHIP, THE CONTRACTOR SHALL COMPLY WITH RECOGNIZED INDUSTRY STANDARDS AND MANUFACTURER’S REQUIREMENTS.
12. THE CONTRACTOR SHALL STAFF THE PROJECT WITH PERSONNEL QUALIFIED TO PRODUCE WORKMANSHIP OF SPECIFIED QUALITY AND TO MEET THE ESTABLISHED SCHEDULE. CONTRACTOR PERSONNEL AT THE SITE SHALL BE EXPECTED TO COMMUNICATE WELL WITH THE OWNER AND CONSULTANT AND MEET ALL COORDINATION REQUIREMENTS.

COORDINATION

13. THE CONTRACTOR IS EXPECTED TO HAVE A COPY OF THE BIDDING/CONTRACT DOCUMENTS, ADDENDA, SUBMITTALS, SHOP DRAWINGS AND DATA SHEETS ON SITE AT ALL TIMES FOR REVIEW BY THE OWNER AND CONSULTANT.
14. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE OWNER AND THE CONSULTANT.
15. THE CONTRACTOR SHALL COORDINATE AND COMMUNICATE THE PROJECT SCHEDULE FOR CONSTRUCTION ACTIVITIES WITH THE OWNER, CONSULTANT, SUB-CONTRACTOR(S) AND ALL OTHER TRADES.
16. THE CONTRACTOR’S SITE REPRESENTATIVE SHALL DISCUSS AND DOCUMENT DAILY THE PROGRESS OF THE PROJECT AND PROVIDE WEEKLY REPORTS TO OWNER AND THE CONSULTANT.
17. REGARDLESS OF CIRCUMSTANCES, THE CONTRACTOR SHALL NOTIFY THE CONSULTANT OF ANY AND ALL CHANGES IN THE SCOPE OF WORK DUE TO UNFORESEEN CONDITIONS WITHIN 24-HOURS. ANY ADDITIONAL COSTS TO THE OWNER SHALL BE DISCLOSED AND SUBMITTED IN WRITING FOR APPROVAL BEFORE ANY WORK PROCEEDS. ANY ADDITIONAL COSTS MUST BE APPROVED BY THE OWNER AND CONSULTANT.
18. SUPPORT DOCUMENTATION SHALL BE PROVIDED FOR ANY AND ALL CHANGES IN THE WORK. DOCUMENTATION SHALL INCLUDE PHOTOGRAPHS PRIOR TO AND AFTER CORRECTIVE ACTION AS WELL AS AS-BUILT DRAWINGS REFERENCING THE LOCATION OF THE WORK PERFORMED AND THE QUANTITY OF WORK COMPLETED.

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

19. IF PERMISSIBLE BY THE OWNER, THE CONTRACTOR IS ENCOURAGED TO PHOTOGRAPH OR VIDEOTAPE EXISTING CONDITIONS OF ADJACENT CONSTRUCTION AND SITE IMPROVEMENTS THAT MIGHT BE CONSTRUED AS DAMAGE CAUSED BY REROOF OPERATIONS. IN THE EVENT THAT PHOTOGRAPHY IS NOT ALLOWED, THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION OF SAID CONDITIONS. PHOTOGRAPHS, VIDEOTAPE AND/OR WRITTEN DOCUMENTATION SHALL BE SUBMITTED TO THE OWNER AND CONSULTANT PRIOR TO THE START OF WORK.

GENERAL NOTES

20. IF AVAILABLE AT THE SITE, THE OWNER WILL PROVIDE ACCESS TO POWER AND WATER AS NECESSARY FOR THE PERFORMANCE OF THE WORK. THE CONTRACTOR MAY DEEM NECESSARY AND ELECT TO PROVIDE GENERATORS FOR ELECTRIC POWER; THE CONTRACTOR SHALL PROVIDE ALL CONVEYANCE FOR POWER AND WATER FOR THE DURATION OF THE PROJECT.
21. THE CONTRACTOR SHALL PROVIDE PORTABLE TOILET FACILITIES FOR USE BY CONTRACTOR’S EMPLOYEES DURING THE COURSE OF THE WORK. TOILETS SHALL BE PLACED ON-SITE IN AN AREA DESIGNATED BY THE OWNER; TOILETS SHALL BE PROPERLY MAINTAINED THROUGHOUT CONSTRUCTION AND REMOVED AT THE END OF THE PROJECT.
22. THE CONTRACTOR SHALL COMPLY WITH THE OWNER’S VEHICLE SITE POLICIES AND SHALL RESTRICT VEHICLE PARKING TO AREAS DESIGNATED BY THE OWNER. THE CONTRACTOR SHALL RESTRICT CONTRACTOR’S USE OF THE SITE, FOR EQUIPMENT SET-UP AND MATERIAL STORAGE TO AREAS DESIGNATED BY THE OWNER.
23. THE CONTRACTOR SHALL NOT BE PERMITTED TO RESTRICT THE FLOW OF TRAFFIC AROUND THE PROJECT SITE WITHOUT PRIOR WRITTEN AUTHORIZATION. THE CONTRACTOR SHALL MAINTAIN A VEHICLE ACCESS LANE AROUND PROJECT STAGING AND SET-UP AT ALL TIMES, AND PROVIDE PROTECTIVE TRAFFIC WAY FOR MATERIAL HANDLING AND EMPLOYEE/VEHICLE TRAFFIC.
24. THE CONTRACTOR SHALL REMOVE DEBRIS FROM THE ROOFTOP AS IT ACCUMULATES AND SHALL TAKE CARE TO PREVENT IT FROM ENTERING STORM SEWERS, ETC. ALL REMOVAL SHALL BE IN ACCORDANCE WITH SITE REQUIREMENTS, AND APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. DEBRIS SHALL BE REMOVED FROM THE SITE DAILY.
25. ALL DEBRIS REMOVED FROM THE PROJECT SITE SHALL BE DISPOSED OF AT A LEGALLY APPROVED DUMPING SITE FOR THE SPECIFIED TYPE OF MATERIAL. THE CONTRACTOR SHALL PROVIDE AN APPROPRIATE VEHICLE, RECEPACLE OR SERVICE FOR CONVEYANCE AND BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH DISPOSAL.
26. ALL MATERIALS AND EQUIPMENT DELIVERED TO THE PROJECT SITE SHALL BE PLACED IN A LOCATION APPROVED FOR USE BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STORAGE AND SECURITY OF ALL MATERIALS AND EQUIPMENT.
27. ALL MATERIALS DELIVERED TO THE SITE SHALL BE STORED A MINIMUM OF 4-INCHES ABOVE GRADE OR ABOVE THE ROOF SURFACE WITH PROTECTIVE TARPS.
28. CONTRACTOR SHALL PROVIDE CLEAN PROTECTIVE TARPS TO PROTECT BUILDING FINISHES AT ACCESS POINTS, AT SET-UP/STAGING AREAS AND AT ALL MATERIALS LOADING/HANDLING LOCATIONS. TARPS SHALL BE SECURED AGAINST WIND DAMAGE OR DISPLACEMENT THROUGHOUT THE DURATION OF THE PROJECT.
29. PROTECTIVE TARPS SHALL BE MAINTAINED IN FUNCTIONAL CONDITION WITH A CLEAN VISUAL APPEARANCE WHICH IS ACCEPTABLE TO OWNER. REPLACE TARPS THAT BECOME WORN, DAMAGED OR WHEN REQUESTED BY THE OWNER OR CONSULTANT.
30. CONTRACTOR SHALL LIMIT ACCESS TO BUILDING INTERIOR TO DESIGNATED AREAS AS APPROVED BY OWNER FOR INTERIOR PROTECTION AND COORDINATION ACTIVITIES.

ROOF DEMOLITION

31. THE CONTRACTOR SHALL NOT PERFORM WORK IN THE PRESENCE OF RAIN, SNOW OR OTHER VISIBLE PRECIPITATION.
32. PROVIDE INTERIOR PROTECTION, AS REQUIRED, UNDER THE AREA(S) OF WORK TO PREVENT THE ENTRY OF DUST AND DEBRIS INTO THE INTERIOR SPACE.
33. REMOVE PORTIONS OF THE ROOF AREA IDENTIFIED IN THE DRAWINGS AND SPECIFICATIONS. REMOVE ALL RELATED SHEET METAL FLASHINGS, TRIMS AND COMPONENTS AS PART OF THE WORK.
34. INSPECT EXISTING DECK AND SUBSTRATE CONDITIONS FOR DAMAGE AND/OR DETERIORATION. COMPLETE REPAIRS UPON APPROVAL BY THE OWNER AND THE CONSULTANT.
35. REMOVE ALL ABANDONED CONDUIT, CABLING, EQUIPMENT, ETC. AS IDENTIFIED BY THE OWNER AND/OR AS OUTLINED IN THE DRAWINGS AND SPECIFICATIONS. PATCH ALL OPENINGS IN THE DECK OR SUBSTRATE.
36. WHERE IDENTIFIED, COMPLETE TESTING REQUIREMENTS OF THE EXISTING DECK. SUBMIT WRITTEN RESULTS OF TESTING TO THE CONSULTANT.
37. CLEAN DECK SURFACE FREE OF ALL DIRT, DEBRIS AND PROTRUSION THAT MAY AFFECT THE INSTALLATION OF THE ROOF SYSTEM.

ROOF INSTALLATION

38. DURING THE COURSE OF THE PROJECT, THE ROOF SYSTEM MANUFACTURER SHALL PROVIDE QUALIFIED PERSONNEL TO OBSERVE THE WORK IN PROGRESS. INSPECTION INTERVALS SHALL BE AS OUTLINED IN THE CONTRACT DOCUMENTS AND A WRITTEN REPORT SHALL BE FURNISHED BY THE MANUFACTURER AT EACH INSPECTION INTERVAL.
39. THE CONTRACTOR SHALL NOT INSTALL MATERIALS MARKED "KEEP FROM FREEZING" WHEN TEMPERATURES ARE FORECASTED TO FALL BELOW 40 DEG. F.
40. INSTALL NEW PERIMETER WOOD NAILERS, BLOCKING AND PLYWOOD WHERE SHOWN OR INDICATED IN THE DRAWINGS AND SPECIFICATIONS. ATTACH NEW WOOD COMPONENTS SECURELY TO THE SUBSTRATE AND IN ACCORDANCE WITH PUBLISHED REQUIREMENTS.
41. RAISE ALL ROOFTOP EQUIPMENT AND PENETRATIONS TO AN 8-INCH MINIMUM HEIGHT ABOVE THE FINISHED ROOF SURFACE. EXTEND ELECTRICAL WIRING, DUCTWORK, PIPING AND LINESETS TO ACCOMMODATE THE WORK.
42. VERIFY THAT THE SUBSTRATE HAS BEEN CLEANED AND IS ACCEPTABLE TO RECEIVE THE SPECIFIED INSULATION. PREPARE THE SUBSTRATE, IF REQUIRED, IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
43. INSTALL SPECIFIED INSULATION IN THE AREA OF WORK IN ACCORDANCE WITH WIND UPLIFT REQUIREMENTS AND MANUFACTURER’S PUBLISHED INSTRUCTIONS. AFFIXMENT OF THE INSULATION SHALL INCLUDE PRESCRIPTIVE ENHANCEMENTS AT PERIMETERS AND CORNERS OF THE ROOF AREA.
44. INSTALL TAPERED INSULATION DRAIN SUMPS ADJACENT TO SCUPPERS. INSTALL TAPERED INSULATION CRICKETS ON THE UPSLOPE SIDE OF ALL ROOF CURBS TO ENHANCE DRAINAGE.
45. INSTALL SPECIFIED ROOF SYSTEM IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE MANUFACTURER’S PUBLISHED INSTRUCTIONS. SECURELY ATTACH FLASHING TO THEIR SUBSTRATE(S) AS INDICATED ON DRAWINGS.

46. INSTALL WALKWAY PADS, AS SPECIFIED, AT TOP AND BOTTOM OF ROOF ACCESS MANLADDERS, AROUND SERVICEABLE ROOFTOP EQUIPMENT, BENEATH SUPPORTS AND SET-ON COMPONENTS. WALKWAYS PADS ARE CONSIDERED PART OF THE BASE BID.
47. INSTALL SHEET METAL COMPONENTS AS INDICATED IN THE SPECIFICATIONS AND ON THE DRAWINGS. SHEET METAL COMPONENTS MAY INCLUDE, BUT ARE NOT LIMITED TO: FASCIA, GRAVEL STOPS, SCUPPERS, DRIP EDGES, BASE FLASHINGS, RAIN COLLARS, COUNTERFLASHINGS AND CLOSURES. ALL SHEET METAL COMPONENTS SHALL BE SECURED ATTACHED TO THE SUBSTRATE TO MEET SPECIFIED WIND UPLIFT AND ATTACHMENT REQUIREMENTS.
48. THE ROOFING CONTRACTOR SHALL PERFORM A FINAL CLEANING OF THE PROJECT PRIOR TO THE CONSULTANT’S FINAL REVIEW. THE FINAL CLEANING SHALL INCLUDE THE ROOF SURFACE, DRAINAGE SYSTEM, AND FINISHED SURFACES AFFECTED BY THE WORK.

FINAL REVIEW

49. WHEN IN THE OPINION OF THE CONTRACTOR, THE PROJECT IS COMPLETE IN ALL RESPECTS, THE CONTRACTOR SHALL SUBMIT WRITTEN NOTIFICATION TO THE CONSULTANT AND REQUEST A FINAL REVIEW. ON RECEIPT OF THE REQUEST, A FINAL REVIEW WILL BE SCHEDULED WITH THE OWNER, CONTRACTOR, MANUFACTURER AND CONSULTANT.
50. IF THE WORK IS FOUND TO BE COMPLETE, THE CONTRACTOR IS EXPECTED TO DEMOBILIZE FROM THE PROJECT AND REMOVE ALL MATERIALS, EQUIPMENT AND DEBRIS AT THEIR EARLIEST CONVENIENCE. IF THE WORK IS FOUND TO BE INCOMPLETE, THE CONTRACTOR IS EXPECTED TO COMPLETE THE WORK AND MAY BE SUBJECT TO COSTS INCURRED BY BOTH THE OWNER AND THE CONSULTANT.
51. THE CONTRACTOR WILL BE RESPONSIBLE FOR RESTORING THE SITE AND GROUNDS BACK TO THEIR ORIGINAL PRE-CONSTRUCTION CONDITION. THE CONTRACTOR SHALL PROMPTLY REPAIR DAMAGE CAUSED BY CONSTRUCTION AS THE RESULT OF STAGING, STORAGE, DEMOLITION AND INSTALLATION WORK AT NO COST TO THE OWNER.

PROJECT CLOSE-OUT SUBMITTALS AND WARRANTIES

52. UPON WORK COMPLETION AND ACCEPTANCE OF THE PROJECT BY THE OWNER AND CONSULTANT, THE CONTRACTOR SHALL PROVIDE ALL SPECIFIED CLOSE-OUT DOCUMENTATION AND WARRANTIES.
53. THE PROJECT WILL NOT BE CONSIDERED COMPLETE, AND RETAINAGE MONIES WILL NOT BE RELEASED, UNTIL ALL REQUIRED CLOSE-OUT DOCUMENTATION HAS BEEN RECEIVED AND ACCEPTED BY THE OWNER AND CONSULTANT.

SPECIFIC ROOF SYSTEM SUBSTRATE PER ROOF AREA – WALKUP SKYDOME ROOF REPLACEMENT – WOOD DECK SUBSTRATE

54. REMOVE EXISTING HYPALON ROOF MEMBRANE.
55. INSTALL NEW POLYISOCYANURATE ROOF INSULATION OVER EXISTING 1/4” GYPSUM COVER BOARD WITH MECHANICAL FASTENERS TO MEET FACTORY MUTUAL (FM) 1-120.
56. REMOVE EXISTING METAL FLASHING.
57. FURNISH AND INSTALL NEW 1/4” GYPSUM COVER BOARD IN ADHESIVE.
58. FURNISH AND INSTALL NEW FIBERTITE 50XT FLEECE BACK ROOF MEMBRANE IN ADHESIVE.
59. FURNISH AND INSTALL NEW METAL ROOFING AND SIDING ON BRACES AT UPPER ROOF AREA.
60. FURNISH AND INSTALL MEMBRANE CLAD METAL SCUPPERS AT UPPER ROOF AREA.
61. FURNISH AND INSTALL NEW WOOD BLOCKING AND SHEET METAL FLASHINGS AS REQUIRED BY CONTRACT DOCUMENTS.
62. FURNISH AND INSTALL NEW SAFETY RAILING AROUND SKYLIGHT AS SHOWN IN CONTRACT DOCUMENTS.
63. COORDINATE REMOVAL OF LIGHTNING PROTECTION EQUIPMENT WITH OWNER.
64. FURNISH AND INSTALL NEW SPRING LOADED LIGHTNING PROTECTION SYSTEM. SYSTEM MUST BE INSTALLED BY CERTIFIED CONTRACTOR. (ALTERNATE #1)
65. FURNISH AND INSTALL NEW TRAFFIC PADS WHERE SHOWN ON DRAWINGS.

FILE NAME: G-002.DWG 4-4-17

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ROOF REPLACEMENT PROJECT 2017
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GENERAL NOTES



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J.K.K.

Checked By:
G.A.

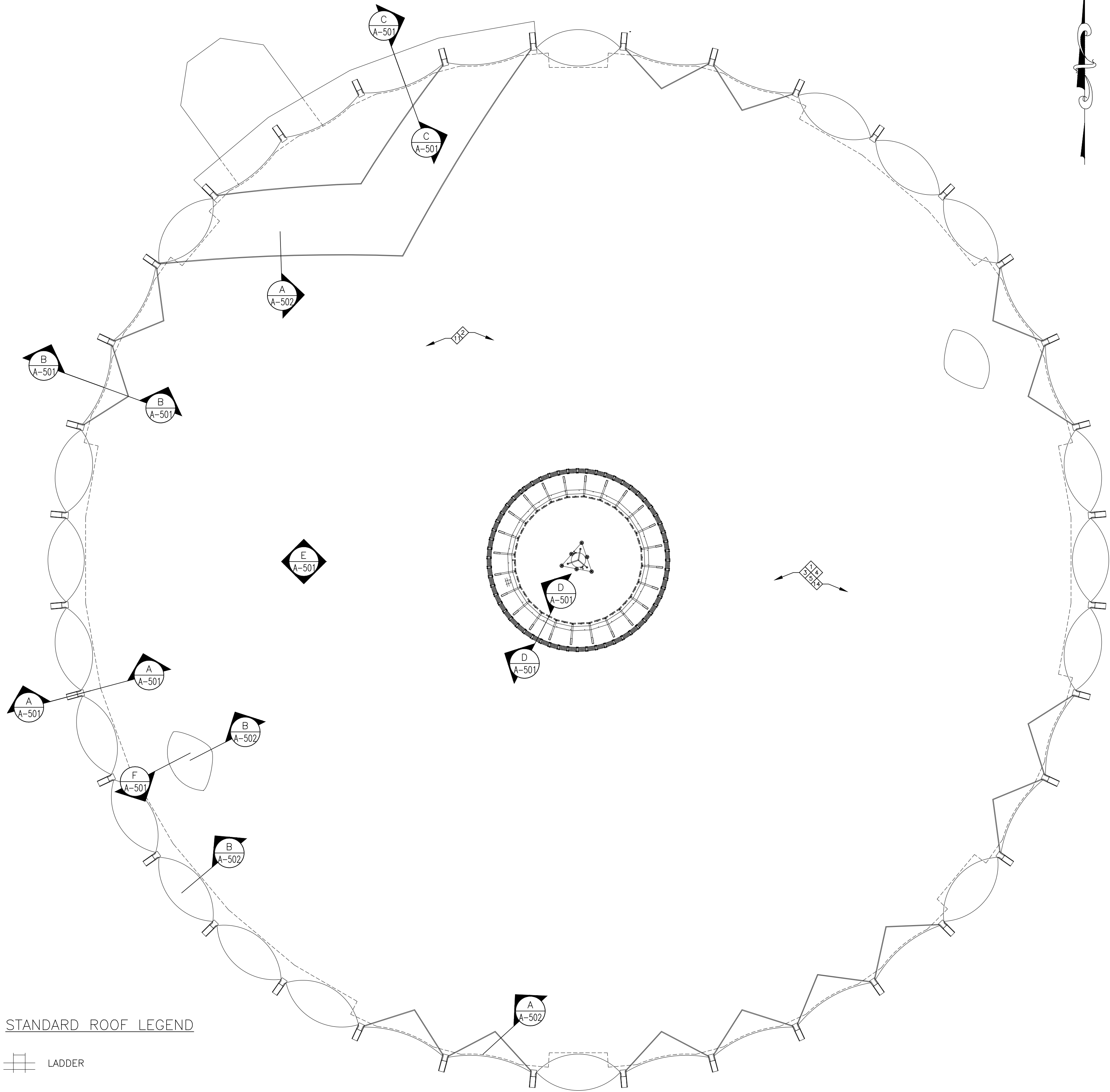
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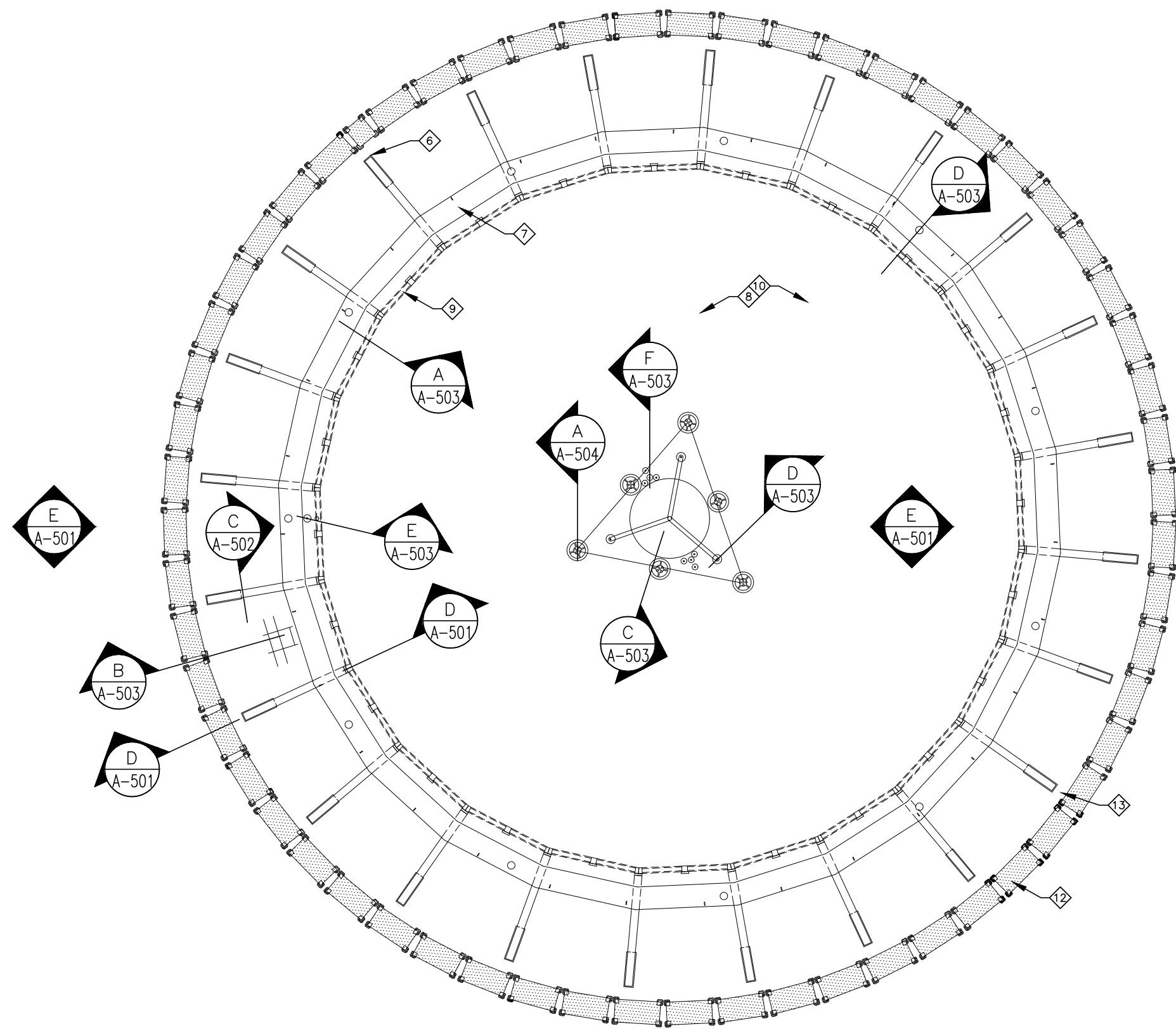
G-002



STANDARD ROOF LEGEND

- LADDER
- PIPE PENETRATION
- SCUPPER
- SOIL STACK
- NEW WALKWAY PAD
- NEW SAFETY RAILING

A
A-101 WALK UP SKYDOME ROOF PLAN
SCALE: 1/32" = 1'-0"
0 8 16 24 32 48 64
SCALE: 1/32" = 1'-0"



B
A-101 ENLARGED TOP SKYLIGHT STRUCTURE ROOF PLAN
SCALE: 3/32" = 1'-0"
0 2 4 8 12 16 24
SCALE: 3/32" = 1'-0"

KEYED NOTES:

- COORDINATE ALL REQUIRED ELECTRICAL AND MECHANICAL DISCONNECTS WITH THE OWNER PRIOR TO THE START OF WORK. REMOVE EXISTING CSPE ROOF MEMBRANE, FLASHINGS, PERIMETER SHEET METAL, AND PENETRATION FLASHING SHEET METAL. INSPECT EXISTING GYPSUM BOARD FOR ANY DAMAGE AND REPORT CONDITIONS TO CONSULTANT.
- COORDINATE REMOVAL OF LIGHTNING ROD PROTECTION SYSTEM WITH OWNER AND UNDERWRITERS LABORATORIES (UL) CERTIFIED CONTRACTOR. PROVIDE TEMPORARY LIGHTNING PROTECTION AS REQUIRED.
- MECHANICALLY ATTACH EXISTING GYPSUM BOARD AND POLYISOCYANURATE ROOF INSULATION TO WOOD DECK TO MEET FACTORY MUTUAL (FM) 1-120 WIND UPLIFT REQUIREMENTS.
- INSTALL NEW 1/4-INCH GYPSUM BOARD OVER EXISTING INSTALLED IN FOAM ADHESIVE TO MEET FM 1-120 REQUIREMENTS.
- FULLY ADHERE NEW .050" KEE ROOF MEMBRANE OVER GYPSUM COVER BOARD.
- INSTALL NEW SELF-ADHERED UNDERLAYMENT ON UPPER STRUCTURAL BRACES. INSTALL METAL WALL PANELS ON BRACES WITH METAL COPING CAP AS SPECIFIED.
- INSTALL NEW SELF-ADHERED UNDERLAYMENT AND STANDING SEAM METAL ROOF PANELS ON MANSARD ROOF AREAS OF UPPER ROOF.
- FABRICATE AND INSTALL MEMBRANE COATED METAL FLASHINGS AS SHOWN IN DETAILS.
- FABRICATE AND INSTALL MEMBRANE COATED METAL SCUPPERS AT BASE OF UPPER ROOF AREA. FLASH SCUPPERS IN INTERIOR OF BUILDING WITH PMMA FLASHING SYSTEM.
- PROVIDE AND INSTALL NEW MEMBRANE AND SHEET METAL FLASHINGS AT ALL ROOF PENETRATIONS.
- NEW LIGHTNING PROTECTION SYSTEM TO BE DESIGNED AND INSTALLED BY A UL CERTIFIED CONTRACTOR. AIR TERMINALS SHALL BE SPRING LOADED.
- PROVIDE AND INSTALL NEW TRAFFIC PAD AROUND PERIMETER OF UPPER ROOF AS SHOWN ON DRAWINGS. PROVIDE TRAFFIC PADS AT BASE AND TOP OF LADDER
- INSTALL TRAFFIC PADS UNDER SATELLITE DISH. COORDINATE WITH OWNER ALL SATELLITE DISCONNECTS PRIOR TO START OF WORK.
- PROVIDE CONTRACTOR'S AND MANUFACTURER'S WARRANTY

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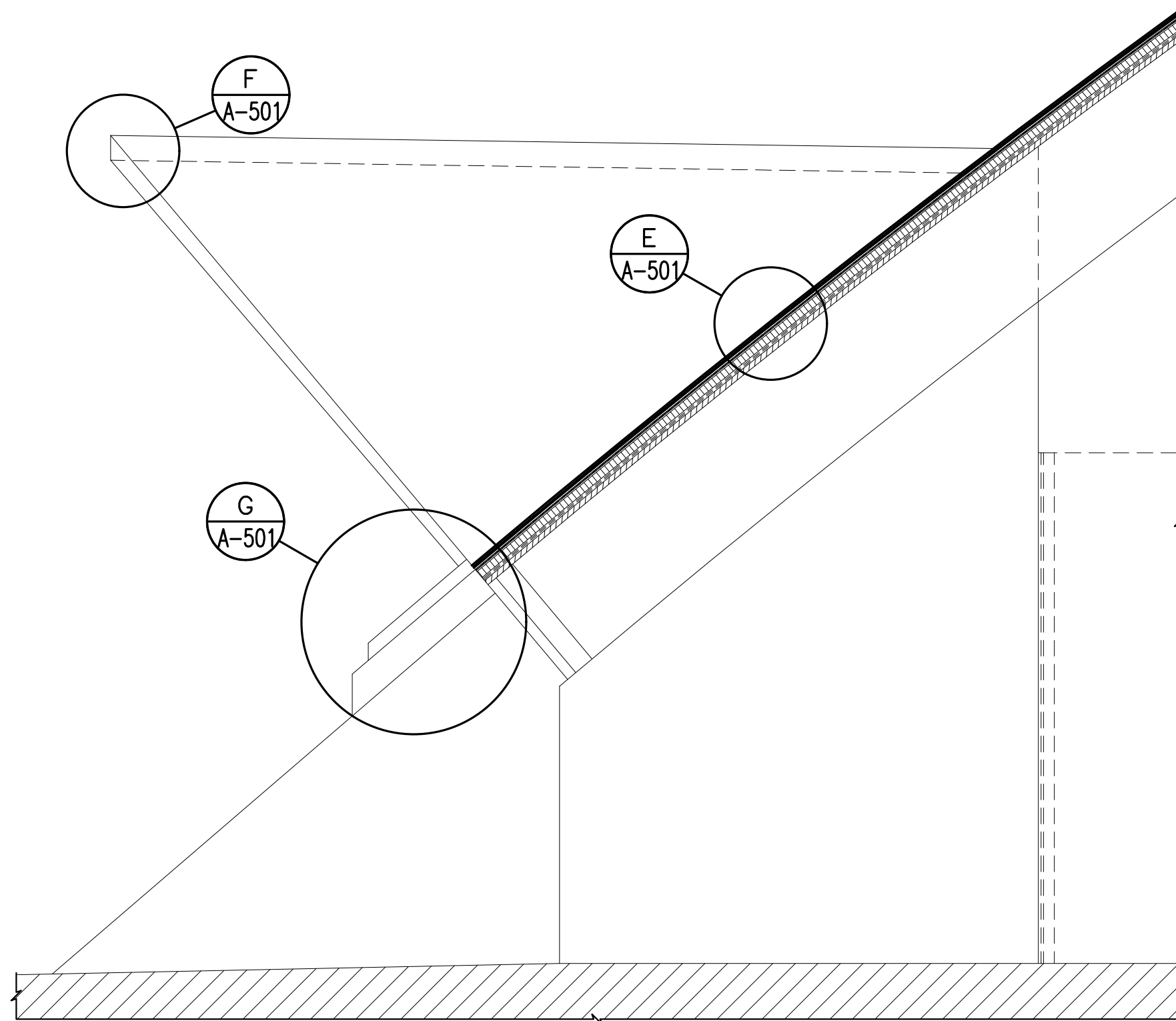
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WALKUP SKYDOME
ROOF REPLACEMENT PROJECT 2017
FLAGSTAFF, AZ
OVERALL ROOF PLAN AND
ENLARGED TOP SKYLIGHT STRUCTURE ROOF PLAN**

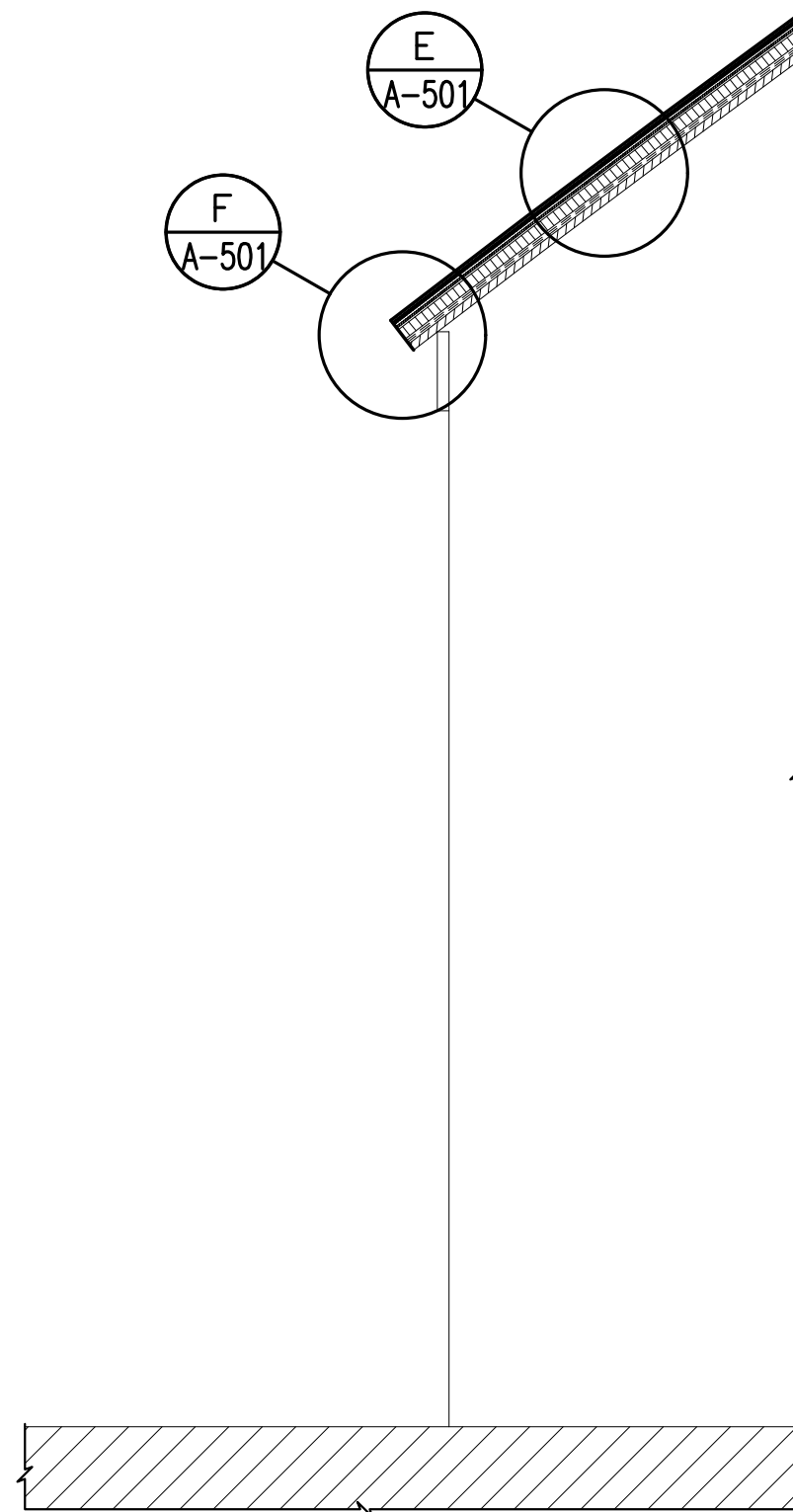


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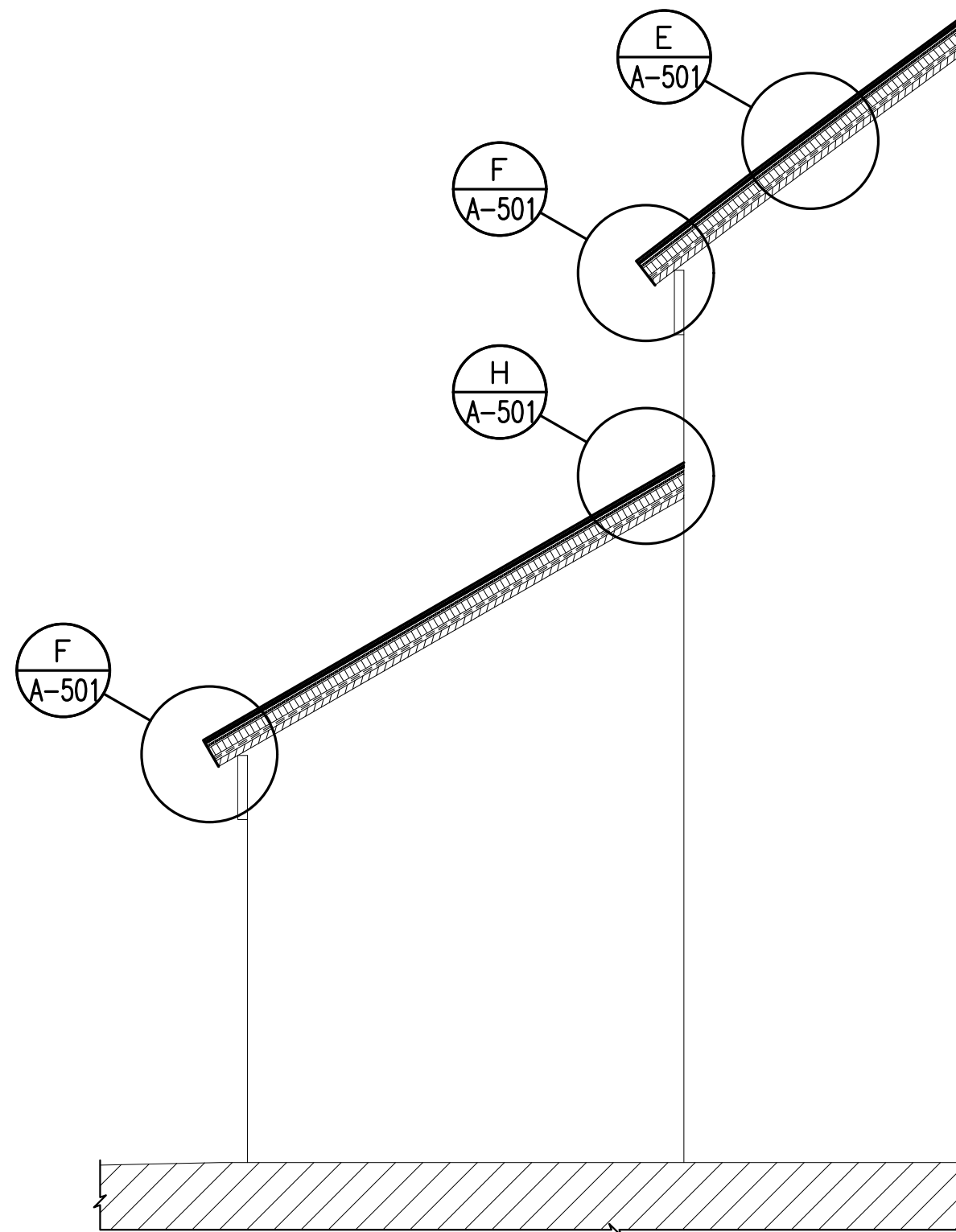
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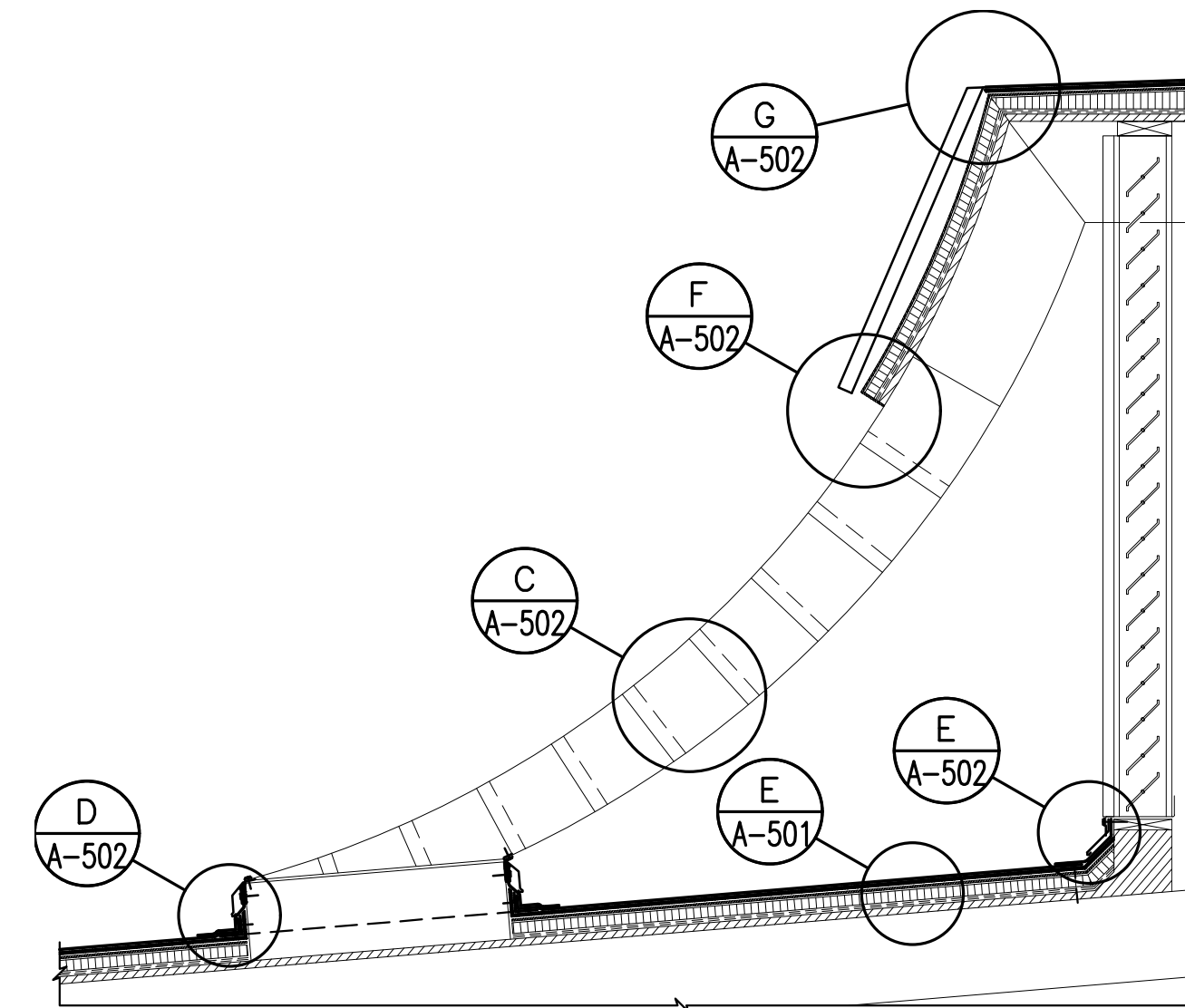
A ENTRANCE AND EYEBROW ROOF
DETAIL CROSS SECTION
A-501 N.T.S.



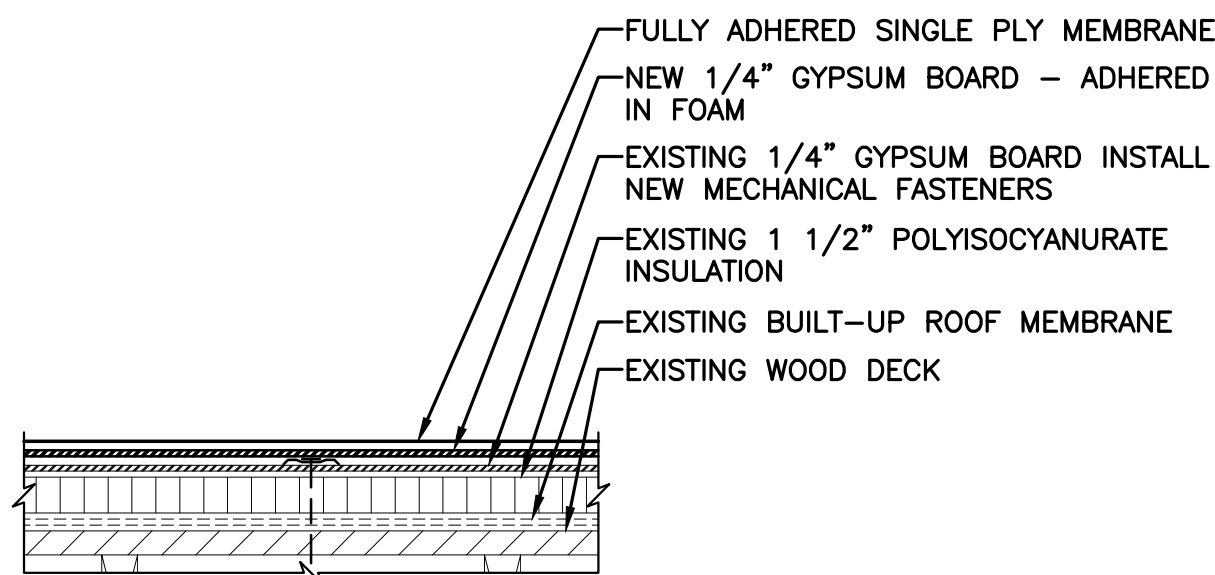
B DETAIL CROSS SECTION
A-501 N.T.S.



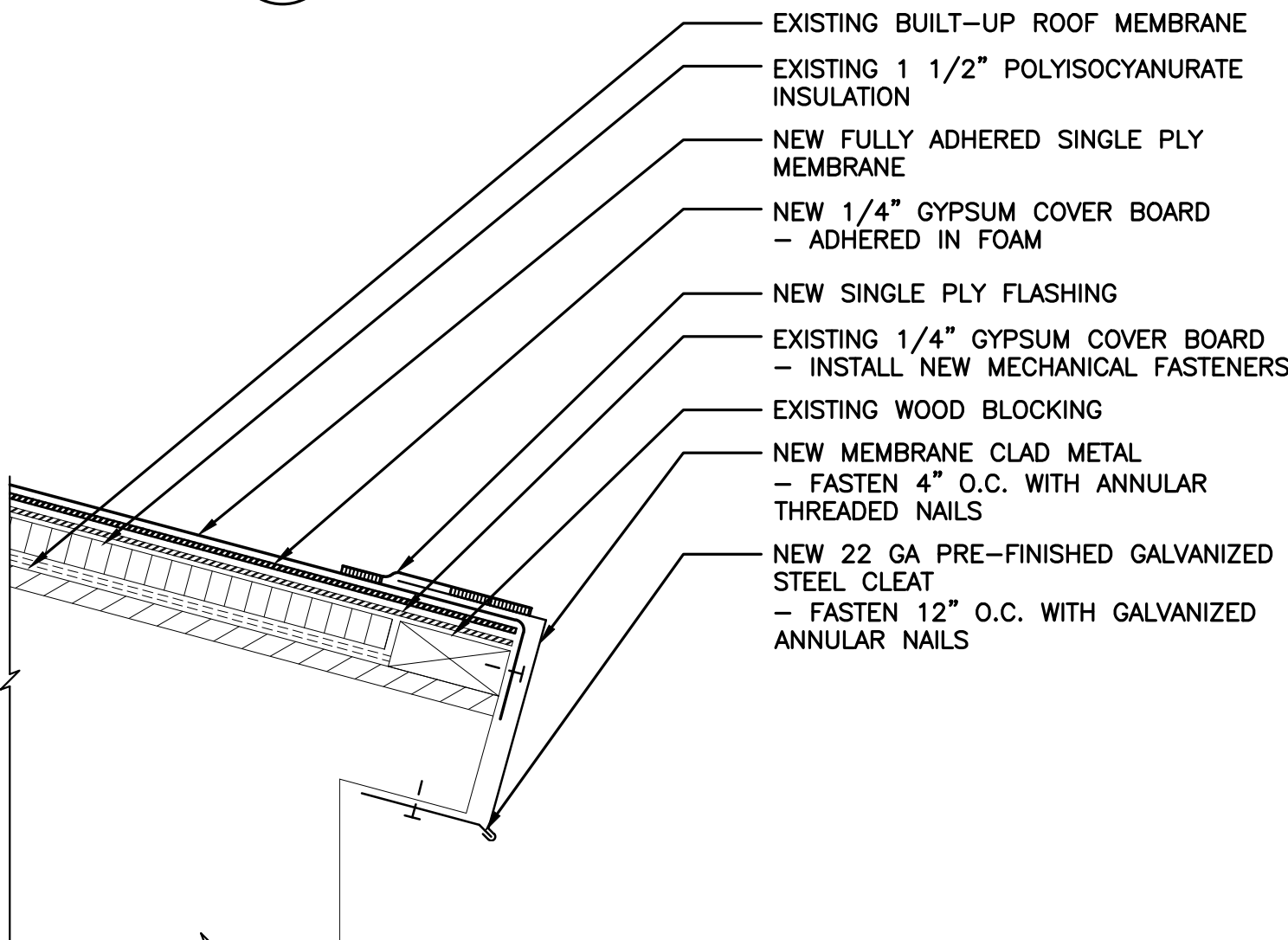
C DETAIL CROSS SECTION
A-501 N.T.S.



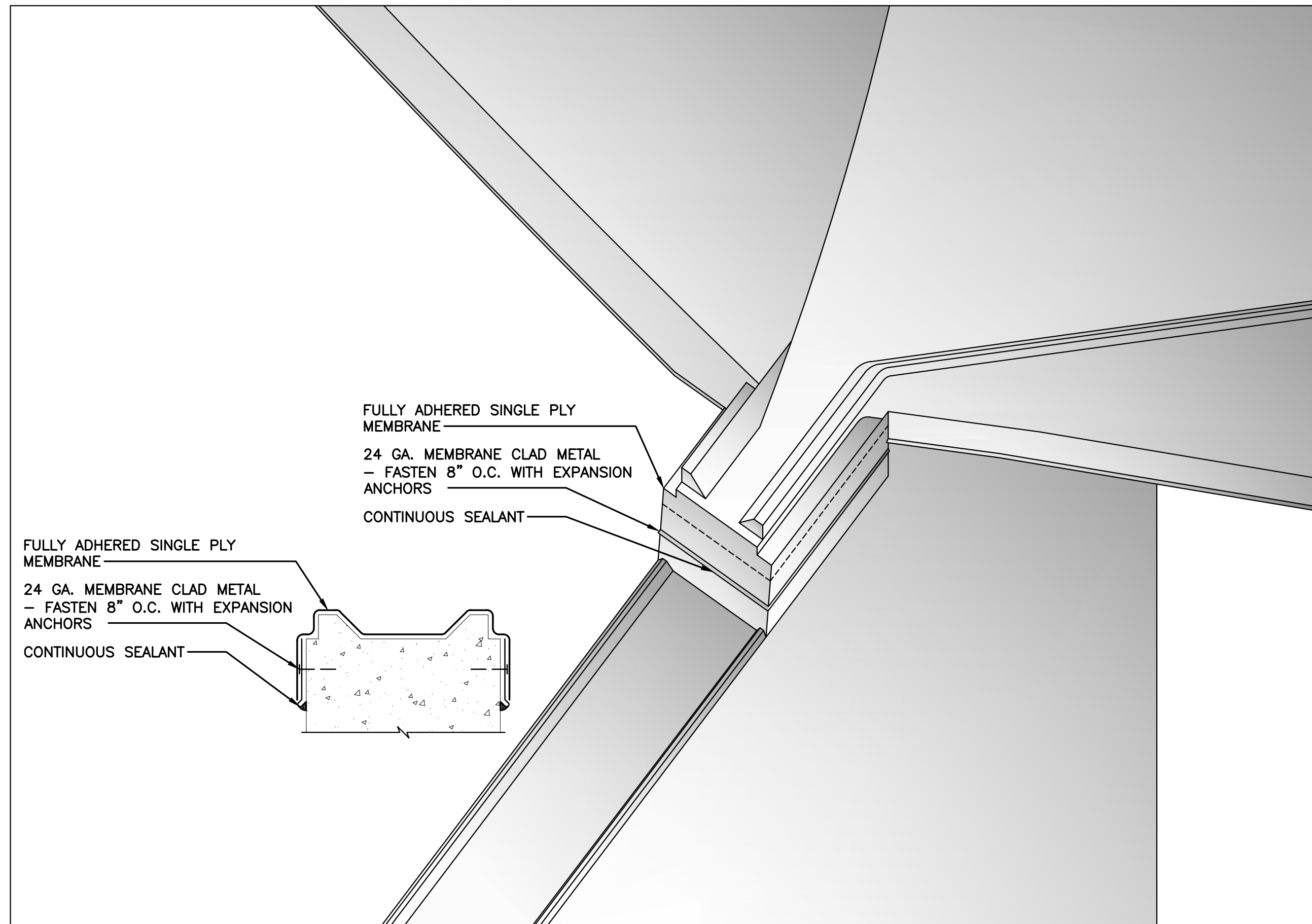
D TOP SKYLIGHT STRUCTURE
DETAIL CROSS SECTION
A-501 N.T.S.



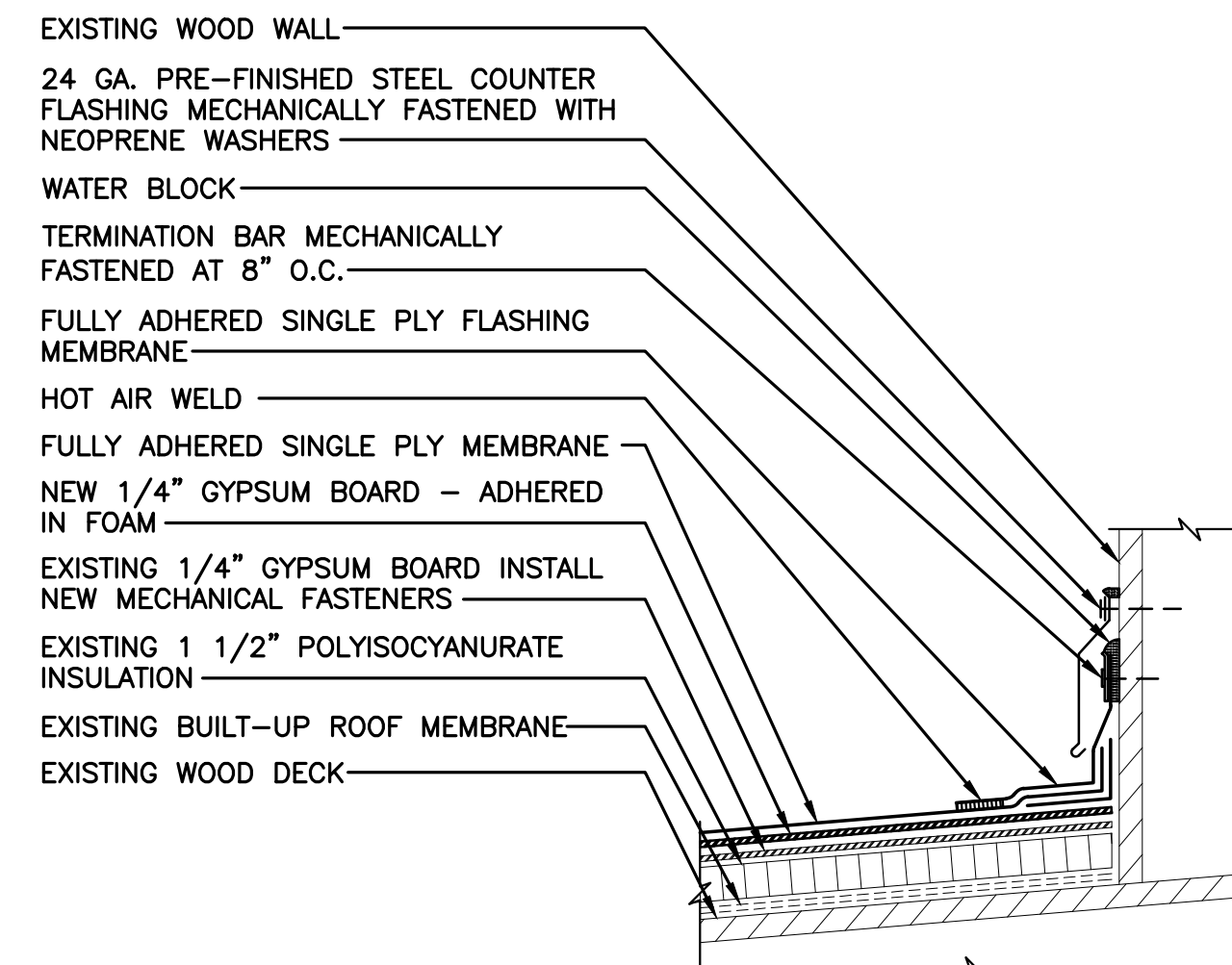
E ROOF SYSTEM DETAIL
A-501 N.T.S.



F LOW EAVE DETAIL
A-501 N.T.S.



G TYPICAL CONCRETE COLUMN DRAIN DISCHARGE DETAIL
A-501 N.T.S.



H BASE FLASHING AT WOOD WALL DETAIL
A-501 N.T.S.

EXISTING ROOF CONSTRUCTION
HYPALON ROOF MEMBRANE
1/4" GYPSUM BOARD
1 1/2" FOIL-FACED POLYISOCYANURATE INSULATION
BUILT-UP ROOF MEMBRANE WITH ALUMINUM ROOF COATING
WOOD DECK WITH KRAFT PAPER FACER.

PROPOSED ROOF CONSTRUCTION
KEE ELVALOY SINGLE PLY ROOF MEMBRANE ADHERED WITH ADHESIVE
1/4" GYPSUM BOARD INSTALLED IN LOW-RISE FOAM
1/4" GYPSUM BOARD MECHANICALLY ATTACHED
1 1/2" FOIL-FACED POLYISOCYANURATE INSULATION MECHANICALLY ATTACHED.
BUILT-UP ROOF MEMBRANE WITH ALUMINUM COATING
WOOD DECK WITH KRAFT PAPER FACER

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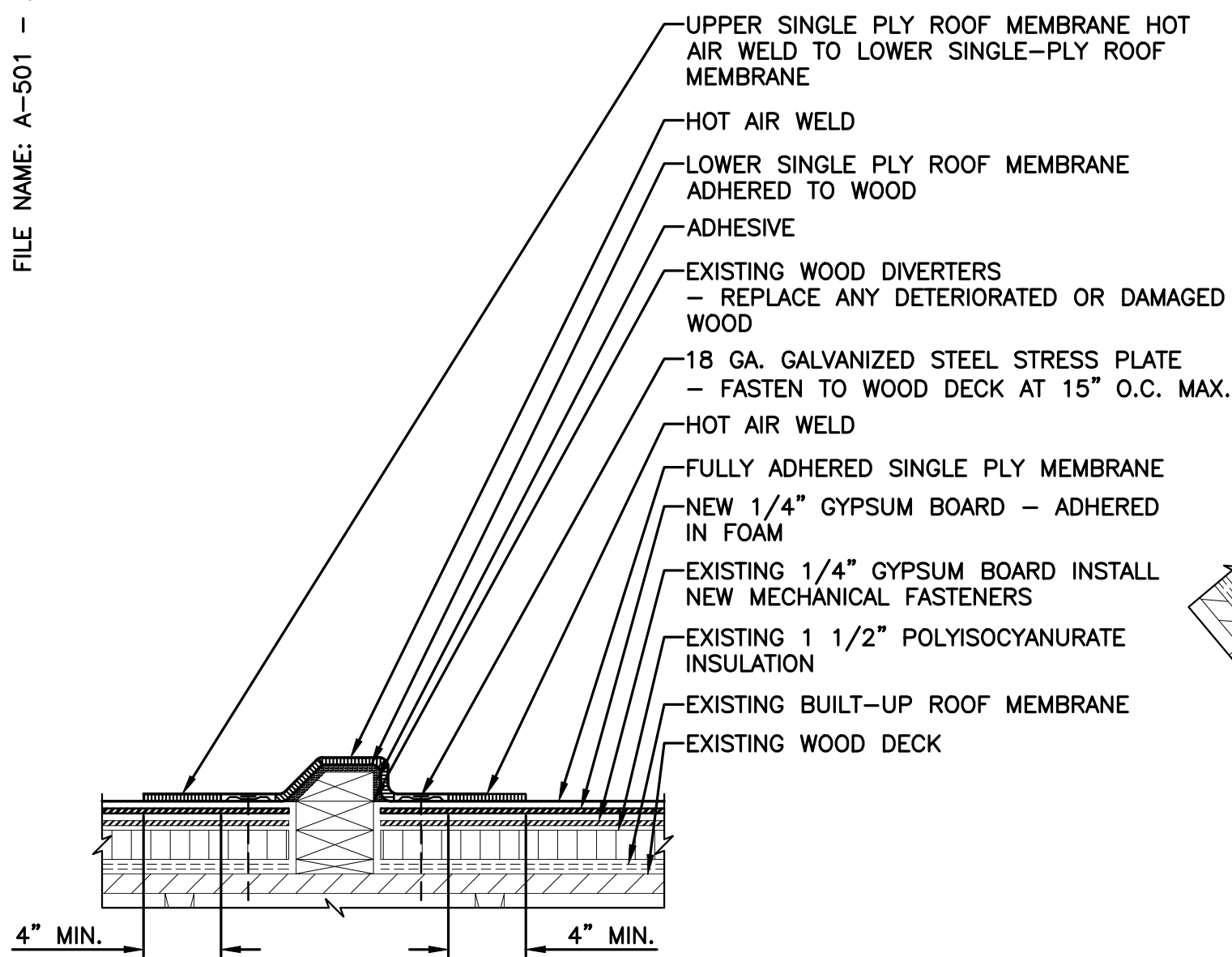
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WALKUP SKYDOME
ROOF REPLACEMENT PROJECT 2017
FLAGSTAFF, AZ
ROOF DETAILS**

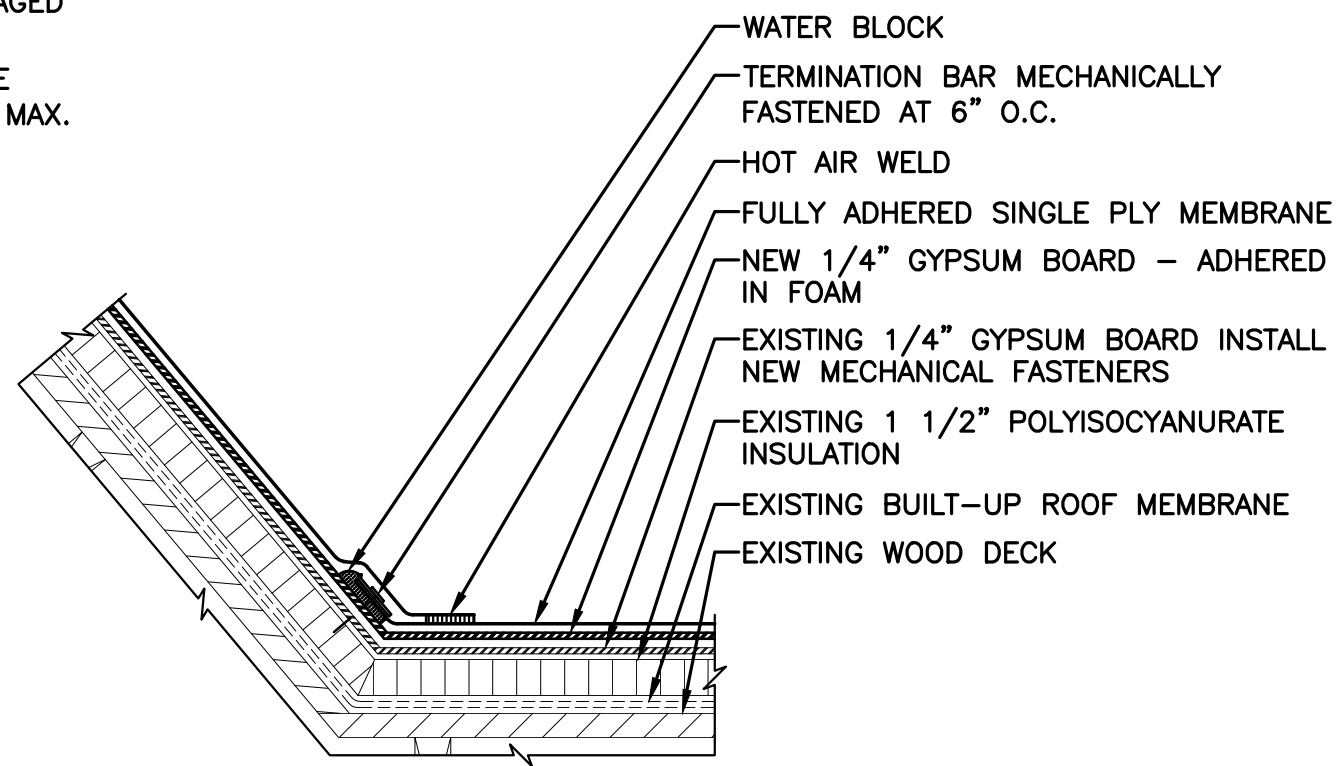


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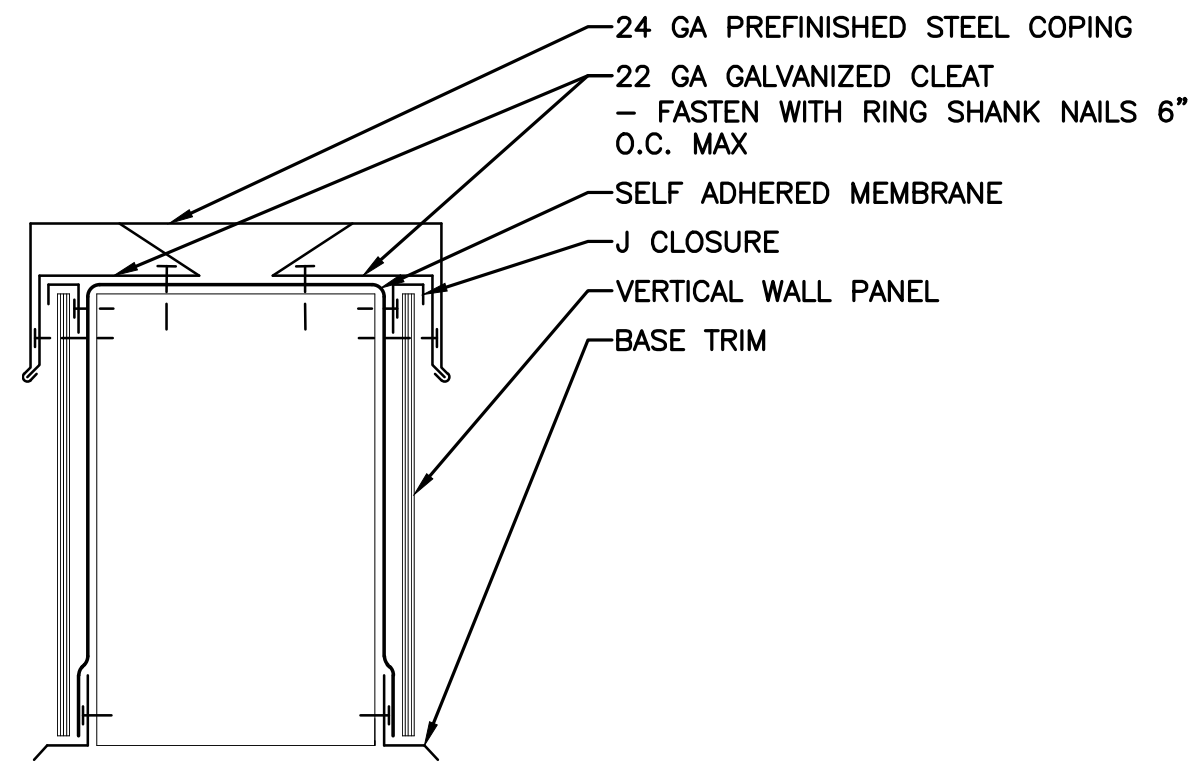
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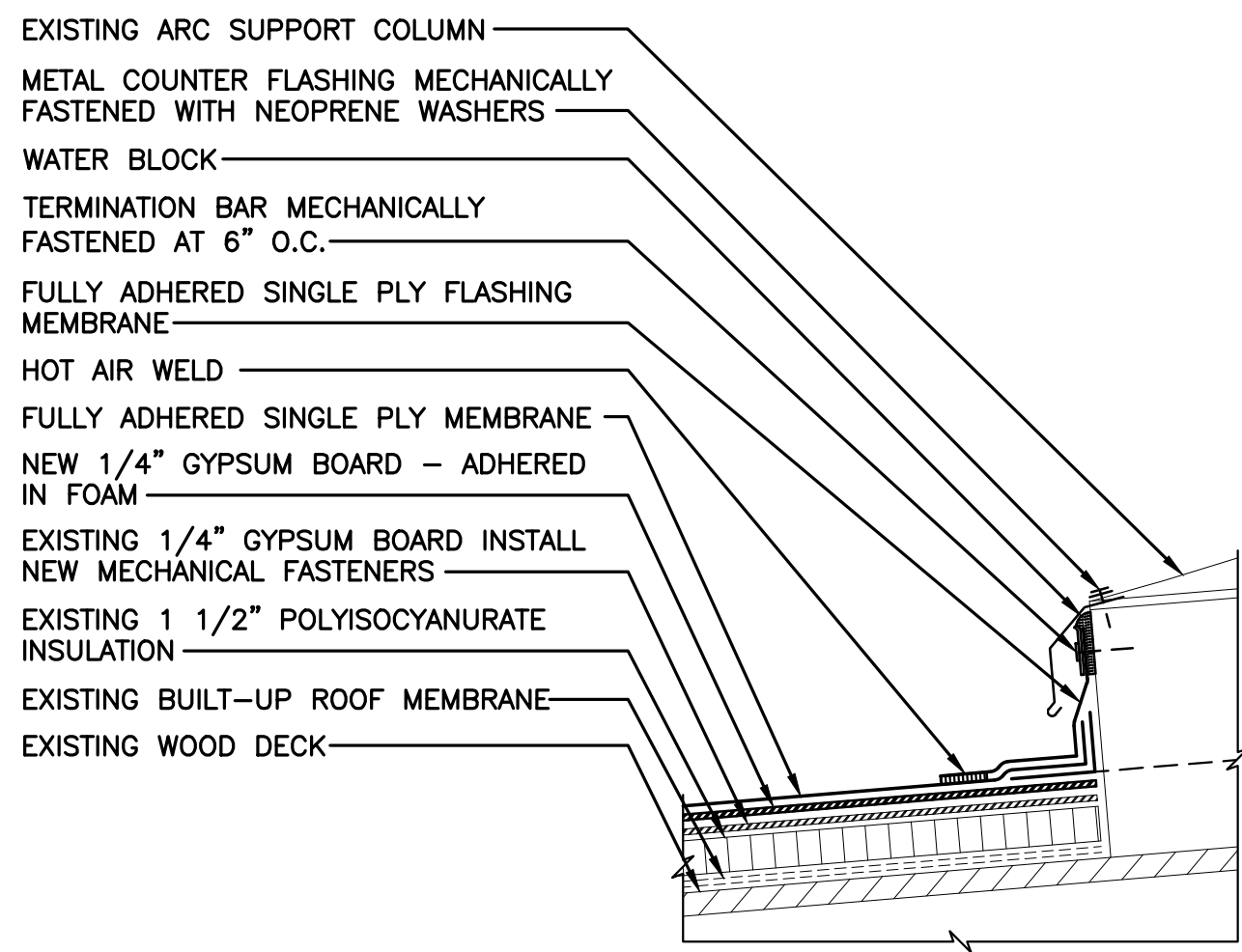
A WATER/SNOW DIVERTER DETAIL
A-502 N.T.S.



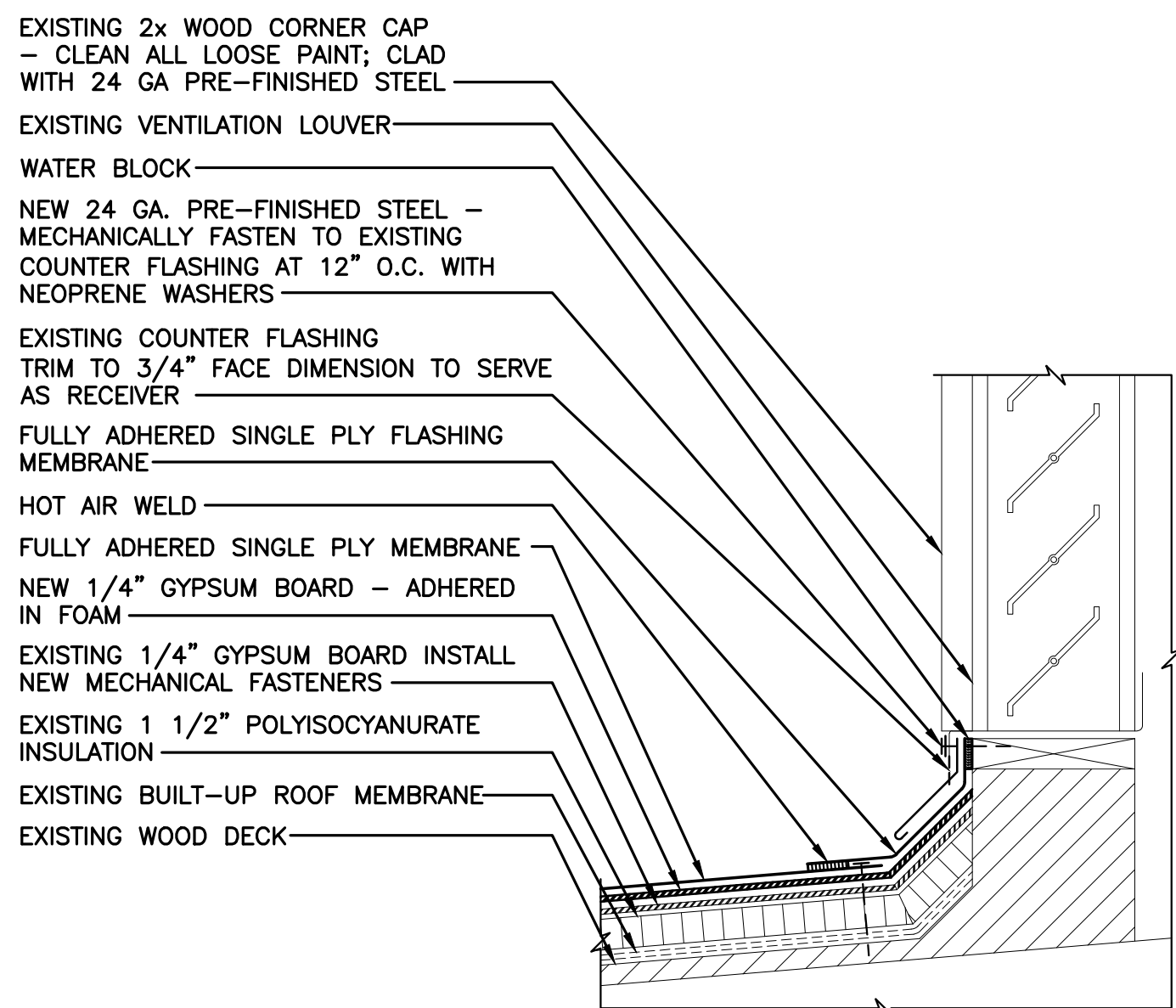
B HORIZONTAL TRANSITION DETAIL
A-502 N.T.S.



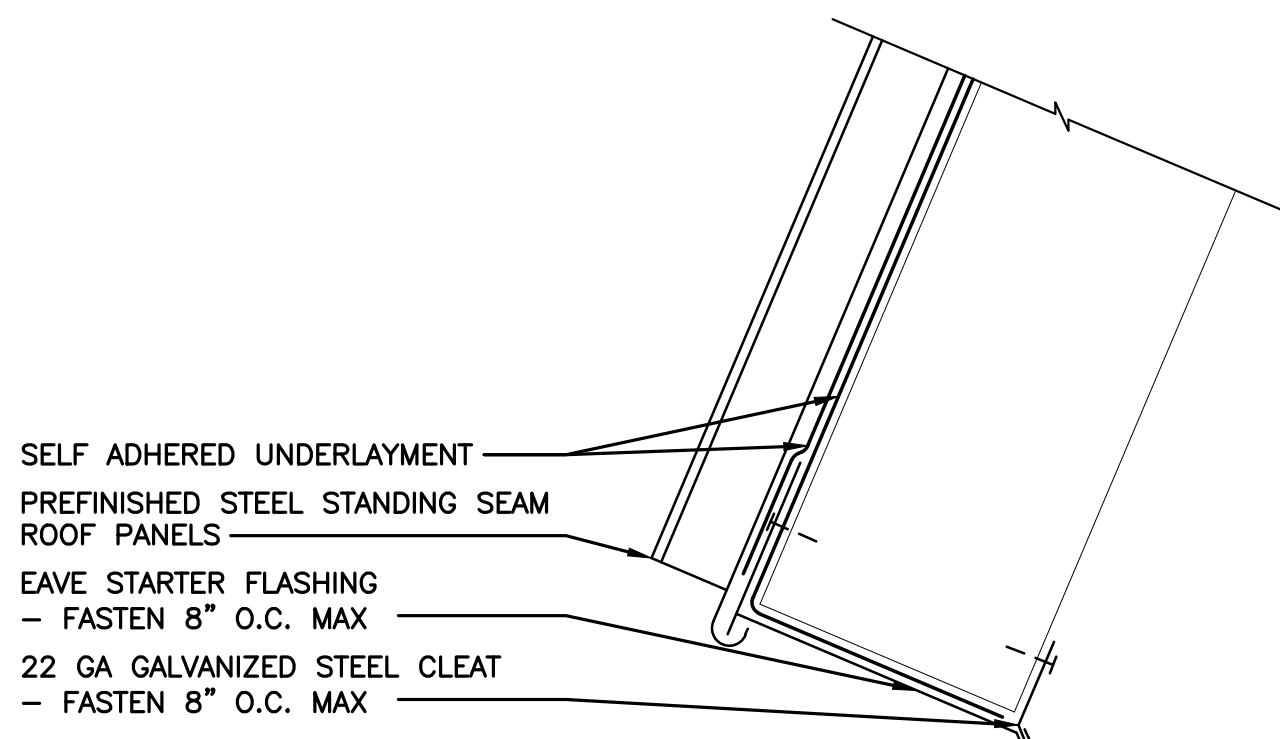
C UPPER SUPPORT BRACE
A-502 N.T.S.



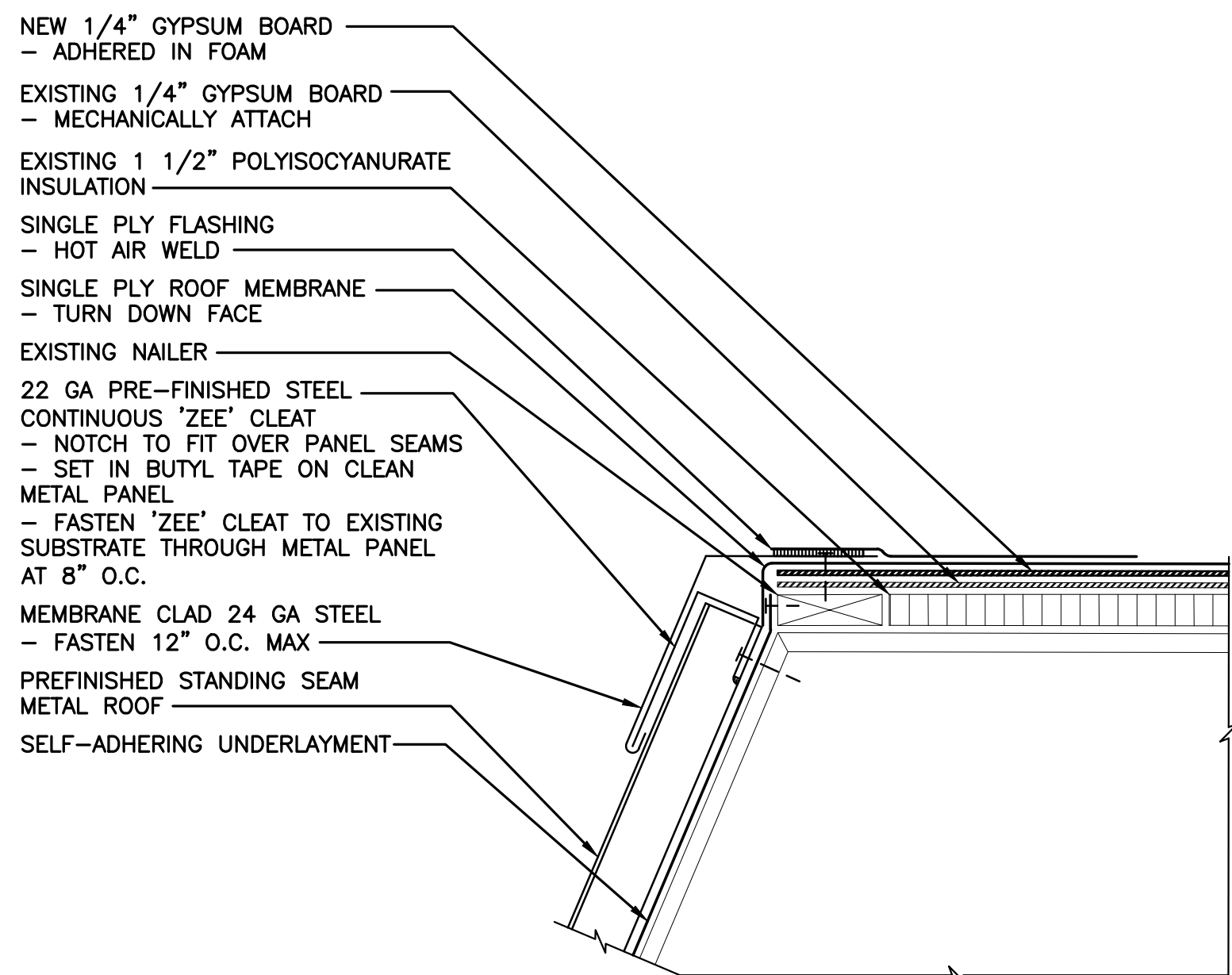
D BASE FLASHING AT ARC SUPPORT COLUMN DETAIL
A-502 N.T.S.



E BASE FLASHING AT LOUVER DETAIL
A-502 N.T.S.



F EAVE FLASHING UPPER ROOF
A-502 N.T.S.



G UPPER ROOF TRANSITION
A-502 N.T.S.

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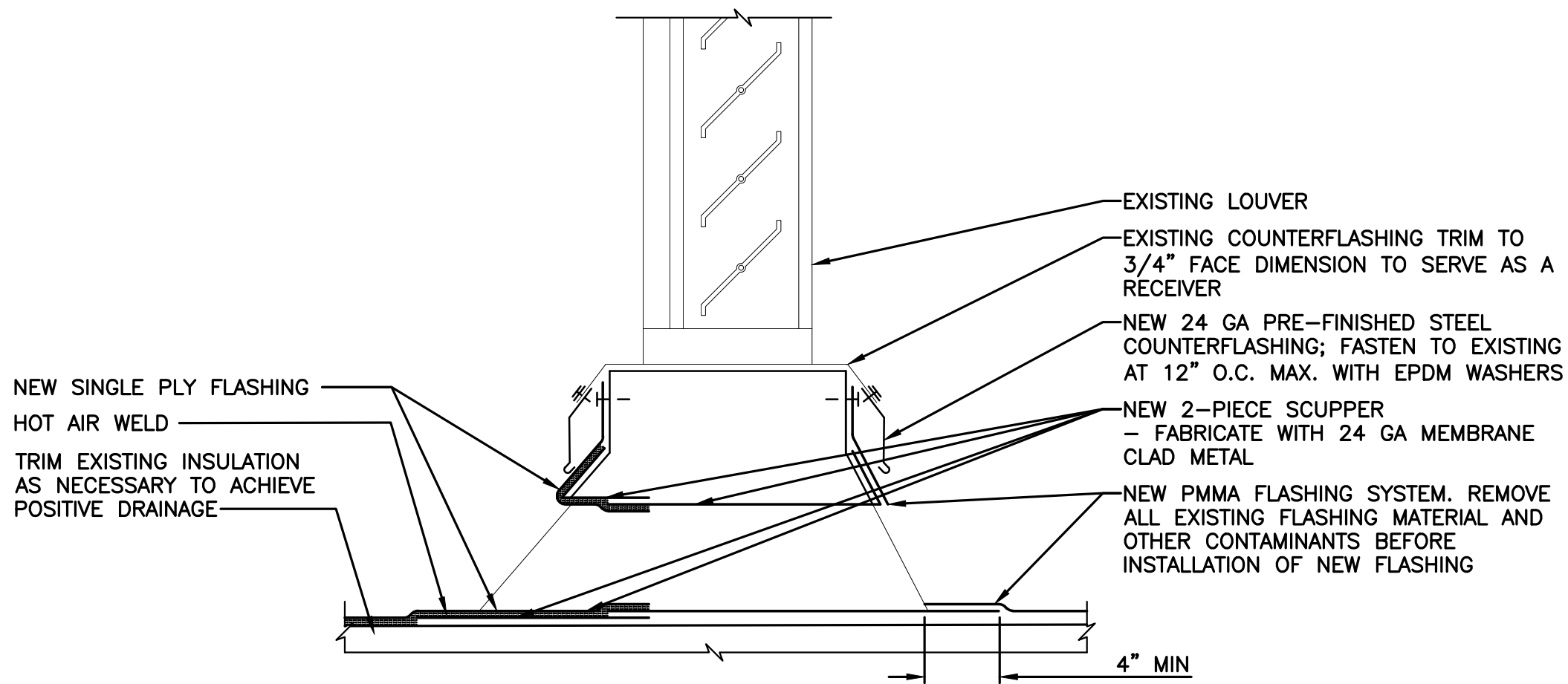
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ROOF DETAILS

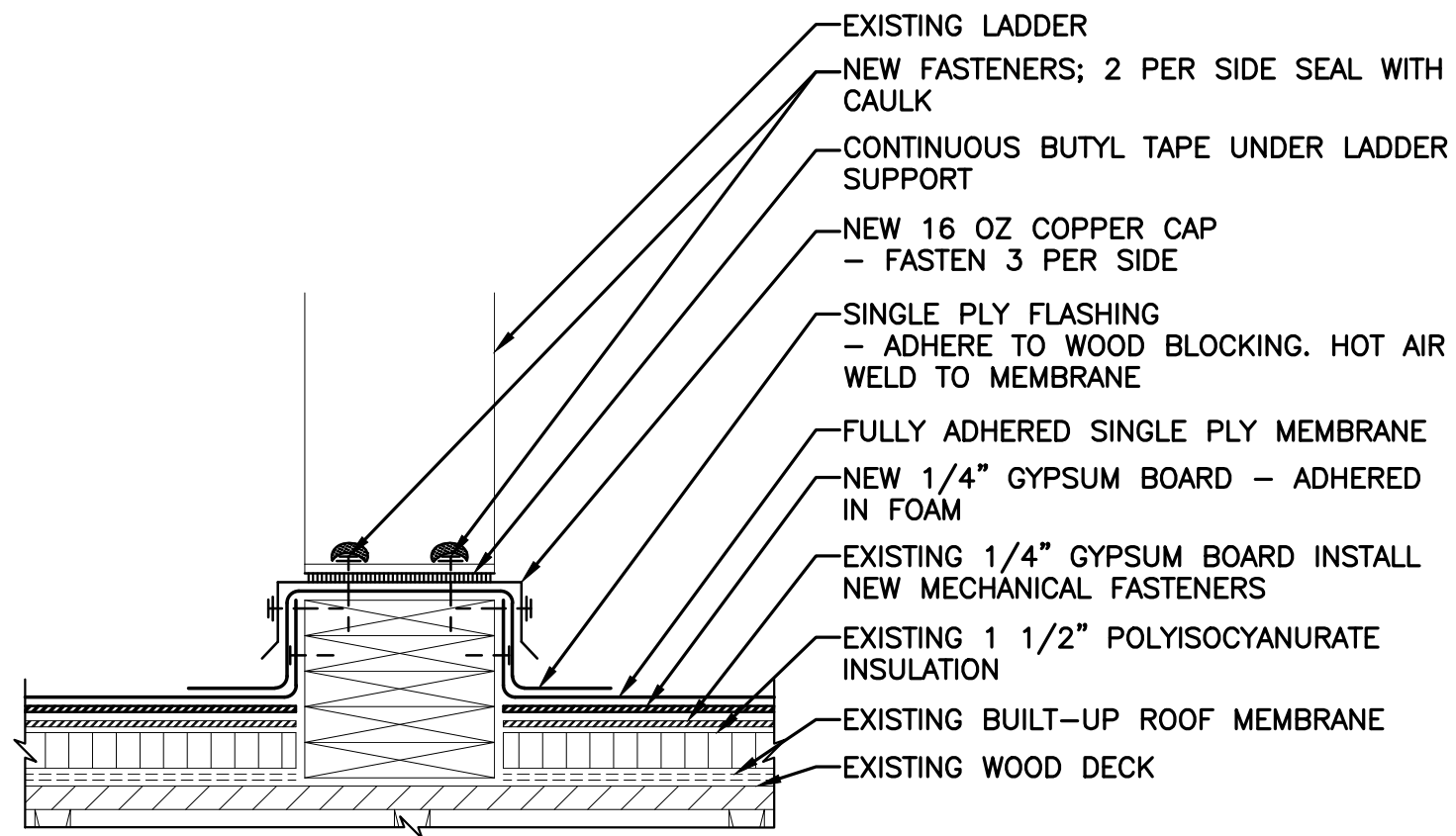


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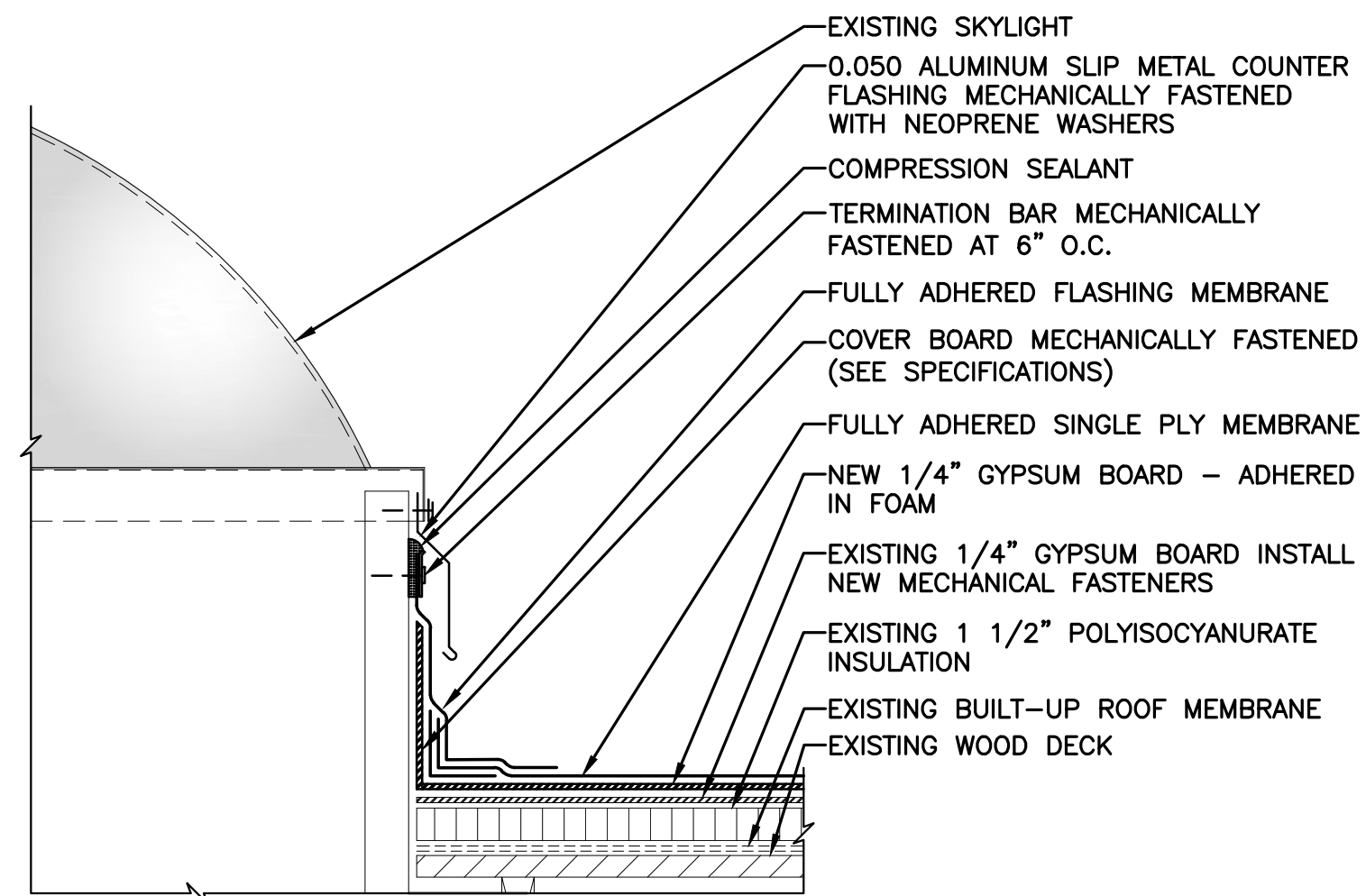
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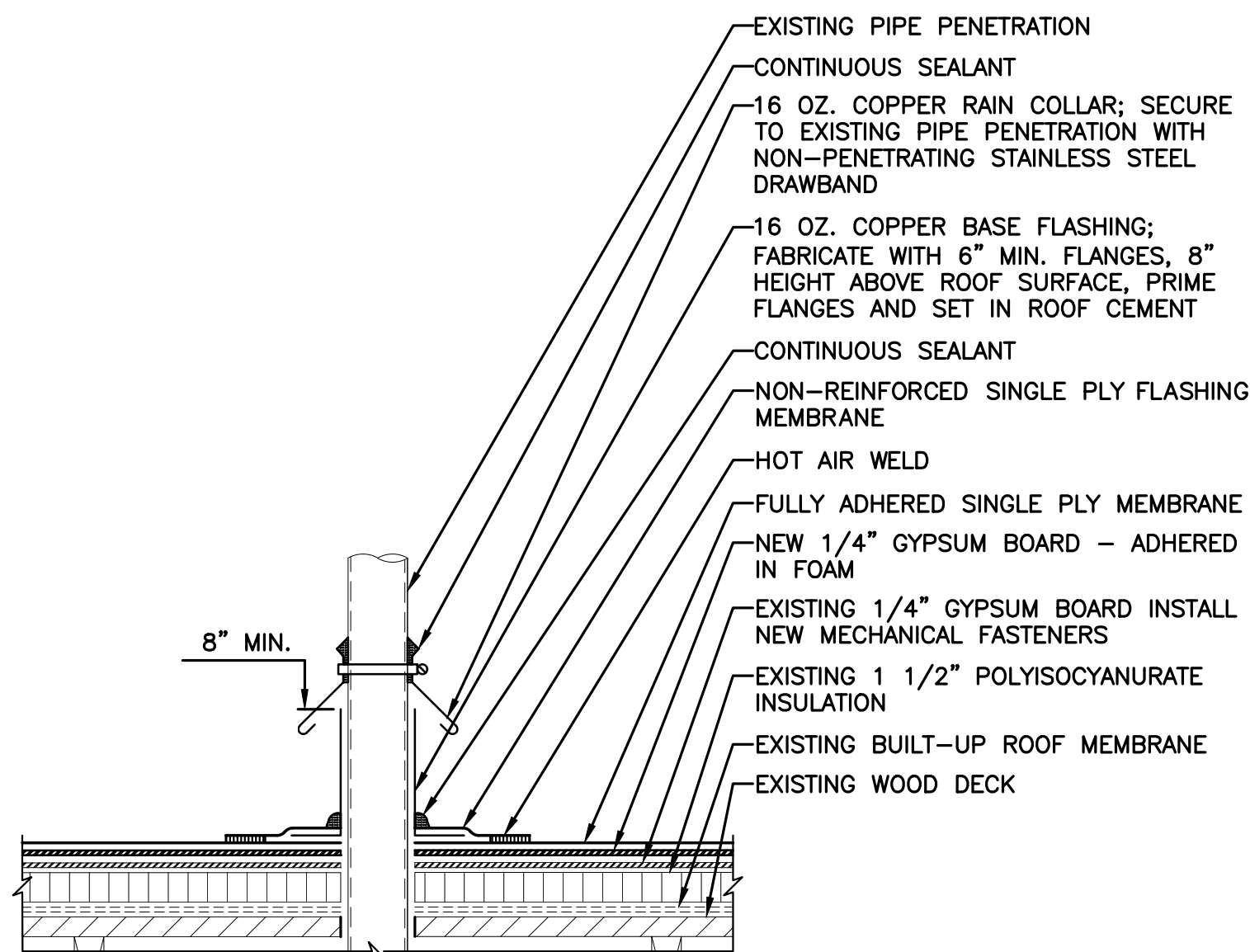
A THROUGHWALL SCUPPER DETAIL
A-503 N.T.S.



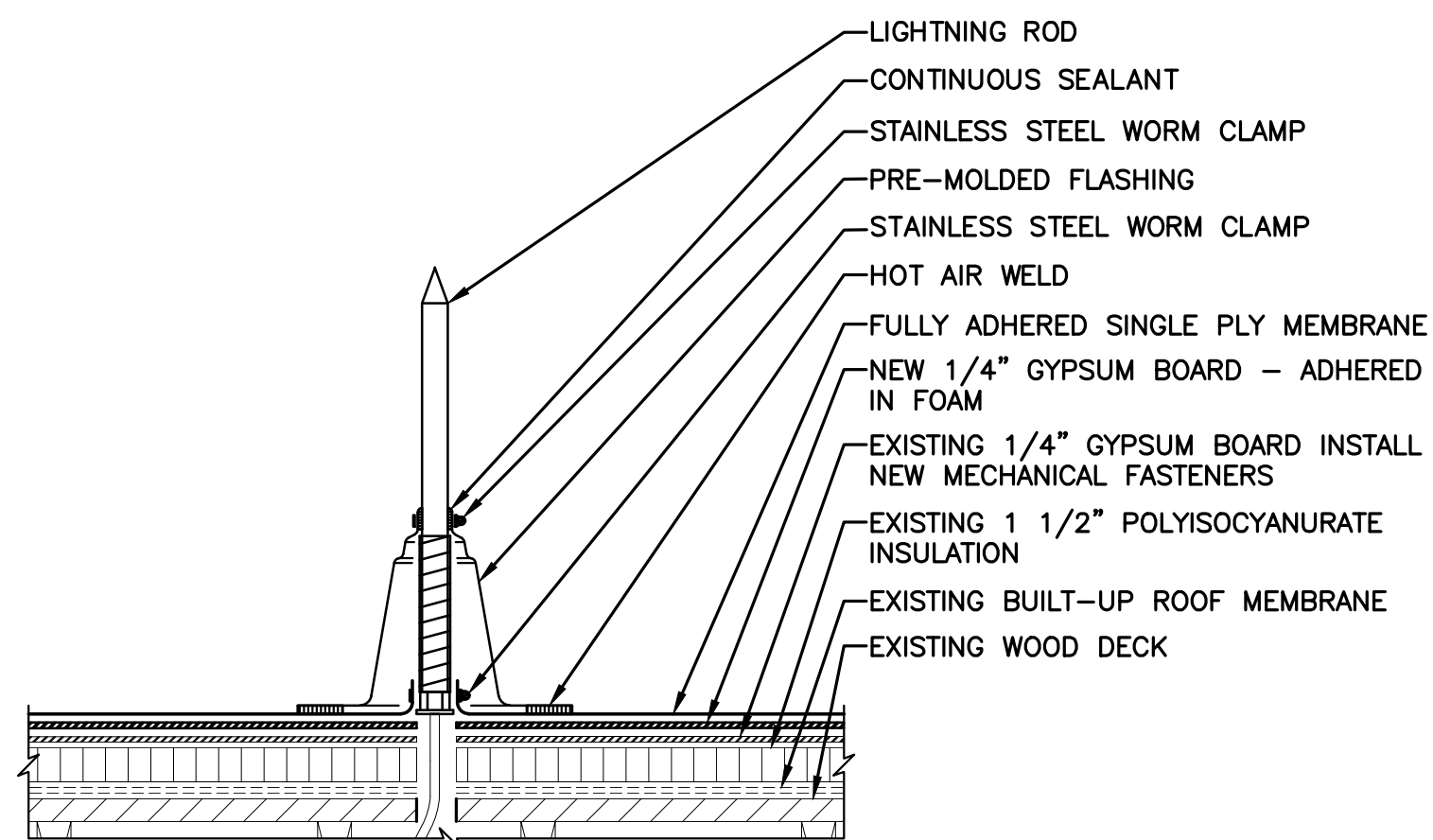
B LADDER SUPPORT DETAIL
A-503 N.T.S.



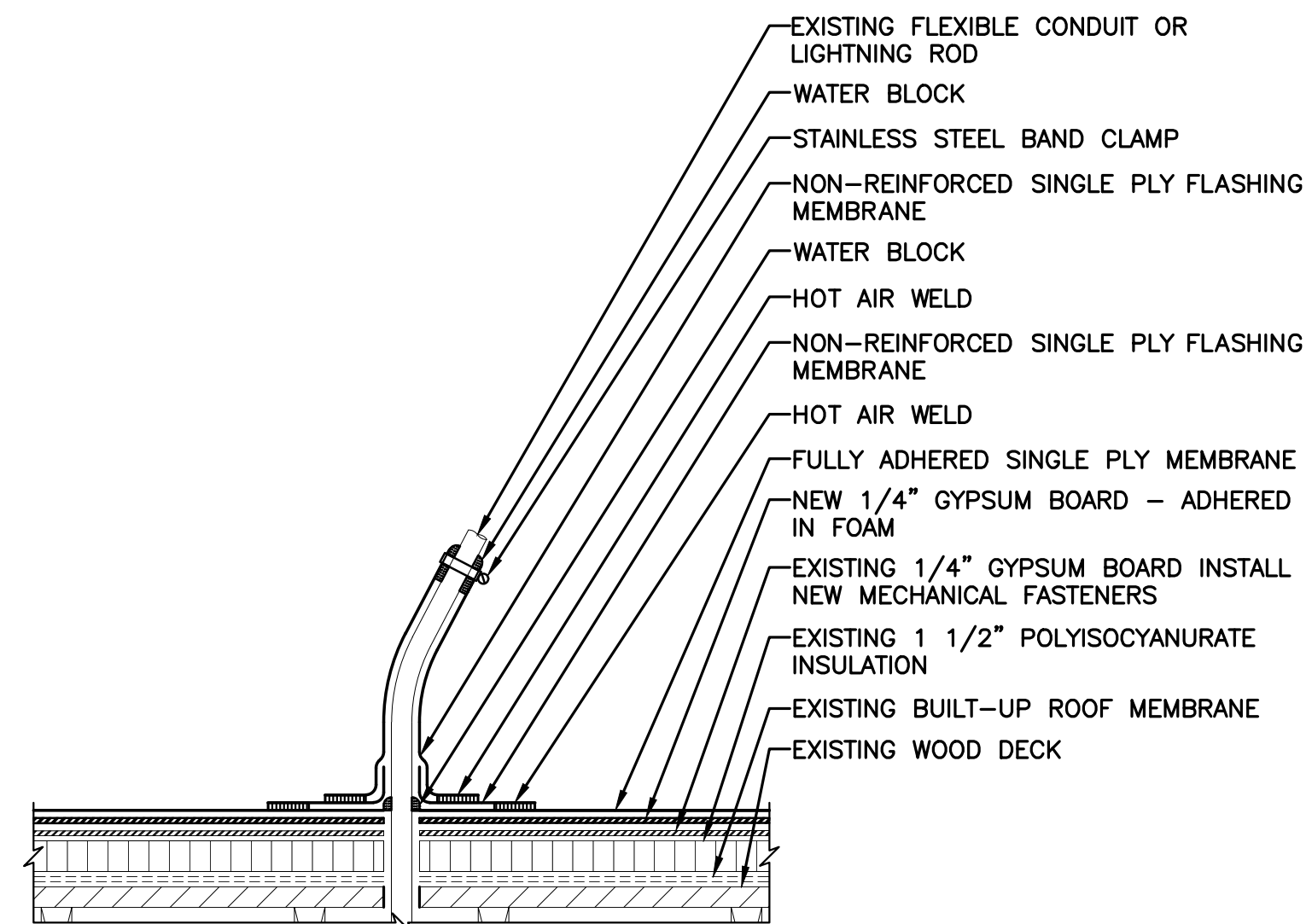
C SKYLIGHT FLASHING DETAIL
A-503 N.T.S.



D PIPE PENETRATION
A-503 N.T.S.



E LIGHTNING ROD FLASHING DETAIL
A-503 N.T.S.



F FLEXIBLE CONDUIT OR LIGHTNING ROD FIELD WRAP DETAIL
A-503 N.T.S.

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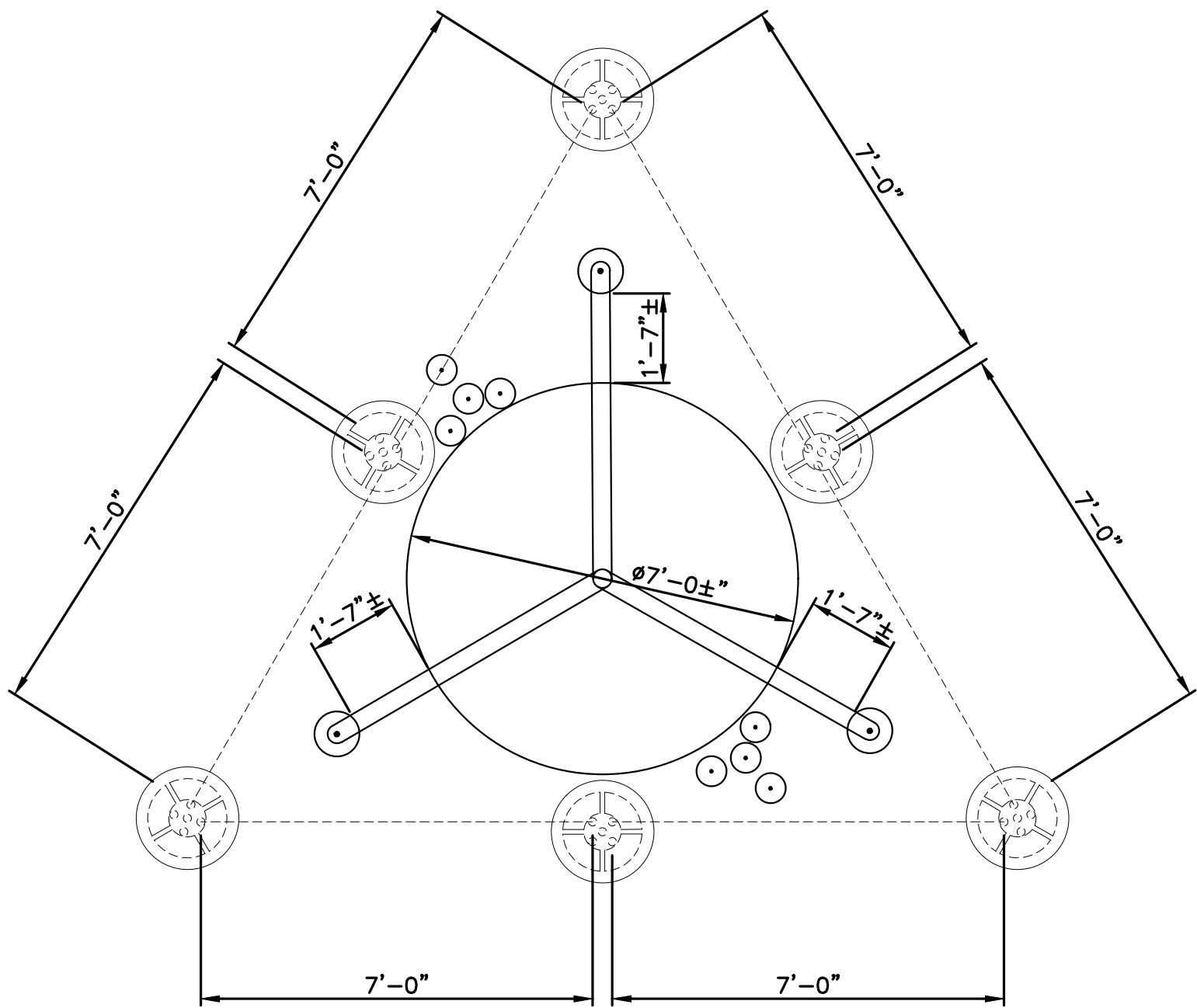
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ROOF REPLACEMENT PROJECT 2017
FLAGSTAFF, AZ
ROOF DETAILS**



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A SKYLIGHT SAFETY RAILING DETAIL
A-504 N.T.S.



REQUIRED SIGNAGE, SEE SPECIFICATIONS


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CODE:

2015 EDITION OF THE INTERNATIONAL BUILDING CODE WITH NORTHERN ARIZONA UNIVERSITY AMENDMENTS, AND ALL REFERENCED STANDARDS AND SPECIFICATIONS THEREIN. CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE CODES. CONTRACTOR SHALL NOTIFY STRUCTURAL ENGINEER OF RECORD OF ANY DISCREPANCIES.

DESIGN LOADS:

ROOF LIVE LOAD	20 PSF
ROOF DEAD LOAD	20 PSF
ROOF SNOW LOADS:	
Pg	50 PSF
Ft	40 PSF
Ce	1.0
Is	1.0
Ci	1.0
WIND LOADS:	
RISK CATEGORY	III
VELOCITY:	
ULTIMATE DESIGN WIND SPEED	120
NOMINAL DESIGN WIND SPEED	93
Iw	1.0
BUILDING CATEGORY	ENCLOSED
EXPOSURE	"B"

WOOD:

FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE GRADING RULES OF THE WESTERN WOOD PRODUCTS ASSOCIATION OR THE WEST COAST LUMBER INSPECTIONS BUREAU. ALL SAWN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED GRADING AGENCY.

GLULAM BEAMS: 24F-V8

TYPICAL GLULAM BEAM MINIMUM PROPERTIES			
Fb	Fv	Fc (PERPENDICULAR)	E
2,400 PSI	240 PSI	650 PSI	1,800,000 PSI

BEAMS CANTILEVERING OVER SUPPORTS SHALL HAVE THE SPECIFIED MINIMUM PROPERTIES TOP AND BOTTOM. SPECIES FOR OUTER LAMINATIONS SHALL BE DOUGLAS FIR AND SPECIES FOR CORE LAMINATIONS SHALL BE HEM FIR OR BETTER. ALL BEAMS SHALL BE FABRICATED USING WATERPROOF GLUE. FABRICATION AND HANDLING PER LATEST AITC STANDARDS. BEAMS TO BEAR AITC STAMP AND CERTIFICATE AND GRADE STAMP. CAMBER AS SHOWN ON THE DRAWINGS.

DIMENSIONS:

CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH ARCHITECT.

DEMOLITION:

DEMOLITION OF EXISTING STRUCTURE TO BE REMOVED SHALL BE PERFORMED BY THE CONTRACTOR USING MEANS NECESSARY TO PREVENT DAMAGE TO THE EXISTING STRUCTURE TO REMAIN. DAMAGE TO THE EXISTING STRUCTURE TO REMAIN SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE USING METHODS REVIEWED BY THE STRUCTURAL ENGINEER. IF EXISTING CONDITIONS DIFFER FROM THOSE SHOWN IN THE CONTRACT DOCUMENTS, CONTACT STRUCTURAL ENGINEER THROUGH ARCHITECT PRIOR TO PROCEEDING WITH WORK. CONTRACTOR SHALL PROVIDE ALL SHORING AS REQUIRED PRIOR TO DEMOLITION AND RECONSTRUCTION.

GENERAL:

THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING OF LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC.. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS. CONTRACTOR IS RESPONSIBLE FOR ALL O.S.H.A. REQUIREMENTS, NOTIFY ENGINEER OF RECORD OF ANY DISCREPANCIES AND/OR CONFLICTS.

CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS OR ROOF. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.

WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDUM.

ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING WITH APPROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION. DO NOT PENETRATE ANY STRUCTURAL ELEMENTS (BEAMS, COLUMNS, WALLS, SLABS, ETC.) WITHOUT PRIOR WRITTEN APPROVAL OF STRUCTURAL ENGINEER THROUGH ARCHITECT.

OPTIONS ARE INTENDED FOR CONTRACTORS CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES DUE TO THE OPTIONS AND SHALL COORDINATE ALL DETAILS.

NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.

TYPICAL DETAILS ARE NOT CUT ON DRAWINGS, BUT APPLY UNLESS NOTED OTHERWISE.

WHERE ANY DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN.

ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL OF A CIVIL OR STRUCTURAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.

TYPICAL DETAILS NOTE

TYPICAL DETAILS NOT CUT ON DRAWINGS. THEY ARE DETAILS THAT ARE COMMON TO STRUCTURAL CONSTRUCTION. IN SOME CASES THERE MAY BE DETAILS THAT ARE NOT USED, BUT ARE PROVIDED TO ACCOMMODATE POSSIBLE CONSTRUCTION CONDITIONS.

TYPICAL NOTES

- FOR APPLICABLE CODES AND STANDARDS, MATERIAL STRENGTHS AND CONSTRUCTION REQUIREMENTS, SEE GENERAL STRUCTURAL NOTES AND SPECIFICATIONS.
- VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION - RESOLVE ANY DISCREPANCY WITH ARCHITECT. DO NOT SCALE DRAWINGS.
- FOR CLARITY, ALL EXTERIOR SLABS AND SIDEWALKS MAY NOT BE SHOWN, FOR EXACT DIMENSIONS, LOCATIONS, JOINTS, AND SCORE LINES, SEE ARCHITECTURAL DRAWINGS.
- FOR CLARITY, ALL ROOF, FLOOR, AND WALL OPENINGS MAY NOT BE SHOWN ON STRUCTURAL DRAWINGS. FOR EXACT SIZE, NUMBER, AND LOCATION OF OPENINGS, SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. FOR FRAMING AT OPENINGS, SEE TYPICAL STRUCTURAL DETAILS. VERIFY ALL SIZES, WEIGHTS, AND LOCATIONS OF MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTS, ETC. WITH MECHANICAL AND ELECTRICAL ENGINEERS THROUGH ARCHITECT.
- DETAILS MARKED "TYPICAL DETAIL" MAY OR MAY NOT BE CUT ON PLANS, BUT SHALL APPLY UNLESS NOTED OTHERWISE.

STRUCTURAL ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR ANCHOR BOLT(S)	K	KIP(S)
A.B.		LB5	POUNDS
ACI	AMERICAN CONCRETE INSTITUTE	LLV	LONG LEG VERTICAL
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	LSV	LONG SIDE VERTICAL
AISI	AMERICAN IRON AND STEEL INSTITUTE	MAX	MAXIMUM
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION	MCJ	MASONRY CONTROL JOINT
APA	AMERICAN PLYWOOD ASSOCIATION	MIN	MINIMUM
ASD	ALLOWABLE STRESS DESIGN	N.I.C.	NOT IN CONTRACT
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS	NTS	NOT TO SCALE
AMS	AMERICAN WELDING SOCIETY	O.C.	ON CENTER
		OPP	OPPOSITE
		OSB	ORIENTED STRAND BOARD
C.J.	CONSTRUCTION JOINT	PCI	PRESTRESSED CONCRETE INSTITUTE
CLR	CLEAR	PL	PLATE
CMU	CONCRETE MASONRY UNIT	PRE-ENG	PRE-ENGINEERED
CONT.	CONTINUOUS	PCF	POUNDS PER CUBIC FOOT
CRSI	CONCRETE REINFORCING STEEL INSTITUTE	PLF	POUNDS PER LINEAR FOOT
CTJ	CONTROL JOINT	PSF	POUNDS PER SQUARE FOOT
		PSI	POUNDS PER SQUARE INCH
d	PENNY (nails)	P.T.	PRESSURE TREATED
DF	DOUGLAS FIR-LARCH	PTI	POST-TENSIONING INSTITUTE
DIA.	DIAMETER	REINF.	REINFORCING
		RS	ROUGH SAWN
EQ	EQUAL	SIM	SIMILAR
EOR	ENGINEER OF RECORD	SLV	SHORT LEG VERTICAL
		SFF	SPRUCE PINE FIR
F.FE	FINISHED FLOOR ELEVATION	SSV	SHORT SIDE VERTICAL
GLB	GLUED-LAMINATED BEAM	STD	STANDARD
GSN	GENERAL STRUCTURAL NOTES		
HF	HEM FIR	T&G	TONGUE AND GROOVE
HSA	HEADED STUD ANCHOR	TOB	TOP OF BEAM
HSS	TUBE SECTION	TOC	TOP OF COLUMN
		TOP	TOP OF PARAPET
IBC	INTERNATIONAL BUILDING CODE	TOW	TOP OF WALL
ICC	INTERNATIONAL CODE COUNSEL	TYP	TYPICAL
ICF	INSULATED CONCRETE FORM	UNO.	UNLESS NOTED OTHERWISE
IPC	INTERNATIONAL PLUMBING CODE	WWF	WELDED WIRE FABRIC
IRC	INTERNATIONAL RESIDENTIAL CODE		
JB	JOIST BEARING		

PLAN LEGEND

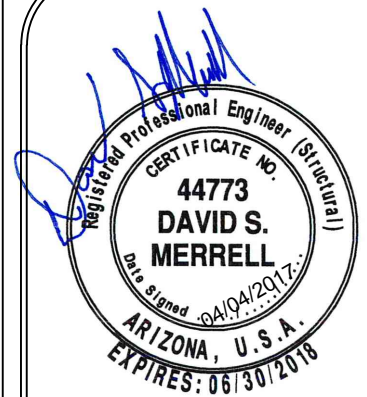
SYMBOL	DESCRIPTION	LOCATION
	DETAIL CUT SHOWN ON PLAN	SEE S3 SERIES SHTS. FOR FRMG DTLS.
	PLAN NOTE	SEE PLAN NOTES ON EACH PLAN SHEET
	EXISTING FOOTINGS, WALL, ETC...	SEE FRAMING PLAN SHEET
	BEAM DESIGNATION	

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NORTHERN ARIZONA UNIVERSITY
WALKUP SKYDOME
ROOF REPLACEMENT PROJECT 2017
FLAGSTAFF, ARIZONA
GENERAL STRUCTURAL NOTES



Drawn By:

BPS

Checked By:

DM

Date

04/04/2017

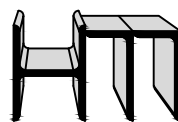
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SCALE: AS NOTED

Sheet No.

S-101



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MERRELL
ENGINEERING

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HME STRUCTURAL DESIGNER: DAVE MERRELL
DRAWN BY: BRIAN SHEPHERD
JOB ORDER #: 17031

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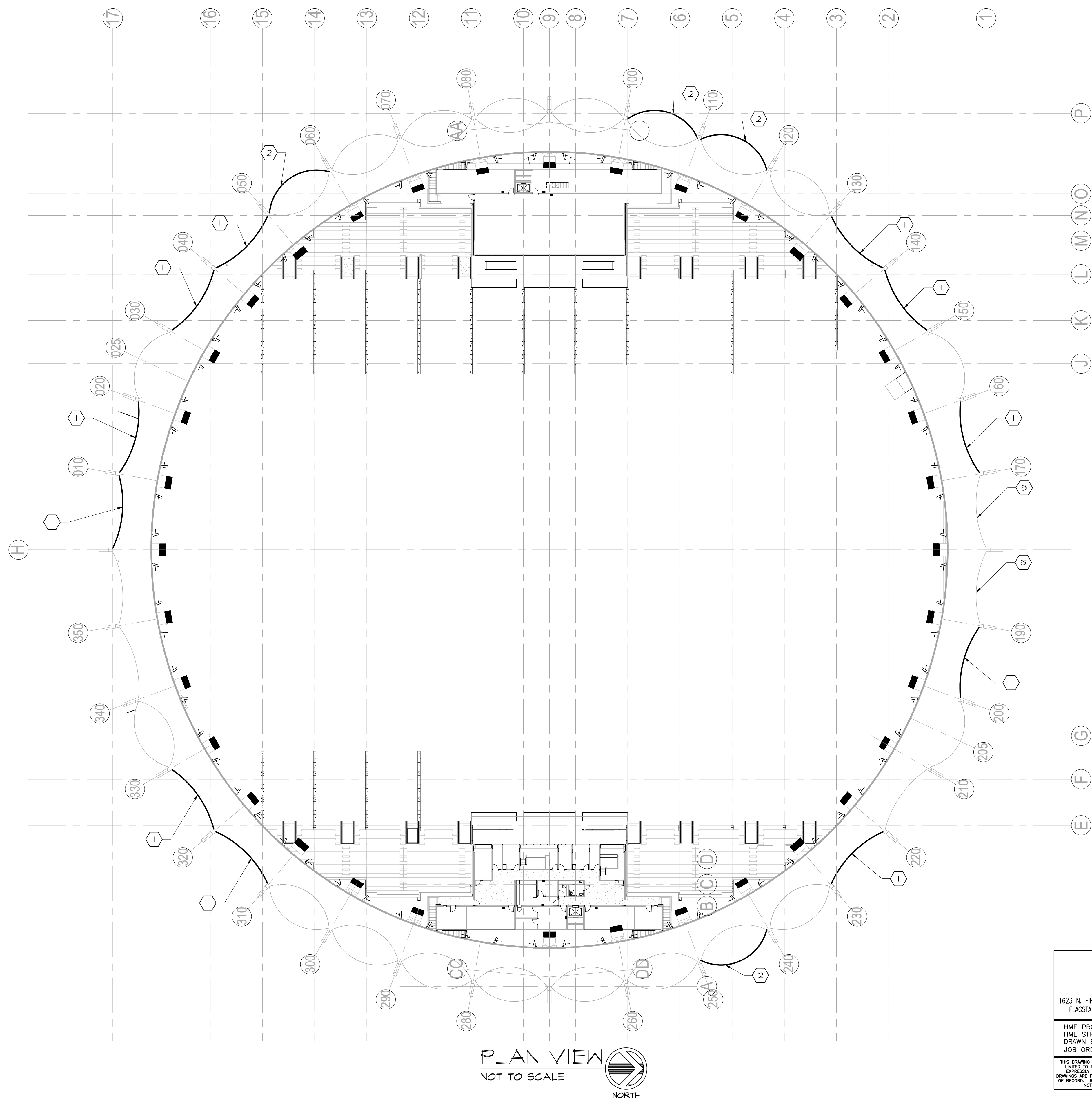
1	REPLACE WITH B1
2	REPLACE WITH B2
3	CONTRACTOR TO VERIFY CONDITION OF EXISTING BEAMS. NOTIFY ENGINEER OF RECORD OF ANY DETERIORATED CONDITIONS. IF DETERIORATED, BEAMS MAY NEED TO BE REPLACED.

DEMOLITION OF EXISTING STRUCTURE TO BE REMOVED SHALL BE PERFORMED BY THE CONTRACTOR USING MEANS NECESSARY TO PREVENT DAMAGE TO THE EXISTING STRUCTURE TO REMAIN. DAMAGE TO THE EXISTING STRUCTURE TO REMAIN SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE USING METHODS REVIEWED BY THE STRUCTURAL ENGINEER. IF EXISTING CONDITIONS DIFFER FROM THOSE SHOWN IN THE CONTRACT DOCUMENTS, CONTACT STRUCTURAL ENGINEER THROUGH ARCHITECT PRIOR TO PROCEEDING WITH WORK. CONTRACTOR SHALL PROVIDE ALL SHORING AS REQUIRED PRIOR TO DEMOLITION AND RECONSTRUCTION.

MARK	SIZE / TYPE	CAMBER AT MIDSPAN	END CONNECTION	REMARKS
B1	GLU LAM, SEE <u>DETAIL 205</u>	SEE <u>DETAIL 201</u>	SEE DETAILS	NOTE 1
B2	GLU LAM, SEE <u>DETAIL 206</u>	SEE <u>DETAIL 202</u>	SEE DETAILS	NOTE 1

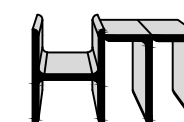
NOTES:

1. BEAMS ARE INTENDED TO MATCH EXISTING. CONTRACTOR TO VERIFY THE DIMENSIONS SHOWN ON PLAN AND VERIFY THAT EACH INDIVIDUAL BEAM FITS INTO EXISTING STEEL HANGER.
2. BEAMS ARE PLANED AT AN ODD ANGLE AT THE TOP. BEAM SHOULD BE CUT AT THE PROPER ANGLE BY THE MANUFACTURER AND SEALED APPROPRIATELY BY THE MANUFACTURER BEFORE BEING DELIVERED TO THE JOB SITE.



PLAN VIEW

NOT TO SCALE



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**NORTHERN ARIZONA UNIVERSITY
WALKUP SKYDOME
ROOF REPLACEMENT PROJECT 2017
FLAGSTAFF, ARIZONA
PLAN VIEW**



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HIGH PERFORMANCE BUILDING ENCLOSURE EXPERTS

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NORTHERN ARIZONA UNIVERSITY
 WALKUP SKYDOME
 ROOF REPLACEMENT PROJECT 2017
 FLAGSTAFF, ARIZONA
 DETAILS

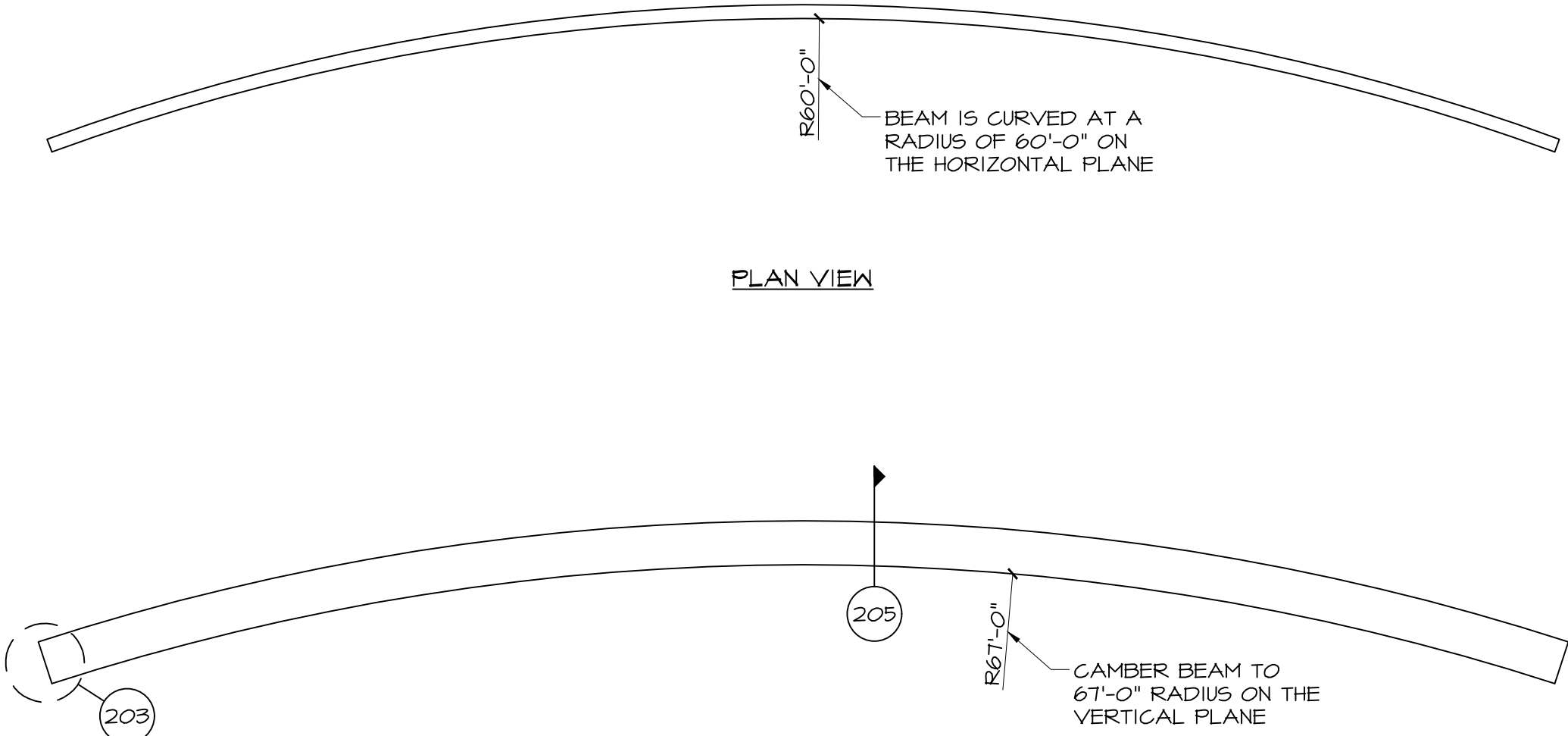


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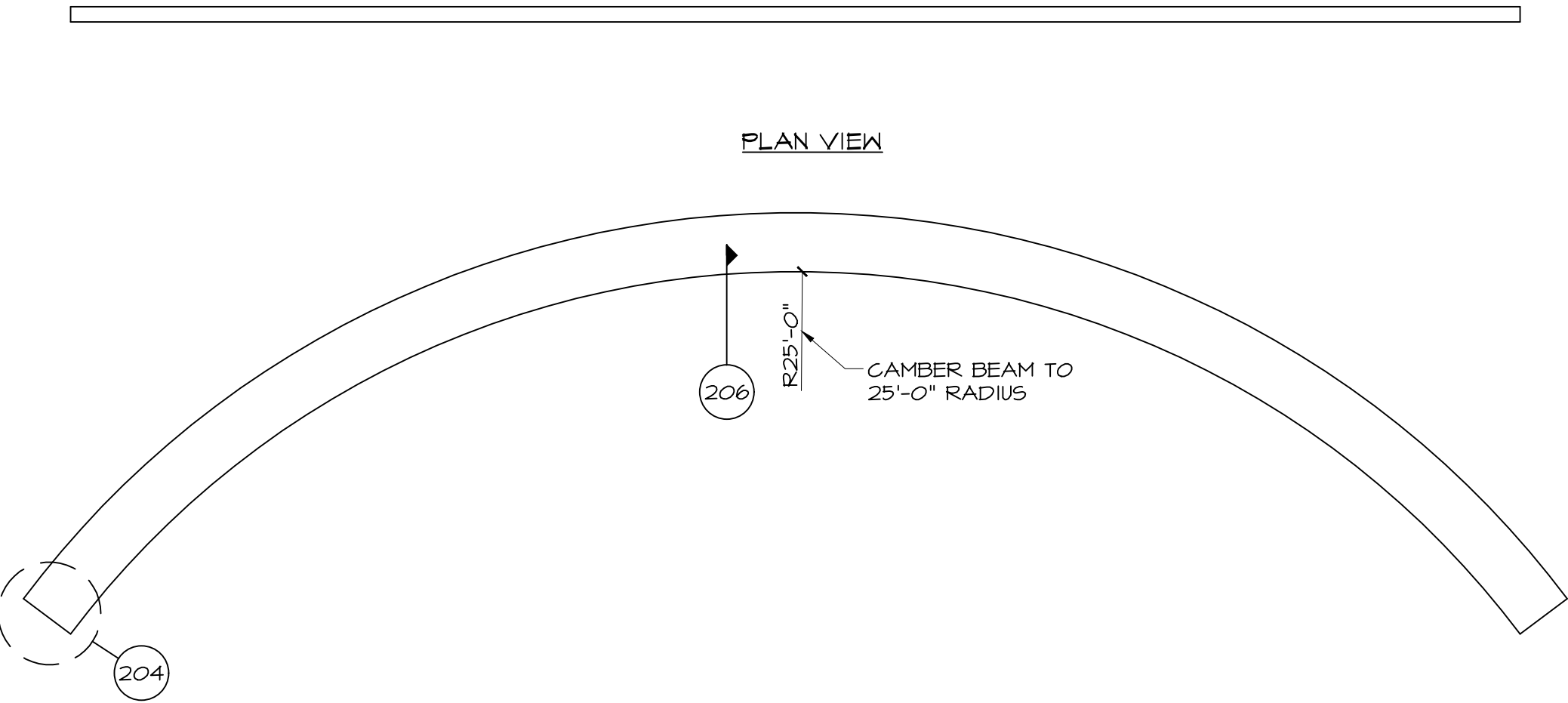
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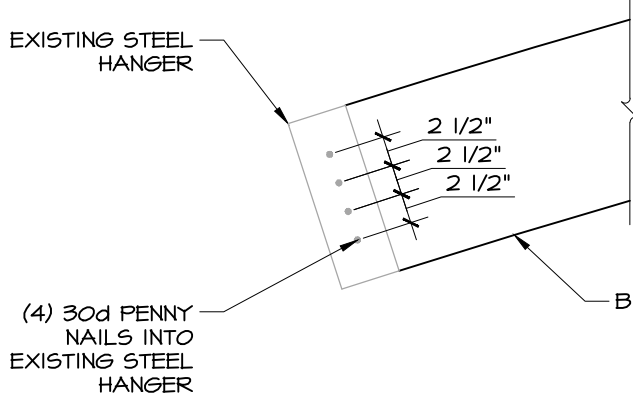
PLAN VIEW
 ELEVATION

201 NEW BEAM (B1) AT EXISTING CONNECTION
 1/4" = 1'-0"

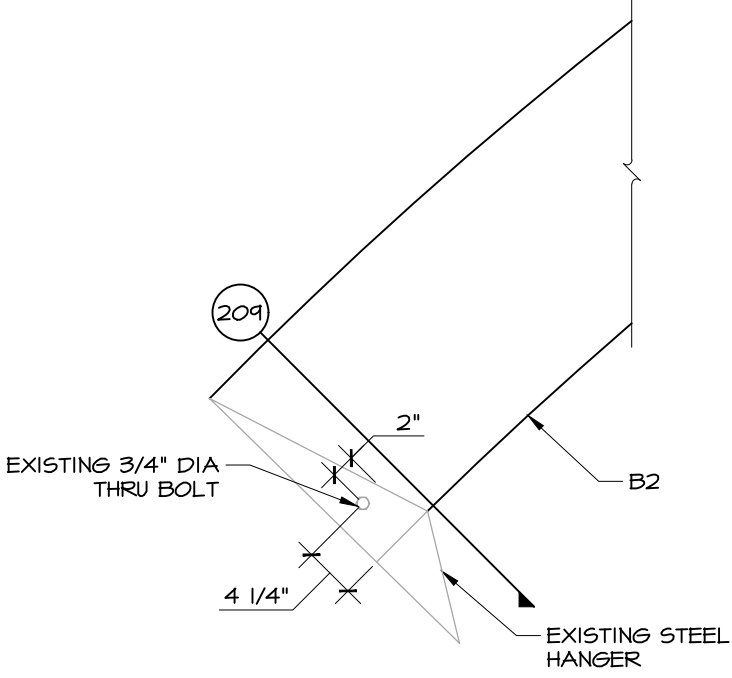


PLAN VIEW
 ELEVATION

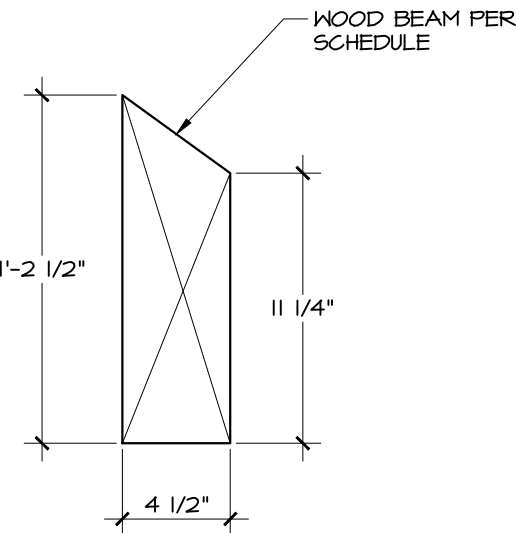
202 NEW BEAM (B2) AT EXISTING CONNECTION
 1/4" = 1'-0"



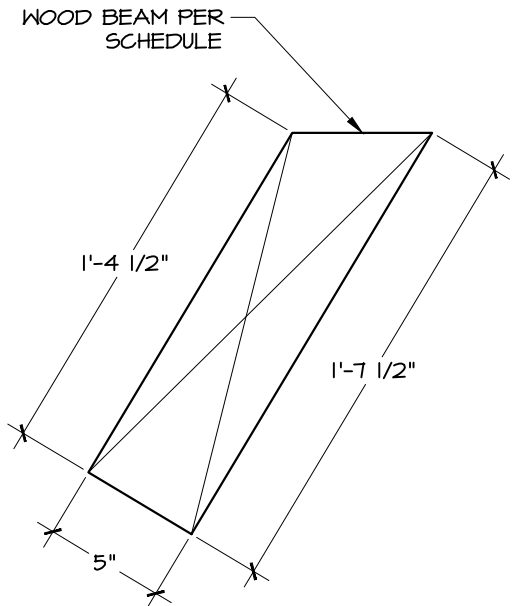
203 WOOD BEAM AT EXISTING CONNECTION
 3/4" = 1'-0"



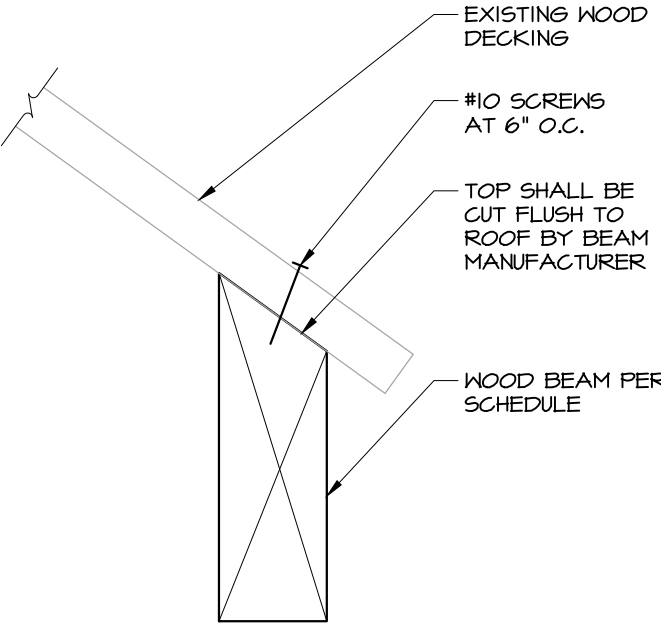
204 WOOD BEAM AT EXISTING CONNECTION
 3/4" = 1'-0"



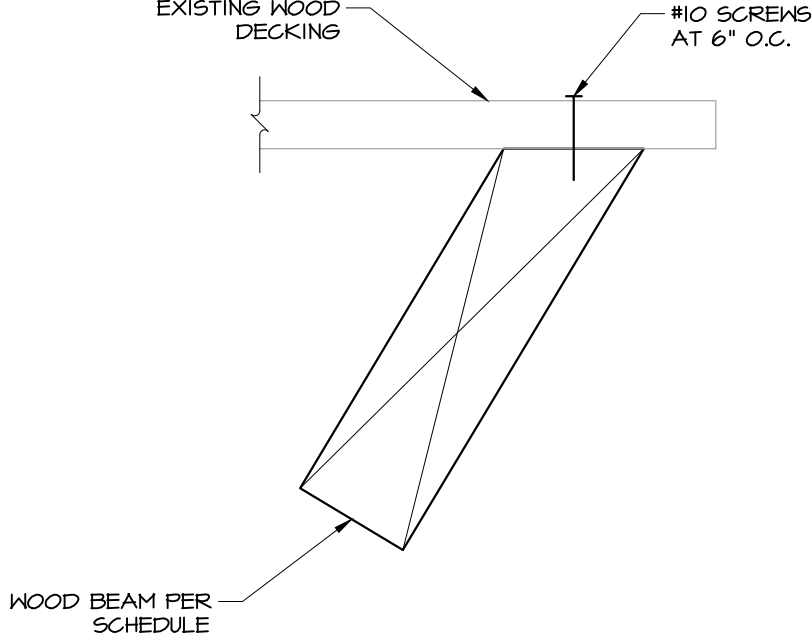
205 B1 CROSS SECTION
 1 1/2" = 1'-0"



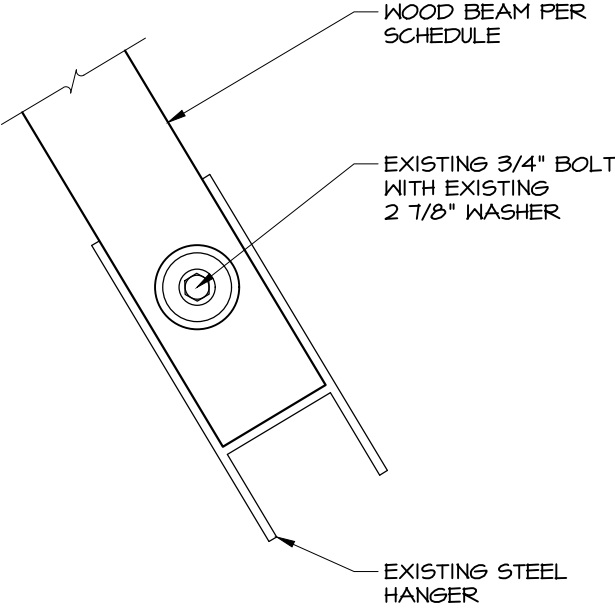
206 B2 CROSS SECTION
 1 1/2" = 1'-0"



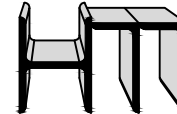
207 EXISTING WOOD DECK AT WOOD BEAM
 1 1/2" = 1'-0"



208 EXISTING WOOD DECK AT WOOD BEAM
 1 1/2" = 1'-0"



209 WOOD BEAM AT EXISTING HANGER
 1 1/2" = 1'-0"



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