Agenda
Hailey Planning and Zoning Commission
Monday, November 17, 2025
5:30 p.m.

Hailey Planning and Zoning Meetings are open to the public, in person, and by electronic means when available. The city strives to make the meeting available virtually but cannot guarantee access due to platform failure, internet interruptions or other potential technological malfunctions. Participants may join our meeting virtually by the following means:
Join on your computer, mobile app, or room device.
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Phone Conference ID: 602 369 677#

Call to Order Hailey Planning and Zoning Commission

- Public Comment for items not on the Agenda.

Consent Agenda - ACTION ITEM

- **CA 1** Motion to approve the Findings of Fact, Conclusions of Law, and Decision of a Preliminary Plat Application by Arch Community Trust, Inc., represented by Galena-Benchmark Engineering, wherein Lot 6, Block 3 (1411 RedTail Lane) of Quigley Farms Subdivision is subdivided to create two (2) Community Housing lots; Lot 6A comprising of 6,317 square feet in size and Lot 6B comprising of 6,319 square feet in size. This project is located within the General Residential (GR) Zoning District. **ACTION ITEM**

- **CA2** Motion to approve the Findings of Fact, Conclusions of Law, and Decision of a Wireless Permit by AT&T Mobility Corporation to modify the existing Wireless Permit to upgrade the existing tower. The proposed modifications will occur inside the equipment room and to the existing tower on the roof; no increase in height of the tower is proposed. The Applicant is proposing the following modification to be permitted as part of the Wireless Permit Application: The removal and replacement of three (3) antennas, removal and replacement of nine (9) remote radio heads (RRH), removal of three (3) TMA's, installation of six (6) new back-to-back RRH mounts and rotating the existing platform. Modifications to the Equipment room include the following: Removal of twenty (20) batteries, installation of eight (8) new batteries and the installation of one (1) generic E//BBU in DRM. The equipment is located at Pine Street Station Condominiums

115 South Main Street Hailey, Idaho 83333 (208) 788-9815

(400 South Main Street), within the Business (B) and Townsite Overlay (TO) Zoning Districts. **ACTION ITEM**

- **CA 3** Motion to approve meeting minutes dated October 06, 2025. **ACTION ITEM**

- **CA 4** Motion to approve meeting minutes dated October 10, 2025. **ACTION ITEM**

Public Hearing - ACTION ITEM

- **PH 1** Consideration of a Design Review Pre-Application, submitted by Guerra-Ori, LLC, and represented by Jay Cone of Jay Cone Architecture, for the construction of a new Townhouse Development project consisting of three (3) detached townhouses to be known as Shapi Shay Townhomes. This project is located at 2410 Woodside Boulevard (Lot 18, Block 62, Woodside Subdivision #15) within the General Residential (GR) Zoning District. **ACTION ITEM.**

- **PH 2** Consideration of request from SVHD Properties, LLC, to the City of Hailey to vacate the certain section of Right-of-Way along West Carbonate Street, thereby reducing the City's Right-of-Way from 100' to 60' along that portion of West Carbonate Street adjacent to Lots 9 & 10, Block 43, Hailey Townsite. The section proposed for vacation is as follows, "Wherein approximately a 13-foot-wide strip of Carbonate Street adjacent to Lots 9 & 10, Block 43, Hailey Townsite is being [proposed for vacation] within City of Hailey, Blaine County, Idaho". **ACTION ITEM.**

Administrative Review – NO ACTION ITEM

Staff Reports and Discussion

- Monday, December 1, 2025
  DIF Adoption into Comp Plan DIF Adoption into Comp Plan
  PP: Little Haven PP: Little Haven
  DR/PUD: Campion Ice House

Adjourn by 8:00 PM - ACTION ITEM

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FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION

On October 20, 2025, the Hailey Planning and Zoning Commission considered and recommended for approval by the Hailey City Council a Preliminary Plat Application by ARCH Community Trust, Inc., wherein Lot 6, Block 3 (1411 Red Tail Lane) of Quigley Farms Subdivision is subdivided to create two (2) Community Housing lots; Lot 6A comprising of 6,317 square feet in size and Lot 6B comprising of 6,319 square feet in size. This project is located within the General Residential (GR) Zoning District.

The Hailey Planning and Zoning Commission unanimously recommended approval by the Hailey City Council on October 20, 2025, and enters these Findings of Fact, Conclusions of Law and Decision.

Applicant: ARCH Community Housing Trust, Inc.
Project: Quigley Farms Subdivision – Lots 6A and 6B
Location: Lot 6, Block 3, Quigley Farms Subdivision
Size & Zoning: 12,636 square feet; General Residential (GR) Zoning District

Notice: Notice for the public hearing was published in the Idaho Mountain Express on September 24, 2025, and mailed to adjoining property owners on September 24, 2025.

Background and Application: The Quigley Farms Subdivision Large Block Plat for Blocks 1-17 received Final Plat approval in June 2018. Phase I consisted of the Preliminary Plat for Blocks 1, 2, 3, 4, 10, 11 and 15, which included 36 lots comprising of 41 residential units (including eight community housing units), and commercial space. This approval included the provision that individual blocks may be approved for Final Plat, so long as each block supply separate infrastructure to stand on its own. Blocks 2, 3 and 4 received Final Plat approval on November 9, 2020.

ARCH Community Housing Trust is requesting approval to further subdivide Lot 6, Block 3 of Phase I, into two (2) lots, wherein Lots 6A and 6B are dedicated as Community Housing units, one of which the City of Hailey would like the first right of refusal to purchase and utilize as employee housing. The proposed development gains access off the public streets, Red Tail Lane, Quigley Farm Road, and Appaloosa Road. Vehicular access to the parcel is located off the proposed alley. Further details of this land subdivision have been described herein.

Reasoned Statement: These Findings of Fact, Conclusions of Law, and Decision ("Findings") represent the summary, and majority opinion of the determinative body of the City of Hailey pursuant to Idaho Code. These Findings represent a final decision, after extensive on-the-record deliberations, as more completely documented in the Minutes therefore, and the recordings thereof. These Findings represent a unanimous approval of the Hailey Planning and Zoning Commission, after deliberations on each of the criteria detailed herein below.

On October 20, 2025, the Hailey Planning and Zoning Commission discussed and unanimously approved the Preliminary Plat Application by ARCH Community Trust, Inc. , wherein Lot 6, Block 3 (1411 RedTail Lane) of Quigley Farms Subdivision is subdivided to create two (2) Community Housing lots; Lot 6A comprising of 6,317 square feet in size and Lot 6B comprising of 6,319 square feet in size. This project is located within the General Residential (GR) Zoning District.

Standards of Evaluation for a Subdivision				
Compliant			**Standards and Staff Comments**	
Yes	**No**	**N/A**	**City Code**	**City Standards and *Staff Comments***
☒	☐	☐	**17.06.050**	Complete Application
☒	☐	☐	**Department Comments**	**Engineering:** *All infrastructure will require detailed final construction drawings to be submitted to the City and approved by the City prior to construction. All construction must conform to City of Hailey standard drawings, specifications and procedures.* *Findings: Compliance. This standard has been met.*
				Life/Safety: *No comments*
				Water and Wastewater: **Water:** *Lot 6B will need to install a water service* **Wastewater:** *The existing sewer stub will need to be abandoned, and each new lot will need to install their own sewer service, placement of the service shall be in the center lot for the new lots.* *Findings: Compliance. This standard has been met.*
				Building: *No comments*
				Streets: *No comments*
				City Arborist: *No comments*
☒	☐	☐	**16.04.010 Development Standards**	**Applicability: The configuration and development of proposed subdivisions shall be subject to and meet the provisions and standards found in this Title, the Zoning Title and any other applicable Ordinance or policy of the City of Hailey and shall be in accordance with general provisions of the Comprehensive Plan.**
			Staff Comments	*Please refer to the specific standards as noted herein.* *Findings: Compliance. This standard has been met.*
16.04.020: Streets:				
Compliant			**Standards and Staff Comments**	
Yes	**No**	**N/A**	**City Code**	**City Standards and *Staff Comments***
☒	☐	☐	**16.04.020**	**Streets: Streets shall be provided in all subdivisions where necessary to provide access and shall meet all standards below.**
☒	☐	☐	**A.**	**Development Standards: All streets in the subdivision must be platted and developed with a width, alignment, and improvements such that the street is adequate to safely accommodate existing and anticipated vehicular and pedestrian traffic and meets City standards. Streets shall be aligned in such a manner as to provide through, safe and efficient access from and to adjacent developments and properties and shall provide for the integration of the proposed streets with the existing pattern.**
			Staff Comments	*The project connects to Red Tail Lane, Appaloosa Road, and Quigley Farm Road. These streets are existing public streets. Red Tail Lane and Appaloosa Road are 60 feet in width. Quigley Farm Road is 70 feet in width. These streets are adequate to safely accommodate existing and anticipated vehicular/pedestrian traffic. For further comments or concerns noted by the Streets Division, please refer to Section 17.06.050: Streets.* *Findings: Compliance. This standard has been met.*
☐	☐	☒	**B.**	**Cul-De-Sacs; Dead-End Streets: Cul-de-sacs or dead-end streets shall be allowed only if connectivity is not possible due to surrounding topography or existing platted development. Where allowed, such cul-de-sacs or dead-end streets shall**

				comply with all regulations set forth in the IFC and other applicable codes and ordinances. Street rights-of-way extended into un-platted areas shall not be considered dead end streets.
			Staff Comments	*N/A, as no cul-de-sac or dead-end street is proposed.* *Findings: Compliance. This standard is either not applicable or has been met.*
☒	☐	☐	**C.**	**Access: More than one access may be required based on the potential for impairment of a single access by vehicle congestion, terrain, climatic conditions or other factors that could limit access.**
			Staff Comments	*Access to the parcels can be achieved from Red Tail Lane, Appaloosa Road, Quigley Farm Road and Fox Acres Road.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**D.**	**Design: Streets shall be laid out so as to intersect as nearly as possible at right angles and no street shall intersect any other street at less than eighty (80) degrees. Where possible, four-way intersections shall be used. A recommended distance of 500 feet, with a maximum of 750 feet, measured from the center line, shall separate any intersection. Alternatively, traffic calming measures including but not limited to speed humps, speed tables, raised intersections, traffic circles or roundabouts, meanderings, chicanes, chokers, and/or neck-downs shall be a part of the street design. Alternate traffic calming measures may be approved with a recommendation by the City Engineer. Three-way intersections shall only be permitted where most appropriate or where no other configuration is possible. A minimum distance of 150 feet, measured from the center line, shall separate any 2 three-way intersections.**
			Staff Comments	*All streets within the subdivision are existing public streets and comply with this standard.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**E.**	**Centerlines: Street centerlines which deflect more than five (5) degrees shall be connected by a curve. The radius of the curve for the center line shall not be more than 500 feet for an arterial street, 166 feet for a collector street and 89 feet for a residential street. Alternatively, traffic calming measures including but not limited to speed humps, speed tables, raised intersections, traffic circles or roundabouts, meanderings, chicanes, chokers, and/or neck-downs shall be a part of the street design. Alternate traffic calming measures may be approved with a recommendation by the City Engineer.**
			Staff Comments	*All streets within the subdivision are existing public streets and comply with this standard.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**F.**	**Width: Street width is to be measured from property line to property line. The minimum street width, unless specifically approved otherwise by the Council, shall be as specified in City Standards for the type of street.**
			Staff Comments	*The existing public streets, Red Tail Lane, Appaloosa Road and Quigley Farm Road) meet the minimum City Standards of 60' in width. Quigley Farm Road is 70' in width, which is consistent with Title 18 of the Hailey Municipal Code.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**G.**	**Roadways: Roadway, for the purpose of this section, shall be defined as the area of asphalt from curb face to curb face or edge to edge. Roadway includes areas for vehicle travel and may include parallel or angle in parking areas. The width of roadways shall be in accordance with the adopted City Standards for road construction.**
			Staff Comments	*This standard has been met.* *Findings: Compliance. This standard has been met.*

☒	☐	☐	**H.**	**Road Grades: Road Grades shall be at least two percent (2%) and shall not generally exceed six percent (6%). Grade may exceed 6%, where necessary, by 1% (total 7%) for no more than 300 feet or 2% (total 8%) for no more than 150 feet. No excess grade shall be located within 200 feet of any other excess grade nor there any horizontal deflection in the roadway greater than 30 degrees within 300 feet of where the excess grade decreases to a 2% slope.**
			Staff Comments	*The subject Block is relatively flat. It appears that this standard has been met but will be further reviewed for compliance at final design.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**I.**	**Runoff: The developer shall provide storm sewers and/or drainage areas of adequate size and number to contain any runoff within the streets in the subdivision in conformance with the applicable Federal, State and local regulations. The developer shall provide copies of state permits for shallow injection wells (drywells). Drainage plans shall be reviewed by City Staff and shall meet the approval of the City Engineer. Developer shall provide a copy of EPA's "NPDES General Permit for Storm water Discharge from Construction Activity" for all construction activity affecting more than one acre**.
			Staff Comments	*To adequately accommodate runoff, drywell and other construction details shall be provided at final design.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**J.**	**Signage: The developer shall provide and install all street and traffic control signs in accordance with City Standards.**
			Staff Comments	*This standard will be met and will be reviewed for compliance at final design.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**K.**	**Dedication; Names: All streets and alleys within any subdivision shall be dedicated for public use, except as provided herein. New street names (public and private) shall not be the same or similar to any other street names used in Blaine County.**
			Staff Comments	*The dedication of street names and/or alleys were approved through the Quigley Large Block Plat, approved by the city, as well as the Blaine County Assessor's Office.* *Findings: Compliance. This standard has been met.*
			L.	**Private Streets:**
☐	☐	☒	**L. 1.**	**Private streets may be allowed (a) to serve a maximum of five (5) residential dwelling units, (b) within Planned Unit Developments, or (c) within commercial developments in the Business, Limited Business, Neighborhood Business, Light Industrial, Technological Industry, and Service Commercial Industrial districts. Private streets are allowed at the sole discretion of the Council, except that no Arterial or Major Street, or Collector or Secondary Street may be private. Private streets shall have a minimum total width of 36 feet, shall be constructed to all other applicable City Standards including paving, and shall be maintained by an owner's association.**
			Staff Comments	*N/A, as no private streets are proposed.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**L. 2.**	**Private streets, wherever possible, shall provide interconnection with other public streets and private streets.**
			Staff Comments	*N/A, as no private streets are proposed.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**L. 3.**	**The area designated for private streets shall be platted as a separate parcel according to subsection 16.04.060C below. The plat shall clearly indicate that the parcel is unbuildable except for public vehicular and public pedestrian access and ingress/egress, utilities or as otherwise specified on the plat.**
			Staff Comments	*N/A, as no private streets are proposed.*

				Findings: Compliance. This standard is either not applicable or has been met.
☐	☐	☒	**L. 4.**	**Private street names shall not end with the word "Road", "Boulevard", "Avenue", "Drive" or "Street". Private streets serving five (5) or fewer dwelling units shall not be named.**
			Staff Comments	*N/A, as no private streets are proposed.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**L. 5.**	**Private streets shall have adequate and unencumbered 10-foot-wide snow storage easements on both sides of the street, or an accessible dedicated snow storage easement representing not less than twenty-five percent (25%) of the improved area of the private street. Private street snow storage easements shall not be combined with, or encumber, required on-site snow storage areas.**
			Staff Comments	*N/A, as no private streets are proposed.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**L. 6.**	**Subdivisions with private streets shall provide two (2) additional parking spaces per dwelling unit for guest and/or overflow parking. These spaces may be located (a) within the residential lot (*e.g.*, between the garage and the roadway), (b) as parallel spaces within the street parcel or easement adjacent to the travel lanes, (c) in a designated guest parking area, or (d) as a combination thereof. Guest/overflow parking spaces are in addition to the minimum number of parking spaces required pursuant to chapter 17.09 of this code. The dimension of guest/overflow parking spaces shall be no less than ten feet by twenty feet (10'x20') if angle parking, or ten feet by twenty-four feet (10'x24') if parallel. Guest overflow parking spaces shall be improved with asphalt, gravel, pavers, grass block, or another all-weather dustless surface. No part of any required guest/overflow parking spaces shall be utilized for snow storage.**
			Staff Comments	*N/A, as no private streets are proposed.* *Findings: Compliance. This standard is either not applicable or has been met.*
			M.	**Driveways:**
☒	☐	☐	**M. 1.**	**Driveways may provide access to not more than two (2) residential dwelling units. Where a parcel to be subdivided will have one lot fronting on a street, not more than one additional single-family lot accessed by a driveway may be created in the rear of the parcel. In such a subdivision, where feasible (*e.g.*, no driveway already exists), both lots shall share access via a single driveway. Driveways shall not be named.**
			Staff Comments	*At this time, no driveways are shown on the plat. It appears that no driveway will provide access to more than two (2) residential dwelling units.* *Additionally, all driveways will be located off the alley and will meet City Standards and further details will be provided at the time of Building Permit submittal. Findings: Compliance. This standard has been met.*
☒	☐	☐	**M. 2.**	**Driveways shall be constructed with an all-weather surface and shall have the following minimum roadway widths:** **a) Accessing one residential unit: twelve feet (12')** **b) Accessing two residential units: sixteen feet (16')** **No portion of the required fire lane width of any driveway may be utilized for parking, above ground utility structures, dumpsters or other service areas, snow storage or any other obstructions.**
			Staff Comments	*At this time, no driveways are shown on the plat. It appears that no driveway will provide access to more than two (2) residential dwelling units; however, this will be reviewed for compliance at final design. Additionally, no driveway materials are proposed at this time but shall conform to this standard.* *Findings: Compliance. This standard has been met.*

☒	☐	☐	**M. 3.**	**Driveways longer than 150 feet must have a turnaround area approved by the Fire Department. Fire lane signage must be provided as approved by the Fire Department.**
			Staff Comments	*At this time, no driveways are shown on the plat. However, no driveway shall exceed 150' in length. More details are needed with regard to proposed driveways. Please refer to Section 16.04.020(M) fir further details.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**M. 4.**	**Driveways accessing more than one residential dwelling unit shall be maintained by an owner's association, or in accordance with a plat note.**
			Staff Comments	*At this time, no driveways are shown on the plat. It appears that no driveway will provide access to more than two (2) residential dwelling units; however, this will be reviewed for compliance at final design.* *Please refer to Section 16.04.020(M) for further details.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**M. 5.**	**The area designated for a driveway serving more than one dwelling unit shall be platted as a separate unbuildable parcel, or as a dedicated driveway easement. Easements and parcels shall clearly indicate the beneficiary of the easement or parcel and that the property is unbuildable except for ingress/egress, utilities or as otherwise specified on the plat. A building envelope may be required in order to provide for adequate building setback.**
			Staff Comments	*Please refer to Section 16.04.020(M) for further details.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**M. 6.**	**No driveway shall interfere with maintenance of existing infrastructure and shall be located to have the least adverse impact on residential dwelling units, existing or to be constructed, on the lot the easement encumbers and on adjacent lots.**
			Staff Comments	*Driveways will not impact existing infrastructure and shall be compatible with existing and planned residential units; however, further details are needed with regard to driveways. Please refer to Section 16.04.020(M) for further details.* *Findings: Compliance. This standard has been met.*
☐	☐	☒	**N.**	**Parking Access Lane: A parking access lane shall not be considered a street but shall comply with all regulations set forth in the IFC and other applicable codes and ordinances.**
			Staff Comments	*N/A* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**O.**	**Fire Lanes: Required fire lanes, whether in private streets, driveways or parking access lanes, shall comply with all regulations set forth in the IFC and other applicable codes and ordinances.**
			Staff Comments	*N/A* *Findings: Compliance. This standard is either not applicable or has been met.*

16.04.030: Sidewalks and Drainage Improvements

Compliant			Standards and Staff Comments	
Yes	**No**	**N/A**	**City Code**	**City Standards and *Staff Comments***
☒	☐	☐	**A.**	**Sidewalks and drainage improvements are required in all zoning districts and shall be located and constructed according to applicable City standards, except as otherwise provided herein.**
			Staff Comments	*All proposed streets have adjacent sidewalks or multiuse paths. Existing sidewalks and pathways occur throughout the development. The width of all sidewalks complies with the standards noted in Section 18.06.012.C: Mobility Design.*

				Additionally, A Right-of-Way Maintenance and Wastewater Discharge Agreement was approved, which further addresses maintenance of sidewalks within the City's Right-of-Way. To summarize, the agreement notes that: *1) The Association shall clear snow from all paved sidewalks in the Development which are located within the City's Right-of-Way.* *2) The Association shall cause all sidewalks to be swept and cleared of debris at least once each spring after the snow melts, and as reasonably requested by the City.* *3) The Association shall be solely responsible for all Maintenance Obligations associated with sidewalks, at a level consistent with the maintenance of the Common Area. The Association shall replace the sidewalks at the end of their lifecycle.* *Findings: Compliance. This standard has been met.*
☒	☐	☒	**B.**	**The length of sidewalks and drainage improvements constructed shall be equal to the length of the subject property line(s) adjacent to any public street or private street.**
			Staff Comments	*Please refer to Section 16.04.030(A) for further details.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**C.**	**New sidewalks shall be planned to provide pedestrian connections to any existing and future sidewalks adjacent to the site.**
			Staff Comments	*Please refer to Section 16.04.030(A) for further details.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**D.**	**Sites located adjacent to a public street or private street that are not currently through streets, regardless whether the street may provide a connection to future streets, shall provide sidewalks to facilitate future pedestrian connections.**
			Staff Comments	*Please refer to Section 16.04.030(A) for further details.* *Findings: Compliance. This standard has been met.*
☐	☐	☒	**E.**	**The requirement for sidewalk and drainage improvements are not required for any lot line adjustment.**
			Staff Comments	*N/A* *Findings: Compliance. This standard is either not applicable or has been met.*
16.04.040: Alleys and Easements				
Compliant			**Standards and Staff Comments**	
Yes	**No**	**N/A**	**City Code**	**City Standards and *Staff Comments***
			A.	**Alleys:**
☐	☐	☒	**A. 1.**	**Alleys shall be provided in all Business District and Limited Business District developments where feasible.**
			Staff Comments	*N/A, this parcel is located in the General Residential (GR) Zoning District, this standard does not apply.* *Findings: Compliance. This standard is either not applicable or has been met.*
☒	☐	☐	**A. 2.**	**The minimum width of an alley shall be twenty-six (26') feet.**
			Staff Comments	*The alley is existing and meets this standard.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**A. 3.**	**All alleys shall be dedicated to the public or provide for public access.**
			Staff Comments	*The alley is existing and meets this standard.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**A. 4.**	**All infrastructures to be installed underground shall, where possible, be installed in the alleys platted.**

			Staff Comments	*All infrastructure for Block 3 is in place and meets this standard.* *Findings: Compliance. This standard has been met.*
☐	☐	☒	**A. 5.**	**Alleys in commercial areas shall be improved with drainage as appropriate and which the design meets the approval of the City Engineer. The Developer shall provide storm sewers and/or drainage areas of adequate size and number to contain any runoff within the streets in the subdivision upon the property in conformance with the latest applicable Federal, State and local regulations. The developer shall provide copies of state permits for shallow injection wells (drywells). Drainage plans shall be reviewed by City Staff and shall meet the approval of the City Engineer.**
			Staff Comments	*N/A, this parcel is located in the General Residential (GR) Zoning District, this standard does not apply.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**A. 6.**	**Dead-end alleys shall not be allowed.**
			Staff Comments	*N/A, as no dead-end alleys exist or are proposed with Lot 6 Block 3.*
☒	☐	☐	**A. 7.**	**Where alleys are not provided, easements of not less than ten (10) feet in width may be required on each side of all rear and/or side lot lines (total width = 20 feet) where necessary for wires, conduits, storm or sanitary sewers, gas and water lines. Easements of greater width may be required along lines, across lots, or along boundaries, where necessary for surface drainage or for the extension of utilities.**
			Staff Comments	*The alley is existing and meets this standard.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**B.**	**Easements. Easements, defined as the use of land not having all the rights of ownership and limited to the purposes designated on the plat, shall be placed on the plat as appropriate. Plats shall show the entity to which the easement has been granted. Easements shall be provided for the following purposes:**
☒	☐	☐	**B. 1.**	**To provide access through or to any property for the purpose of providing utilities, emergency services, public access, private access, recreation, deliveries or such other purpose. Any subdivision that borders on the Big Wood River shall dedicate a 20-foot-wide fisherman's access easement, measured from the Mean High-Water Mark, which shall provide for non-motorized public access. Additionally, in appropriate areas, an easement providing non-motorized public access through the subdivision to the river shall be required as a sportsman's access.**
			Staff Comments	*Though the proposed subdivision does not border the Big Wood River, the following easements are shown on the proposed plat:* 1. *A 5'-wide Public Utility Easement between proposed Lot 6A and Lot 5* 2. *A 5'-wide Public Utility Easement between proposed Lot 6B and Lot 7* 3. *A 40'-wide Public Access, Utility and Snow Storage Easement along the rear property line of all parcels in Block 3* 4. *A 10'-wide Public Utility Easement and Snow Storage Easement along the property frontage of all lots.* *Findings: Compliance. This standard has been met.*
☐	☐	☒	**B. 2.**	**To provide protection from or buffering for any natural resource, riparian area, hazardous area, or other limitation or amenity on, under, or over the land. Any subdivision that borders on the Big Wood River shall dedicate a one hundred (100) foot wide riparian setback easement, measured from the Mean High-Water Mark, upon which no permanent structure shall be built, in order to protect the natural vegetation and wildlife along the river bank and to protect structures from damage or loss due to river bank erosion. A twenty-five (25) foot wide riparian setback**

				easement shall be dedicated adjacent to tributaries of the Big Wood River. Removal and maintenance of live or dead vegetation within the riparian setback easement is controlled by the applicable bulk requirement of the Flood Hazard Overlay District. The riparian setback easement shall be fenced off during any construction on the property.
			Staff Comments	*N/A, as no natural resource, riparian area, hazardous area or other limitation requires an easement for the proposed subdivision.* *Findings: Compliance. This standard is either not applicable or has been met.*
☒	☐	☐	**B. 3.**	**To provide for the storage of snow, drainage areas or the conduct of irrigation waters. Snow storage areas shall be not less than twenty-five percent (25%) of parking, sidewalk and other circulation areas. No dimension of any snow storage area may be less than 10 feet. All snow storage areas shall be accessible and shall not be located over any above ground utilities, such as transformers.**
			Staff Comments	*Snow storage easements have been delineated on the preliminary plat. The plat shows a 10'-wide Public Utility and Snow Storage Easement along all property frontages of the proposed lots, as well as a 40'-wide Public Access, Utility and Snow Storage Easement along the rear property line of all parcels in Block 3.* *Findings: Compliance. This standard has been met.*
16.04.050: Blocks				
Compliant			**Standards and Staff Comments**	
Yes	**No**	**N/A**	**City Code**	**City Standards and *Staff Comments***
☒	☐	☐	**16.04.050**	**Blocks: The length, width and shape of blocks shall be determined with due regard to adequate building sites suitable to the special needs of the type of use contemplated, the zoning requirements as to lot size and dimensions, the need for convenient access and safe circulation and the limitations and opportunities of topography.**
			Staff Comments	*All proposed Lots and Blocks are shown on the Preliminary Plat.* *Findings: Compliance. This standard has been met.*
16.04.060: Lots				
Compliant			**Standards and Staff Comments**	
Yes	**No**	**N/A**	**City Code**	**City Standards and *Staff Comments***
☒	☐	☐	**16.04.060**	**Lots: All lots shown on the subdivision plat must conform to the minimum standards for lots in the District in which the subdivision is planned. The City will generally not approve single-family residential lots larger than one-half (1/2) acre (21,780 square feet). In the event a single-family residential lot greater than one-half (1/2) acre is platted, irrigation shall be restricted to not more than one-half (1/2) acre, pursuant to Idaho Code §42-111, and such restriction shall be included as a plat note. District regulations are found in the Zoning Chapter.**
☒	☐	☐	**A.**	**If lots are more than double the minimum size required for the zoning district, the Developer may be required to arrange lots in anticipation of future re-subdivision and provide for future streets where necessary to serve potential lots, unless the plat restricts further subdivision.**
			Staff Comments	*The proposed Lots 6a and 6B meet the minimum size required by the General Residential (GR) Zoning District. No Lots are more than double the minimum lot size. Furthermore, The Applicant has no intention to further subdivide the proposed Lots within the subdivision, and no Lots are proposed to be at or larger than one-half (1/2) acre.* *Findings: Compliance. This standard has been met.*
☐	☐	☒	**B.**	**Double frontage lots shall be prohibited except where unusual topography, a more integrated street plan, or other conditions make it undesirable to meet this**

				requirement. Double frontage lots are those created by either public or private streets, but not by driveways or alleys. Subdivisions providing a platted parcel of 25 feet or more between any street right-of-way and any single row of lots shall not be considered to have platted double frontage lots. The 25-foot-wide parcel provided must be landscaped to provide a buffer between the street and the lot(s).
			Staff Comments	*N/A, as no double frontage lots are proposed.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**C.**	**No unbuildable lots shall be platted. Platted areas that are not buildable shall be noted as such and designated as "parcels" on the plat. Green Space shall be clearly designated as such on the plat.**
			Staff Comments	*N/A, as no unbuildable lots are proposed.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**D.**	**A single flag lot may be permitted at the sole discretion of the Hearing Examiner or Commission and Council, in which the "flagpole" projection is serving as a driveway as provided herein, providing connection to and frontage on a public or a private street. Once established, a flag lot may not be further subdivided, but a lot line adjustment of a flag lot is not considered a further subdivision. The "flagpole" portion of the lot shall be included in lot area but shall not be considered in determining minimum lot width. The "flagpole" shall be of adequate width to accommodate a driveway as required by this ordinance, fire and other applicable codes. Flag lots within the Townsite Overlay District are not allowed, except where parcels do not have street access, such as parcels adjacent to the ITD right-of-way.**
			Staff Comments	*N/A, as no flag lot is proposed at this time.* *Findings: Compliance. This standard is either not applicable or has been met.*
☒	☐	☐	**E.**	**All lots shall have frontage on a public or private street. No frontage width shall be less than the required width of a driveway as provided under Section 16.04.020 of this Ordinance. Townhouse Sub-Lots are excluded from this requirement; provided, however, that Townhouse Developments shall have frontage on a street.**
			Staff Comments	*The proposed Lots have frontages on a public street, Red Tail Lane, and it appears that no frontage width will be less than the required driveway width, as noted herein.* *Findings: Compliance. This standard has been met.*
☐	☐	☒	**F.**	**In the Townsite Overlay District, original Townsite lots shall be subdivided such that the new platted lots are oriented the same as the original lots, i.e., lots shall be subdivided in such a way as to maintain frontage on both the street and alley. Exceptions may be made for corner properties with historic structures.**
			Staff Comments	*N/A, as this project is not located within the Townsite Overlay (TO) Zoning District.* *Findings: Compliance. This standard is either not applicable or has been met.*

16.04.070: Orderly Development

Compliant			**Standards and Staff Comments**	
Yes	**No**	**N/A**	**City Code**	**City Standards and *Staff Comments***
☒	☐	☐	**A.**	**Phasing Required: Development of subdivisions shall be phased to avoid the extension of City services, roads and utilities through undeveloped land.**
			Staff Comments	*No Phasing Plan has been developed for Block 3. That said, the Annexation Agreement serves as such, as it outlines several project phases. This agreement was approved by City Council and has been recorded with Blaine County.* *Findings: Compliance. This standard has been met.*

☒	☐	☐	**B.**	**<u>Agreement:</u> Developers requesting phased subdivisions shall enter into a phasing agreement with the City. Any phasing agreement shall be approved and executed by the Council and the Developer on or before the preliminary plat approval by the Council.**
			Staff Comments	*No Phasing Plan has been developed for Block 3 specifically. That said, the Annexation Agreement serves as such, as it outlines several project phases. This agreement has been approved by City Council and has been recorded with Blaine County.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**C.**	**<u>Mitigation of Negative Effects:</u> No subdivision shall be approved which affects the ability of political subdivisions of the state, including school districts, to deliver services without compromising quality of service delivery to current residents or imposing substantial additional public costs upon current residents, unless the Developer provides for the mitigation of the effects of subdivision. Such mitigation may include, but is not limited to the following:** **a) Provision of on-site or off-site street or intersection improvements.** **b) Provision of other off-site improvements.** **c) Dedications and/or public improvements on property frontages.** **d) Dedication or provision of parks or green space.** **e) Provision of public service facilities.** **f) Construction of flood control canals or devices.** **g) Provisions for ongoing maintenance.**
			Staff Comments	**a) Provision of on-site or off-site street or intersection improvements.** *N/A* **b) Provision of other off-site improvements.** *Several off-site improvements have been made, which include, but are not limited to vehicular/bike lane improvements and Toe of the Hill Trail Connections.* **c) Dedications and/or public improvements on property frontages.** *N/A* **d) Dedication or provision of parks or green space.** *Please refer to Section 16.04.110 for further details.* **e) Provision of public service facilities.** *All public utilities and services have been developed as part of the subdivision.* **f) Construction of flood control canals or devices.** *The construction and/or incorporation of roads and drywells, all improved drainage conditions onsite.* **g) Provisions for ongoing maintenance.** *A plan for ongoing maintenance was addressed in the Annexation Agreement and associated documents.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**D.**	**When the developer of contiguous parcels proposes to subdivide any portion of the contiguous parcels, an area development plan shall be submitted and approved. The Commission and Council shall evaluate the following basic site criteria and make appropriate findings of fact:** **1. Streets, whether public or private, shall provide an interconnected system and shall be adequate to accommodate anticipated vehicular and pedestrian traffic.** **2. Non-vehicular circulation routes shall provide safe pedestrian and bicycle ways and provide an interconnected system to streets, parks and green space, public lands, or other destinations.** **3. Water main lines and sewer main lines shall be designed in the most**

				effective layout feasible. **4. Other utilities including power, telephone, cable, and gas shall be designed in the most effective layout feasible.** **5. Park land shall be most appropriately located on the Contiguous Parcels.** **6. Grading and drainage shall be appropriate to the Contiguous Parcels.** **7. Development shall avoid easements and hazardous or sensitive natural resource areas.** **The commission and council may require that any or all contiguous parcels be included in the subdivision.**
			Staff Comments	*These issues have been covered in the full development of the project through the Annexation Agreement, as well as the Large Block Plat.* *Findings: Compliance. This standard has been met.*

16.04.080: Perimeter Walls, Gates and Berms

Compliant			Standards and Staff Comments	
Yes	**No**	**N/A**	**City Code**	**City Standards and *Staff Comments***
☐	☐	☒	**16.04.080**	**The City of Hailey shall not approve any residential subdivision application that includes any type of perimeter wall or gate that restricts access to the subdivision. This regulation does not prohibit fences on or around individual lots. The City shall also not allow any perimeter landscape berm more than 3' higher than the previously existing (original) grade.**
			Staff Comments	*N/A, as it appears, no perimeter walls, gates or landscape berms are proposed within Lot 6 Block 3.* *Findings: Compliance. This standard is either not applicable or has been met.*

16.04.090: Cuts, Fills, Grading and Drainage

Compliant			Standards and Staff Comments	
Yes	**No**	**N/A**	**City Code**	**City Standards and *Staff Comments***
☒	☐	☐	**A.**	**Plans Required: Proposed subdivisions shall be carefully planned to be compatible with natural topography, soil conditions, geology and hydrology of the site, as well as to minimize cuts; fills, alterations of topography, streams, drainage channels; and disruption of soils or vegetation. Fill within the floodplain shall comply with the requirements of the Flood Hazard Overlay District of the Zoning Ordinance.**
			Staff Comments	*No floodplain exists and the parcel is currently vacant.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**A. 1.**	**A preliminary soil report prepared by a qualified engineer may be required by the Hearing Examiner or Commission and/or Council as part of the preliminary plat application.**
			Staff Comments	*At this time, the City Engineer has not required that a Soils Report be prepared and/or submitted.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**A. 2.**	**A preliminary grading plan prepared by a civil engineer may be required by the Hearing Examiner or Commission and/or the Council as part of the preliminary plat application, to contain the following information:** **a) Proposed contours at a maximum of two (2) foot contour intervals;** **b) Cut and fill banks in pad elevations;** **c) Drainage patterns;** **d) Areas where trees and/or natural vegetation will be preserved;** **e) Location of all street and utility improvements including driveways to building envelopes; and** **f) Any other information which may reasonably be required by the Administrator, Hearing Examiner, Commission and/or Council.**

			Staff Comments	*Preliminary grading, drainage, and utility improvements have been shown on the Preliminary Plat and shall be included in final design.* *Findings: Compliance. This standard has been met.*
			B.	**Design Standards: The proposed subdivision shall conform to the following design standards:**
☒	☐	☐	**B. 1.**	**Grading shall be designed to blend with natural land forms and to minimize the necessity of padding or terracing of building sites, excavation for foundations, and minimize the necessity of cuts and fills for streets and driveways.**
			Staff Comments	*The grading has been developed for the proposed streets within the subdivision. Grading for dwelling units shall meet this standard.* *Findings: Compliance. This standard has been met.*
☐	☐	☒	**B. 2.**	**Areas within a subdivision which are not well suited for development because of existing soil conditions, steepness of slope, geology or hydrology shall be allocated for Green Space for the benefit of future property owners within the subdivision.**
			Staff Comments	*N/A, as none exist within Lot 6 Block 3.* *Findings: Compliance. This standard is either not applicable or has been met.*
☒	☐	☐	**B. 3.**	**Where existing soils and vegetation are disrupted by subdivision development, provision shall be made by the Developer for Revegetation of disturbed areas with perennial vegetation sufficient to stabilize the soil upon completion of the construction, including temporary irrigation for a sufficient period to establish perennial vegetation. Until such time as the vegetation has been installed and established, the Developer shall maintain and protect all disturbed surfaces from erosion.**
			Staff Comments	*Erosion control and re-vegetation shall be included in final design.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**B. 4.**	**Where cuts, fills or other excavation are necessary, the following development standards shall apply:** **a) Fill areas for structures or roads shall be prepared by removing all organic material detrimental to proper compaction for soil stability.** **b) Fill for structures or roads shall be compacted to at least 95 percent of maximum density as determined by American Association State Highway Transportation Officials (AASHTO) and American Society of Testing & Materials (ASTM).** **c) Cut slopes shall be no steeper than two horizontals to one vertical. Subsurface drainage shall be provided as necessary for stability.** **d) Fill slopes shall be no steeper than three horizontals to one vertical. Neither cut nor fill slopes shall be located on natural slopes of three to one or steeper, or where fill slope toes out within twelve (12) feet horizontally of the top of existing or planned cut slope.** **e) Tops and toes of cut and fill slopes shall be set back from structures and property lines as necessary to accommodate drainage features and drainage structures.**
			Staff Comments	*Grading and drainage review shall take place during final design.* *Findings: Compliance. This standard has been met.*
☐	☐	☒	**B. 5.**	**The developer shall provide storm sewers and/or drainage areas of adequate size and number to contain the runoff upon the property in conformance with the applicable Federal, State and local regulations. The developer shall provide copies of state permits for shallow injection wells (drywells). Drainage plans shall be reviewed by planning staff and shall meet the approval of the City engineer. Developer shall provide a copy of EPA's "NPDES General Permit for Storm-water Discharge from Construction Activity" for all construction activity affecting more than one acre.**

			Staff Comments	*N/A, as Lot 6 Block 3 is not greater than one (1) acre, this standard does not apply.* *Findings: Compliance. This standard is either not applicable or has been met.*
16.04.100: Overlay Districts				
Compliant			**Standards and Staff Comments**	
Yes	**No**	**N/A**	**City Code**	**City Standards and *Staff Comments***
			A.	**Flood Hazard Overlay District:**
☐	☐	☒	**A. 1.**	**Subdivisions or portions of subdivision located within the Flood Hazard Overlay District shall comply with all provisions of Section 4.10 of the Zoning Ordinance.**
			Staff Comments	*N/A, as the proposed subdivision is not located within the Flood Hazard Overlay District.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**A. 2.**	**Subdivisions located partially in the Flood Hazard Overlay District shall have designated building envelopes outside the Flood Hazard Overlay District to the extent possible.**
			Staff Comments	*N/A, as the proposed subdivision is not located within the Flood Hazard Overlay District.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**A. 3.**	**Any platted lots adjacent to the Big Wood River or its tributaries shall have designated building envelopes.**
			Staff Comments	*N/A, as the proposed subdivision is not located adjacent to the Big Wood River or its tributaries.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**B.**	**Hillside Overlay District:**
☐	☐	☒	**B. 1.**	**Subdivisions or portions of subdivisions located within the Hillside Overlay District shall comply with all provisions of Section 17.04N, of the Hailey Municipal Code.**
			Staff Comments	*N/A, as the proposed subdivision is not located within the Hillside Overlay District.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**B. 2.**	**Subdivisions located partially in the Hillside Overlay District shall have designated building envelopes outside the Hillside Overlay District.**
			Staff Comments	*N/A, as the proposed subdivision is not located within the Hillside Overlay District.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**B. 3.**	**All approved subdivisions shall contain a condition that a Site Alteration Permit is required before any development occurs.**
			Staff Comments	*N/A, as the proposed subdivision is not located within the Hillside Overlay District.* *Findings: Compliance. This standard is either not applicable or has been met.*
16.04.110: Parks, Pathways and Other Green Spaces				
Compliant			**Standards and Staff Comments**	
Yes	**No**	**N/A**	**City Code**	**City Standards and *Staff Comments***
☒	☐	☐	**A.**	**Parks and Pathways: Unless otherwise provided, every subdivision shall set aside a Park and/or Pathway(s) in accordance with standards set forth herein.**
			Staff Comments	*Open space dedications to the BCRD (Block 10) and BCSD (Block 1) were conveyed at the time of the Large Block Preliminary Plat. A 30'-wide open space/park pathway and public utility easement were granted within Lots 1-4 of Block 3. Numerous other open space parcels and pathways have been*

				delineated on the Large Block Plat, creating the feel of a pedestrian-oriented development. Pathways have also been set aside for certain areas within the Quigley Farm Subdivision (i.e., extension of the Toe-of-the-Hill Trail, asphalt pathway to Quigley Road from Fox Acres, and multiuse pathways planned in collaboration with BCRD, etc.); Furthermore, Lot 6, Block 3 is within the Large Block Plat of the Quigley Farm Subdivision and is not required to provide additional park space or pathways. *Findings: Compliance. This standard has been met.*
			A. 1.	**Parks:**
☒	☐	☐	**A. 1. a.**	**The developer of any subdivision, or any part thereof, consisting of three (3) or more residential lots, including residential townhouse sub-lots and residential condominium units, without regard to the number of phases within the subdivision, shall set aside or acquire land area within, adjacent to or in the general vicinity of the subdivision for Parks. Parks shall be developed within the City of Hailey and set aside in accordance with the following formula:** **P = x multiplied by .0277** **"P" is the Parks contribution in acres** **"x" is the number of single-family lots, residential townhouse sub-lots or residential condominium units contained within the plat. Where multi-family lots are being platted with no fixed number of units, "x" is maximum number of residential lots, sub-lots, and units possible within the subdivision based on current zoning regulations.**
			Staff Comments	*Mathematical calculations of this formula for the submitted plat result in the following requirements:* ***Project Buildout with Number of Units:*** *.0277 x 176 = 4.8752 acres* *The above calculation was discussed at length during the Preliminary Plat process of the Quigley Farm Subdivision Large Block Plat. Park Space was conveyed during this process and the Hailey City Council found that the amount of permanent open space protected by the project greatly exceeds the required amount. Furthermore, Lot 6 Block 3 is within the Large Block Plat of the Quigley Farm Subdivision and is not required to provide additional park space.* *Findings: Compliance. This standard has been met.*
☐	☐	☒	**A.1.b**	**In the event the subdivision is located in the Business (B), Limited Business (LB), Neighborhood Business (NB), or Transitional (TN) zoning districts, the area required for a Park shall be reduced by 75%, but in no event shall the area required for a Park/Cultural Space exceed 17.5% of the area of the lot(s) being developed.**
			Staff Comments	*N/A, as the proposed subdivision is located in the General Residential (GR) Zoning District., this standard does not apply.* *Findings: Compliance. This standard is either not applicable or has been met.*
☒	☐	☐	**A. 2.**	**Pathways: The developer of any subdivision, or any part thereof, shall provide pathways for all trails and paths identified in the master plan that are located on the property to be subdivided or on City property adjacent to the property to be subdivided, and sidewalks required by this ordinance.**

			Staff Comments	*Pathways were also conveyed during the Preliminary Plat process of the Quigley Farm Subdivision Large Block Plat. A 30'-wide open space/park pathway and public utility easement were granted within Lots 1-4 of Block 3. Numerous other open space parcels and pathways have been delineated on the Large Block Plat, creating the feel of a pedestrian-oriented development. Pathways have also been set aside for certain areas within the Quigley Farm Subdivision (i.e., extension of the Toe-of-the-Hill Trail, asphalt pathway to Quigley Road from Fox Acres, and multiuse pathways with BCRD, etc.) Furthermore, Lot 6, Block 3 is within the Large Block Plat of the Quigley Farm Subdivision and is not required to provide additional pathways.* *Findings: Compliance. This standard has been met.*
☐	☐	☒	**B.**	**Multiple Ownership: Where a parcel of land is owned or otherwise controlled, in any manner, directly or indirectly:** **a) By the same individual(s) or entity(ies), including but not limited to corporation(s), partnership(s), limited liability company(ies) or trust(s), or** **b) By different individuals or entities, including but not limited to corporations, partnerships, limited liability companies or trusts where a) such individual(s) or entity(ies) have a controlling ownership or contractual right with the other individual(s) or entity(ies), or b) the same individual(s) or entity(ies) act in any manner as an employee, owner, partner, agent, stockholder, director, member, officer or trustee of the entity(ies),** **c) Multiple subdivisions of the parcel that cumulatively result in three (3) or more residential lots, townhouse sub-lots or condominium units, are subject to the provisions of this ordinance, and shall provide the required improvements subject to the required standards at or before the platting or development of the lots, sub-lots or units.** d) **Parks and Lands Board: The parks and lands board shall review and make a recommendation to the hearing examiner or commission and council regarding each application subject to the provisions of Section 4.10 of this ordinance. Such recommendation will be based on compliance with the master plan and provisions of this ordinance.**
			Staff Comments	*N/A, as these issues were covered in the full development of the project through the Annexation Agreement, as well as within the Large Block Plat. This does not apply specifically to the subject parcel.* *Findings: Compliance. This standard is either not applicable or has been met.*
☒	☐	☐	**C.**	**Parks and Lands Board: The parks and lands board shall review and make a recommendation to the hearing examiner or commission and council regarding each application subject to the provisions of Section 4.10 of this ordinance. Such recommendation will be based on compliance with the master plan and provisions of this ordinance.**
			Staff Comments	*The Parks and Lands Board reviewed the full project in September 2016 and again in December 2017. In September 2016, the Parks and Lands Board reviewed the plan to develop Quigley Farm. The discussion included the relocation of ball fields and the addition of sports fields. It also included future cross-country skiing trails, biking trails and connections to the existing Toe of the Hill Trail. The addition of paved bike paths, parking, a pavilion and restroom, mountain bike and hand-cycling trails and other connections to existing trails were also discussed.*

				At the December 2017 meeting, the Parks and Lands Board unanimously voted to approve Quigley Farm Subdivisions open space dedication as proposed, with the following conditions: *1) A bike path be added between Quigley Road and Fox Acres Road, east of the dedicated parcel to BCSD;* *2) A public process to take place to determine the future of the berms on the west side of the parcel dedicated to the BCSD; and* *3) Wayfinding and dog pot station to be added at the end of Antler Drive where the bike path begins.* *These conditions were covered in the full development of the project through the Large Block Plat. Furthermore, Lot 6 Block 3 is within the Large Block Plat of the Quigley Farm Subdivision and is not required to provide additional open space.* *Findings: Compliance. This standard has been met.*
			D.	**Minimum Requirements:**
☒	☐	☐	**D. 1.**	**Private Green Space: Use and maintenance of any privately-owned green space shall be controlled by recorded covenants or restrictions which run with the land in favor of the future owners of the property within the tract and which cannot be modified without the consent of the council.**
			Staff Comments	*Lot 6 Block 3 is within the Large Block Plat of the Quigley Farm Subdivision is not required to provide additional green space. Numerous open space parcels have been delineated on the Large Block Plat, which is protected from redevelopment, and will be managed by the Homeowner's Association.* *Findings: Compliance. This standard has been met.*
☐	☐	☒	**D. 2.**	**Neighborhood Park: A neighborhood park shall include finished grading and ground cover, large grassy areas, trees and shrubs, sheltered picnic table(s), trash container(s), dog station(s), bike racks, park bench(es), parking as required by ordinance, and two or more of the following: play structure, restrooms, an athletic field, trails, hard surface multiple use court (tennis or basketball courts), or gardens that demonstrate conservation principles. Neighborhood Parks shall provide an average of 15 trees per acre, of which at least 15% shall be of 4" caliper or greater. A maximum of 20% of any single tree species may be used. Landscaping and irrigation shall integrate water conservation. A neighborhood park shall be deeded to the City upon completion, unless otherwise agreed upon by the developer and City.**
			Staff Comments	*Lot 6, Block 3 is within the Large Block Plat of the Quigley Farm Subdivision and is not required to provide additional open space. Open space dedications to the BCRD (Block 10) and BCSD (Block 1) were conveyed at the time of the Large Block Preliminary Plat.* *Findings: Compliance. This standard has been met.*
☐	☐	☒	**D. 3.**	**Mini Park: A mini park shall include finished grading and ground cover, trees and shrubs, picnic table(s), trash container(s), dog station(s), bike racks and park bench(es). All mini parks shall provide an average of 15 trees per acre, of which at least 15% shall be of 4" caliper or greater. A maximum of 20% of any single tree species may be used. Landscaping and irrigation shall integrate water conservation.**
			Staff Comments	*N/A, as no mini park is proposed with this subdivision.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**D. 4.**	**Park/Cultural Space: A park/cultural space shall include benches, planters, trees, public art, water features and other elements that would create a gathering place.**

				Connective elements, such as parkways or enhanced sidewalks may also qualify where such elements connect two or more parks or park/cultural spaces.
			Staff Comments	*N/A, as no park/cultural space is proposed with this subdivision.* *Findings: Compliance. This standard is either not applicable or has been met.*
☒	☐	☐	**D. 5.**	**Pathway: Pathways shall have a minimum twenty-foot (20') right-of-way width and shall be paved or improved as recommended by the Parks and Lands Board. Construction of Pathways shall be undertaken at the same time as other public improvements are installed within the development, unless the Council otherwise allows when deemed beneficial for the project. The Developer shall be entitled to receive a Park dedication credit only if the Developer completes and constructs a Pathway identified in the Master Plan or completes and constructs a Pathway not identified in the Master Plan where the Pathway connects to existing or proposed trails identified in the Master Plan. The City may permit easements to be granted by Developers for Pathways identified in the Master Plan, thereby allowing the Developer to include the land area in the determination of setbacks and building density on the site, but in such cases, a Park dedication credit will not be given. A Developer is entitled to receive a credit against any area required for a Park for every square foot of qualified dedicated Pathway right-of-way.**
			Staff Comments	*Pathways were conveyed during the Preliminary Plat process of the Quigley Farm Subdivision Large Block Plat. That said, a 30'-wide open space/park pathway and public utility easement were granted within Lots 1-4 of Block 3.* *Other pathways have been delineated on the Large Block Plat, creating the feel of a pedestrian-oriented development. Pathways have also been set aside for certain areas within the Quigley Farm Subdivision (i.e., extension of the Toe-of-the-Hill Trail, asphalt pathway to Quigley Road from Fox Acres, and multiuse pathways in collaboration with BCRD, etc.) Furthermore, Lot 6, Block 3 is within the Large Block Plat of the Quigley Farm Subdivision and is not required to provide additional pathways.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**E.**	**Specific Park Standards: All Parks shall meet the following criteria for development, location and size (unless unusual conditions exist that prohibit meeting one or more of the criteria):**
☒	☐	☐	**E. 1.**	**Shall meet the minimum applicable requirements required by Subsection D of this section.**
			Staff Comments	*Please refer to Section 16.040.110 for further details.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**E. 2.**	**Shall provide safe and convenient access, including ADA standards.**
			Staff Comments	*Please refer to Section 16.040.110 for further details.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**E. 3.**	**Shall not be gated so as to restrict access and shall not be configured in such a manner that will create a perception of intruding on private space. If a Park is privately owned and maintained, the use of the park shall not be exclusive to the homeowners, residents or employees of the development.**
			Staff Comments	*No gates or restricted access are proposed at this time.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**E. 4.**	**Shall be configured in size, shape, topography and improvements to be functional for the intended users. To be eligible for Park dedication, the land must, at a minimum, be located on slopes less than 25 degrees, and outside of drain ways, floodways and wetland areas. Mini Parks shall not be occupied by non-recreational**

				buildings and shall be available for the use of all the residents or employees of the proposed subdivision.
			Staff Comments	*Please refer to Section 16.040.110 for further details.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**E. 5.**	**Shall not create undue negative impact on adjacent properties and shall be buffered from conflicting land uses.**
			Staff Comments	*Please refer to Section 16.040.110 for further details.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**E. 6.**	**Shall require low maintenance or provide for maintenance or maintenance endowment.**
			Staff Comments	*Please refer to Section 16.040.110 for further details.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**F.**	**Specific Pathway Standards: All Pathways shall meet the following criteria for development, location and size (unless unusual conditions exist that prohibit meeting one or more of the criteria):**
☒	☐	☐	**F. 1.**	**Shall meet the minimum applicable requirements required by Subsection D of this section.**
			Staff Comments	*Please refer to Section 16.040.110.D for further details.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**F. 2.**	**Shall be connected in a useful manner to other Parks, Pathways, Green Space and recreation and community assets.**
			Staff Comments	*Please refer to Section 16.040.110.A for further details.* *Findings: Compliance. This standard has been met.*
			G.	**Specific Green Space Standards: If green space is required or offered as part of a subdivision, townhouse or condominium development, all green space shall meet the following criteria for development, location and size (unless unusual conditions exist that prohibit meeting one or more of the criteria):**
☒	☐	☐	**G. 1.**	**Shall meet the minimum applicable requirements required by subsection D of this section.**
			Staff Comments	*Please refer to Section 16.04.110 for further details.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**G. 2.**	**Public and private green spaces on the same property or adjacent properties shall be complementary to one another. Green space within proposed developments shall be designed to be contiguous and interconnecting with any adjacent Green Space (both existing and potential future space).**
			Staff Comments	*Please refer to Section 16.04.110 for further details.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**G. 3.**	**The use of the private green space shall be restricted to Parks, Pathways, trails or other recreational purposes, unless otherwise allowed by the City.**
			Staff Comments	*Please refer to Section 16.04.110 for further details.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**G. 4.**	**The private ownership and maintenance of green space shall be adequately provided for by written agreement.**
			Staff Comments	*Maintenance of green space is managed by the Subdivision's HOA, through the approved maintenance agreement. Furthermore, Lot 6 Block 3 is within the Large Block Plat of the Quigley Farm Subdivision and is not required to provide an additional maintenance agreement.* *Findings: Compliance. This standard has been met.*
			H.	**In-Lieu Contributions:**

☐	☐	☒	**H. 1.**	**After receiving a recommendation by the Parks and Lands Board, the Council may at their discretion approve and accept voluntary cash contributions in lieu of Park land dedication and Park improvements.**
			Staff Comments	*N/A- Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**H. 2.**	**The voluntary cash contributions in lieu of Park land shall be equivalent to the area of land (*e.g.*, square footage) required to be dedicated under this ordinance multiplied by the fair market value of the land (*e.g.*, $/square foot) in the development at the time of preliminary plat approval by the Council. The City shall identify the location of the property to be appraised, using the standards in subsections E4 and E5 of this section. The appraisal shall be submitted by a mutually agreed upon appraiser and paid for by the applicant.**
			Staff Comments	*N/A- Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**H. 3.**	**Except as otherwise provided, the voluntary cash contribution in lieu of Park land shall also include the cost for Park improvements, including all costs of acquisition, construction and all related costs. The cost for such improvements shall be based upon the estimated costs provided by a qualified contractor and/or vendor. In the Business (B), Limited Business (LB), Neighborhood Business (NB) and Transitional (TN) zoning districts, in-lieu contributions will not include the cost for Park improvements.**
			Staff Comments	*N/A- Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**H. 4.**	**In-lieu contributions must be segregated by the City and not used for any other purpose other than the acquisition of Park land and/or Park improvements, which may include upgrades and replacement of Park improvements. Such funds should be used, whenever feasible or practicable, on improvements within walking distance of the residents of the subdivision.**
			Staff Comments	*N/A- Findings: Compliance. This standard is either not applicable or has been met.*

16.05: Improvements Required:

Compliant			Standards and Staff Comments	
Yes	**No**	**N/A**	**City Code**	**City Standards and *Staff Comments***
☒	☐	☐	**16.05.010**	**Minimum Improvements Required: It shall be a requirement of the Developer to construct the minimum infrastructure improvements set forth herein and any required infrastructure improvements for the subdivision, all to City Standards and procedures, set forth in Title 18 of the Hailey Municipal Code and adopted by ordinance in accordance with the notice and hearing procedures provided in Idaho Code §67-6509. Alternatives to the minimum improvement standards may be recommended for approval by the City Engineer and approved by the City Council at its sole discretion only upon showing that the alternative is clearly superior in design and effectiveness and will promote the public health, safety and general welfare.**
			Staff Comments	*The Applicant intends to construct all necessary infrastructure, if the project is approved.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**A.**	**Plans Filed, maintained: Six (6) copies of all improvement plans shall be filed with the City Engineer and made available to each department head. Upon final approval two (2) sets of revised plans shall be returned to the Developer at the pre-construction conference with the City Engineer's written approval thereon. One**

				set of final plans shall be on-site at all times for inspection purposes and to note all field changes upon.
			Staff Comments	*This standard will be met.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**B.**	**Preconstruction Meeting: Prior to the start of any construction, it shall be required that a pre-construction meeting be conducted with the Developer or his authorized representative/engineer, the contractor, the City Engineer and appropriate City departments. An approved set of plans shall be provided to the Developer and contractor at or shortly after this meeting.**
			Staff Comments	*This standard will be met.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**C.**	**Term of Guarantee of Improvements: The developer shall guarantee all improvements pursuant to this Section for no less than one year from the date of approval of all improvements as complete and satisfactory by the City engineer, except that parks shall be guaranteed and maintained by the developer for a period of two years.**
			Staff Comments	*This standard will be met.* *Findings: Compliance. This standard has been met.*
16.05.020: Streets, Sidewalks, Lighting, Landscaping				
☒	☐	☐	**16.05.020**	**Streets, Sidewalks, Lighting, Landscaping: The developer shall construct all streets, alleys, curb and gutter, lighting, sidewalks, street trees and landscaping, and irrigation systems to meet City Standards, the requirements of this ordinance, the approval of the Council, and to the finished grades which have been officially approved by the City engineer as shown upon approved plans and profiles. The developer shall pave all streets and alleys with an asphalt plant-mix and shall chip-seal streets and alleys within one year of construction.**
			Staff Comments	*All public infrastructure shall meet City specifications.* *Findings: Compliance. This standard has been met.*
☒	☐	☐	**A.**	**Street Cuts: Street cuts made for the installation of services under any existing improved public street shall be repaired in a manner which shall satisfy the Street Superintendent, shall have been approved by the Hailey City Engineer or his authorized representative, and shall meet City Standards. Repair may include patching, skim coats of asphalt or, if the total area of asphalt removed exceeds 25% of the street area, the complete removal and replacement of all paving adjacent to the development. Street cut repairs shall also be guaranteed for no less than one year. (Ord. 1191, 2015)**
			Staff Comments	*All public infrastructure shall meet City specifications.* ***Findings: Compliance. This standard has been met.***
☐	☐	☒	**B.**	**Signage: Street name signs and traffic control signs shall be erected by the Developer in accordance with City Standard, and the street name signs and traffic control signs shall thereafter be maintained by the City.**
			Staff Comments	*N/A, as street names and signage are existing and in place.* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**C.**	**Streetlights: Street lights in the Recreational Green Belt, Limited Residential, General Residential, and Transitional zoning districts are not required improvements. Where proposed, street lighting in all zoning districts shall meet all requirements of Chapter VIIIB of the Hailey Zoning Ordinance.**
			Staff Comments	*N/A, as no streetlights are shown and/or proposed.* *Findings: Compliance. This standard is either not applicable or has been met.*
16.05.030: Sewer Connections				

☒	☐	☐	**16.05.030**	**Sewer Connections: The developer shall construct a municipal sanitary sewer connection for each and every developable lot within the development. The developer shall provide sewer mains of adequate size and configuration in accordance with City standards, and all federal, state, and local regulations. Such mains shall provide wastewater flow throughout the development. All sewer plans shall be submitted to the City engineer for review and approval. At the City engineer's discretion, plans may be required to be submitted to the Idaho Department of Environmental Quality (DEQ) for review and comments.**
			Staff Comments	*Sewer services are shown from connecting into a sewer main. Connection details to the existing sewer system shall be approved by the Wastewater Division prior to construction. All infrastructure will require detailed final construction drawings, to be submitted to the City and approved by the City prior to construction. All construction must conform to City of Hailey Standard Drawings, Specifications and Procedures. This has been made a Condition of Approval.* *Other recommendations and/or comments made by the Wastewater Division include:* - *Sewer services shall be installed to the center of each Lot (6A and 6B)* - *The existing sewer stub shall be abandoned, and each new lot shall install separate sewer services.* *The items above have been made Conditions of Approval.* *Findings: Compliance. This standard has been met.*
16.05.040: Water Connections				
☒	☐	☐	**A.**	**Requirements: The developer shall construct a municipal potable water connection, water meter and water meter vault in accordance with City Standards or other equipment as may be approved by the City engineer, for each and every developable lot within the development. The developer shall provide water mains and services of adequate size and configuration in accordance with City Standards, and all federal, state, and local regulations. Such water connection shall provide all necessary appurtenances for fire protection, including fire hydrants, which shall be located in accordance with the IFC and under the approval of the Hailey Fire Chief. All water plans shall be submitted to the City engineer for review and approval. At the City Engineer's discretion, plans may be required to be submitted to the Idaho Department of Environmental Quality (DEQ) for review and comments.**
			Staff Comments	*Water services are shown from each lot and connecting into an eight (8") inch water main. Connection details to the existing water system shall be approved by the Water Division prior to construction. All infrastructure will require detailed final construction drawings, to be submitted to the City and approved by the City prior to construction. All construction must conform to City of Hailey Standard Drawings, Specifications and Procedures. This has been made a Condition of Approval.* *Other recommendations and/or comments made by the Water Division include:* - *Lot 6B shall install a separate water service.* *The items above have been made a Conditions of Approval.* *Findings: Compliance. This standard has been met.*

☐	☐	☒	**B.**	**Townsite Overlay: Within the Townsite Overlay District, where water main lines within the alley are less than six (6) feet deep, the developer shall install insulating material (blue board insulation or similar material) for each and every individual water service line and main line between and including the subject property and the nearest public street, as recommended by the City Engineer.**
			Staff Comments	*N/A, as this project is not within the Townsite Overlay (TO) District.* *Findings: Compliance. This standard is either not applicable or has been met.*
16.05.050: Drainage				
☒	☐	☐	**16.05.050**	**Drainage: The developer shall provide drainage areas of adequate size and number to meet the approval of the street superintendent and the City engineer or his authorized representative. (Ord. 1191, 2015)**
			Staff Comments	*Review of drainage calculations will take place during final design. Design concepts must conform to City of Hailey standard drawings, specifications and procedures.* *Findings: Compliance. This standard has been met.*
16.05.060: Utilities				
☒	☐	☐	**16.05.060**	**Utilities: The developer shall construct each and every individual service connection and all necessary trunk lines, and/or conduits for those improvements, for natural gas, electricity, telephone, and cable television to the property line before placing base gravel for the street or alley.**
			Staff Comments	*Utilities have been constructed and installed underground. Additional utility company comments and engineering details will be required at final design.* *Findings: Compliance. This standard has been met.*
16.05.070: Parks, Green Space				
☒	☐	☐	**16.05.070**	**Parks, Green Space: The developer shall improve all parks and green space areas as presented to and approved by the hearing examiner or commission and council.**
			Staff Comments	*Please refer to Section 16.04.110 for further detail.* *Findings: Compliance. This standard has been met.*
16.05.080: Installation to Specifications; Inspections				
☒	☐	☐	**16.05.080**	**Installation to Specifications; Inspections: All improvements are to be installed under the specifications and inspection of the City engineer or his authorized representative. The minimum construction requirements shall meet City Standards or the Department of Environmental Quality (DEQ) standards, whichever is the more stringent.**
			Staff Comments	*An inspection schedule will be established for any/all components at final design. All infrastructure must meet City of Hailey specifications and will be further evaluated in greater detail at final design. The inspection process of the proposed public improvements shall include materials testing to ensure compliance with the Hailey Municipal Code.* *The city will need to select an inspector, to be paid for by the Applicant, for all water, sewer, and roadway infrastructure during construction.* *Findings: Compliance. This standard has been met.*
16.05.090: Completion; Inspections; Acceptance				
☒	☐	☐	**A.**	**Installation of all infrastructure improvements must be completed by the developer and inspected and accepted by the City prior to signature of the plat by City representatives, or according to a phasing agreement. A post-construction conference shall be requested by the developer and/or contractor and conducted**

				with the developer and/or contractor, the City engineer, and appropriate City departments to determine a punch list of items for final acceptance.
			Staff Comments	*This standard shall be met.* *Findings: Compliance. This standard has been met.*
☐	☐	☒	**B.**	**The developer may, in lieu of actual construction, provide to the City security pursuant to Section 3.3.7, for all infrastructure improvements to be completed by developer after the final plat has been signed by City representatives. (Ord. 1191, 2015)**
			Staff Comments	*N/A, as completion of all major infrastructure by the Developer is preferred over bonding.* *Findings: Compliance. This standard is either not applicable or has been met.*
16.05.100: As Built Plans and Specifications				
☒	☐	☐	**16.05.100**	**As Built Plans and Specifications: Prior to the acceptance by the City of any improvements installed by the developer, three (3) sets of "as-built plans and specifications" certified by the developer's engineer shall be filed with the City engineer. (Ord. 1191, 2015)**
			Staff Comments	*As built, drawings will be required. This standard will be met.* *Findings: Compliance. This standard has been met.*
16.08: Townhouses:				
Compliant			**Standards and Staff Comments**	
Yes	**No**	**N/A**	**City Code**	**City Standards and *Staff Comments***
☐	☐	☒	**16.08.010**	**Plat Procedure: The developer of the townhouse development shall submit with the preliminary plat application and all other information required herein a copy of the proposed party wall agreement and the proposed document(s) creating an association of owners of the proposed townhouse sublots, which shall adequately provide for the control (including billing, where applicable) and maintenance of all common utilities, commonly held facilities, garages, parking and/or green spaces. Prior to final plat approval, the developer shall submit to the city a final copy of the party wall agreement and any other such documents and shall record the documents prior to or at the same time of the recordation of the plat, which plat shall reflect the recording instrument numbers thereupon. (Ord. 1191, 2015)**
			Staff Comments	*N/A* *Findings: Compliance. This standard is either not applicable or has been met.*
☐	☐	☒	**16.08.020**	**Garages: All garages shall be designated on the preliminary and final plats and on all deeds as part of the particular townhouse units. Detached garages may be platted on separate sublots; provided, that the ownership of detached garages is appurtenant to specific townhouse units on the townhouse plat and that the detached garage(s) may not be sold and/or owned separate from any dwelling unit(s) within the townhouse development. (Ord. 1191, 2015)**
			Staff Comments	*N/A* *Findings: Compliance. This standard is either not applicable or has been met*
☐	☐	☒	**16.08.030**	**Storage, Parking Areas: Residential townhouse developments shall provide parking spaces according to the requirements of title 17, chapter 17.09 of this code. (Ord. 1191, 2015)**
			Staff Comments	*N/A* *Findings: Compliance. This standard is either not applicable or has been met*
☐	☐	☒	**16.08.040**	**Construction Standards: All townhouse development construction shall be in accordance with the IBC, IRC and IFC. Each townhouse unit must have separate water, sewer and utility services, which do not pass through another building or unit. (Ord. 1191, 2015)**

			Staff Comments	*This standard shall be met.* *Findings: Compliance. This standard has been met*
☐	☐	☒	**16.08.050**	**General Applicability: All other provisions of this title and all applicable ordinances, rules and regulations of the city and all other governmental entities having jurisdiction shall be complied with by townhouse developments. (Ord. 1191, 2015)**
			Staff Comments	*This standard shall be met.* *Findings: Compliance. This standard has been met*
☐	☐	☒	**16.08.060**	**Expiration: Townhouse developments which have received final plat approval shall have a period of three (3) calendar years from the date of final plat approval by the council to obtain a building permit. Developments which have not received a building permit shall be null and void and the plats associated therewith shall be vacated by the council. If a development is to be phased, construction of the second and succeeding phases shall be contingent upon completion of the preceding phase unless the requirement is waived by the council. Further, if construction on any townhouse development or phase of any development ceases or is not diligently pursued for a period of three (3) years without the prior consent of the council, that portion of the plat pertinent to the undeveloped portion of the development shall be vacated. (Ord. 1191, 2015).**
			Staff Comments	*N/A* *Findings: Compliance. This standard is either not applicable or has been met*
☐	☐	☒	**16.08.070**	**Conversion: The conversion by subdivision of existing units into townhouses shall not be subject to section 16.04.110 of this title. (Ord. 1191, 2015)**
			Staff Comments	*This standard is not applicable*
☐	☐	☒	**16.08.080**	**Density: The maximum number of cottage townhouse units on any parcel shall be twelve (12), and not more than two (2) cottage townhouse developments shall be constructed adjacent to each other. (Ord. 1191, 2015)**
			Staff Comments	*N/A* *Findings: Compliance. This standard is either not applicable or has been met*
☐	☐	☒	**16.11.010**	**Exceptions: Whenever the tract to be subdivided is, in the shape or size, or is surrounded by such development or unusual conditions that the strict application of the requirements contained herein would result in real difficulties and substantial hardships or injustices, the council may vary or modify such requirements by making findings for their decision so that the developer is allowed to develop his property in a reasonable manner, while ensuring that the public welfare and interests of the city and surrounding area are protected and the general intent and spirit of this title are preserved. As used in this section, the phrase "real difficulties and substantial hardships or injustices" shall apply only to situations where strict application of the requirements of this title will deny to the developer the reasonable and beneficial use of the property in question, and not in situations where the developer establishes only that exceptions will allow more financially feasible or profitable subdivision. (Ord. 1191, 2015).**
			Staff Comments	*N/A* *Findings: Compliance. This standard is either not applicable or has been met*

CONCLUSIONS OF LAW

Based upon the above Findings of Fact, the Commission makes the following Conclusions of Law:

1) Adequate notice, pursuant to Title 17, Section 17.06.040(D), was given.
2) The project is in general conformance with the Hailey Comprehensive Plan.
3) The project does not jeopardize the health, safety, or welfare of the public.
4) Upon compliance with the conditions set forth, the project conforms to the applicable standards of the Hailey Municipal Code and City Standards.

DECISION

The Preliminary Plat Application by ARCH Community Trust, Inc., wherein Lot 6, Block 3 (1411 Red Tail Lane) of Quigley Farms Subdivision is subdivided to create two (2) Community Housing lots; Lot 6A and Lot 6B, is approved, finding that the project does not jeopardize the health, safety or welfare of the public and the project conforms to the applicable specifications outlined in Chapter 17.11, applicable requirements of the Hailey Municipal Code, Title 18, and City Standards, provided conditions (1) through (10) will be met.

General Conditions:

1) All Fire Department and Building Department requirements shall be met and shall meet City Standards where required.
2) Issuance of permits for the construction of buildings within the proposed subdivision shall be subject to Section 16.02.080 of the Hailey Municipal Code.
3) All improvements and other requirements shall be completed and accepted, or surety provided pursuant to Subsections 16.03.030(I) and 16.05.090(B) of the Hailey Municipal Code, prior to recordation of the Final Plat.
4) The Final Plat must be submitted within two (2) calendar years from the date of approval of the Preliminary Plat.
5) Any Subdivision Inspection Fees due shall be paid prior to recordation of Final Plat.
6) Any Application Development Fees shall be paid prior to recording the Final Plat.
7) Prior to construction, the Applicant shall submit the following, if deemed necessary:
    i. A Storm Water Pollution Prevention Plan (SWPPP)
    ii. An Erosion Control Plan

Streets and Right-of-Ways:

8) All City infrastructure requirements shall be met as outlined in Title 16, Chapter 16.05 of the Hailey Municipal Code. Detailed plans for all infrastructure to be installed or improved at or adjacent to the site shall be submitted for City of Hailey approval and shall meet City Standards where required. Infrastructure to be completed at the Applicant's sole expense include, but will not be limited to:
    i. Drywell and other construction details shall be provided at final design.

Water and Wastewater:

9) All City infrastructure requirements shall be met as outlined in Title 16, Chapter 16.05 of the Hailey Municipal Code. Detailed plans for all infrastructure to be installed or improved at or adjacent to the site shall be submitted for City of Hailey approval and shall meet City Standards where required. Infrastructure to be completed at the Applicant's sole expense include, but will not be limited to:
    i. Sewer services shall be installed to the center of each Lot (6A and 6B)
    ii. The existing sewer stub shall be abandoned, and each new lot shall install separate sewer services.
    iii. Lot 6B shall install a separate water service.

Other:

10) All of the requirements of the Annexation, Services and Development Agreement dated August 16, 2017, the Large Block Plat Conditions of Approval dated July 9, 2018, and Phase I of the Final Plat for Blocks 2-4 dated November 23, 2020, still apply.

Return to Agenda

FINDINGS OF FACT, CONCLUSIONS OF LAW AND DECISION

On October 31, 2025, AT&T Mobility Corporation submitted a request to modify the existing Wireless Permit to upgrade the existing tower. The proposed modifications will occur inside the equipment room and to the existing tower on the roof. The Applicant is proposing the following modification to be permitted as part of the Wireless Permit Application:

- The removal and replacement of three (3) antennas, removal and replacement of nine (9) remote radio heads (RRH), removal of three (3) TMA's, installation of six (6) new back-to-back RRH mounts and rotating the existing platform.

Modifications to the Equipment room include the following:

- Removal of twenty (20) batteries, installation of eight (8) new batteries and the installation of one (1) generic E//BBU in DRM.

The equipment is located at Pine Street Station Condominiums (400 South Main Street), within the Business (B) and Townsite Overlay (TO) Zoning Districts.

FINDINGS OF FACT

Notice: Notice regarding the modification was mailed to property owners within 300 feet on October 31, 2025. Pursuant Section 17.08B.060.04: Review and Public Hearing, of the Hailey Municipal Code, where a Conditional Use Permit is not required, the planning administrator shall mail notice of the application to property owners within 300 feet and shall request written comment from such owners.

Application: AT&T Mobility Corporation submitted a Wireless Permit Application for a modification to the existing rooftop wireless telecommunications network, located and operated at the Pine Street Station Condominiums, at 400 South Main Street in Hailey. The Applicant is proposing the following modification to be permitted as part of the Wireless Permit Application: The removal and replacement of three (3) antennas, removal and replacement of nine (9) remote radio heads (RRH), removal of three (3) TMA's, installation of six (6) new back-to-back RRH mounts and rotating the existing platform. Modifications to the Equipment room include the following: Removal of twenty (20) batteries, installation of eight (8) new batteries and the installation of one (1) generic E//BBU in DRM.

To ensure the proposed modifications are compliant with Title 17.08: Supplementary Regulations, Article B: Wireless Facilities, Planning Staff reached out to Chuck Robertson, a certified Radio Frequency engineer, requesting a preliminary review of the application and supporting documents provided by AT&T Mobility Corporation. Chuck Robertson noted that the proposed modifications "appear to be a technology change/ upgrade from Nokia to Ericsson cellular site equipment. This is a widely known technology update for AT&T wireless sites, so I see no issues with this proposed technology work".

Per Mr. Robertson's report as well as the Roof Top Structural Analysis Report completed by Black & Veatch, the Applicant shall complete the following modifications, which have also been made Conditions of Approval.

Required Modifications:

1) **The antenna ballast frame shall have 1824lb of ballast (48 – 16"x8"x8" standard core concrete ballast blocks or approved equivalent) evenly distributed in the ballast trays per modification drawings detailed in Appendix C.**

2) Remove the existing RRU frame and replace with the proposed RRU frame per modification drawings detailed in Appendix C.

3) Remove the existing mount pipes and pipe-to-pipe connections and replace with Pipe 2½ Std. x 10'-0" pipes and SitePro1 DCP18K per modification drawings detailed in Appendix C.

4) The project Narrative, dated October 30, 2025, shall include the Analysis results from the Structural Analysis report under "Please note" to include:

- **Existing Antenna Frame Stress Level with Existing + Proposed Equipment: 68.5%*CONDITIONAL PASS**
- **Proposed RRU Frame Stress Level with Existing + Proposed Equipment: 78.2%*CONDITIONAL PASS**
- **Existing Roof Top Stress Level with Existing + Proposed Equipment: 93.2% PASS**

Mr. Robertson's analysis of AT&T's Application and supporting documents are attached to this report.

Background: On April 8, 2013, the Hailey Planning and Zoning Commission considered an application submitted by Powder River Development Services (PRDS) with co-applicant AT&T- New Cingular Wireless PCS, LLC (AT&T), for a Wireless Permit to replace an existing Wireless Permit previously obtained by Edge Wireless, LLC, and AT&T Mobility Corporation. On September 30, 2022, AT&T Mobility Corporation submitted a request to modify the existing Wireless Permit to upgrade the existing tower to 5G technology. The proposed modifications occurred inside the equipment room and to the existing tower on the roof; no increase in height of the tower is proposed. The equipment is located at Pine Street Station Condominiums (400 South Main Street), within the Business (B) and Townsite Overlay (TO) Zoning Districts.

Permit Granting Authority: Pursuant Section 17.08B.060.01 of the Hailey Municipal Code,

A. Wireless Permit: The Hailey Planning Administrator shall be the granting authority for wireless permits not requiring a conditional use permit, subject to final approval or denial by the Planning and Zoning Commission on its Consent Agenda. Such approval or denial shall specify the ordinance and standards used in evaluating the application; the reasons for the approval or denial; and the actions, if any, that the Applicant could take to obtain a permit. An Applicant who is denied or aggrieved by a decision may appeal such decision as set forth in Section 17.08B.150.01 of this article. The Planning Administrator may attach reasonable conditions to the approval of an application, including, but not limited to, those that will minimize adverse impact on adjacent properties or public ways, and/or assure the PWSF or WCF is constructed and/or maintained in accordance with this article and this title.

This project does not require a Conditional Use Permit; therefore, in accordance with Section 17.08B.060.01 of the Hailey Municipal Code, the Planning Administrator has submitted these Findings of Fact, Conclusions of Law, and Decision for the Planning and Zoning Commission to review and approve via the Consent Agenda at the November 17, 2025, public hearing.

Procedural History: The Application was submitted on October 31, 2025, and certified complete on October 31, 2025. A review of the Findings of Fact, Conclusions of Law and Decision made by the Planning Administrator will be held on November 17, 2025, in the Hailey City Council Chambers.

General Requirements for Wireless Facilities

Compliant			Standards and Staff Comments	
Yes	**No**	**N/A**	**City Code**	**City Standards and** *Staff Comments*
☒	☐	☐	**17.06.050**	**Complete Application**
☒	☐	☐	**17.08B.030:**	**17.08B.030: Applicability**
☒	☐	☐	**17.08B.030.01**	**17.08B.030.01 Permits Required: It shall be unlawful to commence construction or placement of any PWSF or WCF without having first obtained a valid written wireless permit pursuant to this article, and as set forth in section 17.08B.040 of this article, a conditional use permit pursuant to chapter 17.11 of this title.** **A. Building Permit: It shall be unlawful to commence construction on any new PWSF or WCF, or to modify, alter or add on to an existing PWSF or WCF, without having first obtained a valid written building permit as required under the international building code as adopted by Hailey ordinance.**
			Staff Comments	*The Applicant has not yet submitted a Building Permit for the proposed modifications; however, a Building Permit shall be required prior to the commencement of construction. This has been listed as Condition of Approval and further notes that the application and all documentation shall be approved prior to installation of any new equipment associated with this project.*
☒	☐	☐		**B. Conditional Use Permit: Any conditional use permit issued for a PWSF or WCF shall subscribe to procedures set forth in this article and in chapter 17.11 of this title.** **1) Where nonconflicting differences between this article and chapter 17.11 of this title exist, this article shall be additive to and supportive of chapter 17.11 of this title.** **2) Where this article and chapter 17.11 of this title contain conflicting provisions, the more restrictive requirements shall apply. (Ord. 1191. 2015)**
			Staff Comments	*A Conditional Use Permit is not required. Wireless Facilities mounted to a building are accessory uses in the Business (B) Zone District.* *Furthermore, pursuant Section 17.08B.060.01 of the Hailey Municipal Code,* *A. Wireless Permit: The Hailey Planning Administrator shall be the granting authority for wireless permits not requiring a conditional use permit, subject to final approval or denial by the Planning and Zoning Commission on its Consent Agenda. Such approval or denial shall specify the ordinance and standards used in evaluating the application; the reasons for the approval or denial; and the actions, if any, that the Applicant could take to obtain a permit. An Applicant who is denied or aggrieved by a decision may appeal such decision as set forth in Section 17.08B.150.01 of this article. The Planning Administrator may attach reasonable conditions to the approval of an application, including, but not limited to, those that will minimize*

				adverse impact on adjacent properties or public ways, and/or assure the PWSF or WCF is constructed and/or maintained in accordance with this article and this title. *This project does not require a Conditional Use Permit; therefore, in accordance with Section 17.08B.060.01 of the Hailey Municipal Code, the Planning Administrator has submitted these Findings of Fact, Conclusions of Law and Decision for the Planning and Zoning Commission to review on the Consent Agenda of November 17, 2025.*
☒	☐	☐	**17.08B.030.02**	**17.08B.030.02: Preexisting Personal Wireless Service Facilities or Wireless Communications Facilities:** **A. Prior Issued Permits: A PWSF or WCF for which a permit has been issued prior to the effective date hereof shall be deemed a permitted use, subject to the conditions of that permit.** **B. Compliance for Unpermitted: All unpermitted PWSFs or WCFs shall be brought into compliance with this article. Unpermitted PWSFs or WCFs will be subject to abatement.** **C. Separate Permits: Where any unpermitted PWSF or WCF to be attached to a mount approved for another use or PWSF or WCF, the unpermitted PWSF or WCF must apply for a separate permit, even when: 1) sharing a legal mount; 2) already in operation; and/or 3) duly licensed by the federal communications commission. The issuance of permit renewals or other new permits for such facilities shall be in accordance with the provisions of this article.** **D. Damaged, Destroyed Facilities: Damaged or destroyed facilities may be rebuilt and all such facilities may be replaced by facilities of the same height at the same location; provided, that lattice towers are encouraged to be changed to mounts of lower visual impact.** **E. New Approvals With Preexisting: Any carrier with at least one preexisting PWSF or WCF in the city of Hailey that is out of compliance with the city of Hailey building and zoning requirements, prior to the adoption of this article, shall not be eligible for any new approvals of PWSFs or WCFs by the city until each preexisting PWSF or WCF owned by that carrier is brought into compliance with this article. (Ord. 1191, 2015)**
			Staff Comments	*The existing wireless facility was installed prior to the adoption of Section 17.08B: Wireless Facilities. The proposed modifications are to an existing and previously permitted facility. The Hailey Municipal Code requires that the existing facility and the proposed modifications be reviewed and/or brought into compliance, if incompliant, with a new Wireless Permit Application. The Applicant has submitted a new Wireless Permit Application for the proposed modifications, and the proposed modifications appear to be compliant with code.*
☒	☐	☐	**17.08B.030.03**	**17.08B.030.03: Unpermitted Facilities, Mounts or Equipment Ineligible for Collocation:** **A. No issuance of any permit under this article shall occur for a request to collocate, attach or share an existing PWSF or WCF site, mount or facility, when such existing site, mount or facility is found to have one or more PWSFs or WCFs without permits and/or any structure, mount or facility is found to lack one or more building or any other permits required by the city, or is otherwise in violation of city ordinance or state or federal law.**

				B. Any application by a wireless carrier or other entity shall not be accepted by the city of Hailey if that wireless carrier has a preexisting PWSF or WCF on, or the other entity owns or leases, a mount, rooftop or tower, on which there is any unpermitted PWSF or WCF until that PWSF or WCF is brought into compliance with this article. (Ord. 1191, 2015)
			Staff Comments	*The existing Wireless Facility and proposed modifications are permissible, so long as the modifications comply with FCC regulations and standards noted herein.* *To ensure the proposed modifications are compliant with Title 17.08: Supplementary Regulations, Article B: Wireless Facilities, Planning Staff reached out to Chuck Robertson, a certified Radio Frequency Engineer. Mr. Robertson noted that that the proposed modifications appear to be a "technology upgrade to 5G utilizing new mid-band C spectrum."* *Mr. Robertson's analysis of AT&T's Application are attached to this report.*
☐	☐	☒	**17.08B.030.04**	**17.08B.030.04: Exempt Communication Facilities:** **A. The requirements imposed by this article shall not apply to antennas designed to receive video programming signals from direct broadcast satellite (DBS) services, multichannel multipoint distribution providers (MMDS), or television broadcast stations (TVBS); provided, that all of the following conditions are met:** **1) The antenna measures thirty-nine inches (39") (1m) in diameter or less in diameter** **2) A dish that measures greater than thirty-nine inches (39") (1m) in diameter that is complete enclosed** **3) The antenna is attached to a freestanding tower measuring less than twelve feet (12') in height** **B. The requirements of this article shall not apply to amateur radio facilities owned and operated by a federally licensed amateur radio operator or used exclusively as noncommercial, receive only antennas. However, such facilities may not collocate a PWSF or WCF unless a wireless permit is obtained under this article. (Ord. 1191, 2015)**
			Staff Comments	*N/A, as the existing facility and proposed modifications do not meet the specifications of an exempt communication facility.*
☒	☐	☐	**17.08B.030.05**	**17.08B.030.05: Relationship to Other Ordinances: This article shall supersede any conflicting requirements contained in this title regarding the siting and permitting of PWSFs or WCFs, except as otherwise specifically provided for in this article. (Ord. 1191, 2015)**
☒	☐	☐	**17.08B.030.06**	**17.08B.030.06: Jurisdiction: This article shall apply only in the incorporated area of the city of Hailey and where adopted pursuant to the Hailey/Blaine County area of city impact ordinance. (Ord. 1191, 2015)**
☒	☐	☐	**17.08B.030.07**	**17.08B.030.07: Zoning District Regulations, General Prohibitions and Restrictions:** **A. Applicability: The placement, use or modification of any wireless communication facility at any location within the city of Hailey is subject to the provisions of this article.** **B. LB, B, LI, TI, SCI, A Districts: In the limited business district, business district, light industrial district, technological industry district, service commercial industrial district, and airport district:**

				1) PWSFs and WCFs attached to street poles shall be a permitted use in the aforementioned zoning districts upon issuance of a wireless permit in accordance with the provisions of this article **2) All other PWSFs or WCFs, excluding freestanding towers, shall be permitted as an accessory use in the aforementioned zoning districts of Hailey upon issuance of a wireless permit in accordance with provisions of this article** **3) Freestanding towers and monopoles, excluding lattice towers, shall be a conditional use within these zoning districts of Hailey upon issuance of a wireless permit and a conditional use permit in accordance with this article and chapter 17.11 of this title**
			Staff Comments	*The existing Wireless Facility is attached to the roof of Pine Street Station Condominiums, located at 400 South Main Street. The proposed modifications will occur both inside the equipment room and to the existing tower on the rooftop; no change in tower height is proposed. The tower will remain attached to the roof and/or existing facility of the same building.*
☐	☐	☒		**C. RGB, LR, GR, TN Districts: In the recreational green belt district, limited residential district, general residential district, and transitional district:** **1) PWSFs or WCFs shall be permitted only as a conditional use in the aforementioned zoning districts of Hailey upon issuance of both a wireless permit in accordance with this article and conditional use permit in accordance with chapter 17.11 of this title** **2) Freestanding towers and monopoles shall be prohibited in these zoning districts of Hailey.**
			Staff Comments	*N/A, as the project is located within the Business (B) Zone District.*
☐	☐	☒		**D. Prohibitions: The following are prohibited within the City:** **1) Lattice towers larger than two feet by two feet (2' x 2')** **2) WCFs and PWSFs that interfere with City and public safety communication systems and/or area television or radio broadcast**
			Staff Comments	*N/A, as no lattice towers are proposed.*
☐	☐	☒		**E. Restrictions: In all zoning districts within Hailey, no guywire or other support wires shall be used in connection with antenna, antenna array or its support structure, except when used to anchor the antenna, antenna array or support structure to an existing building to which such antenna, antenna array or support structure is attached. (Ord. 1191, 2015)**
			Staff Comments	*N/A, as no guywire or other support wires are proposed at this time.*
☒	☐	☐	**17.08B.050**	**17.08B.050: Location and Facility Type Standards and Priorities**
☒	☐	☐	**17.08.050.01**	**17.08B.050.01: Location Selection Criteria:** **A. Master Development Plan: PWSFs or WCFs shall be located on a master development plan as set forth in section 17.08B.060.02 of this article;**
			Staff Comments	*Please refer to Section 17.08B.060.02 for further information.*

☒	☐	☐		**B. Siting Criteria: Applications shall be considered based on preferred siting criteria as set forth below in order of priority:** **1. City owned property due to the city's ability to control and monitor ordinance compliance;** **2. Public safety communication center;** **3. Collocation on existing buildings, structures and towers in the zoning districts set forth in subsection 17.08B.040B of this article. In presenting another site, the applicant shall have the burden of proving that there are no such feasible existing structures upon which to locate;** **4. Street poles;** **5. Existing buildings and structures, excluding freestanding towers and monopoles, located on residentially zoned land, as set forth in subsection 17.08B.040C of this article;** **6. In areas where the existing topography, vegetation, buildings and other structures provide the greatest amount of screening;** **7. Other locations consistent with the provisions of this title;** **8. Location of PWSFs or WCFs within floodplain areas, wetlands, hillside areas above twenty five percent (25%) slope, avalanche prone areas, areas where the FAA requires lighting on the facility, and areas for which the FCC requires an environmental assessment under the national environmental policy act (NEPA) are to be avoided. (Ord. 1191, 2015)**
☐	☐	☒	**17.08B.050.02**	**17.08B.050.02: Collocation Requirement: Collocation is considered to be the least intrusive and visually unobtrusive installation method because the equipment is attached to an existing structure. No new tower shall be permitted unless the applicant demonstrates a good faith effort to collocate on an existing facility, including good faith efforts to negotiate lease rights, and there is no reasonable alternative location, site or design. The applicant shall submit clear and convincing evidence that:** **A. No suitable existing towers or structures are located within the city or immediate geographic area;** **B. Existing towers or structures are not sufficiently designed to meet the applicant's master development plan;** **C. Existing towers or structures do not have sufficient structural strength to support the applicant's proposed antenna and related equipment;** **D. The applicant's proposed antenna would cause electromagnetic interference with the antenna on the existing towers or structures, or the antenna on the existing towers or structures would cause interference with the applicant's proposed antenna;** **E. The fees, costs or contractual provisions required by the owner of the proposed collocation site in order to share an existing tower or structure or to adapt an existing tower or structure for share are prohibitive;** **F. Costs exceeding new tower development and construction are presumed (rebuttably) to be prohibitive;** **G. No other reasonable alternative exists to the applicant's proposed PWSF or WCF;**

				H. In the case of public safety communication equipment, existing towers or structures do not satisfy requirements for public safety communication accreditation. **In addition, no new tower shall be permitted unless the applicant provides a written statement to the city that the applicant shall make a good faith effort to allow other wireless carriers to collocate antennas on the proposed tower where technically and economically feasible. This provision shall not apply to lattice towers. (Ord. 1191, 2015)**
			Staff Comments	*The Applicant has submitted a new Wireless Permit Application for the proposed modifications to the existing facility. The existing facility does not have an existing or proposed freestanding tower; therefore, collocation requirements are not applicable.*
☒	☐	☐	**17.08B.060**	**17.08B.060: Application and Hearing Procedures**
☒	☐	☐	**17.08B.060.01**	**17.08B.060.01: Permit Granting Authority:** **A. A. Wireless Permit: The Hailey planning administrator shall be the granting authority for wireless permits not requiring a conditional use permit, subject to final approval or denial by the planning and zoning commission on its consent agenda. Such approval or denial shall specify the ordinance and standards used in evaluating the application; the reasons for the approval or denial; and the actions, if any, that the applicant could take to obtain a permit. An applicant who is denied or aggrieved by a decision may appeal such decision as set forth in section 17.08B.150.01 of this article. The planning administrator may attach reasonable conditions to the approval of an application, including, but not limited to, those that will minimize adverse impact on adjacent properties or public ways, and/or assure the PWSF or WCF is constructed and/or maintained in accordance with this article and this title.**
			Staff Comments	*This project does not require a Conditional Use Permit; therefore, in accordance with Section 17.08B.060.01 of the Hailey Municipal Code, the Planning Administrator has submitted these Findings of Fact, Conclusions of Law and Decision for the Planning and Zoning Commission to review on the Consent Agenda of November 17, 2025.*
☒	☐	☐		**B. Master Development Plans: The planning administrator shall also have the authority to approve or deny all PWSF or WCF master development plans.**
			Staff Comments	*Please refer to Section 17.08B.060.02 for further information.*
☐	☐	☒		**C. Conditional Use Permits: The Commission shall have the authority to approve or deny all conditional use permit applications for PWSFs or WCFs, which shall be jointly processed with wireless permit applications in accordance with the procedures for conditional use permits set forth in chapter 17.11 of this title.**

			Staff Comments	*N/A, as a Conditional Use Permit, is not required. Wireless Facilities mounted to a building are accessory uses in the Business (B) Zone District.*
☐	☐	☒		**D. Encroachment Permit: Prior to issuance of any wireless permit for a facility to be located on a street pole, or otherwise within the public right of way, an encroachment permit or right of way use agreement must be obtained by the applicant for the PWSF or WCF from the city and/or, where applicable, the Idaho transportation department (ITD). Any PWSF or WCF to be otherwise located on city owned property shall also enter into a lease agreement with the city subject to authorization by the city council. (Ord. 1191, 2015)**
			Staff Comments	*N/A, as the Wireless Facility is existing and is not located on a street pole or within the public right-of-way.*
☒	☐	☐	**17.08B.060.02**	**17.08B.060.02: Master Development Plan:** **A. Required: An applicant for a wireless permit must obtain approval of a master development plan by the Hailey planning administrator and pursuant to this article prior to or concurrently with the processing of any wireless permit application. A master development plan shall be submitted by each company seeking placement of a PWSF or WCF within the city.** **B. Waiver: The planning administrator may waive the processing of a master development plan if the applicant demonstrates by clear and convincing evidence that a network of PWSFs or WCFs will not be required of the owner/operator of the proposed PWSF or WCF.** **C. Expected Network Illustrated: The master development plan shall illustrate a carrier's expected network of PWSFs or WCFs within and adjacent to the city. It shall forecast five (5) years in advance the approximate locations of future facilities and the areas of service, but is not required to detail the specific siting or type of facility (e.g., pole, roof, building attached). Future amendments to each company's master development plan shall be submitted and reviewed by the planning administrator prior to approval of additional PWSF or WCF facility locations.** **D. Placement Without Plan: If a PWSF or WCF is placed without a master development plan, the applicant shall file for and receive approval of a plan prior to the filing of an application for another PWSF or WCF. (Ord. 1191, 2015)**
			Staff Comments	*The Applicant is seeking to continue utilizing an existing Wireless Facility and currently has no plans for constructing a new facility within the City of Hailey. Based on this information, the Master Development Plan was administratively waived. Staff concurs with the previous waiver and does not see a need for a Master Development Plan at this time.*
☒	☐	☐	**17.08B.060.05:**	**17.08B.060.05: Permit Form, Annual Report and Renewal:** **A. Issuance of Permit: Upon approval, the city shall issue the applicant a wireless permit in written form stating the exact PWSF or WCF approved and the conditions, if any, of said permit.** **B. Annual Report: As a condition of each wireless permit, the applicant shall file with the city on each anniversary date of the issuance of the permit an annual report containing the following information:** **1. Name of permittee, landowner;** **2. Any collocation added to the site or removed from the site within the preceding year;**

				3. Any modifications to the site in the preceding year, including change of ownership; **4. Updated list of hazardous substances as set forth in subsection 17.08B.060.03C15d of this article, together with a plan of the site showing the exact location of each such substance and means of access in case of an emergency;** **5. Date of the last physical inspection of the site by the permittee and any carrier on the site;** **6. The name and telephone number of contact person in case of emergency at the site and for any required maintenance of the site.** **7. Annual renewal fee as set by city ordinance.** **C. Renewal; Failure To File: The permit shall be automatically renewed annually upon the filing of an annual report and renewal fee as set by city ordinance. Failure to file an annual report shall result in the expiration of the wireless permit. Expiration occurs one year after the due date of the annual report. A new application, together with all applicable fees, shall be required to reinstate the permit.** *D.* **Conditional Use Permit: Where an application is also required as set forth in this article, the city shall issue the applicant a conditional use permit in written form stating the exact PWSF or WCF and the conditions of said permit. Such permit shall be subject to the terms and conditions set forth in chapter 17.11 of this title, as well as any supplementary conditions set forth in this article. (Ord. 1191, 2015)**
			Staff Comments	*Issuing these Findings of Fact, Conclusions of Law and Decision shall satisfy the requirements of the standards noted above.*
☒	☐	☐	**17.08B.070.01**	**17.08B.070.01: Applicability: The standards identified in the sections below shall apply to all wireless permits and all PWSFs or WCFs constructed or located in the city, unless otherwise herein specified. Such standards shall also be considered in the issuance of a conditional use permit pursuant to this article and chapter 17.11 of this title. The Applicant for a wireless permit has the burden of demonstrating compliance with these standards.**
			Staff Comments	*A Conditional Use Permit is not required. Wireless Facilities mounted to a building are accessory uses in the Business (B) Zone District.* *Furthermore, pursuant Section 17.08B.060.01 of the Hailey Municipal Code,* *A. Wireless Permit: The Hailey Planning Administrator shall be the granting authority for wireless permits not requiring a conditional use permit, subject to final approval or denial by the Planning and Zoning Commission on its Consent Agenda. Such approval or denial shall specify the ordinance and standards used in evaluating the application; the reasons for the approval or denial; and the actions, if any, that the Applicant could take to obtain a permit. An Applicant who is denied or aggrieved by a decision may appeal such decision as set forth in Section 17.08B.150.01 of this article. The Planning Administrator may attach reasonable conditions to the approval of an application, including, but not limited to, those that will minimize adverse impact on adjacent properties or public ways, and/or assure the PWSF or WCF is constructed and/or maintained in accordance with this article and this title.*

				This project does not require a Conditional Use Permit; therefore, in accordance with Section 17.08B.060.01 of the Hailey Municipal Code, the Planning Administrator has submitted these Findings of Fact, Conclusions of Law and Decision for the Planning and Zoning Commission to review on the Consent Agenda of November 17, 2025.
☒	☐	☐	**17.08B.070.02**	**17.08B.040.02: Height: PWSFs or WCFs shall not exceed forty feet (40') AGL or the maximum permissible height of the zoning district where it is sited, whichever is lower, with the exception of facade and roof attached PWSFs or WCFs or public safety communication equipment as described below:**
				A. Roof attached PWSFs or WCFs shall not exceed five feet (5') above the highest portion of the roof membrane, or continuous parapet wall. The antenna and support system for whip antennas shall not exceed ten feet (10') above the highest portion of that roof, including parapet walls.
			Staff Comments	*This standard shall be met. The proposed new antennas exceed ten (10) feet in height from the roof surface. The new equipment shall be amended to not exceed ten (10) feet in height. This has been made a Condition of Approval.*
☐	☐	☒		**B. Facade attached PWSFs or WCFs shall not exceed five feet (5') above the facade to which it is attached.**
			Staff Comments	*N/A, as the existing facility and proposed modifications are roof-mounted and do not attach to the façade of the building.*
☒	☐	☐		**C. If the height of the building is in excess of the maximum height allowed within the zone and was legally established, then the combined height of the building and antenna shall not exceed the maximum height allowed by such approval, unless determined to be suitably camouflaged.**
			Staff Comments	*The height of the building is 38'. The exception for roof attached PWSF's allows for PWSF height to be above the maximum permissible height of the Business (B) Zone District.*
☐	☐	☒		**D. Street pole attached PWSFs or WCFs may only extend six feet (6') above the existing street pole. A maximum extension of ten feet (10') from the top of the street pole, may be permitted pursuant to standards provided in section 17.08B.070.09 of this article, if a utility disturbance can be clearly demonstrated.**
			Staff Comments	*N/A, as the Wireless Facility is not attached to a street pole.*
☐	☐	☒		**E. Public safety communication equipment located on the same property as a public safety communication center, the height of the support structure may be allowed a maximum of seventy-five feet (75') AGL. (Ord. 1191, 2015)**
			Staff Comments	*N/A*
☐	☐	☒	**17.08B.070.03**	**17.08B.070.03: Setbacks: All PWSFs or WCFs, except those mounted-on street poles, shall comply with the building setback provisions of the zoning district in which the PWSF or WCF is located or the requirements of this section, whichever is greater. At a minimum, the following setbacks shall be observed:** **A. Street Pole Attached: No setback when constructed within the public right of way and under the provisions of section 17.08B.070.09 of this article;**

			Staff Comments	*N/A*
☐	☐	☒		**A. Facade Attached: The maximum projection shall be eighteen inches (18"). The location of a PWSF or WCF on the wall of a legal nonconforming structure is permitted. However, the PWSF or WCF shall not be located on an exterior wall in a manner that will increase the degree of nonconformity. Additional standards for antennas attached to the facade of structures are listed in section 17.08B.070.09 of this article**
			Staff Comments	*N/A*
☒	☐	☐		**B. Roof Attached: PWSFs or WCFs shall be set back from the edge of the building a distance equal to the height of the antenna and support system as measured from the roof membrane**
			Staff Comments	*It appears this standard has been met.*
☐	☐	☒		**C. Freestanding Tower: Setbacks shall be measured from the base of the tower to the property line of the parcel on which it is located. Towers shall be set back from all property lines one hundred percent (100%) of the height of the tower as measured from the base of the tower to the highest point of the tower, including antennas**
			Staff Comments	*N/A*
☐	☐	☒		**D. Underground Vaults or Aboveground Structures: Underground vaults or aboveground structures shall comply with all setback and other requirements of the underlying zoning district in which the real property is located**
			Staff Comments	*N/A*
☐	☐	☒		**E. Equipment Enclosures: No freestanding PWSFs or WCFs or equipment enclosures shall be located between the face of a structure and a public street, bikeway, park or residential development, except for approved facade attached PWSFs or WCFs located on existing or new permitted structures in accordance with this article. (Ord. 1191, 2015)**
			Staff Comments	*N/A*
☒	☐	☐	**17.08B.070.04**	**17.08B.070.04: Design Standards: The following design criteria shall be met by each application for wireless permit approval:**
☒	☐	☐		**A. Architectural Compatibility:** **1) All facilities shall be designed to minimize the visual impact to the greatest extent feasible, considering technological requirements, by means of placement, screening and camouflage to be compatible with existing architectural elements and building materials and other site characteristics. The applicant shall use the smallest and least visible antennas possible, as well as the smallest possible equipment enclosure.**
			Staff Comments	*The new antennas will be visible from the alley and rear parking area of Pine Street Station. The antennas will not be visible from Highway 75. Ideally, Planning Staff would like to see the new antennas located closer to the center of the roof,*

				to minimize the visual impact altogether. That said, this Wireless Facility is existing and relocating it may be infeasible.
☒	☐	☐		**2) Equipment enclosures of PWSFs or WCFs shall be placed in underground vaults or within buildings where possible. All other equipment enclosures shall be designed consistent with the requirements of this article. The equipment enclosure shall be constructed so as to minimize its visual impact. Landscape planting shall be installed and maintained to completely obscure the visibility of the equipment enclosure from the developed street and adjacent properties. Sight distance clearance shall be maintained for the equipment enclosure and associated landscape pursuant to the requirements of this article and other applicable ordinances and standards of the city. Any aboveground equipment enclosure greater than ninety (90) cubic feet in size shall be subject to design review pursuant to chapter 17.06 of this title.**
				All equipment enclosures are located and stored within the building.
☐	☐	☒		**B. Landscaping or Screening Standards:** **1) Support structures and equipment enclosures shall be installed so as to maintain and blend with existing landscaping on site, including trees, foliage and shrubs, whether or not utilized for screening**
			Staff Comments	*N/A, as no landscaping exists and/or is proposed. The Wireless Facility is a rooftop facility located at Pine Street Station Condominiums. The support structures are compact in size, and all equipment enclosures are located and stored within the building.*
☐	☐	☒		**2) Additional landscaping and screening shall be installed to visually screen the aboveground equipment enclosures. Landscaping and screening shall consist of a combination of trees, foliage and shrubs of dense spacing in one of the following designs:** **a) A screening wall or fence and a five foot (5') wide landscape planter located in front of the wall or fence** **b) A ten-foot (10') wide landscape planter** **c) Any combination of existing vegetation, topography, decorative walls/fences or other features instead of landscaping, if they achieve the same degree of screening as the required landscaping described above.**
				N/A, as all equipment enclosures are located within the building.
☐	☐	☒		**3) No PWSF or WCF shall be at a height greater than ten feet (10') above the average height of the existing, mature trees located on site.**
			Staff Comments	*N/A, as no mature landscaping exists onsite.*
☐	☐	☒		**4) Where mature trees or landscaping does not exist, the appropriateness of siting support structures and equipment enclosures shall be determined by considering the context of**

				the surrounding topography, buildings or other vertical structures.
			Staff Comments	*No mature landscaping exists. That said, due to the height of the building and antennas, the visibility of the antennas will be limited to site distances farther from the building. Other vertical structures on the building's roof include a satellite dish and HVAC units.*
☐	☐	☒		**5) Upon completion, the permittee(s) of the facility shall be jointly and severally responsible for the continued maintenance and replacement of all required landscaping and screening materials**.
			Staff Comments	*N/A, as no mature landscaping exists onsite.*
☒	☐	☐		**C. Color and Materials Standards:** **1) PWSFs or WCFs located on buildings, walls or roofs, or structures, shall be painted or constructed of materials to match the color of the structure directly behind them to reduce the visibility of the PWSF or WCF**
			Staff Comments	*It has been made a Condition of Approval that the existing and proposed equipment be painted a non-reflective grey color. The Applicant intends to paint the new equipment to match the existing grey antennas. See image below for details.* 
☒	☐	☐		**2) To the extent any PWSFs or WCFs extend above the height of the vegetation immediately surrounding it, they shall be painted in a nonreflective light gray, light blue or other hue, which blends with the skyline and horizon.**
			Staff Comments	*There is no vegetation immediately surrounding the rooftop of Pine Street Station Condominiums. The Applicant intends to paint the new equipment a non-reflective grey color to match the existing antennas. This has been made a Condition of Approval.*
☒	☐	☐		**D. Facility Lighting and Signage Standards:** **1) Facility lighting shall be designed so as to meet but not exceed minimum requirements for security, safety and/or FAA**

				regulations. Lighting of antennas or support structures shall be prohibited unless required by the FAA and no other alternatives are available. In all instances, the lighting shall be designed so as to avoid glare and minimize illumination on adjacent properties. No strobe or flashing lights shall be permitted unless no other lighting can meet FAA regulations and the applicant provides written confirmation from the FAA that the specific WCF under review cannot meet its regulations by the use of any other alternative other than such lighting. Lighting shall also comply with any applicable city lighting standards.
			Staff Comments	*The FAA does not require notification of construction and/or modifications to wireless facilities for antennas less than 20 feet in height; therefore, no lighting is necessary at this time. It has been made a Condition of Approval that lighting any part of the Wireless Facility shall be prohibited.*
☐	☐	☒		**2) Signs shall be limited to those needed to identify the telephone number(s) to contact in an emergency, public safety warnings, certifications or other required seals. These signs shall also comply with the requirements of the city's sign regulations.**
			Staff Comments	*N/A, as no signs are proposed and/or required at this time.*
☒	☐	☐		**3) All facility lighting shall comply with the standards as set forth in article C of this chapter. (Ord. 1191, 2015)**
			Staff Comments	*No lighting is necessary at this time. It has been made a Condition of Approval that lighting any part of the Wireless Facility shall be prohibited.*
☒	☐	☐	**17.08B.070.05**	**17.08B.070.05: Parking Standards:** **A. Automated: If the freestanding PWSF or WCF is fully automated, one off street parking space shall be provided for maintenance workers.**
			Staff Comments	*The wireless facility is fully automated, and one (1) off-street parking space is required, and has been provided, for maintenance workers.*
☐	☐	☒		**B. Nonautomated: Nonautomated PWSFs or WCFs shall provide documentation regarding the provision of adequate off-street parking. Parking will be sufficient to accommodate the maximum number of employees at any one time. (Ord. 1191, 2015)**
			Staff Comments	*N/A*
☒	☐	☐	**17.08B.070.06**	**17.08B.070.06: Access Standards: In addition to ingress and egress requirements of the international building code and the international fire code, access to and from PWSFs or WCFs, and equipment shall be regulated as follows:** **A. Interference: No PWSF or WCF or equipment shall be located in a required parking, maneuvering or vehicle/pedestrian circulation area such that it interferes with, or in any way impairs, the intent or functionality of the original design.**
			Staff Comments	*This standard has been met. The Wireless Facility and all associated equipment are located on the roof of Pine Street Station Condominiums.*
☒	☐	☐		**B. Public, Emergency Access: The PWSF or WCF shall be secured from access by the general public, but access for emergency services must**

				be ensured. Access roads shall comply with fire department and other city standards for emergency vehicular access. (Ord. 1191, 2015)
			Staff Comments	*This standard has been met. The Wireless Facility and all associated equipment are located on the roof of Pine Street Station Condominiums. Emergency Services do have access to the rooftop area; however, the general public does not.*
☐	☐	☒	**17.08B.070.07**	**17.08B.070.07: Scenic Landscapes and Vistas Standards:** **A. Open Areas: Freestanding PWSFs or WCFs shall not be located within open areas that are visible from public roads, recreational areas or residential development. As specified in subsection 17.08B.070.04A1 of this article, PWSFs or WCFs shall be installed to blend with existing landscaping and structures.**
			Staff Comments	*N/A, as the Wireless Facility is not located within open areas visibly from public roads, recreational areas, or residential development. It is a roof-mounted facility.*
☐	☐	☒		**B. Scenic Areas: Any PWSF or WCF that is located within three hundred feet (300') of a scenic vista, scenic landscape or scenic road as designated by the city, in addition to height regulations specified in section 17.08B.070.02 of this article, shall not exceed the height of vegetation at the proposed location. If the facility is located further than three hundred feet (300') from the scenic vista, scenic landscape or scenic road, section 17.08B.070.02 of this article shall apply exclusively. (Ord. 1191, 2015)**
			Staff Comments	*N/A, as the roof-mounted equipment is not located within 300 feet of a scenic vista, landscape, or scenic road.*
☐	☐	☒	**17.08B.070.08**	**17.08B.070.08: Environmental Standards:** **A. Floodways, Wetlands: PWSFs or WCFs shall not be located in floodways and wetlands. PWSFs or WCFs shall also be avoided whenever possible in floodplains and disturbance to floodplain areas shall be minimized.**
			Staff Comments	*N/A, as the facility it not located within the floodplain or wetlands.*
☐	☐	☒		**B. Riparian Areas: PWSFs or WCFs shall not be located in riparian setbacks along watercourses.**
			Staff Comments	*N/A, as the facility is not located in any riparian setbacks.*
☐	☐	☒		**C. Avalanche Areas: PWSFs or WCFs shall avoid locating in avalanche prone areas, as determined by site specific studies on a case by case basis as part of the PWSF or WCF approval process. Evidence shall be submitted to demonstrate that no location outside an avalanche prone area can accommodate the applicant's proposed antenna as specified in the collocation requirement of section 17.08B.050.02 of this article. PWSFs or WCFs located within avalanche prone areas shall provide proof of FCC acceptance of the proposed location.**
			Staff Comments	*N/A, as the facility is not located in avalanche prone areas.*
☒	☐	☐		**D. Hazardous Waste: No hazardous waste shall be discharged on the site of any PWSF or WCF. If any hazardous materials are to be used on site, there shall be provisions for full containment of such materials. An enclosed containment area shall be provided with a sealed floor, designed to contain at least one hundred ten percent (110%) of the volume of the hazardous materials stored or used on site.**

			Staff Comments	*Hazardous waste shall not be discharged, stored, or used onsite. This has been made a Condition of Approval.*
☐	☐	☒		**E. Stormwater Runoff: Stormwater runoff shall be contained on site.**
			Staff Comments	*N/A*
☐	☐	☒		**F. Placement in Floodplain: PWSFs or WCFs locating within the floodplain shall comply with the additional placement standards set forth in the Hailey floodplain ordinance and provide written proof of FCC acceptance of the proposed location.**
			Staff Comments	*N/A, as this facility is not located within the floodplain.*
☐	☐	☒		**G. Aboveground Noise: Aboveground equipment for PWSFs or WCFs, exclusive of roof and facade attached PWSFs or WCFs, shall not generate noise in excess of fifty (50) decibels at the property line.**
			Staff Comments	*N/A, as the Wireless Facility is roof mounted.*
☒	☐	☐		**H. Noise from Attached Equipment: Roof or facade attached equipment for PWSFs or WCFs shall not generate noise in excess of fifty (50) decibels at ground level at the base of the structure closest to the antenna.**
			Staff Comments	*This standard shall be met and has been made a Condition of Approval.*
☒	☐	☐		**I. Measurement of Noise: The noise standards of this article require measurements by a qualified acoustical engineer. (Ord. 1191, 2015)**
			Staff Comments	*Upon the installation of new antennas, a Condition of Approval has been made that a qualified acoustical engineer submits a statement showing that the requirements above are met.*
☐	☐	☒	**17.08B.070.09**	**17.08B.070.09: Street Pole and Façade Attached Standards: Street pole and facade attached PWSFs or WCFs shall meet the following conditions and criteria, in addition to the other standards identified in this section:** **A. Facade Attached PWSFs Or WCFs: Equipment enclosures shall be located within the structure in which the WCF is placed or located underground if site conditions permit. Otherwise, equipment enclosures shall comply with the design standards listed in section 17.08B.070.04 of this article.**
			Staff Comments	*N/A, as the Wireless Facility is roof mounted.*
☐	☐	☒		**B. Street Pole Attached PWSFs Or WCFs: Only one PWSF or WCF shall be permitted on any one street pole. Surface area of an antenna shall not exceed four (4) square feet. The antenna shall be either fully concealed within the street pole or camouflaged to appear to be an integrated part of the street pole. An antenna not flush mounted on the side of the street pole shall be centered on the top of the street pole to which it is attached; horizontal projection shall not exceed twelve inches (12") beyond the outer diameter of the pole, and camouflaged or disguised.**
			Staff Comments	*N/A, as the Wireless Facility is roof mounted.*

☐	☐	☒		**C. Utility Separation: In the event that a utility located upon the street pole requires vertical separation between its utility facilities and the antenna so attached, the antenna may be raised by a support system to accommodate the separation requirement to an elevation not exceeding an additional ten feet (10') or the required separation, whichever is less. Any such support shall not be greater in diameter than the existing street pole and shall be designed to blend into the colors and textures of the existing street pole.**
			Staff Comments	*N/A, as the Wireless Facility is roof mounted.*
☐	☐	☒		**D. Pole Replacement: Existing street poles may be replaced with a new street pole of the same height, dimensions and appearance as the existing street pole. An antenna located upon the new street pole shall meet the standards for attaching an antenna to an existing street pole, as set forth above.**
			Staff Comments	*N/A, as the Wireless Facility is roof mounted.*
☐	☐	☒		**E. Horizontal Separation: For PWSFs or WCFs located within developed streets, there shall be a minimum horizontal separation of three hundred feet (300') between the PWSFs or WCFs of a single licensed carrier and a minimum horizontal separation of one hundred feet (100') between the PWSFs or WCFs of any other licensed carrier.**
			Staff Comments	*N/A, as the Wireless Facility is roof mounted.*
☐	☐	☒		**F. Permits: An encroachment permit or right of way permit shall be obtained from the city, or where applicable, ITD, by the applicant, after staff review of the wireless permit application and prior to its issuance.**
			Staff Comments	*N/A, as the Wireless Facility is roof mounted.*
☐	☐	☒		**G. Relocation of Utilities: In the event the utilities located on a street pole are relocated underground, the PWSF or WCF shall be relocated to another location pursuant to the requirements of this article. (Ord. 1191, 2015)**
			Staff Comments	*N/A, as the Wireless Facility is roof mounted.*
☒	☐	☐	**17.08B.070.10**	**17.08B.070.10: Review of Alternatives: In reviewing the alternatives submitted with regard to an application under subsection 17.08B.060.03C of this article, the city shall compare the PWSF or WCF proposed in the application with the alternatives submitted. Comparisons shall be made between: a) the location selection criteria set forth in section 17.08B.050.01 of this article; b) the collocation requirement set forth in section 17.08B.050.02 of this article; and c) the standards and criteria set forth in section 17.08B.070 of this article, in order to determine which best meets those standards, criteria and priorities and which is the least intrusive on the values set forth in the intent and purpose set forth in this article. (Ord. 1191, 2015)**
☒	☐	☐	**17.08B.080**	**17.08B.080: Safety Requirements:** **A. Federal Requirements: All PWSFs or WCFs shall meet or exceed current standards and regulations of the FAA, the FCC and any other agency of the federal government with the authority to regulate towers and antennas. If such standards and regulations are changed, the owners of the PWSFs or WCFs governed by this article shall bring such PWSFs or**

				WCFs into compliance with the revised standards and regulations. Failure to bring PWSFs or WCFs into compliance with such revised standards and regulations shall constitute grounds for revocation of the wireless permit and removal of the PWSF or WCF at the owner's expense.
			Staff Comments	*The project does not require FAA approval. The FCC Microwave License for AT&T is active, and no changes are proposed to the licensed system.*
☒	☐	☐		**B. Antenna Support Structure Safety: The applicant shall demonstrate that the proposed antenna and support structure are safe and the surrounding areas shall not be negatively affected by support structure failure, falling ice or other debris or interference. All support structures shall be fitted with anticlimbing devices, as approved by the manufacturers. (Ord. 1191, 2015)**
			Staff Comments	*The safety and durability of the proposed modifications will be evaluated by the Building Department during the building plan review process. Due to roof access limitation and the proposed height of the antennas, it is not necessary to fit the structures with anticlimbing devices.*
☒	☐	☐	**17.08B.090**	**17.08B.090: Maintenance Requirements:** **A. Each permittee shall maintain its PWSF or WCF in a good and safe condition, preserving the original appearance and concealment, disguise or screening elements incorporated into the design at the time of approval and in a manner, which complies with all applicable federal, state and local requirements. Such maintenance shall include, but not be limited to, such items as painting, repair of equipment and maintenance of landscaping. If the permittee fails to maintain the facility, the city may undertake the maintenance at the expense of the permittee or terminate the permit, at its sole option**.
			Staff Comments	*It has been made a Condition of Approval that the facility be maintained in accordance with the Maintenance Requirements noted herein.*
☒	☐	☐		**B. To ensure the structural integrity of towers, the owner of a tower shall ensure that it is maintained in compliance with standards contained in applicable city building codes and the applicable standards for towers that are published by the EIA, as amended from time to time. If, upon inspection, the city concludes that the tower fails to comply with such codes or standards and constitutes a danger to person or property, then upon notice being provided to the owner of the tower, the owner shall have thirty (30) days to bring such tower into compliance with such standards. Failure to bring such tower into compliance within said thirty (30) days constitutes grounds for revocation of the wireless permit and removal of the PWSF or WCF at the owner's expense. (Ord. 1191, 2015)**
			Staff Comments	*The Applicant is hereby notified of this standard.*
☒	☐	☐	**17.08B.100**	**17.08B.100: Modification of PWSFs or WCFs:** **A. New Permit: Any proposed change or addition to any PWSF or WCF shall require the issuance of a new wireless permit, pursuant to the requirements of this article. This provision shall not apply to routine maintenance of a PWSF or WCF, to the replacement of any portion of the PWSF or WCF with identical equipment, or to a change in ownership.**

			Staff Comments	*The Wireless Permit Application, submitted October 31, 2025, satisfies this requirement.*
☒	☐	☐		**B. Facility Upgrade: At the time of modification or upgrade of facilities, existing equipment shall be replaced with equipment of equal or greater technical capacity and reduced in size so as to reduce visual impact.**
			Staff Comments	*This standard will be met.*
☒	☐	☐		**C. Existing Uses: Any PWSF or WCF lawfully existing on the effective date hereof shall be allowed to continue operation as it presently exists, subject to section 17.08B.030.02 of this article. Routine maintenance and repair shall be permitted. However, any construction involving the replacement of support structure apparatus, antennas or any exterior alteration of the PWSF or WCF, or any component thereof, shall comply with all the requirements of this article. Emergency service PWSFs or WCFs may obtain a waiver from the commission in order to preserve the public health and safety. In order to receive a waiver, the commission must determine that the modifications cannot comply with this article without an extreme burden to the citizens of Hailey. The waiver shall be noticed by the commission under the public hearing notice requirements identified in subsection 17.08B.060.04D of this article. (Ord. 1191, 2015)**
			Staff Comments	*The proposed modifications require a new Wireless Permit Application and Building Permit Application, which is satisfied by the present application and permit process.*
☒	☐	☐	**17.08B.110**	**17.08B.110: Abandonment or Discontinuation of Use:** **A. Commencement Time Limit; Extensions: Construction or activation of a PWSF or WCF shall commence within ninety (90) days of approval of the wireless permit or the permit shall be null and void ab initio. Due to weather conditions or other extenuating circumstances beyond the control of the applicant, an additional ninety (90) day extension may be granted by the approving body as accepted by said approval body. Requests and approvals of extensions shall be made in writing and prior to the expiration of the time period sought to be extended.**
			Staff Comments	*The Applicant is hereby notified of this standard.*
☒	☐	☐		**B. Notification: At such time that a licensed carrier plans to abandon or discontinue operation of a PWSF or WCF, such carrier shall notify the city by certified U.S. mail of the proposed date of abandonment or discontinuation of operations. Such notice shall be given no less than thirty (30) days prior to abandonment or discontinuation of operations. In the event that a licensed carrier fails to give such notice, the PWSF or WCF shall be considered abandoned upon such discontinuation of operations.**
			Staff Comments	*The Applicant is hereby notified of this standard.*
☒	☐	☐		**C. Physical Removal: Upon abandonment or discontinuation of use, the carrier shall physically remove the PWSF or WCF within ninety (90) days from the date of abandonment or discontinuation of use. "Physically remove" shall include, but not be limited to:**

				1) Removal of antennas, support structures, equipment enclosures and security barriers from the subject property **2) Proper disposal of the waste materials from the site in accordance with local and state solid waste disposal regulations** **3) Restoring the location of the PWSF or WCF to its natural condition, except that any landscaping and grading shall remain in the after condition. Minor modification for integration with other landscaping or site design will be permitted and approved by staff.**
			Staff Comments	*The Applicant is hereby notified of this standard.*
☒	☐	☐		**D. Failure to Remove: If a carrier fails to remove a PWSF or WCF in accordance with this section, the city may cause the facility to be removed and the owner of the land where the facility is located shall pay all expenses of removal.**
			Staff Comments	*The Applicant is hereby notified of this standard.*
☒	☐	☐		**E. Multiple Providers: In the event that more than one provider is using the PWSF or WCF, the PWSF or WCF shall not be considered abandoned until all such users cease using the structure as provided in this article. (Ord. 1191, 2015)**
			Staff Comments	*The Applicant is hereby notified of this standard.*

17.06.060 Criteria.

A. The Commission or Hearing Examiner shall determine the following before approval is given:

1. **The project does not jeopardize the health, safety or welfare of the public.**
2. **The project conforms to the applicable specifications outlined in the Design Review Guidelines, as set forth herein, applicable requirements of the Zoning Title, and City Standards.**

B. Conditions. The Commission or Hearing Examiner may impose any condition deemed necessary. The Commission or Hearing Examiner may also condition approval of a project with subsequent review and/or approval by the Administrator or Planning Staff. Conditions which may be attached include, but are not limited to those which will:

1. **Ensure compliance with applicable standards and guidelines.**
2. **Require conformity to approved plans and specifications.**
3. **Require security for compliance with the terms of the approval.**
4. **Minimize adverse impact on other development.**
5. **Control the sequence, timing and duration of development.**
6. **Assure that development and landscaping are maintained properly.**
7. **Require more restrictive standards than those generally found in the Zoning Title.**

C. Security. The applicant may, in lieu of actual construction of any required or approved improvement, provide to the City such security as may be acceptable to the City, in a form and in an amount equal to the cost of the engineering or design, materials and installation of the

improvements not previously installed by the applicant, plus fifty percent (50%), which security shall fully secure and guarantee completion of the required improvements within a period of one (1) year from the date the security is provided.

1. **If any extension of the one-year period is granted by the City, each additional year, or portion of each additional year, shall require an additional twenty percent (20%) to be added to the amount of the original security initially provided.**
2. **In the event the improvements are not completely installed within one (1) year, or upon the expiration of any approved extension, the City may, but is not obligated, to apply the security to the completion of the improvements and complete construction of the improvements.**

CONCLUSIONS OF LAW & DECISION

Based upon the above Findings of Fact, the Planning Administrator makes the following Conclusions of Law:

1. Adequate notice, pursuant to Title 17, Section 17.06.040(D), was given.
2. The project is in general conformance with the Hailey Comprehensive Plan.
3. The project does not jeopardize the health, safety, or welfare of the public.
4. Upon compliance with the conditions set forth, the project conforms to the applicable standards outlined in the Hailey Municipal Code.
5. That the project shall receive Wireless Permit approval, subject to the following Conditions:
    a. All necessary permits (Building Permit, Wireless Permit, etc.) shall be obtained prior to the installation of any new equipment associated with this project.
    b. The project shall meet all applicable Fire and Building Department requirements.
    c. All existing and proposed equipment shall be painted a non-reflective grey color.
    d. Lighting any part of the wireless facility shall be prohibited.
    e. The existing and proposed portions of the facility shall not generate noise in excess of fifty (50) dBA at ground level at the base of the structure closest to the antenna. Verification that noise does not exceed this standard shall be submitted by a qualified acoustical engineer.
    f. The existing facility and proposed modifications shall meet or exceed the current standards and regulations of the FCC and any other agency of the federal government with the authority to regulate antennas.
    g. Antennas shall not exceed ten (10) feet in height from the roof surface. The new antennas/ equipment shall be amended to meet the height requirement and shall not exceed the maximum ten (10) feet height.
    h. The facility and all applicable structures shall be maintained in accordance with Section 17.08B.090: Maintenance Requirements, of the Hailey Municipal Code.
    i. The antenna ballast frame shall have 1824lb of ballast (48 – 16”x8”x8” standard core concrete ballast blocks or approved equivalent) evenly distributed in the ballast trays per modification drawings detailed in Appendix C.
    j. Remove the existing RRU frame and replace with the proposed RRU frame per modification drawings detailed in Appendix C.

k. Remove the existing mount pipes and pipe-to-pipe connections and replace with Pipe 2½ Std. x 10'-0" pipes and SitePro1 DCP18K per modification drawings detailed in Appendix C.
l. The project Narrative dated October 30, 2025, shall include the Analysis results from the Structural Analysis report under "please note" to include:
    - Existing Antenna Frame Stress Level with Existing + Proposed Equipment: 68.5%*CONDITIONAL PASS
    - Proposed RRU Frame Stress Level with Existing + Proposed Equipment: 78.2%*CONDITIONAL PASS
    - Existing Roof Top Stress Level with Existing + Proposed Equipment: 93.2% PASS

Signed this _____ day of _____, 2025.

_____
Janet Fugate, Planning & Zoning Commission Chair

Attest:

_____
Kayme Backstrom, Community Development Assistant

Contracted to AT&T Mobility

October 30, 2025

City of Hailey Community Development
115 Main Street South, Ste H
Hailey, ID 83337

RE: AT&T Site Modification / Technology Upgrade Project
Project Site Info: IDL04214 Hailey, FA: 10129884, Project: Nokia MM
Site Address: 400 South Main Street, Hailey, ID 83333

Dear City of Hailey:

I am writing to you on behalf of AT&T Wireless, with regards to an existing wireless facility located at the above referenced address. Due to new technology, AT&T needs to modify the equipment at the site and as an Eligible Facility Request for a minor modification under 6409 and Federal Communications Commission ("FCC") rules, AT&T requests your review and approval. The full scope of working being proposed which are depicted on the attached construction drawings are as follows:

Rooftop work:

- Remove and replace 3 antennas
- Remove and replace 9 remote radio heads (RRH')
- Remove 3 TMA's
- Install 6 new back-to-back RRH mounts
- Rotate existing platform

Equipment Room:

- Remove 20 bat
- Install 8 new batteries
- Install 1 generic E\\ BBU in DRM

PLEASE NOTE:

No additional noise.
No changes to the existing electrical service already provided at this location
No additional shelters/equipment sheds or platforms
No expansion of the existing compound
No ground disturbance

AT&T is seeking the documented consent from the City of Hailey to proceed to make this change. AT&T Wireless appreciates your assistance in the continuing operation of this wireless communication location. Please call (303) 903-3990 or email at valerie.cardenas@smartlinkgroup.com if you need any further information or have any questions.

Sincerely,

Jill Drake

Jill Drake-Real Estate Specialist II
Smartlink Group on behalf of AT&T Wireless

(please attach the Business card of City of Hailey representative that signs)

To: Smartlink Group
c/o Valerie Cardenas
3775 Jay Street
Wheat Ridge, CO 80033

Attention: Valerie Cardenas

RE:	AT&T Site Modification / Technology Upgrade Project
AT&T Site ID:	IDL04214 Hailey, FA: 10129884, Project: Nokia MM
Site Address:	400 South Main Street, Hailey, ID 83333

Dear Valerie:

The City of Hailey has reviewed the requested AT&T wireless facility changes and hereby gives Planning and Building consent for the placement of AT&T's additional equipment as described in the attached letter dated 08/28/2024.

Signed: _____

Printed Name: _____

Title: _____

Date: _____

October 30, 2025

City of Hailey Community Development
115 Main Street South, Ste H
Hailey, ID 83337

RE: Request for Minor Modification to Existing Wireless Facility –6409/47 CFR § 1.40001 ("6409")
Site Address: 400 South Main Street, Hailey, ID 83333
Prior Case No.: Planning Approval Issued 11/21/2022 – Janet Fugate
Building Permit #22-231 Issued 5/23/2023
AT&T Project No.: IDL04214 Hailey, FA: 10129884, Project: Nokia MM

Dear Planning and Zoning/Building Division:

On behalf of New Cingular Wireless PCS, LLC ("AT&T"), we are pleased to submit this request to modify the existing Wireless Communications site, at the location referenced above, as an Eligible Facilities Request for a non-substantial modification pursuant to Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012 and the corresponding Federal Communications Commission ("FCC") implementing rules.

Scope of Work
AT&T proposes the following non-substantial modifications to this site, all of which comply with the site's prior conditions of approval.

Increase height of original structure	10 feet or less	No increase in height
Antennas extending horizontally from edge of structure	6 feet or less	No antennas will extend 6 feet or more horizontally from the edge of the structure
Additional equipment cabinets	4 or fewer	No additional equipment cabinets being added

Conditions of Approval
The FCC rule provides that a change is substantial if it does not comply with the conditions associated with the prior zoning approval, except that the limitation does not apply to modifications that are allowed under Section 6409(a), i.e., with respect to height and site expansions. In this case, the proposed modifications maintain all of the original conditions of approval.

FCC Shot Clock for Section 6409 Minor Modifications
AT&T requests approval of the following application, as well as any other authorizations necessary, for its proposed modification under Section 6409(a). The FCC rule provides that all authorizations related to 6409(a) applications be completed within 60 days after filing.1 Based on a filing date of August 30, 2024 and without accounting for any tolling, the projected shot-clock deadline for a decision is October 29, 2024.

We look forward to working with you on this important project that will significantly improve wireless communication services in your community. Please do not hesitate to contact me or Valerie Cardenas, if you have any questions or concerns.

Sincerely,

Jill Drake

Jill Drake
Real Estate Specialist II
Smartlink Group for AT&T Mobility

Enclosures: FCC Rule for Section 6409 Applications (47 CFR § 1.40001); Plans and drawings

[1]47 C.F.R. § 1.6100(c)(2).

CR Wireless, LLC

November 11, 2025

City of Hailey, Community Development
115 South Main Street
Hailey, ID 83333

Ref: AT&T Site Modification / Technology Upgrade Wireless Permit application dated August 28, 2024
IDL04214 Hailey, FA10129884
400 South Main Street, Hailey, ID 83333

Attn: Ashley Dyer, City Planner, Community Development

Dear Ms. Dyer,

At your request I have reviewed the documentation you sent regarding the Wireless Permit Application for an AT&T Site Modification / Technology Upgrade located at 400 South Main Street in Hailey, Idaho. This appears to be a technology change / upgrade from Nokia to Ericsson cellular site equipment. This is a widely known technology update for AT&T wireless sites, so I see no issues with this proposed technology work.

The Project Narrative Letter of August 28, 2024, under the section "*PLEASE NOTE:* does not include the CONDITIONAL PASS requirements under the Analysis Results portion of the letter and Section 3) RECOMMENDATIONS of the Roof Top Structural Analysis Report from Black & Veatch dated June 27, 2024. I have copied them here for reference.

3) RECOMMENDATIONS
The roof top will have sufficient capacity to carry the final loading configuration. In order for the results of this analysis to be considered valid the modifications listed below must be completed.

Modifications:
1) The antenna ballast frame shall have 1824lb of ballast (48 – 16"x8"x8" standard core concrete ballast blocks or approved equivalent) evenly distributed in the ballast trays per modification drawings detailed in Appendix C.
2) Remove the existing RRU frame and replace with the proposed RRU frame per modification drawings detailed In Appendix C.
3) Remove the existing mount pipes and pipe-to-pipe connections and replace with Pipe 2½ Std. x 10'-0" pipes and SitePro1 DCP18K per modification drawings detailed in Appendix C.

No additional modifications to those listed above are required at this time, provided that the above listed changes are implemented.

Review of the Roof Top Modification Drawings on pages 57-61 of the Black & Veatch Roof Top Structural Analysis Report and the AT&T Cell Site RF Modifications drawings Project Description indicates

CR Wireless, LLC
1213 N Jacob Alcott Way #242
Nampa, Idaho 83687
208.841.8084

Chuck Robertson | RF Engineer
FCC Licensed | CommScope Certified | ETA F.O.I Certified
Member AT&T FirstNet:
crobertson@crwireless.net

installation of a Remote Radio Unit Unistrut Frame and Tri-Pod modifications required as part of this proposed work. Plan for rooftop work that could be noticeable to existing tenants during work completion.

I also see several line items highlighted in red on the Cell Site RF Modifications drawing under Build Standards that should be reviewed and verified acceptable as noted by the Landlord.

This completes my review of the submitted permit application and associated documentation. I recommend approval if the items highlighted herein are addressed and work is coordinated with tenants prior to starting to minimize disruption while work is completed.

Thank you.

Sincerely,

Chuck Robertson
RF Engineer

Cc: Robyn Davis, Community Development Director

CR Wireless, LLC
1213 N Jacob Alcott Way #242
Nampa, Idaho 83687
208.841.8084

Chuck Robertson | RF Engineer
FCC Licensed | CommScope Certified | ETA F.O.I Certified
Member AT&T FirstNet:
crobertson@crwireless.net

HAILEY
IDL04214

at&t

CELL SITE RF MODIFICATIONS
WSUTH0033680
FA#:10129884
ROOFTOP

PROJECT DESCRIPTION

AT&T WIRELESS PROPOSES TO MODIFY AN EXISTING WIRELESS INSTALLATION. THE SCOPE WILL CONSIST OF THE FOLLOWING:

ROOFTOP WORK:
- REMOVE (3) PANEL ANTENNAS
- REMOVE (6) REMOTE RADIO HEADS (RRHs)
- REMOVE (3) TMAs
- INSTALL (3) PANEL ANTENNAS
- INSTALL (3) AIR 6472 B77/B77M ANTENNAS
- INSTALL (6) REMOTE RADIO UNITS (RRUs)
- INSTALL (2) TIE-OFF POINTS
- INSTALL (1) SURGE SUPPRESSOR (DC9)
- INSTALL (1) DC POWER TRUNK
- INSTALL (1) FIBER TRUNK (24 PAIR)

GROUND WORK:
- REMOVE (1) NOKIA FSM4 UNIT
- REMOVE (1) DC POWER PLANT
- REMOVE (6) RECTIFIERS
- REMOVE (4) CONVERTERS
- REMOVE (1) BATTERY RACK
- INSTALL (1) ERICSSON BASEBAND UNIT IN EXISTING FIF RACK
- INSTALL (1) SURGE SUPPRESSION (DC12) UNIT IN EXISTING FIF RACK
- INSTALL (1) VERTIV DC POWER PLANT
- INSTALL (8) CONVERTERS IN PROPOSED DC POWER PLANT
- INSTALL (8) RECTIFIERS IN PROPOSED DC POWER PLANT
- INSTALL (1) POWERSHIFT CONVERTER IN PROPOSED DC POWER PLANT
- INSTALL (1) VERTIV BATTERY RACK
- INSTALL – REMOTE RADIO UNIT UNISTRUT FRAME
- INSTALL – TRI-POD MODIFICATIONS
- RE-USE (16) 185AH BATTERIES IN PROPOSED BATTERY RACK

ENGINEERING

2018 INTERNATIONAL BUILDING CODE OR LATEST ADOPTED EDITION
2017 NATIONAL ELECTRIC CODE OR LATEST ADOPTED EDITION
TIA/EIA-222-H OR LATEST EDITION

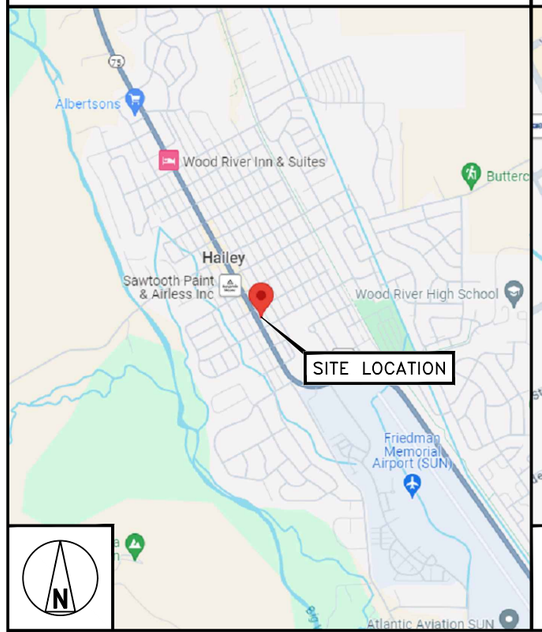
SITE INFORMATION

PROPERTY OWNER:	ERIC R. ALBERDI
ADDRESS:	400 S. MAIN STREET, #101
SITE ADDRESS:	400 SOUTH MAIN STREET HAILEY, ID 83333
FA:	10129884
ROOFTOP OWNER: (TELECOM MANAGEMENT:)	AP WIP TOWER, LLC
CELL SITE RF MODIFICATIONS IWM #:	WSUTH0033680
COUNTY:	BLAINE
LATITUDE (NAD83): LONGITUDE (NAD83):	43.5164689 -114.31255
GROUND ELEVATION:	5,322' AMSL
ZONING JURISDICTION:	CITY OF HAILEY
ZONING DISTRICT:	B-BUSINESS TO-TOWNSITE OVERLAY
PARCEL NUMBER:	RPH07070001010
OCCUPANCY GROUP:	U
CONSTRUCTION TYPE:	V-B
POWER COMPANY:	IDAHO POWER CO.
TELEPHONE COMPANY:	CENTURYLINK
SITE ACQUISITION MANAGER:	TAMARA SHIVELEY (801) 230-4877
CONSTRUCTION MANAGER:	JOHN VAUGHAN (303) 517-3652
RF ENGINEER:	DAVID BLACK (303) 217-1477

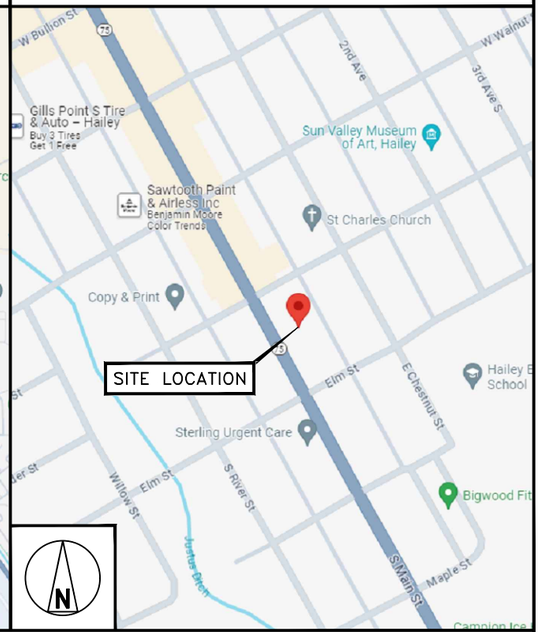
CONTACT INFORMATION

ENGINEER:	BLACK & VEATCH CORPORATION 4600 SOUTH SYRACUSE STREET, SUITE 800 DENVER, CO 80237
CONTACT:	CAMERON LOUCKS
PHONE:	(303) 264-0581

VICINITY MAP



LOCAL MAP



NO SCALE

DRIVING DIRECTIONS

DIRECTIONS FROM AT&T OFFICE

GET ON E-470 N IN MERIDIAN FROM INVERNESS DR W, INVERNESS PKWY AND S JAMAICA ST, FOLLOW E-470 N AND I-25 N TO CO-14 W IN LARIMER COUNTY. TAKE EXIT 269B FROM I-25 N, GET ON I-80 W IN LARAMIE FROM US-287, MERGE ONTO CO-14 W, TURN RIGHT TO STAY ON CO-14 W, TURN RIGHT ONTO US-287 N/N COLLEGE AVE, KEEP RIGHT, FOLLOW SIGNS FOR US-287/LARAMIE/CO-14/POUDRE CYN, MERGE ONTO US-287, SLIGHT RIGHT TO MERGE ONTO I-80 W TOWARD RAWLINS, FOLLOW I-80 W AND I-84 W TO US-93 N IN JEROME COUNTY. TAKE EXIT 173 FROM I-84 W, MERGE ONTO I-80 W, TAKE EXIT 168 FOR I-84 W TOWARD OGDEN, CONTINUE ONTO I-84 W, TAKE EXIT 173 FOR US-93 TOWARD TWIN FALLS/SUN VLY, DRIVE TO ID-75 N IN HAILEY, TURN RIGHT ONTO US-93 N, CONTINUE ONTO ID-75 N/N GREENWOOD ST, CONTINUE TO FOLLOW ID-75 N, PASS BY NAPA AUTO PARTS – DYNA PARTS LLC, SITE WILL BE ON THE RIGHT.

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE. NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

DRAWING INDEX

SHEET NO.	SHEET TITLE
T-1	TITLE SHEET
C-1	SITE PLAN
C-1.1	ENLARGED SITE PLAN
C-2	EQUIPMENT LAYOUT
C-3	ELEVATION
C-4	ANTENNA SCHEDULE & LAYOUTS
C-5	EQUIPMENT DETAILS
C-6	EQUIPMENT DETAILS
E-1	ELECTRICAL AC ONE-LINE DIAGRAM
E-2	ELECTRICAL DC ONE-LINE DIAGRAM
G-1	GROUNDING ONE-LINE DIAGRAM
G-2	GROUNDING DETAILS
GN-1	LEGEND & ABBREVIATIONS
GN-2	GENERAL CONSTRUCTION NOTES
GN-3	GENERAL SITE WORK & DRAINAGE NOTES
GN-4	GENERAL CONCRETE WORK NOTES
GN-5	GENERAL STRUCTURAL STEEL NOTES
GN-6	GENERAL ELECTRICAL NOTES
GN-7	BATTERY SAFETY NOTES
S-1	TITLE PAGE
S-2	MODIFICATION INSPECTION CHECKLIST
S-3	NOTES
S-4	ANTENNA FRAME
S-5	RRU FRAME

11"x17" PLOT WILL BE HALF SCALE UNLESS OTHERWISE NOTED

CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON THE JOB SITE, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

DIGLINE
IDAHO DIGLINE
1-800-342-1585
WWW.DIGLINE.COM

2 WORKING DAYS UTILITY NOTIFICATION PRIOR TO CONSTRUCTION

at&t
188 INVERNESS DRIVE WEST
SUITE 400
ENGLEWOOD, CO 80112

BLACK & VEATCH
4600 SOUTH SYRACUSE STREET
SUITE 800
DENVER, COLORADO 80237

PROJECT/PHASE NO:	129551/XXXX
DRAWN BY:	ASK
CHECKED BY:	JMH
RFDS:	1.00

REV	DATE	DESCRIPTION
0	07/19/24	ISSUED FOR CONSTRUCTION

PROFESSIONAL ENGINEER
LICENSED
P-17069
STATE OF IDAHO
PING JIANG

Jul 19, 2024

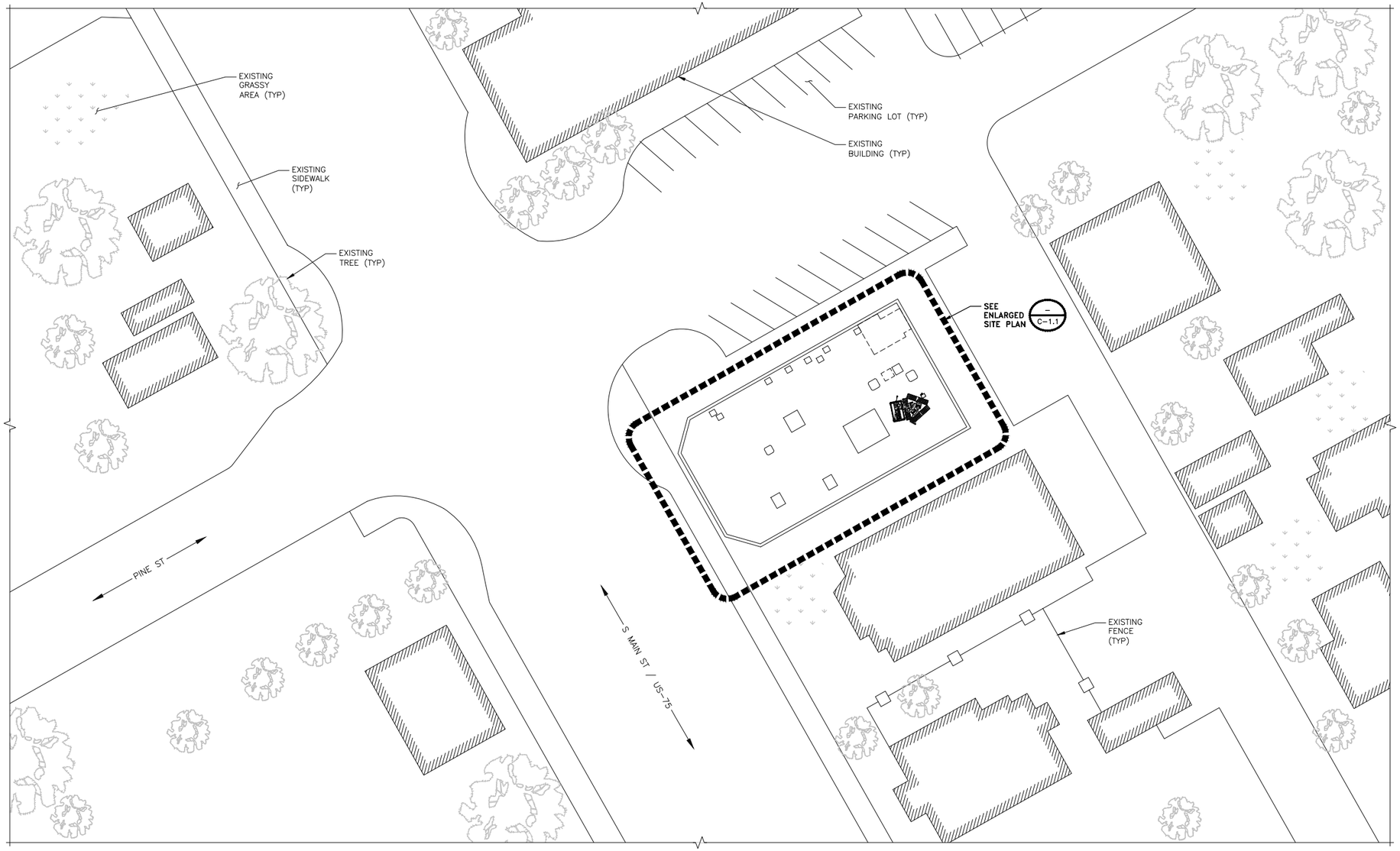
HAILEY
IDL04214
400 SOUTH MAIN STREET
HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

NOTE

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.



SITE PLAN

20' 10' 0 20' 40'
1"=20'

1

at&t

188 INVERNESS DRIVE WEST
SUITE 400
ENGLEWOOD, CO 80112

BLACK & VEATCH

4600 SOUTH SYRACUSE STREET
SUITE 800
DENVER, COLORADO 80237

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HAILEY
IDL04214
400 SOUTH MAIN STREET
HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
SITE PLAN

SHEET NUMBER
C-1

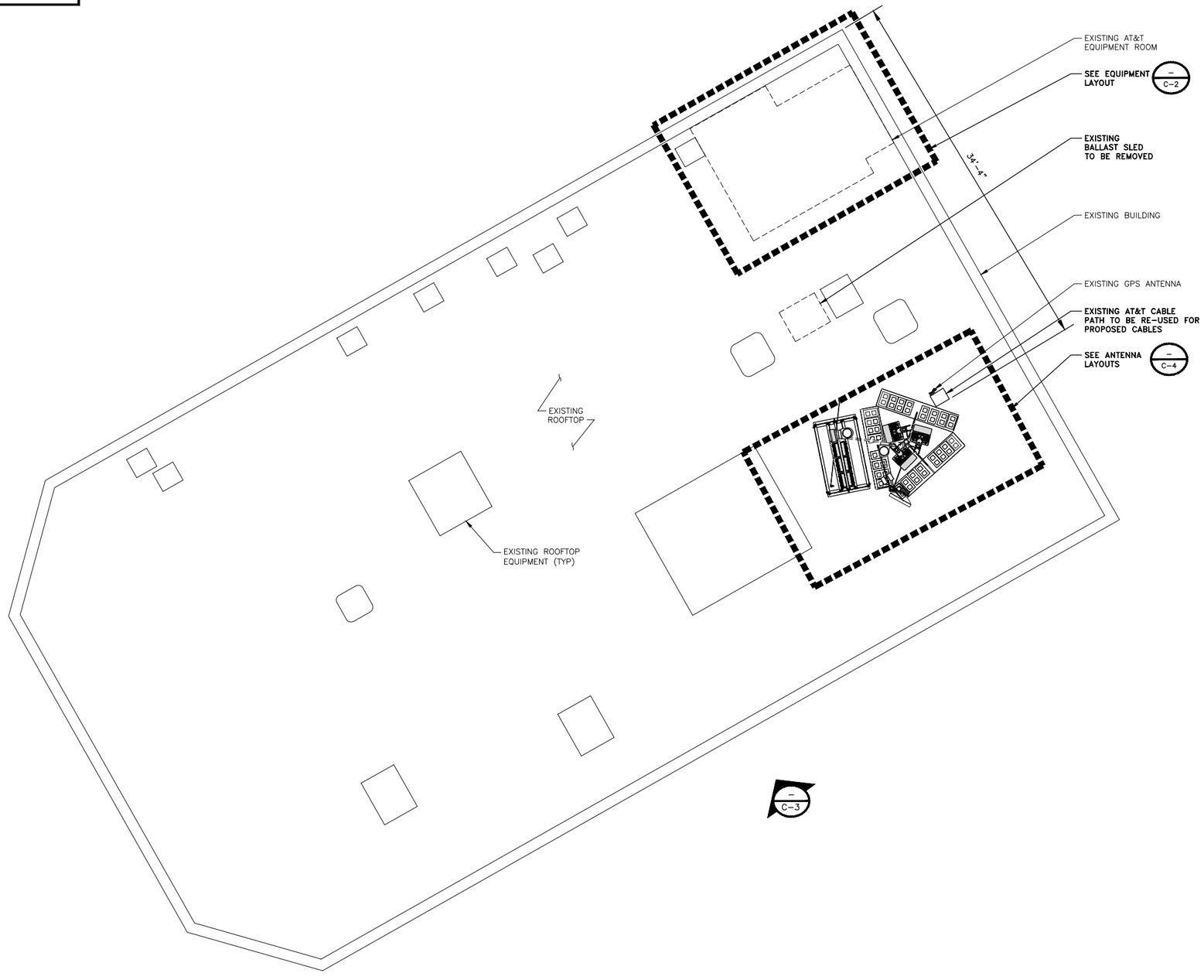
COAX & CABLE INFORMATION

- (2) EXISTING #8 AWG DC POWER TRUNKS
- (1) EXISTING 18-PAIR FIBER TRUNK
- **(1) PROPOSED #6 AWG DC TRUNK**
- **(1) PROPOSED 24-PAIR FIBER TRUNK**

ROUTED ON EXISTING ROOFTOP

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. ANTENNAS AND MOUNTS OMITTED FOR CLARITY.



N

ENLARGED SITE PLAN

6' 4' 2' 0 5' 10'
3/16"=1'-0"

1

at&t
188 INVERNESS DRIVE WEST
SUITE 400
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PROFESSIONAL ENGINEER
LICENSED
P-17069
STATE OF IDAHO
PING JIANG

Jul 19, 2024

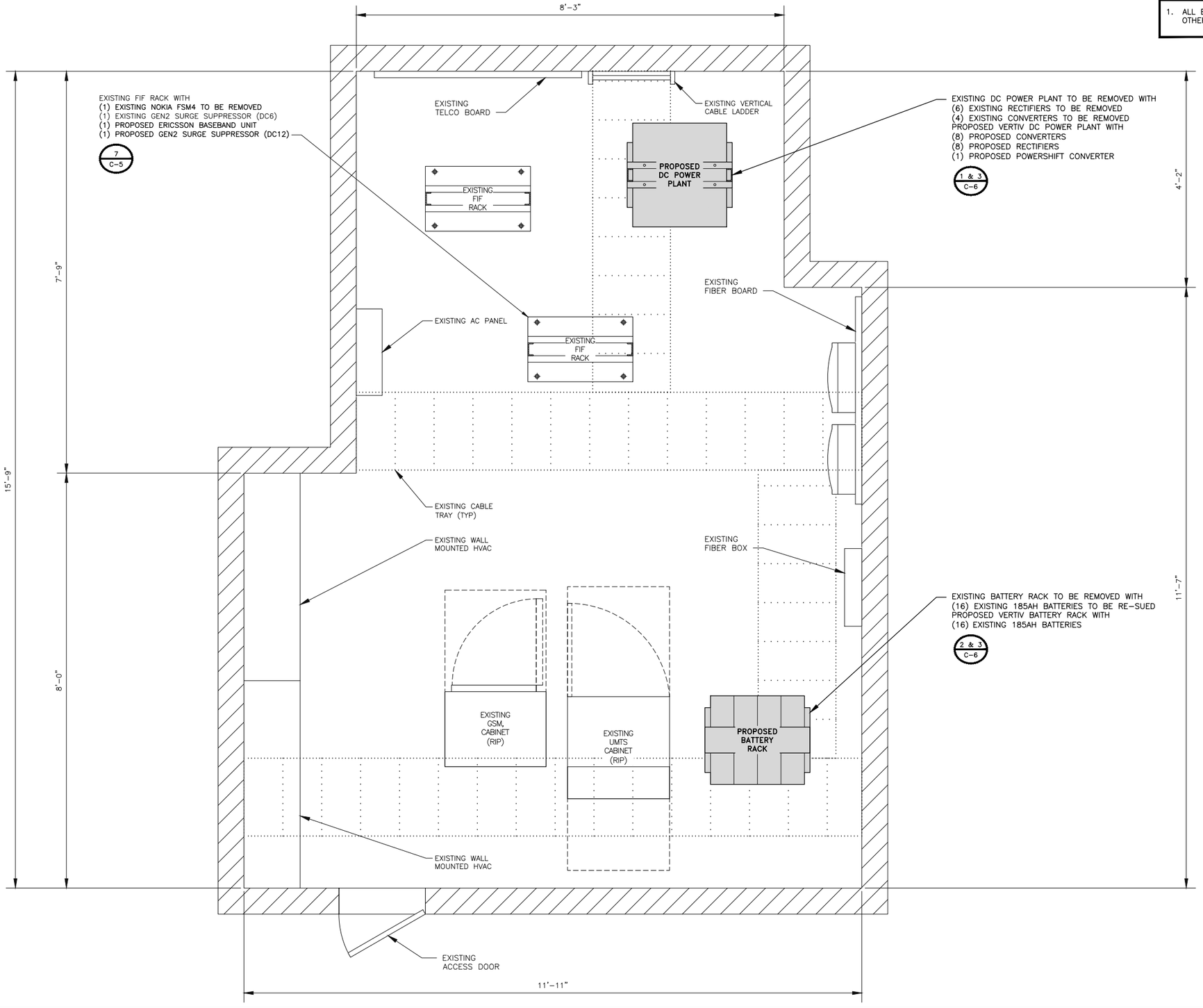
HAILEY
IDL04214
400 SOUTH MAIN STREET
HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
ENLARGED SITE PLAN

SHEET NUMBER
C-1.1

NOTE

1. ALL EXISTING EQUIPMENT TO REMAIN UNLESS NOTED OTHERWISE.



FINAL EQUIPMENT LAYOUT

12" 9" 6" 3" 0 1' 2'
1"=1'-0"

1

at&t
188 INVERNESS DRIVE WEST
SUITE 400
ENGLEWOOD, CO 80112

BLACK & VEATCH
4600 SOUTH SYRACUSE STREET
SUITE 800
DENVER, COLORADO 80237

PROJECT/PHASE NO:	129551/XXXX
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RFDS:	1.00

REV	DATE	DESCRIPTION
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PROFESSIONAL ENGINEER LICENSED P-17069 STATE OF IDAHO PING JIANG

Jul 19, 2024

HAILEY
IDL04214
400 SOUTH MAIN STREET
HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
EQUIPMENT LAYOUT

SHEET NUMBER
C-2

NOTES

1. THE PASSING STRUCTURAL AND MOUNT ANALYSIS FOR THE EXISTING STRUCTURE WAS COMPLETED BY ACCELERATED TOWER ENGINEERING ON JUNE 27, 2024. PROPOSED TRI-POD & RRU FRAME MODIFICATIONS REQUIRED, PLEASE REFERENCE SHEETS S-1 THROUGH S-5. THE STRUCTURE AND MODIFIED MOUNTS WILL HAVE SUFFICIENT CAPACITY FOR THE EXISTING AND PROPOSED LOADINGS OBSERVED ON THESE CONSTRUCTION DRAWINGS ONCE THE MODIFICATIONS HAVE BEEN INSTALLED.
2. EXISTING AND PROPOSED EXPOSED EQUIPMENT TO BE PAINTED A NON-REFLECTIVE GREY COLOR.

COAX & CABLE INFORMATION

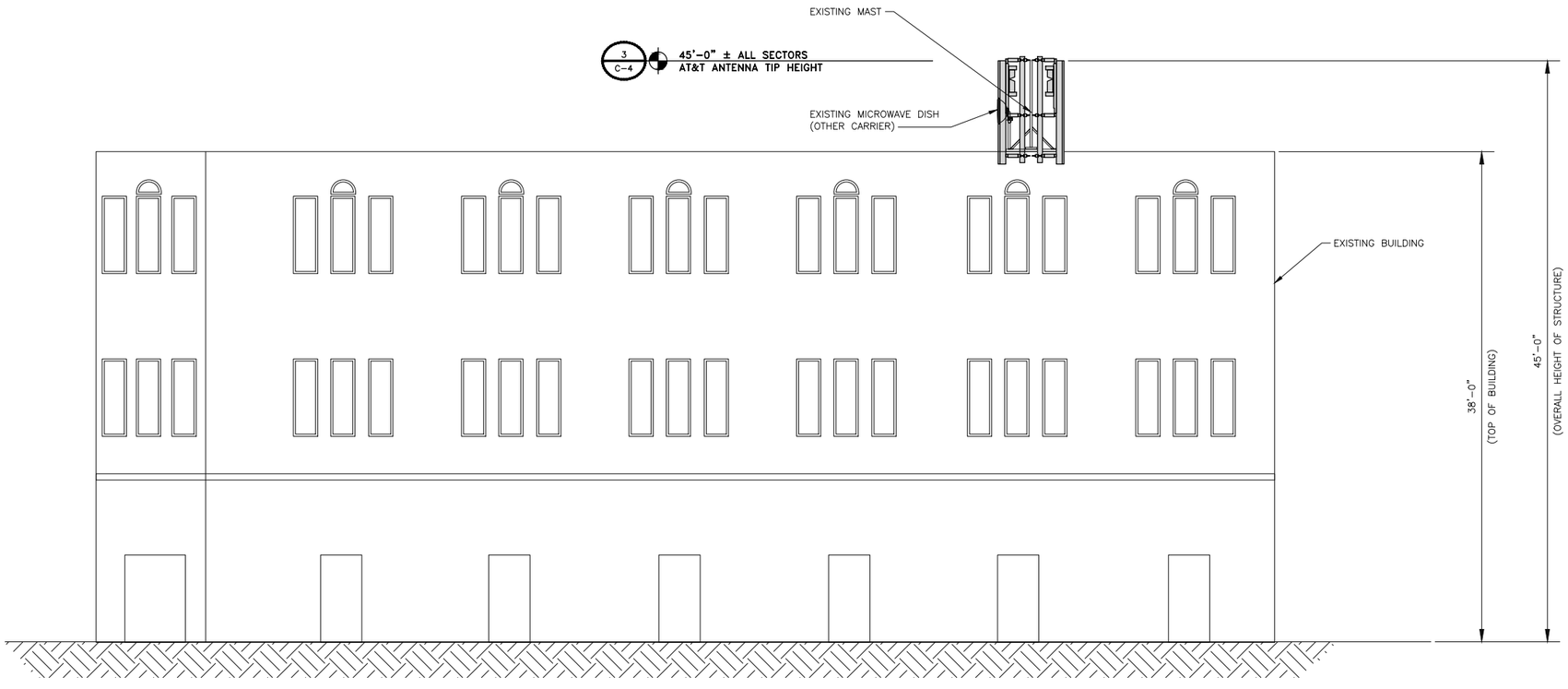
- (2) EXISTING #8 AWG DC POWER TRUNKS
- (1) EXISTING 18-PAIR FIBER TRUNK
- **(1) PROPOSED #6 AWG DC TRUNK**
- **(1) PROPOSED 24-PAIR FIBER TRUNK**

ROUTED ON EXISTING ROOFTOP

CABLE SUPPORT HANGER NOTE

CONTRACTOR SHALL FIELD VERIFY EXISTING CABLE HOIST GRIPS SUPPORT METHOD. CONTRACTOR SHALL NOTE ANY EXISTING INSTALLATION NOT CONFORMING TO THE REQUIRMENTS BELOW TO CONSTRUCTION MANAGER FOR REMEDIATION APPROVAL. CONTRACTOR SHALL MAINTAIN A SUPPLY OF REMEDIATION HARDWARE WITH TOWER CREWS FOR ON-SITE REMEDIATION, WHEN APPROVED, WITHOUT REMOBILIZATION. INSTALL ALL HARDWARE PER MANUFACTURER REQUIREMENTS.

- ALL HOIST GRIPS SHALL BE SECURED TO TOWER STRUCTURE
- WRAPPING HOIST GRIPS OVER TOWER STEEL IS NOT PERMITTED
- USE OF SHACKLES IS PREFERRED
- BEAM CLAMPS OR ANGLE ADAPTERS ARE NOT PERMITTED FOR HOIST GRIPS
- HOIST GRIPS SHALL BE INSTALLED EVERY 200 FT OR PER CABLE MANUFACTURER REQUIREMENTS
- CHAIN NOT PERMITTED FOR HOIST GRIP SUPPORT



FINAL SOUTHEAST ELEVATION

6' 4' 2' 0 5' 10'
3/16"=1'-0"

1

at&t

188 INVERNESS DRIVE WEST
SUITE 400
ENGLEWOOD, CO 80112

BLACK & VEATCH

4600 SOUTH SYRACUSE STREET
SUITE 800
DENVER, COLORADO 80237

PROJECT/PHASE NO:	129551/XXXX
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CHECKED BY:	JMH
RFDS:	1.00

REV	DATE	DESCRIPTION
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PROFESSIONAL ENGINEER
LICENSED
P-17069
STATE OF IDAHO
PING JIANG

Jul 19, 2024

HAILEY
IDL04214
400 SOUTH MAIN STREET
HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
ELEVATION

SHEET NUMBER
C-3

COAX & CABLE INFORMATION

- ALL EXISTING CABLES/COAX TO REMAIN UNLESS NOTED OTHERWISE.
- (2) EXISTING #8 AWG DC POWER TRUNKS
- (1) EXISTING 18-PAIR FIBER TRUNK
- **(1) PROPOSED #6 AWG DC TRUNK IN PROPOSED INNERDUCT** ROUTED ON EXISTING ROOFTOP

SECTOR	TECH.		ANTENNA MODEL		AZIMUTH		TIP HEIGHT	RRU/RRH MODEL & RELATED EQUIPMENT	
	EXIST.	FINAL	EXIST.	FINAL	EXIST.	FINAL	FINAL	EXIST.	FINAL
A1	LTE	**LTE**	*XXQLH-654L8H8-IVT	**NNH4-65C-R6-UPM +AIR 6472 B77G/B77M**	15°	**15°**	**45'-0"**	*ETW190VS12UB_E15S09 *4T4R B25/66 320W AHFIB *RRH2X40W_7L RETUNED UHLB	**4490 B5/B12A INTEGRATED WITHIN: ERICSSON 6472 B77G/B77M 4890 B25/66**
B1	LTE	**LTE**	*XXQLH-654L8H8-IVT	**NNH4-65C-R6-UPM +AIR 6472 B77G/B77M**	135°	**135°**	**45'-0"**	*ETW190VS12UB_E15S09 *4T4R B25/66 320W AHFIB *RRH2X40W_7L UHLA	**4490 B5/B12A INTEGRATED WITHIN: ERICSSON 6472 B77G/B77M 4890 B25/66**
C1	LTE	**LTE**	*XXQLH-654L8H8-IVT	**NNH4-65C-R6-UPM +AIR 6472 B77G/B77M**	255°	**255°**	**45'-0"**	*ETW190VS12UB_E15S09 *4T4R B25/66 320W AHFIB *RRH2X40W_7L UHLA	**4490 B5/B12A INTEGRATED WITHIN: ERICSSON 6472 B77G/B77M 4890 B25/66**

*TO BE REMOVED

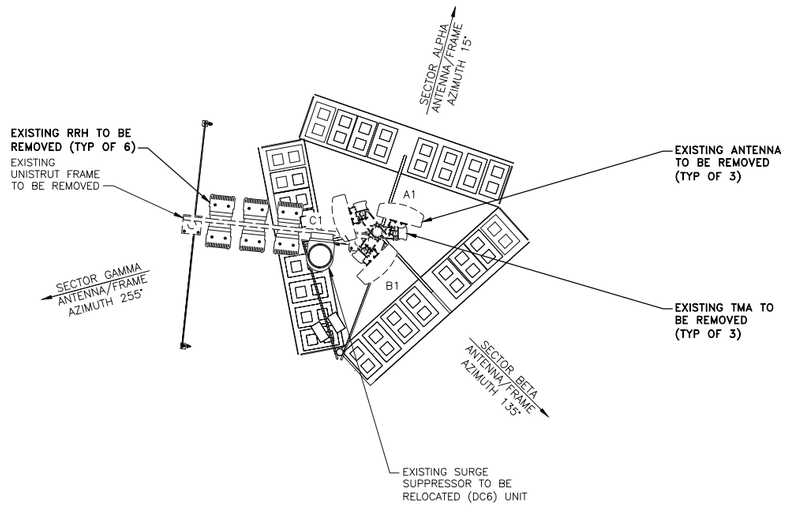
ANTENNA SCHEDULE

NO SCALE

1

NOTE

1. ALL EXISTING EQUIPMENT TO REMAIN UNLESS NOTED OTHERWISE.



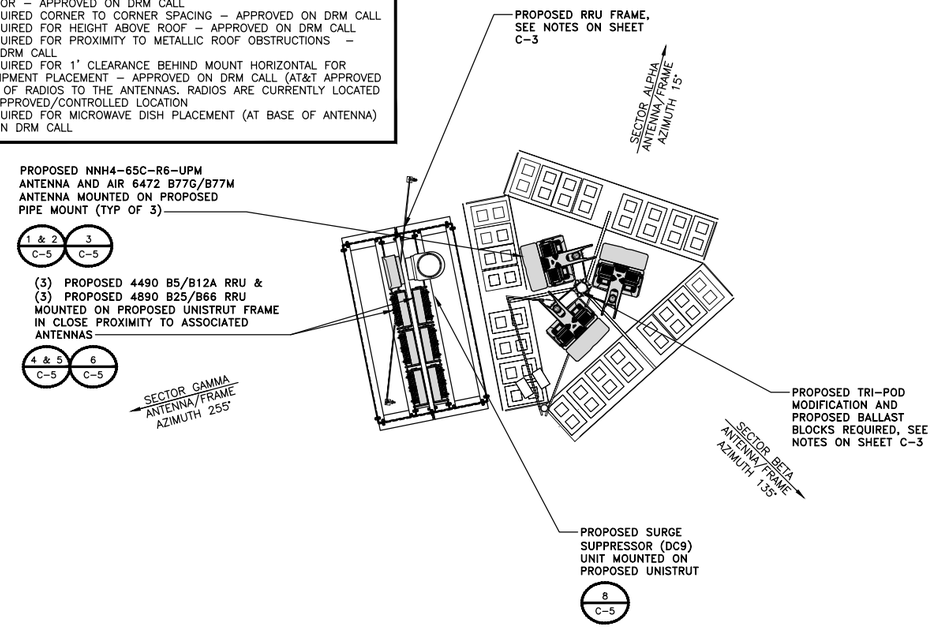
EXISTING ANTENNA LAYOUT

12" 6" 0 1' 2' 3' 4' 5' 6' 7'
3/8"=1'-0"

2

EXCEPTIONS:

1. EXCEPTION REQUIRED FOR 1' CLEARANCE BEHIND MOUNT HORIZONTAL TO ADJACENT SECTOR – APPROVED ON DRM CALL
2. EXCEPTION REQUIRED CORNER TO CORNER SPACING – APPROVED ON DRM CALL
3. EXCEPTION REQUIRED FOR HEIGHT ABOVE ROOF – APPROVED ON DRM CALL
4. EXCEPTION REQUIRED FOR PROXIMITY TO METALLIC ROOF OBSTRUCTIONS – APPROVED ON DRM CALL
5. EXCEPTION REQUIRED FOR 1' CLEARANCE BEHIND MOUNT HORIZONTAL FOR ANCILLARY EQUIPMENT PLACEMENT – APPROVED ON DRM CALL (AT&T APPROVED THE PROXIMITY OF RADIOS TO THE ANTENNAS. RADIOS ARE CURRENTLY LOCATED IN LANDLORD APPROVED/CONTROLLED LOCATION
6. EXCEPTION REQUIRED FOR MICROWAVE DISH PLACEMENT (AT BASE OF ANTENNA) – APPROVED ON DRM CALL



PROPOSED ANTENNA LAYOUT

12" 6" 0 1' 2' 3' 4' 5' 6' 7'
3/8"=1'-0"

3

at&t
188 INVERNESS DRIVE WEST
SUITE 400
ENGLEWOOD, CO 80112

BLACK & VEATCH
4600 SOUTH SYRACUSE STREET
SUITE 800
DENVER, COLORADO 80237

PROJECT/PHASE NO:	129551/XXXX
DRAWN BY:	ASK
CHECKED BY:	JMH
RFDS:	1.00

REV	DATE	DESCRIPTION
0	07/19/24	ISSUED FOR CONSTRUCTION

PROFESSIONAL ENGINEER LICENSED STATE OF IDAHO P-17069 PING JIANG
Jul 19, 2024

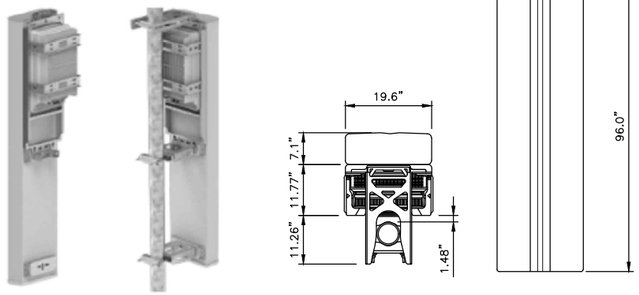
HAILEY
IDL04214
400 SOUTH MAIN STREET
HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
ANTENNA SCHEDULE & LAYOUTS

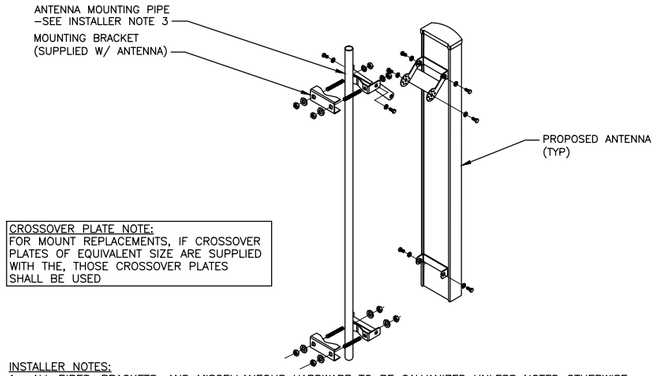
SHEET NUMBER
C-4

COMMSCOPE NNH4-65C-R6-UPM

DIMENSIONS, HxWxD: 96.0"X19.6"X7.1" (2438x498x180mm)
WEIGHT: 98 lbs. (44.5 kg)



ANTENNA SPECIFICATIONS | NO SCALE | 1



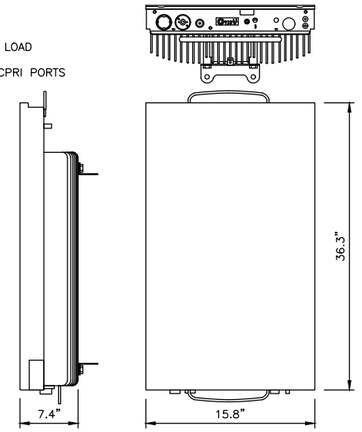
CROSSOVER PLATE NOTE:
FOR MOUNT REPLACEMENTS, IF CROSSOVER PLATES OF EQUIVALENT SIZE ARE SUPPLIED WITH THE, THOSE CROSSOVER PLATES SHALL BE USED

INSTALLER NOTES:
1. ALL PIPES, BRACKETS, AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE
2. REFER TO ANTENNA MANUFACTURER INSTALLATION MANUAL FOR ASSEMBLY AND BOLT TORQUE SPECS.
3. ANY NEW MOUNT PIPES PROPOSED FOR PASSIVE ANTENNAS. INCLUDING NEW MOUNTS OR MOUNT REPLACEMENTS. SHALL BE P2.5 STD (2-7/8" O.D.) SABRE# C10900802 / ANT 46141 (OR APPROVED EQUIVALENT) PASSIVE ANTENNA MOUNT PIPES FOR EXISTING MOUNTS MAY REMAIN. UNLESS OTHERWISE NOTED IN MOUNT ANALYSIS

ANTENNA MOUNTING DETAIL | NO SCALE | 2

ERICSSON AIR 6472 B77M

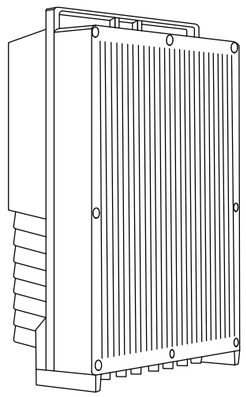
DIMENSIONS, WxDxH: 15.8"x7.4"x36.3"
(mm) 402x188x922mm
POWER CONSUMPTION: 1200 WATTS @ MAX LOAD
TOTAL WEIGHT: 66.1 lbs
PORTS: 2 x 10/25 GBPS eCPRI PORTS



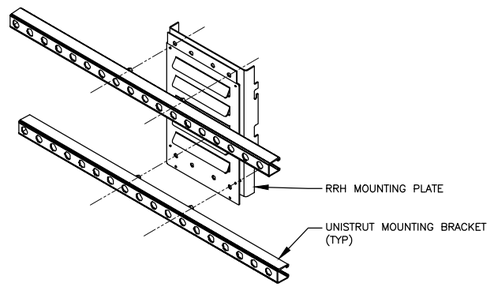
PROPOSED ANTENNA SPECIFICATIONS | NO SCALE | X

ERICSSON RADIO 4890 B25/66

DIMENSIONS, HxWxD: 17.5"x15.1"x6.9"
(mm) 444x384x176mm
POWER CONSUMPTION: 480 WATTS
TOTAL WEIGHT: 68 lbs



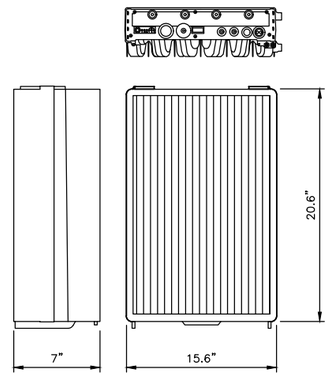
RRU SPECIFICATIONS | NO SCALE | 4



RRH UNISTRUT MOUNTING DETAIL | NO SCALE | 5

ERICSSON RADIO 4490 B5/12A

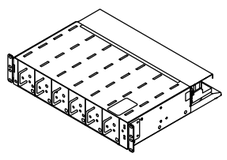
DIMENSIONS, HxWxD: 20.6"x15.6"x7"
(mm) 524x397x178mm
POWER CONSUMPTION: 480W
TOTAL WEIGHT: 65 lbs



RRU SPECIFICATIONS | NO SCALE | 6

RAYCAP DC12-48-60-RM

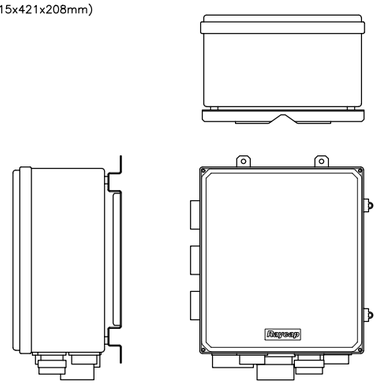
DIMENSIONS, WxDxH: 483x89x392mm (19.0"x3.5"x15.4")
NOMINAL OPERATING VOLTAGE: 48 VDC
NOMINAL DISCHARGE CURRENT: 20 kA 8/20µs
MAXIMUM DISCHARGE CURRENT: 60 kA 8/20µs
MAXIMUM CONTINUOUS OPERATING VOLTAGE: 75 VDC
VOLTAGE PROTECTION RATING: 400 V
TOTAL WEIGHT: 27 lbs



DC SURGE SUPPRESSOR DETAIL | NO SCALE | 7

RAYCAP DC9-48-60-24-PC16-EV

DIMENSIONS, LxWxH: 16.34"x16.57"x8.19" (415x421x208mm)
WEIGHT: 34.9 lbs (15.83 kg)



DC SURGE SUPPRESSOR DETAIL | NO SCALE | 8

NOT USED | NO SCALE | 9

at&t
188 INVERNESS DRIVE WEST
SUITE 400
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BLACK & VEATCH
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DENVER, COLORADO 80237

PROJECT/PHASE NO:	129551/XXXX
DRAWN BY:	ASK
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RFDS:	1.00

REV	DATE	DESCRIPTION
0	07/19/24	ISSUED FOR CONSTRUCTION

PROFESSIONAL ENGINEER LICENSED STATE OF IDAHO P-17069 PING JIANG
Jul 19, 2024

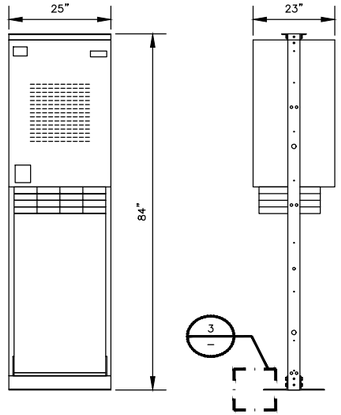
HAILEY
IDL04214
400 SOUTH MAIN STREET
HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
C-5

EMERSON NETSURE 7100 CABINET

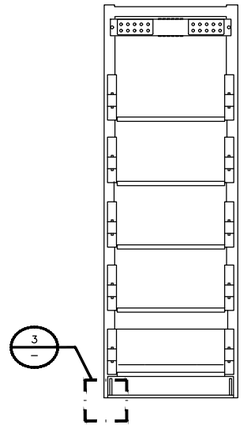
DIMENSIONS, WxDxH: 84"x25"x23" (2133.6x635x584.2mm)
LOAD RATING: 500 lbs (226.8kg)
MOUNTING WIDTH, WxD: 23"x20"
RACK PART #: VERTIV 562353
RACK CONMAT #: NEQ.46811



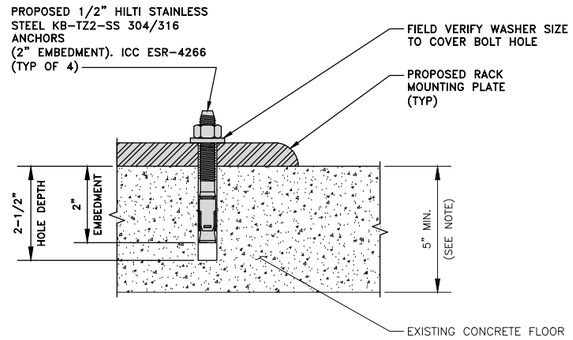
DC POWER PLANT SPECIFICATIONS | NO SCALE | 1

EMERSON–NETSURE VRLA BATTERY RACK

DIMENSIONS HxWxD: 84"x25.5"x25"
WEIGHT (WITHOUT BATTERIES): 600 LBS MAX.
OUTPUT: +24VDC OR –48VDC
CAPACITY: 1200 AMPS PER BAY
OPERATING TEMPERATURE: –40°C TO +40°C (–40°F TO +104°F)
STORAGE RANGE: –40°C TO +85°C (–40°F TO +185°F)



INDOOR BATTERY RACK DETAIL | NO SCALE | 2



NOTE:
CONTRACTOR TO FIELD VERIFY CONCRETE FLOOR THICKNESS PRIOR TO PURCHASE & INSTALLATION.
CONTACT ENGINEER OF RECORD (EOR) IMMEDIATELY IF SLAB THICKNESS IS LESS THAN 5".

CONCRETE ANCHOR DETAIL | NO SCALE | 3

NOT USED | NO SCALE | 4

NOT USED | NO SCALE | 5

NOT USED | NO SCALE | 6

NOT USED | NO SCALE | 7

NOT USED | NO SCALE | 8

NOT USED | NO SCALE | 9

at&t
188 INVERNESS DRIVE WEST
SUITE 400
ENGLEWOOD, CO 80112

BLACK & VEATCH
4600 SOUTH SYRACUSE STREET
SUITE 800
DENVER, COLORADO 80237

PROJECT/PHASE NO:	129551/XXXX
DRAWN BY:	ASK
CHECKED BY:	JMH
RFDS:	1.00

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LICENSED
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STATE OF IDAHO
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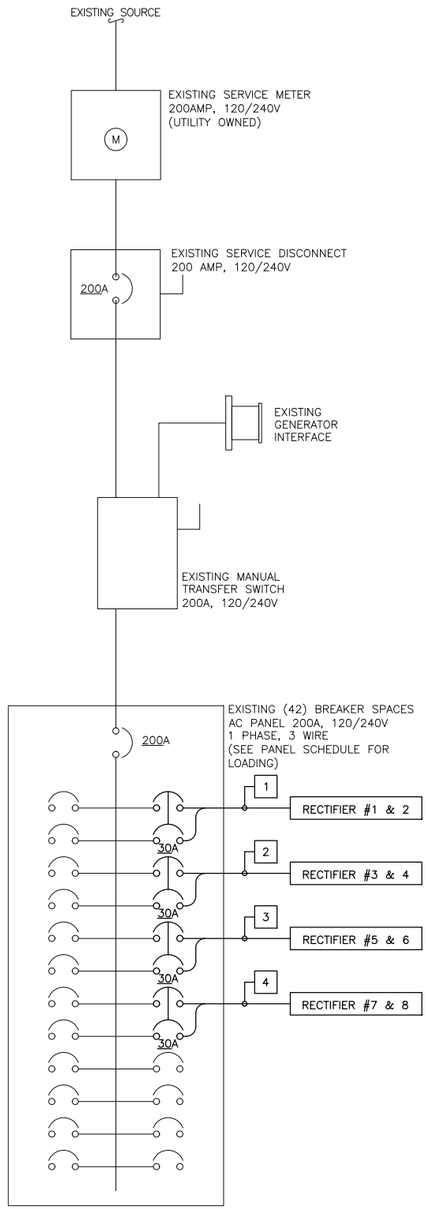
CELL SITE RF MODIFICATIONS

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
C-6



ELECTRICAL AC ONE–LINE DIAGRAM | NO SCALE | 1

AC CIRCUIT SCHEDULE			
NO.	FROM	TO	CONFIGURATION
1	AC LOAD CENTER	RECTIFIERS #1 & #2	(2) #10 CU THHN/THWN–2, (1) #10 CU EGC
2	AC LOAD CENTER	RECTIFIERS #3 & #4	(2) #10 CU THHN/THWN–2, (1) #10 CU EGC
3	AC LOAD CENTER	RECTIFIERS #5 & #6	(2) #10 CU THHN/THWN–2, (1) #10 CU EGC
4	AC LOAD CENTER	RECTIFIERS #7 & #8	(2) #10 CU THHN/THWN–2, (1) #10 CU EGC

NOTES
1. CIRCUIT #1 – #2 TO BE RAN TOGETHER IN MINIMUM 3/4" CONDUIT.
2. CIRCUIT #3 – #4 TO BE RAN TOGETHER IN MINIMUM 3/4" CONDUIT.

CIRCUIT SCHEDULE | 2

Site Name:	***HAILEY***						**MODEL NUMBER:**	***SQUARE D***										
SITE NUMBER:	***IDL04214***						**PHASE:**	**1**			**WIRE:**			**3**				
VOLTAGE:	**240 /120**	**Volts AC**					**BUSS RATING:**	**200**	**AMPS**									
MAIN BREAKER:	**200 AMPS**																	
MOUNT:	***SURFACE***																	
ENCLOSURE TYPE:	***NEMA 1***																	
PANEL STATUS:	***EXISTING MAIN AC PANEL***																	

CKT	LOAD DESCRIPTION	BREAKER AMPS	BREAKER POLES	BREAKER STATUS	SERVICE LOAD VA	Demand Factor	USAGE FACTOR	PHASE A VA	PHASE B VA	USAGE FACTOR	Demand Factor	SERVICE LOAD VA	BREAKER STATUS	BREAKER POLES	BREAKER AMPS	LOAD DESCRIPTION	CKT
1	SUB PANEL	125	2	ON	410	1.00	1.00	***420***		1.00	1.00	10	ON	2	60	TVSS	2
3					410	1.00	1.00		***420***	1.00	1.00	10					4
5	AHU	20	2	ON	300	1.00	1.00	***2300***		**1.00**	**1.00**	**2000**	**NEW**	**2**	**30**	**RECTIFIER #1 & 2**	6
7					300	1.00	1.00		***2300***	**1.00**	**1.00**	**2000**					8
9	LIGHTS	20	1	ON	400	1.00	1.00	***2400***		**1.00**	**1.00**	**2000**	**NEW**	**2**	**30**	**RECTIFIER #3 & 4**	10
11	RECEPTACLES	20	1	ON	540	1.00	1.00		***2540***	**1.00**	**1.00**	**2000**					12
13	RECEPTACLES	20	1	ON	540	1.00	1.00	***2540***		**1.00**	**1.00**	**2000**	**NEW**	**2**	**30**	**RECTIFIER #5 & 6**	14
15	SMOKE DETECTOR	20	1	ON	25	1.00	1.00		***2025***	**1.00**	**1.00**	**2000**					16
17	POWER FAIL RELAY	20	1	ON	10	1.00	1.00	***2010***		**1.00**	**1.00**	**2000**	**NEW**	**2**	**30**	**RECTIFIER #7 & 8**	18
19	COND UNIT #1	30	2	ON	2500	0.50	1.00		***3250***	**1.00**	**1.00**	**2000**					20
21					2500	0.50	1.00	***2500***		1.00	0.50	2500	ON	2	30	COND UNIT #2	22
23									***1250***	1.00	0.50	2500					24
25								***0***		1.00	1.00	0	OFF	2	30	SPARE	26
27									***0***	1.00	1.00	0					28
29								***0***		1.00	1.00	0	OFF	2	30	SPARE	30
31									***0***	1.00	1.00	0					32
33								***0***		1.00	1.00	0	OFF	2	30	SPARE	34
35									***0***	1.00	1.00	0					36
37								***0***									38
39									***0***								40
41								***0***									42
								PHASE A	***PHASE B***								
								12170	***11785***	**VA**							
									TOTAL	**KVA**	**23.96**						
										AMPS	**99.81**	≤ 80% OF MAIN BREAKER					

NOTES | 3

1. CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING A BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTOR'S FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.
2. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT NATIONAL ELECTRICAL CODES AND ALL STATE AND LOCAL CODES, LAWS, AND ORDINANCES. PROVIDE ALL COMPONENTS AND WIRING SIZES AS REQUIRED TO MEET NEC STANDARDS.
3. LOCATION OF EQUIPMENT, CONDUIT AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH FIELD CONDITIONS PRIOR TO CONSTRUCTION.
4. CONDUIT ROUGH–IN SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION CONFLICTS. VERIFY WITH THE MECHANICAL EQUIPMENT CONTRACTOR AND COMPLY AS REQUIRED.
5. CONTRACTOR SHALL PROVIDE ALL BREAKERS, CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETE SYSTEM.
6. CONTRACTOR SHALL PROVIDE PULL BOXES AND JUNCTION BOXES AS REQUIRED BY THE NEC ARTICLE 314.
7. CONTRACTOR SHALL PROVIDE ALL STRAIN RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
8. ALL DISCONNECTS AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED PHENOLIC NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS INSTALLED ON, AND PANEL FIELD LOCATIONS FED FROM.
9. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS PER THE SPECIFICATIONS AND NEC 250. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULL BOXES, AND ALL DISCONNECT SWITCHES, AND EQUIPMENT CABINETS.
10. ALL NEW MATERIAL SHALL HAVE A U.L. LABEL.
11. PANEL SCHEDULE LOADING AND CIRCUIT ARRANGEMENTS REFLECT POST–CONSTRUCTION EQUIPMENT.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR AS–BUILT PANEL SCHEDULE AND SITE DRAWINGS.
13. AIR CONDITIONING SYSTEM IS COMPRISED OF TWO COMPRESSOR/CONDENSER AND AIR HANDLING UNITS. THE ELECTRICAL CONTROLLER FOR THE AIR CONDITIONING SYSTEM WILL ONLY ALLOW PERMISSION FOR ONE HVAC TO BE ENERGIZED AT ANY GIVEN TIME. IN EXAMPLE ONE, IF HVAC #1 HAS A FAILURE, HVAC #2 WILL BE ENERGIZED. IN EXAMPLE TWO, WHEN HVAC CYCLE, THE CONTROLLER WILL DE–ENERGIZE FOR IT'S TIMED CYCLE.

PANEL SCHEDULE | NO SCALE | 4

at&t
188 INVERNESS DRIVE WEST
SUITE 400
ENGLEWOOD, CO 80112

BLACK & VEATCH
4600 SOUTH SYRACUSE STREET
SUITE 800
DENVER, COLORADO 80237

PROJECT/PHASE NO:	129551/XXXX
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CHECKED BY:	JMH
RFDS:	1.00

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Jul 19, 2024

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IDL04214
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HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
ELECTRICAL DC ONE–LINE DIAGRAM

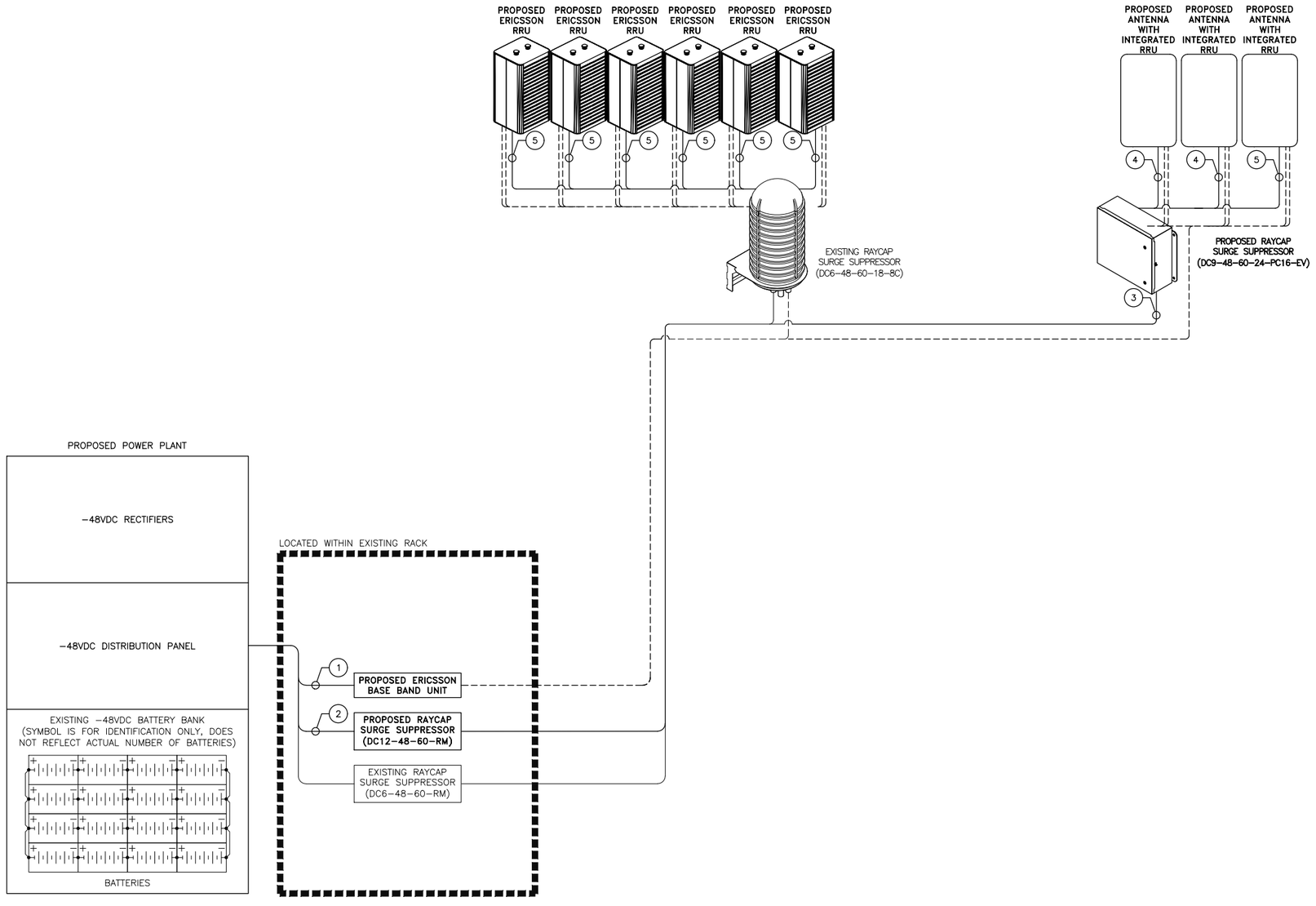
SHEET NUMBER
E-1

DC CIRCUIT SCHEDULE

NO.	FROM	TO	CONFIGURATION
1	PROPOSED −48VDC DISTRIBUTION PANEL	PROPOSED BASE BAND UNIT	(2) 1−#12 TELCOFLEX III DC CABLE
2	PROPOSED −48VDC DISTRIBUTION PANEL	PROPOSED RAYCAP SURGE SUPPRESSOR DC12−48−60−RM	(12) 1−#8 TELCOFLEX IV DC CABLE
3	PROPOSED RAYCAP SURGE SUPPRESSOR DC12−48−60−RM	PROPOSED RAYCAP SURGE SUPPRESSOR DC9−48−60−24−PC18−EV	(1) 6−#6 THHN/THWN/VW−1 TYPE TC−ER DC CABLE
4	PROPOSED RAYCAP SURGE SUPPRESSOR (DC9−48−60−24−PC16−EV)	PROPOSED REMOTE RADIO UNIT (RRU)	(1) 2−#8 THHN/THWN/VW−1 TYPE TC−ER DC CABLE
5	EXISTING RAYCAP SURGE SUPPRESSOR (DC6−48−60−18−8F)	PROPOSED REMOTE RADIO UNIT (RRU)	(1) 2−#8 THHN/THWN/VW−1 TYPE TC−ER DC CABLE

NOTES

1. DC POWER WIRING SHALL BE COLOR CODED AT EACH END FOR IDENTIFYING +24V AND −48V CONDUCTORS. RED MARKINGS SHALL IDENTIFY +24V AND BLUE MARKINGS SHALL IDENTIFY −48V. REFER TO ATT−002−290−701.
2. NON−LTE DC POWER WIRING SIZE 14 AWG TO 10 AWG SHALL BE TELCOFLEX III. DC POWER WIRING 8 AWG AND LARGER SHALL BE TELCOFLEX IV.
3. LTE POWER WIRING SHALL BE IN ACCORDANCE WITH ATT−002−290−531.
4. DC ELECTRICAL DEMAND FOR THE PROPOSED ADDITIONS WERE INCLUDED IN AC LOAD CALCULATIONS.
5. CONNECT ALL PROPOSED ERICSSON RRU SECOND CPRI TO SURGE SUPPRESSOR FOR FUTURE USE.
6. CONTRACTOR TO RECONNECT ALL EXISTING EQUIPMENT TO PROPOSED POWER PLANT.



ELECTRICAL DC ONE−LINE DIAGRAM

NO SCALE

at&t

188 INVERNESS DRIVE WEST
SUITE 400
ENGLEWOOD, CO 80112

BLACK & VEATCH

4600 SOUTH SYRACUSE STREET
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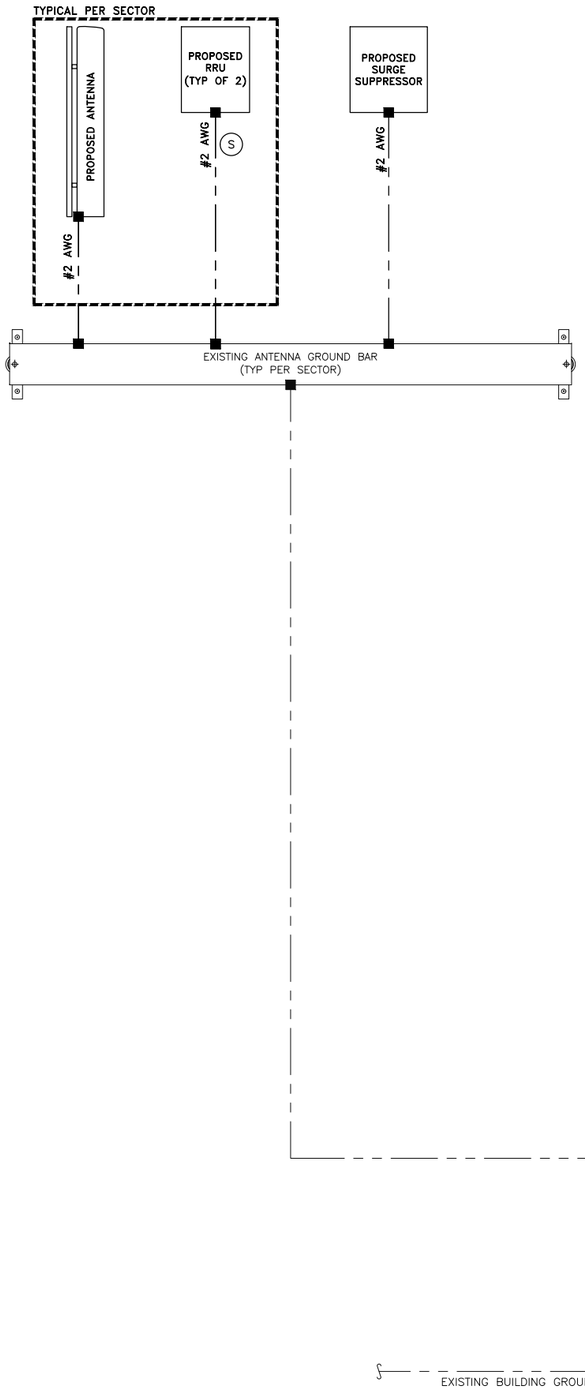
SHEET TITLE
ELECTRICAL DC ONE−LINE DIAGRAM

SHEET NUMBER
E-2



GROUNDING ONE-LINE DIAGRAM

NO SCALE

- EXOTHERMIC CONNECTION
- MECHANICAL CONNECTION
- GROUND ROD
- TEST GROUND ROD WITH INSPECTION SLEEVE

LEGEND

1. GROUNDING IS SHOWN DIAGRAMMATICALLY ONLY.
2. CONTRACTOR SHALL GROUND ALL EQUIPMENT AS A COMPLETE SYSTEM. GROUNDING SHALL BE IN COMPLIANCE WITH NEC SECTION 250 AND AT&T GROUNDING AND BONDING REQUIREMENTS (ATT-TP-76416) AND MANUFACTURER'S SPECIFICATIONS.
3. ALL GROUND CONDUCTORS SHALL BE COPPER; NO ALUMINUM CONDUCTORS SHALL BE USED.

NOTES

(A) EXTERIOR GROUND RING: #2 AWG SOLID COPPER, BURIED AT A DEPTH OF AT LEAST 30 INCHES BELOW GRADE, OR 6 INCHES BELOW THE FROST LINE AND APPROXIMATELY 24 INCHES FROM THE EXTERIOR WALL OR FOOTING. (ATT-TP-76416 2.2.3.5 / 7.5.1)

(B) TOWER GROUND RING: THE GROUND RING SYSTEM SHALL BE INSTALLED AROUND AN ANTENNA TOWER'S LEGS, AND/OR GUY ANCHORS. WHERE SEPARATE SYSTEMS HAVE BEEN PROVIDED FOR THE TOWER AND THE BUILDING, AT LEAST TWO BONDS SHALL BE MADE BETWEEN THE TOWER RING GROUND SYSTEM AND THE BUILDING RING GROUND SYSTEM USING MINIMUM #2 AWG SOLID COPPER CONDUCTORS. (ATT-TP-76416 / 7.5.1)

(C) INTERIOR GROUND RING: #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTOR EXTENDED AROUND THE PERIMETER OF THE EQUIPMENT AREA. ALL NON-TELECOMMUNICATIONS RELATED METALLIC OBJECTS FOUND WITHIN A SITE SHALL BE GROUNDED TO THE INTERIOR GROUND RING WITH #6 AWG STRANDED GREEN INSULATED CONDUCTOR. (ATT-TP-76416 / 7.6.4)

(D) BOND TO INTERIOR GROUND RING: #2 AWG SOLID TINNED COPPER WIRE PRIMARY BONDS SHALL BE PROVIDED AT LEAST AT FOUR POINTS ON THE INTERIOR GROUND RING, LOCATED AT THE CORNERS OF THE BUILDING. (ATT-TP-76416 7.5.2.2)

(E) GROUND ROD: UL LISTED COPPER CLAD STEEL. MINIMUM 5/8" DIAMETER BY EIGHT FEET LONG. GROUND RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES. GROUND RODS SHALL BE DRIVEN TO THE DEPTH OF GROUND RING CONDUCTOR. (ATT-TP-76416)

(F) CELL REFERENCE GROUND BAR: POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 AWG UNLESS NOTED OTHERWISE STRANDED GREEN INSULATED COPPER CONDUCTORS. BOND TO GROUND RING WITH (2) #2 SOLID TINNED COPPER CONDUCTORS. (ATT-TP-76416 / 7.6.7)

(G) HATCH PLATE GROUND BAR: BOND TO THE INTERIOR GROUND RING WITH TWO #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTORS. WHEN A HATCH-PLATE AND A CELL REFERENCE GROUND BAR ARE BOTH PRESENT, THE CRGB MUST BE CONNECTED TO THE HATCH-PLATE AND TO THE INTERIOR GROUND RING USING (2) TWO #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTORS EACH.

(H) EXTERIOR CABLE ENTRY PORT GROUND BARS: LOCATED AT THE ENTRANCE TO THE CELL SITE BUILDING. BOND TO GROUND RING WITH A #2 AWG SOLID TINNED COPPER CONDUCTORS WITH AN EXOTHERMIC WELD AND INSPECTION SLEEVE. (ATT-TP-76416 / 7.6.7.2)

(J) TOWER EXIT GROUND BAR: #2 AWG SOLID TINNED COPPER BOND TO THE TOWER GROUND RING. (ATT-TP-76416 / 7.4.2.6)

(K) TELCO GROUND BAR: BOND TO BOTH CELL REFERENCE GROUND BAR AND EXTERIOR GROUND RING. (ATT-TP-76416 / 7.6.8)

(L) FRAME BONDING: THE BONDING POINT FOR TELECOM EQUIPMENT FRAMES SHALL BE THE GROUND BUS THAT IS NOT ISOLATED FROM THE EQUIPMENTS METAL FRAMEWORK. BOND THE FRAME GROUND TO THE "I" SECTION OF THE CELL REFERENCE GROUND BAR OR SUPPLEMENTARY CONDUCTOR. (ATT-TP-76416 6.5.3 AND 7.8)

(M) INTERIOR UNIT BONDS: METAL FRAMES, CABINETS AND INDIVIDUAL METALLIC UNITS LOCATED WITH THE AREA OF THE INTERIOR GROUND RING REQUIRE A #6 AWG STRANDED GREEN INSULATED COPPER BOND TO THE INTERIOR GROUND RING. (ATT-TP-76416 / 7.12.3.1)

(N) FENCE AND GATE GROUNDING: METAL FENCES WITHIN 7 FEET OF THE EXTERIOR GROUND RING OR OBJECTS BONDED TO THE EXTERIOR GROUND RING SHALL BE BONDED TO THE GROUND RING WITH A #2 AWG SOLID TINNED COPPER CONDUCTOR AT AN INTERVAL NOT EXCEEDING 25 FEET. BONDS SHALL BE MADE AT EACH GATE POST AND ACROSS GATE OPENINGS. (ATT-TP-76416 / 7.12.2.2)

(P) EXTERIOR UNIT BONDS: METALLIC OBJECTS, EXTERNAL TO OR MOUNTED TO THE BUILDING, SHALL BE BONDED TO THE EXTERIOR GROUND RING. (ATT-TP-76416 7.12.2)

(Q) ICE BRIDGE SUPPORTS: EACH ICE BRIDGE LEG SHALL BE BONDED TO THE GROUND RING WITH #2 AWG BARE TINNED COPPER CONDUCTOR. PROVIDE EXOTHERMIC WELDS AT BOTH THE ICE BRIDGE LEG AND BURIED GROUND RING. (ATT-TP-76416 / 7.4.2.6)

(R) DURING ALL DC POWER SYSTEM CHANGES INCLUDING DC SYSTEM CHANGE OUTS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTER SYSTEMS IT SHALL BE REQUIRED THAT SERVICE CONTRACTORS VERIFY ALL DC POWER SYSTEMS ARE EQUIPPED WITH A MASTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM COMMON RETURN BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR (CRGB) PER TP76300 SECTION H 6 AND TP76416 FIGURE 7-11 REQUIREMENTS.

(S) OUTDOOR GROUNDING CONDUCTORS: GROUNDING CONDUCTORS INSTALLED OUTDOORS AND RUN ENTIRELY ABOVE GRADE SHALL BE TINNED STRANDED COPPER AND BE SUNLIGHT RESISTANT.

GROUNDING KEY NOTES

at&t
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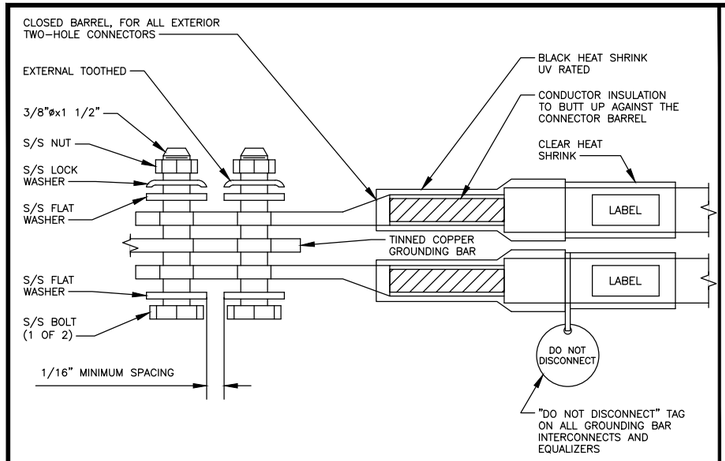
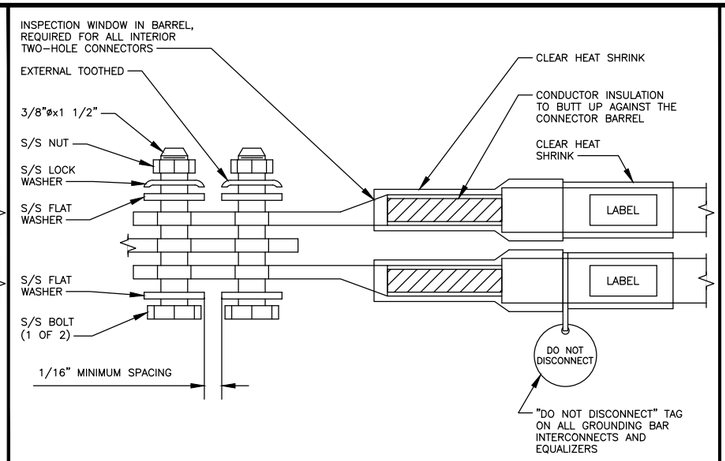
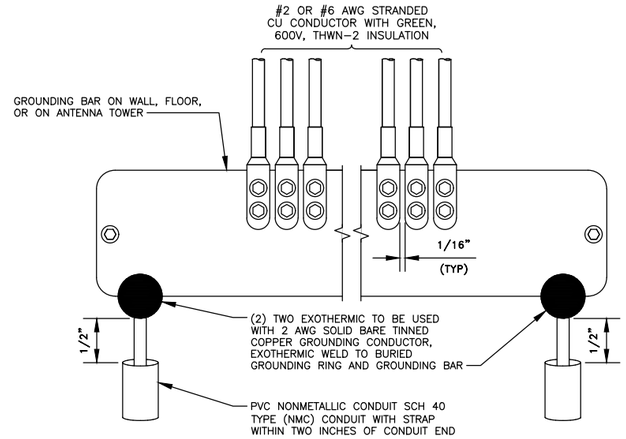
G-1



INTERIOR TWO HOLE LUG | NO SCALE | 1



EXTERIOR TWO HOLE LUG | NO SCALE | 2



INSTALLATION OF GROUNDING CONDUCTOR TO GROUNDING BAR | NO SCALE | 3

NEWTON INSTRUMENT COMPANY, INC. BUTNER, NC			
NO	REQUIRED	PART NUMBER	DESCRIPTION
1	1	1/4"X4"X30"	SOLID GROUND BAR
2	2	A-6056	WALL MOUNTING BRACKET
3	2	3061-4	INSULATORS
4	4	3012-1	5/8"-11X1" H.H.C.S.
5	4	3015-8	5/8" LOCKWASHER

EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION

SECTION "P" – SURGE PROTECTORS
(EC) CABLE ENTRY PORTS (HATCH PLATES) (#2)
(EC) TELCO GROUND BAR (#2)
(EC) COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2)
(AT&T) CELL SITE +24V POWER SUPPLY RETURN BAR (#2)
(AT&T) CELL SITE -48V POWER SUPPLY RETURN BAR (#2)
(EC) GENERATOR FRAMEWORK (IF AVAILABLE) (#2)
(AT&T) RECTIFIER FRAMES
(AT&T) ANTENNA SUPPRESSION

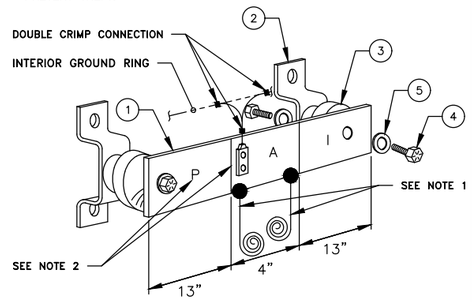
SECTION "A" – SURGE ABSORBERS
(EC) INTERIOR GROUND RING (#2)
(EC) EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2)
(EC) METALLIC COLD WATER PIPE (IF AVAILABLE) (#2)
(EC) BUILDING STEEL (IF AVAILABLE) (#2)

SECTION "I" – ISOLATED GROUNDING ZONE
(AT&T) ALL CELL SITE COMMUNICATIONS EQUIPMENT FRAMES

(MGB) REFERENCE GROUNDING BAR | NO SCALE | 4

DETAIL NOTES

1. EXOTHERMICALLY WELD #2 AWG BARE TINNED SOLID COPPER CONDUCTOR TO GROUND BAR. ROUTE CONDUCTOR TO BURIED GROUND RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
2. EC SHALL PERMANENTLY MARK THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P", "A", "I") WITH 1" HIGH LETTERS.
3. GROUND BAR SHALL BE ENGRAVED PER AT&T SPECIFICATIONS TO PREVENT THEFT.



NOTES | NO SCALE | 5

1. ALL MAIN CABLES WILL BE GROUNDED W/ COAXIAL CABLE GROUND KITS AT:
   A. THE ANTENNA LEVEL.
   B. MID LEVEL IF TOWER IS OVER 200'.
   C. BASE OF TOWER PRIOR TO TURNING HORIZONTAL
   D. OUTSIDE THE EQUIPMENT SHELTER AT ENTRY PORT.
   E. INSIDE THE EQUIPMENT SHELTER AT THE ENTRY PORT.
2. ALL PROPOSED GROUND BAR DOWNLEADS ARE TO BE CADWELDED TO THE EXISTING ADJACENT GROUND BAR DOWNLEADS A MINIMUM DISTANCE OF FOUR FEET BELOW GROUND BAR.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ANTENNA AND COAX CONFIGURATION, MAKE AND MODELS PRIOR TO INSTALLATION.
4. DO NOT ALLOW THE COPPER CONDUCTOR TO TOUCH THE GALVANIZED GUY WIRE AT THE CONNECTION POINT OR AT ANY OTHER POINT. NO EXOTHERMICALLY WELDED CONNECTION SHALL BE MADE TO THE GUY WIRE.
5. SUBCONTRACTOR SHALL GROUND ALL EQUIPMENT INCLUDING ANTENNAS, RET MOTORS, TMA'S, COAX CABLES, AND RET CONTROL CABLES AS A COMPLETE SYSTEM. GROUNDING SHALL BE EXECUTED BY QUALIFIED PERSONEL IN COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
6. DO NOT INSTALL CABLE GROUNDING KIT AT A BEND AND ALWAYS DIRECT GROUNDING CONDUCTOR DOWN TO GROUNDING BAR.
7. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
8. WEATHERPROOFING SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
9. ALL EXTERIOR HEAT SHRINK OR HEAT SHRINK EXPOSED TO U/V LIGHT SHALL BE BLACK. ALL INTERIOR HEAT SHRINK SHALL BE CLEAR.
10. NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION, AND CONNECTION ORIENTATION. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL GROUNDING BAR AS REQUIRED, PROVIDING 50% SPARE CONNECTION POINTS.
11. PROVIDE GROUNDING KIT 6" BEFORE TURN TRANSITION FROM TOWER TO ICE BRIDGE.

NOT USED | NO SCALE | 6

NOT USED | NO SCALE | 7

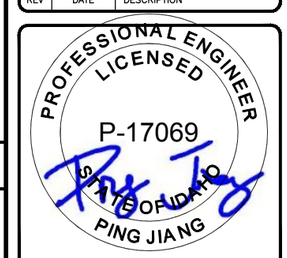
NOT USED | NO SCALE | 8

at&t
188 INVERNESS DRIVE WEST
SUITE 400
ENGLEWOOD, CO 80112

BLACK & VEATCH
4600 SOUTH SYRACUSE STREET
SUITE 800
DENVER, COLORADO 80237

PROJECT/PHASE NO:	129551/XXXX
DRAWN BY:	ASK
CHECKED BY:	JMH
RFDS:	1.00

REV	DATE	DESCRIPTION
0	07/19/24	ISSUED FOR CONSTRUCTION



Jul 19, 2024

HAILEY
IDL04214
400 SOUTH MAIN STREET
HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
G-2

LEGEND

EXOTHERMIC CONNECTION

MECHANICAL CONNECTION

CHEMICAL ELECTROLYTIC GROUNDING SYSTEM

TEST CHEMICAL ELECTROLYTIC GROUNDING SYSTEM

EXOTHERMIC WITH INSPECTION SLEEVE

GROUNDING BAR

GROUND ROD

TEST GROUND ROD WITH INSPECTION SLEEVE

SINGLE POLE SWITCH

DUPLEX RECEPTACLE

DUPLEX GFCI RECEPTACLE

FLUORESCENT LIGHTING FIXTURE
(2) TWO LAMPS 48–T8

SMOKE DETECTION (DC)

EMERGENCY LIGHTING (DC)

SECURITY LIGHT W/PHOTOCELL LITHONIA ALXW
LED–1–25A400/51K–SR4–120–PE–DDBTXD

CHAIN LINK FENCE

WOOD/WROUGHT IRON FENCE

WALL STRUCTURE

LEASE AREA

PROPERTY LINE (PL)

SETBACKS

ICE BRIDGE

CABLE TRAY

WATER LINE

UNDERGROUND POWER

UNDERGROUND TELCO

OVERHEAD POWER

OVERHEAD TELCO

UNDERGROUND TELCO/POWER

ABOVE GROUND POWER

ABOVE GROUND TELCO

ABOVE GROUND TELCO/POWER

WORKPOINT

SECTION REFERENCE

DETAIL REFERENCE

ABBREVIATIONS

AB	ANCHOR BOLT
ABV	ABOVE
AC	ALTERNATING CURRENT
ADDL	ADDITIONAL
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AGL	ABOVE GROUND LEVEL
AIC	AMPERAGE INTERRUPTION CAPACITY
ALUM	ALUMINUM
ALT	ALTERNATE
ANT	ANTENNA
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BATT	BATTERY
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BTC	BARE TINNED COPPER CONDUCTOR
BOF	BOTTOM OF FOOTING
CAB	CABINET
CANT	CANTILEVERED
CHG	CHARGING
CLG	CEILING
CLR	CLEAR
COL	COLUMN
COMM	COMMON
CONC	CONCRETE
CONSTR	CONSTRUCTION
DBL	DOUBLE
DC	DIRECT CURRENT
DEPT	DEPARTMENT
DF	DOUGLAS FIR
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DWG	DRAWING
DWL	DOWEL
EA	EACH
EC	ELECTRICAL CONDUCTOR
EL.	ELEVATION
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
ENG	ENGINEER
EQ	EQUAL
EXP	EXPANSION
EXT	EXTERIOR
EW	EACH WAY
FAB	FABRICATION
FF	FINISH FLOOR
FG	FINISH GRADE
FIF	FACILITY INTERFACE FRAME
FIN	FINISH(ED)
FLR	FLOOR
FDN	FOUNDATION
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FOW	FACE OF WALL
FS	FINISH SURFACE
FT	FOOT
FTG	FOOTING
GA	GAUGE
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GLB	GLUE LAMINATED BEAM
GLV	GALVANIZED
GPS	GLOBAL POSITIONING SYSTEM
GND	GROUND
GSM	GLOBAL SYSTEM FOR MOBILE
HDG	HOT DIPPED GALVANIZED
HDR	HEADER
HGR	HANGER
HVAC	HEAT/VENTILATION/AIR CONDITIONING
HT	HEIGHT
IGR	INTERIOR GROUND RING
IN	INCH
INT	INTERIOR
LB(S)	POUND(S)
LF	LINEAR FEET
LTE	LONG TERM EVOLUTION
MAS	MASONRY
MAX	MAXIMUM
MB	MACHINE BOLT
MECH	MECHANICAL
MFR	MANUFACTURER
MGB	MASTER GROUND BAR
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
MTS	MANUAL TRANSFER SWITCH
MW	MICROWAVE
NEC	NATIONAL ELECTRIC CODE
NM	NEWTON METERS
NO.	NUMBER
#	NUMBER
NTS	NOT TO SCALE
OC	ON–CENTER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OPNG	OPENING
P/C	PRECAST CONCRETE
PCS	PERSONAL COMMUNICATION SERVICES
PCU	PRIMARY CONTROL UNIT
PRC	PRIMARY RADIO CABINET
PP	POLARIZING PRESERVING
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PWR	POWER CABINET
QTY	QUANTITY
RAD	RADIUS
RECT	RECTIFIER
REF	REFERENCE
REINF	REINFORCEMENT
REQ'D	REQUIRED
RET	REMOTE ELECTRIC TILT
RF	RADIO FREQUENCY
RMC	RIGID METALLIC CONDUIT
RRH	REMOTE RADIO HEAD
RRU	REMOTE RADIO UNIT
RWY	RACEWAY
SCH	SCHEDULE
SHT	SHEET
SIAD	SMART INTEGRATED ACCESS DEVICE
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
TEMP	TEMPORARY
THK	THICKNESS
TMA	TOWER MOUNTED AMPLIFIER
TN	TOE NAIL
TOA	TOP OF ANTENNA
TOC	TOP OF CURB
TOF	TOP OF FOUNDATION
TOP	TOP OF PLATE (PARAPET)
TOS	TOP OF STEEL
TOW	TOP OF WALL
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
UMTS	UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
UPS	UNITERRUPTIBLE POWER SYSTEM (DC POWER PLANT)
VIF	VERIFIED IN FIELD
W	WIDE
W/	WITH
WD	WOOD
WP	WEATHERPROOF
WT	WEIGHT

at&t

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BLACK & VEATCH

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PROJECT/PHASE NO:	129551/XXXX
DRAWN BY:	ASK
CHECKED BY:	JMH
RFDS:	1.00

REV	DATE	DESCRIPTION
0	07/19/24	ISSUED FOR CONSTRUCTION

PROFESSIONAL ENGINEER
LICENSED
P-17069
STATE OF IDAHO
PING JIANG

Jul 19, 2024

HAILEY
IDL04214
400 SOUTH MAIN STREET
HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
LEGEND & ABBREVIATIONS

SHEET NUMBER
GN-1

GENERAL CONSTRUCTION NOTES

GENERAL CONSTRUCTION

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
   GENERAL CONTRACTOR: OVERLAND CONTRACTING INC. (B&V)
   CONTRACTOR: (CONSTRUCTION)
   OWNER: AT&T
2. ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND AT&T PROJECT SPECIFICATIONS.
3. GENERAL CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE NECESSARY PROVISIONS. PRIOR TO PROCEEDING WITH CONSTRUCTION, GENERAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL CONTRACT DOCUMENTS, SITE CONDITIONS, DIMENSIONS, AND CONFIRMING THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON PLAN. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
4. MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORK.
5. ALL WORK CARRIED OUT SHALL COMPLY WITH APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS IN ADDITION TO LOCAL JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.
6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS SHOWN ON THE DRAWINGS.
7. PLANS SHALL NOT BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES, UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. IT IS CRITICAL TO FIELD VERIFY ALL DIMENSIONS. SHOULD THERE BE ANY QUESTIONS REGARDING THE PLAN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS. SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND APPROVED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
8. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
9. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THE PLAN, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER PRIOR TO PROCEEDING.
10. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORK AREA, ADJACENT AREAS, AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS AND THE LOCAL JURISDICTION.
11. GENERAL CONTRACTOR SHALL COORDINATE AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.
12. ERECTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT, EXPERIENCED WORKMEN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE. ALL MEMBERS SHALL BE LAID PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.
13. SEAL PENETRATIONS THROUGH FIRE RATED AREAS, SHALL BE MADE WITH UL LISTED MATERIALS, APPROVED BY THE LOCAL JURISDICTION. CONTRACTOR SHALL KEEP AREA CLEAN AND HAZARD FREE, AND DISPOSE OF ALL DEBRIS DAILY.
14. AS-BUILT CONDITIONS ARE REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES. CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
15. CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER, 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
16. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING, AND STRUCTURES DURING CONSTRUCTION OPERATIONS. ANY DAMAGED AREAS/ SITE ELEMENTS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
17. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR IS ALSO RESPONSIBLE FOR THE NOTIFICATION OF TIER-TWO FACILITY/UTILITY OWNERS.
18. GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND CONTRACTORS TO THE SITE AND/OR BUILDING.
19. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.
20. THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS, ON THE PREMISES, AT ALL TIMES.
21. THE CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A OT 2-A:10-B:C LOCATED WITHIN 25 FEET OF TRAVEL DISTANCE TO WORK ALL AREAS OR WHERE WORK IS BEING PERFORMED DURING CONSTRUCTION.
22. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. TRAINING SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION.
23. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED, OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
24. THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT, OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE AND PROPERLY STABILIZED TO PREVENT EROSION.
25. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE SITE DURING CONSTRUCTION. EROSION CONTROL AND SEDIMENT CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH FEDERAL AND/OR LOCAL JURISDICTIONS.
26. FILL OR EMBANKMENT MATERIAL SHALL NOT BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW, OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
27. THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 95 PERCENT STANDARD PROCTOR UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR IN OPEN SPACE. ALL TRENCHES IN THE PUBLIC RIGHT-OF-WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL, PRE-APPROVED BY THE LOCAL JURISDICTION.
28. ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.
29. ALL BROCHURES, OPERATION MANUALS, MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.
30. CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.
31. THE PROPOSED FACILITY WILL BE UNMANNED, DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS NOT FOR HUMAN HABITAT (NO HANDICAP ACCESS REQUIRED).
32. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION OF APPROXIMATELY TWO TIMES PER MONTH BY AT&T TECHNICIANS.
33. NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.
34. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION AT&T MOBILITY GROUNDING STANDARD "TECHNICAL SPECIFICATION FOR CONSTRUCTION OF GSM WIRELESS SITES" AND "TECHNICAL SPECIFICATION FOR FACILITY GROUNDING". IN CASE OF A CONFLICT BETWEEN THE CONSTRUCTION SPECIFICATIONS AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.
35. CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF CONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY.
36. CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
37. CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.
38. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE OBSERVATIONS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
39. WHITE STROBE LIGHTS ARE NOT PERMITTED. IF LIGHTING IS REQUIRED, IT SHALL MEET FAA STANDARDS AND REQUIREMENTS.
40. ALL COAXIAL CABLE CONTRACTOR SHALL INSTALL PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

ANTENNA MOUNTING

41. DESIGN AND CONSTRUCTION OF ANTENNA SUPPORTS SHALL CONFORM TO CURRENT ANSI/TIA-222 OR APPLICABLE LOCAL CODES.
42. ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS NOTED OTHERWISE.
43. ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS NOTED OTHERWISE.
44. DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED BY COLD GALVANIZING IN ACCORDANCE WITH ASTM A780.
45. ALL ANTENNA MOUNTS SHALL BE INSTALLED WITH LOCK WASHERS AND/OR DOUBLE NUTS, AND SHALL BE TORQUED TO MANUFACTURER'S RECOMMENDATIONS.
46. CONTRACTOR SHALL INSTALL ANTENNA AND ASSOCIATED GROUNDING PER MANUFACTURER'S RECOMMENDATIONS.
47. ALL UNUSED PORTS ON ANY ANTENNA OR TMA, SHALL BE COVERED BY CONCEALOR CAP WITH PROPER WEATHER PROOFING OR BE TERMINATED WITH A 50 Ω LOAD.
48. PRIOR TO SETTING ANTENNA AZIMUTHS AND DOWNTILTS, ANTENNA CONTRACTOR SHALL CHECK THE ANTENNA MOUNT FOR TIGHTNESS AND ENSURE THAT THEY ARE PLUMB. ANTENNA AZIMUTHS SHALL BE SET FROM TRUE NORTH AND BE ORIENTED WITHIN +/- 3 DEGREES AS DEFINED BY THE RFDS. ANTENNA DOWNTILTS SHALL BE WITHIN +/- 0.5 DEGREES AS DEFINED BY THE RFDS. REFER TO ATT-002-290-210.
49. JUMPERS FROM THE TOWER MOUNTED AMPLIFIERS MUST TERMINATE TO OPPOSITE POLARIZATIONS IN EACH SECTOR.
50. CONTRACTOR SHALL RECORD THE SERIAL NUMBER, SECTOR, AND POSITION OF EACH ACTUATOR INSTALLED AT THE ANTENNAS AND PROVIDE THE INFORMATION TO AT&T.
51. TOWER MOUNTED AMPLIFIERS SHALL BE MOUNTED ON PIPE DIRECTLY BEHIND ANTENNAS AS CLOSE TO ANTENNA AS FEASIBLE IN A VERTICAL POSITION.
52. ANTENNAS SHALL HAVE A 4'-0" MINIMUM CENTER-TO-CENTER HORIZONTAL SEPARATION.

TORQUE REQUIREMENTS

53. ALL RF CONNECTIONS SHALL BE TIGHTENED BY A TORQUE WRENCH.
54. A TORQUE MARK FORMING A CONTINUOUS STRAIGHT LINE IS TO BE MADE IN THE FOLLOWING APPLICATIONS:
    A. RF CONNECTIONS - MARK BOTH SIDES OF THE CONNECTOR
    B. GROUNDING AND ANTENNA HARDWARE - MARK ON THE NUT SIDE OF THE BOLT, STARTING FROM THE THREADS TO THE SOLID SURFACE. SOLID SURFACE EXAMPLES INCLUDE A GROUND BAR OR ANTENNA BRACKET METAL.
55. ALL 8M ANTENNA HARDWARE SHALL BE TIGHTENED TO 9 LB-FT (12 NM).
56. ALL 12M ANTENNA HARDWARE SHALL BE TIGHTENED TO 43 LB-FT (58 NM).
57. ALL GROUNDING HARDWARE SHALL BE TIGHTENED UNTIL THE LOCK WASHER COLLAPSES AND THE GROUNDING HARDWARE IS NO LONGER LOOSE.
58. ALL DIN TYPE CONNECTIONS SHALL BE TIGHTENED TO 18-22 LB-FT (24.4 - 29.8 NM).
59. ALL N TYPE CONNECTIONS SHALL BE TIGHTENED TO 15-20 LB-IN (1.7 - 2.3 NM).

FIBER & POWER CABLE MOUNTING

60. THE FIBER OPTIC TRUNK CABLES SHALL BE INSTALLED IN CONDUITS OR INNERDUCT. WHEN UTILIZING A CABLE TRAY SYSTEM, PLACE FIBER OPTIC TRUNK CABLE INTO AN INTER-DUCT. A PARTITION BARRIER SHALL BE INSTALLED BETWEEN THE 600 VOLT CABLES AND THE INTER-DUCT IN ORDER TO SEGREGATE CABLE TYPES. OPTIC FIBER TRUNK CABLES SHALL HAVE APPROVED CABLE RESTRAINTS EVERY (6) SIX FEET AND SHALL BE SECURELY FASTENED TO THE CABLE TRAY SYSTEM. NFPA 70 (NEC) ATRICLE 770 RULES SHALL APPLY.
61. TYPE TC-ER CABLES SHALL BE INSTALLED INTO CONDUITS OR CABLE TRAYS, AND SHALL BE SECURED AT INTERVALS NOT EXCEEDING (6) FEET. WHERE TYPE TC-ER CABLES ARE NOT SUBJECT TO PHYSICAL DAMAGE, CABLES SHALL BE PERMITTED TO MAKE A TRANSITION BETWEEN CONDUITS OR CABLE TRAYS THAT ARE SERVICING UTILIZATION EQUIPMENT OR DEVICES. A TRANSITION DISTACE EXCEEDING (6) FEET REQUIRES CONTINUOUS SUPPORTING. NFPA 70 (NEC) ARTICLES 336 AND 392 RULES SHALL APPLY.
62. WHEN INSTALLING OPTIC FIBER TRUNK CABLES OR TYPE TC-ER CABLES INTO CONDUITS, NFPA 70 (NEC) ARTICLE 300 RULES SHALL APPLY.

COAXIAL CABLE NOTES

63. TYPES AND SIZES OF THE ANTENNA CABLES ARE BASED ON ESTIMATED LENGTHS. PRIOR TO ORDERING CABLE, CONTRACTOR SHALL VERIFY ACTUAL LENGTH BASED ON CONSTRUCTION LAYOUT AND NOTIFY THE PROJECT MANAGER IF ACTUAL LENGTHS EXCEED ESTIMATED LENGTHS.
64. CONTRACTOR SHALL VERIFY THAT THE DOWNTILT OF EACH ANTENNA IS WITHIN +/- 0.5 DEGREES OF SPECIFICATION WITH AN OCI APPROVED DIGITAL LEVEL.
65. CONTRACTOR SHALL CONFIRM COAX COLOR CODING PRIOR TO CONSTRUCTION. REFER TO LASTEST REVISION OF THE "ANTENNA SYSTEM LABELING STANDARD."
66. ALL COAXIAL CABLE SHALL BE SECURED TO THE DESIGNED SUPPORT STRUCTURE IN AN APPROVED MANNER, NOT TO EXCEED MANUFACTURER'S RECOMMENDATIONS.
67. COAXIAL CABLE SHALL BE SECURED TO THE DESIGNATED SUPPORT STRUCTURE(S) PER MANUFACTURER'S SPECIFICATIONS.

GENERAL CABLE AND EQUIPMENT NOTES

68. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ANTENNA, TMAS, DIPLEXERS, COAX CONFIGURATION, MAKES, AND MODELS PRIOR TO INSTALLATION.
69. ALL CONNECTIONS FOR HANGERS, SUPPORTS, BRACING, ETC. SHALL BE INSTALLED PER TOWER MANUFACTURER'S RECOMMENDATIONS.
70. CONTRACTOR SHALL REFERENCE THE TOWER STRUCTURAL ANALYSIS/DESIGN DRAWINGS FOR DIRECTIONS ON CABLE DISTRIBUTION/ROUTING.
71. AFTER INSTALLATION AND FINAL CONNECTIONS ARE MADE, ALL OUTDOOR RF CONNECTORS/CONNECTIONS SHALL BE WEATHERPROOFED, EXCEPT THE RET CONNECTORS, USING BUTYL TAPE. BUTYL TAPE SHALL HAVE A MINIMUM OF ONE-HALF TAPE WIDTH OVERLAP ON EACH TURN AND EACH LAYER SHALL BE WRAPPED THREE TIMES. WEATHERPROOFING SHALL BE SMOOTH WITHOUT BUCKLING. BUTYL BLEEDING IS NOT ALLOWED. SELF BONDING TAPE AND PLASTIC ENCLOSURES ARE PERMITTED PER ATT-002-290-041, SECTION 7.
72. IF REQUIRED TO PAINT ANTENNAS AND/OR COAX:
    A. TEMPERATURE SHALL BE ABOVE 50 DEGREES FAHRENHEIT.
    B. PAINT COLOR MUST BE APPROVED BY BUILDING OWNER/LANDLORD.
    C. FOR REGULATED TOWERS, FAA/FCC APPROVED PAINT IS REQUIRED.
    D. DO NOT PAINT OVER COLOR CODING OR ON EQUIPMENT MODEL NUMBERS.
73. ALL CABLES SHALL BE GROUNDED WITH COAXIAL CABLE GROUND KITS. AT THE FOLLOWING LOCATIONS PER MANUFACTURER'S RECOMMENDATIONS:
    A. THE ANTENNA LEVEL.
    B. THE MID LEVEL, TOWERS WHICH ARE OVER 200'-0", ADDITIONAL CABLE GROUNDING REQUIRED.
    C. BASE OF TOWER PRIOR TO TURNING HORIZONTAL.
    D. OUTSIDE THE EQUIPMENT SHELTER AT ENTRY PORT.
74. ANTENNA CONTRACTOR SHALL FURNISH AND INSTALL A 12'-0" T-BOOM SECTOR ANTENNA MOUNT INCLUDING ALL HARDWARE, IF APPLICABLE.

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REV	DATE	DESCRIPTION
0	07/19/24	ISSUED FOR CONSTRUCTION

PROFESSIONAL ENGINEER
LICENSED
P-17069
STATE OF IDAHO
PING JIANG
Jul 19, 2024

HAILEY
IDL04214
400 SOUTH MAIN STREET
HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
GENERAL CONSTRUCTION NOTES

SHEET NUMBER
GN-2

GENERAL SITE WORK AND DRAINAGE NOTES

PART 1 – GENERAL

CONTRACTOR SHALL PROVIDE CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUBGRADE PREPARATION, AND FINISH GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS.

1.1 REFERENCES:

A. DOT (STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION)

B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)

C. OSHA (OCCUPATION SAFETY AND HEALTH ADMINISTRATION)

1.2 INSPECTION AND TESTING:

A. FIELD TESTING OF EARTHWORK COMPACTION AND CONCRETE CYLINDERS SHALL BE PERFORMED BY AN INDEPENDENT TESTING LAB. THIS WORK SHALL BE COORDINATED BY THE SUBCONTRACTOR.

B. ALL WORK SHALL BE INSPECTED AND RELEASED BY THE GENERAL CONTRACTOR. THE INSPECTIONS SHALL BE CARRIED OUT WITH SPECIFIC CONCERN FOR PROPER PERFORMANCE OF THE WORK AS SPECIFIED AND/OR CALLED FOR ON THE PLAN. IT IS THE SUBCONTRACTOR'S RESPONSIBILITY TO REQUEST THE REQUIRED INSPECTIONS PRIOR TO PROCEEDING WITH FURTHER WORK THAT WOULD MAKE PARTS OF WORK INACCESSIBLE OR DIFFICULT TO INSPECT.

1.3 SITE MAINTENANCE AND PROTECTION:

A. PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OF WORK UNTIL COMPLETION OF THE SUBCONTRACT.

B. AVOID DAMAGE TO THE SITE AND TO EXISTING FACILITIES, STRUCTURES, TREES, AND SHRUBS DESIGNATED TO REMAIN. TAKE PROTECTIVE MEASURES TO PREVENT DAMAGED TO EXISTING FACILITIES THAT ARE NOT DESIGNATED FOR MODIFICATION OR REMOVAL.

C. KEEP SITE FREE OF PONDING WATER.

D. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT AND EPA REQUIREMENTS.

E. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNS, AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE DURATION OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.

F. DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE ENGINEER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.

1. NOTICE TO ENGINEER SHALL BE PROVIDED A MINIMUM OF 48 HOURS PRIOR TO OUTAGE.

PART 2 – PRODUCTS

2.1 SUITABLE BACKFILL: ASTM D2321 (CLASS I, II, III OR IVA) FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN THREE (3) INCHES IN ANY DIMENSION.

2.2 NON–POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS III, IVA OR IVB) COARSE AGGREGATE. FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN THREE (3) INCHES IN ANY DIMENSION.

2.3 POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS IA, IB OR II) COARSE AGGREGATE FREE FROM FROZEN LUMPS, REFUSE, STONES, OR ROCKS LARGER THAN THREE (3) INCHES IN DIAMETER, OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.

2.4 SELECT STRUCTURAL FILL: GRANULAR FILL MATERIAL MEETING THE REQUIREMENTS OF ASTM E850–95. FOR USE AROUND AND UNDER STRUCTURES WHERE STRUCTURAL FILL MATERIAL IS REQUIRED.

2.5 GRANULAR BEDDING AND TRENCH BACKFILL: WELL–GRADED SAND MEETING THE GRADATION REQUIREMENTS OF ASTM D2487 (CLASSIFIED AS SE OR SW–SM SOILS).

2.6 COARSE AGGREGATE FOR ACCESS ROAD SUBBASE COURSE SHALL CONFORM TO ASTM D2940.

2.7 UNSUITABLE MATERIAL: HIGH AND MODERATELY PLASTIC SILTS AND CLAYS (LL>45). MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES IN DIAMETER, AND DEBRIS. THESE WILL BE SOILS CLASSIFIED BY ASTM AS PT, MH, CH, OH, ML, AND OL.

2.8 GEOTEXTILE FABRIC: MIRAFI 500X OR APPROVED EQUIVALENT.

2.9 PLASTIC MARKING TAPE SHALL BE ACID AND ALKALI RESISTANT POLYETHYLENE FILM SPECIFICALLY MANUFACTURED FOR MARKING AND LOCATING UNDERGROUND UTILITIES, SIX (6) INCHES WIDE WITH A MINIMUM THICKNESS OF 0.004" TAPE SHALL HAVE MINIMUM STRENGTH OF 1,500 PSI IN BOTH DIRECTIONS AND MANUFACTURED WITH INTEGRAL CONDUCTORS, FOIL BACKING OR OTHER MEANS TO ENABLE DETECTION BY A METAL DETECTOR WHEN BURIED UP TO 3 FEET DEEP. THE METALLIC CORE OF THE TAPE SHALL BE ENCASED IN A PROTECTIVE JACKET OR PROVIDED WITH OTHER MEANS TO PROTECT IT FROM CORROSION. TAPE COLOR SHALL BE RED FOR ELECTRIC UTILITIES AND ORANGE FOR TELECOMMUNICATION UTILITIES.

PART 3 – EXECUTION

3.1 GENERAL:

A. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF A RAIN EVENT, THE SITE CAN PROPERLY DRAIN AT ANY TIME.

B. PRIOR TO SURVEY, LAYOUT, STAKING, AND MARKING, ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS, AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK.

C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE. REMOVE TREES, BRUSH, STUMPS, RUBBISH, OTHER DEBRIS, AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE GROUND SURFACE.

1. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STUMPS, BRUSH, REFUSE, AND OTHER DEBRIS EMBEDDED IN OR PROTRUDING THROUGH THE GROUND SURFACE. RAKE, DISK, OR PLOW THE AREA TO A DEPTH OF NO LESS THAN 6 INCHES, AND REMOVE MATERIAL TO A DEPTH OF 12 INCHES BELOW THE BOTTOM DEPTH OF ROOTS AND OTHER DEBRIS.

2. REMOVE TOPSOIL MATERIAL COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL. AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER UNDESIRABLE MATERIALS.

3. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM CLEARING, GRUBBING, AND DEMOLITION WORK COMPLETELY WITH SUITABLE FILL.

D. ALL DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN AN AUTHORIZED LANDFILL. BURNING OF DEBRIS WILL NOT BE PERMITTED.

E. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATIONS OF FEATURES INDICATED ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER ITEM NOT SHOWN THAT MIGHT INTERFERE WITH THE PROPOSED CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE PLANS.

F. SEPARATE AND STOCKPILE ALL EXCAVATED MATERIALS SUITABLE FOR BACKFILL. ALL EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF–SITE IN A LEGAL MANNER.

3.2 BACKFILL:

A. AFTER COMPLETING CONSTRUCTION OF A STRUCTURE, INCLUDING EXPIRATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST–IN–PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.

1. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL BE REMOVED AND THE EXCAVATION CLEANED OF ALL TRASH, DEBRIS, AND UNSUITABLE MATERIALS.

2. BACKFILL BY PLACING AND COMPACTING SUITABLE BACKFILL MATERIAL IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 8–INCHES LOOSE THICKNESS. WHERE HAND OPERATED COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4 INCHES IN LOOSE DEPTH.

3. IF THE DENSITY TESTING INDICATES THAT THE CONTRACTOR HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE SPECIFICATION REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY, SUCH AS DISKING AND DRYING, ADDING WATER, OR INCREASING THE COMPACTIVE EFFORT TO MEET THE MINIMUM COMPACTION REQUIREMENTS.

B. THOROUGHLY COMPACT EACH LAYER OF BACKFILL TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D698.

3.3 TRENCH EXCAVATION:

A. UTILITY TRENCHES SHALL BE EXCAVATED AT LOCATIONS, DEPTHS, AND WIDTHS SHOWN ON PLAN, OR AS DIRECTED BY THE GENERAL CONTRACTOR. EXCAVATION CONTRACTOR SHALL PROVIDE SHORING, SHEETING, AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE TRENCH WALLS.

B. THE TRENCH WIDTH SHALL EXTEND A MINIMUM OF 6 INCHES BEYOND THE OUTSIDE EDGE OF THE OUTERMOST CONDUIT.

3.4 TRENCH BACKFILL:

A. NOTIFY THE GENERAL CONTRACTOR 24 HOURS IN ADVANCE OF BACKFILLING.

B. PROVIDE GRANULAR BEDDING MATERIAL IN ACCORDANCE WITH THE PLAN AND THE UTILITY REQUIREMENTS.

C. CONDUCT UTILITY CHECK TESTS BEFORE BACKFILLING. BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.

D. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6–INCH UNCOMPACTED LIFTS AND TO 12 INCHES OVER THE CONDUITS. SOLIDLY RAM AND TAMP BACKFILL INTO SPACE AROUND CONDUITS.

E. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE, OR UNBALANCED LOADING.

F. ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT THE BACKFILL MATERIAL IN MAXIMUM 8–INCH THICK LOOSE LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.

G. COMPACT THE TRENCH BACKFILL A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D698.

3.5 AGGREGATE ACCESS ROAD:

A. CLEAR, GRUB, STRIP, AND EXCAVATE FOR THE ACCESS ROAD AS SHOWN ON PLAN. SCARIFY TO A DEPTH OF 6 INCHES AND PROOF–ROLL. ALL HOLES, RUTS, SOFT PLACES, AND OTHER DEFECTS SHALL BE CORRECTED.

B. THE SUBGRADE OF THE DISTURBED AREA SHALL BE COMPACTED TO NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D1557.

C. AFTER PREPARATION OF THE ROAD SUBGRADE IS COMPLETE, INSTALL THE GEOTEXTILE FABRIC (MIRAFI 500X) AT LOCATIONS INDICATED ON THE PLAN BY ROLLING THE FABRIC OUT LONGITUDINALLY ALONG THE ROADWAY. THE FABRIC SHALL NOT BE DRAGGED ACROSS THE SUBGRADE. PLACE THE ENTIRE ROLL IN A SINGLE OPERATION AND ROLL IT OUT AS SMOOTHLY AS POSSIBLE.

1. GEOTEXTILE FABRIC OVERLAPS THAT ARE PARALLEL TO THE ROADWAY WILL BE PERMITTED ALONG THE CENTERLINE OF THE ROAD AND AT LOCATIONS BEYOND THE ROADWAY SURFACE WIDTH (I.E. WITHIN THE SHOULDER WIDTH) ONLY. NO LONGITUDINAL OVERLAPS SHALL BE LOCATED BETWEEN THE CENTERLINE AND THE SHOULDER. PARALLEL OVERLAPS SHALL BE A MINIMUM OF 3 FEET WIDE.

2. TRANSVERSE (PERPENDICULAR TO THE ROADWAY) GEOTEXTILE FABRIC OVERLAPS AT THE END OF A ROLL SHALL OVERLAP IN THE DIRECTION OF THE AGGREGATE PLACEMENT WITH THE PREVIOUS ROLL ON TOP OF THE NEW ROLL, AND SHALL HAVE A MINIMUM LENGTH OF 3 FEET.

3. ALL GEOTEXTILE FABRIC OVERLAPS SHALL BE PINNED WITH STAPLES OR NAILS A MINIMUM OF 10 INCHES LONG TO INSURE PROPER POSITIONING DURING PLACEMENT OF AGGREGATE. PIN LONGITUDINAL SEAMS AT A MINIMUM OF 25–FOOT INTERVALS AND TRANSVERSE SEAMS AT A MINIMUM OF 5–FOOT INTERVALS.

D. THE AGGREGATE BASE AND SURFACE AGGREGATE SHALL BE CONSTRUCTED IN LAYERS NOT MORE THAN 4 INCHES (COMPACTED) IN THICKNESS. AGGREGATE TO BE PLACED ON GEOTEXTILE FABRIC SHALL BE END–DUMPED ON THE FABRIC FROM THE FREE END OF THE FABRIC OR OVER PREVIOUSLY PLACED AGGREGATE. THE FIRST LIFT SHALL BE BLADED DOWN TO A THICKNESS OF 8 INCHES PRIOR TO COMPACTION. AT NO TIME SHALL EQUIPMENT, EITHER TRANSPORTING THE AGGREGATE OR GRADING THE AGGREGATE, BE PERMITTED ON THE ROADWAY WITH LESS THAN 4 INCHES OF MATERIAL COVERING THE GEOTEXTILE FABRIC.

E. THE AGGREGATE SHALL BE IMMEDIATELY COMPACTED TO NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST, ASTM D1557. A TAMPING ROLLER, PNEUMATIC–TIRED ROLLER, OR VIBRATORY MACHINE, OR ANY COMBINATION THEREOF MAY BE USED FOR COMPACTION PROCEDURES. THE TOP LAYER SHALL BE GIVEN A FINAL ROLLING WITH A THREE–WHEEL OR TANDEM ROLLER.

3.6 FINISH GRADING:

A. PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL PROPERLY BLEND WITH SURROUNDING TOPOGRAPHY AND STRUCTURES.

B. IF DEEMED SUITABLE PER GEOTECHNICAL ENGINEER, UTILIZE FILL MATERIAL RESULTING FROM EXCAVATION FOR THE CONSTRUCTION OF FILLS, EMBANKMENTS, AND FOR REPLACEMENT OF REMOVED UNSUITABLE MATERIALS.

C. ACHIEVE FINISHED GRADE BY PLACING A MINIMUM OF 4 INCHES OF 1/2" – 3/4" CRUSHED STONE ON IF APPLICABLE, TOP OF SOIL STABILIZER FABRIC.

D. REPAIR ALL ACCESS ROADS AND SURROUNDING AREAS DISTURBED DURING THE COURSE OF THIS WORK TO THEIR ORIGINAL CONDITION.

3.7 ASPHALT PAVING: SHALL BE PERFORMED PER COLORADO DEPARTMENT OF TRANSPORTATION (CDOT), DIVISION 400 – CDOT PAVEMENT STANDARDS AND SPECIFICATIONS.

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SHEET TITLE
GENERAL SITE WORK & DRAINAGE NOTES

SHEET NUMBER
GN-3

GENERAL CONCRETE WORK NOTES

PART 1 – GENERAL

1.1 SCOPE:

A. FORM WORK, REINFORCING STEEL, ACCESSORIES, CAST-IN PLACE CONCRETE, FINISHING, CURING, AND TESTING FOR STRUCTURAL CONCRETE FOUNDATIONS.

1.2 REFERENCES:

A. ACI (AMERICAN CONCRETE INSTITUTE)

1. ACI 301 SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS.
2. ACI 304 RECOMMENDED PRACTICE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE.
3. ACI 305 RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING.
4. ACI 306 RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING.
5. ACI 308 STANDARD PRACTICE FOR CURING CONCRETING.
6. ACI 309 STANDARD PRACTICE FOR CONSOLIDATION OF CONCRETE.
7. ACI 318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
8. ACI 347 RECOMMENDED PRACTICE FOR CONCRETE FORMWORK.

B. THE APPLICABLE STANDARDS OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) ARE REFERENCED IN THE ACI STANDARDS AND ARE A PART OF THIS SPECIFICATION.

PART 2 – PRODUCTS

2.1 REINFORCING MATERIALS:

B. REINFORCING BARS: ASTM A615, GRADE 60, PROPOSED DEFORMED BILLET-STEEL BARS, PLAIN FINISH.

C. CONTRACTOR SHALL FURNISH CHAIRS, BOLSTERS, BAR SUPPORTS, SPACERS AS REQUIRED FOR SUPPORT OF REINFORCING STEEL AND WIRE FABRIC.

2.2 CONCRETE MATERIALS:

A. PORTLAND CEMENT SHALL BE TYPE II, CONFORMING TO ASTM C-150.

B. AGGREGATE SHALL CONFORM TO ASTM C-33.

1. FINE AGGREGATE SHALL BE UNIFORMLY GRADED, CLEAN, SHARP, AND WASHED NATURAL OR CRUSHED SAND, FREE FROM ORGANIC IMPURITIES.
2. COARSE AGGREGATE SHALL BE NATURAL WASHED GRAVEL OR CRUSHED ROCK CONSISTING HARD, STRONG, DURABLE PIECES, FREE FROM ADHERENT COATINGS.
3. MAXIMUM SIZE OF COARSE AGGREGATE SHALL BE 3/4 INCH IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM C-33 GRADATION SIZE NO. 67.

C. WATER USED IN CONCRETE MIX SHALL BE POTABLE, CLEAN, AND FREE FROM OILS, ACIDS, SALTS, CHLORIDES, ALKALI, SUGAR, VEGETABLE, OR OTHER DELETARIOUS SUBSTANCES.

D. THE CONCRETE SHALL CONTAIN AN AIR-ENTRAINING ADMIXTURE COMPLYING WITH THE REQUIREMENTS OF ASTM C-260 AND ACI 212. 1R AND A WATER-REDUCING ADMIXTURE COMPLYING WITH THE REQUIREMENTS OF ASTM C-494 AND ACI 212.1R. ADMIXTURES SHALL BE PURCHASED AND BATCHED IN LIQUID SOLUTION. THE USE OF CALCIUM CHLORIDE OR AN ADMIXTURE CONTAINING CALCIUM CHLORIDE IS PROHIBITED. ADMIXTURES SHALL BE OF THE SAME MANUFACTURER TO ASSURE COMPATIBILITY. ACCEPTABLE MANUFACTURERS ARE:

1. W.R. GRACE
2. SIKA CORPORATION
3. MASTER BUILDERS
4. EUCLID CHEMICAL COMPANY

E. CURING COMPOUND SHALL CONFORM TO ASTM C309, TYPE I, ID, CLASS A AND B, AND ASTM C171 AS APPLICABLE.

2.3 CONCRETE MIX:

A. PROPORTION CONCRETE MIX IN ACCORDANCE WITH REQUIREMENTS OF ACI 301. THE STRENGTH OF CONCRETE SHALL BE AS INDICATED ON THE DRAWINGS. WHERE STRENGTH IS NOT CLEARLY INDICATED, CONCRETE OF MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI SHALL BE USED.

B. THE CONCRETE MIX SHALL BE DESIGNED FOR A MAXIMUM SLUMP OF THREE INCHES AT THE POINT OF DISCHARGE. MIXES OF THE STIFFEST CONSISTENCY THAT CAN BE EFFICIENTLY PLACED SHALL BE USED.

C. ALL CONCRETE SHALL HAVE THREE (3) TO FIVE (5) PERCENT ENTRAINED AIR.

D. ALL STRUCTURAL CONCRETE SHALL CONTAIN A WATER-REDUCING AGENT.

PART 3 – EXECUTION

3.1 GENERAL:

A. CONSTRUCT AND ERECT THE FORM WORK IN ACCORDANCE WITH ACI 301 AND ACI 347.

B. COLD-WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 306.

C. HOT-WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305.

3.2 INSERTS, EMBEDDED COMPONENTS, AND OPENINGS:

A. CONTRACTOR SHALL CHECK ALL CIVIL, ARCHITECTURAL, STRUCTURAL, AND ELECTRICAL DRAWINGS FOR OPENINGS, SLEEVES, ANCHOR BOLTS, INSERTS, AND OTHER ITEMS TO BE INCORPORATED INTO THE CONCRETE WORK.

B. COORDINATE THE WORK OF OTHER SECTION IN FORMING AND SETTING OPENINGS, RECESSES, SLOTS, CHASES, ANCHORS, INSERTS, AND OTHER ITEMS TO BE EMBEDDED.

C. EMBEDDED ITEMS SHALL BE SET ACCURATELY IN LOCATION, ALIGNMENT, ELEVATION AND PLUMBNESS, LOCATED AND MEASURED FROM ESTABLISHED SURVEYED REFERENCE BENCHMARKS.

D. EMBEDDED ITEMS SHALL BE ANCHORED INTO PLACE IN A MANNER TO PREVENT MOVEMENT DURING CONCRETE PLACEMENT AND CONSOLIDATION. COMPONENTS FORMING A PART OF A COMPLETE ASSEMBLY SHALL BE ALIGNED BEFORE ANCHORING INTO PLACE. PROVIDE TEMPORARY BRACING, ANCHORAGE, AND TEMPLATES AS REQUIRED TO MAINTAIN THE SETTING AND ALIGNMENT.

3.3 REINFORCEMENT PLACEMENT:

A. PLACE REINFORCEMENT ACCORDING TO CONSTRUCTION PLAN SET DRAWINGS AND IN ACCORDANCE WITH ACI 301 AND ACI 318.

B. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT FROM FORM WORK CONSTRUCTION OR CONCRETE PLACEMENT AND CONSOLIDATION. SUPPORT REINFORCING ON METAL CHAIRS, RUNNERS, BOLSTERS, SPACERS AND HANGERS.

C. SPLICES OF REINFORCING BARS SHALL BE CLASS B UNLESS SPECIFIED OTHERWISE ON THE DRAWINGS. SPLICES SHALL BE STAGGERED AND FULL DEVELOPMENT LENGTH SHALL BE PROVIDED ACROSS JOINTS.

D. LOCATE REINFORCING TO PROVIDE CONCRETE COVER AND SPACING SHOWN ON THE DRAWINGS. MINIMUM COVER SHALL BE AS REQUIRED BY ACI 318.

E. WELDING OF AND TO ANY REINFORCING MATERIALS, INCLUDING TACK WELDING OF CROSSING BARS, IS STRICTLY PROHIBITED.

3.4 CONCRETE PLACEMENT:

A. PRIOR TO PLACING CONCRETE, THE FORMS AND REINFORCEMENT SHALL BE THOROUGHLY INSPECTED; ALL TEMPORARY BRACING, TIES, AND CLEATS REMOVED; ALL OPENINGS FOR UTILITIES PROPERLY BOXED; ALL FORMS PROPERLY SECURED IN THEIR CORRECT POSITION AND MADE TIGHT. ALL REINFORCEMENT AND EMBEDDED ITEMS SHALL BE SECURED IN THEIR PROPER LOCATIONS. ALL OLD AND DRY CONCRETE AND DIRT SHALL BE CLEANED OFF AND ALL STANDING WATER AND OTHER FOREIGN MATERIAL REMOVED.

B. CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301 AND ACI 304 AND SHALL BE PLACED AT SUCH A RATE THAT THE CONCRETE PREVIOUSLY PLACED IS STILL PLASTIC AND INTEGRATED WITH THE FRESH CONCRETE. CONCRETE PLACEMENT, ONCE STARTED, SHALL BE CARRIED ON AS A CONTINUOUS OPERATION UNTIL THE SECTION IS COMPLETED. COLD JOINTS ARE NOT ALLOWED UNLESS PRE-APPROVED BY ENGINEER.

C. ALL CONCRETE SHALL BE THOROUGHLY CONSOLIDATED AND COMPACTED BY VIBRATION SPACING, RODDING, OR FORKING DURING THE OPERATION OF PLACING IN ACCORDANCE WITH ACI 309. THE CONCRETE SHALL BE THOROUGHLY WORKED AROUND REINFORCEMENT, EMBEDDED ITEMS, AND INTO THE CORNER OF THE FORMS SO AS TO ELIMINATE ALL AIR POCKETS AND VOIDS.

3.5 FINISHING:

A. FINISHING OF THE FLOOR SLABS SHALL BE IN ACCORDANCE WITH ACI 302.1 SECTION 7.2 AND SHALL INCLUDE A MINIMUM OF THREE TROWELINGS. IN ACCORDANCE WITH ASTM E 1155 THE SLAB FINISH TOLERANCE AS MEASURED SHALL HAVE AN OVERALL TEST NUMBER FOR FLATNESS OF Ff= 20 AND Fl = 15. THE MINIMUM LOCAL NUMBER FOR FLATNESS, Ff= 15 AND Fl=10.

B. SURFACE OF FLOOR SLAB SHALL RECEIVE TWO COATS OF CLEAR SEALER/HARDNER.

C. ABOVE GRADE WALL SURFACES SHALL HAVE A SMOOTH FORM FINISH AS DEFINED IN CHAPTER 10 OF ACI 301.

3.6 CURING:

A. FRESHLY DEPOSITED CONCRETE SHALL BE PROTECTED FROM PREMATURE DRYING AND EXCESSIVELY HOT AND COLD TEMPERATURES, AND SHALL BE MAINTAINED WITH MINIMUM MOISTURE LOSS AT A RELATIVELY CONSTANT TEMPERATURE FOR A PERIOD OF TIME NECESSARY FOR THE HYDRATION OF THE CEMENT AND PROPER CURING OF THE CONCRETE.

B. CONCRETE SHALL BE KEPT CONTINUOUSLY MOIST AT LEAST OVERNIGHT, IMMEDIATELY FOLLOWING THE INITIAL CURING. BEFORE THE CONCRETE HAS DRIED. ADDITIONAL CURING SHALL BE ACCOMPLISHED BY ONE OF THE FOLLOWING MATERIALS OR METHODS:

1. PONDING OR CONTINUOUS SPRINKLING.
2. ABSORPTIVE MAT OR FABRIC KEPT CONTINUOUSLY WET.
3. NON-ABSORPTIVE FILM (POLYETHYLENE) OVER PREVIOUSLY SPRINKLED SURFACE.
4. SAND OR OTHER COVERING KEPT CONTINUOUSLY WET.
5. CONTINUOUS STEAM (NOT EXCEEDING 150 DEGREES FAHRENHEIT OR VAPOR MIST BATH.
6. CURING COMPOUND APPLIED IN TWO COATS, SPRAYED IN PERPENDICULAR DIRECTION

C. THE FINAL CURING SHALL CONTINUE UNTIL THE CUMULATIVE NUMBER OF DAYS OR FRACTION THEREOF, NOT NECESSARILY CONSECUTIVE, DURING WHICH TEMPERATURE OF THE AIR IN CONTACT WITH CONCRETE IS ABOVE 50 DEGREES' FAHRENHEIT HAS TOTALED SEVEN (7) DAYS. CONCRETE SHALL NOT BE PERMITTED TO FREEZE DURING THE CURING PERIOD. RAPID DRYING AT THE END OF THE CURING PERIOD SHALL BE PREVENTED.

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0	07/19/24	ISSUED FOR CONSTRUCTION

PROFESSIONAL ENGINEER
LICENSED
P-17069
STATE OF IDAHO
PING JIANG

Jul 19, 2024

HAILEY
IDL04214
400 SOUTH MAIN STREET
HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
GENERAL CONCRETE WORK NOTES

SHEET NUMBER
GN-4

GENERAL STRUCTURAL STEEL NOTES

PART 1 – GENERAL

1.1 SCOPE:

A. PROVIDE FABRICATION AND ERECTION OF STRUCTURAL STEEL AND OTHER ELEMENTS AS SHOWN ON THE DRAWINGS OR REQUIRED BY OTHER SECTIONS OF THESE SPECIFICATIONS.

1.2 REFERENCES:

A. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC). MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN (ASD).

B. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM).
ASTM A36: STRUCTURAL STEEL
ASTM A53: PIPE, STEEL BLACK AND HOT DIPPED, ZINC–COATED WELDED AND SEAMLESS.
ASTM A108: STEEL BARS, CARBON, COLD FINISHED, STANDARD QUALITY.
ASTM A123: ZINC (HOT–DIPPED GALVANIZED) COATING ON IRON AND STEEL PRODUCTS.
ASTM A307: CARBON STEEL BOLTS AND STUD, 60,000 P.S.I. TENSILE STRENGTH.
ASTM A325: HIGH–STRENGTH BOLT FOR STRUCTURAL STEEL JOINTS.
ASTM A490: HEAT–TREATED, STRUCTURAL STEEL BOLTS, 150 (KSI) (1035MPA) TENSILE STRENGTH.
ASTM A500: COLD–FORMED WELDED AND SEAMLESS CARBON STEEL STRUCTURAL TUBING IN ROUNDS AND SHAPES.
ASTM A563: CARBON AND ALLOY STEEL NUTS.
ASTM B695: COATINGS OF ZINC MECHANICALLY DEPOSITED ON IRON AND STEEL.
ASTM F436: HARDENED STEEL WASHERS.
ASTM F959: COMPRESSIBLE–WASHER–TYPE DIRECT TENSION INDICATOR FOR USE WITH STRUCTURAL FASTENERS.

C. AMERICAN WELDING SOCIETY (AWS):
AWS A5.1: COVERED CARBON STEEL ARC WELDING ELECTRODES.
AWS A5.5: LOW ALLOY STEEL COVERED ARC WELDING ELECTRODES.
AWS D1.1: STRUCTURAL WELDING CODE – STEEL.

D. RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC): "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 BOLTS OR ASTM A490 BOLTS." AS ENDORSED BY AISC.

E. STEEL STRUCTURES PAINTING COUNCIL (SSPC):
SSPC–SP3: POWER TOOL CLEANING.
SSPC–PAINT 11: RED IRON OXIDE, ZINC CHROME, RAW LINSEED OIL OR ALKYD PAINT.

1.3 SUBMITTALS:

A. SUBMIT THE FOLLOWING FOR APPROVAL:

1. FABRICATION AND ERECTION DRAWINGS SHOWING ALL DETAILS, CONNECTIONS, MATERIAL DESIGNATIONS, AND ALL TOP STEEL ELEVATIONS.

B. WELDERS SHALL BE QUALIFIED AS PRESCRIBED IN AWS D1.1.

PART 2 – PRODUCTS

2.1 STRUCTURAL STEEL:

A. SHAPES, PLATES, AND BARS SHALL CONFORM TO ASTM A36.

B. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B. STEEL PIPE SHALL CONFIRM TO ASTM A53, TYPE E OR S, GRADE B.

2.2 ANCHOR BOLTS:

A. ANCHOR BOLTS SHALL CONFORM TO ASTM A307 WITH HEAVY HEXAGONAL NUTS.

2.3 BOLTS:

A. COMMON (MACHINE) BOLTS SHALL CONFORM TO ASTM A307 GRADE A AND NUTS TO ASTM A563. ONE COMMON BOLT ASSEMBLY SHALL CONSIST OF A BOLT, A HEAVY HEX NUT, AND A HARDENED WASHER.

B. HIGH–STRENGTH BOLTS SHALL CONFORM TO ASTM A325 ONE HIGH. STRENGTH BOLT ASSEMBLY SHALL CONSIST OF A HEAVY HEX STRUCTURAL BOLT, A HEAVY HEX NUT, AND A HARDENED WASHER CONFORMING TO ASTM F436. THE HARDENED WASHER SHALL BE INSTALLED AGAINST THE ELEMENT TURNED IN TIGHTENING. UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL CONNECTIONS SHALL BE BEARING TYPE CONNECTIONS.

2.4 WELDING ELECTRODES:

A. WELDING ELECTRODES SHALL COMPLY WITH AWS D1.1 USING A5.1 OR A5.5 E70XX AND SHALL BE COMPATIBLE WITH THE WELDING PROCESS SELECTED.

2.5 PRIMER:

A. PRIMER SHALL BE RED OXIDE–CHROMATE PRIMER COMPLYING WITH SSPC PAINT SPECIFICATION NO. 11.

PART 3 – EXECUTION

3.1 FABRICATION:

A. SHOP FABRICATE AND ASSEMBLY MATERIALS AS SPECIFIED HEREIN.

1. FABRICATE ITEMS OF STRUCTURAL STEEL IN ACCORDANCE WITH THE AISC–ASD SPECIFICATIONS, AND AS INDICATED ON THE APPROVED SHOP DRAWINGS.
2. ALL EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED PER ASTM.
3. PROPERLY MARK AND MATCH–MARK MATERIALS FOR FIELD ASSEMBLY AND FOR IDENTIFICATION AS TO INTENDED LOCATION.
4. FABRICATE AND DELIVER IN A SEQUENCE WHICH WILL EXPEDITE ERECTION AND MINIMIZE FIELD HANDLING OF MATERIALS.
5. WHERE FINISHING IS REQUIRED, COMPLETE THE ASSEMBLY, INCLUDING THE WELDING OF UNITS, BEFORE START OF FINISHING OPERATIONS.
6. THE FINISH SURFACE OF MEMBERS EXPOSED IN THE FINISHED STRUCTURE SHALL BE FREE FROM MARKINGS, BURNS, AND OTHER DEFECTS.

B. PROVIDE CONNECTIONS AS SPECIFIED HEREIN:

1. PROVIDE BOLTS AND WASHERS OF TYPES AND SIZE REQUIRED FOR COMPLETION OF FIELD ERECTION. USE 3/4" DIAMETER A325 BOLTS UNLESS NOTED OTHERWISE.
2. INSTALL HIGH STRENGTH THREADED FASTENERS IN ACCORDANCE WITH "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR ASTM A490 BOLTS."
3. WELDED CONSTRUCTION SHALL COMPLY WITH AWS D1.1 FOR PROCEDURES, APPEARANCE, QUALITY OF WELD, AND METHODS USED IN CORRECTING WELDED WORK.
4. THE FABRICATOR SHALL FURNISH AND INSTALL ERECTION CLIPS FOR FIT–UP OF WELDED CONNECTIONS.
5. DOUBLE ANGLE MEMBERS SHALL HAVE WELDED FILLERS SPACED IN ACCORDANCE WITH CHAPTER E4 OF THE AISC–ASD SPECIFICATION.
6. GUSSET AND STIFFENER PLATES SHALL BE 3/8" THICK MINIMUM.

3.2 PRIMING:

A. STRUCTURAL STEEL SHALL BE PRIMED AS SPECIFIED HEREIN, UNLESS SHOWN OTHERWISE ON THE DRAWINGS.

B. STRUCTURAL STEEL SURFACE PREPARATION SHALL CONFIRM TO SSPC–SP3, "POWER TOOL CLEANING."

C. SURFACE PREPARATION AND PRIMER SHALL BE IN ACCORDANCE WITH AISC CODE OF STANDARD PRACTICE IN THE ASD MANUAL OF STEEL CONSTRUCTION.

D. MATERIALS SHALL REMAIN CLOSED UNTIL REQUIRED FOR USE. MANUFACTURER'S POT–LIFE REQUIREMENTS SHALL BE STRICTLY ADHERED TO.

E. PRIMER SHALL BE APPLIED TO DRY, CLEAN, PREPARED SURFACE AND UNDER FAVORABLE CONDITIONS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER, PRIMING SHALL NOT BE DONE WHEN AMBIENT TEMPERATURE IS LESS THAN 50 DEGREES FAHRENHEIT, THE RELATIVE HUMIDITY IS MORE THAN 90 PERCENT, OR THE SURFACE TEMPERATURE IS LESS THAN 5 DEGREES FAHRENHEIT ABOVE THE DEW POINT.

F. GENERALLY ALL PRIMER SHALL BE SPRAY APPLIED. BRUSH OR ROLLER APPLICATION SHALL BE LIMITED TO TOUCHUP AND TO AREAS NOT ACCESSIBLE BY SPRAY GUN.

G. PRIMER SHALL BE UNIFORMLY APPLIED WITHOUT RUNS, SAGS, SOLVENT BLISTERS, DRY SPRAY, OR OTHER BLEMISHES. ALL BLEMISHES AND OTHER IRREGULARITIES SHALL BE REPAIRED OR REMOVED AND THE AREA RE–COATED. SPECIAL ATTENTION SHALL BE PAID TO CREVICES, WELD LINES, BOLT HEADS, CORNERS, EDGES, ETC., TO OBTAIN THE REQUIRED NOMINAL FILM THICKNESS.

H. DRY COAT FILM THICKNESS OF THE PRIMER SHALL BE 2.0 MILLIMETERS

I. IF THE PRIMER IS DAMAGED BY WELDING OR IN ANY OTHER MANNER, THE AREA SHALL BE TOUCHED UP AND REPAIRED. THE TOUCHUP PAINT SHALL BE COMPATIBLE WITH THE PREVIOUS APPLIED PRIMER COAT WITH MINIMUM DRY FILM THICKNESS OF 1.5 MILLIMETERS.

3.3 INSTALLATION:

A. INSTALLATION OF STRUCTURAL STEEL SHALL COMPLY WITH AISC "CODE OF STANDARD PRACTICE."

B. STRUCTURAL FIELD WELDING SHALL BE DONE BY THE ELECTRIC SUBMERGED OR SHIELDED METAL ARC PROCESS. WELDED CONSTRUCTION METHODS SHALL COMPLY WITH AWS D1.1.

C. PROVIDE ANCHOR BOLTS AND OTHER CONNECTORS REQUIRED FOR SECURING STRUCTURAL STEEL TO MASONARY WALLS AND TO OTHER IN–PLACE WORK. PROVIDE TEMPLATES AND OTHER DEVICES NECESSARY FOR PRESETTING BOLTS AND ANCHORS TO ACCURATE LOCATIONS.

D. SPLICE MEMBERS ONLY WHERE INDICATED ON THE DRAWINGS.

E. PROVIDE TEMPORARY SHORING BRACING WITH CONNECTIONS OF SUFFICIENT STRENGTH TO BEAR IMPOSED LOADS. REMOVE TEMPORARY CONNECTIONS AND MEMBERS WHEN PERMANENT MEMBERS ARE IN PLACE AND THE FINAL CONNECTIONS HAVE BEEN MADE.

F. BEFORE ASSEMBLY ALIGN AND ADJUST MEMBERS AND OTHER SURFACES WHICH WILL BE IN THE PERMANENT CONTACT, BEFORE ASSEMBLY.

G. AS A MINIMUM, HIGH–STRENGTH BOLTS, SHALL BE TIGHTENED TO A "SNUG–TIGHT" CONDITION AS DEFINED IN THE LATEST AISC SPECIFICATIONS. ALL HIGH–STRENGTH BOLTS SPECIFIED ON THE DESIGN DRAWINGS TO BE USED IN PRETENSIONED OR SLIP–CRITICAL JOINTS SHALL BE TIGHTENED TO A BOLT TENSION NOT LESS THAN SPECIFIED IN AISC TABLE J3.1. INSTALLATION SHALL BE BY ANY OF THE FOLLOWING METHODS: TURN–OF NUT METHOD, A DIRECT–TENSION–INDICATOR, TWIST–OFF–TYPE TENSION–CONTROL BOLT, CALIBRATED WRENCH, OR ALTERNATIVE DESIGN BOLT.

at&t

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DRAWN BY:	ASK
CHECKED BY:	JMH
RFDS:	1.00

REV	DATE	DESCRIPTION
0	07/19/24	ISSUED FOR CONSTRUCTION

PROFESSIONAL ENGINEER
LICENSED
P-17069
STATE OF IDAHO
PING JIANG

Jul 19, 2024

HAILEY
IDL04214
400 SOUTH MAIN STREET
HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
GENERAL STRUCTURAL STEEL NOTES

SHEET NUMBER
GN-5

GENERAL ELECTRICAL NOTES

PART 1 – GENERAL

1.1 GENERAL CONDITIONS:

A. CONTRACTOR SHALL INSPECT THE EXISTING SITE CONDITIONS PRIOR TO PERFORMING WORK. ANY QUESTIONS ARISING DURING THE BID PERIOD REGARDING THE CONTRACTORS FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, PRIOR TO THE AWARD OF THE CONTRACT.

B. THE CONTRACTOR SHALL OBTAIN PERMITS, LICENSES, MAKE ALL DEPOSITS, AND PAY ALL FEES REQUIRED FOR THE CONSTRUCTION PERFORMANCE OF THE WORK UNDER THIS SECTION.

C. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS. DRAWING SHALL NOT BE SCALED TO DETERMINE DIMENSIONS. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL SYSTEMS AND COMPONENTS COVERED UNDER THIS SECTION.

1.2 LAWS, REGULATIONS, ORDINANCES, STATUTES, AND CODES:

A. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, AND ALL APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES, AND CODES. CONDUIT BENDS SHALL BE THE RADIUS BEND FOR THE TRADE SIZE OF CONDUIT IN COMPLIANCE WITH THE LATEST EDITIONS OF NEC.

1.3 REFERENCES:

A. THE PUBLICATIONS LISTED BELOW ARE PART OF THIS SPECIFICATION. EACH PUBLICATION SHALL BE THE LATEST REVISION AND ADDENDUM IN EFFECT ON THE DATE OF CONSTRUCTION. EXCEPT AS MODIFIED BY THE REQUIREMENT SPECIFIED HEREIN OR THE DETAILS OF THE DRAWINGS, WORK INCLUDED IN THIS SPECIFICATION SHALL CONFORM TO THE APPLICABLE PROVISION OF THESE PUBLICATIONS.

1. ANSI/IEEE (AMERICAN NATIONAL STANDARDS INSTITUTE)
2. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)
3. ICE (INSULATED CABLE ENGINEERS ASSOCIATION)
4. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
5. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
6. OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION)
7. UL (UNDERWRITERS LABORATORIES. INC.)
8. AT&T GROUNDING AND BONDING STANDARDS TP–76416

1.4 SCOPE OF WORK:

A. WORK UNDER THIS SECTION SHALL CONSIST OF FURNISHING ALL LABOR, MATERIAL, AND ASSOCIATED SERVICES REQUIRED TO COMPLETE REQUIRED CONSTRUCTION AND TO ACHIEVE OPERATIONAL STATUS.

B. ALL ELECTRICAL EQUIPMENT UNDER THIS CONTRACT SHALL BE PROPERLY TESTED, ADJUSTED, AND ALIGNED BY THE CONTRACTOR.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATING, DRAINING, TRENCHING, BACKFILLING, AND REMOVAL OF EXCESS SOIL, FILL, AND DEBRIS.

D. THE CONTRACTOR SHALL FURNISH THE OWNER WITH CERTIFICATES OF A FINAL INSPECTION AND APPROVAL FROM THE JURISDICTIONAL AUTHORITIES.

E. IF APPLICABLE, THE CONTRACTOR SHALL PREPARE A COMPLETE SET OF AS–BUILT DRAWINGS TO DOCUMENT ALL WIRING EQUIPMENT CONDITIONS AND CHANGES WHILE COMPLETING THIS CONTRACT. THE AS–BUILT DRAWINGS SHALL BE SUBMITTED AT COMPLETION OF THE PROJECT TO THE APPROPRIATE PARTY.

PART 2 – PRODUCTS

2.1 GENERAL:

A. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, UL LISTED, AND FREE FROM DEFECTS.

B. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES (UL) LABEL OF APPROVAL AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.

C. ALL ITEMS, MATERIALS, AND EQUIPMENT SHALL BE ACCEPTABLE TO THE JURISDICTIONAL AUTHORITY AND SUITABLE FOR THE USE INTENDED.

D. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING OF GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED (10,000 AIC MINIMUM). CONTRACTOR SHALL VERIFY THAT AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PER THE GOVERNING JURISDICTION.

2.2 MATERIALS AND EQUIPMENT:

A. CONDUIT:

1. RIGID METAL CONDUIT (RMC) SHALL BE HOT–DIPPED GALVANIZED INSIDE AND OUTSIDE INCLUDING ENDS AND THREADS, AND ENAMELED OR LACQUERED INSIDE IN ADDITION TO GALVANIZING.
2. LIQUIDTIGHT FLEXIBLE METAL CONDUIT SHALL BE UL LISTED.
3. CONDUIT CLAMPS, STRAPS, AND SUPPORTS SHALL BE STEEL OR MALLEABLE IRON. ALL FITTINGS SHALL BE COMPRESSION AND CONCRETE–TIGHT TYPE. GROUNDING BUSHINGS WITH INSULATED THROATS SHALL BE INSTALLED ON ALL CONDUIT TERMINATIONS.
4. NONMETALLIC CONDUIT AND FITTINGS SHALL BE SCHEDULE 40 PVC AND INSTALLED USING SOLVENT–CEMENT–TYPE JOINTS AS RECOMMENDED BY THE MANUFACTURER.

B. CONDUCTORS AND CABLE:

1. CONDUCTORS AND CABLE SHALL BE FLAME–RETARDANT, MOISTURE AND HEAT RESISTANT THERMOPLASTIC, SINGLE CONDUCTOR, COPPER, TYPE THHN/THWN–2, 600 VOLT, SIZE AS INDICATED, ON PLANS THE MINIMUM SIZE CONDUCTOR USED SHALL BE #12 AWG.
2. #10 AWG AND SMALLER CONDUCTOR SHALL BE SOLID OR STRANDED. #8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED.
3. SOLDERLESS COMPRESSION TYPE CONNECTORS SHALL BE USED FOR TERMINATION OF ALL STRANDED CONDUCTORS.
4. STRAIN–RELIEF SUPPORTS GRIPS SHALL BE HUBBELL KELLEMS OR APPROVED EQUAL. CABLES SHALL BE SUPPORTED IN ACCORDANCE WITH THE NEC AND CABLE MANUFACTURER'S RECOMMENDATIONS.
5. ALL CONDUCTORS SHALL BE TAGGED AT BOTH ENDS OF THE CONDUCTOR, AT ALL PULL BOXES, J–BOXES, EQUIPMENT. CABINETS SHALL BE IDENTIFIED WITH APPROVED PLASTIC TAGS (ACTION CRAFT, BRADY, OR APPROVED EQUAL).

C. DISCONNECT SWITCHES:

1. DISCONNECT SWITCHES SHALL BE HEAVY DUTY, DEAD–FRONT, QUICK–MAKE, QUICK–BREAK, EXTERNALLY OPERABLE, HANDLE LOCKABLE, INTERLOCK WITH COVER IN CLOSED POSITION, RATING AS INDICATED, UL LABELED, FURNISHED IN NEMA 3R ENCLOSURE, SQUARE–D, OR ENGINEERED APPROVED EQUAL.

D. CHEMICAL ELECTROLYTIC GROUNDING SYSTEM:

1. INSTALL CHEMICAL GROUNDING AS REQUIRED. THE SYSTEM SHALL BE ELECTROLYTIC MAINTENANCE FREE ELECTRODE CONSISTING OF RODS WITH A MINIMUM #2 AWG CU EXOTHERMALLY WELDED PIGTAIL, PROTECTIVE BOXES, AND BACKFILL MATERIAL. MANUFACTURER SHALL BE LYNCOLE XIT GROUNDING ROD TYPES K2–(*)CS OR K2L–(*)CS (*) LENGTH AS REQUIRED.
2. GROUND ACCESS BOX SHALL BE A POLYPLASTIC BOX FOR NON–TRAFFIC APPLICATIONS, INCLUDING BOLT DOWN FLUSH COVER WITH "BREATHER" HOLES, XIT MODEL #XB–22. ALL DISCONNECT SWITCHES AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMICOID NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS IDENTIFICATION NUMBERING, AND THE ELECTRICAL POWER SOURCE.
3. BACKFILL MATERIAL SHALL BE LYNCONITE AND LYNCOLE GROUNDING GRAVEL.

E. SYSTEM GROUNDING:

1. ALL GROUNDING COMPONENTS SHALL BE TINNED AND GROUNDING CONDUCTOR SHALL BE #2 AWG BARE, SOLID, TINNED COPPER. ABOVE–GRADE GROUNDING CONDUCTORS SHALL BE INSULATED WHERE NOTED.
2. GROUNDING BUSES SHALL BE BARE, TINNED, ANNEALED COPPER BARS OF RECTANGULAR CROSS SECTION. STANDARD BUS BARS MGB SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AND THEY SHALL NOT BE FABRICATED OR MODIFIED IN THE FIELD. ALL GROUNDING BUSES SHALL BE IDENTIFIED WITH MINIMUM 3/4" LETTERS BY STENCILING OR DESIGNATION PLATE.
3. CONNECTORS SHALL BE HIGH CONDUCTIVITY, HEAVY DUTY, LISTED AND LABELED AS GROUNDING CONNECTORS FOR THE MATERIALS USED. USE TWO–HOLE COMPRESSION LUGS WITH CLEAR HEAT SHRINK FOR MECHANICAL CONNECTIONS. USE TWO–HOLE COMPRESSION LUGS WITH INSPECTION WINDOW AND CLEAR HEAT SHRINK FOR INTERIOR AND BLACK HEAT SHRINK FOR EXTERIOR.
4. EXOTHERMIC WELDED CONNECTIONS SHALL BE PROVIDED IN KIT FORM AND SELECTED FOR THE SPECIFIC TYPES, SIZES, AND COMBINATIONS OF CONDUCTORS AND OTHER ITEMS TO BE CONNECTED.
5. GROUND RODS SHALL BE ERICO #615800, COPPER–CLAD STEEL WITH HIGH STRENGTH STEEL CORE AND ELECTROLYTIC GRADE COPPER OUTER SHEATH, MOLTEN WELDED TO CORE, AND 5/8"x10'–0". ALL GROUNDING RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES AS SHOWN ON DRAWINGS.
6. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS IN COMPLIANCE WITH THE AT&T SPECIFICATIONS AND NEC. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULLBOXES, DISCONNECT SWITCHES, STARTERS, AND EQUIPMENT CABINETS.

F. OTHER MATERIALS:

1. THE CONTRACTOR SHALL PROVIDE OTHER MATERIALS, THOUGH NOT SPECIFICALLY DESCRIBED, WHICH ARE REQUIRED FOR A COMPLETELY OPERATIONAL SYSTEM AND PROPER INSTALLATION OF THE WORK.
2. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR REQUIRED BY NEC.

G. PANELS AND LOAD CENTERS:

1. ALL PANEL DIRECTORIES SHALL BE TYPEWRITTEN.

PART 3 – EXECUTION

3.1 GENERAL:

A. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

B. DURING INSTALLATION AND CONSTRUCTION PERIODS EQUIPMENT SHALL BE TIGHTLY COVERED AND PROTECTED AGAINST DIRT, WATER, AND CHEMICAL OR MECHANICAL INJURY.

3.2 LABOR AND WORKMANSHIP:

A. ALL LABOR FOR THE INSTALLATION OF MATERIALS AND EQUIPMENT FURNISHED FOR THE ELECTRICAL SYSTEM SHALL BE INSTALLED BY EXPERIENCED WIREMEN IN A NEAT AND WORKMAN–LIKE MANNER.

B. ALL ELECTRICAL EQUIPMENT SHALL BE ADJUSTED, ALIGNED, AND TESTED BY THE CONTRACTOR AS REQUIRED TO CONFIRM THE INTENDED PERFORMANCE.

C. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED EQUIPMENT, REMOVE ALL NECESSARY LABELS, DEBRIS, CRATING, OR CARTONS, AND LEAVE THE INSTALLATION FINISHED AND READY FOR OPERATION.

3.3 COORDINATION:

A. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRICAL ITEMS WITH THE OWNER–FURNISHED EQUIPMENT DELIVERY SCHEDULE TO PREVENT UNNECESSARY DELAYS IN THE SCHEDULED WORK.

3.4 INSTALLATION:

B. CONDUIT:

1. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT AS SPECIFIED. NO CONDUIT OR TUBING OF LESS THAN ¾" TRADE SIZE SHALL BE UTILIZED.
2. PROVIDE RIGID PVC SCHEDULE 80 CONDUITS FOR ALL RISERS UNLESS OTHERWISE NOTED. EMT MAY BE INSTALLED FOR EXTERIOR CONDUITS WHERE NOT SUBJECT TO PHYSICAL DAMAGE.
3. INSTALL SCHEDULE 40 PVC CONDUIT WITH A MINIMUM COVER OF 24" UNDER ROADWAYS, PARKING LOTS, STREETS, AND ALLEYS. CONDUIT SHALL HAVE A MINIMUM COVER OF 18" IN ALL NON–TRAFFIC APPLICATIONS (REFER TO 2020 OR LASTEST NEC, TABLE 300.5).
4. USE GALVANIZED FLEXIBLE STEEL CONDUIT AT LOCATIONS OF DIRECT CONNECTION TO EQUIPMENT THAT MOVES OR VIBRATES, OR FOR EASE OF MAINTENANCE. USE LIQUID TIGHT, FLEXIBLE METAL CONDUIT FOR OUTDOOR APPLICATIONS. INSTALL GALVANIZED FLEXIBLE STEEL CONDUIT AT ALL POINTS OF CONNECTION TO EQUIPMENT MOUNTED ON SUPPORTS TO ALLOW FOR EXPANSION AND CONTRACTION.
5. A RUN OF CONDUIT BETWEEN BOXES OR EQUIPMENT SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF THREE QUARTER–BENDS. CONDUIT BEND SHALL BE MADE WITH THE UL LISTED BENDER OR FACTORY 90 DEGREE ELBOWS MAY BE USED.
6. FIELD FABRICATED CONDUITS SHALL BE CUT SQUARE WITH A CONDUIT CUTTING TOOL AND REAMED TO PROVIDE A SMOOTH INSIDE SURFACE.
7. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL CONDUITS DURING CONSTRUCTION. TEMPORARY OPENINGS IN THE CONDUIT SYSTEM SHALL BE PLUGGED OR CAPPED TO PREVENT ENTRANCE OF MOISTURE OR FOREIGN MATTER. CONTRACTOR SHALL REPLACE ANY CONDUITS CONTAINING FOREIGN MATERIALS THAT CANNOT BE REMOVED.
8. ALL CONDUITS SHALL BE SWABBED CLEAN BY PULLING AN APPROPRIATE SIZE MANDREL THROUGH THE CONDUIT BEFORE INSTALLATION OF CONDUCTORS OR CABLES. CONDUIT SHALL BE FREE OF DIRT AND DEBRIS.
9. INSTALL PULL STRINGS IN ALL CLEAN EMPTY CONDUITS. IDENTIFY PULL STRINGS AT EACH END.
10. INSTALL 2" HIGHLY VISIBLE AND DETECTABLE TAPE 12" ABOVE ALL UNDERGROUND CONDUITS AND CONDUCTORS.
11. CONDUITS SHALL BE INSTALLED IN SUCH A MANNER AS TO INSURE AGAINST COLLECTION OF TRAPPED CONDENSATION.
12. PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS TO ALLOW FOR RACEWAYS AND CABLES TO BE ROUTED THROUGH THE BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS. SLEEVES AND/OR PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE EFFECTIVELY SEALED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL OR STRUCTURE. FIRE STOPS AT FLOOR PENETRATIONS SHALL BE INSTALLED TO PREVENT PASSAGE OF WATER, SMOKE, FIRE, AND FUMES. ALL MATERIAL SHALL BE UL APPROVED FOR THIS PURPOSE.

B. CONDUCTORS AND CABLE:

1. ALL POWER WIRING SHALL BE COLOR CODED AS FOLLOWS:

DESCRIPTION	208/240/120 VOLT SYSTEMS
PHASE A	BLACK
PHASE B	RED
PHASE C	BLUE
NEUTRAL	WHITE
GROUNDING	GREEN

2. SPLICES SHALL BE MADE ONLY AT OUTLETS, JUNCTION BOXES, OR ACCESSIBLE RACEWAY CONDULETS APPROVED FOR THIS PURPOSE.
3. PULLING LUBRICANTS SHALL BE UL APPROVED. CONTRACTOR SHALL USE NYLON OR HEMP ROPE FOR PULLING CONDUCTOR OR CABLES INTO THE CONDUIT.
4. CABLES SHALL BE NEATLY TRAINED, WITHOUT INTERLACING, AND BE OF SUFFICIENT LENGTH IN ALL BOXES AND EQUIPMENT TO ALLOW FOR A NEAT ARRANGEMENT. CABLES SHALL BE SECURED IN A MANNER TO AVOID TENSION ON CONDUCTORS AND/OR TERMINALS. CONDUCTORS SHALL BE PROTECTED FROM MECHANICAL INJURY AND MOISTURE. SHARP BENDS OVER CONDUIT BUSHINGS ARE PROHIBITED. DAMAGED CABLES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

C. DISCONNECT SWITCHES:

1. INSTALL DISCONNECT SWITCHES LEVEL AND PLUMB, AND CONNECT TO WIRING SYSTEM AND GROUNDING SYSTEM AS REQUIRED.

D. GROUNDING:

1. ALL METALLIC PARTS OF ELECTRICAL EQUIPMENT WHICH DO NOT CARRY CURRENT SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING MANUFACTURER, AT&T GROUNDING AND BONDING STANDARDS TP–76416, TP–76300, AND THE NATIONAL ELECTRICAL CODE.
2. PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEM WITH ASSEMBLY OF MATERIALS, INCLUDING GROUNDING ELECTRODES, BONDING JUMPERS, AND ADDITIONAL ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.
3. ALL GROUNDING CONDUCTORS SHALL PROVIDE A STRAIGHT DOWNWARD PATH TO GROUND. GROUNDING CONDUCTORS SHALL NOT BE LOOPED OR SHARPLY BENT. ROUTE GROUNDING CONNECTIONS AND CONDUCTORS TO GROUND IN THE SHORTEST AND STRAIGHTEST PATHS POSSIBLE TO MINIMIZE TRANSIENT VOLTAGE RISES.
4. AT BUILDINGS AND/OR NEW TOWERS GREATER THAN 75 FEET IN HEIGHT AND WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWER GROUND RING, TO THE EXISTING GROUNDING SYSTEM. THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN #2 AWG COPPER. ROOFTOP GROUND RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, THE LIGHTNING PROTECTION SYSTEM, AND/OR THE BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY). SEE STANDARD 6.3.2.2.
5. TIGHTEN GROUNDING AND BONDING CONNECTORS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING SPECIFICATIONS. WHERE MANUFACTURER'S TORQUING REQUIREMENTS ARE NOT AVAILABLE, TIGHTEN CONNECTIONS TO COMPLY WITH TIGHTENING TORQUE VALUES SPECIFIED IN UL TO ASSURE PERMANENT AND EFFECTIVE GROUNDING.
6. CONTRACTOR SHALL VERIFY THE LOCATIONS OF GROUNDING TIE–IN POINTS TO THE EXISTING GROUNDING SYSTEM. ALL UNDERGROUND GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
7. ALL GROUNDING CONNECTIONS SHALL BE INSPECTED FOR TIGHTNESS. EXOTHERMIC WELDED CONNECTIONS SHALL BE APPROVED BY THE INSPECTOR HAVING JURISDICTION PRIOR TO PERMANENT CONCEALMENT.
8. APPLY CORROSION–RESISTANCE FINISH TO FIELD CONNECTIONS AND AREAS/COMPONENTS WHERE FACTORY APPLIED PROTECTIVE COATINGS HAVE BEEN DESTROYED.
9. A SEPARATE, CONTINUOUS, INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUITS.
10. BOND ALL INSULATED GROUNDING BUSHINGS WITH A BARE #6 AWG GROUNDING CONDUCTOR TO A GROUND BUS.
11. DIRECT–BURIED GROUNDING CONDUCTORS SHALL BE INSTALLED AT A NOMINAL DEPTH OF 30" MINIMUM BELOW GRADE, OR 6" MINIMUM BELOW THE FROST LINE, USING THE GREATER OF THE TWO DISTANCES.
12. ALL GROUNDING CONDUCTORS EMBEDDED IN OR PENETRATING CONCRETE SHALL BE INSTALLED IN SCHEDULE 40 PVC CONDUIT.
13. THE INSTALLATION OF A CHEMICAL ELECTROLYTIC GROUNDING SYSTEM IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REMOVE SEALING TAPE FROM LEACHING AND BREATHER HOLES. INSTALL THE PROTECTIVE BOX FLUSH WITH GRADE.
14. IF COAX ON THE ICE BRIDGE IS MORE THAN 6 FEET FROM THE GROUND BAR AT THE BASE OF THE TOWER, INSTALL A SECOND GROUND BAR AT THE END OF THE ICE BRIDGE TO GROUND THE COAX CABLE GROUNDING KITS AND IN–LINE ARRESTORS.
15. CONTRACTOR SHALL REPAIR, AND/OR REPLACE, EXISTING GROUNDING SYSTEM COMPONENTS DAMAGED DURING CONSTRUCTION AT THE CONTRACTORS EXPENSE.

3.5 ACCEPTANCE TESTING:

A. CERTIFIED PERSONNEL USING CERTIFIED EQUIPMENT SHALL PERFORM REQUIRED TESTS AND SUBMIT WRITTEN TEST REPORTS UPON COMPLETION.

B. WHEN MATERIAL AND/OR WORKMANSHIP IS FOUND TO BE NON–COMPLIANT WITH THE SPECIFIED REQUIREMENTS, THE NON–COMPLIANT ITEMS/ELEMENTS SHALL BE PROMPTLY REMOVED FROM THE PROJECT SITE AND REPLACED WITH ITEMS COMPLYING WITH THE SPECIFIED REQUIREMENTS.

C. TEST PROCEDURES:

1. ALL FEEDERS SHALL HAVE INSULATION TESTED AFTER INSTALLATION, BEFORE CONNECTION TO DEVICES. THE CONDUCTORS SHALL TEST FREE FROM SHORT CIRCUITS AND GROUNDS. TESTING SHALL BE FOR ONE MINUTE USING 1,000VOLT DC.
2. PRIOR TO ENERGIZING CIRCUITRY, TEST WIRING DEVICES FOR ELECTRICAL CONTINUITY AND PROPER POLARITY CONNECTIONS.
3. MEASURE AND RECORD VOLTAGES BETWEEN PHASES AND BETWEEN PHASE CONDUCTORS AND NEUTRALS. SUBMIT A REPORT OF MAXIMUM AND MINIMUM VOLTAGES TO APPROPRIATE PARTS.
4. PERFORM GROUNDING TEST TO MEASURE RESISTANCE OF GROUNDING SYSTEM USING THE IEEE STANDARD 3–POINT "FALL–OF–POTENTIAL" METHOD. PROVIDE PLOTTED TEST VALUES AND LOCATION SKETCH. NOTIFY THE ENGINEER IMMEDIATELY IF MEASURED VALUE IS OVER 5 OHMS.

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PROJECT/PHASE NO: 129551/XXXX
DRAWN BY: ASK
CHECKED BY: JMH
RFDS: 1.00

REV	DATE	DESCRIPTION
0	07/19/24	ISSUED FOR CONSTRUCTION

PROFESSIONAL ENGINEER LICENSED
P-17069
STATE OF IDAHO
PING JIANG
Jul 19, 2024

HAILEY
IDL04214
400 SOUTH MAIN STREET
HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
GENERAL ELECTRICAL NOTES

SHEET NUMBER
GN-6

BATTERY SAFETY NOTES

PART 1 – GENERAL

1.1 LAWS, REGULATIONS, ORDINANCES, STATUTES, AND CODES:

A. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, AND ALL APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES, AND CODES.

1.2 REFERENCES:

A. THE PUBLICATIONS LISTED BELOW ARE PART OF THIS SPECIFICATION. EACH PUBLICATION SHALL BE THE LATEST REVISION AND ADDENDUM IN EFFECT ON THE DATE OF CONSTRUCTION. EXCEPT AS MODIFIED BY THE REQUIREMENT SPECIFIED HEREIN OR THE DETAILS OF THE DRAWINGS, WORK INCLUDED IN THIS SPECIFICATION SHALL CONFORM TO THE APPLICABLE PROVISION OF THESE PUBLICATIONS.

1. ANSI/IEEE (AMERICAN NATIONAL STANDARDS INSTITUTE)
2. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)
3. ICE (INSULATED CABLE ENGINEERS ASSOCIATION)
4. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
5. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
6. OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION)
7. UL (UNDERWRITERS LABORATORIES. INC.)
8. AT&T GROUNDING AND BONDING STANDARDS TP-76416
9. IFC (INTERNATIONAL FIRE CODE)
10. IMC (INTERNATIONAL MECHANICAL CODE)

1.3 SCOPE OF WORK:

A. WORK UNDER THIS SECTION SHALL CONSIST OF FURNISHING ALL LABOR, MATERIAL, AND ASSOCIATED SERVICES REQUIRED TO COMPLETE REQUIRED CONSTRUCTION AND TO ACHIEVE OPERATIONAL STATUS.

B. ALL ELECTRICAL EQUIPMENT UNDER THIS CONTRACT SHALL BE PROPERLY TESTED, ADJUSTED, AND ALIGNED BY THE CONTRACTOR.

C. THE BATTERY & POWER SYSTEMS ARE EQUIPPED WITH TEMPERATURE SENSORS & ARE PRE-PROGRAMMED WITH THE BATTERY VOLTAGE TEMPERATURE COMPENSATION & BATTERY THERMAL RUNAWAY MANAGEMENT FEATURES ENABLED PER AT&T MOBILITY'S SPECIFICATIONS.

D. DOOR(S) INTO EQUIPMENT ROOM MUST BE PROVIDED WITH APPROVED SIGNS AND APPROPRIATELY MARKED NFPA 704 PLACARD THAT STATE THE FOLLOWING:
- EQUIPMENT ROOM CONTAINS ENERGIZED BATTERY SYSTEMS
- EQUIPMENT ROOM CONTAINS ENERGIZED ELECTRICAL CIRCUITS
- BATTERY ELECTROLYTE SOLUTIONS WHERE PRESENT, ARE CORROSIVE LIQUIDS

E. CABINETS SHALL HAVE EXTERIOR LABELS THAT IDENTIFY THE MANUFACTURER AND MODEL NUMBER OF THE SYSTEM AND ELECTRICAL RATING (VOLTAGE AND CURRENT) OF THE CONTAINED BATTERY SYSTEM. SIGNS WITHIN THE CABINET SHALL INDICATE RELEVANT ELECTRICAL, CHEMICAL, AND FIRE HAZARDS.

PART 2 – PRODUCTS

2.1 GENERAL:

A. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, UL LISTED, AND FREE FROM DEFECTS.

B. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES (UL) LABEL OF APPROVAL AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.

C. ALL ITEMS, MATERIALS, AND EQUIPMENT SHALL BE ACCEPTABLE TO THE JURISDICTIONAL AUTHORITY AND SUITABLE FOR THE USE INTENDED.

D. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING OF GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED (10,000 AIC MINIMUM). CONTRACTOR SHALL VERIFY THAT AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PER THE GOVERNING JURISDICTION.

2.2 MATERIALS AND EQUIPMENT:

A. BATTERIES:

1. BATTERIES SHALL BE VRLA(VALVE REGULATED LEAD-ACID) BATTERIES COMPLYING WITH IFC 608.
2. CONTRACTOR TO INSTALL ENERSYS POWERSAFE SBS BATTERIES OR ENGINEERING APPROVED EQUIVALENT.

B. POWER PLANTS/CABINETS:

1. POWER PLANTS/CABINETS SHALL BE EQUIPPED WITH TEMPERATURE SENSORS AND ARE PRE-PROGRAMMED WITH THE BATTERY VOLTAGE TEMPERATURE COMPENSATION & BATTERY THERMAL RUNAWAY MANAGEMENT FEATURES ENABLED PER AT&T MOBILITY'S SPECIFICATIONS.
2. CONTRACTOR TO INSTALL VERTIV POWER PLANTS/CABINETS PER AT&T SPECIFICATIONS; AND COMPLYING WITH IFC 608 AND IMC 502.4.

C. BATTERY RACKS/CABINETS:

1. BATTERY RACKS/CABINETS SHALL BE EQUIPPED WITH TEMPERATURE SENSORS PER AT&T MOBILITY'S SPECIFICATIONS.
2. CONTRACTOR TO INSTALL VERTIV BATTERY RACKS/CABINETS PER AT&T SPECIFICATIONS; AND COMPLYING WITH IFC 608 AND IMC 502.4.

IFC 608 CODE ANALYSIS & COMPLIANCE INFORMATION

- SAFETY CAPS (IFC 608.2.2) – EXISTING POWERSAFE SBS 190F VRLA BATTERIES HAVE SELF-RESEALING SAFETY VENTS WITH FLASH ARRESTORS WHICH SATISFY THIS CODE REQUIREMENT.
- THERMAL RUNAWAY MANAGEMENT (IFC 608.3) – POWER PLANTS/CABINETS SHALL BE EQUIPPED WITH TEMPERATURE SENSORS AND ARE PRE-PROGRAMMED WITH THE BATTERY VOLTAGE TEMPERATURE COMPENSATION AND BATTERY THERMAL RUNAWAY MANAGEMENT FEATURES ENABLED. BATTERY RACKS/CABINETS SHALL BE EQUIPPED WITH TEMPERATURE SENSORS.
- SPILL CONTROL (IFC 608.5) – NOT REQUIRED FOR VRLA BATTERIES PER EXCEPTION.
- NEUTRALIZATION (IFC 608.5.2) – CONTRACTOR TO ENSURE THAT BATTERY SPILL CLEAN-UP KIT IS PROVIDED ON SITE, CAPABLE OF NEUTRALIZING A MINIMUM OF X GALLONS OF SPILLED ELECTROLYTE (WHERE X=3% OF THE TOTAL VOLUME CALCULATED IN THE ELECTROLYTE CALCULATIONS).
- VENTILATION (IFC 608.5.2) – EXHAUST FAN WILL LIMIT CONCENTRATION TO 1% VIA HYDROGEN SENSOR AND MAKEUP AIR INTAKE. HYDROGEN SENSOR TO ACTIVATE DAMPER/FAN AT 1% CONCENTRATION AND SIGNAL AN ALARM TO A MONITORED FACILITY AT 2% CONCENTRATION.
- SIGNAGE (IFC 608.7) – AT&T WILL PLACE UV-RESISTANT SIGNS ON THE EXTERIOR OF THE SHELTER DOOR CAPABLE OF WITHSTANDING THE HARSH SUNLIGHT OUTDOORS PER IFC 608.7.1. IN THE CASE THAT BATTERIES ARE INSTALLED IN A CABINET, CONTRACTOR SHALL PLACE SIGNAGE ON THE CABINET DOOR PER IFC 608.7.2.
- SEISMIC PROTECTION (IFC 608.8) – CONTRACTOR WILL ENSURE THAT THE NEW BATTERY RACKS HAVE THE REQUIRED BRACING TO MEET SEISMIC ZONE 4.
- SMOKE DETECTION (IFC 608.9) – SMOKE DETECTORS TO BE TIED INTO EXISTING ALARMING SYSTEMS. AT&T TO VERIFY OPERATION OF SMOKE DETECTOR/ALARM.

IMC 502.4 CODE ANALYSIS & COMPLIANCE INFORMATION

- (IMC 502.4) STATIONARY STORAGE BATTERY SYSTEMS.
  STATIONARY STORAGE BATTERY SYSTEMS, AS REGULATED BY SECTION 608 OF THE INTERNATIONAL FIRE CODE, SHALL BE PROVIDED WITH VENTILATION IN ACCORDANCE WITH IMC 502.4 AND SECTION 502.4.1 OR 502.4.2.

  EXCEPTION: LITHIUM-ION AND LITHIUM METAL POLYMER BATTERIES SHALL NOT REQUIRE ADDITIONAL VENTILATION BEYOND THAT WHICH WOULD NORMALLY BE REQUIRED FOR HUMAN OCCUPANCY OF THE SPACE.
- (SECTION 502.4.1) HYDROGEN LIMIT IN ROOMS.
  FOR FLOODED LEAD ACID, FLOODED NICKEL CADMIUM AND VRLA BATTERIES, THE VENTILATION SYSTEM SHALL BE DESIGNED TO LIMIT THE MAXIMUM CONCENTRATION OF HYDROGEN TO 1.0 PERCENT OF THE TOTAL VOLUME OF THE ROOM.
- (SECTION 502.4.2) VENTILATION RATE IN ROOMS
  CONTINUOUS VENTILATION SHALL BE PROVIDED AT A RATE OF NOT LESS THAN 1 CUBIC FOOT PER MINUTE PER SQUARE FOOT OF FLOOR AREA OF THE ROOM.
- (SECTION 502.4.3) SUPERVISION
  MECHANICAL VENTILATION SYSTEMS REQUIRED BY SECTION 502.4 SHALL BE SUPERVISED BY AN APPROVED CENTRAL, PROPRIETARY OR REMOTE STATION SERVICE OR SHALL INITIATE AN AUDIBLE AND VISUAL SIGNAL AT A CONSTANTLY ATTENDED ON-SITE LOCATION.

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PROJECT/PHASE NO:	129551/XXXX
DRAWN BY:	ASK
CHECKED BY:	JMH
RFDS:	1.00

REV	DATE	DESCRIPTION
0	07/19/24	ISSUED FOR CONSTRUCTION

PROFESSIONAL ENGINEER
LICENSED
P-17069
STATE OF IDAHO
PING JIANG

Jul 19, 2024

HAILEY
IDL04214
400 SOUTH MAIN STREET
HAILEY, ID 83333
CELL SITE RF MODIFICATIONS

SHEET TITLE
BATTERY SAFETY NOTES

SHEET NUMBER
GN-7

ROOF TOP MODIFICATION DRAWINGS

SITE INFORMATION

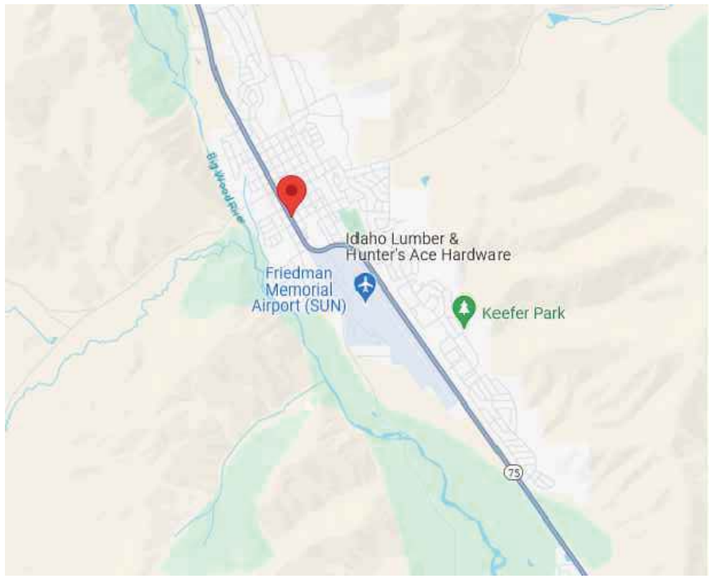
SITE NAME: HAILEY

SITE NUMBER: 99737 (IDL04214)

SITE ADDRESS:

400 S Main St

Hailey, ID 83333, Blaine County



PROJECT CONTACTS

1) PROPERTY OWNER
AP Wireless Investments

2) CONSTRUCTION MANAGER
Unknown

3) ENGINEER OF RECORD (EOR)
Shawn D. Cook, P.E.
(479)530-8627
Shawn.Cook@atowereng.com
4710 Portofino Dr.
Longmont, CO 80503

STRUCTURE INFORMATION

BUILDING TYPE:		COMMERCIAL STRUCTURE
ROOF HEIGHT:		38 FT
SITE LOCATION:	LAT:	43.5165
SITE LOCATION:	LONG:	-114.3126
ATE ID:	#:	019420240354

CODE COMPLIANCE

THIS REINFORCEMENT DESIGN IS BASED ON THE REQUIREMENTS OF TIA STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES USING:

CODE:	2018 IBC
BASIC WIND SPEED:	103
ICE THICKNESS:	0.00
WIND SPEED WITH ICE:	N/A
SERVICE LOAD WIND SPEED:	60
EXPOSURE CATEGORY:	C

DRAWINGS INCLUDED

SHEET NUMBER	DESCRIPTION
S-1	TITLE PAGE
S-2	MODIFICATION INSPECTION CHECKLIST
S-3	NOTES
S-4	ANTENNA FRAME
S-5	RRU FRAME

General Notes

Accelerated Tower Engineering
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(479) 530-8627
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Report Prepared For:

BLACK & VEATCH
4600 S. Syracuse Street, Suite 300
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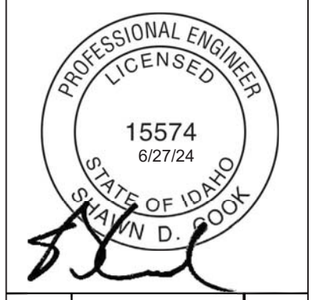
ENGINEER of RECORD SEAL



No.	Revision/Issue	Date
0	Construction	06/27/2024

Project Name and Address
USID#99737 (IDL04214)
HAILEY
400 S Main St
Hailey, ID 83333
Blaine County

Sheet Title
Title Page

Project 019420240354
Date 06/27/2024
Drawn By: BU
Checked By: SC
Sheet S-1

MODIFICATION INSPECTION NOTES

MI CHECKLIST

CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY EOR)	REPORT ITEM
PRE-CONSTRUCTION	
X	MI CHECKLIST DRAWING
NA	EOR APPROVED SHOP DRAWINGS
NA	FABRICATION INSPECTION
NA	FABRICATOR CERTIFIED WELD INSPECTION
X	MATERIAL TEST REPORT (MTR)
NA	FABRICATOR NDE INSPECTION
NA	NDE REPORT OF MONOPOLE BASE PLATE
X	PACKING SLIPS
ADDITIONAL TESTING AND INSPECTIONS:	
CONSTRUCTION	
X	CONSTRUCTION INSPECTIONS
NA	FOUNDATION INSPECTIONS
NA	CONCRETE COMP. STRENGTH AND SLUMP TESTS
NA	POST INSTALLED ANCHOR ROD VERIFICATION
NA	BASE PLATE GROUT VERIFICATION
NA	CONTRACTOR'S CERTIFIED WELD INSPECTION AND NDE REPORTS
NA	EARTHWORK: LIFT AND DENSITY
X	ON SITE COLD GALVANIZING VERIFICATION
NA	GUY WIRE TENSION REPORT
X	GC AS-BUILT DOCUMENTS
ADDITIONAL TESTING AND INSPECTIONS:	
POST-CONSTRUCTION	
X	MI INSPECTOR REDLINE OR RECORD DRAWING(S)
NA	POST INSTALLED ANCHOR ROD PULL-OUT TESTING
X	PHOTOGRAPHS
ADDITIONAL TESTING AND INSPECTIONS:	

NOTE: X DENOTES A DOCUMENT REQUIRED FOR THE MI REPORT
NA DENOTES A DOCUMENT THAT IS NOT REQUIRED FOR THE MI REPORT

GENERAL

THE MODIFICATION INSPECTION (MI) IS A VISUAL INSPECTION OF TOWER MODIFICATIONS AND A REVIEW OF CONSTRUCTION INSPECTIONS AND OTHER REPORTS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NAMELY THE MODIFICATION DRAWINGS, AS DESIGNED BY THE ENGINEER OF RECORD (EOR).

THE MI IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE MODIFICATION DESIGN ITSELF, NOR DOES THE MI INSPECTOR TAKE OWNERSHIP OF THE MODIFICATION DESIGN. OWNERSHIP OF THE STRUCTURAL MODIFICATION DESIGN EFFECTIVENESS AND INTEGRITY RESIDES WITH THE EOR AT ALL TIMES.

TO ENSURE THAT THE REQUIREMENTS OF THE MI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE MI INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PURCHASE ORDER (PO) IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY. IF CONTACT INFORMATION IS NOT KNOWN, CONTACT THE EOR OR CONSTRUCTION MANAGER.

MI INSPECTOR

THE MI INSPECTOR IS REQUIRED TO CONTACT THE GC AS SOON AS RECEIVING A PO FOR THE MI TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE MI CHECKLIST
- WORK WITH THE GC TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS

THE MI INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GC INSPECTION AND TEST REPORTS, REVIEWING THE DOCUMENTS FOR ADHERENCE TO THE CONTRACT DOCUMENTS, CONDUCTING THE IN-FIELD INSPECTIONS, AND SUBMITTING THE MI REPORT TO THE EOR.

GENERAL CONTRACTOR

THE GC IS REQUIRED TO CONTACT THE MI INSPECTOR AS SOON AS RECEIVING A PO FOR THE MODIFICATION INSTALLATION OR TURNKEY PROJECT TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE MI CHECKLIST
- WORK WITH THE MI INSPECTOR TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE MI INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS
- BETTER UNDERSTAND ALL INSPECTION AND TESTING REQUIREMENTS

THE GC SHALL PERFORM AND RECORD THE TEST AND INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MI CHECKLIST.

RECOMMENDATIONS

THE FOLLOWING RECOMMENDATIONS AND SUGGESTIONS ARE OFFERED TO ENHANCE THE EFFICIENCY AND EFFECTIVENESS OF DELIVERING AN MI REPORT:

- IT IS SUGGESTED THAT THE GC PROVIDE A MINIMUM OF 5 BUSINESS DAYS NOTICE, PREFERABLY 10, TO THE MI INSPECTOR AS TO WHEN THE SITE WILL BE READY FOR THE MI TO BE CONDUCTED.
- THE GC AND MI INSPECTOR COORDINATE CLOSELY THROUGHOUT THE ENTIRE PROJECT.
- WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE SIMULTANEOUSLY FOR ANY GUY WIRE TENSIONING OR RE-TENSIONING OPERATIONS.
- IT MAY BE BENEFICIAL TO INSTALL ALL TOWER MODIFICATIONS PRIOR TO CONDUCTING THE FOUNDATION INSPECTIONS TO ALLOW THE FOUNDATION AND MI INSPECTION(S) TO COMMENCE WITH ONE SITE VISIT.
- WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE DURING THE MI TO HAVE ANY DEFICIENCIES CORRECTED DURING THE INITIAL MI. THEREFORE, THE GC MAY CHOOSE TO COORDINATE THE MI CAREFULLY TO ENSURE ALL CONSTRUCTION FACILITIES ARE AT THEIR DISPOSAL WHEN THE MI INSPECTOR IS ON SITE.

CANCELLATION OR DELAYS IN SCHEDULED MI

IF THE GC AND MI INSPECTOR AGREE TO A DATE ON WHICH THE MI WILL BE CONDUCTED, AND EITHER PARTY CANCELS OR DELAYS, THE EOR SHALL NOT BE RESPONSIBLE FOR ANY COSTS, FEES, LOSS OF DEPOSITS AND/OR OTHER PENALTIES RELATED TO THE CANCELLATION OR DELAY INCURRED BY EITHER PARTY, NOR FOR ANY TIME (E.G. TRAVEL AND LODGING, COSTS OF KEEPING EQUIPMENT ON-SITE, ETC.). IF THE EOR CONTRACTS DIRECTLY FOR A THIRD PARTY MI, EXCEPTIONS MAY BE MADE IN THE EVENT THAT THE DELAY/CANCELLATION IS CAUSED BY WEATHER OR OTHER CONDITIONS THAT MAY COMPROMISE THE SAFETY OF THE PARTIES INVOLVED.

CORRECTION OF FAILING MI'S

IF THE MODIFICATION INSTALLATION WOULD FAIL THE MI ("FAILED MI"), THE GC SHALL WORK WITH THE EOR TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:

- CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT MI.
- OR, RE-ANALYZE THE MODIFICATION/REINFORCEMENT USING THE AS-BUILT CONDITION

REQUIRED PHOTOS

BETWEEN THE GC AND THE MI INSPECTOR THE FOLLOWING PHOTOGRAPHS, AT A MINIMUM, ARE TO BE TAKEN AND INCLUDED IN THE MI REPORT:

- PRE-CONSTRUCTION GENERAL SITE CONDITION
- PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION CONSTRUCTION/ERECTION AND INSPECTION
  - RAW MATERIALS
  - PHOTOS OF ALL CRITICAL DETAILS
  - FOUNDATION MODIFICATIONS
  - WELD PREPARATION
  - BOLT INSTALLATION
  - FINAL INSTALLED CONDITION
  - SURFACE COATING REPAIR
- POST CONSTRUCTION PHOTOGRAPHS
  - FINAL INFIELD CONDITION

PHOTOS OF ELEVATED MODIFICATIONS TAKEN ONLY FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.

General Notes

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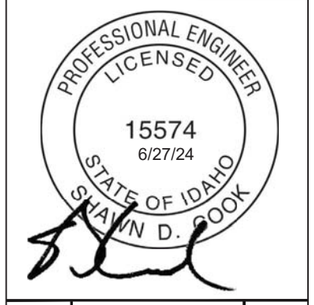
ENGINEER of RECORD SEAL



No.	Revision/Issue	Date
0	Construction	06/27/2024

Project Name and Address
USID#99737 (IDL04214)
HAILEY
400 S Main St
Hailey, ID 83333
Blaine County

Sheet Title
Modification Inspection Checklist

Project 019420240354
Date 06/27/2024
Drawn By: BU
Checked By: SC
Sheet S-2

GENERAL NOTES

1. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST BE EXPERIENCED IN THE PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED, THAT HE IS PROPERLY LICENSED, AND THAT HE IS PROPERLY REGISTERED TO DO THIS WORK IN THE STATE AND/OR COUNTY IN WHICH IT IS TO BE PERFORMED.
2. THE GENERAL NOTES AND TYPICAL DETAILS ARE APPLICABLE TO ALL PARTS OF THE STRUCTURE AND SHALL BE READ IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS AND PROJECT SPECIFICATIONS.
3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING APPROVALS FROM ALL AUTHORITIES HAVING JURISDICTION FOR THIS PROJECT AND SHALL NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY, OR CITY) ENGINEER 24 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
5. ERECT GUARDS AND BARRIERS PER APPLICABLE LABOR AND CONSTRUCTION SAFETY REGULATIONS.
6. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, POSSIBLE INTERFERENCES, AND DIMENSIONS BEFORE PROCEEDING WITH THE WORK. REPORT ANY AND ALL DISCREPANCIES TO THE ENGINEER OF RECORD (EOR) AND FIELD PERSONNEL IMMEDIATELY. ANY AND ALL FIELD CHANGES SHALL BE APPROVED AND DOCUMENTED BY THE EOR PRIOR TO FIELD IMPLEMENTATION.
7. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR TWO (2) YEARS FROM THE DATE OF COMPLETED CONSTRUCTION.
8. USE ONLY THE LATEST ISSUES OF ANY APPLICABLE CODES, STANDARDS, OR REGULATIONS MENTIONED IN THE FOLLOWING NOTES AND SPECIFICATIONS, UNO.
9. ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH ANSI, ASTM, ACI, TIA, AND AISC STANDARDS AS REFERENCED IN THE APPLICABLE CODE.
10. STRUCTURAL ELEMENTS SHOWN ON THESE DRAWINGS ARE DESIGNED IN ACCORDANCE WITH APPLICABLE BUILDING CODES/STANDARDS. ALL CONSTRUCTION, EXCEPT WHERE NOTED OTHERWISE, SHALL COMPLY WITH THOSE CODES/STANDARDS.
11. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS, AND IN CONFORMANCE WITH THE DRAWINGS. ANY AND ALL SUBSTITUTIONS MUST BE DULY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER OF RECORD PRIOR TO FABRICATION AND INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
12. ALL MANUFACTURER'S HARDWARE ASSEMBLY INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION PROCEDURES MEET THE REQUIREMENTS OF OSHA, THE OWNER, AND ALL OTHER APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS.
14. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIAL ACCESS, WITH THE RESIDENT LEASING AGENT.
15. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SAFEGUARD ALL EXISTING STRUCTURES OR BURIED SERVICES AFFECTED BY THIS CONSTRUCTION. CONTRACTOR IS ALSO RESPONSIBLE FOR TEMPORARILY RELOCATING ANY LINES OR STRUTS AS NECESSARY TO COMPLETE THE REQUIRED WORK.
16. STRUCTURAL DESIGN IS FOR THE COMPLETE CONDITION ONLY. THE CONTRACTOR MUST BE COGNIZANT THAT THE REMOVAL OF ANY STRUCTURAL COMPONENT OF AN EXISTING STRUCTURE HAS THE POTENTIAL TO CAUSE THE PARTIAL OR COMPLETE COLLAPSE OF THE STRUCTURE. ALL NECESSARY PRECAUTIONS MUST BE TAKEN TO ENSURE STRUCTURAL INTEGRITY, INCLUDING, BUT NOT LIMITED TO, ENGINEERING ASSESSMENT OF CONSTRUCTION STRESSES WITH INSTALLATION MAXIMUM WIND SPEED AND/OR TEMPORARY BRACING AND SHORING.
17. DO NOT SCALE DRAWINGS.
18. FOR THIS ANALYSIS AND MODIFICATION, THE STRUCTURE HAS BEEN ASSUMED TO BE IN GOOD CONDITION WITHOUT ANY DEFECTS. IF THE CONTRACTOR DISCOVERS ANY INDICATION OF AN EXISTING STRUCTURAL DEFECT, CONTACT THE ENGINEER OF RECORD IMMEDIATELY.
19. MODIFICATION WORK SHALL BE COMPLETED IN CALM WIND CONDITIONS / OR APPROPRIATE WIND SPEED FOR THE TYPE OF MODIFICATION WORK TO BE INSTALLED.
20. THE CLIMBING FACILITIES, SAFETY CLIMB AND ALL PARTS THEREOF SHALL NOT BE IMPEDED, MODIFIED OR ALTERED WITHOUT THE EXPRESS APPROVAL OF THE ENGINEER OF RECORD.

WELDING NOTES

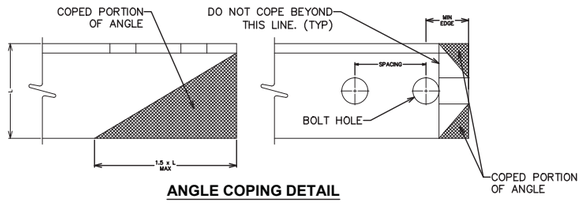
1. ALL WELDING SHALL BE IN ACCORDANCE WITH THE AWS D1.1/D1.1M, "STRUCTURAL WELDING CODE-STEEL".
2. ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS.
3. ALL ARC WELDING SHALL BE DONE IN ACCORDANCE WITH A, "CUTTING AND WELDING SAFETY PLAN" AND AWS D1.1 (LATEST EDITION). THE CONTRACTOR IS RESPONSIBLE FOR THE "CUTTING AND WELDING PLAN". THIS SHALL INCLUDE A CERTIFIED WELDING INSPECTOR (CWI) FOR ACCEPTANCE OR REJECTION OF ALL WELDING OPERATIONS, PRE-DURING-POST, USING THE ACCEPTANCE CRITERIA OF AWS D1.1. THE CWI SHALL WORK WITH THE GC ON THE LEVEL OF INTERACTION NEEDED TO CONDUCT THE WELDING INSPECTION. THE CERTIFIED WELDING INSPECTION IS THE RESPONSIBILITY OF THE GC.
4. FOR ALL WELDING, USE E70XX ELECTRODES FOR SMAW PROCESS AND E7XT-XX ELECTRODES FOR FCAW PROCESS, UNO.
5. SURFACES TO BE WELDED SHALL BE FREE FROM SCALE, SLAG, RUST, MOISTURE, GREASE OR ANY OTHER FOREIGN MATERIAL THAT WOULD PREVENT PROPER WELDING. GRIND THE SURFACE ADJACENT TO THE WELD FOR A DISTANCE OF 2" MINIMUM ALL AROUND. ENSURE BOTH AREAS ARE 100% FREE OF ALL GALVANIZING.
6. DO NOT WELD IF THE TEMPERATURE OF THE STEEL IN THE VICINITY OF THE WELD AREA IS BELOW 0° F. WHEN THE TEMPERATURE IS BETWEEN 0° F AND 32° F, PREHEAT AND MAINTAIN THE STEEL IN THE VICINITY OF THE WELD AREA AT 70° F DURING THE WELDING PROCESS.
7. DO NOT WELD ON WET OR FROST-COVERED SURFACES & PROVIDE ADEQUATE PROTECTION FROM HIGH WINDS.

STRUCTURAL NOTES

1. DESIGN, FABRICATION, ERECTION, ALTERATION AND MAINTENANCE SHALL CONFORM TO THE FOLLOWING, UNLESS NOTED OTHERWISE (UNO).
   A. TIA-222: STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS
   B. TIA-1019-A: INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS
   C. AISC: MANUAL OF STEEL CONSTRUCTION
2. ALL STRUCTURAL ELEMENTS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS, UNO.
   A. STRUCTURAL STEEL, ASTM A36 (FY = 36KSI)
   B. STRUCTURAL STEEL PIPE, A53 GRADE B (FY = 35KSI)
   C. STRUCTURAL STEEL TUBING, ASTM A500 GRADE B (FY = 46KSI)
   D. ANCHOR BOLTS, HILTI KWIK BOLT TZ EXPANSION ANCHORS
   E. U-BOLTS, A307 GRADE A
3. HOLES SHALL NOT BE FLAME CUT THRU STEEL UNLESS APPROVED BY THE ENGINEER OF RECORD.
4. ANCHOR BOLTS WILL BE INSTALLED PER THE MANUFACTURES SPECIFICATIONS AND RECOMMENDATIONS..
5. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
6. FASTENERS SHALL BE INSTALLED IN PROPERLY ALIGNED HOLES AND TIGHTENED BY ONE OF THE METHODS DESCRIBED IN THE AISC MANUAL OF STEEL CONSTRUCTION, SUBSECTION 8.2.1 THROUGH 8.2.4.
7. HOT-DIP GALVANIZE ALL ITEMS, UNO.
   GALVANIZE PER ASTM A123, ASTM A153/A153M OR ASTM A653 G90, AS APPLICABLE.
8. AFTER FINAL INSPECTION, ALL EXPOSED STRUCTURAL STEEL AS THE RESULT OF THIS SCOPE OF WORK INCLUDING WELDS, FIELD DRILLED HOLES, AND SHAFT INTERIORS (WHERE ACCESSIBLE), SHALL BE CLEANED AND (2) COATS OF ZRC-BRAND (OR APPROVED EQUAL BY EOR) ZINC-RICH COLD GALVANIZING APPLIED BY BRUSH IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS. PHOTO DOCUMENTATION IS REQUIRED TO BE SUBMITTED TO THE MI INSPECTOR.
9. ALL FASTENERS ARE REQUIRED TO HAVE A LOCKING DEVICE INSTALLED.

FIBERGLASS REINFORCED PLASTIC (FRP) NOTES

1. ALL FRP CONNECTIONS TO OTHER FRP MEMBERS AND STEEL MEMBERS SHALL BE IN ACCORDANCE WITH THE MANUFACTURES SPECIFICATIONS AND RECOMMENDATIONS, UNO.
2. ALL FRP DESIGN CALCULATIONS WERE BASED ON THE MATERIAL STRENGTH PROPERTIES OF THE STRONGWELL EXTREN SERIES 500 STRUCTURAL SHAPES AND STRONGWELL FIBERBOLTS. ANY SUBSTITUTE FRP MANUFACTURERS PRODUCTS MUST MEET OR EXCEED THESE MATERIAL STRENGTH PROPERTIES AND MUST HAVE EOR APPROVAL.
3. FRP ADHESIVE SHALL COMPLY WITH ONE OF THE FOLLOWING OR HAVE EOR APPROVAL:
   3.1. EPON 828 Epoxy Resin
   3.2. Dow D.E.R. 331 Epoxy Resin
4. FOLLOW MANUFACTURES SPECIFICATIONS AND RECOMMENDATIONS FOR THE APPLICATION OF EPOXY RESIN.



ANGLE COPING DETAIL

GENERAL BOLT INFORMATION

BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE	SPACING
3/8"	7/16"	7/16" x 9/16"	9/16"	1 1/8"
1/2"	9/16"	9/16" x 3/4"	3/4"	1 1/2"
5/8"	11/16"	11/16" x 7/8"	7/8"	1 7/8"
3/4"	13/16"	13/16" x 1"	1"	2 1/4"
7/8"	15/16"	15/16" x 1 1/8"	1 1/8"	2 5/8"
1"	1 1/16"	1 1/16" x 1 5/16"	1 1/4"	3"

DETAIL DRAWINGS SHALL GOVERN OVER ANY VARIANCE FROM THIS SHEET

General Notes

Accelerated Tower Engineering
4710 Portofino Drive
Longmont, CO 80503
(479) 530-8627
www.atowereng.com

Report Prepared For:

BLACK & VEATCH
4600 S. Syracuse Street, Suite 300
Denver, CO 80237
(303) 264-0512

ENGINEER of RECORD SEAL

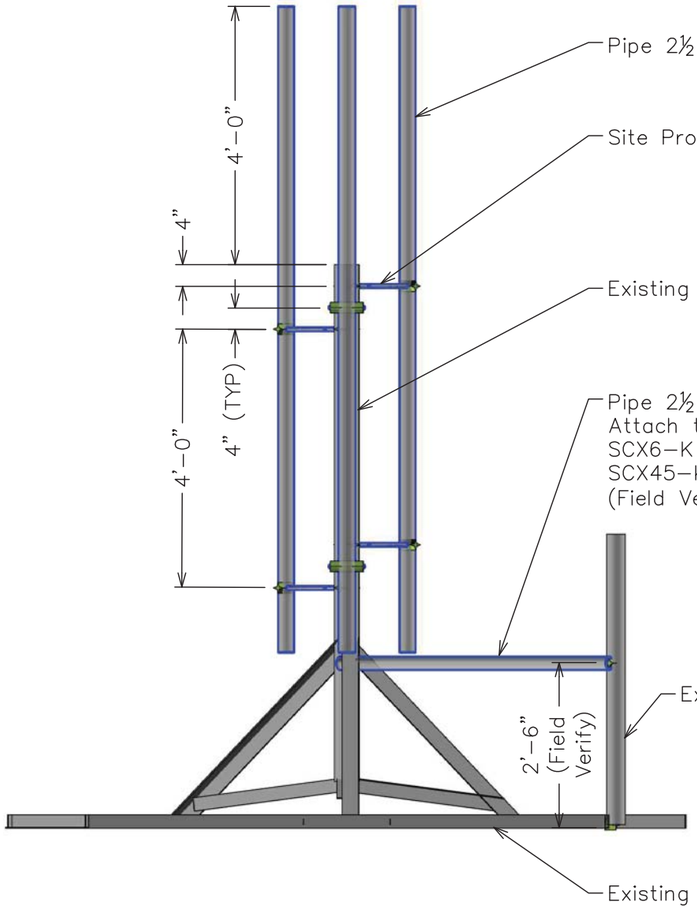
PROFESSIONAL ENGINEER LICENSED
15574
6/27/24
STATE OF IDAHO
SHAWN D. COOK

No.	Revision/Issue	Date
0	Construction	06/27/2024

Project Name and Address
USID#99737 (IDL04214)
HAILEY
400 S Main St
Hailey, ID 83333
Blaine County

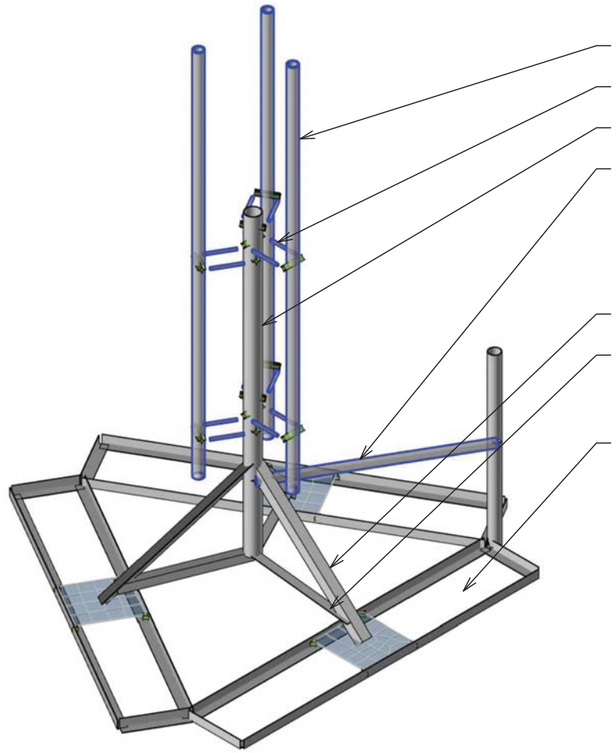
Sheet Title
Notes

Project 019420240354
Date 06/27/2024
Drawn By: BU
Checked By: SC
Sheet S-3



Note(s):
1. Remove all existing antenna mount pipes and standoffs.
2. Remove all existing RRU unistruts.
3. Remove all excess ballast from the roof.

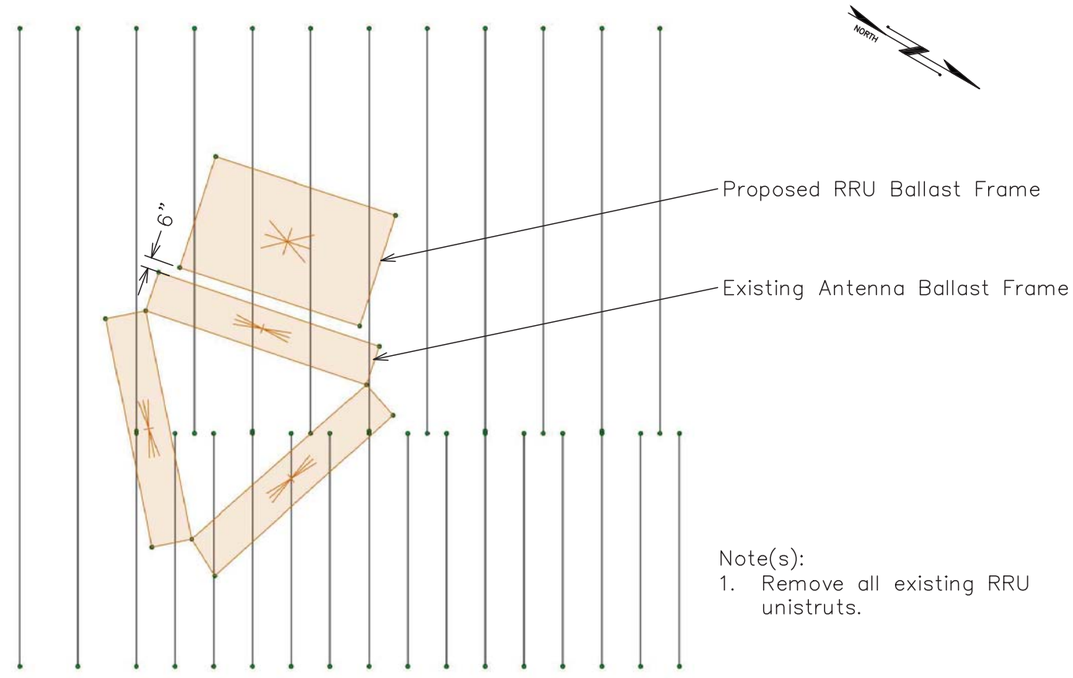
Elevation View (Antenna Frame)



The ballast frame shall have 1824lb of ballast (48 – 16"x8"x8" standard–core concrete ballast blocks or approved equivalent) evenly distributed in the ballast trays.

Note(s):
1. Remove all existing antenna mount pipes and standoffs.
2. Remove all existing RRU unistruts.
3. Remove all excess ballast from the roof.

Isometric View (Antenna Frame)



Note(s):
1. Remove all existing RRU unistruts.

Plan View (Roof Layout)

General Notes

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ENGINEER of RECORD SEAL

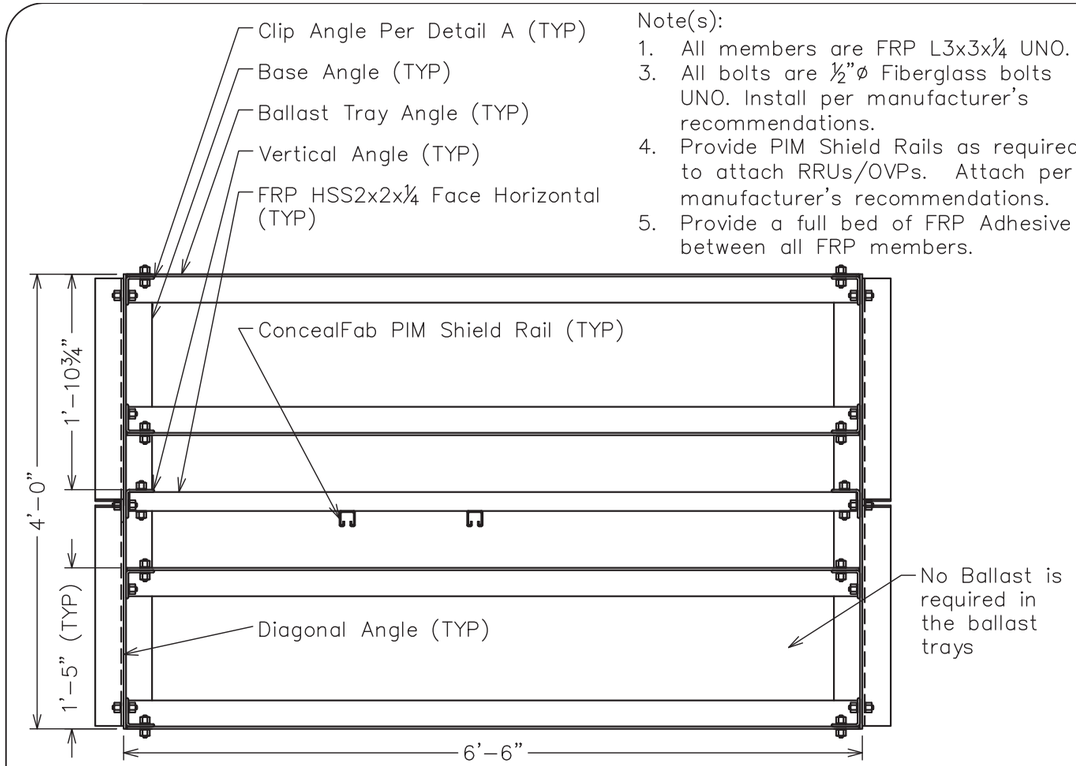
PROFESSIONAL ENGINEER LICENSED
15574
6/27/24
STATE OF IDAHO
SHAWN D. COOK

No.	Revision/Issue	Date
0	Construction	06/27/2024

Project Name and Address
USID#99737 (IDL04214)
HAILEY
400 S Main St
Hailey, ID 83333
Blaine County

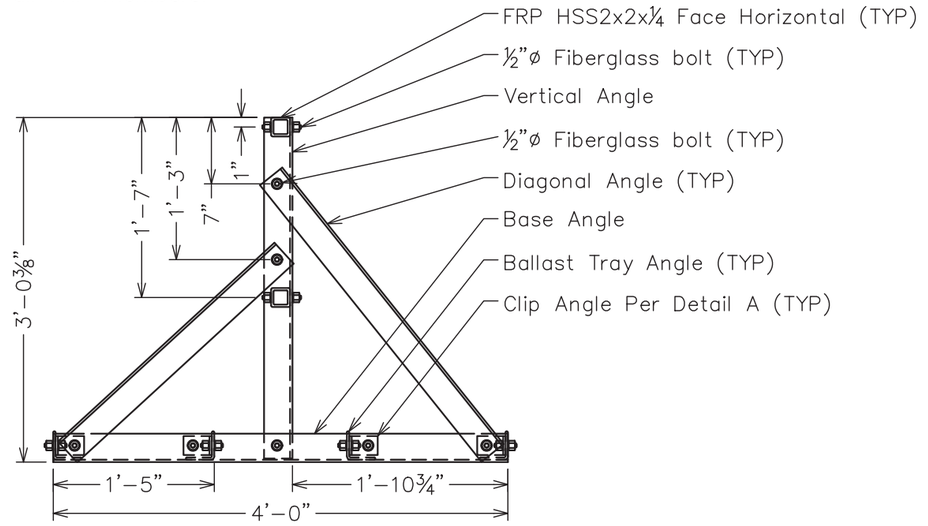
Sheet Title
Antenna Frame

Project 019420240354
Date 06/27/2024
Drawn By: BU
Checked By: SC
Sheet S-4



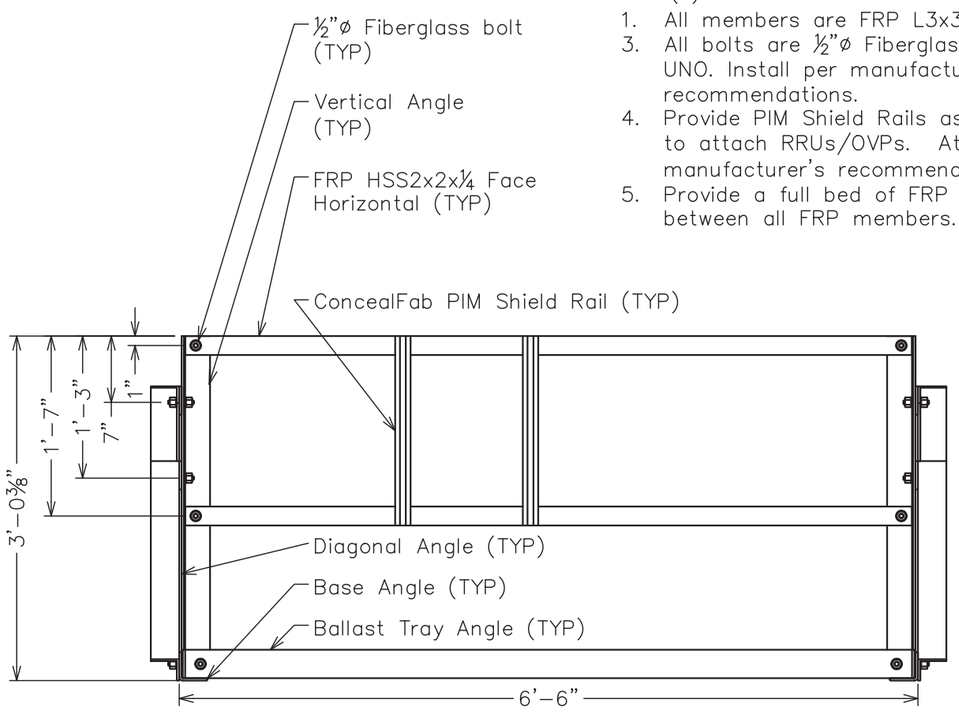
Note(s):
1. All members are FRP L3x3x¼ UNO.
3. All bolts are ½"ø Fiberglass bolts UNO. Install per manufacturer's recommendations.
4. Provide PIM Shield Rails as required to attach RRUs/OVPs. Attach per manufacturer's recommendations.
5. Provide a full bed of FRP Adhesive between all FRP members.

Plan View (RRU Frame)



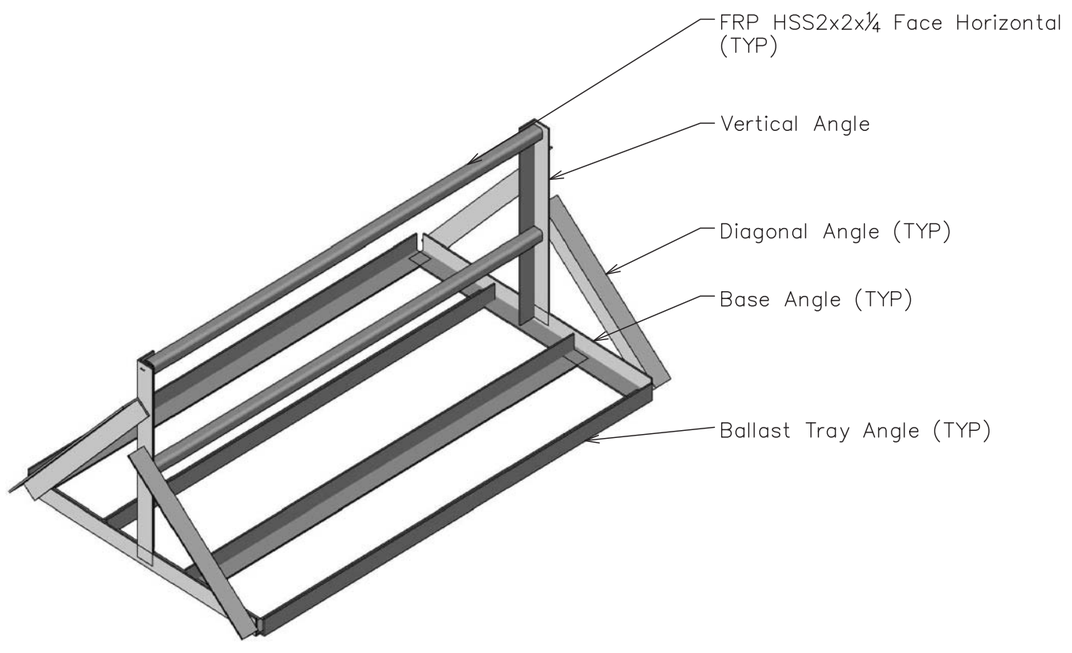
Note(s):
1. All members are FRP L3x3x¼ UNO.
3. All bolts are ½"ø Fiberglass bolts UNO. Install per manufacturer's recommendations.
4. Provide PIM Shield Rails as required to attach RRUs/OVPs. Attach per manufacturer's recommendations.
5. Provide a full bed of FRP Adhesive between all FRP members.

Side View (RRU Frame)



Note(s):
1. All members are FRP L3x3x¼ UNO.
3. All bolts are ½"ø Fiberglass bolts UNO. Install per manufacturer's recommendations.
4. Provide PIM Shield Rails as required to attach RRUs/OVPs. Attach per manufacturer's recommendations.
5. Provide a full bed of FRP Adhesive between all FRP members.

Front View (RRU Frame)



Isometric View (RRU Frame)

General Notes

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ENGINEER of RECORD SEAL

PROFESSIONAL ENGINEER LICENSED
15574
6/27/24
STATE OF IDAHO
SHAWN D. COOK

No.	Revision/Issue	Date
0	Construction	06/27/2024

Project Name and Address
USID#99737 (IDL04214)
HAILEY
400 S Main St
Hailey, ID 83333
Blaine County

Sheet Title
RRU Frame

Project 019420240354
Date 06/27/2024
Drawn By: BU
Checked By: SC
Sheet S-5

SLIP SHEET DE130

Project Information

Site Name:	HAILEY
FA Location:	10129884
USID:	99737
Site ID:	IDL04214
Drone Flight Type:	
Date:	2/28/2024

Region:	WEST
Market:	RMR
Submarket:	IDAHO
RFDS ID:	RFDS-6226
Site Acquisition Supplier:	SMARTLINK GROUP
Civil Supplier:	BV / OCI

IWM Job Number	PACE Job Number	Oracle PTN	National Program	Job Scope	Job Status	Primary/Secondary	Spectrum
WSUTH0033680	MRUTH061978	3771A1A7P3	Cell Site RF Modifications	LTE 1C RRH Swap	Active	PARENT	700 MHz OFFSET LOWER_B+C (1
WSUTH0033834	MRUTH061941	3771A1A92H	5G NR Radio	5G NR 1SR CBAND	Active	CHILD	CBAND 4 GHz C1+C2+C3+C4 (80M
WSUTH0035351	MRUTH063013	3771A1ADVE	5G NR Radio	5G NR 1SR CBAND	Active	CHILD	DoD 3.45 GHz C+D+E+F (40 MHz)
WSUTH0033951	MRUTH061736	3771A1A917	Cell Site RF Modifications	5G NR RRH Swap	Active	CHILD	PCS MHz D+E+F+C3 (20Mhz) E-U
WSUTH0034050	MRUTH062501	3771A1A7S6	LTE 2C	Site Overlay.LTE.2nd Carrier	Active	CHILD	700 MHz UPPER D (10 MHz) Band
WSUTH0033730	MRUTH061452	3771A1A91P	LTE Software Carrier	5G NR Software RRH Swap	Active	SOFTWARE	AWS1_3 C+D+J (20 MHz) Band 4_

Scope of Work Summary

Nokia Market Modernization

*SIAD: HAS A D2 SIAD THAT IS COMMISIONED

BV CAN RUN SA

Site Information

Latitude:	43.5164689
Longitude:	-114.31255
Structure Type:	Rooftop
Site Access Information:	Vicktoria "Vika" Popova 858.564.3384, vpopova@apwip.com

Electric Utility Company:	Idaho Power Company
Gas Utility Company:	
Local Exchange Carrier (LEC):	
Equipment Location (Indoor, Outdoor, Shelter, WUC, etc.):	

Generator Site (Yes/No):	No
Site Backup Type:	YES, 50' REQUIRED FOR CRANE/LIFT HEIGHT
Crane (Yes/No):	
Other:	

Previous Structural Analysis	
Vendor:	Trileaf
Date:	3/22/2023
Percentage:	96%
Pass/Fail:	Pass
Notes:	

Previous Mount Analysis			
Vendor:	Trileaf	Type:	Ballast Frame on Roof
Date:	9/14/2022	Model:	
Percentage:	95%	Length:	
Pass/Fail:	Pass	Azimuth:	15/135/225
Mount Replacement or Modification Required:			
Sector or Mount Rotation Required:			

Notes:	

Microwave (Ops dispatch verification may be required)

Type	Quantity	RAD	Size	Status (Active or Inactive)	LMPS Agreement/Amendment ID	Target/Drain
Unknown	1	41'	2'	Unknown		

Microwave Cont.	
Is there an active ETTCS job?	
Other:	

Leasing, Zoning, and Permitting

General Lease Information	
Street Address Per Lease:	**400 South Main Street, Hailey, ID**
Landlord Power or AT&T Owner Service:	
Landlord Site Name:	**Hill1-L357235-AT&T**
Landlord Site Number:	
Known Landlord Issues:	**Collo app required**
Current Project Leasing Disposition (Consent/Notice/Amendment):	Amendment
Third Party:	
Other:	(i.e. Bird Site, Tribal, etc.)

Structure - Site Lease Information	
Structure Landlord:	**AP Wireless**
Structure Landlord Contact Information:	**Vicktoria "Vika" Popova 858.564.3384, vpopova@apwip.com**
LMPS Agreement/Amendment ID:	**113502**
Original Lease Commencement Date:	**11/17/2000**
Number of Amendments:	**5**
Effective Date of Last Agreement/Amendment:	**1/25/2023**
Current Lease Termination Date:	**11/30/2045**
Lease Term Renewal - Automatic or Written Notice?	**Automatic**
RER - Tower Equipment: Existing Lease Space in Square Inch Measurement:	**N/A - CD's used as lease exhibit**
Lease Provision for AT&T's Permitted Use/Modification Rights:	
RAD Center:	41'
Current Rent:	$3,723.77

Ground - Site Lease Information	
Ground Landlord:	Same As Structure
Ground Landlord Contact Information:	
LMPS Agreement/Amendment ID:	
Original Lease Commencement Date:	
Number of Amendments:	
Effective Date of Last Agreement/Amendment:	
Current Lease Termination Date:	
Lease Term Renewal - Automatic or Written Notice?	
RER - Ground Space: Existing Lease Space in Square Foot Measurement:	
Lease Provision for AT&T's Permitted Use/Modification Rights:	
Additional Ground Space Needed?	
Current Rent:	

Zoning	
Structure Aesthetics:	All exposed equipment needs to be painted a non-reflective grey
Jurisdiction:	City of Hailey
Zoning Disposition (BP Only, ZN required, etc.):	ZN and BP Required
Are Current Site Conditions in Compliance:	Yes
Other:	CUP Issued for WCF so any changes may require a hearing

Zoning Cont. (Answer Yes/No with Details)	
Jurisdiciton Code Conforms with Section 6409:	No because of CUP
CUP/SUP? Verify current CUP/SUP effective date and renewal date:	Effecitve 4/8/2013
Additional ground space, Rooftop, Antenna Relocation Trigger CUP/SUP:	Yes
Ground, Structure or Rooftop Set Back Requirements / height limitations / slim line / radome requirements:	façade
If not currently stealth, will new stealth be required? (Add Code Language):	No

Zoning Cont. (Answer Yes/No with Details)	
Is stealth or special structure type required for New Builds?:	
Space is available in existing stealthing for additional antennas:	N/A
Space is available in existing stealthing for additional RRUs and conduit:	N/A
[illegible]	BP will be required
[illegible]	CUP application will be required to determine if new equipment comply with CUP

Permitting	
Jurisdiction:	City of Hailey
Most Recent Final BP (Include Number on File):	Permit #: 22-231
Municipal Permitted Use Terms:	Need licensed contractor information to release permit
If RRU's are relocated from Ground to tower, would it be reasonable to anticipate structural upgrades being necessary?	N
Known BP Issues:	None

Compliance	
FCC/ASR Number:	
Existing EME Signage & Barriers:	
EME Required?	Yes - Rooftop Site
Compliance - Low/Med/High:	
Other:	

Real Estate Rights Summary	
SQIN/HWM Contracted:	N/A
SQIN/HWM Existing:	
SQIN/HWM Proposed:	
Notes:	CD's used as lease exhibit

RF Information (Leased = Leased, Existing = Drone, Proposed Design = RFDS)

Leased Antennas

Type	Qty	RAD	Sector/Position
NNHR-65C-R6-UPM	3	41	A1, B1, C1
C-Band project not done. Never installed			

Existing Antennas

Type	Qty	RAD	Sector/Position
Remove - XXQLH-654L8H8-IVT	3	41	A1
			A2
			A3
			A4
Remove - XXQLH-654L8H8-IVT	3	41	B1
			B2
			B3
			B4
Remove - XXQLH-654L8H8-IVT	3	41	C1
			C2
			C3
			C4

Proposed Design Antennas

Type	Qty	RAD	Sector/Position
PROPOSED - NNH4-65C-R6-UPM / AIR6472 B77G/B77	1	41	A1
PROPOSED - NNH4-65C-R6-UPM / AIR6472 B77G/B77	1	41	B1
PROPOSED - NNH4-65C-R6-UPM / AIR6472 B77G/B77	1	41	C1

Leased Radios

Type	Qty	RAD	Sector/Position
B25/66 320W AHFIB	3	41	1 per sector
B12/14/29 370 W AHLBBA	3	41	1 per sector
AEQK	3	41	1 per sector
AHLBBA & AEQK never installed			

Existing Radios

Type	Qty	RAD	Sector/Position
Remove - B25/66 320W AHFIB	3	41	A1, B1, C1
Remove - RRH2x40W_7L Retuned UHLB	3	41	A1
Remove - RRH2x40W_7L UHLA	3	41	B1, C1

Proposed Design Radios

Type	Qty	RAD	Sector/Position
PROPOSED - 4490 B5/B12A	3	41	A1, B1, C1
PROPOSED - AIR6472 B77G/B77M	3	41	A1, B1, C1
PROPOSED - 4890 B25/B66	3	41	A1, B1, C1

Leased TMAs

Type	Qty	RAD	Sector/Position

Existing TMAs

Type	Qty	RAD	Sector/Position
Remove - ETW190VS12UB_E15S09	3		A1, B1, C1

Proposed Design TMAs

Type	Qty	RAD	Sector/Position
None			

Leased Diplexers

Type	Qty	RAD	Sector/Position

Existing Diplexers

Type	Qty	RAD	Sector/Position
NA			

Proposed Design Diplexers

Type	Qty	RAD	Sector/Position
NA			

Leased Duplexers/Combiners

Type	Qty	RAD	Sector/Position

Existing Duplexers/Combiners

Type	Qty	RAD	Sector/Position
NA			

Proposed Design Duplexers/Combiners

Type	Qty	RAD	Sector/Position
NA			

Leased Filters

Type	Qty	RAD	Sector/Position

Existing Filters

Type	Qty	RAD	Sector/Position
NA			

Proposed Design Filters

Type	Qty	RAD	Sector/Position
NA			

Surge Protection Information

Existing Ground Surge

Type	Qty
REMAIN - DC6-48-60-RM	1

Proposed Ground Surge

Type	Qty
REMAIN - DC6-48-60-RM	1
PROPOSED - DC12-48-60-RM	1

Final Ground Surge

Type	Qty
REMAIN - DC6-48-60-RM	1
PROPOSED - DC12-48-60-RM	1

Leased Tower Surge (Squids)

Type	Qty	RAD	Sector/Position
DC6-48-60-18-8C-EV	1		

Existing Tower Surge (Squids)

Type	Qty	RAD	Sector/Position
REMAIN - DC6-48-60-18-8C	1	41	

Proposed Design Tower Surge (Squids)

Type	Qty	RAD	Sector/Position
REMAIN - DC6-48-60-18-8C	1	41	
PROPOSED - DC9-48-60-24-PC16-EV	1	41	

Cable/Feedline Information

Leased Fiber Trunks	
Type	Qty
24 Pair	1

Existing Fiber Trunks	
Type	Qty
REMAIN - 18 PAIR	1

Proposed Design Fiber Trunks	
Type	Qty
REMAIN - 18 PAIR	1
PROPOSED - L9BB-235-XXXX 24 PAIR	1

Leased DC Power Trunks		
Type	Qty	Gauge
#6 Power	1	

Existing DC Power Trunks		
Type	Qty	Gauge
REMAIN - WR-VG86ST-BRD	2	#8

Proposed Design DC Power Trunks		
Type	Qty	Gauge
REMAIN - WR-VG86ST-BRD	2	#8
PROPOSED - WR-VG66ST-BRD	1	#6

Leased Coax	
Type	Qty

Existing Coax	
Type	Qty

Proposed Design Coax	
Type	Qty

BBU & Power Information

BBU & Power Summary:	PROPOSED: (1) GENERIC E\\\ BBU @DRM PROPOSED: (1) NETSURE 7100 INDOOR POWER SYSTEM, -48 VDC/-58 VDC NEQ.53545 PROPOSED: (8) VERTIV -58V CONVERTER NEQ.53011 PROPOSED: (1) VERTIV -48 TO +24 CONVERTER KIT CEQ.57464 (CIENA ON FUSE PANEL) PROPOSED: (8) VERTIV -48V RECTIFIER R48-2000e3 NEQ.15930 PROPOSED: (1) VERTIV INDOOR BATTERY RACK NEQ.20326 (MOUNTED IN PLACE OF EXISTING BATTERY RACK)

Final BBU & Card Information	
Type	Qty
Generic E\\\ BBU @ DRM. Need to determine BBU requirements closer to CX	1

Existing Power Plant	
Type	Qty
REMOVE - ALPHA +24	1

Proposed Power Plant	
Type	Qty
NETSURE 7100 INDOOR POWER SYSTEM, -48 VDC/-58 VDC NEQ.53545	1

Final Power Plant	
Type	Qty
NETSURE 7100 INDOOR POWER SYSTEM, -48 VDC/-58 VDC NEQ.53545	1

Existing Converter Shelf & Converters	
Type	Qty
REMOVE - CORDEX	4

Proposed Converter Shelf & Converters	
Type	Qty
VERTIV -58V CONVERTER NEQ.53011	8
VERTIV -48 TO +24 CONVERTER KIT CEQ.57464	1

Final Converter Shelf & Converters	
Type	Qty
VERTIV -58V CONVERTER NEQ.53011	8
VERTIV -48 TO +24 CONVERTER KIT CEQ.57464	1

Existing Rectifiers	
Type	Qty
REMOVE - CORDES	6

Proposed Rectifiers	
Type	Qty
VERTIV -48V RECTIFIER R48-2000e3 NEQ.15930	8

Final Rectifiers	
Type	Qty
VERTIV -48V RECTIFIER R48-2000e3 NEQ.15930	8

Existing Batteries	
Type	Qty
PLY12V185FT - INST 06/26/23 CONDUCT: 95%	16

Proposed Batteries	
Type	Qty
VERTIV INDOOR BATTERY RACK NEQ.20326	1

Final Batteries	
Type	Qty
PLY12V185FT - INST 06/26/23 **(Converted TO 4 Strings -48V)**	4 Strings (16)
VERTIV INDOOR BATTERY RACK NEQ.20326	1

Existing Breakers	
Type	Qty
TBD at materials scoping stage	

Proposed Breakers	
Type	Qty
TBD at materials scoping stage	

Final Breakers	
Type	Qty
TBD at materials scoping stage	

Additional Ground, Compound, and Tower Top Information

Site Type (Indoor/Outdoor/Other):	
Foundation Type:	
Shelter Port Penetrations:	
Ice Bridge Details:	
GPS Location Correct:	

Exterior Ground Bar Details:	
DMarc Location - Telco Details:	
DMarc Location - AC Power Details:	
Cable Ladder Existing:	
Port Holes Immediately Above/Below AT&T Centerline (Monopole):	

Other:	

Generator Information

Generator Make:	
Generator Model:	
Generator Location (Indoor/Outdoor):	

Generator distance between tank and generator acceptable?	
Generator Pad Type:	
Generator Fuel Type:	

Generator Size:	
Generator Fuel Capacity/Size:	

Build Standards (Is there an issue? Yes/No)

Lease Envelope, Mount, and Antenna Placement and Alignment	
Lease Envelope (Free from Potential Encroachment):	NO
Antenna Centerline (RAD) Accuracy:	NO
Antenna Tip Height:	NO
Mount Standards (Maximum Antenna Count):	NO
Mount Alignment Accuracy:	NO
Antenna Vertical Mounting Pipe Placement on Horizontal Mounting Pipe:	NO
Guy Wire Azimuths:	NO

Antenna Placement and Alignment	
Antenna Horizontal and Corner Spacing:	YES. CORNER TO CORNER AND 12" INTERSECTOR SPACING EXCEPTION APPROVED BY AT&T AT DRM.
Antenna Face Plane:	
Antenna Azimuth (Aiming) Accuracy:	no
Antenna Skew to Mount Alignment Accuracy:	no
Antenna Mechanical Downtilt Accuracy:	no
Antenna Plumb (Roll) Tolerance:	no
Other:	no

Notes:
Mount Adjustments per DRM - **Replacement Required: N/A PER DRM** **Modification Required: N/A PER DRM** **Sector or Mount Rotation Required:N/A PER DRM** **Remove ballast mount nearby the AT&T sled mount. Landlord approved 2/20/2024 per DRM.**

Ancillary and High Band Equipment Placement	
Ancillary Equipment Placement (Distance Behind Horizontal Mounting Pipe):	Yes. Per DRM, AT&T approved the proximity of the RRHs to the antennas. Landlord controlled locations. replace the existing steel unistrut with Concealfab PIM friendly unistrut
3 GHz AAS & mmWave Vertical Radio Separation:	NO
Vertical Antenna Separation:	NO
Wall Mounted Equipment Placement Vertical to Antennas:	NO
Wall Mounted Equipment Placement Horizontal to Antennas:	NO

Rooftops, Stealthing, and Microwave Dishes	
Antenna Vertical Clearance Rooftop and/or Obstacle:	YES. ROOFTOP CLEARANCE EXCEPTION APPROVED BY AT&T AT DRM
Antenna Spacing from FRP/Screening (Stealthing/Structure):	NO
Metallic Obstruction Objects/Structures:	Yes. Per DRM, AT&T approved many HVAC units on the rooftop in hte pathway of the antennas
Microwave Dish Placement Vertical to Antennas:	Yes. Per DRM, AT&T approved the dish that is mounted to the base mount below the antenna
Microwave Dish Placement Horizontal to Antennas:	NO

Special Considerations (Is there an issue? Yes/No)

Microwave	
Microwave Dish Installed on the Mount?	YES
Microwave Dish Placement - Horizontal to Antennas (Stay behind Antenna Face Plane):	NO
Microwave Dish Placement - Vertical to Antennas (Stay behind Antenna Face Plane):	Yes. Per DRM, AT&T approved the dish that is mounted to the base mount below the antenna

Wall Mount	
Antenna(s) and/or Equipment Wall-Mounted:	NO
Wall-Mounted Equipment Placement - Horizontal to Antenna:	NO
Wall-Mounted Equipment Placement - Vertical to Antennas:	NO

FRP/Screening or Concealment	
Does the site have or require FRP / Screening or Concealment?	NO
Are there metallic structures or fasteners used as part of the FRP / Screening or Concealment?	NO
Antenna Spacing from FRP / Screening (Stealthing and/or Structure):	NO

Rooftop, Utility, Water Tank, Billboard, Parking Garage	
Antenna Vertical Clearance - RT and/or Obstacle:	Yes. Per DRM, AT&T approved the distance across the rooftop for two sectors
Metallic Obstruction Object/Structure Size:	Yes. Ask landlord if we can remove an empty pipe mount on the roof near AT&T antennas.

Other:	Remove ballast mount nearby the AT&T sled mount. Landlord approved 2/20/2024 per DRM.; ROOFTOP SAFETY TIE OFFS REQUIRED TO BE INSTALLED BY JX

Approvals

AT&T Site Acquisition PM:	
Site Acquisition Supplier PM:	
AT&T RF Design Engineer:	

AT&T Equipment Engineer:	
AT&T Construction PM:	
Construction Supplier PM:	

RFDS Rework Requested:	

BLACK & VEATCH

Accelerated Tower Engineering

Date: June 27, 2024

Ashlee Lee
Black & Veatch
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Shawn D. Cook, P.E.
Accelerated Tower Engineering LLC
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Subject: **Roof Top Structural Analysis Report**

Carrier Designation: **AT&T Mobility**
Carrier Site Number: **99737**
Carrier Site Name: **HAILEY (10129884)**

Engineering Firm Designation: **ATE Project Number: 019420240354**

Site Data: **400 S Main St, Hailey, ID 83333, Blaine County**
Latitude 43°31'.0", Longitude -114°18'45.6"
38.0 Foot Roof Top Site

Dear Ashlee Lee,

Accelerated Tower Engineering, LLC is pleased to submit this **"Roof Top Structural Analysis Report"** for the structural integrity of the existing roof top structure. The purpose of the analysis is to determine the adequacy of the existing roof top structure with the addition of proposed equipment as specified in the construction drawings Rev.1 (Redlines) prepared by AT&T, issued on 7/2/2024.

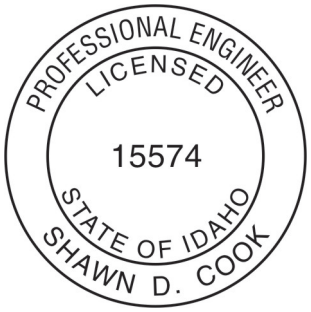
Analysis Results:

Existing Antenna Frame Stress Level with Existing + Proposed Equipment:	**68.5%*CONDITIONAL PASS**
Proposed RRU Frame Stress Level with Existing + Proposed Equipment:	**78.2%*CONDITIONAL PASS**
Existing Roof Top Stress Level with Existing + Proposed Equipment:	**93.2% PASS**

We at Accelerated Tower Engineering, LLC appreciate the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or any other projects, please give us a call.

Respectfully submitted,

Shawn D. Cook, P.E.
Structural Engineer
ID PE#: 15574



1) ANALYSIS CRITERIA

Table 1 – Analysis Parameters

Parameter	Remarks
International Building Code	2018
TIA-222 Revision	TIA-222-H
Risk Category	II
Basic Wind Speed	103 mph
Exposure Category	C
Topographic Factor at Mount	1.00
Rooftop Wind Speed-Up Factor	1.00
Ground Elevation Factor	0.82
Wind Speed with Ice	40 mph
Ice Thickness	0 in
Seismic S_s	0.462
Seismic S_1	0.150

Table 2 – Final Configuration Loading

Mount Elevation (ft)	Antenna Centerline (ft)	Quantity	Manufacturer	Model	Notes
42.0	48.5	3	Ericsson	AIR 6472 B77G B77M	Proposed
	46.0	3	Commscope	NNH4-65C-R6-UPM	
38.5	39.5	1	Raycap	DC6-48-60-18-8C	Existing
		3	Ericsson	RRUS 4490 B5/B12A	Proposed
		3	Ericsson	RRUS 4890 B25/B66	
		1	Raycap	DC9-48-60-24-PC16-EV	

2) ANALYSIS PROCEDURE

Table 3 – Documents Provided

Document	Remarks	Source
Previous Mount Analysis	Trileaf (65319), dated 11/7/2019	B&V
Previous Analysis	MasTec (10031-S1), dated 6/27/2017	B&V
Photographs	Site Visit Photographs	B&V
Construction Drawings	AT&T Rev. 1 (Redlines), dated 7/2/2024	B&V

2.1) Analysis Method

RISA-3D, a commercially available analysis software package, was used to create a three-dimensional model of the mount and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendices.

2.2) Assumptions

1) The roof top was built, installed, and maintained in accordance with the manufactures' specifications and recommendations.
2) Material grades were not provided and were assumed to be in accordance with Table 2-3 "Applicable ASTM Specifications for Various Structural Shapes" per the AISC "Steel Construction Manual."

3) All bolted and welded connections are assumed to develop, at a minimum, a capacity equal to the members connected unless determined and explicitly stated in this report.

This analysis may be affected if any assumptions are not valid or have been made in error. Accelerated Tower Engineering, LLC should be notified immediately to determine the effect on the structural integrity of the mount.

3) RECOMMENDATIONS

The roof top will have sufficient capacity to carry the final loading configuration. In order for the results of this analysis to be considered valid the modifications listed below must be completed.

Modifications:

1) The antenna ballast frame shall have 1824lb of ballast (48 – 16”x8”x8” standard core concrete ballast blocks or approved equivalent) evenly distributed in the ballast trays per modification drawings detailed in Appendix C.
2) Remove the existing RRU frame and replace with the proposed RRU frame per modification drawings detailed in Appendix C.
3) Remove the existing mount pipes and pipe-to-pipe connections and replace with Pipe 2½ Std. x 10’-0” pipes and SitePro1 DCP18K per modification drawings detailed in Appendix C.

No additional modifications to those listed above are required at this time, provided that the above listed changes are implemented.

Table 4.1 – Antenna Frame Connection Component Usages

Section Set	Member Designation	Code Check
Base Tray	L9	66.7%
Vertical	V1	56.2%
Diagonal	D3	47.9%
Horizontal	H1	8.6%
Mount Pipe(1)	MP3	27.3%
Mount Pipe(2)	MP4	33.7%
Threaded Rod	TR12	37.0%
Stabilizer	STAB	68.5%
Ballast Check	NA	Adequate

Table 4.2 – RRU Frame Connection Component Usages

Section Set	Member Designation	Code Check
Vertical	V1	55.6%
Diagonal	D4	78.2%
Base Angle	L3	59.0%
Horizontal	H1	66.5%
Mount Connection	NA	Adequate

Table 4.3 – Building Component Usages

Component	Unity Check
Joist	93.2%

Appendix A

RISA-3D Output

Accelerated Tower Engineering

Appurtenance Wind Loading (Antenna Frame)
TIA-222-H

Project Data	
ATE #	019420240354
Site Name	HAILEY
Site Number	99737

Site Information	
TIA Revision	H
Structure Class	II
Exposure Category	C
Basic Wind Speed (mph)	103
Basic Wind Speed with Ice (mph)	40
Density of Ice (pcf), δ_{ice}	56
Design Ice Thickness (in), t_i	0.00
Total Height of Structure (ft), h	38.0
Mount Centerline (ft), h_m	41.8
Wind Direction Probability Factor, K_d	0.95
Gust Response Factor, G_h	1.00
Appurtenance Shielding Factor, K_a	0.90
Ground Elevation Factor, K_e	0.82
Use CFD values for EPAs where available	TRUE

Seismic Information	
Short-Period Response Parameter, Ss	0.462
1Sec-Period Response Parameter, S1	0.150
Soil Category	D
Short-Period Design Response Parameter, SDS	0.441
1Sec-Period Design Response Parameter, SD1	0.230
Response Modification Coefficient, R	2.000
Seismic Response Coefficient, Cs	0.220
Earthquake Amplification Factor, As	1.000
Vertical Seismic Load Factor	0.088
Horizontal Seismic Load Factor	0.220

Mount Pipe Loading

Mount Pipe	Mount Location	Vertical Offset (ft)	Length (in)	Diameter (in)	Weight (lbs)	Velocity Pressure Coefficient	Velocity Pressure (psf)	Front Force Coefficient	Top Front Design Wind Force (plf)	Base Front Design Wind Force (plf)	Side Force Coefficient	Side Design Wind Force (plf)	Ice Weight (plf)	Ice Velocity Pressure (psf)	Ice Front Force Coefficient	Ice Top Front Design Wind Force (plf)	Ice Base Front Design Wind Force (lbf)	Ice Side Force Coefficient	Ice Side Design Wind Force (plf)
Pipe 2½ Std. x 120	1	3.0	120.0	2.875	58.0	1.07	22.7	1.00	4.9	4.9	1.20	5.9	0.0	3.4	1.00	0.7	0.7	1.20	0.9
Pipe 2½ Std. x 120	2	3.0	120.0	2.875	58.0	1.07	22.7	1.00	4.9	4.9	1.20	5.9	0.0	3.4	1.00	0.7	0.7	1.20	0.9
Pipe 2½ Std. x 120	3	3.0	120.0	2.875	58.0	1.07	22.7	1.00	4.9	4.9	1.20	5.9	0.0	3.4	1.00	0.7	0.7	1.20	0.9
Pipe 3 Std. x 54	4	-2.4	54.0	3.500	34.1	1.04	22.1	1.00	5.8	5.8	0.99	5.7	0.0	3.3	1.00	0.9	0.9	0.99	0.9

Appurtenance Loading

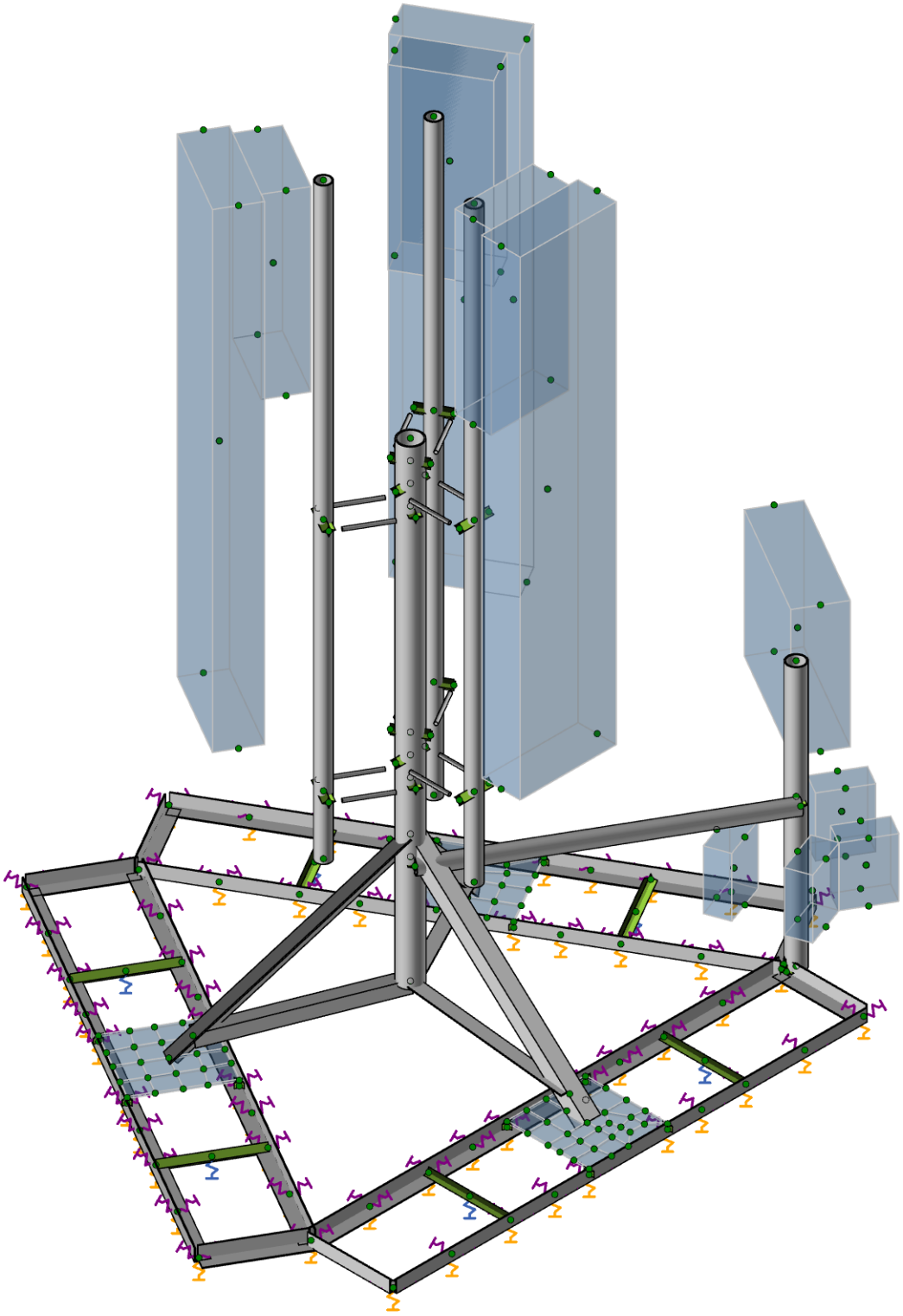
Appurtenance	Appurtenance Type	Mount Location	Quantity	Vertical Offset (ft)	Horizontal Offset (in)	Length (in)	Width (in)	Depth (in)	Weight (lbs)	Allow Shielding (Front)	% Shielded (Front)	Velocity Pressure Coefficient	Velocity Pressure (psf)	Front Force Coefficient	Front EPA (sqft)	Front Design Wind Force (lbf)	Side Force Coefficient	Side Design Wind Force (lbf)	Ice Weight (lbs)	Ice Velocity Pressure (psf)	Ice Front Force Coefficient	Ice Front Design Wind Force (lbf)	Ice Side Force Coefficient	Ice Side Design Wind Force (lbf)
COMMSCOPE: NNH4-65C-R6-UPM	Antenna	1	1	4.4	15.3	96.0	19.6	7.8	98.0	No	0%	1.08	22.9	1.31	17.07	351.7	1.58	168.9	0.0	3.5	0.75	53.0	0.92	25.5
ERICSSON: AIR 6472 B77G B77M	Antenna	1	1	6.9	7.7	36.3	15.8	7.4	86.9	Yes	100%	1.09	23.1	1.20	0.00	0.0	1.31	50.8	0.0	3.5	0.70	0.0	0.75	7.7
COMMSCOPE: NNH4-65C-R6-UPM	Antenna	2	1	4.4	15.3	96.0	19.6	7.8	98.0	No	0%	1.08	22.9	1.31	17.07	351.7	1.58	168.9	0.0	3.5	0.75	53.0	0.92	25.5
ERICSSON: AIR 6472 B77G B77M	Antenna	2	1	6.9	7.7	36.3	15.8	7.4	86.9	Yes	100%	1.09	23.1	1.20	0.00	0.0	1.31	50.8	0.0	3.5	0.70	0.0	0.75	7.7
COMMSCOPE: NNH4-65C-R6-UPM	Antenna	3	1	4.4	15.3	96.0	19.6	7.8	98.0	No	0%	1.08	22.9	1.31	17.07	351.7	1.58	168.9	0.0	3.5	0.75	53.0	0.92	25.5
ERICSSON: AIR 6472 B77G B77M	Antenna	3	1	6.9	7.7	36.3	15.8	7.4	86.9	Yes	100%	1.09	23.1	1.20	0.00	0.0	1.31	50.8	0.0	3.5	0.70	0.0	0.75	7.7
ANDREW: VHLPX2-23B	Dish w/ Radome	4	1	-0.7	4.5	25.9	25.9	8.9	44.0	No	0%	1.05	22.3	1.26	4.62	92.8	0.34	11.1	0.0	3.4	0.70	14.0	0.71	1.7
ALCATEL LUCENT: 95MPR23-C256F50-314	TME	4	1	-2.9	-8.5	12.0	9.0	4.5	11.5	No	0%	1.04	22.1	1.21	0.45	9.0	1.20	0.0	0.0	3.3	0.70	1.4	0.70	0.0
ALCATEL LUCENT: 95MPR23-C256F50-314	TME	4	1	-2.9	-8.5	12.0	9.0	4.5	11.5	No	0%	1.04	22.1	1.21	0.45	9.0	1.20	17.9	0.0	3.3	0.70	1.4	0.70	2.7
ALCATEL LUCENT: 95MPR23-C256F50-315	TME	4	1	-2.9	-8.5	12.0	9.0	4.5	11.5	No	0%	1.04	22.1	1.21	0.45	9.0	1.20	0.0	0.0	3.3	0.70	1.4	0.70	0.0
ALCATEL LUCENT: 95MPR23-C256F50-315	TME	4	1	-2.9	-8.5	12.0	9.0	4.5	11.5	No	0%	1.04	22.1	1.21	0.45	9.0	1.20	17.9	0.0	3.3	0.70	1.4	0.70	2.7

Distributed Loads

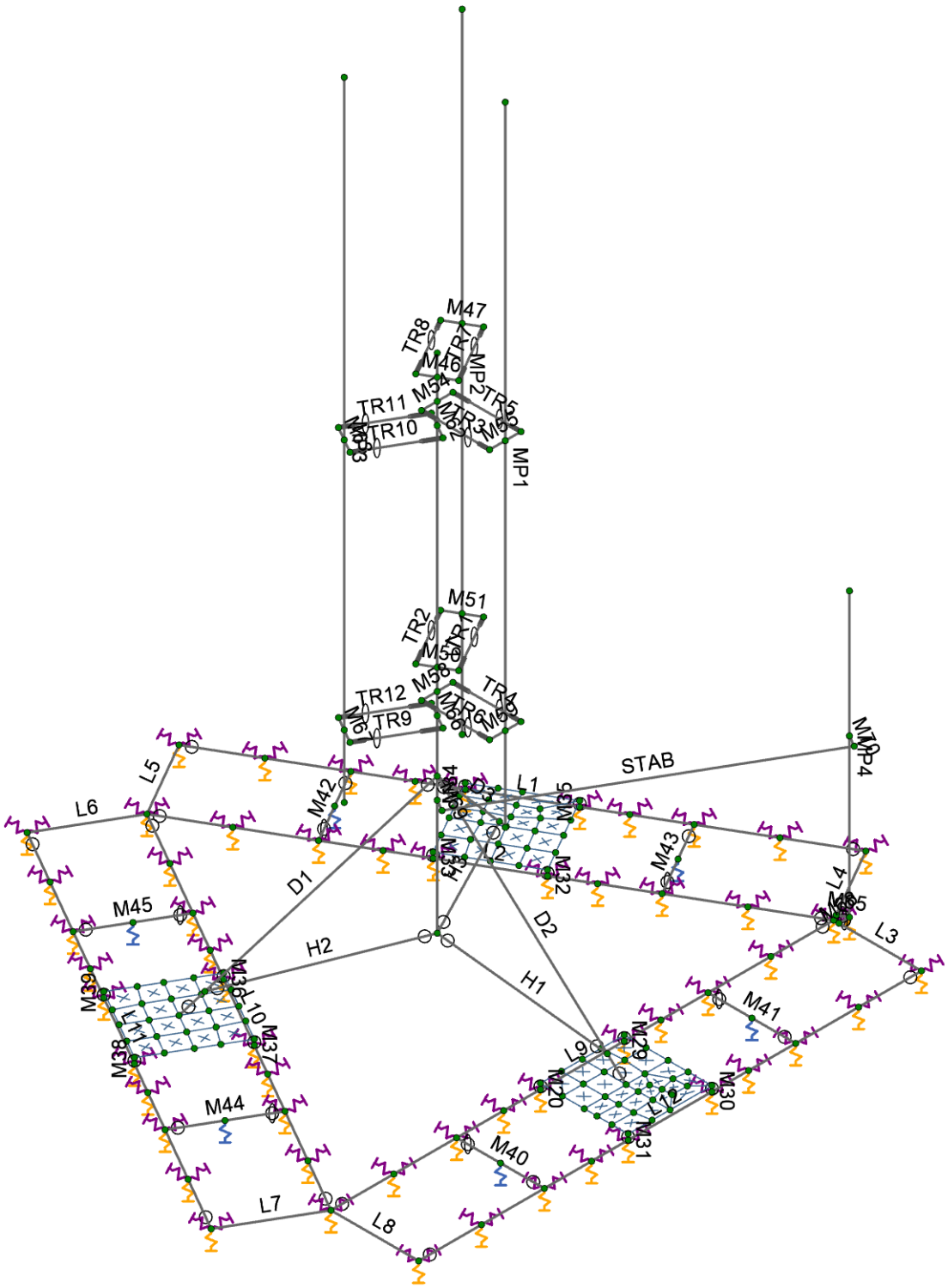
Mount Members	Vertical Offset (ft)	Height/Dia. (in)	Depth (in)	Shape	Min Velocity Pressure Coefficient	Max Velocity Pressure Coefficient	Min Velocity Pressure (psf)	Max Velocity Pressure (psf)	Min Force Coefficient	Max Force Coefficient	Min Ice Weight (plf)	Max Ice Weight (plf)	Min Ice Velocity Pressure (psf)	Max Ice Velocity Pressure (psf)	Min Ice Force Coefficient	Max Ice Force Coefficient
PIPE_4.0(NOMINAL)	0.0	4.500	4.500	Round	1.05	1.05	20.2	20.2	1.12	1.12	0.00	0.00	3.0	3.0	1.12	1.12
L2.5X2.5X3	0.0	2.500	2.500	Flat	1.05	1.05	20.2	20.2	1.39	2.00	0.00	0.00	3.0	3.0	0.80	1.20
L3X3X4	0.0	3.000	3.000	Flat	1.05	1.05	20.2	20.2	1.71	1.71	0.00	0.00	3.0	3.0	1.01	1.01
SR5/8	0.0	0.625	0.625	Round	1.05	1.05	20.2	20.2	1.11	1.11	0.00	0.00	3.0	3.0	1.11	1.11
PIPE_2.5(NOMINAL)	0.0	2.875	2.875	Round	1.05	1.05	20.2	20.2	1.09	1.09	0.00	0.00	3.0	3.0	1.09	1.09

Surface Loads

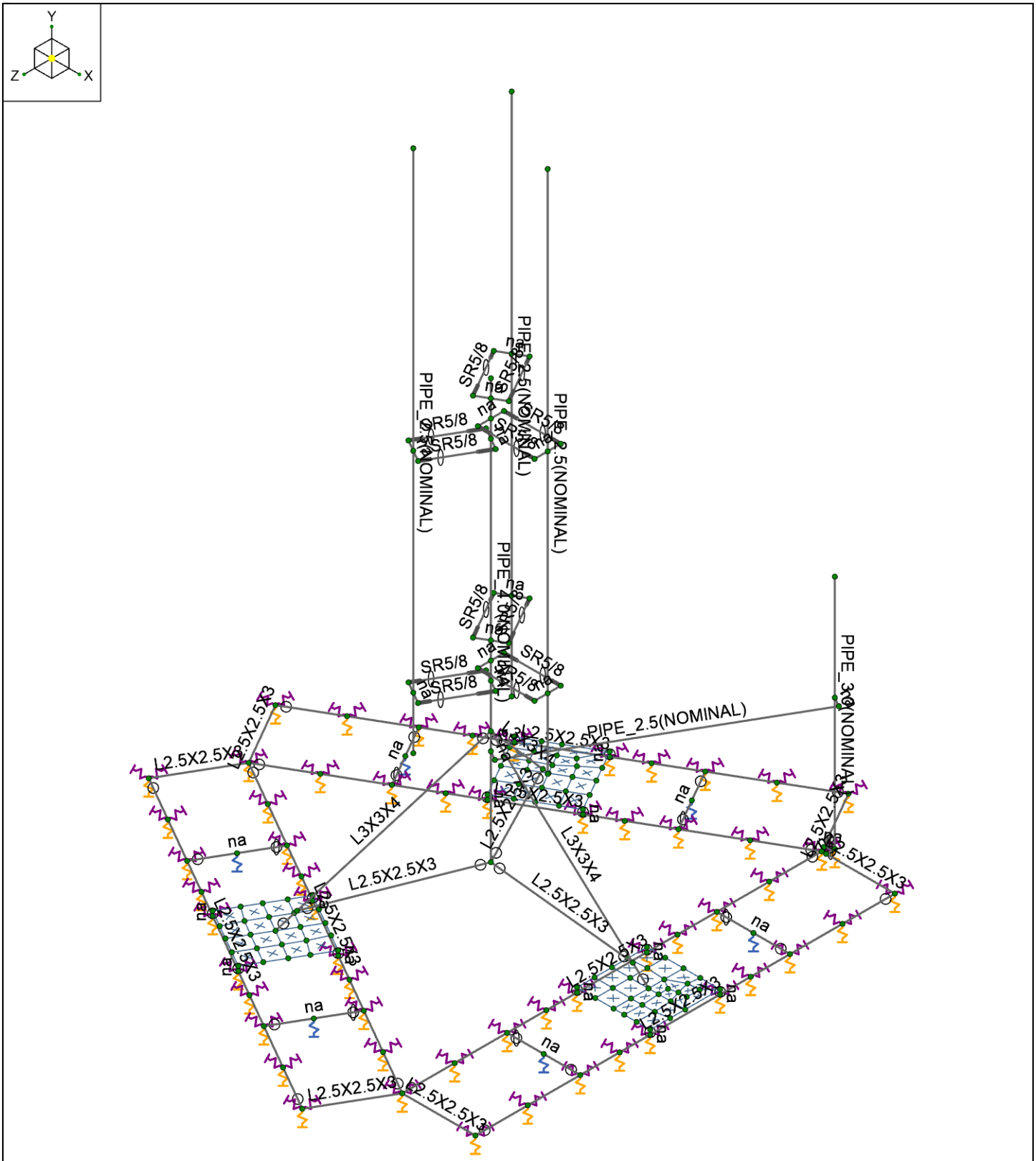
Surface Label	Velocity Pressure Coefficient	Velocity Pressure (psf)	Force Coefficient	Ice Weight (psf)	Ice Velocity Pressure (psf)	Ice Force Coefficient



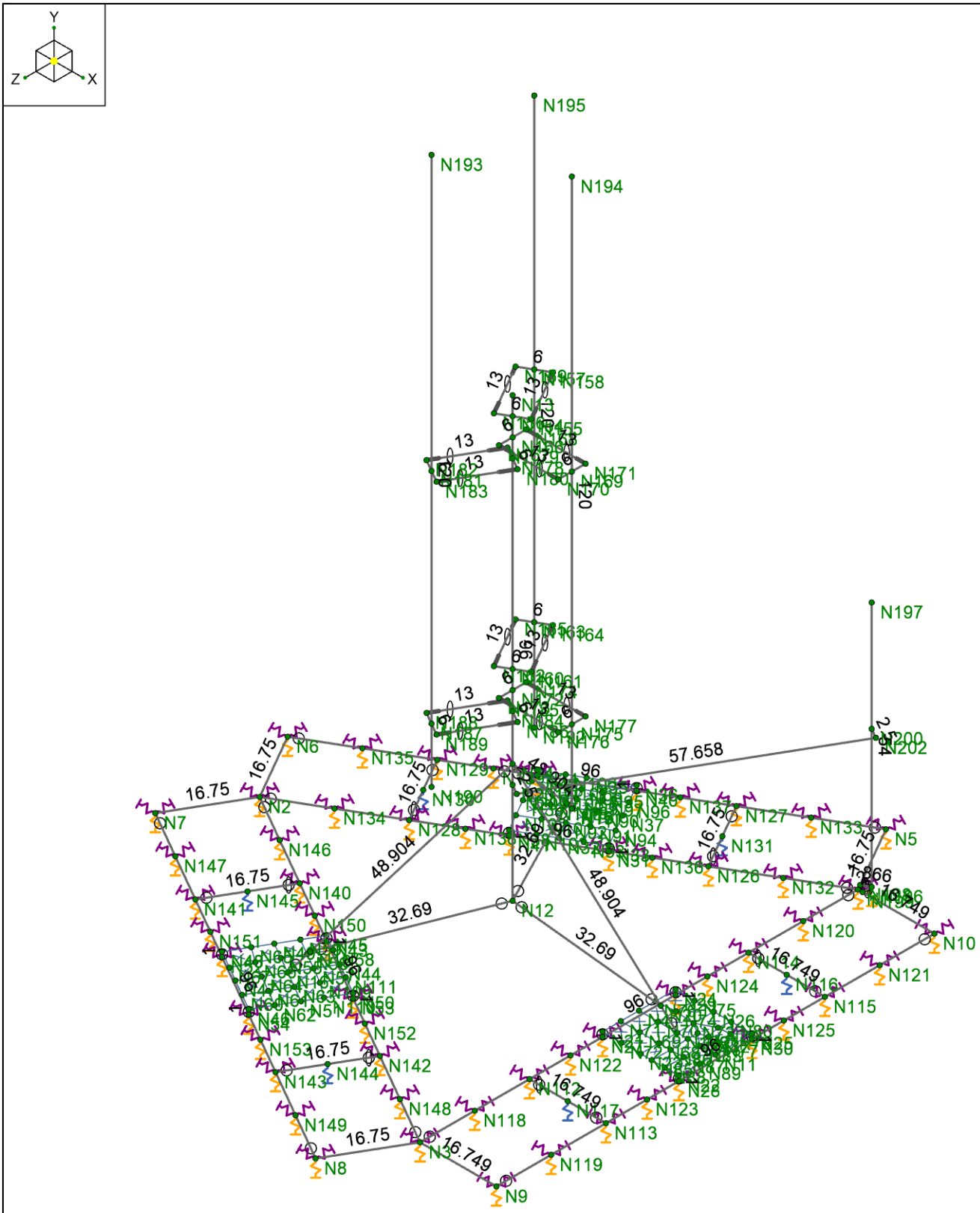
IRISA A NEMETSCHEK COMPANY	Accelerated Tower Engine…	Tripod Ballast Frame	SK-1
	Shawn Cook, P.E.		Jun 27, 2024 at 11:12 AM
			99737 Mount Analysis.r3d



IRISA	Accelerated Tower Engine…	Tripod Ballast Frame	SK-2
	Shawn Cook, P.E.		Jun 27, 2024 at 11:12 AM
			99737 Mount Analysis.r3d

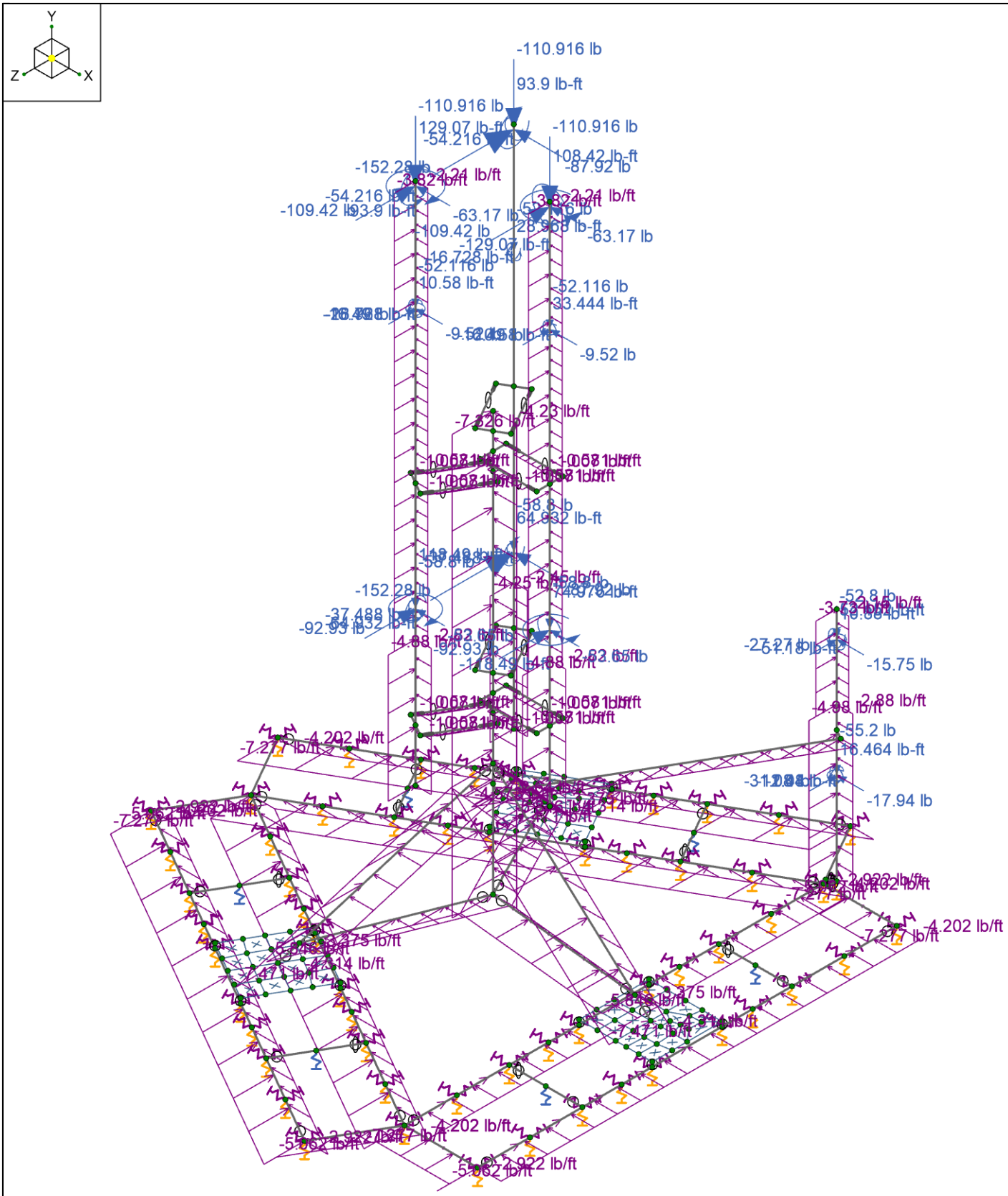


IRISA	Accelerated Tower Engine…	Tripod Ballast Frame	SK-3
	Shawn Cook, P.E.		Jun 27, 2024 at 11:13 AM
			99737 Mount Analysis.r3d



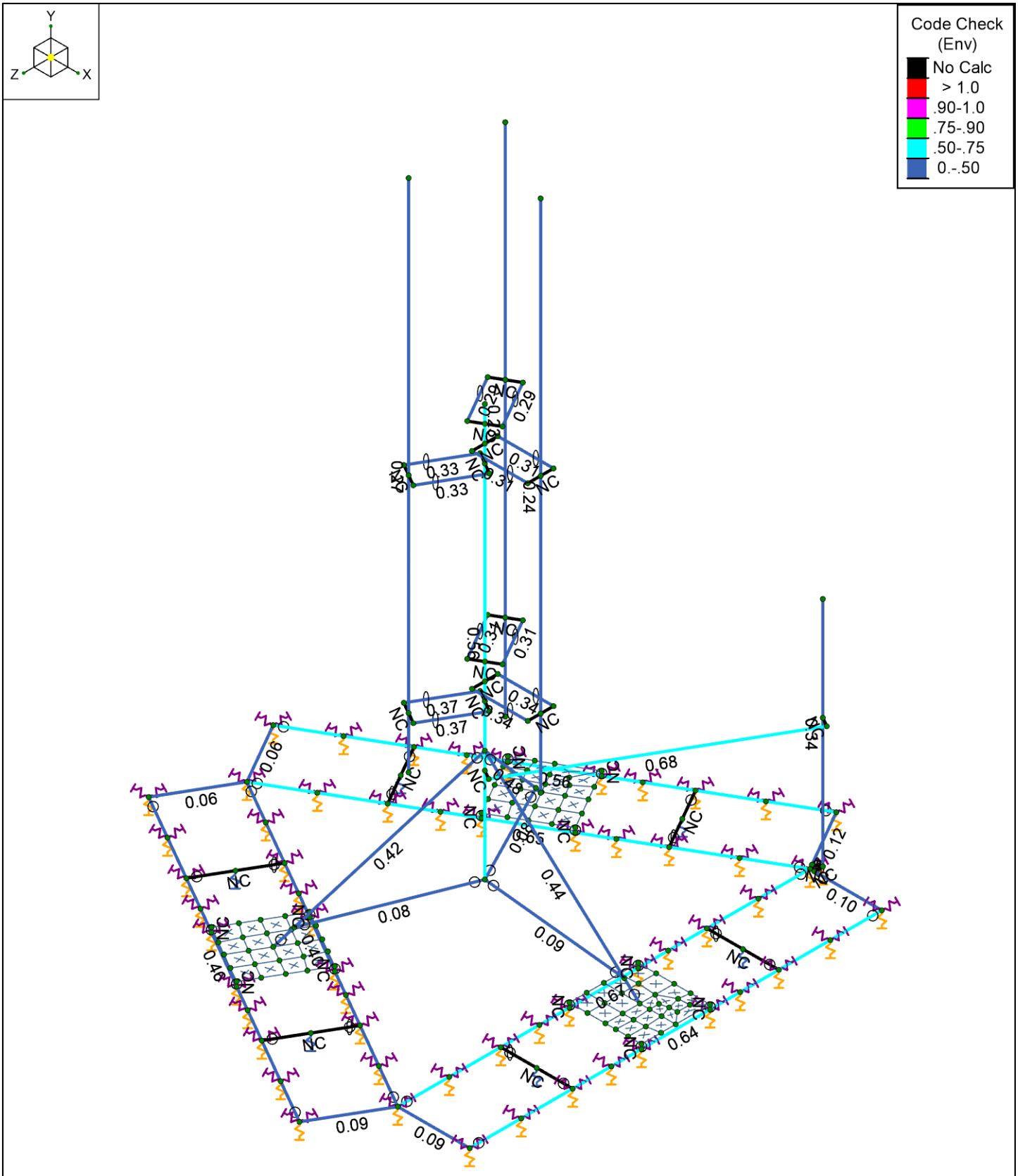
Member Length (in) Displayed

IRISA A NEMETSCHEK COMPANY	Accelerated Tower Engine…	Tripod Ballast Frame	SK-4
	Shawn Cook, P.E.		Jun 27, 2024 at 11:13 AM
			99737 Mount Analysis.r3d



Loads: LC 4, 1.2D + 1.0W (60 deg)

IRISA	Accelerated Tower Engine…	Tripod Ballast Frame	SK-5
	Shawn Cook, P.E.		Jun 27, 2024 at 11:13 AM
			99737 Mount Analysis.r3d



Member Code Checks Displayed (Enveloped)

IRISA	Accelerated Tower Engine…	Tripod Ballast Frame	SK-6
	Shawn Cook, P.E.		Jun 27, 2024 at 11:14 AM
			99737 Mount Analysis.r3d

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
2	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
3	SAE J429-5	29000	11154	0.3	0.65	0.49	92	1.4	120	1.3

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	Base Tray	L2.5X2.5X3	None	None	A36 Gr.36	Typical	0.901	0.535	0.535	0.011
2	Vertical	PIPE_4.0(NOMINAL)	None	None	A53 Gr.B	Typical	3.174	7.233	7.233	14.465
3	Diagonal	L3X3X4	None	None	A36 Gr.36	Typical	1.44	1.23	1.23	0.031
4	Horizontal	L2.5X2.5X3	None	None	A36 Gr.36	Typical	0.901	0.535	0.535	0.011
5	Mount Pipe(1)	PIPE_2.5(NOMINAL)	None	None	A53 Gr.B	Typical	1.704	1.53	1.53	3.059
6	Mount Pipe(2)	PIPE_3.0(NOMINAL)	None	None	A53 Gr.B	Typical	2.228	3.017	3.017	6.034
7	Threaded Rod	SR5/8	None	None	SAE J429-5	Typical	0.307	0.007	0.007	0.015
8	Stabilizer	PIPE_2.5(NOMINAL)	None	None	A53 Gr.B	Typical	1.704	1.53	1.53	3.059

Material Take-Off

	Material	Size	Pieces	Length[in]	Weight[K]
1	General Members				
2	RIGID		34	193.4	0
3	Total General		34	193.4	0
4					
5	Hot Rolled Steel				
6	A36 Gr.36	L3X3X4	3	146.7	0.06
7	A36 Gr.36	L2.5X2.5X3	15	774.6	0.198
8	A53 Gr.B	PIPE_2.5(NOMINAL)	4	417.7	0.202
9	A53 Gr.B	PIPE_3.0(NOMINAL)	1	54	0.034
10	A53 Gr.B	PIPE_4.0(NOMINAL)	1	96	0.086
11	SAE J429-5	SR5/8	12	96	0.008
12	Total HR Steel		36	1584.9	0.588
13					
14	Plate Elements	Thickness (in)		Volume (yds^3)	
15	gen_Steel	0.4	57	0	0.085
16	Total Plates		57	0	0.085

Hot Rolled Steel Design Parameters

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	Channel Conn.	a [in]	Function
1	V1	Vertical	96	70	70	Lbyy	N/A	N/A	Lateral
2	L9	Base Tray	96	40	40		N/A	N/A	Lateral
3	L12	Base Tray	96	40	40		N/A	N/A	Lateral
4	L8	Base Tray	16.749			Lbyy	N/A	N/A	Lateral
5	L3	Base Tray	16.749			Lbyy	N/A	N/A	Lateral
6	L2	Base Tray	96	40	40		N/A	N/A	Lateral
7	L1	Base Tray	96	40	40		N/A	N/A	Lateral
8	L4	Base Tray	16.75			Lbyy	N/A	N/A	Lateral
9	L5	Base Tray	16.75			Lbyy	N/A	N/A	Lateral
10	L6	Base Tray	16.75			Lbyy	N/A	N/A	Lateral
11	L10	Base Tray	96	40	40		N/A	N/A	Lateral
12	L11	Base Tray	96	40	40		N/A	N/A	Lateral
13	L7	Base Tray	16.75			Lbyy	N/A	N/A	Lateral
14	D3	Diagonal	48.904			Lbyy	N/A	N/A	Lateral
15	D1	Diagonal	48.904			Lbyy	N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	Channel Conn.	a [in]	Function
16	D2	Diagonal	48.904			Lbyy	N/A	N/A	Lateral
17	H2	Horizontal	32.69			Lbyy	N/A	N/A	Lateral
18	H3	Horizontal	32.69			Lbyy	N/A	N/A	Lateral
19	H1	Horizontal	32.69			Lbyy	N/A	N/A	Lateral
20	TR7	Threaded Rod	13			Lbyy	N/A	N/A	Lateral
21	TR8	Threaded Rod	13			Lbyy	N/A	N/A	Lateral
22	TR1	Threaded Rod	13			Lbyy	N/A	N/A	Lateral
23	TR2	Threaded Rod	13			Lbyy	N/A	N/A	Lateral
24	TR3	Threaded Rod	13			Lbyy	N/A	N/A	Lateral
25	TR5	Threaded Rod	13			Lbyy	N/A	N/A	Lateral
26	TR6	Threaded Rod	13			Lbyy	N/A	N/A	Lateral
27	TR4	Threaded Rod	13			Lbyy	N/A	N/A	Lateral
28	TR11	Threaded Rod	13			Lbyy	N/A	N/A	Lateral
29	TR10	Threaded Rod	13			Lbyy	N/A	N/A	Lateral
30	TR12	Threaded Rod	13			Lbyy	N/A	N/A	Lateral
31	TR9	Threaded Rod	13			Lbyy	N/A	N/A	Lateral
32	MP1	Mount Pipe(1)	120	Segment	Segment	Lbyy	N/A	N/A	Lateral
33	MP2	Mount Pipe(1)	120	Segment	Segment	Lbyy	N/A	N/A	Lateral
34	MP3	Mount Pipe(1)	120	Segment	Segment	Lbyy	N/A	N/A	Lateral
35	MP4	Mount Pipe(2)	54			Lbyy	N/A	N/A	Lateral
36	STAB	Stabilizer	57.658			Lbyy	N/A	N/A	Lateral

Node Coordinates

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
1	N1	27.713	0	-48	
2	N2	-55.426	0	0	
3	N3	27.713	0	48	
4	N4	27.713	1	0	
5	N5	19.338	0	-62.506	
6	N6	-63.8	0	-14.506	
7	N7	-63.8	0	14.506	
8	N8	19.338	0	62.506	
9	N9	44.462	0	48	
10	N10	44.462	0	-48	
11	N11	44.462	1	0	
12	N12	0	8	0	
13	N13	0	104	0	
14	N14	0	34.004	0	
15	N15	-18.044	1	-31.253	
16	N16	-18.044	1	31.253	
17	N17	36.088	1	0	
18	N18	-16.239825	4.299988	-28.12809	
19	N19	-16.239907	4.299838	28.128232	
20	N20	32.479728	4.299917	0	
21	N21	27.713	1	8	
22	N22	44.462	1	8	
23	N23	36.088	1	8	
24	N24	27.713	1	-8	
25	N25	44.462	1	-8	
26	N26	36.088	1	-8	
27	N27	27.713	0	8	
28	N28	44.462	0	8	
29	N29	27.713	0	-8	
30	N30	44.462	0	-8	
31	N31	-6.927969	0	-28.000162	

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
32	N32	-13.8565	1	-24.000162	
33	N33	-6.928297	1	-28.000162	
34	N34	-29.159203	1	-34.505222	
35	N35	-22.231	1	-38.505222	
36	N36	-15.302797	1	-42.505222	
37	N37	-11.115797	1	-35.253125	
38	N38	-20.784703	1	-20.000162	
39	N39	-24.972203	1	-27.253125	
40	N40	-15.304182	0	-42.505222	
41	N41	-20.784469	0	-20.000162	
42	N42	-29.160515	0	-34.505222	
43	N43	-20.784469	0	20.000162	
44	N44	-13.8565	1	24.000162	
45	N45	-20.784703	1	20.000162	
46	N46	-15.302797	1	42.505222	
47	N47	-22.231	1	38.505222	
48	N48	-29.159203	1	34.505222	
49	N49	-24.972203	1	27.253125	
50	N50	-6.928297	1	28.000162	
51	N51	-11.115797	1	35.253125	
52	N52	-29.160515	0	34.505222	
53	N53	-6.927969	0	28.000162	
54	N54	-15.304182	0	42.505222	
55	N55	-21.508102	1	29.253062	
56	N56	-19.414352	1	25.626612	
57	N57	-15.950223	1	27.626597	
58	N58	-17.320602	1	22.000162	
59	N59	-22.878453	1	23.626643	
60	N60	-18.766898	1	40.505222	
61	N61	-16.673398	1	36.879142	
62	N62	-13.209297	1	38.879173	
63	N63	-14.579898	1	33.253062	
64	N64	-20.137473	1	34.879126	
65	N65	-26.821594	1	30.456364	
66	N66	-23.526079	1	32.852277	
67	N67	-25.335026	1	36.713111	
68	N68	36.088	1	4	
69	N69	31.9005	1	4	
70	N70	31.9005	1	0	
71	N71	27.713	1	4	
72	N72	31.9005	1	8	
73	N73	36.088	1	-3.584343	
74	N74	31.9005	1	-3.896086	
75	N75	31.9005	1	-8	
76	N76	27.713	1	-3.584343	
77	N77	42.136469	1	-2.693809	
78	N78	42.168225	1	-5.588661	
79	N79	39.58125	1	-5.432797	
80	N80	39.916669	1	-8	
81	N81	38.396403	1	-2.150617	
82	N82	40.301423	1	-2.632597	
83	N83	41.168294	1	0	
84	N84	38.383196	1	0	
85	N85	38.502276	1	8	
86	N86	38.639144	1	3.990997	

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
87	N87	41.430755	1	3.926529	
88	N88	41.367132	1	8	
89	N89	44.462	1	3.421237	
90	N90	-14.579898	1	-33.253062	
91	N91	-12.486148	1	-29.626612	
92	N92	-15.95025	1	-27.626581	
93	N93	-10.392398	1	-26.000162	
94	N94	-9.022047	1	-31.626643	
95	N95	-17.758749	1	-37.397227	
96	N96	-12.965196	1	-38.456378	
97	N97	-16.202395	1	-35.892539	
98	N98	-20.629747	1	-35.731722	
99	N99	-19.221358	1	-33.29228	
100	N100	-21.148119	1	-29.460892	
101	N101	-19.324356	1	-25.67857	
102	N102	-22.878453	1	-23.626643	
103	N103	-16.960619	1	-22.207998	
104	N104	-26.232944	1	-29.436792	
105	N105	-22.756662	1	-31.539795	
106	N106	-25.177221	1	-36.80422	
107	N107	-24.135252	1	-33.965267	
108	N108	-27.669674	1	-31.925281	
109	N109	-12.561663	1	29.653489	
110	N110	-9.266179	1	32.049494	
111	N111	-10.752381	1	25.792326	
112	N112	27.713	0	24	
113	N113	44.462	0	24	
114	N114	27.713	0	-24	
115	N115	44.462	0	-24	
116	N116	36.0875	0	-24	
117	N117	36.0875	0	24	
118	N118	27.713	0	36	
119	N119	44.462	0	36	
120	N120	27.713	0	-36	
121	N121	44.462	0	-36	
122	N122	27.713	0	15	
123	N123	44.462	0	15	
124	N124	27.713	0	-15	
125	N125	44.462	0	-15	
126	N126	6.928215	0	-35.99998	
127	N127	-1.446755	0	-50.505853	
128	N128	-34.641075	0	-12.000101	
129	N129	-43.015919	0	-26.505758	
130	N130	-38.82836	0	-19.252692	
131	N131	2.74086	0	-43.252692	
132	N132	17.320415	0	-42.000162	
133	N133	8.945915	0	-56.505222	
134	N134	-45.033415	0	-6.000162	
135	N135	-53.407915	0	-20.505222	
136	N136	-0.866119	0	-31.500162	
137	N137	-9.240619	0	-46.005222	
138	N138	-26.846881	0	-16.500162	
139	N139	-35.221381	0	-31.005222	
140	N140	-34.641075	0	12.000101	
141	N141	-43.015919	0	26.505758	

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
142	N142	6.928215	0	35.99998	
143	N143	-1.446755	0	50.505853	
144	N144	2.74086	0	43.252692	
145	N145	-38.82836	0	19.252692	
146	N146	-45.033415	0	6.000162	
147	N147	-53.407915	0	20.505222	
148	N148	17.320415	0	42.000162	
149	N149	8.945915	0	56.505222	
150	N150	-26.846881	0	16.500162	
151	N151	-35.221381	0	31.005222	
152	N152	-0.866119	0	31.500162	
153	N153	-9.240619	0	46.005222	
154	N154	0	100	0	
155	N155	2.598076	100	-1.5	
156	N156	-2.598076	100	1.5	
157	N157	-6.5	100	-11.25833	
158	N158	-3.901924	100	-12.75833	
159	N159	-9.098076	100	-9.75833	
160	N160	0	52	0	
161	N161	2.598076	52	-1.5	
162	N162	-2.598076	52	1.5	
163	N163	-6.5	52	-11.25833	
164	N164	-3.901924	52	-12.75833	
165	N165	-9.098076	52	-9.75833	
166	N166	0	96	0	
167	N167	0	96	3	
168	N168	0	96	-3	
169	N169	13	96	0	
170	N170	13	96	3	
171	N171	13	96	-3	
172	N172	0	48	0	
173	N173	0	48	3	
174	N174	0	48	-3	
175	N175	13	48	0	
176	N176	13	48	3	
177	N177	13	48	-3	
178	N178	0	92	0	
179	N179	-2.598076	92	-1.5	
180	N180	2.598076	92	1.5	
181	N181	-6.5	92	11.25833	
182	N182	-9.098076	92	9.75833	
183	N183	-3.901924	92	12.75833	
184	N184	0	44	0	
185	N185	-2.598076	44	-1.5	
186	N186	2.598076	44	1.5	
187	N187	-6.5	44	11.25833	
188	N188	-9.098076	44	9.75833	
189	N189	-3.901924	44	12.75833	
190	N190	-6.5	32	11.25833	
191	N191	13	32	0	
192	N192	-6.5	32	-11.25833	
193	N193	-6.5	152	11.25833	
194	N194	13	152	0	
195	N195	-6.5	152	-11.25833	
196	N196	28.713	0	-50	

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
197	N197	28.713	54	-50	
198	N198	27.096975	0	-49.066992	
199	N199	28.713	0	-48	
200	N200	28.713	30	-50	
201	N201	0	30	0	
202	N202	30.878064	30	-48.75	
203	N203	2.165064	30	1.25	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]
1	N8	S0.25	CS5	S0.25
2	N9	S0.25	CS5	S0.25
3	N43	S0.25	CS5	S0.25
4	N30	S0.25	CS5	S0.25
5	N53	S0.25	CS5	S0.25
6	N52	S0.25	CS5	S0.25
7	N1	S0.25	CS5	S0.25
8	N2	S0.25	CS5	S0.25
9	N3	S0.25	CS5	S0.25
10	N29	S0.25	CS5	S0.25
11	N5	S0.25	CS5	S0.25
12	N6	S0.25	CS5	S0.25
13	N7	S0.25	CS5	S0.25
14	N10	S0.25	CS5	S0.25
15	N28	S0.25	CS5	S0.25
16	N27	S0.25	CS5	S0.25
17	N31	S0.25	CS5	S0.25
18	N40	S0.25	CS5	S0.25
19	N41	S0.25	CS5	S0.25
20	N42	S0.25	CS5	S0.25
21	N54	S0.25	CS5	S0.25
22	N116		TS1	
23	N117		TS1	
24	N112	S0.25	CS5	S0.25
25	N113	S0.25	CS5	S0.25
26	N114	S0.25	CS5	S0.25
27	N115	S0.25	CS5	S0.25
28	N118	S0.25	CS5	S0.25
29	N119	S0.25	CS5	S0.25
30	N120	S0.25	CS5	S0.25
31	N121	S0.25	CS5	S0.25
32	N122	S0.25	CS5	S0.25
33	N123	S0.25	CS5	S0.25
34	N124	S0.25	CS5	S0.25
35	N125	S0.25	CS5	S0.25
36	N126	S0.25	CS5	S0.25
37	N127	S0.25	CS5	S0.25
38	N128	S0.25	CS5	S0.25
39	N129	S0.25	CS5	S0.25
40	N130		TS1	
41	N131		TS1	
42	N132	S0.25	CS5	S0.25
43	N133	S0.25	CS5	S0.25
44	N134	S0.25	CS5	S0.25
45	N135	S0.25	CS5	S0.25

Node Boundary Conditions (Continued)

	Node Label	X [k/in]	Y [k/in]	Z [k/in]
46	N136	S0.25	CS5	S0.25
47	N137	S0.25	CS5	S0.25
48	N138	S0.25	CS5	S0.25
49	N139	S0.25	CS5	S0.25
50	N140	S0.25	CS5	S0.25
51	N141	S0.25	CS5	S0.25
52	N142	S0.25	CS5	S0.25
53	N143	S0.25	CS5	S0.25
54	N144		TS1	
55	N145		TS1	
56	N146	S0.25	CS5	S0.25
57	N147	S0.25	CS5	S0.25
58	N148	S0.25	CS5	S0.25
59	N149	S0.25	CS5	S0.25
60	N150	S0.25	CS5	S0.25
61	N151	S0.25	CS5	S0.25
62	N152	S0.25	CS5	S0.25
63	N153	S0.25	CS5	S0.25
64	N196		CS5	

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Point	Distributed
1	Dead Load	None		-1		47	
2	Wind Load (0 deg)	None				28	33
3	Wind Load (30 deg)	None				48	76
4	Wind Load (60 deg)	None				43	66
5	Wind Load (90 deg)	None				34	68
6	Wind Load (120 deg)	None				43	64
7	Wind Load (150 deg)	None				51	76
8	Wind Load (180 deg)	None				28	59
9	Wind Load (210 deg)	None				48	76
10	Wind Load (240 deg)	None				43	66
11	Wind Load (270 deg)	None				34	68
12	Wind Load (300 deg)	None				43	64
13	Wind Load (330 deg)	None				51	76
14	Vert. Seismic Load	None		-0.088		47	
15	Horz. Seismic Load (0 deg)	None	-0.22			30	
16	Horz. Seismic Load (30 deg)	None	-0.191		-0.11	51	
17	Horz. Seismic Load (60 deg)	None	-0.11		-0.191	47	
18	Horz. Seismic Load (90 deg)	None			-0.22	34	
19	Horz. Seismic Load (120 deg)	None	0.11		-0.191	47	
20	Horz. Seismic Load (150 deg)	None	0.191		-0.11	51	
21	Horz. Seismic Load (180 deg)	None	0.22			30	
22	Horz. Seismic Load (210 deg)	None	0.191		0.11	51	
23	Horz. Seismic Load (240 deg)	None	0.11		0.191	47	
24	Horz. Seismic Load (270 deg)	None			0.22	34	
25	Horz. Seismic Load (300 deg)	None	-0.11		0.191	47	
26	Horz. Seismic Load (330 deg)	None	-0.191		0.11	51	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor
1	1.4D	Yes	Y	1	1.4				
2	1.2D + 1.0W (0 deg)	Yes	Y	1	1.2	2	1		

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor
3	1.2D + 1.0W (30 deg)	Yes	Y	1	1.2	3	1		
4	1.2D + 1.0W (60 deg)	Yes	Y	1	1.2	4	1		
5	1.2D + 1.0W (90 deg)	Yes	Y	1	1.2	5	1		
6	1.2D + 1.0W (120 deg)	Yes	Y	1	1.2	6	1		
7	1.2D + 1.0W (150 deg)	Yes	Y	1	1.2	7	1		
8	1.2D + 1.0W (180 deg)	Yes	Y	1	1.2	8	1		
9	1.2D + 1.0W (210 deg)	Yes	Y	1	1.2	9	1		
10	1.2D + 1.0W (240 deg)	Yes	Y	1	1.2	10	1		
11	1.2D + 1.0W (270 deg)	Yes	Y	1	1.2	11	1		
12	1.2D + 1.0W (300 deg)	Yes	Y	1	1.2	12	1		
13	1.2D + 1.0W (330 deg)	Yes	Y	1	1.2	13	1		
14	1.2D + 1.0Ev + 1.0Eh (0 deg)	Yes	Y	1	1.2	14	1	15	1
15	1.2D + 1.0Ev + 1.0Eh (30 deg)	Yes	Y	1	1.2	14	1	16	1
16	1.2D + 1.0Ev + 1.0Eh (60 deg)	Yes	Y	1	1.2	14	1	17	1
17	1.2D + 1.0Ev + 1.0Eh (90 deg)	Yes	Y	1	1.2	14	1	18	1
18	1.2D + 1.0Ev + 1.0Eh (120 deg)	Yes	Y	1	1.2	14	1	19	1
19	1.2D + 1.0Ev + 1.0Eh (150 deg)	Yes	Y	1	1.2	14	1	20	1
20	1.2D + 1.0Ev + 1.0Eh (180 deg)	Yes	Y	1	1.2	14	1	21	1
21	1.2D + 1.0Ev + 1.0Eh (210 deg)	Yes	Y	1	1.2	14	1	22	1
22	1.2D + 1.0Ev + 1.0Eh (240 deg)	Yes	Y	1	1.2	14	1	23	1
23	1.2D + 1.0Ev + 1.0Eh (270 deg)	Yes	Y	1	1.2	14	1	24	1
24	1.2D + 1.0Ev + 1.0Eh (300 deg)	Yes	Y	1	1.2	14	1	25	1
25	1.2D + 1.0Ev + 1.0Eh (330 deg)	Yes	Y	1	1.2	14	1	26	1

Envelope Node Reactions

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	N8	max	14.922	2	6.306	9	26.007	6	0	25	0	25	0	25
2		min	-17.881	7	0	1	-21.041	10	0	1	0	1	0	1
3	N9	max	15.824	2	7.906	14	22.731	6	0	25	0	25	0	25
4		min	-18.037	7	0	1	-18.521	10	0	1	0	1	0	1
5	N43	max	29.361	13	265.453	12	26.945	6	0	25	0	25	0	25
6		min	-25.111	8	0	4	-47.181	12	0	1	0	1	0	1
7	N30	max	58.581	2	379.604	9	22.803	6	0	25	0	25	0	25
8		min	-68.254	8	0	2	-18.324	10	0	1	0	1	0	1
9	N53	max	29.049	13	267.615	12	26.833	6	0	25	0	25	0	25
10		min	-24.15	8	0	4	-46.943	12	0	1	0	1	0	1
11	N52	max	33.113	13	365.325	12	31.528	6	0	25	0	25	0	25
12		min	-25.492	8	0	4	-55.554	12	0	1	0	1	0	1
13	N1	max	21.748	2	373.738	6	26.313	6	0	25	0	25	0	25
14		min	-20.377	8	0	2	-22.083	10	0	1	0	1	0	1
15	N2	max	18.915	2	14.738	13	26.518	6	0	25	0	25	0	25
16		min	-17.95	8	0	1	-19.625	11	0	1	0	1	0	1
17	N3	max	15.832	2	24.355	4	25.935	6	0	25	0	25	0	25
18		min	-18.042	7	0	1	-22.021	10	0	1	0	1	0	1
19	N29	max	52.003	2	278.757	9	26.131	6	0	25	0	25	0	25
20		min	-58.533	8	0	2	-21.967	10	0	1	0	1	0	1
21	N5	max	19.32	2	21.752	15	25.187	6	0	25	0	25	0	25
22		min	-20.105	8	0	2	-21.914	10	0	1	0	1	0	1
23	N6	max	16.689	2	9.581	7	25.483	6	0	25	0	25	0	25
24		min	-17.768	8	0	1	-19.849	11	0	1	0	1	0	1
25	N7	max	17.967	2	10.482	9	26.615	6	0	25	0	25	0	25
26		min	-17.34	7	0	1	-19.317	11	0	1	0	1	0	1
27	N10	max	21.738	2	7.304	22	22.798	6	0	25	0	25	0	25
28		min	-20.375	8	0	1	-18.342	10	0	1	0	1	0	1
29	N28	max	56.076	2	386.724	9	22.734	6	0	25	0	25	0	25

Envelope Node Reactions (Continued)

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
30		min	-67.615	8	0	2	-18.509	10	0	1	0	1	0	1
31	N27	max	49.454	2	313.605	9	26.02	6	0	25	0	25	0	25
32		min	-57.87	8	0	2	-22.092	10	0	1	0	1	0	1
33	N31	max	41.234	3	266.664	3	55.95	4	0	25	0	25	0	25
34		min	-27.278	8	0	7	-45.077	11	0	1	0	1	0	1
35	N40	max	45.122	3	410.624	3	64.364	4	0	25	0	25	0	25
36		min	-30.228	9	0	7	-50.136	11	0	1	0	1	0	1
37	N41	max	41.668	3	291.908	3	55.172	4	0	25	0	25	0	25
38		min	-28.143	8	0	7	-43.792	11	0	1	0	1	0	1
39	N42	max	45.714	3	419.853	3	63.588	4	0	25	0	25	0	25
40		min	-30.11	9	0	7	-48.802	11	0	1	0	1	0	1
41	N54	max	32.763	13	363.581	12	31.404	6	0	25	0	25	0	25
42		min	-24.504	8	0	4	-55.273	12	0	1	0	1	0	1
43	N116	max	0	25	0	24	0	25	0	25	0	25	0	25
44		min	0	1	-732.639	2	0	1	0	1	0	1	0	1
45	N117	max	0	25	0	25	0	25	0	25	0	25	0	25
46		min	0	1	-622.202	2	0	1	0	1	0	1	0	1
47	N112	max	39.749	2	117.68	9	25.982	6	0	25	0	25	0	25
48		min	-47.857	8	0	2	-22.06	10	0	1	0	1	0	1
49	N113	max	39.749	2	34.084	11	22.729	6	0	25	0	25	0	25
50		min	-47.857	8	0	2	-18.511	10	0	1	0	1	0	1
51	N114	max	44.879	2	115.146	8	26.199	6	0	25	0	25	0	25
52		min	-49.948	8	0	2	-22.01	10	0	1	0	1	0	1
53	N115	max	44.879	2	86.587	7	22.797	6	0	25	0	25	0	25
54		min	-49.948	8	0	2	-18.328	10	0	1	0	1	0	1
55	N118	max	28.631	2	38.724	11	25.957	6	0	25	0	25	0	25
56		min	-33.223	8	0	2	-22.039	10	0	1	0	1	0	1
57	N119	max	27.174	2	8.703	14	22.729	6	0	25	0	25	0	25
58		min	-31.386	8	0	2	-18.515	10	0	1	0	1	0	1
59	N120	max	34.353	2	163.885	6	26.254	6	0	25	0	25	0	25
60		min	-36.868	8	0	2	-22.046	10	0	1	0	1	0	1
61	N121	max	32.899	2	16.654	7	22.796	6	0	25	0	25	0	25
62		min	-34.837	8	0	1	-18.334	10	0	1	0	1	0	1
63	N122	max	45.925	2	227.291	9	26.003	6	0	25	0	25	0	25
64		min	-54.867	8	0	2	-22.077	10	0	1	0	1	0	1
65	N123	max	49.707	2	245.538	9	22.731	6	0	25	0	25	0	25
66		min	-60.02	8	0	2	-18.509	10	0	1	0	1	0	1
67	N124	max	49.981	2	191.68	8	26.16	6	0	25	0	25	0	25
68		min	-56.092	8	0	2	-21.985	10	0	1	0	1	0	1
69	N125	max	53.724	2	247.759	8	22.799	6	0	25	0	25	0	25
70		min	-61.233	8	0	2	-18.325	10	0	1	0	1	0	1
71	N126	max	35.439	3	108.869	4	46.836	4	0	25	0	25	0	25
72		min	-25.153	8	0	2	-38.73	10	0	1	0	1	0	1
73	N127	max	34.236	3	93.074	5	46.755	4	0	25	0	25	0	25
74		min	-24.982	9	0	7	-38.753	11	0	1	0	1	0	1
75	N128	max	35.288	3	110.855	3	44.8	4	0	25	0	25	0	25
76		min	-25.931	8	0	7	-36.855	11	0	1	0	1	0	1
77	N129	max	34.217	3	36.817	13	44.685	4	0	25	0	25	0	25
78		min	-25.735	8	0	7	-37.093	11	0	1	0	1	0	1
79	N130	max	0	25	0	25	0	25	0	25	0	25	0	25
80		min	0	1	-589.482	10	0	1	0	1	0	1	0	1
81	N131	max	0	25	0	25	0	25	0	25	0	25	0	25
82		min	0	1	-725.388	10	0	1	0	1	0	1	0	1
83	N132	max	28	3	161.988	6	34.731	5	0	25	0	25	0	25
84		min	-22.911	8	0	2	-31.147	10	0	1	0	1	0	1

Envelope Node Reactions (Continued)

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
85	N133	max	25.881	3	18.244	15	32.836	5	0	25	0	25	0	25
86		min	-22.262	8	0	2	-29.695	10	0	1	0	1	0	1
87	N134	max	27.429	2	41.236	13	34.203	5	0	25	0	25	0	25
88		min	-22.362	8	0	7	-28.826	11	0	1	0	1	0	1
89	N135	max	24.472	2	6.757	21	32.842	5	0	25	0	25	0	25
90		min	-21.732	8	0	2	-28.017	11	0	1	0	1	0	1
91	N136	max	39.364	3	174.304	4	53.242	4	0	25	0	25	0	25
92		min	-26.452	8	0	2	-43.094	11	0	1	0	1	0	1
93	N137	max	40.848	3	263.487	4	57.66	4	0	25	0	25	0	25
94		min	-28.215	9	0	7	-46.088	11	0	1	0	1	0	1
95	N138	max	39.824	3	212.169	3	51.94	4	0	25	0	25	0	25
96		min	-27.56	8	0	7	-41.306	11	0	1	0	1	0	1
97	N139	max	41.45	3	264.875	3	56.345	4	0	25	0	25	0	25
98		min	-28.49	8	0	7	-44.261	11	0	1	0	1	0	1
99	N140	max	25.923	13	101.991	12	27.305	6	0	25	0	25	0	25
100		min	-23.436	8	0	4	-40.541	12	0	1	0	1	0	1
101	N141	max	25.652	13	32.721	10	27.407	6	0	25	0	25	0	25
102		min	-22.505	8	0	4	-40.711	12	0	1	0	1	0	1
103	N142	max	25.599	13	97.625	12	26.963	6	0	25	0	25	0	25
104		min	-21.422	8	0	4	-39.953	12	0	1	0	1	0	1
105	N143	max	25.334	13	33.674	10	27.054	6	0	25	0	25	0	25
106		min	-20.561	7	0	4	-40.12	12	0	1	0	1	0	1
107	N144	max	0	25	0	25	0	25	0	25	0	25	0	25
108		min	0	1	-509.392	6	0	1	0	1	0	1	0	1
109	N145	max	0	25	0	25	0	25	0	25	0	25	0	25
110		min	0	1	-508.661	6	0	1	0	1	0	1	0	1
111	N146	max	21.151	2	34.557	12	27.015	6	0	25	0	25	0	25
112		min	-20.929	8	0	4	-29.963	12	0	1	0	1	0	1
113	N147	max	19.765	2	9.05	9	26.125	6	0	25	0	25	0	25
114		min	-19.694	8	0	2	-28.579	12	0	1	0	1	0	1
115	N148	max	20.466	13	31.702	11	26.548	6	0	25	0	25	0	25
116		min	-19.492	7	0	4	-29.476	12	0	1	0	1	0	1
117	N149	max	19.496	13	8.483	9	25.643	6	0	25	0	25	0	25
118		min	-18.843	7	0	2	-28.185	12	0	1	0	1	0	1
119	N150	max	28.408	13	192.567	12	27.114	6	0	25	0	25	0	25
120		min	-24.661	8	0	4	-45.356	12	0	1	0	1	0	1
121	N151	max	30.26	13	231.408	12	29.774	6	0	25	0	25	0	25
122		min	-24.482	8	0	4	-49.85	12	0	1	0	1	0	1
123	N152	max	28.039	13	194.233	12	26.889	6	0	25	0	25	0	25
124		min	-23.119	8	0	4	-44.905	12	0	1	0	1	0	1
125	N153	max	29.854	13	229.615	12	29.533	6	0	25	0	25	0	25
126		min	-22.92	8	0	4	-49.349	12	0	1	0	1	0	1
127	N196	max	0	25	484.899	6	0	25	0	25	0	25	0	25
128		min	0	1	0	2	0	1	0	1	0	1	0	1
129	Totals:	max	1748.856	2	1845.99	1	1670.117	5						
130		min	-1749.07	8	1582.051	10	-1669.888	11						

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [lb-ft]	phi*Mn z-z [lb-ft]	Cb	Eqn
1	STAB	PIPE_2.5(NOMINAL)	0.685	0	6	0.117	0		3	44408.566	53677.579	3811.826	3811.826	1	H1-1b
2	L9	L2.5X2.5X3	0.667	56	10	0.069	34.667	y	10	20314.8	29192.4	872.574	1517.62	1.476	H2-1
3	L2	L2.5X2.5X3	0.65	53.334	10	0.062	61.334	y	2	20314.8	29192.4	872.574	1525.843	1.5	H2-1
4	L12	L2.5X2.5X3	0.644	40	2	0.073	40	y	13	20314.8	29192.4	872.574	1525.846	1.5	H2-1
5	V1	PIPE_4.0(NOMINAL)	0.562	69.333	2	0.119	72		9	89562.303	99982.526	11317.631	11317.631	1	H1-1b
6	L1	L2.5X2.5X3	0.558	53.333	10	0.06	56	y	11	20314.8	29192.4	872.574	1525.848	1.5	H2-1

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [lb-ft]	phi*Mn z-z [lb-ft]	Cb	Eqn
7	D3	L3X3X4	0.479	5.434	3	0.153	4.075	z	3	32294.663	46656	1688.138	3641.391	1.5	H2-1
8	L11	L2.5X2.5X3	0.462	40	6	0.032	37.333	z	7	20314.8	29192.4	872.574	1525.848	1.5	H2-1
9	D2	L3X3X4	0.438	5.434	9	0.109	4.075	z	9	32294.624	46656	1688.138	3641.39	1.5	H2-1
10	D1	L3X3X4	0.422	5.434	12	0.093	4.075	z	11	32294.663	46656	1688.138	3641.391	1.5	H2-1
11	L10	L2.5X2.5X3	0.403	40	6	0.034	61.334	z	12	20314.8	29192.4	872.574	1525.843	1.5	H2-1
12	TR12	SR5/8	0.37	8	13	0.023	8		13	17853.13	25402.722	264.612	264.612	1	H1-1b
13	TR9	SR5/8	0.369	8	11	0.023	8		11	17853.13	25402.722	264.612	264.612	1	H1-1b
14	TR6	SR5/8	0.338	8	9	0.021	8		9	17853.13	25402.722	264.612	264.612	1	H1-1b
15	TR4	SR5/8	0.338	8	7	0.021	8		7	17853.13	25402.722	264.612	264.612	1	H1-1b
16	MP4	PIPE_3.0(NOMINAL)	0.337	24	6	0.057	24		6	62869.996	70196.802	6123.718	6123.718	1	H1-1b
17	TR10	SR5/8	0.335	8	7	0.022	8		7	17853.13	25402.722	264.612	264.612	1	H1-1b
18	TR11	SR5/8	0.334	8	5	0.022	8		5	17853.13	25402.722	264.612	264.612	1	H1-1b
19	TR2	SR5/8	0.31	8	3	0.019	8		3	17853.13	25402.722	264.612	264.612	1	H1-1b
20	TR3	SR5/8	0.309	8	12	0.02	8		13	17853.13	25402.722	264.612	264.612	1	H1-1b
21	TR1	SR5/8	0.309	8	5	0.019	8		5	17853.13	25402.722	264.612	264.612	1	H1-1b
22	TR5	SR5/8	0.309	8	4	0.02	8		3	17853.13	25402.722	264.612	264.612	1	H1-1b
23	TR8	SR5/8	0.29	8	12	0.019	8		12	17853.13	25402.722	264.612	264.612	1	H1-1b
24	TR7	SR5/8	0.289	8	8	0.019	8		8	17853.13	25402.722	264.612	264.612	1	H1-1b
25	MP3	PIPE_2.5(NOMINAL)	0.273	60	12	0.06	60		10	43716.23	53677.579	3811.826	3811.826	1	H1-1b
26	MP1	PIPE_2.5(NOMINAL)	0.245	53.333	8	0.052	53.333		10	44888.302	53677.579	3811.826	3811.826	1	H1-1b
27	MP2	PIPE_2.5(NOMINAL)	0.232	50	4	0.052	50		2	46007.772	53677.579	3811.826	3811.826	1	H1-1b
28	L4	L2.5X2.5X3	0.124	15.354	13	0.086	16.75	z	13	27204.75	29192.4	872.574	1971.83	1.456	H2-1
29	L3	L2.5X2.5X3	0.1	0.931	10	0.099	0	y	7	27204.881	29192.4	872.574	1971.83	1.5	H2-1
30	L8	L2.5X2.5X3	0.087	16.749	10	0.006	0	z	10	27204.881	29192.4	872.574	1971.83	1.5	H2-1
31	H1	L2.5X2.5X3	0.086	17.253	9	0.011	32.69	z	9	22914.255	29192.4	872.574	1854.782	1.136	H2-1
32	L7	L2.5X2.5X3	0.086	16.75	10	0.006	0	z	10	27204.75	29192.4	872.574	1971.83	1.5	H2-1
33	H2	L2.5X2.5X3	0.082	17.253	12	0.009	32.69	z	13	22914.255	29192.4	872.574	1854.782	1.136	H2-1
34	H3	L2.5X2.5X3	0.081	17.253	3	0.035	32.69	z	2	22914.317	29192.4	872.574	1854.784	1.136	H2-1
35	L5	L2.5X2.5X3	0.058	0	2	0.004	16.75	z	2	27204.812	29192.4	872.574	1971.83	1.5	H2-1
36	L6	L2.5X2.5X3	0.057	16.75	2	0.004	0	z	2	27204.812	29192.4	872.574	1971.83	1.5	H2-1

Accelerated Tower Engineering

Appurtenance Wind Loading (RRU Ballast Frame)
TIA-222-H

Project Data	
ATE #	019420240354
Site Name	HAILEY
Site Number	99737

Site Information	
TIA Revision	H
Structure Class	II
Exposure Category	C
Basic Wind Speed (mph)	103
Basic Wind Speed with Ice (mph)	40
Density of Ice (pcf), δ_{ice}	56
Design Ice Thickness (in), t_i	0.00
Total Height of Structure (ft), h	38.0
Mount Centerline (ft), h_m	38.7
Wind Direction Probability Factor, K_d	0.95
Gust Response Factor, G_h	1.00
Appurtenance Shielding Factor, K_a	0.90
Ground Elevation Factor, K_e	0.82
Use CFD values for EPAs where available	TRUE

Seismic Information	
Short-Period Response Parameter, Ss	0.462
1Sec-Period Response Parameter, S1	0.150
Soil Category	D
Short-Period Design Response Parameter, SDS	0.441
1Sec-Period Design Response Parameter, SD1	0.230
Response Modification Coefficient, R	2.000
Seismic Response Coefficient, Cs	0.220
Earthquake Amplification Factor, As	1.000
Vertical Seismic Load Factor	0.088
Horizontal Seismic Load Factor	0.220

Mount Pipe Loading

Mount Pipe	Mount Location	Vertical Offset (ft)	Length (in)	Diameter (in)	Weight (lbs)	Velocity Pressure Coefficient	Velocity Pressure (psf)	Front Force Coefficient	Top Front Design Wind Force (plf)	Base Front Design Wind Force (plf)	Side Force Coefficient	Side Design Wind Force (plf)	Ice Weight (plf)	Ice Velocity Pressure (psf)	Ice Front Force Coefficient	Ice Top Front Design Wind Force (plf)	Ice Base Front Design Wind Force (lbf)	Ice Side Force Coefficient	Ice Side Design Wind Force (plf)
Direct Connection	1	0.8	18.0	0.000	0.0	1.04	22.1	0.00	0.0	0.0	0.00	0.0	0.0	3.3	0.00	0.0	0.0	0.00	0.0
Direct Connection	2	0.8	18.0	0.000	0.0	1.04	22.1	0.00	0.0	0.0	0.00	0.0	0.0	3.3	0.00	0.0	0.0	0.00	0.0
Direct Connection	3	0.8	18.0	0.000	0.0	1.04	22.1	0.00	0.0	0.0	0.00	0.0	0.0	3.3	0.00	0.0	0.0	0.00	0.0
Direct Connection	4	0.8	18.0	0.000	0.0	1.04	22.1	0.00	0.0	0.0	0.00	0.0	0.0	3.3	0.00	0.0	0.0	0.00	0.0

Appurtenance Loading

Appurtenance	Appurtenance Type	Mount Location	Quantity	Vertical Offset (ft)	Horizontal Offset (in)	Length (in)	Width (in)	Depth (in)	Weight (lbs)	Allow Shielding (Front)	% Shielded (Front)	Velocity Pressure Coefficient	Velocity Pressure (psf)	Front Force Coefficient	Front EPA (sqft)	Front Design Wind Force (lbf)	Side Force Coefficient	Side Design Wind Force (lbf)	Ice Weight (lbs)	Ice Velocity Pressure (psf)	Ice Front Force Coefficient	Ice Front Design Wind Force (lbf)	Ice Side Force Coefficient	Ice Side Design Wind Force (lbf)
ERICSSON: RRUS 4490 B5/B12A	TME	1	1	0.8	-7.4	17.5	15.1	6.8	68.0	No	0%	1.04	22.1	1.20	2.20	43.9	1.20	19.8	0.0	3.3	0.70	6.6	0.70	3.0
ERICSSON: RRUS 4490 B5/B12A	TME	1	1	0.8	7.4	17.5	15.1	6.8	68.0	Yes	100%	1.04	22.1	1.20	0.00	0.0	1.20	19.8	0.0	3.3	0.70	0.0	0.70	3.0
ERICSSON: RRUS 4490 B5/B12A	TME	2	1	0.8	-7.4	17.5	15.1	6.8	68.0	No	0%	1.04	22.1	1.20	2.20	43.9	1.20	0.0	0.0	3.3	0.70	6.6	0.70	0.0
ERICSSON: RRUS 4890 B25/B66	TME	2	1	0.8	7.5	17.5	15.1	6.9	68.0	Yes	100%	1.04	22.1	1.20	0.00	0.0	1.20	0.0	0.0	3.3	0.70	0.0	0.70	0.0
ERICSSON: RRUS 4890 B25/B66	TME	3	1	0.8	-7.5	17.5	15.1	6.9	68.0	No	0%	1.04	22.1	1.20	2.20	43.9	1.20	0.0	0.0	3.3	0.70	6.6	0.70	0.0
ERICSSON: RRUS 4890 B25/B66	TME	3	1	0.8	7.5	17.5	15.1	6.9	68.0	Yes	100%	1.04	22.1	1.20	0.00	0.0	1.20	0.0	0.0	3.3	0.70	0.0	0.70	0.0
RAYCAP: DC6-48-60-18-8C	TME	4	1	0.8	-9.1	31.4	10.2	10.2	26.2	No	0%	1.04	22.1	0.51	1.14	22.8	0.51	22.8	0.0	3.3	0.71	4.8	0.71	4.8
RAYCAP: DC9-48-60-24-PC16-EV	TME	4	1	0.8	8.8	18.9	15.9	9.6	26.2	Yes	64%	1.04	22.1	1.20	0.90	17.9	1.20	30.3	0.0	3.3	0.70	2.7	0.70	4.6

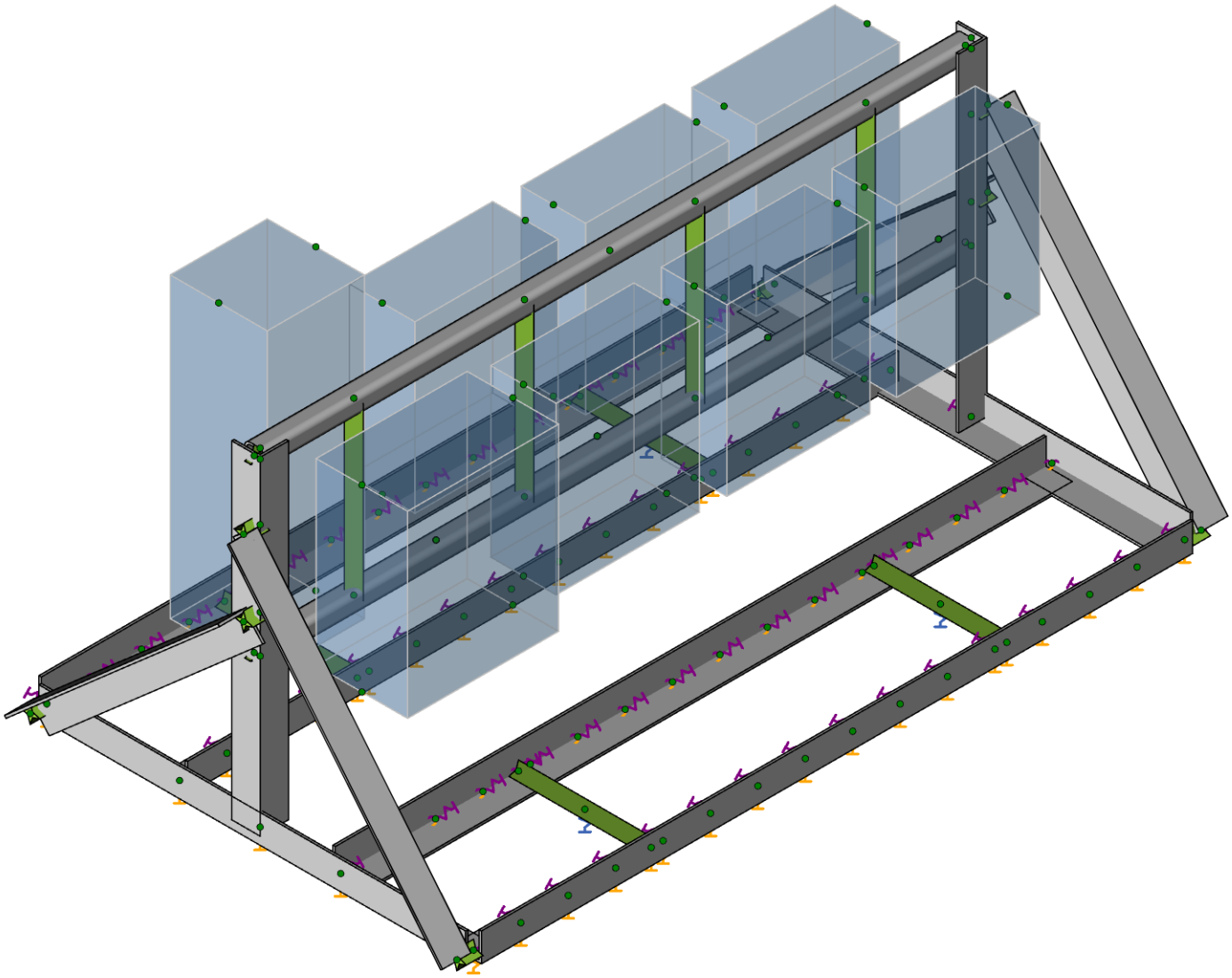
Distributed Loads

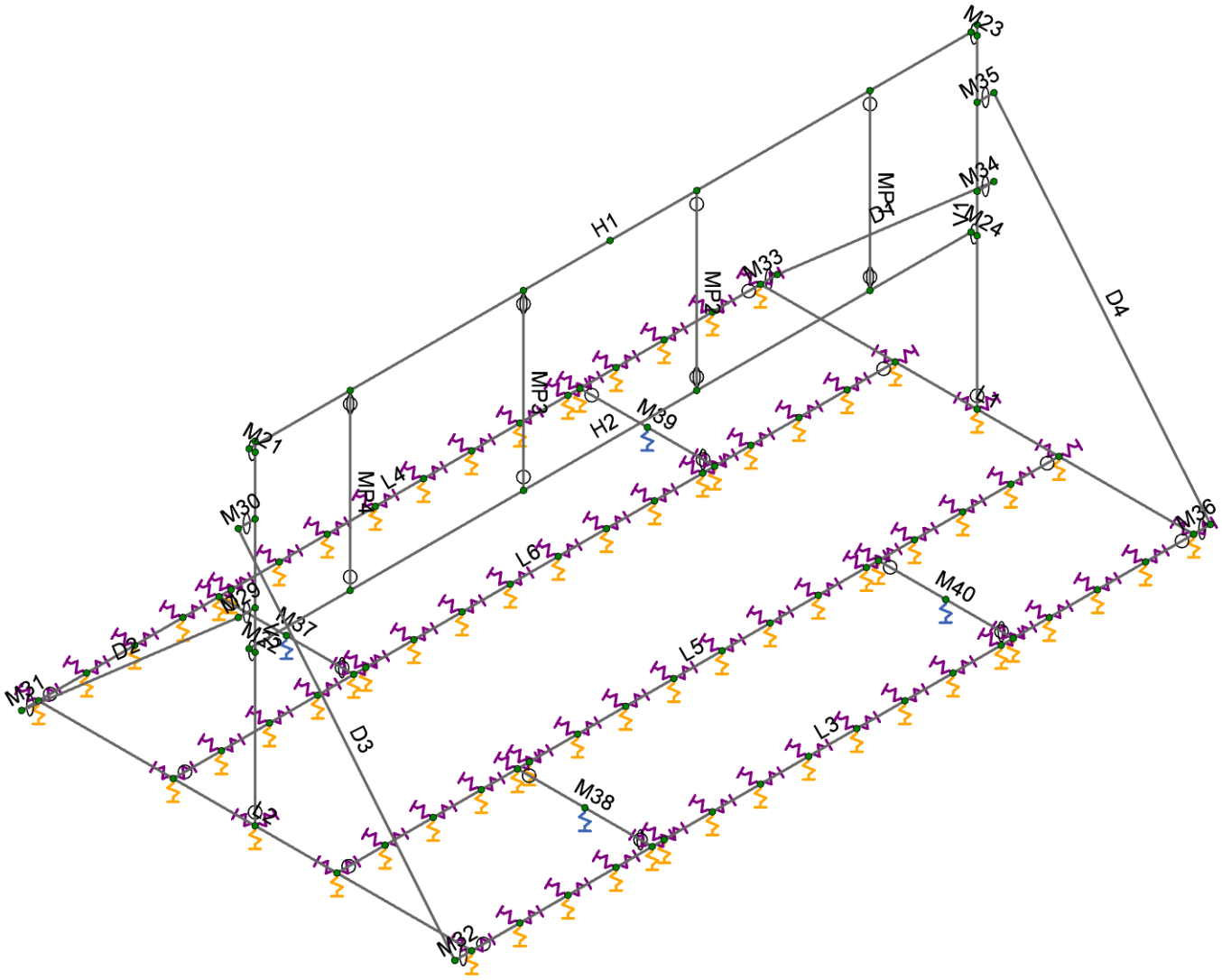
Mount Members	Vertical Offset (ft)	Height/Dia. (in)	Depth (in)	Shape	Min Velocity Pressure Coefficient	Max Velocity Pressure Coefficient	Min Velocity Pressure (psf)	Max Velocity Pressure (psf)	Min Force Coefficient	Max Force Coefficient	Min Ice Weight (plf)	Max Ice Weight (plf)	Min Ice Velocity Pressure (psf)	Max Ice Velocity Pressure (psf)	Min Ice Force Coefficient	Max Ice Force Coefficient
L3X3X4	0.0	3.000	3.000	Flat	1.04	1.04	19.8	19.8	1.50	2.00	0.00	0.00	3.0	3.0	0.87	1.20
HSS2X2X4	0.0	2.000	2.000	Flat	1.04	1.04	19.8	19.8	2.00	2.00	0.00	0.00	3.0	3.0	1.20	1.20

Surface Loads

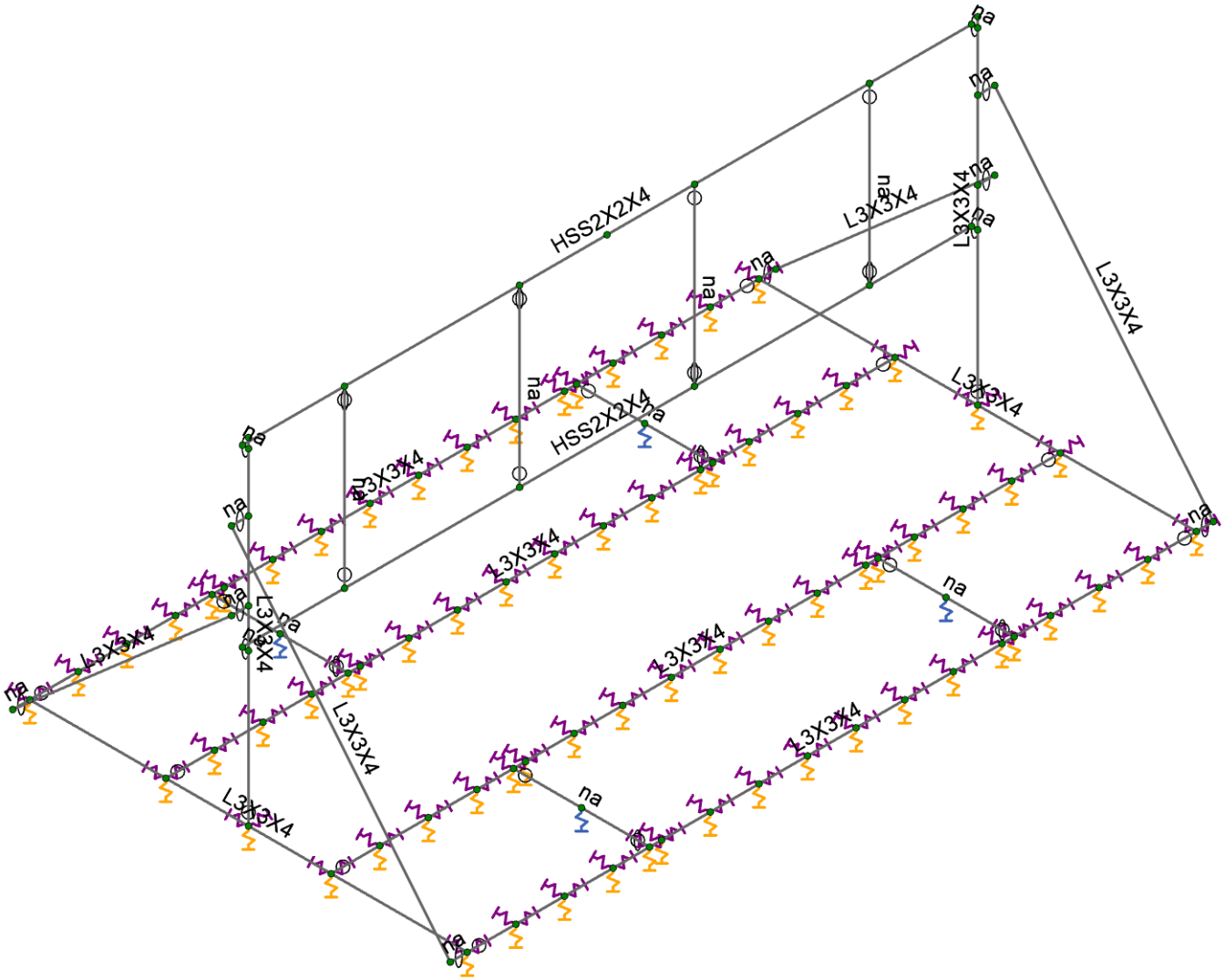
Surface Label	Velocity Pressure Coefficient	Velocity Pressure (psf)	Force Coefficient	Ice Weight (psf)	Ice Velocity Pressure (psf)	Ice Force Coefficient

4710 Portofino Drive, Longmont, CO 80503, shawn.cook@atowereng.com (479) 530-8627, ben.ude@atowereng.com (360) 477-1934

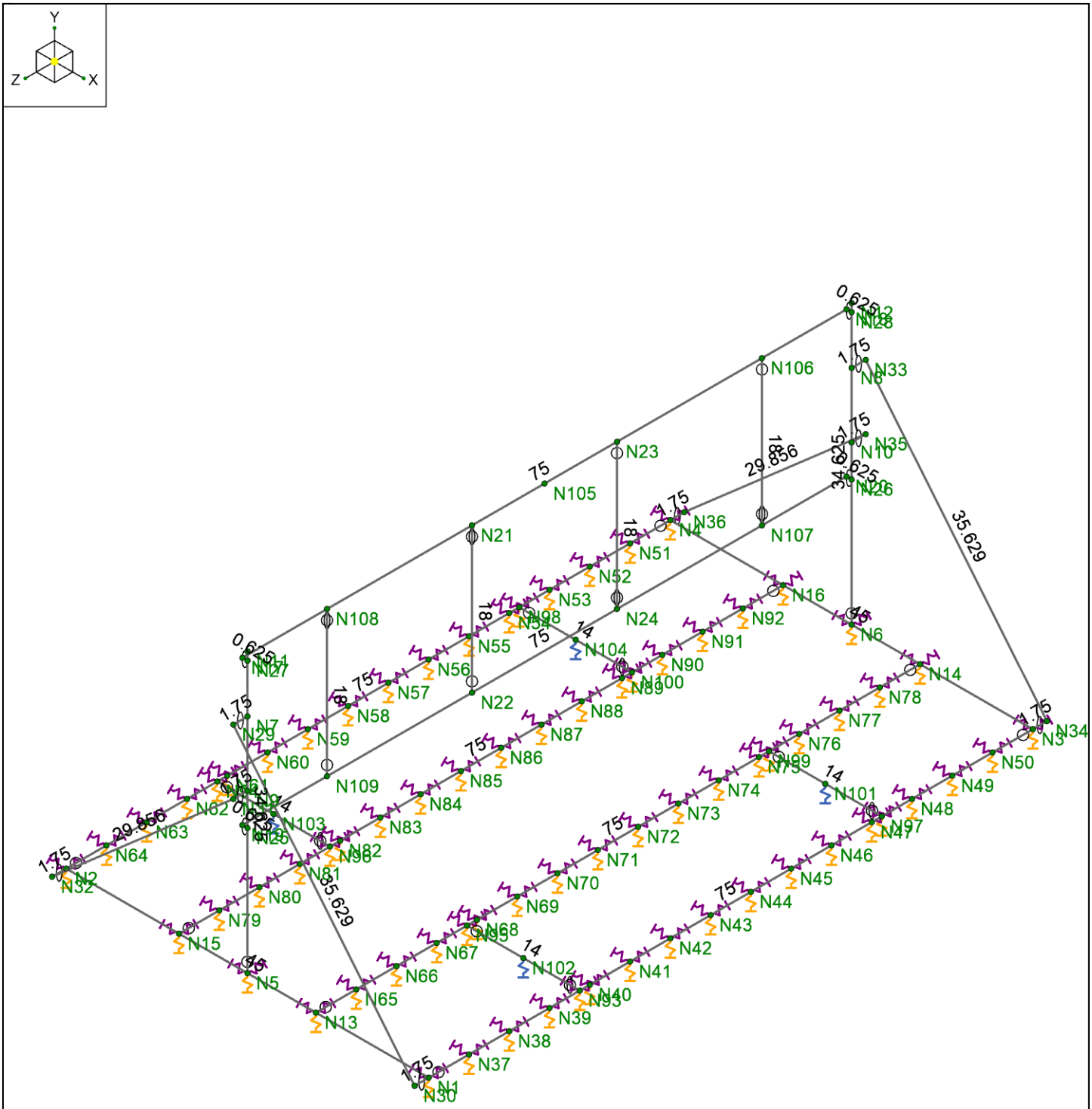

Y
Z
X



IRISA	Accelerated Tower Engine…	RRU Ballast Mount	SK-2
	Shawn D. Cook, P.E.		Jun 27, 2024 at 10:43 AM
			99737 Mount Analysis_RRU.…

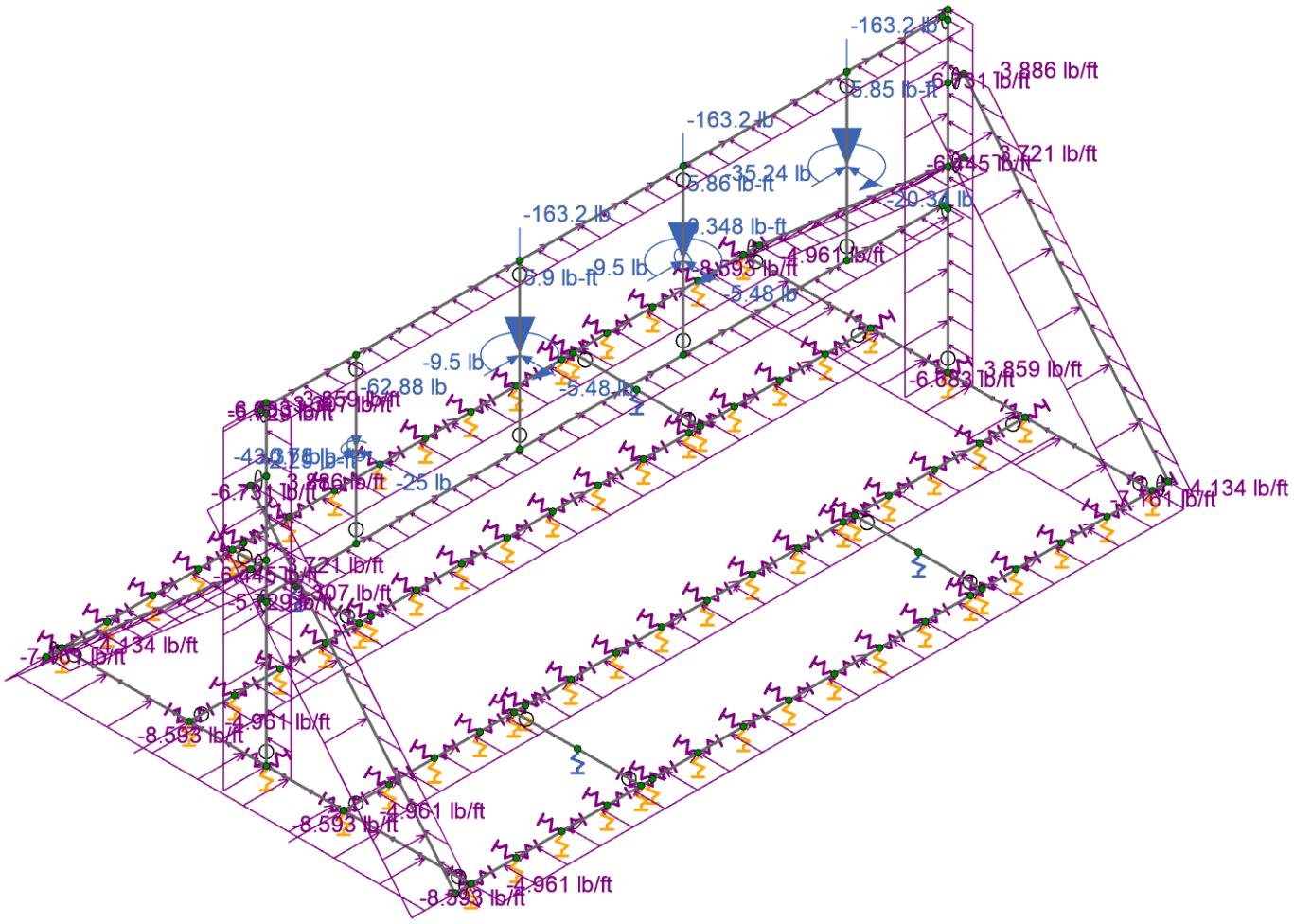


RISA A NEMETSCHEK COMPANY	Accelerated Tower Engine…	RRU Ballast Mount	SK-3
	Shawn D. Cook, P.E.		Jun 27, 2024 at 10:44 AM
			99737 Mount Analysis_RRU.…



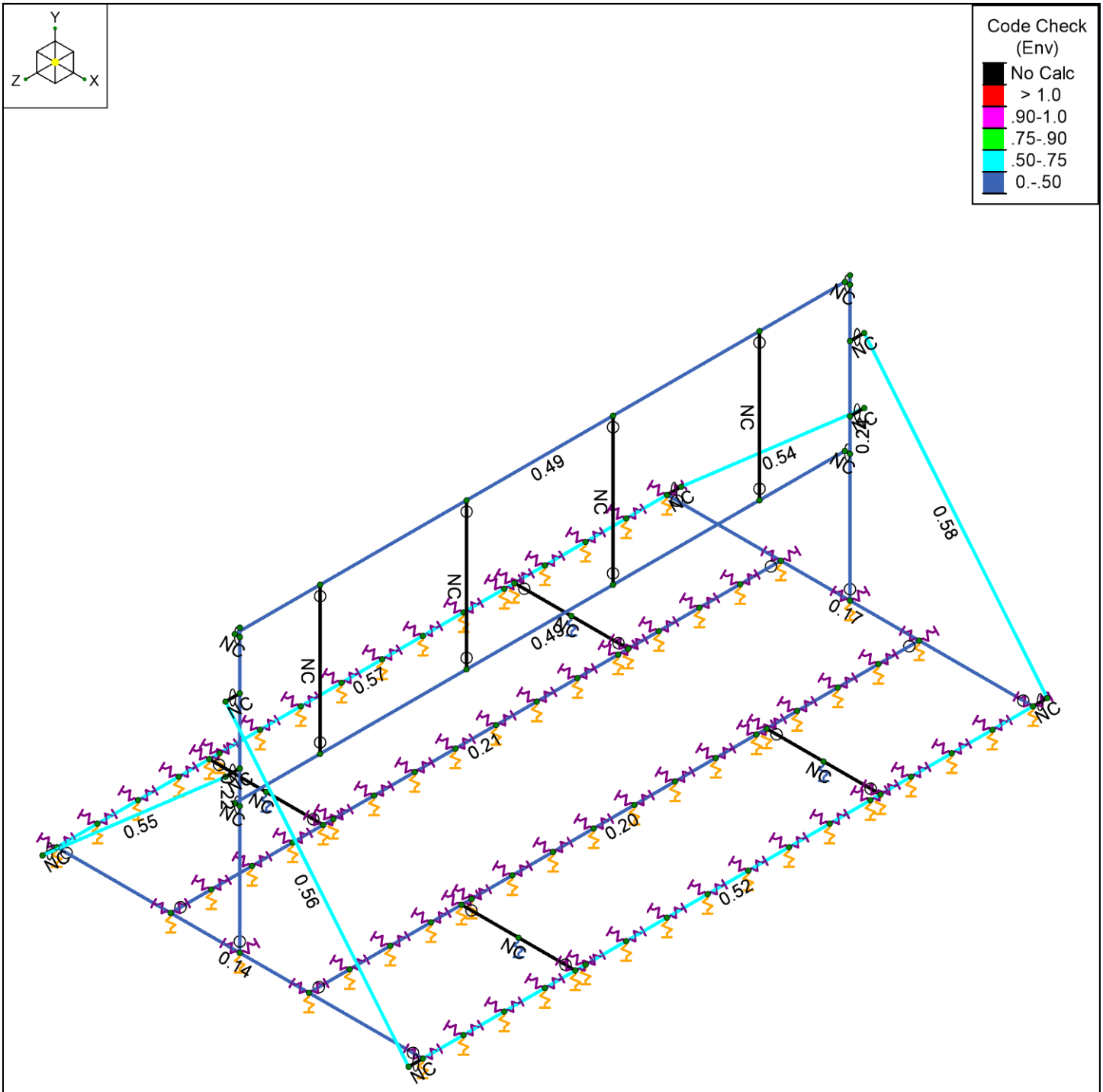
Member Length (in) Displayed

RISA A NEMETSCHEK COMPANY	Accelerated Tower Engine…	RRU Ballast Mount	SK-4
	Shawn D. Cook, P.E.		Jun 27, 2024 at 10:44 AM
			99737 Mount Analysis_RRU.…



Loads: LC 4, 1.2D + 1.0W (60 deg)

IRISA	Accelerated Tower Engine…	RRU Ballast Mount	SK-5
	Shawn D. Cook, P.E.		Jun 27, 2024 at 11:33 AM
			99737 Mount Analysis_RRU.…



Member Code Checks Displayed (Enveloped)

RISA A NEMETSCHEK COMPANY	Accelerated Tower Engine…	RRU Ballast Mount	SK-6
	Shawn D. Cook, P.E.		Jun 27, 2024 at 11:32 AM
			99737 Mount Analysis_RRU.…

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	FRP	2600	425	0.33	0.44	0.12	10	1	23	1

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	Vertical	L3X3X4	None	None	FRP	Typical	1.44	1.23	1.23	0.031
2	Diagonal	L3X3X4	None	None	FRP	Typical	1.44	1.23	1.23	0.031
3	Base Angle	L3X3X4	None	None	FRP	Typical	1.44	1.23	1.23	0.031
4	Horizontal	HSS2X2X4	None	None	FRP	Typical	1.51	0.747	0.747	1.31

Material Take-Off

	Material	Size	Pieces	Length[in]	Weight[K]
1	General Members				
2	RIGID		20	144.5	0
3	Total General		20	144.5	0
4					
5	Hot Rolled Steel				
6	FRP	HSS2X2X4	2	150	0.016
7	FRP	L3X3X4	12	590.2	0.059
8	Total HR Steel		14	740.2	0.075

Hot Rolled Steel Design Parameters

	Label	Shape	Length [in]	Lb z-z [in]	Lcomp top [in]	Channel Conn.	a [in]	Function
1	L3	Base Angle	75			N/A	N/A	Lateral
2	L1	Base Angle	45			N/A	N/A	Lateral
3	L4	Base Angle	75			N/A	N/A	Lateral
4	L2	Base Angle	45			N/A	N/A	Lateral
5	V1	Vertical	34.625	19.625		N/A	N/A	Lateral
6	V2	Vertical	34.625	19.625		N/A	N/A	Lateral
7	H1	Horizontal	75			N/A	N/A	Lateral
8	H2	Horizontal	75			N/A	N/A	Lateral
9	D3	Diagonal	35.629			N/A	N/A	Lateral
10	D2	Diagonal	29.856			N/A	N/A	Lateral
11	D4	Diagonal	35.629			N/A	N/A	Lateral
12	D1	Diagonal	29.856			N/A	N/A	Lateral
13	L5	Base Angle	75		Lbyy	N/A	N/A	Lateral
14	L6	Base Angle	75		Lbyy	N/A	N/A	Lateral

Node Coordinates

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
1	N1	5.45	0	17.5	
2	N2	-39.55	0	17.5	
3	N3	5.45	0	-57.5	
4	N4	-39.55	0	-57.5	
5	N5	-17.05	0	17.5	
6	N6	-17.05	0	-57.5	
7	N7	-17.05	27.625	17.5	
8	N8	-17.05	27.625	-57.5	
9	N9	-17.05	19.625	17.5	
10	N10	-17.05	19.625	-57.5	

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
11	N11	-17.05	34.625	17.5	
12	N12	-17.05	34.625	-57.5	
13	N13	-8.55	0	17.5	
14	N14	-8.55	0	-57.5	
15	N15	-25.55	0	17.5	
16	N16	-25.55	0	-57.5	
17	N17	-17.675	33.625	17.5	
18	N18	-17.675	33.625	-57.5	
19	N19	-17.675	15.625	17.5	
20	N20	-17.675	15.625	-57.5	
21	N21	-17.675	33.625	-11	
22	N22	-17.675	15.625	-11	
23	N23	-17.675	33.625	-29	
24	N24	-17.675	15.625	-29	
25	N25	-17.05	15.625	17.5	
26	N26	-17.05	15.625	-57.5	
27	N27	-17.05	33.625	17.5	
28	N28	-17.05	33.625	-57.5	
29	N29	-17.05	27.625	19.25	
30	N30	5.45	0	19.25	
31	N31	-17.05	19.625	19.25	
32	N32	-39.55	0	19.25	
33	N33	-17.05	27.625	-59.25	
34	N34	5.45	0	-59.25	
35	N35	-17.05	19.625	-59.25	
36	N36	-39.55	0	-59.25	
37	N37	5.45	0	12.5	
38	N38	5.45	0	7.5	
39	N39	5.45	0	2.5	
40	N40	5.45	0	-2.5	
41	N41	5.45	0	-7.5	
42	N42	5.45	0	-12.5	
43	N43	5.45	0	-17.5	
44	N44	5.45	0	-22.5	
45	N45	5.45	0	-27.5	
46	N46	5.45	0	-32.5	
47	N47	5.45	0	-37.5	
48	N48	5.45	0	-42.5	
49	N49	5.45	0	-47.5	
50	N50	5.45	0	-52.5	
51	N51	-39.55	0	-52.5	
52	N52	-39.55	0	-47.5	
53	N53	-39.55	0	-42.5	
54	N54	-39.55	0	-37.5	
55	N55	-39.55	0	-32.5	
56	N56	-39.55	0	-27.5	
57	N57	-39.55	0	-22.5	
58	N58	-39.55	0	-17.5	
59	N59	-39.55	0	-12.5	
60	N60	-39.55	0	-7.5	
61	N61	-39.55	0	-2.5	
62	N62	-39.55	0	2.5	
63	N63	-39.55	0	7.5	
64	N64	-39.55	0	12.5	
65	N65	-8.55	0	12.5	

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
66	N66	-8.55	0	7.5	
67	N67	-8.55	0	2.5	
68	N68	-8.55	0	-2.5	
69	N69	-8.55	0	-7.5	
70	N70	-8.55	0	-12.5	
71	N71	-8.55	0	-17.5	
72	N72	-8.55	0	-22.5	
73	N73	-8.55	0	-27.5	
74	N74	-8.55	0	-32.5	
75	N75	-8.55	0	-37.5	
76	N76	-8.55	0	-42.5	
77	N77	-8.55	0	-47.5	
78	N78	-8.55	0	-52.5	
79	N79	-25.55	0	12.5	
80	N80	-25.55	0	7.5	
81	N81	-25.55	0	2.5	
82	N82	-25.55	0	-2.5	
83	N83	-25.55	0	-7.5	
84	N84	-25.55	0	-12.5	
85	N85	-25.55	0	-17.5	
86	N86	-25.55	0	-22.5	
87	N87	-25.55	0	-27.5	
88	N88	-25.55	0	-32.5	
89	N89	-25.55	0	-37.5	
90	N90	-25.55	0	-42.5	
91	N91	-25.55	0	-47.5	
92	N92	-25.55	0	-52.5	
93	N93	5.45	0	-1.25	
94	N94	-39.55	0	-1.25	
95	N95	-8.55	0	-1.25	
96	N96	-25.55	0	-1.25	
97	N97	5.45	0	-38.75	
98	N98	-39.55	0	-38.75	
99	N99	-8.55	0	-38.75	
100	N100	-25.55	0	-38.75	
101	N101	-1.55	0	-38.75	
102	N102	-1.55	0	-1.25	
103	N103	-32.55	0	-1.25	
104	N104	-32.55	0	-38.75	
105	N105	-17.675	33.625	-47	
106	N106	-17.675	15.625	-47	
107	N107	-17.675	33.625	7	
108	N108	-17.675	15.625	7	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]
1	N101		TS0.2	
2	N102		TS0.2	
3	N103		TS0.2	
4	N104		TS0.2	
5	N76	S0.15	CS1	S0.15
6	N37	S0.15	CS1	S0.15
7	N72	S0.15	CS1	S0.15
8	N41	S0.15	CS1	S0.15
9	N60	S0.15	CS1	S0.15

Node Boundary Conditions (Continued)

	Node Label	X [k/in]	Y [k/in]	Z [k/in]
10	N90	S0.15	CS1	S0.15
11	N50	S0.15	CS1	S0.15
12	N39	S0.15	CS1	S0.15
13	N71	S0.15	CS1	S0.15
14	N64	S0.15	CS1	S0.15
15	N47	S0.15	CS1	S0.15
16	N45	S0.15	CS1	S0.15
17	N46	S0.15	CS1	S0.15
18	N57	S0.15	CS1	S0.15
19	N58	S0.15	CS1	S0.15
20	N68	S0.15	CS1	S0.15
21	N53	S0.15	CS1	S0.15
22	N38	S0.15	CS1	S0.15
23	N40	S0.15	CS1	S0.15
24	N42	S0.15	CS1	S0.15
25	N43	S0.15	CS1	S0.15
26	N44	S0.15	CS1	S0.15
27	N48	S0.15	CS1	S0.15
28	N49	S0.15	CS1	S0.15
29	N51	S0.15	CS1	S0.15
30	N52	S0.15	CS1	S0.15
31	N54	S0.15	CS1	S0.15
32	N55	S0.15	CS1	S0.15
33	N56	S0.15	CS1	S0.15
34	N59	S0.15	CS1	S0.15
35	N61	S0.15	CS1	S0.15
36	N62	S0.15	CS1	S0.15
37	N63	S0.15	CS1	S0.15
38	N73	S0.15	CS1	S0.15
39	N65	S0.15	CS1	S0.15
40	N66	S0.15	CS1	S0.15
41	N67	S0.15	CS1	S0.15
42	N69	S0.15	CS1	S0.15
43	N70	S0.15	CS1	S0.15
44	N74	S0.15	CS1	S0.15
45	N75	S0.15	CS1	S0.15
46	N77	S0.15	CS1	S0.15
47	N78	S0.15	CS1	S0.15
48	N79	S0.15	CS1	S0.15
49	N80	S0.15	CS1	S0.15
50	N81	S0.15	CS1	S0.15
51	N82	S0.15	CS1	S0.15
52	N83	S0.15	CS1	S0.15
53	N84	S0.15	CS1	S0.15
54	N85	S0.15	CS1	S0.15
55	N86	S0.15	CS1	S0.15
56	N87	S0.15	CS1	S0.15
57	N88	S0.15	CS1	S0.15
58	N89	S0.15	CS1	S0.15
59	N91	S0.15	CS1	S0.15
60	N92	S0.15	CS1	S0.15
61	N13	S0.15	CS1	S0.15
62	N14	S0.15	CS1	S0.15
63	N15	S0.15	CS1	S0.15
64	N16	S0.15	CS1	S0.15

Node Boundary Conditions (Continued)

	Node Label	X [k/in]	Y [k/in]	Z [k/in]
65	N3	S0.15	CS1	S0.15
66	N2	S0.15	CS1	S0.15
67	N1	S0.15	CS1	S0.15
68	N4	S0.15	CS1	S0.15
69	N5	S0.15	CS1	S0.15
70	N6	S0.15	CS1	S0.15
71	N93	S0.15	CS1	S0.15
72	N94	S0.15	CS1	S0.15
73	N95	S0.15	CS1	S0.15
74	N96	S0.15	CS1	S0.15
75	N97	S0.15	CS1	S0.15
76	N98	S0.15	CS1	S0.15
77	N99	S0.15	CS1	S0.15
78	N100	S0.15	CS1	S0.15

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Point	Distributed
1	Dead Load	None		-1		16	
2	Wind Load (0 deg)	None				5	12
3	Wind Load (30 deg)	None				18	28
4	Wind Load (60 deg)	None				18	28
5	Wind Load (90 deg)	None				8	16
6	Wind Load (120 deg)	None				18	28
7	Wind Load (150 deg)	None				18	28
8	Wind Load (180 deg)	None				5	24
9	Wind Load (210 deg)	None				18	28
10	Wind Load (240 deg)	None				18	28
11	Wind Load (270 deg)	None				8	16
12	Wind Load (300 deg)	None				18	28
13	Wind Load (330 deg)	None				18	28
14	Vert. Seismic Load	None		-0.088		16	
15	Horz. Seismic Load (0 deg)	None	-0.22			8	
16	Horz. Seismic Load (30 deg)	None	-0.191		-0.11	24	
17	Horz. Seismic Load (60 deg)	None	-0.11		-0.191	24	
18	Horz. Seismic Load (90 deg)	None			-0.22	16	
19	Horz. Seismic Load (120 deg)	None	0.11		-0.191	24	
20	Horz. Seismic Load (150 deg)	None	0.191		-0.11	24	
21	Horz. Seismic Load (180 deg)	None	0.22			8	
22	Horz. Seismic Load (210 deg)	None	0.191		0.11	24	
23	Horz. Seismic Load (240 deg)	None	0.11		0.191	24	
24	Horz. Seismic Load (270 deg)	None			0.22	16	
25	Horz. Seismic Load (300 deg)	None	-0.11		0.191	24	
26	Horz. Seismic Load (330 deg)	None	-0.191		0.11	24	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor
1	1.4D	Yes	Y	1	1.4				
2	1.2D + 1.0W (0 deg)	Yes	Y	1	1.2	2	1		
3	1.2D + 1.0W (30 deg)	Yes	Y	1	1.2	3	1		
4	1.2D + 1.0W (60 deg)	Yes	Y	1	1.2	4	1		
5	1.2D + 1.0W (90 deg)	Yes	Y	1	1.2	5	1		
6	1.2D + 1.0W (120 deg)	Yes	Y	1	1.2	6	1		
7	1.2D + 1.0W (150 deg)	Yes	Y	1	1.2	7	1		

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor
8	1.2D + 1.0W (180 deg)	Yes	Y	1	1.2	8	1		
9	1.2D + 1.0W (210 deg)	Yes	Y	1	1.2	9	1		
10	1.2D + 1.0W (240 deg)	Yes	Y	1	1.2	10	1		
11	1.2D + 1.0W (270 deg)	Yes	Y	1	1.2	11	1		
12	1.2D + 1.0W (300 deg)	Yes	Y	1	1.2	12	1		
13	1.2D + 1.0W (330 deg)	Yes	Y	1	1.2	13	1		
14	1.2D + 1.0Ev + 1.0Eh (0 deg)	Yes	Y	1	1.2	14	1	15	1
15	1.2D + 1.0Ev + 1.0Eh (30 deg)	Yes	Y	1	1.2	14	1	16	1
16	1.2D + 1.0Ev + 1.0Eh (60 deg)	Yes	Y	1	1.2	14	1	17	1
17	1.2D + 1.0Ev + 1.0Eh (90 deg)	Yes	Y	1	1.2	14	1	18	1
18	1.2D + 1.0Ev + 1.0Eh (120 deg)	Yes	Y	1	1.2	14	1	19	1
19	1.2D + 1.0Ev + 1.0Eh (150 deg)	Yes	Y	1	1.2	14	1	20	1
20	1.2D + 1.0Ev + 1.0Eh (180 deg)	Yes	Y	1	1.2	14	1	21	1
21	1.2D + 1.0Ev + 1.0Eh (210 deg)	Yes	Y	1	1.2	14	1	22	1
22	1.2D + 1.0Ev + 1.0Eh (240 deg)	Yes	Y	1	1.2	14	1	23	1
23	1.2D + 1.0Ev + 1.0Eh (270 deg)	Yes	Y	1	1.2	14	1	24	1
24	1.2D + 1.0Ev + 1.0Eh (300 deg)	Yes	Y	1	1.2	14	1	25	1
25	1.2D + 1.0Ev + 1.0Eh (330 deg)	Yes	Y	1	1.2	14	1	26	1

Envelope Node Reactions

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	N101	max	0	25	-0.184	25	0	25	0	25	0	25	0	25
2		min	0	1	-7.738	4	0	1	0	1	0	1	0	1
3	N102	max	0	25	-0.348	15	0	25	0	25	0	25	0	25
4		min	0	1	-8.611	12	0	1	0	1	0	1	0	1
5	N103	max	0	25	-0.465	19	0	25	0	25	0	25	0	25
6		min	0	1	-6.997	10	0	1	0	1	0	1	0	1
7	N104	max	0	25	-0.295	21	0	25	0	25	0	25	0	25
8		min	0	1	-6.172	6	0	1	0	1	0	1	0	1
9	N76	max	10.678	3	11.458	6	4.591	6	0	25	0	25	0	25
10		min	-10.748	9	0	9	-4.579	12	0	1	0	1	0	1
11	N37	max	15.985	13	44.754	8	10.287	4	0	25	0	25	0	25
12		min	-15.961	7	0	2	-10.354	12	0	1	0	1	0	1
13	N72	max	4.262	3	0.105	2	4.596	6	0	25	0	25	0	25
14		min	-4.087	9	0	1	-4.576	12	0	1	0	1	0	1
15	N41	max	7.009	13	0	25	10.244	4	0	25	0	25	0	25
16		min	-7.04	7	0	1	-10.323	12	0	1	0	1	0	1
17	N60	max	7.358	3	0	25	10.573	6	0	25	0	25	0	25
18		min	-7.224	9	0	1	-10.61	10	0	1	0	1	0	1
19	N90	max	11.239	13	10.93	4	4.767	6	0	25	0	25	0	25
20		min	-11.048	7	0	9	-4.749	10	0	1	0	1	0	1
21	N50	max	15.974	3	48.094	8	10.268	4	0	25	0	25	0	25
22		min	-15.935	9	0	2	-10.376	12	0	1	0	1	0	1
23	N39	max	12.077	13	22.635	6	10.261	4	0	25	0	25	0	25
24		min	-11.8	7	0	2	-10.333	12	0	1	0	1	0	1
25	N71	max	4.191	13	0.292	2	4.598	6	0	25	0	25	0	25
26		min	-4.083	7	0	1	-4.576	12	0	1	0	1	0	1
27	N64	max	16.672	3	47.62	2	10.615	6	0	25	0	25	0	25
28		min	-16.562	9	0	6	-10.645	10	0	1	0	1	0	1
29	N47	max	9.249	3	10.274	10	10.24	4	0	25	0	25	0	25
30		min	-9.189	9	0	1	-10.338	12	0	1	0	1	0	1
31	N45	max	5.058	3	0	25	10.235	4	0	25	0	25	0	25
32		min	-5.336	9	0	1	-10.326	12	0	1	0	1	0	1
33	N46	max	6.97	3	0	25	10.237	4	0	25	0	25	0	25
34		min	-7.076	9	0	1	-10.331	12	0	1	0	1	0	1

Envelope Node Reactions (Continued)

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
35	N57	max	4.203	2	0	25	10.565	6	0	25	0	25	LOCKED	
36		min	-3.724	7	0	1	-10.608	10	0	1	0	1	LOCKED	
37	N58	max	4.185	2	0	25	10.565	6	0	25	0	25	0	25
38		min	-3.706	8	0	1	-10.607	10	0	1	0	1	0	1
39	N68	max	9.571	13	3.187	12	4.606	6	0	25	0	25	0	25
40		min	-9.37	7	0	1	-4.578	12	0	1	0	1	0	1
41	N53	max	12.292	13	22.364	12	10.58	6	0	25	0	25	0	25
42		min	-12.397	7	0	3	-10.632	10	0	1	0	1	0	1
43	N38	max	14.705	13	32.389	7	10.273	4	0	25	0	25	0	25
44		min	-14.474	7	0	2	-10.343	12	0	1	0	1	0	1
45	N40	max	9.303	13	10.027	6	10.251	4	0	25	0	25	0	25
46		min	-9.155	7	0	1	-10.326	12	0	1	0	1	0	1
47	N42	max	5.077	13	0	25	10.239	4	0	25	0	25	0	25
48		min	-5.307	7	0	1	-10.321	12	0	1	0	1	0	1
49	N43	max	3.549	13	0	25	10.236	4	0	25	0	25	0	25
50		min	-3.996	8	0	1	-10.321	12	0	1	0	1	0	1
51	N44	max	3.553	3	0	25	10.235	4	0	25	0	25	LOCKED	
52		min	-4.013	8	0	1	-10.323	12	0	1	0	1	LOCKED	
53	N48	max	12.026	3	24.086	10	10.247	4	0	25	0	25	0	25
54		min	-11.811	9	0	2	-10.349	12	0	1	0	1	0	1
55	N49	max	14.675	3	34.444	9	10.257	4	0	25	0	25	0	25
56		min	-14.459	9	0	2	-10.361	12	0	1	0	1	0	1
57	N51	max	16.649	13	50.662	2	10.603	6	0	25	0	25	0	25
58		min	-16.519	7	0	6	-10.659	10	0	1	0	1	0	1
59	N52	max	15.045	13	35.259	13	10.59	6	0	25	0	25	0	25
60		min	-15.132	7	0	4	-10.645	10	0	1	0	1	0	1
61	N54	max	9.577	13	7.775	12	10.572	6	0	25	0	25	0	25
62		min	-9.534	7	0	1	-10.622	10	0	1	0	1	0	1
63	N55	max	7.381	13	0	25	10.568	6	0	25	0	25	0	25
64		min	-7.189	7	0	1	-10.616	10	0	1	0	1	0	1
65	N56	max	5.574	13	0	25	10.565	6	0	25	0	25	0	25
66		min	-5.24	7	0	1	-10.611	10	0	1	0	1	0	1
67	N59	max	5.56	3	0	25	10.568	6	0	25	0	25	0	25
68		min	-5.244	9	0	1	-10.608	10	0	1	0	1	0	1
69	N61	max	9.547	3	7.797	4	10.579	6	0	25	0	25	0	25
70		min	-9.596	9	0	1	-10.614	10	0	1	0	1	0	1
71	N62	max	12.273	3	21.651	4	10.589	6	0	25	0	25	0	25
72		min	-12.466	9	0	8	-10.622	10	0	1	0	1	0	1
73	N63	max	15.054	3	33.863	3	10.601	6	0	25	0	25	0	25
74		min	-15.185	9	0	7	-10.632	10	0	1	0	1	0	1
75	N73	max	6.066	3	0	25	4.594	6	0	25	0	25	0	25
76		min	-5.833	9	0	1	-4.576	12	0	1	0	1	0	1
77	N65	max	13.205	13	31.466	9	4.619	6	0	25	0	25	0	25
78		min	-13.33	7	0	3	-4.586	12	0	1	0	1	0	1
79	N66	max	11.909	13	19.711	9	4.614	6	0	25	0	25	0	25
80		min	-11.983	7	0	2	-4.583	12	0	1	0	1	0	1
81	N67	max	10.771	13	10.273	10	4.61	6	0	25	0	25	0	25
82		min	-10.695	7	0	2	-4.58	12	0	1	0	1	0	1
83	N69	max	7.901	13	0	25	4.603	6	0	25	0	25	0	25
84		min	-7.67	7	0	1	-4.577	12	0	1	0	1	0	1
85	N70	max	6.025	13	0.288	2	4.601	6	0	25	0	25	0	25
86		min	-5.826	7	0	1	-4.577	12	0	1	0	1	0	1
87	N74	max	7.902	3	0	25	4.593	6	0	25	0	25	0	25
88		min	-7.682	9	0	1	-4.577	12	0	1	0	1	0	1
89	N75	max	9.527	3	3.176	4	4.591	6	0	25	0	25	0	25

Envelope Node Reactions (Continued)

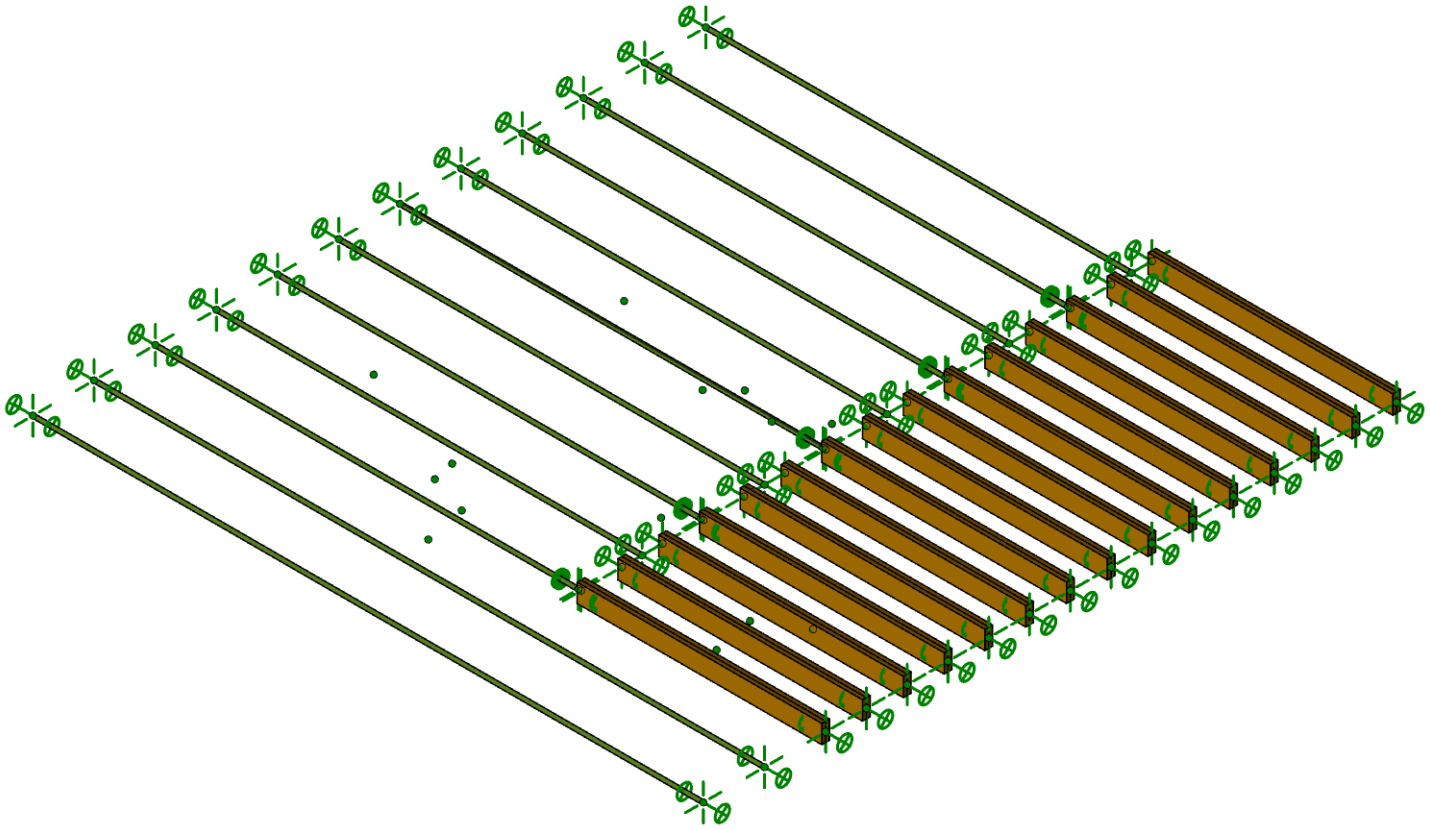
	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
90		min	-9.396	9	0	1	-4.577	12	0	1	0	1	0	1
91	N77	max	11.8	3	22.929	7	4.591	6	0	25	0	25	0	25
92		min	-12.05	9	0	10	-4.581	12	0	1	0	1	0	1
93	N78	max	13.129	3	37.343	7	4.592	6	0	25	0	25	0	25
94		min	-13.385	8	2.187	12	-4.583	12	0	1	0	1	0	1
95	N79	max	14.024	3	32.116	13	4.767	6	0	25	0	25	0	25
96		min	-13.8	9	0	6	-4.765	10	0	1	0	1	0	1
97	N80	max	12.559	3	19.701	13	4.765	6	0	25	0	25	0	25
98		min	-12.4	9	0	4	-4.761	10	0	1	0	1	0	1
99	N81	max	11.167	3	9.731	12	4.763	6	0	25	0	25	0	25
100		min	-11.161	9	0	3	-4.757	10	0	1	0	1	0	1
101	N82	max	9.763	3	2.181	10	4.761	6	0	25	0	25	0	25
102		min	-9.869	9	0	1	-4.754	10	0	1	0	1	0	1
103	N83	max	8.002	3	0	25	4.761	6	0	25	0	25	0	25
104		min	-8.149	9	0	1	-4.753	10	0	1	0	1	0	1
105	N84	max	6.111	3	0	25	4.761	6	0	25	0	25	0	25
106		min	-6.266	9	0	1	-4.751	10	0	1	0	1	0	1
107	N85	max	4.332	3	0	25	4.761	6	0	25	0	25	0	25
108		min	-4.455	9	0	1	-4.75	10	0	1	0	1	0	1
109	N86	max	4.322	13	0	25	4.762	6	0	25	0	25	0	25
110		min	-4.515	7	0	1	-4.749	10	0	1	0	1	0	1
111	N87	max	6.095	13	0	25	4.762	6	0	25	0	25	0	25
112		min	-6.3	7	0	1	-4.748	10	0	1	0	1	0	1
113	N88	max	7.994	13	0	25	4.763	6	0	25	0	25	0	25
114		min	-8.146	7	0	1	-4.748	10	0	1	0	1	0	1
115	N89	max	9.783	13	2.442	6	4.765	6	0	25	0	25	0	25
116		min	-9.816	7	0	1	-4.748	10	0	1	0	1	0	1
117	N91	max	12.656	13	22.942	3	4.771	6	0	25	0	25	0	25
118		min	-12.26	7	0	9	-4.751	10	0	1	0	1	0	1
119	N92	max	14.091	13	37.997	3	4.774	6	0	25	0	25	0	25
120		min	-13.682	7	9.742	9	-4.753	10	0	1	0	1	0	1
121	N13	max	15.843	2	45.252	9	4.624	6	0	25	0	25	0	25
122		min	-15.879	8	0	3	-4.589	12	0	1	0	1	0	1
123	N14	max	16.134	2	54.468	7	4.593	6	0	25	0	25	0	25
124		min	-16.154	8	15.939	13	-4.586	10	0	1	0	1	0	1
125	N15	max	15.905	2	46.711	13	4.77	6	0	25	0	25	0	25
126		min	-15.833	8	11.819	7	-4.769	10	0	1	0	1	0	1
127	N16	max	16.202	2	55.906	3	4.778	6	0	25	0	25	0	25
128		min	-16.101	8	24.71	9	-4.755	10	0	1	0	1	0	1
129	N3	max	16.122	2	103.998	7	10.28	4	0	25	0	25	0	25
130		min	-16.229	8	0	2	-10.392	12	0	1	0	1	0	1
131	N2	max	16.007	2	91.595	13	10.631	6	0	25	0	25	0	25
132		min	-15.818	8	0	5	-10.658	10	0	1	0	1	0	1
133	N1	max	15.837	2	96.567	9	10.303	4	0	25	0	25	0	25
134		min	-15.947	8	0	2	-10.366	12	0	1	0	1	0	1
135	N4	max	16.314	2	98.183	3	10.616	6	0	25	0	25	0	25
136		min	-16.079	8	0	8	-10.676	10	0	1	0	1	0	1
137	N5	max	15.864	2	47.013	1	3.449	4	0	25	0	25	0	25
138		min	-15.858	8	28.709	3	-3.74	10	0	1	0	1	0	1
139	N6	max	16.156	2	59.062	1	3.853	6	0	25	0	25	0	25
140		min	-16.13	8	45.028	7	-3.298	12	0	1	0	1	0	1
141	N93	max	9.927	13	13.369	6	10.253	4	0	25	0	25	0	25
142		min	-9.742	7	0	1	-10.328	12	0	1	0	1	0	1
143	N94	max	10.152	3	11.256	4	10.581	6	0	25	0	25	0	25
144		min	-10.245	9	0	1	-10.616	10	0	1	0	1	0	1

Envelope Node Reactions (Continued)

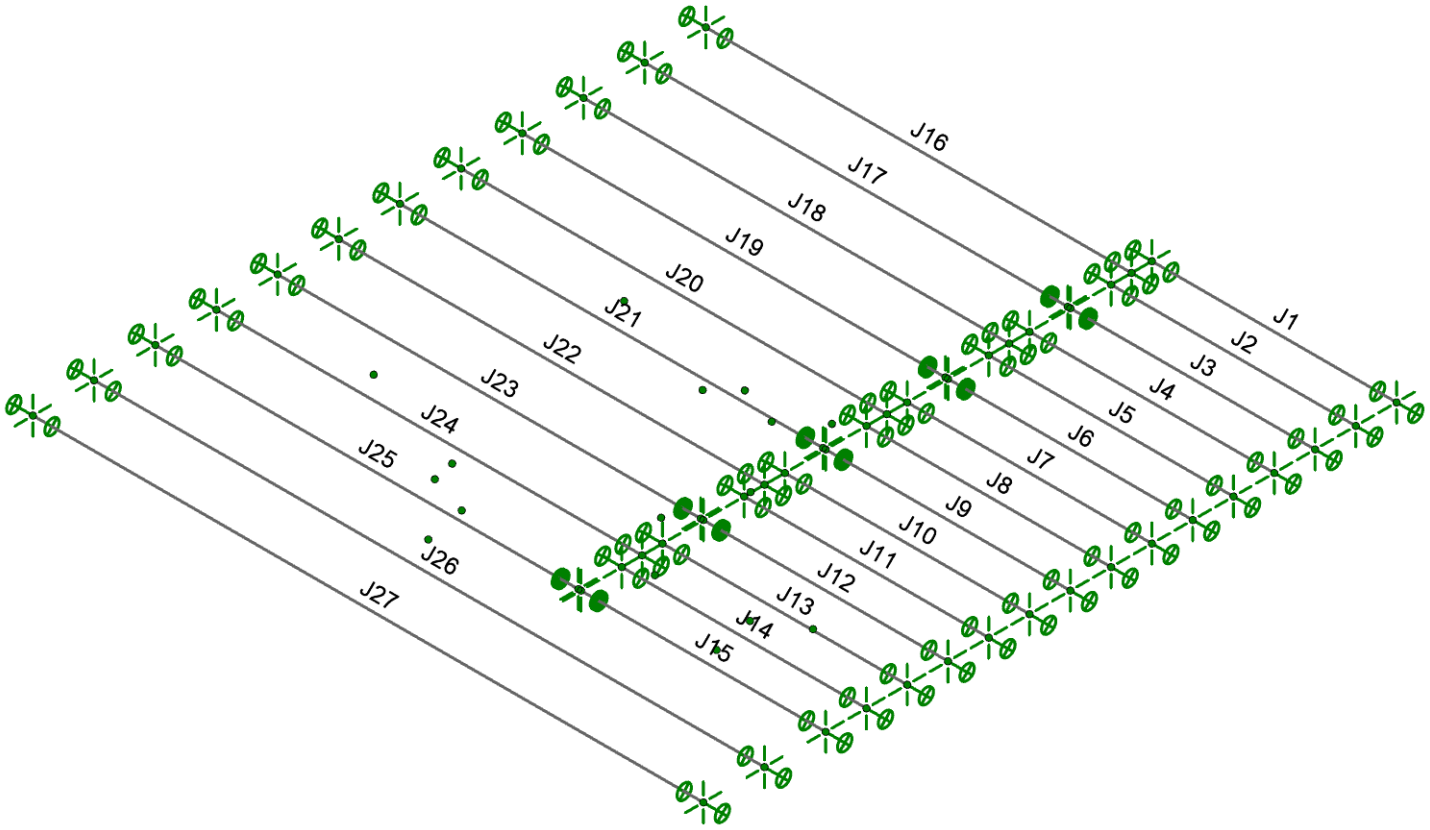
	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
145	N95	max	9.927	13	4.376	12	4.607	6	0	25	0	25	0	25
146		min	-9.742	7	0	1	-4.579	12	0	1	0	1	0	1
147	N96	max	10.152	3	3.428	10	4.762	6	0	25	0	25	0	25
148		min	-10.245	9	0	1	-4.755	10	0	1	0	1	0	1
149	N97	max	9.87	3	13.871	10	10.242	4	0	25	0	25	0	25
150		min	-9.773	9	0	1	-10.34	12	0	1	0	1	0	1
151	N98	max	10.184	13	11.4	12	10.574	6	0	25	0	25	0	25
152		min	-10.177	7	0	1	-10.624	10	0	1	0	1	0	1
153	N99	max	9.87	3	4.665	4	4.591	6	0	25	0	25	0	25
154		min	-9.773	9	0	1	-4.577	12	0	1	0	1	0	1
155	N100	max	10.184	13	3.949	6	4.765	6	0	25	0	25	0	25
156		min	-10.177	7	0	1	-4.748	10	0	1	0	1	0	1
157	Totals:	max	630.692	2	749.233	1	548.54	6						
158		min	-630.704	8	642.195	9	-548.836	10						

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks

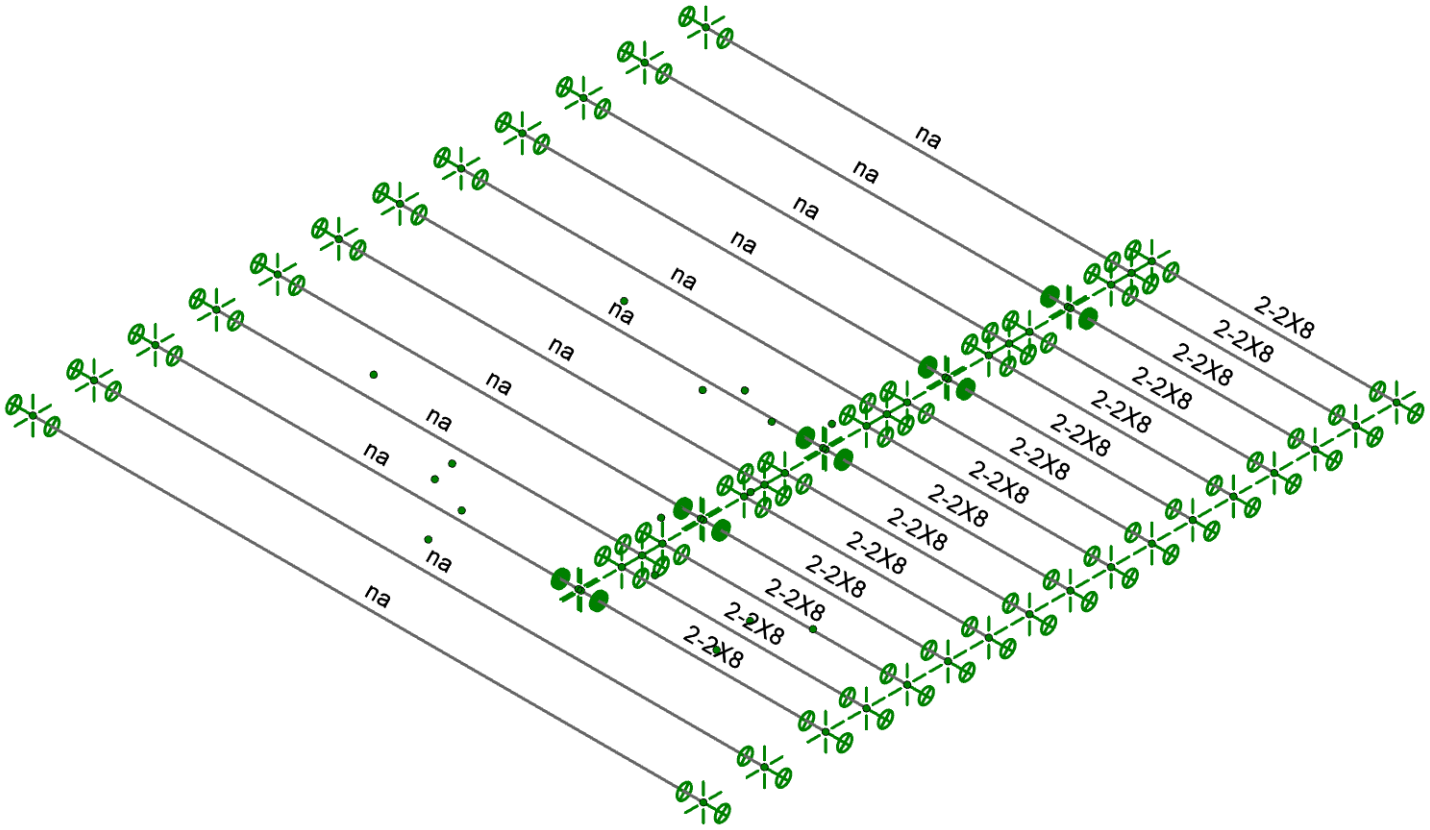
	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [lb-ft]	phi*Mn z-z [lb-ft]	Cb	Eqn
1	D4	L3X3X4	0.585	35.629	10	0.031	35.629	z	10	5865.706	12960	468.927	799.809	1.5	H2-1
2	L4	L3X3X4	0.571	75	4	0.032	4.545	z	12	1774.463	12960	380.913	629.381	1.5	H2-1
3	D3	L3X3X4	0.563	35.629	6	0.031	35.629	y	6	5865.706	12960	468.927	848.778	1.5	H2-1
4	D2	L3X3X4	0.555	29.856	4	0.038	29.856	z	4	6346.785	12960	468.927	799.809	1.5	H2-1
5	D1	L3X3X4	0.541	29.856	12	0.038	29.856	y	12	6346.785	12960	468.927	889.937	1.5	H2-1
6	L3	L3X3X4	0.522	75	10	0.034	70.455	z	10	1774.463	12960	468.927	629.381	1.5	H2-1
7	H1	HSS2X2X4	0.49	46.212	2	0.057	75	y	1	2689.758	13590	723	723	1.175	H1-1b
8	H2	HSS2X2X4	0.49	46.212	8	0.058	75	y	1	2689.758	13590	723	723	1.171	H1-1b
9	V1	L3X3X4	0.243	19.936	2	0.08	19.586	y	8	3802.735	12960	380.913	799.809	1.374	H2-1
10	V2	L3X3X4	0.22	14.689	2	0.08	15.039	y	8	3802.735	12960	380.913	799.809	1.361	H2-1
11	L6	L3X3X4	0.208	56.061	4	0.017	70.455	z	3	1774.463	12960	380.913	629.381	1.5	H2-1
12	L5	L3X3X4	0.195	56.061	6	0.017	70.455	y	6	1774.463	12960	468.927	629.381	1.5	H2-1
13	L1	L3X3X4	0.166	22.727	12	0.046	30.909	z	12	4850.276	12960	468.927	788.515	1.5	H2-1
14	L2	L3X3X4	0.144	22.273	4	0.042	14.091	z	4	4850.276	12960	468.927	788.515	1.5	H2-1



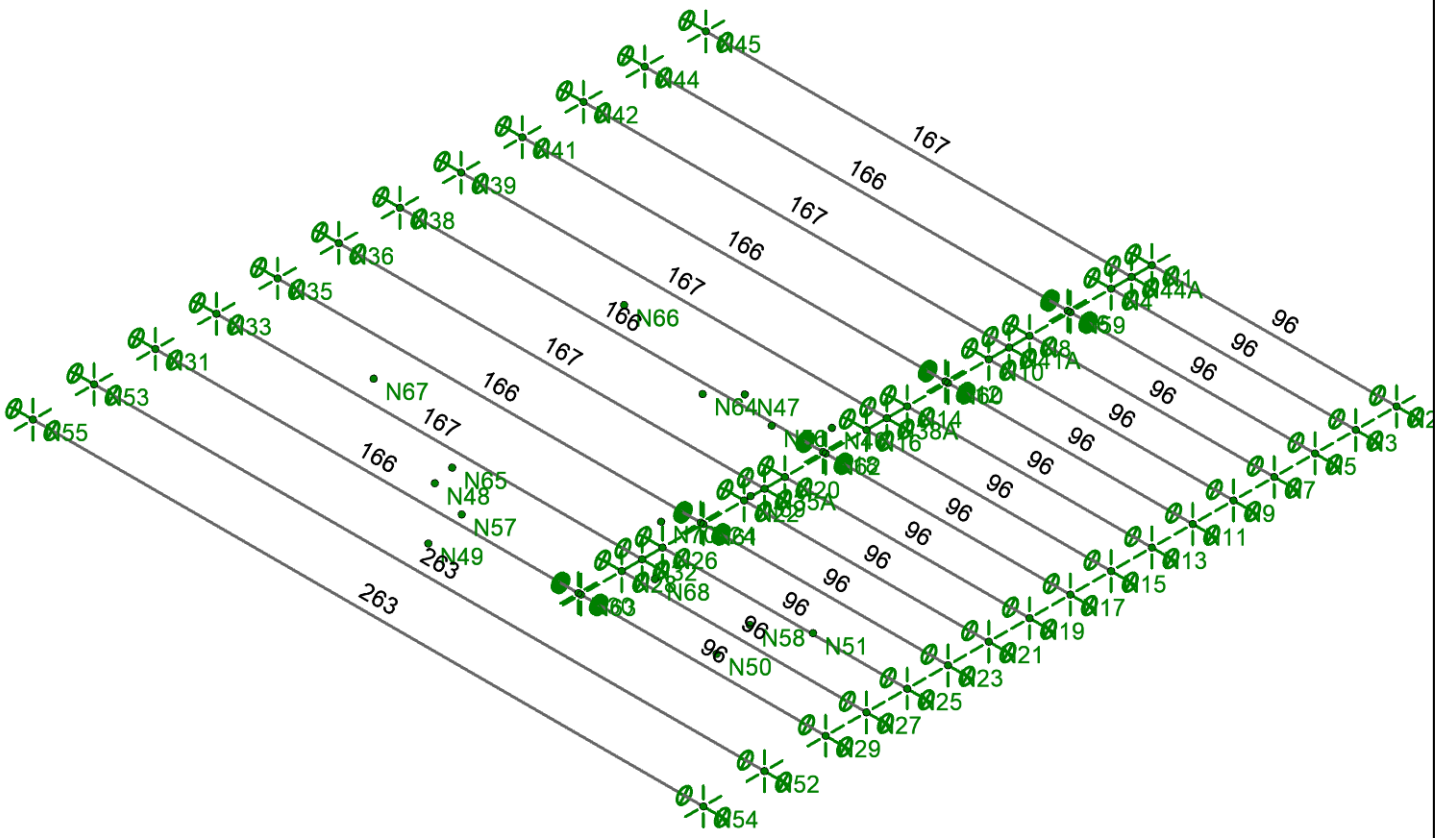
RISA A NEMETSCHEK COMPANY	Accelerated Tower Engine…	Roof Framing	SK-1
	Shawn Cook, P.E.		Jun 27, 2024 at 02:59 PM
			99737 Roof Structure.r3d



RISA A NEMETSCHEK COMPANY	Accelerated Tower Engine…	Roof Framing	SK-2
	Shawn Cook, P.E.		Jun 27, 2024 at 03:00 PM
			99737 Roof Structure.r3d

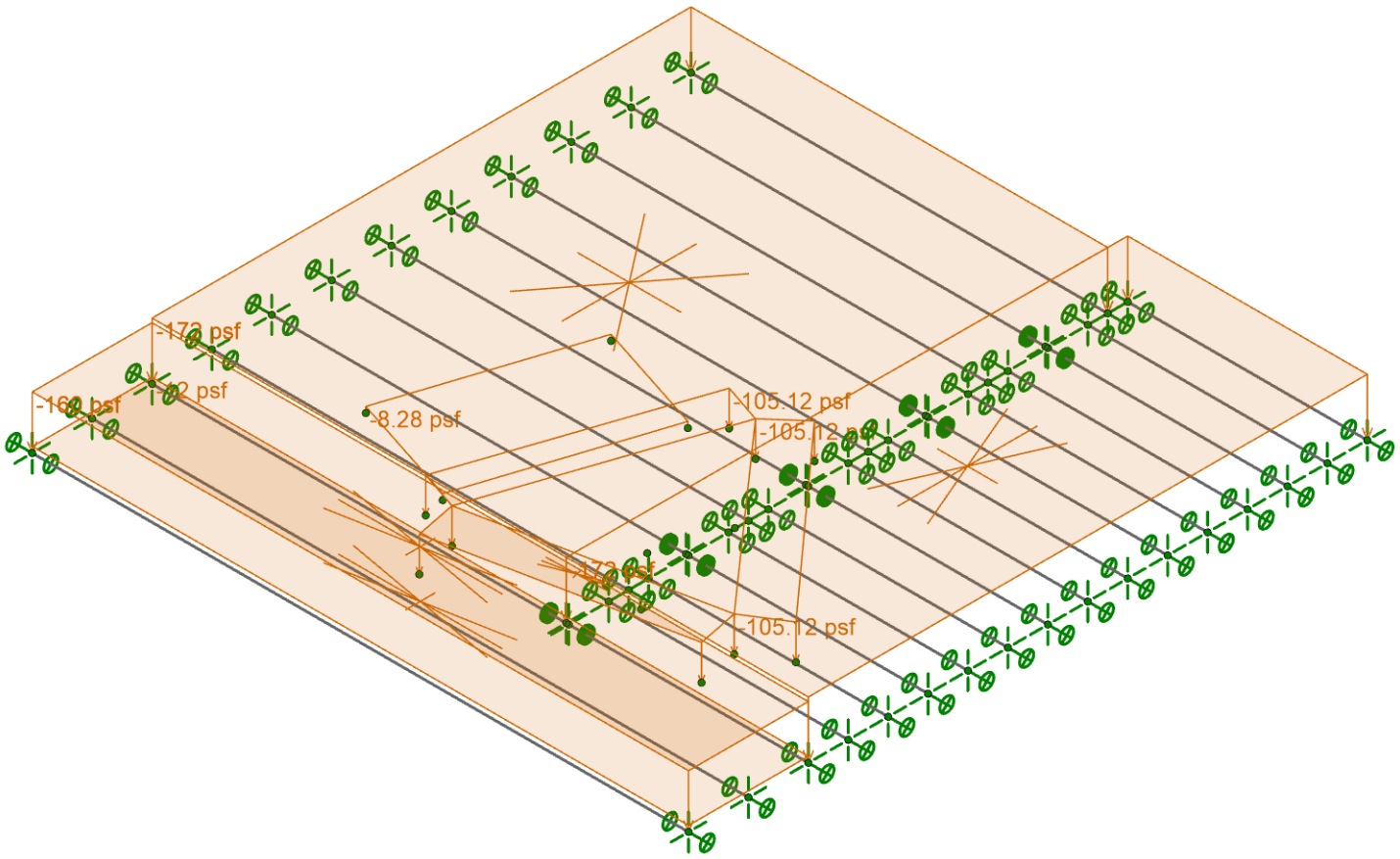


IRISA	Accelerated Tower Engine…	Roof Framing	SK-3
	Shawn Cook, P.E.		Jun 27, 2024 at 03:01 PM
			99737 Roof Structure.r3d



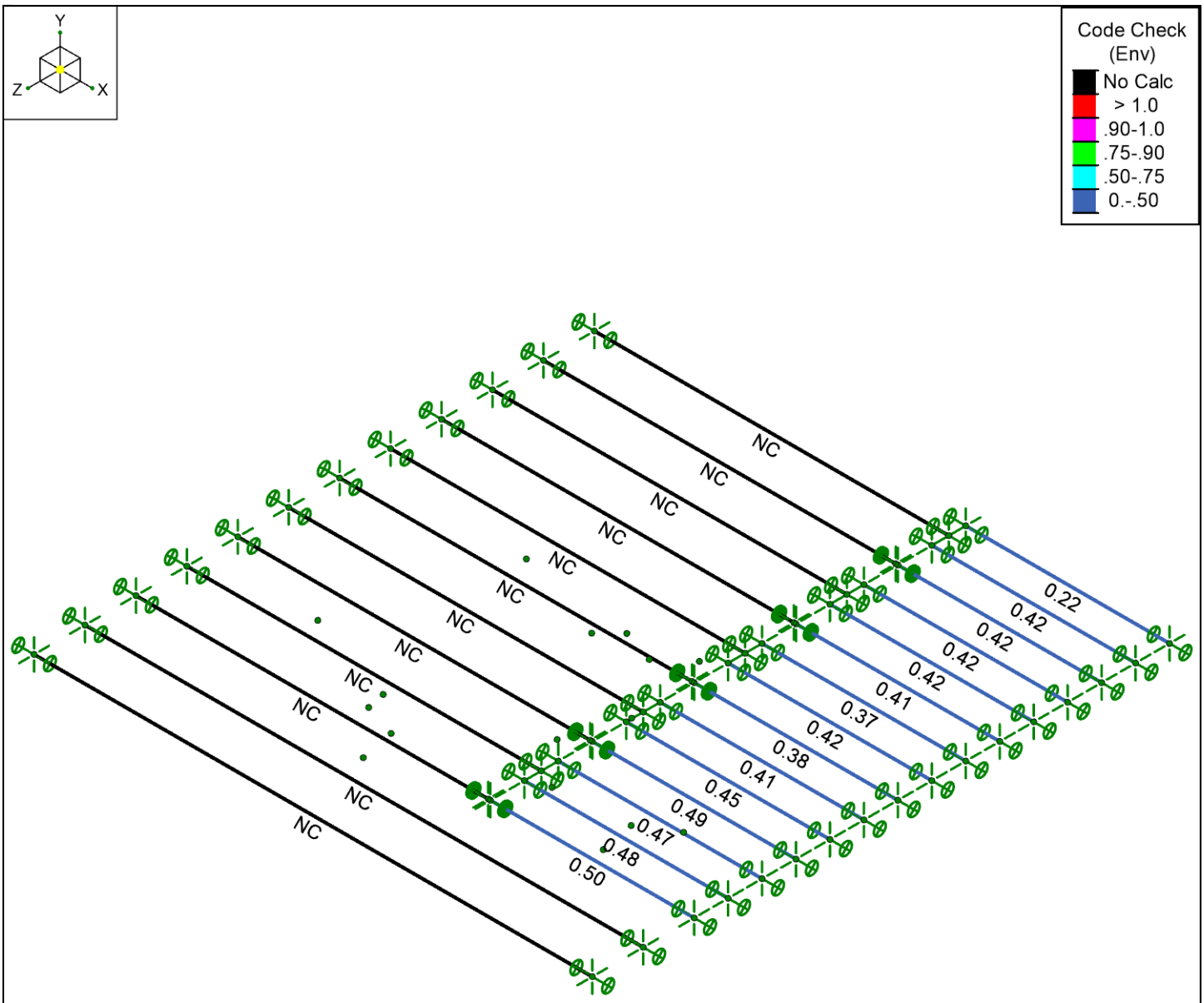
Member Length (in) Displayed

RISA A NEMETSCHEK COMPANY	Accelerated Tower Engine…	Roof Framing	SK-4
	Shawn Cook, P.E.		Jun 27, 2024 at 03:01 PM
			99737 Roof Structure.r3d



Loads: LC 2, 1.2D + 1.6S

RISA A NEMETSCHEK COMPANY	Accelerated Tower Engine…	Roof Framing	SK-5
	Shawn Cook, P.E.		Jun 27, 2024 at 03:02 PM
			99737 Roof Structure.r3d



Member Code Checks Displayed (Enveloped)

RISA A NEMETSCHEK COMPANY	Accelerated Tower Engine…	Roof Framing	SK-6
	Shawn Cook, P.E.		Jun 27, 2024 at 03:02 PM
			99737 Roof Structure.r3d

Wood Properties

	Label	Type	Database	Species	Grade	Cm	Ci	Emod	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]
1	DF	Solid Sawn	Visually Graded	Douglas Fir-Larch	No.2			1	0.3	0.3	0.035

Wood Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	WOOD1A	2-2X8	Beam	Rectangular	DF	Typical	21.75	16.312	95.27	48.282
2	WOOD2	4X16	Beam	Rectangular	DF	Typical	53.375	54.487	1034.419	186.442

Material Take-Off

	Material	Size	Pieces	Length[in]	Weight[K]
1	General Members				
2	RIGID		12	2191	0
3	Total General		12	2191	0
4					
5	Wood				
6	DF	2-2X8	15	1440	0.634
7	Total Wood		15	1440	0.634

Wood Design Parameters

	Label	Shape	Length [in]	le2 [in]	le-bend top [in]	Cr	y sway	z sway
1	J1	WOOD1A	96	16	Lbyy	Yes		
2	J2	WOOD1A	96	16	Lbyy	Yes		
3	J3	WOOD1A	96	16	Lbyy	Yes		
4	J4	WOOD1A	96	16	Lbyy	Yes		
5	J5	WOOD1A	96	16	Lbyy	Yes		
6	J6	WOOD1A	96	16	Lbyy	Yes		
7	J7	WOOD1A	96	16	Lbyy	Yes		
8	J8	WOOD1A	96	16	Lbyy	Yes		
9	J9	WOOD1A	96	16	Lbyy	Yes		
10	J10	WOOD1A	96	16	Lbyy	Yes		
11	J11	WOOD1A	96	16	Lbyy	Yes		
12	J12	WOOD1A	96	16	Lbyy	Yes		
13	J13	WOOD1A	96	16	Lbyy	Yes		
14	J14	WOOD1A	96	16	Lbyy	Yes		
15	J15	WOOD1A	96	16	Lbyy	Yes		

Node Coordinates

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
1	N1	5.499996	0	0	
2	N2	101.499996	0	0	
3	N3	101.499996	0	15.9996	
4	N4	5.499996	0	15.9996	
5	N5	101.499996	0	31.9992	
6	N6	4.499996	0	31.9992	
7	N7	101.499996	0	47.9988	
8	N8	5.499996	0	47.9988	
9	N9	101.499996	0	63.9984	
10	N10	5.499996	0	63.9984	
11	N11	101.499996	0	79.998	
12	N12	4.499996	0	79.998	

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
13	N13	101.499996	0	95.9976	
14	N14	5.499996	0	95.9976	
15	N15	101.499996	0	111.9972	
16	N16	5.499996	0	111.9972	
17	N17	101.499996	0	127.9968	
18	N18	4.499996	0	127.9968	
19	N19	101.499996	0	143.9964	
20	N20	5.499996	0	143.9964	
21	N21	101.499996	0	159.996	
22	N22	5.499996	0	159.996	
23	N23	101.499996	0	175.9956	
24	N24	4.499996	0	175.9956	
25	N25	101.499996	0	191.9952	
26	N26	5.499996	0	191.9952	
27	N27	101.499996	0	207.9948	
28	N28	5.499996	0	207.9948	
29	N29	101.499996	0	223.9944	
30	N30	4.499996	0	223.9944	
31	N31	-161.499996	0	223.9944	
32	N32	5.499996	0	199.9944	
33	N33	-161.499996	0	199.9944	
34	N35	-161.499996	0	175.9944	
35	N35A	5.499996	0	151.9956	
36	N36	-161.499996	0	151.9944	
37	N38	-161.499996	0	127.9944	
38	N38A	5.499996	0	103.9968	
39	N39	-161.499996	0	103.9944	
40	N41	-161.499996	0	79.9944	
41	N41A	5.499996	0	55.998	
42	N42	-161.499996	0	55.9944	
43	N44	-161.499996	0	31.9944	
44	N44A	5.499996	0	7.9992	
45	N45	-161.499996	0	7.9944	
46	N46	-1.976926	0	118.057825	
47	N47	-30.415769	0	123.795738	
48	N48	-61.024571	0	214.785331	
49	N49	-41.836048	0	236.545041	
50	N50	52.267649	0	217.558249	
51	N51	64.115913	0	191.560661	
52	N52	101.499996	0	247.9944	
53	N53	-161.499996	0	247.9944	
54	N54	101.499996	0	271.9944	
55	N55	-161.499996	0	271.9944	
56	N56	-14.539925	0	129.136378	
57	N57	-45.148811	0	220.125923	
58	N58	48.954844	0	201.139204	
59	N59	5.499996	0	31.9992	
60	N60	5.499996	0	79.998	
61	N61	5.499996	0	175.9956	
62	N62	5.499996	0	127.9968	
63	N63	5.499996	0	223.9944	
64	N64	-38.840499	0	131.902136	
65	N65	-62.943824	0	206.084544	
66	N66	-84.491211	0	117.06932	
67	N67	-108.594537	0	191.251728	

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
68	N68	14.751402	0	204.2526	
69	N69	5.258052	0	157.20075	
70	N70	-3.577964	0	183.467168	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]
1	N31		Reaction	Reaction	Reaction
2	N55		Reaction	Reaction	Reaction
3	N36		Reaction	Reaction	Reaction
4	N33		Reaction	Reaction	Reaction
5	N38		Reaction	Reaction	Reaction
6	N53		Reaction	Reaction	Reaction
7	N39		Reaction	Reaction	Reaction
8	N41		Reaction	Reaction	Reaction
9	N45		Reaction	Reaction	Reaction
10	N35		Reaction	Reaction	Reaction
11	N42		Reaction	Reaction	Reaction
12	N44		Reaction	Reaction	Reaction
13	N2		Reaction	Reaction	Reaction
14	N3		Reaction	Reaction	Reaction
15	N5		Reaction	Reaction	Reaction
16	N7		Reaction	Reaction	Reaction
17	N9		Reaction	Reaction	Reaction
18	N11		Reaction	Reaction	Reaction
19	N13		Reaction	Reaction	Reaction
20	N15		Reaction	Reaction	Reaction
21	N17		Reaction	Reaction	Reaction
22	N19		Reaction	Reaction	Reaction
23	N21		Reaction	Reaction	Reaction
24	N23		Reaction	Reaction	Reaction
25	N25		Reaction	Reaction	Reaction
26	N27		Reaction	Reaction	Reaction
27	N29		Reaction	Reaction	Reaction
28	N52	Reaction	Reaction	Reaction	Reaction
29	N54	Reaction	Reaction	Reaction	Reaction
30	N4	Reaction	Reaction	Reaction	Reaction
31	N6	Reaction	Reaction	Reaction	Reaction
32	N8	Reaction	Reaction	Reaction	Reaction
33	N10	Reaction	Reaction	Reaction	Reaction
34	N12	Reaction	Reaction	Reaction	Reaction
35	N14	Reaction	Reaction	Reaction	Reaction
36	N16	Reaction	Reaction	Reaction	Reaction
37	N18	Reaction	Reaction	Reaction	Reaction
38	N20	Reaction	Reaction	Reaction	Reaction
39	N22	Reaction	Reaction	Reaction	Reaction
40	N24	Reaction	Reaction	Reaction	Reaction
41	N26	Reaction	Reaction	Reaction	Reaction
42	N28	Reaction	Reaction	Reaction	Reaction
43	N30	Reaction	Reaction	Reaction	Reaction
44	N32	Reaction	Reaction	Reaction	Reaction
45	N35A	Reaction	Reaction	Reaction	Reaction
46	N38A	Reaction	Reaction	Reaction	Reaction
47	N41A	Reaction	Reaction	Reaction	Reaction
48	N44A	Reaction	Reaction	Reaction	Reaction
49	N1	Reaction	Reaction	Reaction	Reaction

Node Boundary Conditions (Continued)

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]
50	N59	Reaction	Reaction	Reaction	Reaction
51	N60	Reaction	Reaction	Reaction	Reaction
52	N61	Reaction	Reaction	Reaction	Reaction
53	N62	Reaction	Reaction	Reaction	Reaction
54	N63	Reaction	Reaction	Reaction	Reaction

Basic Load Cases

	BLC Description	Category	Y Gravity	Distributed	Area(Member)
1	Dead Load	None	-1		7
2	Live	None			6
3	Snow	None			3
4	BLC 1 Transient Area Loads	None		225	
6	BLC 3 Transient Area Loads	None		154	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor
1	1.4D	Yes	Y	1	1.4		
2	1.2D + 1.6S	Yes	Y	1	1.2	3	1.6

Envelope Node Reactions

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
1	N31	max	0	2	2478.007	2	0	2	0	2	0	2	0	2
2		min	0	1	340.675	1	0	1	0	1	0	1	0	1
3	N55	max	0	2	1871.373	2	0	2	0	2	0	2	0	2
4		min	0	1	153.417	1	0	1	0	1	0	1	0	1
5	N36	max	0	2	2492.906	2	0	2	0	2	0	2	0	2
6		min	0	1	309.888	1	0	1	0	1	0	1	0	1
7	N33	max	0	2	2492.498	2	0	2	0	2	0	2	0	2
8		min	0	1	309.037	1	0	1	0	1	0	1	0	1
9	N38	max	0	2	2372.154	2	0	2	0	2	0	2	0	2
10		min	0	1	259.052	1	0	1	0	1	0	1	0	1
11	N53	max	0	2	3882.462	2	0	2	0	2	0	2	0	2
12		min	0	1	312.145	1	0	1	0	1	0	1	0	1
13	N39	max	0	2	2411.042	2	0	2	0	2	0	2	0	2
14		min	0	1	196.248	1	0	1	0	1	0	1	0	1
15	N41	max	0	2	2309.93	2	0	2	0	2	0	2	0	2
16		min	0	1	188.018	1	0	1	0	1	0	1	0	1
17	N45	max	0	2	1204.858	2	0	2	0	2	0	2	0	2
18		min	0	1	98.07	1	0	1	0	1	0	1	0	1
19	N35	max	0	2	2493.707	2	0	2	0	2	0	2	0	2
20		min	0	1	324.01	1	0	1	0	1	0	1	0	1
21	N42	max	0	2	2428.533	2	0	2	0	2	0	2	0	2
22		min	0	1	197.671	1	0	1	0	1	0	1	0	1
23	N44	max	0	2	2286.369	2	0	2	0	2	0	2	0	2
24		min	0	1	186.1	1	0	1	0	1	0	1	0	1
25	N2	max	0	2	484.142	2	0	2	0	2	0	2	0	2
26		min	0	1	66.946	1	0	1	0	1	0	1	0	1
27	N3	max	0	2	946.946	2	0	2	0	2	0	2	0	2
28		min	0	1	104.616	1	0	1	0	1	0	1	0	1
29	N5	max	0	2	944.368	2	0	2	0	2	0	2	0	2
30		min	0	1	104.406	1	0	1	0	1	0	1	0	1
31	N7	max	0	2	948.488	2	0	2	0	2	0	2	0	2

Envelope Node Reactions (Continued)

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
32		min	0	1	104.741	1	0	1	0	1	0	1	0	1
33	N9	max	0	2	949.007	2	0	2	0	2	0	2	0	2
34		min	0	1	104.784	1	0	1	0	1	0	1	0	1
35	N11	max	0	2	970.34	2	0	2	0	2	0	2	0	2
36		min	0	1	106.52	1	0	1	0	1	0	1	0	1
37	N13	max	0	2	919.569	2	0	2	0	2	0	2	0	2
38		min	0	1	102.387	1	0	1	0	1	0	1	0	1
39	N15	max	0	2	1001.235	2	0	2	0	2	0	2	0	2
40		min	0	1	109.035	1	0	1	0	1	0	1	0	1
41	N17	max	0	2	911.665	2	0	2	0	2	0	2	0	2
42		min	0	1	102.771	1	0	1	0	1	0	1	0	1
43	N19	max	0	2	960.697	2	0	2	0	2	0	2	0	2
44		min	0	1	123.181	1	0	1	0	1	0	1	0	1
45	N21	max	0	2	995.693	2	0	2	0	2	0	2	0	2
46		min	0	1	166.215	1	0	1	0	1	0	1	0	1
47	N23	max	0	2	1036.19	2	0	2	0	2	0	2	0	2
48		min	0	1	213.22	1	0	1	0	1	0	1	0	1
49	N25	max	0	2	1054.613	2	0	2	0	2	0	2	0	2
50		min	0	1	218.852	1	0	1	0	1	0	1	0	1
51	N27	max	0	2	1048.535	2	0	2	0	2	0	2	0	2
52		min	0	1	214.762	1	0	1	0	1	0	1	0	1
53	N29	max	0	2	1197.483	2	0	2	0	2	0	2	0	2
54		min	0	1	169.779	1	0	1	0	1	0	1	0	1
55	N52	max	0	2	3884.213	2	0	2	0	2	0	2	0	2
56		min	0	1	314.409	1	0	1	0	1	0	1	0	1
57	N54	max	0	2	1829.366	2	0	2	0	2	0	2	0	2
58		min	0	1	153.417	1	0	1	0	1	0	1	0	1
59	N4	max	0	2	1047.345	2	0	2	0	2	0	2	0	2
60		min	0	1	112.788	1	0	1	0	1	0	1	0	1
61	N6	max	0	2	2256.732	2	0	2	0	2	0	2	0	2
62		min	0	1	183.687	1	0	1	0	1	0	1	0	1
63	N8	max	0	2	1053.303	2	0	2	0	2	0	2	0	2
64		min	0	1	113.273	1	0	1	0	1	0	1	0	1
65	N10	max	0	2	1047.421	2	0	2	0	2	0	2	0	2
66		min	0	1	112.794	1	0	1	0	1	0	1	0	1
67	N12	max	0	2	2251.055	2	0	2	0	2	0	2	0	2
68		min	0	1	183.225	1	0	1	0	1	0	1	0	1
69	N14	max	0	2	991.361	2	0	2	0	2	0	2	0	2
70		min	0	1	108.231	1	0	1	0	1	0	1	0	1
71	N16	max	0	2	1043.713	2	0	2	0	2	0	2	0	2
72		min	0	1	112.492	1	0	1	0	1	0	1	0	1
73	N18	max	0	2	2741.825	2	0	2	0	2	0	2	0	2
74		min	0	1	602.268	1	0	1	0	1	0	1	0	1
75	N20	max	0	2	1117.739	2	0	2	0	2	0	2	0	2
76		min	0	1	350.367	1	0	1	0	1	0	1	0	1
77	N22	max	0	2	1146.449	2	0	2	0	2	0	2	0	2
78		min	0	1	354.087	1	0	1	0	1	0	1	0	1
79	N24	max	0	2	2653.528	2	0	2	0	2	0	2	0	2
80		min	0	1	508.606	1	0	1	0	1	0	1	0	1
81	N26	max	0	2	1007.549	2	0	2	0	2	0	2	0	2
82		min	0	1	232.994	1	0	1	0	1	0	1	0	1
83	N28	max	0	2	1204.391	2	0	2	0	2	0	2	0	2
84		min	0	1	430.692	1	0	1	0	1	0	1	0	1
85	N30	max	0	2	2896.159	2	0	2	0	2	0	2	0	2
86		min	0	1	844.316	1	0	1	0	1	0	1	0	1

Envelope Node Reactions (Continued)

	Node Label		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC
87	N32	max	0	2	2634.037	2	0	2	0	2	0	2	0	2
88		min	0	1	437.29	1	0	1	0	1	0	1	0	1
89	N35A	max	0	2	2738.936	2	0	2	0	2	0	2	0	2
90		min	0	1	543.855	1	0	1	0	1	0	1	0	1
91	N38A	max	0	2	2338.229	2	0	2	0	2	0	2	0	2
92		min	0	1	190.321	1	0	1	0	1	0	1	0	1
93	N41A	max	0	2	2384.32	2	0	2	0	2	0	2	0	2
94		min	0	1	194.073	1	0	1	0	1	0	1	0	1
95	N44A	max	0	2	1204.101	2	0	2	0	2	0	2	0	2
96		min	0	1	98.008	1	0	1	0	1	0	1	0	1
97	N1	max	0	2	484.08	2	0	2	0	2	0	2	0	2
98		min	0	1	66.941	1	0	1	0	1	0	1	0	1
99	N59	max	0	2	946.081	2	0	2	0	2	0	2	0	2
100		min	0	1	104.545	1	0	1	0	1	0	1	0	1
101	N60	max	0	2	985.247	2	0	2	0	2	0	2	0	2
102		min	0	1	107.733	1	0	1	0	1	0	1	0	1
103	N61	max	0	2	1150.43	2	0	2	0	2	0	2	0	2
104		min	0	1	313.216	1	0	1	0	1	0	1	0	1
105	N62	max	0	2	956.621	2	0	2	0	2	0	2	0	2
106		min	0	1	140.766	1	0	1	0	1	0	1	0	1
107	N63	max	0	2	1315.56	2	0	2	0	2	0	2	0	2
108		min	0	1	331.466	1	0	1	0	1	0	1	0	1
109	Totals:	max	0	2	88402.604	2	0	2						
110		min	0	1	12132.405	1	0	1						

Envelope AWC NDS-18 / SDPWS-15 LRFD Member Wood Code Checks

	Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	Fc' [ksi]	Ft' [ksi]	Fb1' [ksi]	Fb2' [ksi]	Fv' [ksi]	RB	CL	CP	Eqn
1	J1	2-2X8	0.215	48	2	0.107	96	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3
2	J2	2-2X8	0.423	48	2	0.232	0	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3
3	J3	2-2X8	0.42	48	2	0.21	0	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3
4	J4	2-2X8	0.424	48	2	0.234	0	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3
5	J5	2-2X8	0.424	48	2	0.232	0	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3
6	J6	2-2X8	0.409	48	2	0.218	0	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3
7	J7	2-2X8	0.374	50.667	2	0.22	0	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3
8	J8	2-2X8	0.424	48	2	0.231	0	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3
9	J9	2-2X8	0.383	48	2	0.212	0	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3
10	J10	2-2X8	0.409	48	2	0.248	0	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3
11	J11	2-2X8	0.446	45.333	2	0.254	0	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3
12	J12	2-2X8	0.486	45.333	2	0.255	0	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3
13	J13	2-2X8	0.473	48	2	0.234	96	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3
14	J14	2-2X8	0.482	45.333	2	0.267	0	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3
15	J15	2-2X8	0.502	45.333	2	0.292	0	y	2	1.439	1.192	2.142	2.145	0.311	3.59	0.999	0.588	3.9-3

Appendix B

Additional Output

Accelerated Tower Engineering

FRP Member Checks (RRU Ballast Frame)

Project Data	
ATE #	019420240354
Site Name	HAILEY
Site Number	99737

Site Factors	
Strength moisture condition factor for sustained in-service moisture	0.85
Modulus moisture condition factor for sustained in-service moisture	0.95
Strength temperature factor for sustained elevated in-service temperatures	0.90
Modulus temperature factor for sustained elevated in-service temperatures	0.90

Material Information	
Longitudinal Tensile Strength	22950
Transverse Tensile Strength	5355
Longitudinal Tensile Modulus	2565000
Transverse Tensile Modulus	684000
Longitudinal Compressive Strength	22950
Longitudinal Compressive Modulus	2565000
Transverse Compressive Modulus	855000
In-Plane Shear Strength	6120
In-Plane Shear Modulus	342000
Poisson's Ratio	0.330

Section Set Properties

Section Label	Section Shape	Height d (in)	Width b (in)	Height Thickness td (in)	Width Thickness tb (in)	Gross Area (in2)	Iyy (in4)	Syy (in3)	Izz (in4)	Szz (in3)	rzz (in)	J (in4)	Effective Area (in2)	Max Unity Check
Vertical	L3X3X4	3.00	3.00	0.250	0.250	1.42	1.18	0.54	1.18	0.54	0.91	0.03	1.28	55.6%
Diagonal	L3X3X4	3.00	3.00	0.250	0.250	1.42	1.18	0.54	1.18	0.54	0.91	0.03	1.28	78.2%
Base Angle	L3X3X4	3.00	3.00	0.250	0.250	1.42	1.18	0.54	1.18	0.54	0.91	0.03	1.28	59.0%
Horizontal	HSS2X2X4	2.00	2.00	0.250	0.250	1.74	0.91	0.91	0.91	0.91	0.73	1.34	1.60	66.5%

Section Set Unity Checks

Section Label	Controlling Member Label	Structural Assembly?	Controlling Load Combination	Controlling Member Section	Time Effect Factor	Axial (lb)	Design Tensile Strength (lb)	Tensile Unity Check	Design Comp. Strength (lb)	Comp. Unity Check	y Shear (lb)	Design Shear Strength y (lb)	Shear Unity Check y	z Shear (lb)	Design Shear Strength z (lb)	Shear Unity Check z	Torque (lb-ft)	Design Torque Strength (lb-ft)	Moment torque Unity Check	y-y Moment (lb-ft)	Design Moment yy Strength (lb-ft)	Moment yy Unity Check	z-z Moment (lb-ft)	Design Moment zz Strength (lb-ft)	Moment zz Unity Check	Max Unity Check
Vertical	V1	FALSE	1	5	0.40	227	5344	0.0%	1079	21.0%	35	1130	3.1%	-20	1130	1.7%	0	239	0.0%	14	182	7.5%	-49	182	27.0%	55.6%
Diagonal	D4	FALSE	10	10	1.00	158	13360	0.0%	2698	5.9%	-3	2824	0.1%	-83	2824	2.9%	1	599	0.1%	-165	455	36.2%	-165	455	36.2%	78.2%
Base Angle	L3	FALSE	10	10	1.00	63	13360	0.0%	2698	2.3%	112	2824	4.0%	137	2824	4.8%	0	599	0.0%	210	412	51.0%	24	412	5.7%	59.0%
Horizontal	H1	FALSE	1	6	0.40	17	6680	0.0%	1168	1.5%	7	1193	0.6%	2	1193	0.1%	0	10685	0.0%	0	452	0.0%	-294	452	65.0%	66.5%

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Accelerated Tower Engineering

Ballast Mount Check (Antenna Frame)

Site Information	
Structure Height (ft)	38
RFDS Name	10129884
USID	99737
Carrier Site Name	HAILEY
RFDS Revision	
RFDS Date	
CD Company	AT&T
CD Revision	1 (Redlines)
CD Date	7/2/2024
Latitude	43.5165
Longitude	-114.3126
Structure Type	Roof Top
Structure Class	II
Exposure Category	C
3-Sec Gust Basic Wind Speed (mph)	103
3-Sec Gust Basic Wind Speed with Ice (mph)	40
Design Ice Thickness (in)	0
Parapet Height (ft)	0.8
Ballast Frame Height (ft)	8.0
Top Height of Ballast Frame (ft)	45.2
Mount Centerline (ft)	41.8

Analysis Parameters	
Failure Criteria	105%
Load Combination factor, Dead Load	0.9
Load Combination factor, Wind Load	1.0
Sliding Coefficient	0.74
Wind Direction Probability Factor, K_d	0.95
Topographic Factor, K_{zt}	1.00
Gust Response Factor, G_h	1.00
Appurtenance Shielding Factor, K_a	0.90
Velocity Pressure Coefficient, K_z	1.08
Rooftop Wind Speed-Up Factor, K_s	1.00
Velocity Pressure (psf), q_z	22.89
Force Coefficient, C_f	1.31
Sled Area (sqft)	47.0

Sliding Check	
Design Wind Force - Front (lb)	1091
Total Weight (lb)	3155
Nominal Sliding Resistance (lb)	2335
Design Sliding Resistance (lb)	2101
Sliding Resistance Ratio	PASS

Overturning Check	
Design Overturning Moment Front/Back (lb-ft)	8392
Total Equipment Weight (lb)	729
Existing Ballast Frame Weight (lb)	
Proposed Ballast Frame Weight (lb)	
Existing Ballast Frame Support Structure Weight (lb)	478
Proposed Ballast Frame Support Structure Weight (lb)	
Total Ballast Frame/Equipment Weight (lb)	1207
Ballast Frame/Equipment Moment Arm To Back (ft)	3.0
Ballast Frame/Equipment Moment Arm To Front (ft)	6.0
Nominal Resisting Ballast Frame/Equipment Moment to Back (lb-ft)	3629
Nominal Resisting Ballast Frame/Equipment Moment to Front (lb-ft)	7258
Dish Mount Pipe Weight (lb)	90
Dish Equipment Weight (lb)	34
Total Weight (lb)	124
Dish Moment Arm to Back (ft)	0.7
Dish Moment Arm to Front (ft)	7.0
Nominal Resisting Bracing Moment to Back (lb-ft)	83
Nominal Resisting Bracing Moment to Front (lb-ft)	869
Decking Weight (lb)	
Decking Moment Arm to Back (ft)	
Decking Moment Arm to Front (ft)	
Nominal Resisting Decking Moment to Back (lb-ft)	0
Nominal Resisting Decking Moment to Front (lb-ft)	0
Existing Ballast Weight Front (lb)	1824
Proposed Ballast Weight Front (lb)	0
Total Ballast Weight Front (lb)	1824
Ballast Front Moment Arm to Back (ft)	3.0
Ballast Front Moment Arm to Front (ft)	6.0
Nominal Resisting Ballast Front Moment to Back (lb-ft)	5485
Nominal Resisting Ballast Front Moment to Front (lb-ft)	10970
Existing Ballast Weight Back (lb)	0
Proposed Ballast Weight Back (lb)	0
Total Ballast Weight Back (lb)	0
Ballast Back Moment Arm to Back (ft)	6.0
Ballast Back Moment Arm to Front (ft)	3.0
Nominal Resisting Ballast Back Moment to Back (lb-ft)	0
Nominal Resisting Ballast Back Moment to Front (lb-ft)	0
Total Nominal Resisting Moment to Back (lb-ft)	9196
Total Nominal Resisting Moment to Front (lb-ft)	19096
Total Design Resisting Moment to Back (lb-ft)	8277
Total Design Resisting Moment to Front (lb-ft)	17186
Controlling Ballast Front/Back Ratio	PASS
Design Wind Force - Side (lb)	1091
Overturning Moment Side/Side (lb-ft)	9092
Total Weight (lb)	3155
Side Moment Arm (ft)	5.2
Nominal Resisting Moment Side (lb-ft)	16432
Design Resisting Moment Side (lb-ft)	14788
Ballast Side/Side Ratio	PASS
Controlling Ballast Ratio	PASS

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Accelerated Tower Engineering

Ballast Mount Check (RRU Ballast Frame)

Site Information	
Structure Height (ft)	38
RFDS Name	10129884
USID	99737
Carrier Site Name	HAILEY
RFDS Revision	
RFDS Date	
CD Company	AT&T
CD Revision	1 (Redlines)
CD Date	7/2/2024
Latitude	43.5165
Longitude	-114.3126
Structure Type	Roof Top
Structure Class	II
Exposure Category	C
3-Sec Gust Basic Wind Speed (mph)	103
3-Sec Gust Basic Wind Speed with Ice (mph)	40
Design Ice Thickness (in)	0
Parapet Height (ft)	0.8
Ballast Frame Height (ft)	3.0
Top Height of Ballast Frame (ft)	40.2
Mount Centerline (ft)	38.7

Analysis Parameters	
Failure Criteria	105%
Load Combination factor, Dead Load	0.9
Load Combination factor, Wind Load	1.0
Sliding Coefficient	0.74
Wind Direction Probability Factor, K_d	0.95
Topographic Factor, K_{zt}	1.00
Gust Response Factor, G_h	1.00
Appurtenance Shielding Factor, K_a	0.90
Velocity Pressure Coefficient, K_z	1.04
Rooftop Wind Speed-Up Factor, K_s	1.00
Velocity Pressure (psf), q_z	22.14
Force Coefficient, C_f	1.20
Sled Area (sqft)	26.0

Sliding Check	
Design Wind Force - Front (lb)	173
Total Weight (lb)	539
Nominal Sliding Resistance (lb)	399
Design Sliding Resistance (lb)	359
Sliding Resistance Ratio	PASS

Overturning Check	
Design Overturning Moment Front/Back (lb-ft)	388
Total Equipment Weight (lb)	460
Existing Ballast Frame Weight (lb)	
Proposed Ballast Frame Weight (lb)	79
Existing Ballast Frame Support Structure Weight (lb)	
Proposed Ballast Frame Support Structure Weight (lb)	
Total Ballast Frame/Equipment Weight (lb)	539
Ballast Frame/Equipment Moment Arm To Back (ft)	2.0
Ballast Frame/Equipment Moment Arm To Front (ft)	2.0
Nominal Resisting Ballast Frame/Equipment Moment to Back (lb-ft)	1078
Nominal Resisting Ballast Frame/Equipment Moment to Front (lb-ft)	1078
Existing Bracing Weight (lb)	
Proposed Bracing Weight (lb)	
Total Bracing Weight (lb)	0
Bracing Moment Arm to Back (ft)	
Bracing Moment Arm to Front (ft)	
Nominal Resisting Bracing Moment to Back (lb-ft)	0
Nominal Resisting Bracing Moment to Front (lb-ft)	0
Decking Weight (lb)	
Decking Moment Arm to Back (ft)	
Decking Moment Arm to Front (ft)	
Nominal Resisting Decking Moment to Back (lb-ft)	0
Nominal Resisting Decking Moment to Front (lb-ft)	0
Existing Ballast Weight Front (lb)	0
Proposed Ballast Weight Front (lb)	0
Total Ballast Weight Front (lb)	0
Ballast Front Moment Arm to Back (ft)	3.3
Ballast Front Moment Arm to Front (ft)	0.7
Nominal Resisting Ballast Front Moment to Back (lb-ft)	0
Nominal Resisting Ballast Front Moment to Front (lb-ft)	0
Existing Ballast Weight Back (lb)	0
Proposed Ballast Weight Back (lb)	0
Total Ballast Weight Back (lb)	0
Ballast Back Moment Arm to Back (ft)	0.7
Ballast Back Moment Arm to Front (ft)	3.3
Nominal Resisting Ballast Back Moment to Back (lb-ft)	0
Nominal Resisting Ballast Back Moment to Front (lb-ft)	0
Total Nominal Resisting Moment to Back (lb-ft)	1078
Total Nominal Resisting Moment to Front (lb-ft)	1078
Total Design Resisting Moment to Back (lb-ft)	970
Total Design Resisting Moment to Front (lb-ft)	970
Controlling Ballast Front/Back Ratio	PASS
Design Wind Force - Side (lb)	173
Overturning Moment Side/Side (lb-ft)	389
Total Weight (lb)	539
Side Moment Arm (ft)	3.3
Nominal Resisting Moment Side (lb-ft)	1752
Design Resisting Moment Side (lb-ft)	1577
Ballast Side/Side Ratio	PASS
Controlling Ballast Ratio	PASS

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Accelerated Tower Engineering

Red-S Joist Check

Site Information	
SID	1737175
Carrier Site Name	Wildwest-Hosptial
Structure Type	Roof Top

Joist	RISA Moment (lb-ft)	RISA Shear (lb)	Ultimat Moment Capacity (lb-ft)	Ulitimate Shear Capacity (lb)	Stress Ratio
J16	4301	1205	22365	11182	19.2%
J17	7894	2286	22365	11182	35.3%
J18	8672	2429	22365	11182	38.8%
J19	8036	2310	22365	11182	35.9%
J20	8526	2411	22365	11182	38.1%
J21	8430	2742	22365	11182	37.7%
J22	9231	2739	22365	11182	41.3%
J23	8990	2654	22365	11182	40.2%
J24	9001	2634	22365	11182	40.2%
J25	9149	2896	22365	11182	40.9%
J26	21780	3884	23365	8901	93.2%
J27	10174	1871	23365	8901	43.5%

Appendix C

Modification Drawings

ROOF TOP MODIFICATION DRAWINGS

SITE INFORMATION

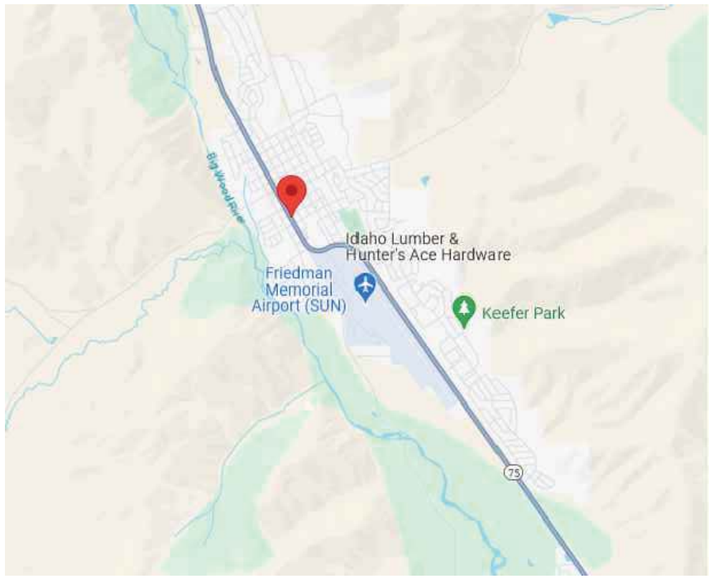
SITE NAME: HAILEY

SITE NUMBER: 99737 (IDL04214)

SITE ADDRESS:

400 S Main St

Hailey, ID 83333, Blaine County



PROJECT CONTACTS

1) PROPERTY OWNER
AP Wireless Investments

2) CONSTRUCTION MANAGER
Unknown

3) ENGINEER OF RECORD (EOR)
Shawn D. Cook, P.E.
(479)530-8627
Shawn.Cook@atowereng.com
4710 Portofino Dr.
Longmont, CO 80503

STRUCTURE INFORMATION

BUILDING TYPE:		COMMERCIAL STRUCTURE
ROOF HEIGHT:		38 FT
SITE LOCATION:	LAT:	43.5165
SITE LOCATION:	LONG:	-114.3126
ATE ID:	#:	019420240354

CODE COMPLIANCE

THIS REINFORCEMENT DESIGN IS BASED ON THE REQUIREMENTS OF TIA STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES USING:

CODE:	2018 IBC
BASIC WIND SPEED:	103
ICE THICKNESS:	0.00
WIND SPEED WITH ICE:	N/A
SERVICE LOAD WIND SPEED:	60
EXPOSURE CATEGORY:	C

DRAWINGS INCLUDED

SHEET NUMBER	DESCRIPTION
S-1	TITLE PAGE
S-2	MODIFICATION INSPECTION CHECKLIST
S-3	NOTES
S-4	ANTENNA FRAME
S-5	RRU FRAME

General Notes

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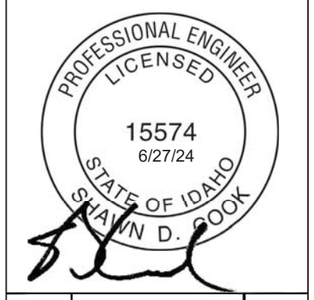
Report Prepared For:

BLACK & VEATCH
4600 S. Syracuse Street, Suite 300
Denver, CO 80237
(303) 264-0512

ENGINEER of RECORD SEAL



No.	Revision/Issue	Date
0	Construction	06/27/2024

Project Name and Address
USID#99737 (IDL04214)
HAILEY
400 S Main St
Hailey, ID 83333
Blaine County

Sheet Title
Title Page

Project 019420240354
Date 06/27/2024
Drawn By: BU
Checked By: SC
Sheet S-1

MODIFICATION INSPECTION NOTES

MI CHECKLIST

CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY EOR)	REPORT ITEM
PRE-CONSTRUCTION	
X	MI CHECKLIST DRAWING
NA	EOR APPROVED SHOP DRAWINGS
NA	FABRICATION INSPECTION
NA	FABRICATOR CERTIFIED WELD INSPECTION
X	MATERIAL TEST REPORT (MTR)
NA	FABRICATOR NDE INSPECTION
NA	NDE REPORT OF MONOPOLE BASE PLATE
X	PACKING SLIPS
ADDITIONAL TESTING AND INSPECTIONS:	
CONSTRUCTION	
X	CONSTRUCTION INSPECTIONS
NA	FOUNDATION INSPECTIONS
NA	CONCRETE COMP. STRENGTH AND SLUMP TESTS
NA	POST INSTALLED ANCHOR ROD VERIFICATION
NA	BASE PLATE GROUT VERIFICATION
NA	CONTRACTOR'S CERTIFIED WELD INSPECTION AND NDE REPORTS
NA	EARTHWORK: LIFT AND DENSITY
X	ON SITE COLD GALVANIZING VERIFICATION
NA	GUY WIRE TENSION REPORT
X	GC AS-BUILT DOCUMENTS
ADDITIONAL TESTING AND INSPECTIONS:	
POST-CONSTRUCTION	
X	MI INSPECTOR REDLINE OR RECORD DRAWING(S)
NA	POST INSTALLED ANCHOR ROD PULL-OUT TESTING
X	PHOTOGRAPHS
ADDITIONAL TESTING AND INSPECTIONS:	

NOTE: X DENOTES A DOCUMENT REQUIRED FOR THE MI REPORT
NA DENOTES A DOCUMENT THAT IS NOT REQUIRED FOR THE MI REPORT

GENERAL

THE MODIFICATION INSPECTION (MI) IS A VISUAL INSPECTION OF TOWER MODIFICATIONS AND A REVIEW OF CONSTRUCTION INSPECTIONS AND OTHER REPORTS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NAMELY THE MODIFICATION DRAWINGS, AS DESIGNED BY THE ENGINEER OF RECORD (EOR).

THE MI IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE MODIFICATION DESIGN ITSELF, NOR DOES THE MI INSPECTOR TAKE OWNERSHIP OF THE MODIFICATION DESIGN. OWNERSHIP OF THE STRUCTURAL MODIFICATION DESIGN EFFECTIVENESS AND INTEGRITY RESIDES WITH THE EOR AT ALL TIMES.

TO ENSURE THAT THE REQUIREMENTS OF THE MI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE MI INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PURCHASE ORDER (PO) IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY. IF CONTACT INFORMATION IS NOT KNOWN, CONTACT THE EOR OR CONSTRUCTION MANAGER.

MI INSPECTOR

THE MI INSPECTOR IS REQUIRED TO CONTACT THE GC AS SOON AS RECEIVING A PO FOR THE MI TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE MI CHECKLIST
- WORK WITH THE GC TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS

THE MI INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GC INSPECTION AND TEST REPORTS, REVIEWING THE DOCUMENTS FOR ADHERENCE TO THE CONTRACT DOCUMENTS, CONDUCTING THE IN-FIELD INSPECTIONS, AND SUBMITTING THE MI REPORT TO THE EOR.

GENERAL CONTRACTOR

THE GC IS REQUIRED TO CONTACT THE MI INSPECTOR AS SOON AS RECEIVING A PO FOR THE MODIFICATION INSTALLATION OR TURNKEY PROJECT TO, AT A MINIMUM:

- REVIEW THE REQUIREMENTS OF THE MI CHECKLIST
- WORK WITH THE MI INSPECTOR TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE MI INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS
- BETTER UNDERSTAND ALL INSPECTION AND TESTING REQUIREMENTS

THE GC SHALL PERFORM AND RECORD THE TEST AND INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MI CHECKLIST.

RECOMMENDATIONS

THE FOLLOWING RECOMMENDATIONS AND SUGGESTIONS ARE OFFERED TO ENHANCE THE EFFICIENCY AND EFFECTIVENESS OF DELIVERING AN MI REPORT:

- IT IS SUGGESTED THAT THE GC PROVIDE A MINIMUM OF 5 BUSINESS DAYS NOTICE, PREFERABLY 10, TO THE MI INSPECTOR AS TO WHEN THE SITE WILL BE READY FOR THE MI TO BE CONDUCTED.
- THE GC AND MI INSPECTOR COORDINATE CLOSELY THROUGHOUT THE ENTIRE PROJECT.
- WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE SIMULTANEOUSLY FOR ANY GUY WIRE TENSIONING OR RE-TENSIONING OPERATIONS.
- IT MAY BE BENEFICIAL TO INSTALL ALL TOWER MODIFICATIONS PRIOR TO CONDUCTING THE FOUNDATION INSPECTIONS TO ALLOW THE FOUNDATION AND MI INSPECTION(S) TO COMMENCE WITH ONE SITE VISIT.
- WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE DURING THE MI TO HAVE ANY DEFICIENCIES CORRECTED DURING THE INITIAL MI. THEREFORE, THE GC MAY CHOOSE TO COORDINATE THE MI CAREFULLY TO ENSURE ALL CONSTRUCTION FACILITIES ARE AT THEIR DISPOSAL WHEN THE MI INSPECTOR IS ON SITE.

CANCELLATION OR DELAYS IN SCHEDULED MI

IF THE GC AND MI INSPECTOR AGREE TO A DATE ON WHICH THE MI WILL BE CONDUCTED, AND EITHER PARTY CANCELS OR DELAYS, THE EOR SHALL NOT BE RESPONSIBLE FOR ANY COSTS, FEES, LOSS OF DEPOSITS AND/OR OTHER PENALTIES RELATED TO THE CANCELLATION OR DELAY INCURRED BY EITHER PARTY, NOR FOR ANY TIME (E.G. TRAVEL AND LODGING, COSTS OF KEEPING EQUIPMENT ON-SITE, ETC.). IF THE EOR CONTRACTS DIRECTLY FOR A THIRD PARTY MI, EXCEPTIONS MAY BE MADE IN THE EVENT THAT THE DELAY/CANCELLATION IS CAUSED BY WEATHER OR OTHER CONDITIONS THAT MAY COMPROMISE THE SAFETY OF THE PARTIES INVOLVED.

CORRECTION OF FAILING MI'S

IF THE MODIFICATION INSTALLATION WOULD FAIL THE MI ("FAILED MI"), THE GC SHALL WORK WITH THE EOR TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:

- CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT MI.
- OR, RE-ANALYZE THE MODIFICATION/REINFORCEMENT USING THE AS-BUILT CONDITION

REQUIRED PHOTOS

BETWEEN THE GC AND THE MI INSPECTOR THE FOLLOWING PHOTOGRAPHS, AT A MINIMUM, ARE TO BE TAKEN AND INCLUDED IN THE MI REPORT:

- PRE-CONSTRUCTION GENERAL SITE CONDITION
- PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION CONSTRUCTION/ERECTION AND INSPECTION
  - RAW MATERIALS
  - PHOTOS OF ALL CRITICAL DETAILS
  - FOUNDATION MODIFICATIONS
  - WELD PREPARATION
  - BOLT INSTALLATION
  - FINAL INSTALLED CONDITION
  - SURFACE COATING REPAIR
- POST CONSTRUCTION PHOTOGRAPHS
  - FINAL INFIELD CONDITION

PHOTOS OF ELEVATED MODIFICATIONS TAKEN ONLY FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.

General Notes

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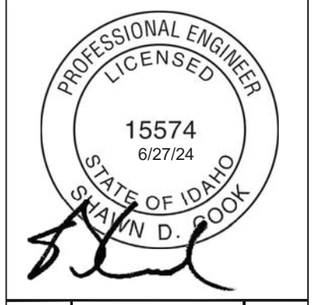
ENGINEER of RECORD SEAL



No.	Revision/Issue	Date
0	Construction	06/27/2024

Project Name and Address
USID#99737 (IDL04214)
HAILEY
400 S Main St
Hailey, ID 83333
Blaine County

Sheet Title
Modification Inspection Checklist

Project 019420240354
Date 06/27/2024
Drawn By: BU
Checked By: SC
Sheet S-2

GENERAL NOTES

1. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST BE EXPERIENCED IN THE PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED, THAT HE IS PROPERLY LICENSED, AND THAT HE IS PROPERLY REGISTERED TO DO THIS WORK IN THE STATE AND/OR COUNTY IN WHICH IT IS TO BE PERFORMED.
2. THE GENERAL NOTES AND TYPICAL DETAILS ARE APPLICABLE TO ALL PARTS OF THE STRUCTURE AND SHALL BE READ IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS AND PROJECT SPECIFICATIONS.
3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING APPROVALS FROM ALL AUTHORITIES HAVING JURISDICTION FOR THIS PROJECT AND SHALL NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY, OR CITY) ENGINEER 24 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
5. ERECT GUARDS AND BARRIERS PER APPLICABLE LABOR AND CONSTRUCTION SAFETY REGULATIONS.
6. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, POSSIBLE INTERFERENCES, AND DIMENSIONS BEFORE PROCEEDING WITH THE WORK. REPORT ANY AND ALL DISCREPANCIES TO THE ENGINEER OF RECORD (EOR) AND FIELD PERSONNEL IMMEDIATELY. ANY AND ALL FIELD CHANGES SHALL BE APPROVED AND DOCUMENTED BY THE EOR PRIOR TO FIELD IMPLEMENTATION.
7. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR TWO (2) YEARS FROM THE DATE OF COMPLETED CONSTRUCTION.
8. USE ONLY THE LATEST ISSUES OF ANY APPLICABLE CODES, STANDARDS, OR REGULATIONS MENTIONED IN THE FOLLOWING NOTES AND SPECIFICATIONS, UNO.
9. ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH ANSI, ASTM, ACI, TIA, AND AISC STANDARDS AS REFERENCED IN THE APPLICABLE CODE.
10. STRUCTURAL ELEMENTS SHOWN ON THESE DRAWINGS ARE DESIGNED IN ACCORDANCE WITH APPLICABLE BUILDING CODES/STANDARDS. ALL CONSTRUCTION, EXCEPT WHERE NOTED OTHERWISE, SHALL COMPLY WITH THOSE CODES/STANDARDS.
11. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS, AND IN CONFORMANCE WITH THE DRAWINGS. ANY AND ALL SUBSTITUTIONS MUST BE DULY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER OF RECORD PRIOR TO FABRICATION AND INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
12. ALL MANUFACTURER'S HARDWARE ASSEMBLY INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION PROCEDURES MEET THE REQUIREMENTS OF OSHA, THE OWNER, AND ALL OTHER APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS.
14. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIAL ACCESS, WITH THE RESIDENT LEASING AGENT.
15. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SAFEGUARD ALL EXISTING STRUCTURES OR BURIED SERVICES AFFECTED BY THIS CONSTRUCTION. CONTRACTOR IS ALSO RESPONSIBLE FOR TEMPORARILY RELOCATING ANY LINES OR STRUTS AS NECESSARY TO COMPLETE THE REQUIRED WORK.
16. STRUCTURAL DESIGN IS FOR THE COMPLETE CONDITION ONLY. THE CONTRACTOR MUST BE COGNIZANT THAT THE REMOVAL OF ANY STRUCTURAL COMPONENT OF AN EXISTING STRUCTURE HAS THE POTENTIAL TO CAUSE THE PARTIAL OR COMPLETE COLLAPSE OF THE STRUCTURE. ALL NECESSARY PRECAUTIONS MUST BE TAKEN TO ENSURE STRUCTURAL INTEGRITY, INCLUDING, BUT NOT LIMITED TO, ENGINEERING ASSESSMENT OF CONSTRUCTION STRESSES WITH INSTALLATION MAXIMUM WIND SPEED AND/OR TEMPORARY BRACING AND SHORING.
17. DO NOT SCALE DRAWINGS.
18. FOR THIS ANALYSIS AND MODIFICATION, THE STRUCTURE HAS BEEN ASSUMED TO BE IN GOOD CONDITION WITHOUT ANY DEFECTS. IF THE CONTRACTOR DISCOVERS ANY INDICATION OF AN EXISTING STRUCTURAL DEFECT, CONTACT THE ENGINEER OF RECORD IMMEDIATELY.
19. MODIFICATION WORK SHALL BE COMPLETED IN CALM WIND CONDITIONS / OR APPROPRIATE WIND SPEED FOR THE TYPE OF MODIFICATION WORK TO BE INSTALLED.
20. THE CLIMBING FACILITIES, SAFETY CLIMB AND ALL PARTS THEREOF SHALL NOT BE IMPEDED, MODIFIED OR ALTERED WITHOUT THE EXPRESS APPROVAL OF THE ENGINEER OF RECORD.

WELDING NOTES

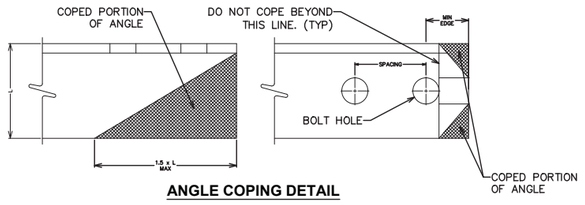
1. ALL WELDING SHALL BE IN ACCORDANCE WITH THE AWS D1.1/D1.1M, "STRUCTURAL WELDING CODE-STEEL".
2. ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS.
3. ALL ARC WELDING SHALL BE DONE IN ACCORDANCE WITH A, "CUTTING AND WELDING SAFETY PLAN" AND AWS D1.1 (LATEST EDITION). THE CONTRACTOR IS RESPONSIBLE FOR THE "CUTTING AND WELDING PLAN". THIS SHALL INCLUDE A CERTIFIED WELDING INSPECTOR (CWI) FOR ACCEPTANCE OR REJECTION OF ALL WELDING OPERATIONS, PRE-DURING-POST, USING THE ACCEPTANCE CRITERIA OF AWS D1.1. THE CWI SHALL WORK WITH THE GC ON THE LEVEL OF INTERACTION NEEDED TO CONDUCT THE WELDING INSPECTION. THE CERTIFIED WELDING INSPECTION IS THE RESPONSIBILITY OF THE GC.
4. FOR ALL WELDING, USE E70XX ELECTRODES FOR SMAW PROCESS AND E7XT-XX ELECTRODES FOR FCAW PROCESS, UNO.
5. SURFACES TO BE WELDED SHALL BE FREE FROM SCALE, SLAG, RUST, MOISTURE, GREASE OR ANY OTHER FOREIGN MATERIAL THAT WOULD PREVENT PROPER WELDING. GRIND THE SURFACE ADJACENT TO THE WELD FOR A DISTANCE OF 2" MINIMUM ALL AROUND. ENSURE BOTH AREAS ARE 100% FREE OF ALL GALVANIZING.
6. DO NOT WELD IF THE TEMPERATURE OF THE STEEL IN THE VICINITY OF THE WELD AREA IS BELOW 0° F. WHEN THE TEMPERATURE IS BETWEEN 0° F AND 32° F, PREHEAT AND MAINTAIN THE STEEL IN THE VICINITY OF THE WELD AREA AT 70° F DURING THE WELDING PROCESS.
7. DO NOT WELD ON WET OR FROST-COVERED SURFACES & PROVIDE ADEQUATE PROTECTION FROM HIGH WINDS.

STRUCTURAL NOTES

1. DESIGN, FABRICATION, ERECTION, ALTERATION AND MAINTENANCE SHALL CONFORM TO THE FOLLOWING, UNLESS NOTED OTHERWISE (UNO).
   A. TIA-222: STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS
   B. TIA-1019-A: INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS
   C. AISC: MANUAL OF STEEL CONSTRUCTION
2. ALL STRUCTURAL ELEMENTS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS, UNO.
   A. STRUCTURAL STEEL, ASTM A36 (FY = 36KSI)
   B. STRUCTURAL STEEL PIPE, A53 GRADE B (FY = 35KSI)
   C. STRUCTURAL STEEL TUBING, ASTM A500 GRADE B (FY = 46KSI)
   D. ANCHOR BOLTS, HILTI KWIK BOLT TZ EXPANSION ANCHORS
   E. U-BOLTS, A307 GRADE A
3. HOLES SHALL NOT BE FLAME CUT THRU STEEL UNLESS APPROVED BY THE ENGINEER OF RECORD.
4. ANCHOR BOLTS WILL BE INSTALLED PER THE MANUFACTURES SPECIFICATIONS AND RECOMMENDATIONS..
5. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.
6. FASTENERS SHALL BE INSTALLED IN PROPERLY ALIGNED HOLES AND TIGHTENED BY ONE OF THE METHODS DESCRIBED IN THE AISC MANUAL OF STEEL CONSTRUCTION, SUBSECTION 8.2.1 THROUGH 8.2.4.
7. HOT-DIP GALVANIZE ALL ITEMS, UNO.
   GALVANIZE PER ASTM A123, ASTM A153/A153M OR ASTM A653 G90, AS APPLICABLE.
8. AFTER FINAL INSPECTION, ALL EXPOSED STRUCTURAL STEEL AS THE RESULT OF THIS SCOPE OF WORK INCLUDING WELDS, FIELD DRILLED HOLES, AND SHAFT INTERIORS (WHERE ACCESSIBLE), SHALL BE CLEANED AND (2) COATS OF ZRC-BRAND (OR APPROVED EQUAL BY EOR) ZINC-RICH COLD GALVANIZING APPLIED BY BRUSH IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS. PHOTO DOCUMENTATION IS REQUIRED TO BE SUBMITTED TO THE MI INSPECTOR.
9. ALL FASTENERS ARE REQUIRED TO HAVE A LOCKING DEVICE INSTALLED.

FIBERGLASS REINFORCED PLASTIC (FRP) NOTES

1. ALL FRP CONNECTIONS TO OTHER FRP MEMBERS AND STEEL MEMBERS SHALL BE IN ACCORDANCE WITH THE MANUFACTURES SPECIFICATIONS AND RECOMMENDATIONS, UNO.
2. ALL FRP DESIGN CALCULATIONS WERE BASED ON THE MATERIAL STRENGTH PROPERTIES OF THE STRONGWELL EXTREN SERIES 500 STRUCTURAL SHAPES AND STRONGWELL FIBERBOLTS. ANY SUBSTITUTE FRP MANUFACTURERS PRODUCTS MUST MEET OR EXCEED THESE MATERIAL STRENGTH PROPERTIES AND MUST HAVE EOR APPROVAL.
3. FRP ADHESIVE SHALL COMPLY WITH ONE OF THE FOLLOWING OR HAVE EOR APPROVAL:
   3.1. EPON 828 Epoxy Resin
   3.2. Dow D.E.R. 331 Epoxy Resin
4. FOLLOW MANUFACTURES SPECIFICATIONS AND RECOMMENDATIONS FOR THE APPLICATION OF EPOXY RESIN.



ANGLE COPING DETAIL

GENERAL BOLT INFORMATION

BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE	SPACING
3/8"	7/16"	7/16" x 9/16"	9/16"	1 1/8"
1/2"	9/16"	9/16" x 3/4"	3/4"	1 1/2"
5/8"	11/16"	11/16" x 7/8"	7/8"	1 7/8"
3/4"	13/16"	13/16" x 1"	1"	2 1/4"
7/8"	15/16"	15/16" x 1 1/8"	1 1/8"	2 5/8"
1"	1 1/16"	1 1/16" x 1 5/16"	1 1/4"	3"

DETAIL DRAWINGS SHALL GOVERN OVER ANY VARIANCE FROM THIS SHEET

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Denver, CO 80237
(303) 264-0512

ENGINEER of RECORD SEAL

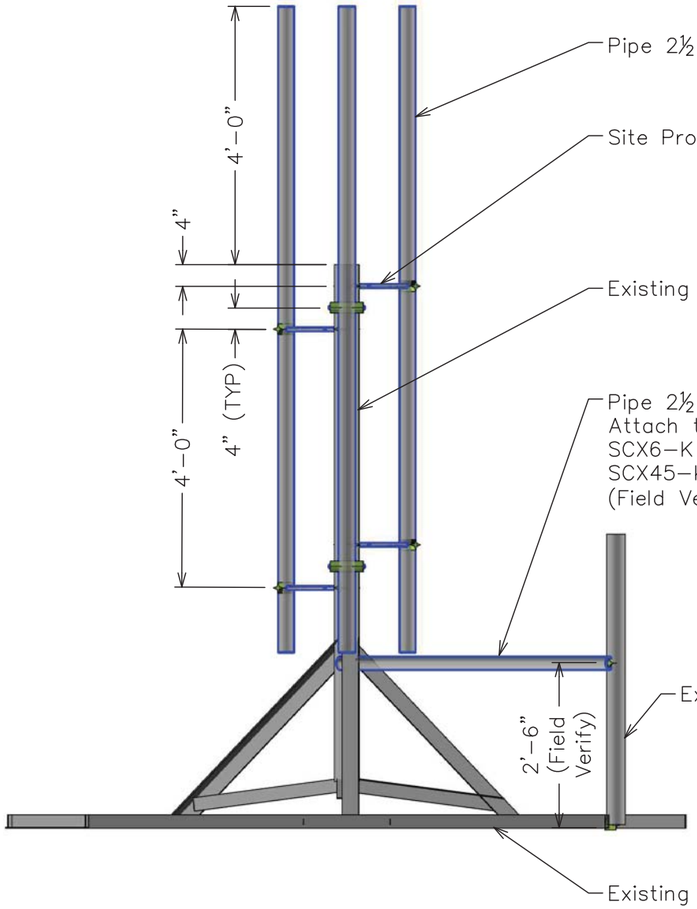
PROFESSIONAL ENGINEER LICENSED
15574
6/27/24
STATE OF IDAHO
SHAWN D. COOK

No.	Revision/Issue	Date
0	Construction	06/27/2024

Project Name and Address
USID#99737 (IDL04214)
HAILEY
400 S Main St
Hailey, ID 83333
Blaine County

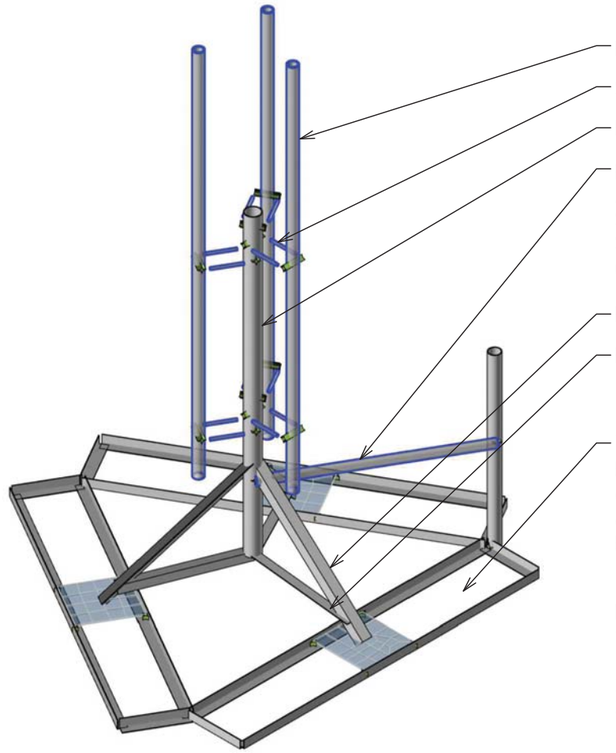
Sheet Title
Notes

Project 019420240354
Date 06/27/2024
Drawn By: BU
Checked By: SC
Sheet S-3



Note(s):
1. Remove all existing antenna mount pipes and standoffs.
2. Remove all existing RRU unistruts.
3. Remove all excess ballast from the roof.

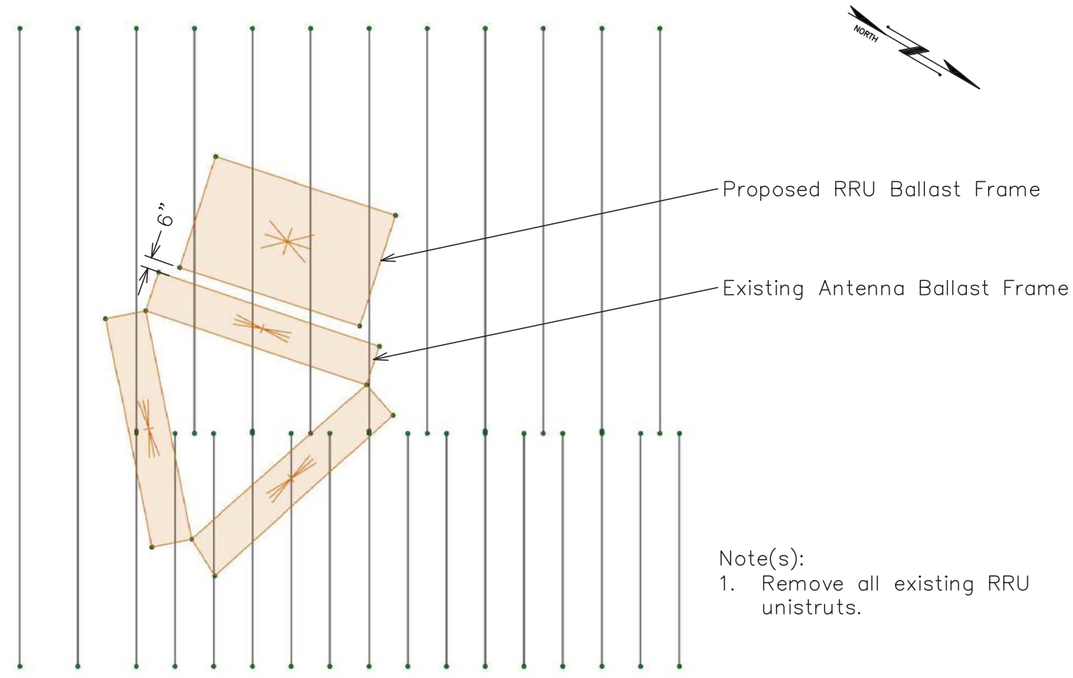
Elevation View (Antenna Frame)



The ballast frame shall have 1824lb of ballast (48 – 16"x8"x8" standard–core concrete ballast blocks or approved equivalent) evenly distributed in the ballast trays.

Note(s):
1. Remove all existing antenna mount pipes and standoffs.
2. Remove all existing RRU unistruts.
3. Remove all excess ballast from the roof.

Isometric View (Antenna Frame)



Note(s):
1. Remove all existing RRU unistruts.

Plan View (Roof Layout)

General Notes

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ENGINEER of RECORD SEAL

PROFESSIONAL ENGINEER LICENSED
15574
6/27/24
STATE OF IDAHO
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No.	Revision/Issue	Date
0	Construction	06/27/2024

Project Name and Address
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HAILEY
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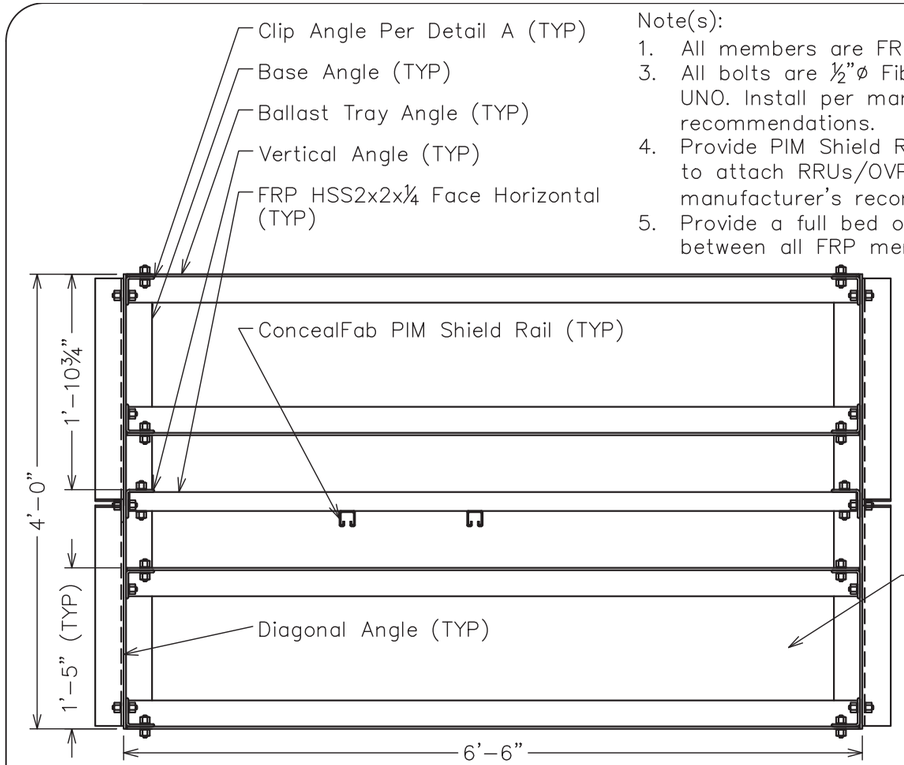
Hailey, ID 83333
Blaine County

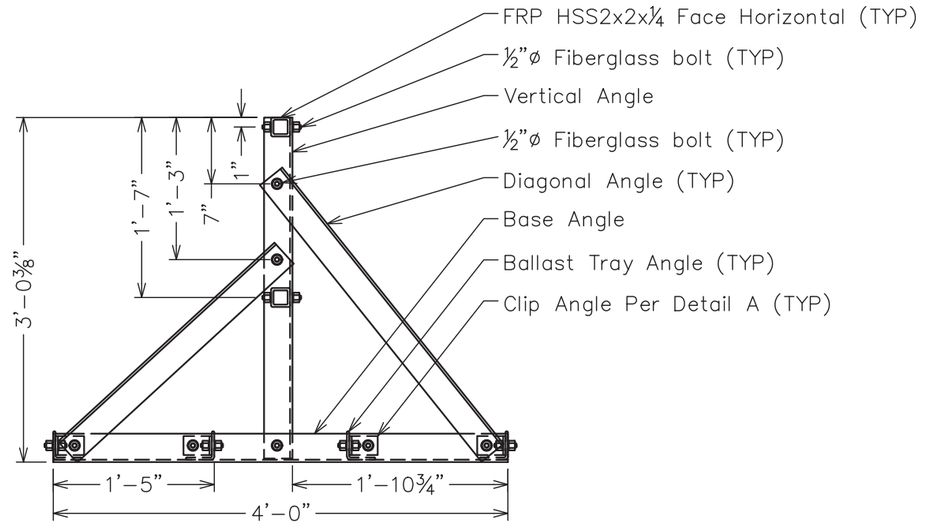
Sheet Title
Antenna Frame

Project 019420240354
Date 06/27/2024
Drawn By: BU
Checked By: SC
Sheet S-4



Note(s):
1. All members are FRP L3x3x¼ UNO.
3. All bolts are ½"ø Fiberglass bolts UNO. Install per manufacturer's recommendations.
4. Provide PIM Shield Rails as required to attach RRUs/OVPs. Attach per manufacturer's recommendations.
5. Provide a full bed of FRP Adhesive between all FRP members.

Plan View (RRU Frame)



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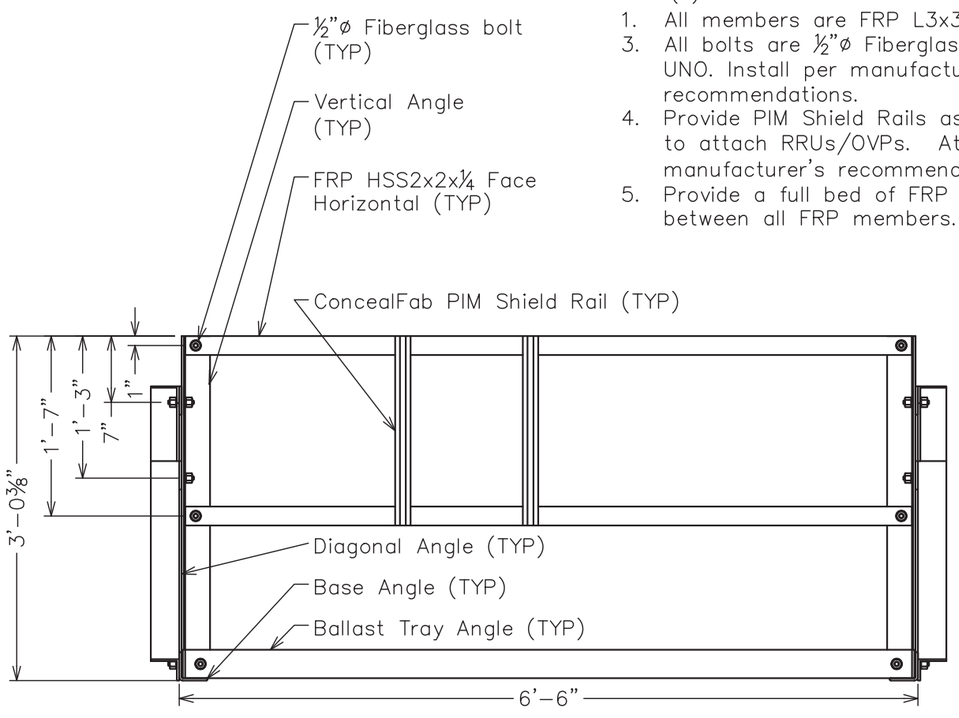
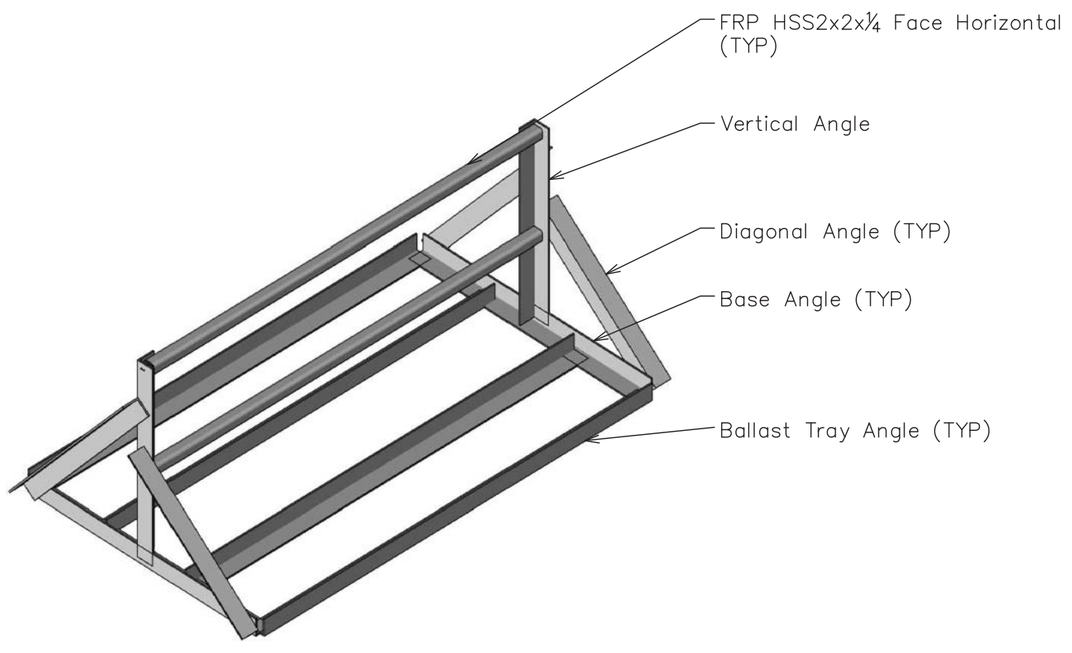
5. Provide a full bed of FRP Adhesive between all FRP members.

Side View (RRU Frame)



Note(s):
1. All members are FRP L3x3x¼ UNO.
3. All bolts are ½"ø Fiberglass bolts UNO. Install per manufacturer's recommendations.
4. Provide PIM Shield Rails as required to attach RRUs/OVPs. Attach per manufacturer's recommendations.
5. Provide a full bed of FRP Adhesive between all FRP members.

Front View (RRU Frame)



Isometric View (RRU Frame)

General Notes

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Sheet Title
RRU Frame

Project 019420240354
Date 06/27/2024
Drawn By: BU
Checked By: SC
Sheet S-5

Return to Agenda

Agenda
Hailey Planning and Zoning Commission
Monday, October 6, 2025
5:30 p.m.

Hailey Planning and Zoning Meetings & Development Impact Fee Advisory Committee are open to the public, in person, and by electronic means when available. The city strives to make the meeting available virtually but cannot guarantee access due to platform failure, internet interruptions or other potential technological malfunctions. Participants may join our meeting virtually by the following means:

Join on your computer, mobile app, or room device.
Click here to join the meeting
Meeting ID: 249 576 139 181
Passcode: Ge6Z7Q
Download Teams | Join on the web

Or call in (audio only)
+1 469-206-8535,,602369677# United States, Dallas
Phone Conference ID: 602 369 677#

Present : Dan Smith, Michael Smith, Jordan Fitzgerald
Absent: Fugate, Sauerbrey

5:30:09 PM **Call to Order Hailey Planning and Zoning Commission**

- Public Comment for items not on the Agenda.

5:31:37 PM **Consent Agenda - ACTION ITEM**

- **CA 1** Motion to approve Findings of Fact, Conclusions of Law, and Decision of a
- Conditional Use Application by Kassidy Thompson and Sherry Horton for a new use - a Performing Arts Studio offering dance instruction for children, teens and adults. The studio will host group classes as well as occasional private lessons in ballet, jazz, tap, lyrical and hip-hop. All proposed to be located at 3950 Woodside Boulevard (Lot 1 Block 45 Woodside Subdivision #10) in Light Industrial (LI) Zoning District. **ACTION ITEM**

- **CA 2** Motion to approve meeting minutes dated May 5, 2025. **ACTION ITEM**

- **CA 3** Motion to approve meeting minutes dated May 19, 2025. **ACTION ITEM**

- **CA 4** Motion to approve meeting minutes dated June 2, 2025. **ACTION ITEM**

- **CA 5** Motion to approve meeting minutes dated June 16, 2025. **ACTION ITEM**

- **CA 6** Motion to approve meeting minutes dated July 7, 2025. **ACTION ITEM**

115 South Main Street Hailey, Idaho 83333 (208) 788-9815

- CA 7 Motion to approve meeting minutes dated July 21, 2025. **ACTION ITEM**

- CA 8 Motion to approve meeting minutes dated August 18, 2025. **ACTION ITEM**

- CA 9 Motion to approve meeting minutes dated September 2, 2025. **ACTION ITEM**

- CA 10 Motion to approve meeting minutes dated September 15, 2025. **ACTION ITEM**

5:32:13 PM M. Smith made motion to approve CA1-CA6, Fitzgerald 2nd, all in favor

5:32:36 PM CA4 correction M Smith present, D. Smith absent, M. Smith motion to approve, Fitzgerald 2nd, Fitzgerald and M. Smith favor, D. Smith abstain

5:33:27 PM D. Smith motion to approve CA5, Fitgerald 2nd, D. Smith and Fitzgerald favor, M. Smith abstain

Public Hearing - ACTION ITEM

- 5:33:40 PM PH 1 Continuation of a Planned Unit Development Application by Skyway Apartments whereby the Applicant is seeking the approval to convert the existing motel/short-term rental units into 46 long-term rental units, to comprise twelve (12) studio units, twenty (20) one-bedroom units, fifteen (15) two-bedroom units and three (3) three-bedroom units. Seven (7) of the proposed 46 residential units would be perpetually dedicated rent-restricted housing as this project's community benefit. This project is located at 804 South 4th Avenue (Lot 1B, Block 137, Townsite) in the Limited Business (LB) and Townsite Overlay (TO) Zoning Districts. **ACTION ITEM**

5:34:28 PM Brooks introduced application and summarized changes from last hearing with a reduction in density.

5:36:03 PM Applicant summarized changes requested by commission. Robert Hogan – Blaine County Housing wrote letter of support, received by commission as handout.

5:37:52 PM Fitzgerald – how will units be restricted (applicant stated by deed). Fitzgerald asked about 1 bdr by studio applicant responded with 10 units
5:38:57 PM M Smith had no comments and complemented project
5:39:25 PM D Smith, no comment also complimented on efforts and reducing income level for residents
5:40:37 PM D Smith opened to public comment.

5:41:05 PM D Smith closed to public comment.

5:41:31 PM No further comments or discussion by commission or staff.

5:41:45 PM M Smith motion to recommend approval by the Hailey City Council the Planned Unit Development (PUD) Application by Hailey Airport Inn, LLC, for approval to convert the existing Hailey Airport Inn motel/short-term rental units into twenty-five (25) long-term rental units, to

comprise of both studio units and one-bedroom units, with seven (7) of the proposed forty-six (46) residential units to be perpetually dedicated rent-restricted housing at 60-120% AMI as the project's community benefit, located at 804 South 4th Avenue (Lot 1B, Block 137, Townsite) in the Limited Business (LB) and Townsite Overlay (TO) Zoning Districts, and to be known as Skyway Apartments; finding that the project meets the standards under Section 17.10 of the Hailey Municipal Code, subject to Conditions 1-5 above. Fitzgerald seconded. All in Favor.

- 5:43:23 PM **PH 2** Consideration of a Preliminary Plat Application by David Hennessy wherein Block 5, Quigley Farms Subdivision (Fox Acres Road and Quigley Farm Road) is proposed to be subdivided to create six (6) lots ranging in size from 10,491 square feet to 13,141 square feet (lots 1-4, and lots 7-8) and six (6) sublots ranging in size from 4,429 square feet to 5,407 square feet(SubLots 1-6). This project is located within the General Residential (GR) Zoning District. **ACTION ITEM**

5:44:13 PM Brooks introduced proposed subdivision and summarized requested changes. Brooks summarized previous project history.

5:45:44 PM Trevor Brand presented applicant project.

5:46:24 PM M. Smith asked about garage access. Applicant stated off the alley.
M. Smith asked intent for change. Further discussion with commission and applicant.

5:48:47 PM D. Smith confirmed retaining two duplex lots. Hennessy confirmed – those are deeded to ARCH at this time. Commission and applicant discussed lot sizes and benefits of going with sublots.

5:49:57 PM D. Smith opened public comment.

5:50:23 PM D. Smith closed public comment.

M. Smith asked staff if wanted to keep condition 4 at proposed term. Davis explained footnote and explained would be easier to track together. Staff recommends 2., applicant confirms that is acceptable.

No further questions or comments.

5:52:04 PM Fitzgerald motion to approve the Preliminary Plat Application by Quigley Farm & Conservation Community, LLC, represented by Dave Hennessy, wherein Block 5, Quigley Farms Subdivision (Fox Acres Road and Quigley Farm Road) is subdivided to create Lots 1-4, 7 and 8, ranging in size from 10,491 square feet to 13,141 square feet, and Sublots 1-6, ranging in size from 4,429 square feet to 5,407 square feet and located within the General Residential (GR) and Peri-Urban Agriculture (PA) Zoning Districts, finding that the application meets all City Standards, and that Conditions (1) through (9) are met. M. Smith seconded. All in Favor.

- 5:52:54 PM **PH 3** Consideration of a Conditional Use Application by Friedman Memorial Airport for the approval and placement of a temporary airline office trailer and ground service equipment electrical infrastructure located at 1616 Airport Circle (FRIEDMAN

MEMORIAL AIRPORT AUTHORITY), a parcel within the Airport (A) Zoning District. **ACTION ITEM**

5:53:34 PM Dyer introduced temporary airline office trailer and ground service equipment electrical infrastructure located at 1616 Airport Circle

5:54:35 PM Jim Laski summarized project and asked for questions
5:55:06 PM Fitzgerald asked for clarification on GSE. Tim Burk airport rep explained GSE explained ground service equipment and what that entails. Fitzgerald asked if a length would be associated with project. Davis explained historically to term limits but there could be one proposed by commission. M Smith no concerns, noted about may need to add lighting per code. Applicant explained current proposed lighting.
6:01:01 PM Open to public comment
6:01:24 PM Closed to public comment
6:04:31 PM M Smith motioned to approved

6:04:33 PM Motion to approve the Conditional Use Application by The Friedman Memorial Airport Authority for the placement of a temporary airline office trailer and ground service electrical infrastructure, all located at 1610 Airport Circle (FR SEC 10,15 & 22 TL 8151 AIRPORT LAND FRIEDMAN MEMORIAL AIRPORT AUTHORITY), finding that the application meets each of the Criteria for Review, (a) through (h) cited in the Hailey Municipal Code, that the Conditional Use Permit complies with the Comprehensive Plan, and that Condition (a) will be met. Fitgerald 2nd, all in favor

Administrative Review – NO ACTION ITEM

- **AR 1** Design Review Exemption by Lightning Strikes, LLC, to exempt from Design Review, plans for an exterior color change to the existing 2,623 square foot multifamily building located at 306 S. Main Street (Lots 11-14, Block 21, Hailey Townsite) within the Business (B), Downtown Residential Overlay (DRO), and Townsite Overlay (TO) Zoning Districts.

Staff Reports and Discussion

- **SR 1** Meeting: Monday, October 20, 2025:

6:06:15 PM Davis summarized upcoming meeting
6:06:55 PM D. Smith will be absent 10/20 meeting
6:07:08 PM Fitzgerald motion to adjourn, M. Smith 2nd, all in favor

Adjourn by 8:00 PM - ACTION ITEM

115 South Main Street Hailey, Idaho 83333 (208) 788-9815

Return to Agenda

Agenda
Hailey Planning and Zoning Commission
Monday, October 20, 2025
5:30 p.m.

Hailey Planning and Zoning Meetings are open to the public, in person, and by electronic means when available. The city strives to make the meeting available virtually but cannot guarantee access due to platform failure, internet interruptions or other potential technological malfunctions. Participants may join our meeting virtually by the following means:
Join on your computer, mobile app, or room device.
Click here to join the meeting
Meeting ID: 249 576 139 181
Passcode: Ge6Z7Q
Download Teams | Join on the web

Or call in (audio only)
+1- 469-206-8535: 602369677# United States, Dallas
Phone Conference ID: 602 369 677#

Board Present: Michael Smith, Sage Sauerbrey, Janet Fugate, Jordan Fitzgerald
Board Absent: Dan Smith
Staff Present: Robyn Davis, Ashley Dyer, Emily Brooks, Kayme Backstrom

5:30:20 PM **Call to Order Hailey Planning and Zoning Commission**

- Public Comment for items not on the Agenda.

5:32:15 PM **Consent Agenda - ACTION ITEM**

- **CA 1** Motion to approve Findings of Fact, Conclusions of Law, and Decision of a Planned Unit Development (PUD) Application by Hailey Airport Inn, LLC, to convert the existing Hailey Airport Inn motel/short-term rental units into twenty-five (25) long-term rental units, to comprise of both studio units and one-bedroom units, with seven (7) of the proposed forty-six (46) total residential units on-stie to be perpetually dedicated rent-restricted housing at 50-120% area median income (AMI) as the project's community benefit, located at 804 South 4th Avenue (Lot 1B, Block 137, Townsite) in the Limited Business (LB) and Townsite Overlay (TO) Zoning Districts, and to be known as Skyway Apartments. **ACTION ITEM**

- **CA 2** Motion to approve Findings of Fact, Conclusions of Law, and Decision of a Preliminary Plat Application by Quigley Farm & Conservation Community, LLC, represented by Dave Hennessy, wherein Block 5, Quigley Farms Subdivision (Fox Acres

115 South Main Street Hailey, Idaho 83333 (208) 788-9815

Road and Quigley Farm Road) is subdivided to create Lots 1-4, 7 and 8, ranging in size from 10,491 square feet to 13,141 square feet, and Sublots 1-6, ranging in size from 4,429 square feet to 5,407 square feet. This parcel is located within the General Residential (GR) and Peri-Urban Agriculture (PA) Zoning Districts. **ACTION ITEM Motion**

- **CA 3** Motion to approve Findings of Fact, Conclusions of Law, and Decision of a Conditional Use Application by The Friedman Memorial Airport Authority for the approval and placement of a temporary airline office trailer and ground service electrical infrastructure (GSE), all located at 1610 Airport Circle (FR SEC 10,15 & 22 TL 8151 AIRPORT LAND FRIEDMAN MEMORIAL AIRPORT AUTHORITY), a parcel within the Airport (A) Zoning District.

5:32:29 PM M. Smith made motion to approve CA1-CA3, Fitzgerald 2nd, Sauerbrey and Fugate abstained

5:32:51 PM **Public Hearing - ACTION ITEM**

- **PH 1**. Consideration of a Preliminary Plat Application by Arch Community Trust, Inc., represented by Galena-Benchmark Engineering, wherein Lot 6, Block 3 (1411 RedTail Lane) of Quigley Farms Subdivision is subdivided to create two (2) Community Housing lots; Lot 6A comprising of 6,317 square feet in size and Lot 6B comprising of 6,319 square feet in size. This project is located within the General Residential (GR) Zoning District. **ACTION ITEM**

5:33:56 PM Dyer clarified phase 1 not phase 2 Applicant is requesting 2 lots from 1 lot.

5:34:31 PM Applicant introduced project. This request is meant to bolster the locals only, the buyer must work 30+ hours per week for a Blaine County employer.

5:36:34 PM Fitzgerald asked for clarification of driveway location. Driveway will be off of ally. Further commission and applicant discussion continued.

Sauerbrey asking about ADU above garages. Michelle stated market pricing value gets priced out with ADU for affordable.

M Smith asked about timeline. Michelle said 2 different quotes immediate and Spring.

M Smith brought up 1 year timeline, Davis said will update to 2 year.

5:43:20 PM Matt Stalker, owns a lot across the street. Addressed concerns of duplex to keep continuous look and snow storage. Agrees with duplex look but not the lot split.

5:47:28 PM Michelle addressed no way to keep to 1 driveway even as is a duplex. It likely would have 2 driveways no matter what for maintenance purposes. This application cannot be evaluated by what could happen on either side.

5:48:25 PM Davis addressed driveway will be off ally. Quigley was approved for it was approved for community housing and single-family homes variety.

5:50:04 PM Further commission discussed project, density, and character of neighborhood and increased diversified housing. Commission was appreciative for the public comment.

5:55:59 PM Sauerbrey motion to approve the Preliminary Plat Application by Arch Community Trust Inc., represented by Galena-Benchmark Engineering, wherein Lot 6, Block 3 (1411 RedTail Lane) of Quigley Farms Subdivision is subdivided to create two (2) sublots; Sublot 6A and Sublot 6B, finding that the application meets all City Standards, and that Conditions (1) through (10) will be met. M. Smith 2nd, all in favor.

- 5:57:02 PM **PH 2.** Commissioner Discussion and Staff updates on Food Truck/Mobile Vending Public Outreach Activities, to include a Public Hearing. No decisions are proposed at this time. **NO ACTION ITEM.**

5:57:23 PM Saurbrey mentioned his wife does have a mobile truck.

5:58:23 PM Staff and Board discussed. Toss associated business language. Property owner permission instead.
6:05:14 PM Public comment, Steve, is very in favor. Likes dedicated areas as well. Allows owners to start brick and mortar.
6:06:52 PM Further discussion and brainstorming. Fugate maybe have a trial period for proposal, then review and revaluate. Waste dump and regulation will be developed and clarified. Regulations for green space.
6:16:44 PM Davis explained vendors of all types are allowed where uses are permitted. As long as code and comp plan support this.
6:37:36 PM Brooks still in information gathering process. To mitigate misunderstandings especially around health regulations.

Administrative Review – NO ACTION ITEM

- **AR 1** Design Review Exemption by Alturas Construction, represented by Mark Gasenica to exempt from Design Review, minor modifications to the existing 820 square foot single family residence located at 417 S. 4th Avenue (Lots 9-10, Block 13, Hailey Townsite) within the Limited Residential (LR-1) and Downtown Residential Overlay (DRO), Zoning Districts.

- **AR 2** Design Review Exemption by Alturas Construction, represented by Mark Gasenica, to exempt from Design Review minor modifications to the existing 440 square foot commercial building located at 512 N. Main Street (Lots S 5' of 13 All od 14-16, Block 64, Hailey Townsite) within the Business (B) Townsite overlay (TO) and Downtown Residential Overlay (DRO), Zoning Districts.

6:41:54 PM **Staff Reports and Discussion**

- **SR 1** Monday November 3rd, 2025 Cancelled

- **SR2** Meeting: Monday, November 17, 2025:
    - Design Review Pre-Application for Shapi Shay
    - Right of way vacation

6:43:10 PM M. Smith motion to adjourn, Sauerbrey 2nd , all in favor

Adjourn by 8:00 PM - ACTION ITEM

115 South Main Street Hailey, Idaho 83333 (208) 788-9815

Return to Agenda

Staff Report
Hailey Planning and Zoning Commission
Regular Meeting of November 17, 2025

To: Planning and Zoning Commission
From: Ashley Dyer, Community Development City Planner

Proposal: Consideration of a Design Review Pre-Application, submitted by Guerra-Ori, LLC, and represented by Jay Cone of Jay Cone Architecture, for the construction of a new Townhouse Development project consisting of three (3) detached townhouses to be known as Shapi Shay Townhomes. This project is located at 2410 Woodside Boulevard (Lot 18, Block 62, Woodside Subdivision #15) within the General Residential (GR) Zoning District.

Hearing: November 17, 2025

Applicant: Guerra-Ori, LLC, represented by Jay Cone of Jay Cone Architecture
Location: Lot 18, Block 62- Woodside Subdivision #15
Zoning & Lot Size: (GR) General Residential

Notice: Notice for the public hearing was published in the Idaho Mountain Express on October 29,2025 and mailed to property owners on October 27, 2025.

Background and Project Overview. The Applicant is proposing a new Townhouse Development infill project to include three (3) detached townhouses located along the public street of Woodside Boulevard.

More specifically, the parcel is located within the Woodside Subdivision and is currently 22,178 square feet in size. Each townhouse sublot is proposed to be 7,392 square feet in size. The proposed site plan entails three (3) detached townhouses, and includes the following:

- 3,119 square foot townhome per sublot
- 1,964 square foot first floor
  - Three (3) bedrooms
  - Two (2) bathrooms
  - Laundry and mudroom areas
- 683 square foot second floor (ADU)
  - One (1) bedroom
  - One (1) bathroom
  - Laundry area
- 472 square foot garage

Procedural History: The Design Review Preapplication was submitted on September 22, 2025. A public hearing before the Planning and Zoning Commission will be held on Monday, November 17, 2025, in the Hailey City Council Chambers and virtually via Microsoft Teams.

Chapter 17.06: Design Review. Section 17.06.050: Application:
C. Design Review Pre-Application:

1. **Required: An application for Preapplication Design Review shall follow the procedures and be subject to the requirements established by section 17.03.070 of this title, and shall be made by at least one holder of any interest in the real property for which the Preapplication Design Review is proposed.**
2. **Information Required: The following information is required with an Application for Preapplication Design Review:**
    a. **The Design Review Application form, including project name and location, and Applicant and representative names and contact information.**
    b. **One (1) eleven inch by seventeen inch (11" x 17") and one electronic copy showing at a minimum the following:**
        i. **Vicinity map, to scale, showing the project location in relationship to neighboring buildings and the surrounding area. Note: A vicinity map must show the location of adjacent buildings and structures.**
        ii. **Site plan, to scale, showing proposed parking, loading and general circulation.**
        iii. **One color rendering of at least one side of the proposed building(s).**
        iv. **General location of public utilities (survey not required). (Ord. 1226, 2017; Ord. 1191, 2015)**

Items for Review, Discussion and/or of Note:

Accessory Dwelling Units (ADUs): ADUs may be located within, or attached to, a principal building or may be located within a detached accessory building. Detached ADUs may comprise the entirety of the accessory building or may comprise part of the floor area of an accessory building with another permitted accessory use or uses comprising the remaining floor area.

- Per Hailey's Municipal Code, ADUs are permitted within the GR Zoning District. The maximum floor area for each ADU, given that each proposed sublot 7,392 sq. ft. in size, is 950 sq. ft, respectively.
- The Applicant is proposing that each townhouse have a 683 square foot ADU, located on the second floor, which complies with the maximum size allowance per sublot.

Streets, Rights-of-Way, and Parking: Per Hailey's Municipal Code, a minimum of two (2) onsite parking spaces per dwelling unit are required. One (1) additional onsite parking space is required for the buildout of an ADU.

- The Applicant has provided three (3) parking spaces onsite per sublot. Two (2) parking spaces are provided within the proposed driveways, which include the required one (1) space designated for the ADU, as well as an additional parking space within the garage area for each townhouse.

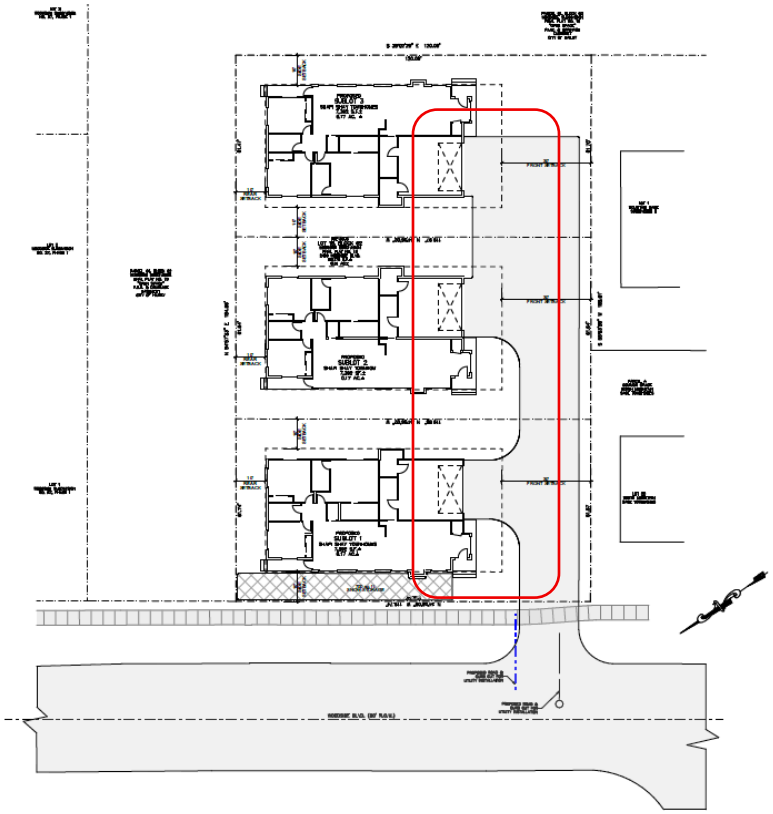
- While the landscape plan is still underway, Staff recommend that street trees be planted along Woodside Boulevard and within the public right-of-way. The Hailey Tree Committee will review said plan at a later date, and prior to the full Design Review hearing.

Site Access and Garage Orientation: Access to the site will be from the existing public street, Woodside Boulevard.

- Due to the linear configuration of the parcel, one access point, and given that the proposed townhouse development is an infill project, which the Comprehensive Plan encourages, building designs may be constrained to comply with all code requirements, as noted below.
- The Applicant has presented a building design that positions the garages of each townhouse along the front elevation of each home, and approximately three (3) feet behind the front door.
    - Per Hailey's Municipal Code, Title 17, Section 17.06.070. E. Detached Townhouse Developments, specific standards apply to the siting of each garage. **In addition to the standards applicable to all non-residential, multi-family or mixed-use developments located within the City of Hailey described in subsection A of this section, the following design standards also apply to detached townhouse developments located within the City of Hailey:**
        - **Driveway Access: Garages shall be located near the rear of the primary residence and in no case shall be located less than ten feet (10') behind the front façade of the residence**.

Given the linear nature of this parcel, as well as the prioritization of infill projects outlined in Hailey's Comprehensive Plan, Staff request feedback from the Commission regarding this standard whereby garages shall be located near the rear of the primary residence and in no case shall be located less than ten feet (10') behind the front façade of the residence.

This standard was established as part of the Cottage Development Code, adopted by the Council in 2023. This project is Hailey's first to "test" the new requirements as codified and has proven to be difficult to meet. By way of example, where remnant parcels remain vacant that are smaller in size, irregular in shape, have limited ingress/egress points, or bound by existing developments on all sides, infill projects are experience design and buildout challenges. Staff encourage the Commission to discuss, and if supportive, direct Staff to refine the code language of said standard to better support and encourage infill projects in Hailey.

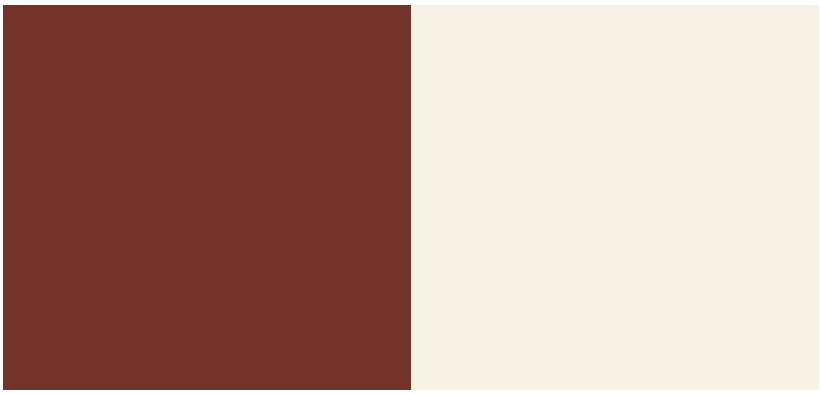


New Outdoor/Open Space: Per Hailey's Municipal Code, all ADUs shall have a designated area to access the outdoors. Examples include a balcony, porch, deck, paver patio, or yard area delineated by fencing, landscaping, or similar treatment so as to provide for private enjoyment of the outdoors. This area shall be no less than fifty (50) square feet in size.

- The Applicant is proposing a 62 square foot balcony for each ADU.
- There is also a designated area in the side yard near each ADUs exterior staircase.
- While a detailed Landscaping Plan has not been provided, the Applicant is aware that one is needed for the full Design Review submittal.

Building Design, Materials, and Colors: The overall building design and materials are proposed to have painted lap siding, painted wood facia, steel flashing in Baked Enamel, and asphalt shingles on the roof. Undulation and visual interest are further enhanced by various sized windows, as well as the integration of exterior elements, such as balconies and exterior staircases. The exterior of the building is proposed to be painted Benjamin Moore Historic Carriage Red - CW 250. The dark "barn red", and the white (Capital White – CW 10) trim will complement the surrounding neighborhood.

2 North Elevation

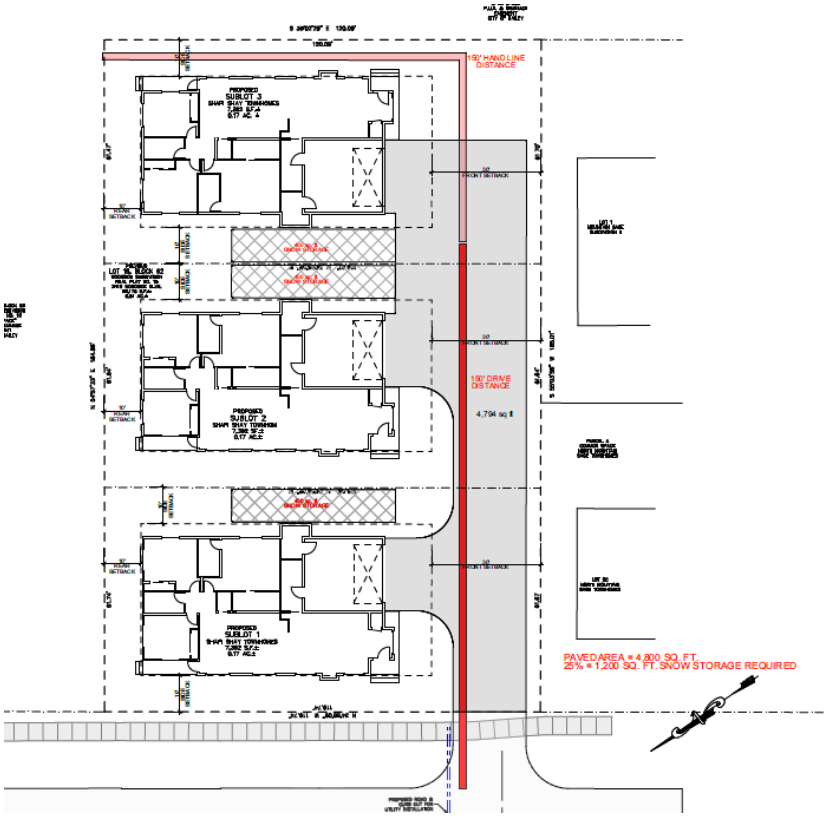


Water, Sewer, and Fire: This is a Preapplication Design Review. Final drawings that illustrate connection details & drainage will be required for full Design Review (to be determined), and no comments have been made by Staff at this time.

Snow Storage: Per Hailey's Municipal Code, Snow storage areas shall not be less than twenty five percent (25%) of the improved parking and vehicle and pedestrian circulation areas.

- The total paved area for this development is 4,800 square feet and per code, 25% would equate to 1,200 square feet of snow storage. The Applicant is proposing 1,200 square feet of snow storage for the Townhouse Development infill project, to be located onsite, along the interior of the lot, between the townhome buildings, which complies with this standard.

Fire Access Lane: As shown below, the proposed fire access lane (in red) has been approved by the Fire Chief.



Action: No formal action is required by the Commission at this time. The Commission should be prepared to offer feedback on the above items, and any others that may arise, so that the Applicant can incorporate said feedback into their full Design Review submittal.

LOT 18 BLOCK 62

VICINITY MAP

BUILDING DATA

LEGAL DESCRIPTION:
Lot 18 Block 62 Woodside Sub. #15

ADDRESS:
2410 Woodside Blvd.

PARCEL NUMBER
RPH04750620180

ZONING: _
General Residential (GR)

BLDG USE:
Single Family

OCC. GROUPS:
R-3

CONST. TYPE:
VB, Non rated

SQUARE FOOTAGE:
First = 1,964 sq. ft.
Second = 683 sq. ft.
Garage = 472 sq. ft.
TOTAL NEW = 3,119 sq. ft.

LOT AREA:
22,176 TOTL
+-7392 Sq. Ft. Individual Lots

MAX. HT.
35' Allowed
25'- 0" Actual

MIN. LOT SIZE
6,000 Sq. Ft.

LOT COVERAGE
40% Allowed
35% Actual

SETBACKS:
-Front Setback = 20'
-Rear Setback = 10'
-Side Setback = 8' Min. One Foot for Every Two and One Half Feet in Height Not Less Than 8'

CLIMATE ZONE:
IECC 6 per 2018 IECC

BLDG. CODE:
2018 IBC
2018 IEEC
2018 IFC

JURISDICTION:
City of Hailey Idaho

CONSULTANTS

ARCHITECT:
Jay Cone Architecture PC
Jay Cone AIA
651 El Dorado Lane
Hailey, Idaho 83333
208-578-5226

CIVIL ENGINEERING / SURVEYING:
Alpine Enterprises
Bruce Smith PLS
PO Box 2037
Ketchum, Idaho 83340
208-727-1988

GENERAL CONTRACTOR:
Manny Construction
Manuel Guerra
PO Box 324
Hailey, Idaho 83333
208-720-6835

SHEET INDEX

JAY CONE ARCHITECTURE PC AIA
208.578.5226
jcone@jayconearchitecture.com
www.jayconearchitecture.com

Date:
9/18/2025

Seal:

LICENSED ARCHITECT Jay Cone
Sept. 18, 2025
JAY W. CONE STATE OF IDAHO

LOT 18 BLOCK 62

Issue:
DESIGN REVIEW

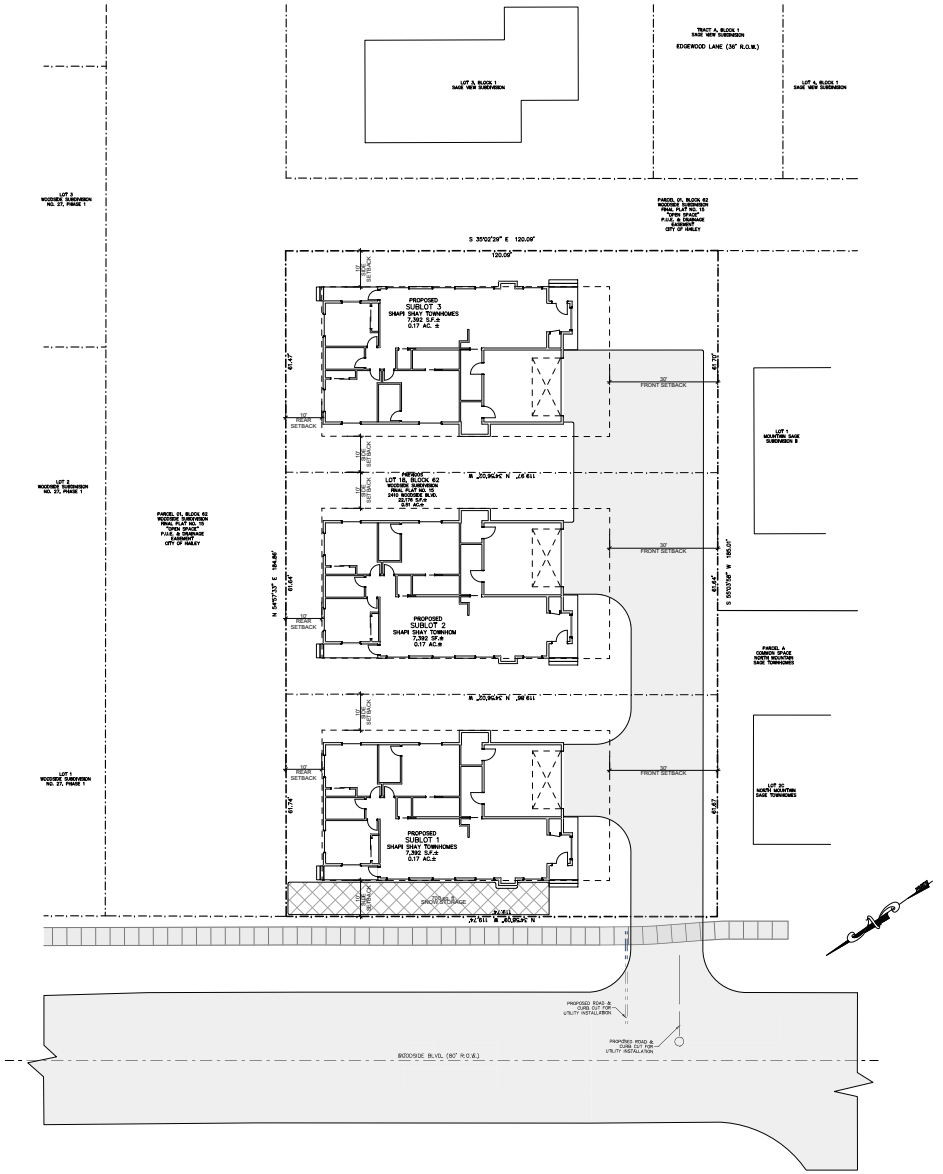
1" ACTUAL

IF THE ABOVE DIMENSION DOES NOT MEASURE ONE INCH (1") EXACTLY, THIS DRAWING HAS BEEN ENLARGED OR REDUCED, AFFECTING ALL LABELED SCALES.

Scale: AS NOTED
Drawn:
Job: 2024-3

G-001

SHEET 1 OF 14



1 ARCHITECTURAL SITE PLAN
SCALE: 1/16" = 1'-0"

JAY CONE
ARCHITECTURE PC AIA
208.578.5226
jcone@jayconearchitecture.com
www.jayconearchitecture.com

Date:
9/18/2025

Seal:

LICENSED ARCHITECT
Idaho
Sept. 18, 2025
JAY W. CONE
STATE OF IDAHO

LOT 18 BLOCK 62

Issue:
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Drawn:
Job: 2024-3

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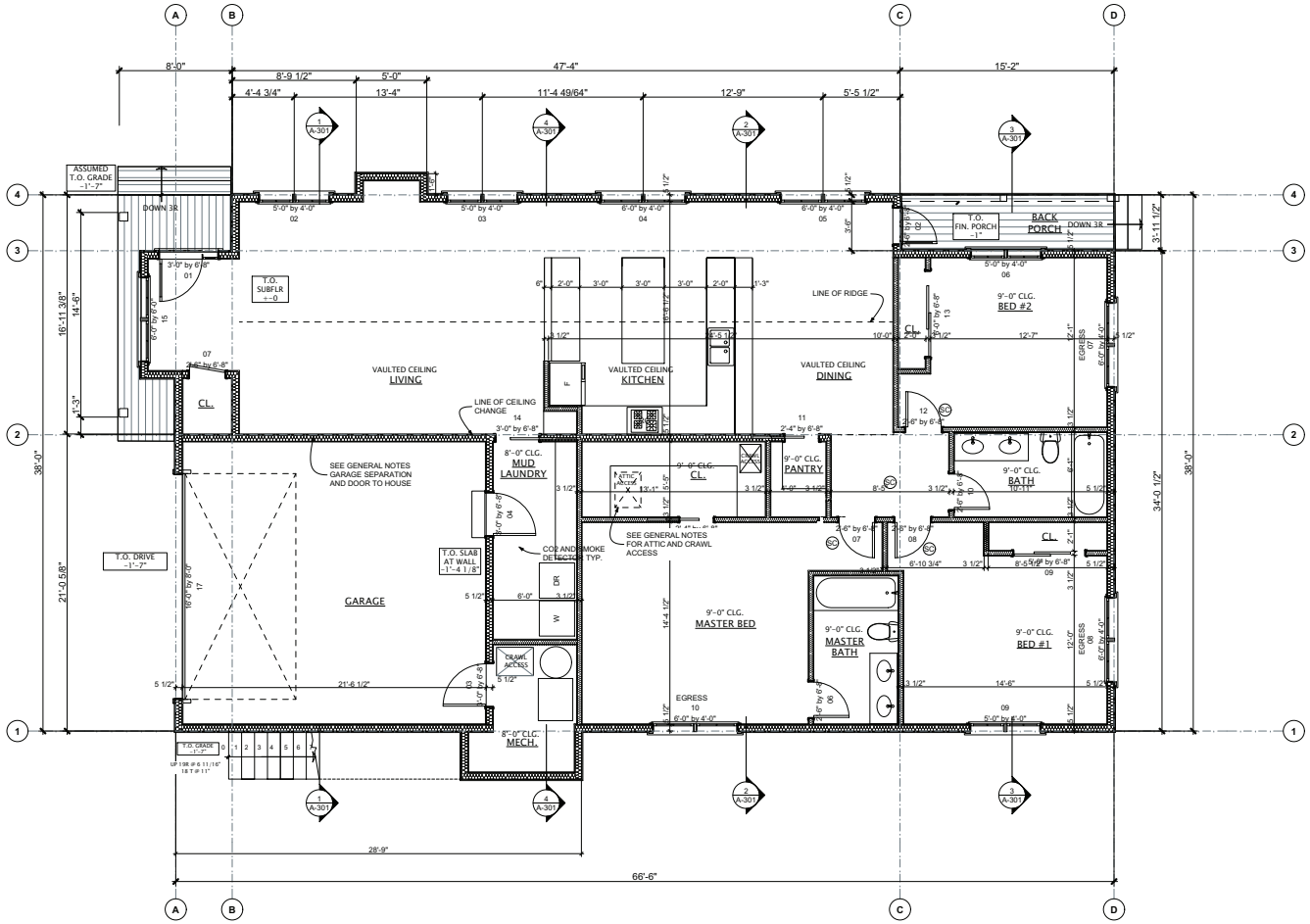
SHEET 7 OF 14



1 FIRST FLOOR PLAN

SCALE: 1/4" = 1'-0"

JAY CONE ARCHITECTURE PC AIA
208.578.5226
jcone@jayconearchitecture.com
www.jayconearchitecture.com

Date: 9/18/2025

Seal:

LICENSED ARCHITECT AHBRA
Sept. 18, 2025
JAY W. CONE
STATE OF IDAHO

LOT 18 BLOCK 62

Issue:

DESIGN REVIEW

1" ACTUAL

IF THE ABOVE DIMENSION DOES NOT MEASURE ONE INCH (1") EXACTLY, THIS DRAWING HAS BEEN ENLARGED OR REDUCED, AFFECTING ALL LABELED SCALES.

Scale: AS NOTED
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Job: 2024-3

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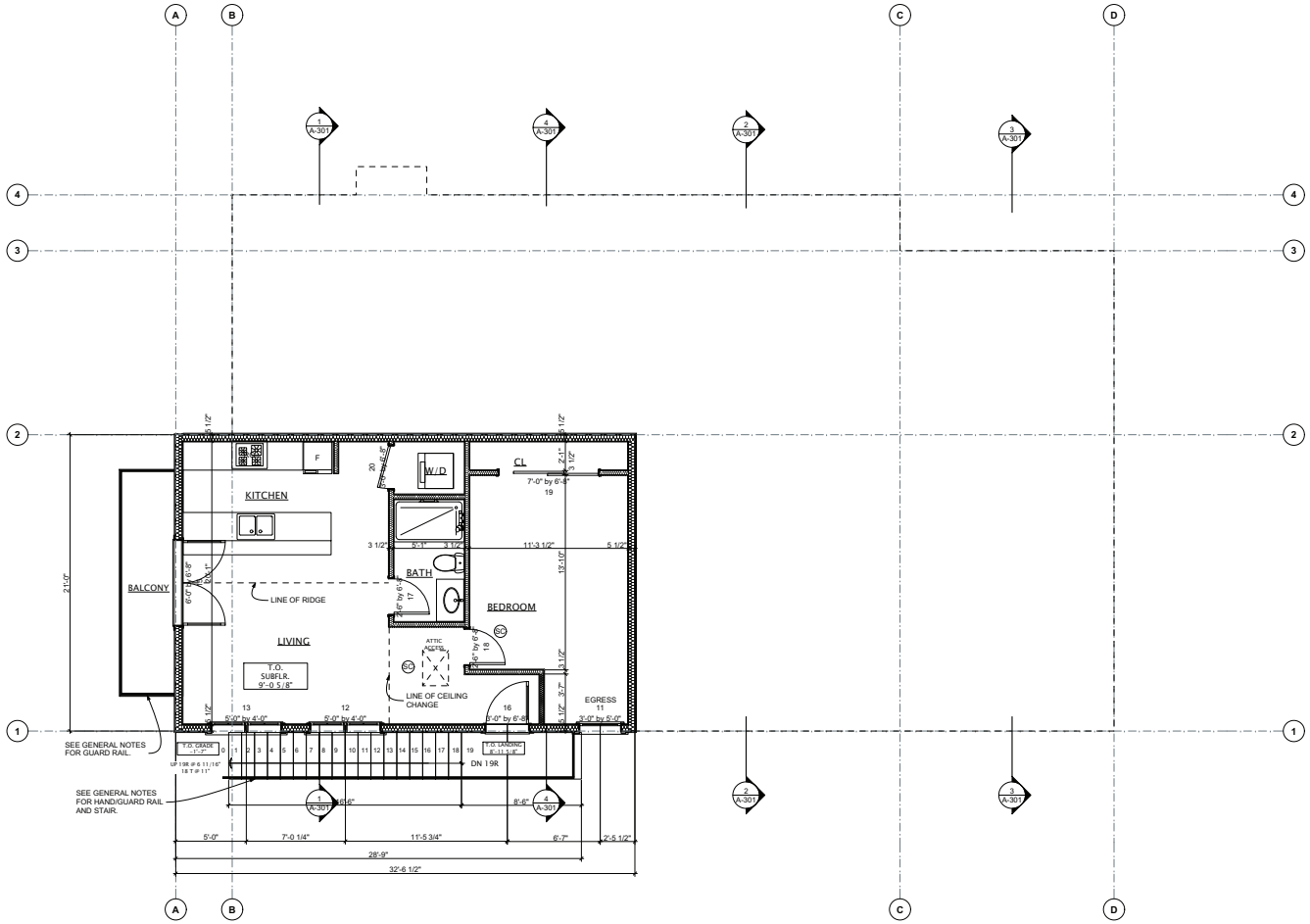
SHEET 8 OF 14



1 SECOND FLOOR PLAN

SCALE: 1/4" = 1'-0"

JAY CONE ARCHITECTURE PC AIA
208.578.5226
jcone@jayconearchitecture.com
www.jayconearchitecture.com

Date: 9/18/2025

Seal:

LICENSED ARCHITECT AVAILABLE
Sept. 18, 2025
JAY W. CONE
STATE OF IDAHO

LOT 18 BLOCK 62

Issue:

DESIGN REVIEW

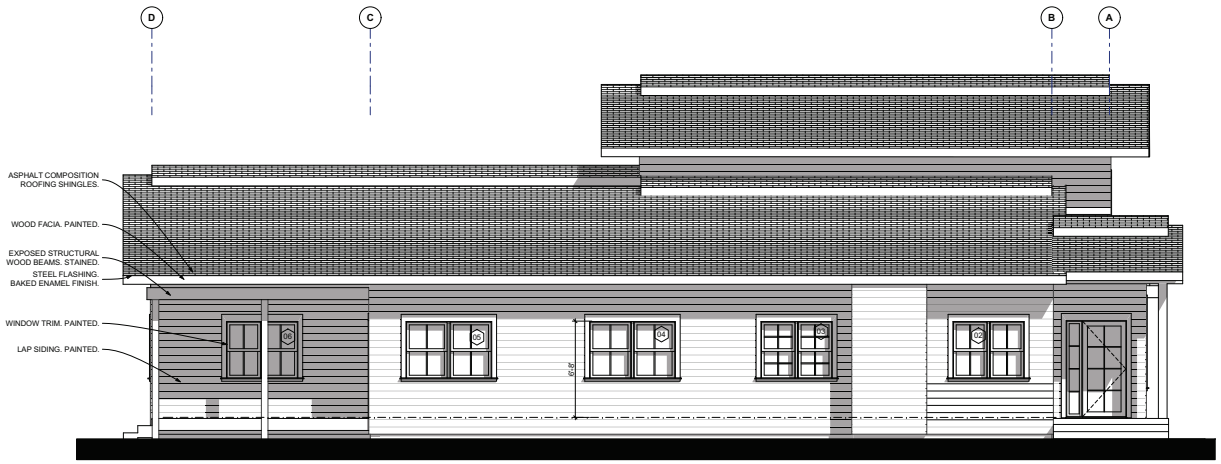
1" ACTUAL

IF THE ABOVE DIMENSION DOES NOT MEASURE ONE INCH (1") EXACTLY, THIS DRAWING HAS BEEN ENLARGED OR REDUCED, AFFECTING ALL LABELED SCALES.

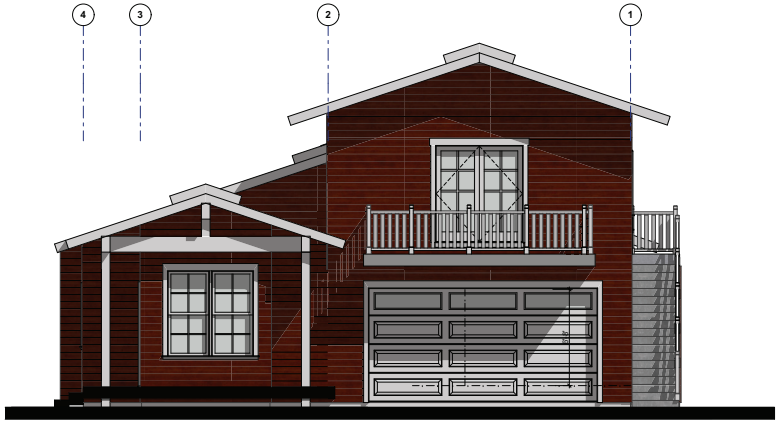
Scale: AS NOTED
Drawn:
Job: 2024-3

A-101

SHEET 9 OF 14



1 West Elevation
SCALE: 1/4" = 1'-0"



2 North Elevation
SCALE: 1/4" = 1'-0"

JAY CONE
ARCHITECTURE PC AIA
208.578.5226
jcone@jayconearchitecture.com
www.jayconearchitecture.com

Date:
9/18/2025

Seal:

LICENSED ARCHITECT Avalon
Sept. 18, 2025
JAY W. CONE STATE OF IDAHO

LOT 18 BLOCK 62

Issue:
DESIGN REVIEW

1" ACTUAL

IF THE ABOVE DIMENSION DOES NOT MEASURE ONE INCH (1") EXACTLY, THIS DRAWING HAS BEEN ENLARGED OR REDUCED, AFFECTING ALL LABELED SCALES.

Scale: AS NOTED
Drawn:
Job: 2024-3

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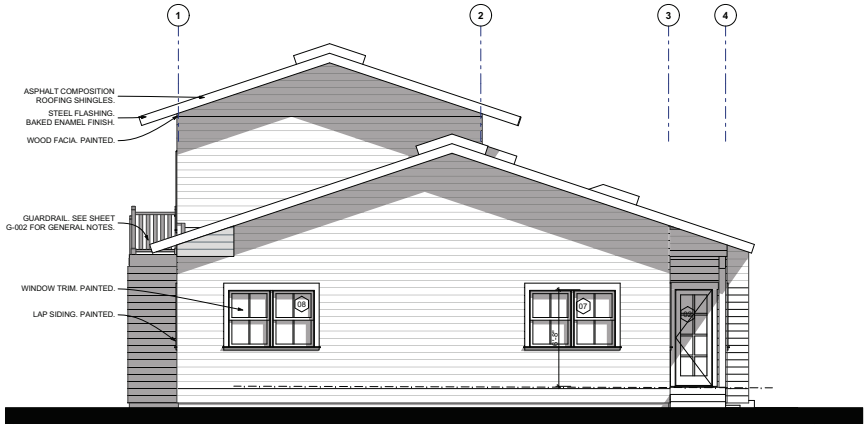
1 East Elevation

SCALE: 1/4" = 1'-0"



2 South Elevation

SCALE: 1/4" = 1'-0"

JAY CONE ARCHITECTURE PC AIA
208.578.5226
jcone@jayconearchitecture.com
www.jayconearchitecture.com

Date: 9/18/2025

Seal:

LICENSED ARCHITECT Jay W. Cone Sept. 18, 2025 JAY W. CONE STATE OF IDAHO

LOT 18 BLOCK 62

Issue: DESIGN REVIEW

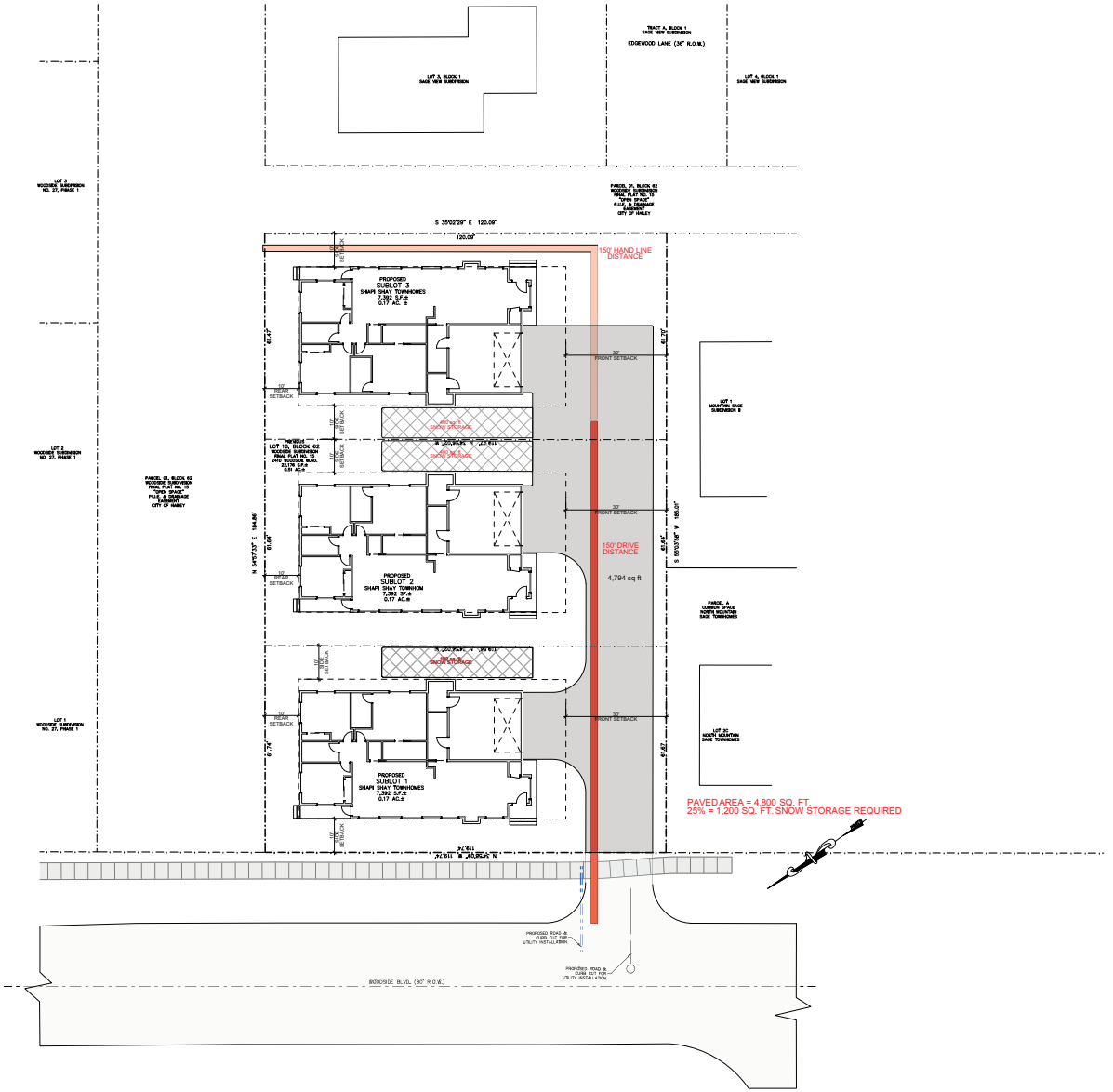
1" ACTUAL

IF THE ABOVE DIMENSION DOES NOT MEASURE ONE INCH (1") EXACTLY, THIS DRAWING HAS BEEN ENLARGED OR REDUCED, AFFECTING ALL LABELED SCALES.

Scale: AS NOTED
Drawn:
Job: 2024-3

A-202

SHEET 12 OF 14



1 ARCHITECTURAL SITE PLAN

SCALE: 1/16" = 1'-0"

JAY CONE
ARCHITECTURE PC AIA
208.578.5226
jcone@jayconearchitecture.com
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Date:
11/10/2025

Seal:

LICENSED ARCHITECT
Jason
Sept. 18, 2025
JAY W. CONE
STATE OF IDAHO

LOT 18 BLOCK 62

Issue:

DESIGN
REVIEW

1" ACTUAL

IF THE ABOVE DIMENSION DOES NOT MEASURE ONE INCH (1") EXACTLY, THIS DRAWING HAS BEEN ENLARGED OR REDUCED, AFFECTING ALL LABELED SCALES.

Scale: AS NOTED
Drawn:
Job: 2024-3

AS-101

SHEET 7 OF 14

Return to Agenda

STAFF REPORT
Hailey Planning and Zoning Commission
Regular Meeting of November 17, 2025

To: Hailey Planning and Zoning Commission
From: Emily Brooks, Community Development City Planner/Resilience Planner

Overview: Consideration of request from SVHD Properties, LLC, to the City of Hailey to vacate the certain section of Right-of-Way along West Carbonate Street, thereby reducing the City's Right-of-Way from 100' to 60' along that portion of West Carbonate Street adjacent to Lots 9 & 10, Block 43, Hailey Townsite. The section proposed for vacation is as follows, "Wherein approximately a 13-foot-wide strip of Carbonate Street adjacent to Lots 9 & 10, Block 43, Hailey Townsite is being [proposed for vacation] within City of Hailey, Blaine County, Idaho".

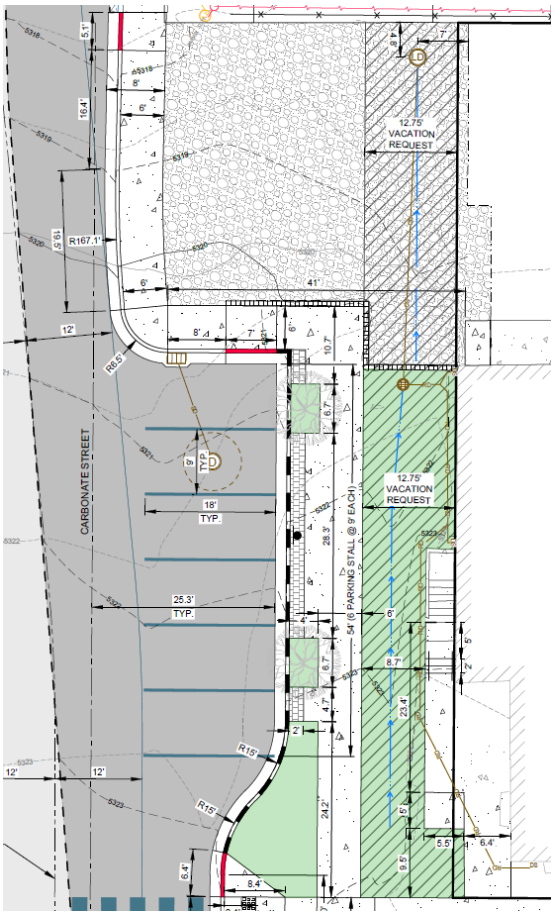
Hearing: November 17, 2025

Applicant: SVHD Properties LLC, represented by Don Cunningham
Location: Corner of West Carbonate Street and South River Street (portion of West Carbonate Street adjacent to Lots 9 & 10, Block 43, Hailey Townsite)

Zoning & Lot Size: Business (B), Townsite Overlay (TO), Downtown Residential Overlay (DRO); Area requested for vacation: approx. 1,530 square feet

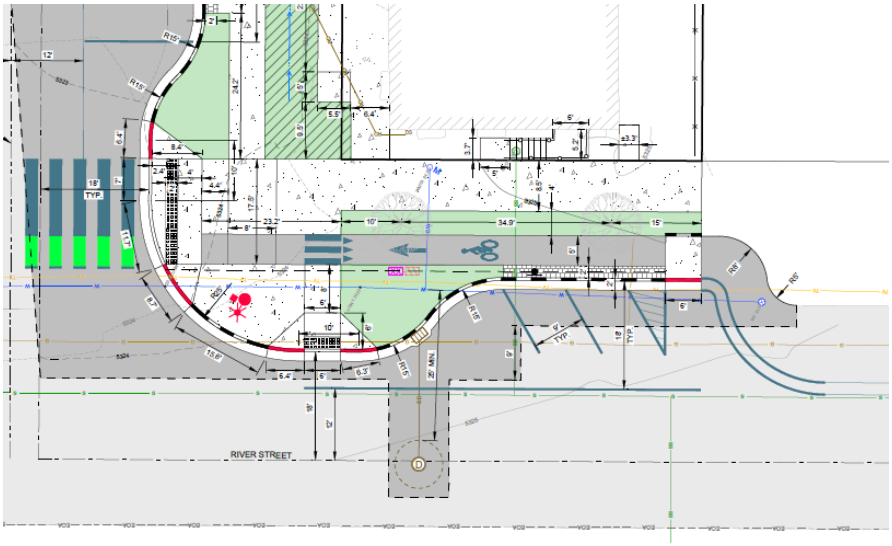
Notice: Notice for the public hearing was published in the Idaho Mountain Express and mailed to property owners within 300 feet on October 29, 2025.

Application: The Applicant is requesting that the City of Hailey vacate a certain section of Right-of-Way along West Carbonate Street, directly adjacent to the 201 N River Street property. The requested vacation will reduce the City's West Carbonate Right-of-Way from 100' to 60', in the area specified. While the proposed area for vacation is only approximately 12.75 feet in width, the Applicant has offered to construct elements of the River Street Typical Section along the property's remaining West Carbonate Street Right-of-Way frontage. This includes eighteen (18) foot by nine (9) foot parking stalls, ten (10) foot wide sidewalks, and landscaping/tree wells. See below:



Currently, the West Carbonate Street Right-of-Way features approximately thirty-five (35) feet of unimproved gravel area adjacent to 201 N River Street, from edge of asphalt to a portion of existing sidewalk. This area functions as informal public parking. See below:

Additionally, the Applicant is proposing to construct the complete River Street Typical Section along the property's River Street frontage, including angled parking stalls, landscaping, curb and gutter with a corner bulbout, a crosswalk, a five (5) foot-wide separated bike path, and an eight and a half (8.5) foot-wide sidewalk. The Applicant will also be responsible for installing street trees in accordance with the Hailey Downtown Master Plan. See below:



City Staff from the Streets Division, Public Works Department, and Community Development Department have worked closely with the Applicant and their design team to construct a Right-of-Way Vacation proposal that responds to both the Applicant's desire for greater flexibility and capacity to

improve/formalize their property's street frontage, as well as the City's ongoing efforts to achieve multi-modal connectivity and "complete streets" along the River Street corridor.

While capital improvement funds and limited grant funds are available to the City for enhancing the Right-of-Way along River Street, Applicant-driven development and funding are efficient and effective ways of achieving the vision for a connected and complete River Street corridor, in addition to the fulfillment of the Hailey Downtown Master Plan.

Standards of Evaluation

Right-of-way vacations are regulated by Title 16, Section 9, of Hailey Code.

16.09.010 Compliance Required:

> **Applications for vacation of a public right-of-way, alley or easement (other than utility easements) shall comply with Idaho Code §50-311 and §§50-1317 through 50-1325, as amended, and the provisions of this Ordinance. Applications for vacation of utility easements shall comply with Idaho Code §50-1306A, as amended. (Ord. 1191, 2015)**

Sections 50-1311 and 50-1321 apply to the vacation of public right-of-way. Idaho Code Section 50-311 states "Cities are empowered to…vacate" any street "whenever deemed expedient for the public good…" This section further provides that "whenever any street, avenue, alley or lane shall be vacated, the same shall revert to the owner of the adjacent real estate, one-half on each side thereof, or as the city council deems in the best interests of the adjoining properties, but the right of way easements and franchise rights of any lot owner or public utility shall not be impaired thereby."

The vacation of one (1) 1,530 square foot area on the northside of West Carbonate Street, adjacent to Block 43, Lots 9 and 10, Hailey Townsite, will greatly improve area circulation through the subsequent creation of an organized vehicle parking scheme, separated and protected bicycle facilities, and dedicated sidewalks and curb bulbouts that will greatly enhance pedestrian visibility and safety.

16.09.020 Application; Considerations:

> **Applications for vacation of streets, alleys or easements shall be submitted to the hearing examiner, except that the administrator and chair of the commission, jointly, shall have discretion and authority to refer a vacation application to the commission. The hearing examiner or commission shall make a recommendation, concerning the application for vacation, to the council. The hearing examiner or commission shall consider the following items in making their recommendation:**

09.020 A. The application and testimony of the applicant and such other information as may come before it with regard to the proposed vacation or dedication.

No testimony has been received at the time of writing this report.

09.020 B. The interests of the adjacent property owners and public utilities.

Notice was sent to adjacent property owners within 300' and all affected agencies. No public comment letters were received, although Staff did field a small number of phone calls and in-person comments at

City Hall, leading up to the November 17th Public Hearing date. The substance of these interactions was primarily to provide clarity on location and type of land use proposal, as these proposals are not commonly seen by the public.

Conformance of the proposal with the Comprehensive Plan.

Goal 9.1: Plan for the long-term utilities, service and facility needs of the City while minimizing impacts to the greatest extent possible.
The proposed vacation supports the long-term utilities, service, and facility needs of the City of Hailey, while minimizing impacts on both City Staff capacity and capital improvement budgets. The proposed vacation is accompanied by the adjacent property owner's (in this case, the Applicant) offer to complete public right-of-way improvements, including the River Street Typical Section and the installation of street trees according to the Hailey Downtown Master Plan. Long-term facilities planning and community visioning are achieved through the proposed vacation.

Goal 3.10.1: Build and maintain a sustainable, safe, reliable, year-round multimodal road network.
The Applicant has proposed to complete the River Street Typical Section along their property's frontages, in conjunction with the proposed vacation. This right-of-way infrastructure development represents significant progress in achieving a safe, reliable, year-round multimodal corridor along River Street. The proposed vacation directly supports this Comprehensive Plan goal.

Goal 3.10.3: Create a vibrant, pedestrian-oriented Downtown with reliable connections from every neighborhood.
Similar to Comprehensive Plan Goal 3.10.1, the proposed vacation and associated right-of-way improvements will further support a vibrant, pedestrian-oriented Downtown and increase reliable connections from surrounding neighborhoods. The proposed vacation is just one (1) block from Hailey's Central Core Overlay District, underscoring the significant impact of the vacation's development on Hailey's Downtown.

09.020 D. The future development of the neighborhood.
The proposed vacation will allow for improved neighborhood circulation by creating safe, reliable pedestrian and bicycle connections from the River Street Corridor to nearby residential development, Hop Porter Park, and downtown Hailey businesses.

09.020 E. That the public right-of-way, alley, or easement no longer serves a public purpose.
The current use and general configuration of this public right of way does not serve a clear circulation purpose. As an unimproved gravel area in the public right-of-way, parking patterns are spontaneous and lines-of-sight for pedestrian visibility could be improved for safety. The proposed vacation and associated development provide positive responses to these conditions.

09.020 F. In lieu of vacation, the hearing examiner or commission may recommend to the council a revocable landscape license. (Ord. 1191, 2015)
N/A.

Summary: Title 16, Section 9, of Hailey's Municipal Code states that the Hearing Examiner or Commission shall consider the application and testimony of the applicant and such other information as

may come before it regarding the proposed vacation. The Hearing Examiner or Commission shall consider the items noted in Section 9.2 of Hailey Code. The Commission shall make its recommendation to the Council for approving or denying said application, including findings that the right-of-way in question is no longer needed for public use.

If public utilities exist outside of the 20'-wide remaining street right-of-way, a public utility easement should be platted concurrently with the right-of-way vacation.

Motion Language:
Approval: "Motion to recommend to the City Council approval of the application submitted by SVHD Properties, LLC, to the City of Hailey to vacate the certain section of Right-of-Way along West Carbonate Street, thereby reducing the City's Right-of-Way from 100' to 60' along that portion of West Carbonate Street adjacent to Lots 9 & 10, Block 43, Hailey Townsite, finding that the vacation is no longer needed for public use, is expedient for the public good, is in accordance with the Comprehensive Plan, future development of the neighborhood will not be compromised, the current use and general configuration of public access would not change."

Denial: "Motion to recommend to the City Council denial of the application submitted by SVHD Properties, LLC, to the City of Hailey to vacate the certain section of Right-of-Way along West Carbonate Street, thereby reducing the City's Right-of-Way from 100' to 60' along that portion of West Carbonate Street adjacent to Lots 9 & 10, Block 43, Hailey Townsite, finding that the vacation does not meet the standards (standards for denial to be inserted)."

Continuation: "Motion to continue the application submitted by SVHD Properties, LLC, to the City of Hailey to vacate the certain section of Right-of-Way along West Carbonate Street, thereby reducing the City's Right-of-Way from 100' to 60' along that portion of West Carbonate Street adjacent to Lots 9 & 10, Block 43, Hailey Townsite (Commission to insert a date certain)"

201 N RIVER STREET

HAILEY, IDAHO

OCTOBER 2025

GENERAL CONSTRUCTIONS NOTES

1. ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE MOST CURRENT EDITION OF THE "IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION" (ISPWC) AND CITY OF HAILEY STANDARDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND KEEPING A COPY OF THE ISPWC AND CITY OF HAILEY STANDARDS ON SITE DURING CONSTRUCTION.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THE PLANS IN AN APPROXIMATE WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING UTILITIES PRIOR TO COMMENCING AND DURING THE CONSTRUCTION. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH RESULT FROM HIS FAILURE TO ACCURATELY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. CONTRACTOR SHALL CALL DIGLINE (1-800-342-1585) TO LOCATE ALL EXISTING UNDERGROUND UTILITIES A MINIMUM OF 48 HOURS IN ADVANCE OF EXCAVATION.
3. CONTRACTOR SHALL COORDINATE RELOCATIONS OF DRY UTILITY FACILITIES (POWER, CABLE, PHONE, TV) WITH THE APPROPRIATE UTILITY FRANCHISE.
4. THE CONTRACTOR SHALL CLEAN UP THE SITE AFTER CONSTRUCTION SO THAT IT IS IN A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION (THIS MAY INCLUDE ENCROACHMENT PERMITS AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION GENERAL PERMIT (CGP) PERMIT COVERAGE).
6. ALL CLEARING & GRUBBING SHALL CONFORM TO ISPWC SECTION 201.
7. ALL EXCAVATION & EMBANKMENT SHALL CONFORM TO ISPWC SECTION 202. SUBGRADE SHALL BE EXCAVATED AND SHAPED TO LINE, GRADE, AND CROSS-SECTION SHOWN ON THE PLANS. THE SUBGRADE SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D-698. THE CONTRACTOR SHALL WATER OR ABRATE SUBGRADE AS NECESSARY TO OBTAIN OPTIMUM MOISTURE CONTENT. IN-LIEU OF DENSITY MEASUREMENTS, THE SUBGRADE MAY BE PROOF-ROLLED TO THE APPROVAL OF THE ENGINEER.
   - PROOF-ROLLING: AFTER EXCAVATION TO THE SUBGRADE ELEVATION AND PRIOR TO PLACING COURSE GRAVEL, THE CONTRACTOR SHALL PROOF ROLL THE SUBGRADE WITH A 5-TON SMOOTH DRUM ROLLER, LOADED WATER TRUCK, OR LOADED DUMP TRUCK, AS ACCEPTED BY THE ENGINEER. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF UNSUITABLE SUBGRADE MATERIAL AREAS, AND/OR AREAS NOT CAPABLE OF COMPACTION ACCORDING TO THESE SPECIFICATIONS. UNSUITABLE OR DAMAGED SUBGRADE IS WHEN THE SOIL MOVES, PUMPS AND/OR DISPLACES UNDER ANY TYPE OF PRESSURE INCLUDING FOOT TRAFFIC LOADS.
   - IF, IN THE OPINION OF THE ENGINEER, THE CONTRACTOR'S OPERATIONS RESULT IN DAMAGE TO, OR PROTECTION OF, THE SUBGRADE, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, REPAIR THE DAMAGED SUBGRADE BY OVER-EXCAVATION OF UNSUITABLE MATERIAL TO FIRM SUBSOIL, LINE EXCAVATION WITH GEOTEXTILE FABRIC, AND BACKFILL WITH PIT RUN GRAVEL.
8. ALL 2" MINUS GRAVEL SHALL CONFORM TO ISPWC 802, TYPE II (ITD STANDARD 703.04, 2"), SHALL BE PLACED IN CONFORMANCE WITH ISPWC SECTION 801 AND COMPACTED PER SECTION 202. MINIMUM COMPACTION OF PLACED MATERIAL SHALL BE 90% OF MAXIMUM LABORATORY DENSITY AS DETERMINED BY AASHTO T-99.
9. ALL 3/4" MINUS CRUSHED GRAVEL SHALL CONFORM TO ISPWC 802, TYPE I (ITD STANDARD 703.04, 3/4" B), SHALL BE PLACED IN CONFORMANCE WITH ISPWC SECTION 802 AND COMPACTED PER SECTION 202. MINIMUM COMPACTION OF PLACED MATERIAL SHALL BE 95% OF MAXIMUM LABORATORY DENSITY AS DETERMINED BY AASHTO T-99 OR ITD T-91.
10. ALL ASPHALTIC CONCRETE PAVEMENT WORK SHALL CONFORM TO ISPWC SECTION(S) 805, 810, AND 811 FOR CLASS II PAVEMENT. ASPHALT AGGREGATE SHALL BE 1/2" (13MM) NOMINAL SIZE CONFORMING TO TABLE 803B IN ISPWC SECTION 803. ASPHALT BINDER SHALL BE PG 58-28 CONFORMING TO TABLE A-1 IN ISPWC SECTION 805.
11. ALL EDGES OF EXISTING ASPHALT PAVING SHALL BE SAW CUT 24" TO PROVIDE A CLEAN PAVEMENT EDGE FOR MATCHING. NO WHEEL CUTTING SHALL BE ALLOWED. PRIOR TO REPLACING ASPHALT, THE UNDERLYING SURFACE INCLUDING VERTICAL SAWCUT JOINTS SHALL BE CLEANED OF ALL DEBRIS AND A TACK COAT SHALL BE APPLIED TO ALL CURBS, SAWCUTS, OR OVERLAY SURFACES.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL PER THE CURRENT EDITION OF THE US DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
13. ALL CONCRETE WORK SHALL CONFORM TO ISPWC SECTIONS 701, 703, AND 705 AND CITY OF HAILEY STANDARD DRAWINGS. ALL CONCRETE SHALL BE 4,000 PSI MINIMUM, 28 DAY, AS DEFINED IN ISPWC SECTION 703, TABLE 1 WITH A MINIMUM OF 1.5 LBS/CY FIBER REINFORCEMENT. IMMEDIATELY AFTER PLACEMENT PROTECT CONCRETE BY APPLYING MEMBRANE-FORMING CURING COMPOUND, TYPE 2, CLASS A PER ASTM C 309-94. APPLY CURING COMPOUND PER MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS. CONTRACTOR SHALL PROVIDE MIX DESIGN, CURING AND PROTECTION PLAN (ISPWC 703.3.5), AND POST POUR CURE SEALING COMPOUND TYPE AND APPLICATION PLAN TO CITY OF HAILEY PRIOR TO INSPECTIONS.
14. ALL TRENCHING SHALL CONFORM TO ISPWC STANDARD DRAWING SD-301 AND CITY OF HAILEY STANDARD DRAWING 18.14.010.A.1. TRENCHES SHALL BE BACKFILLED AND COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
15. PER IDAHO CODE § 55-1613, THE CONTRACTOR SHALL RETAIN AND PROTECT ALL MONUMENTS, ACCESSORIES TO CORNERS, BENCHMARKS AND POINTS SET IN CONTROL SURVEYS. ALL MONUMENTS, ACCESSORIES TO CORNERS, BENCHMARKS AND POINTS SET IN CONTROL SURVEYS THAT ARE LOST OR DISTURBED BY CONSTRUCTION SHALL BE REESTABLISHED AND RE-MONUMENTED, AT THE EXPENSE OF THE AGENCY OR PERSON CAUSING THEIR LOSS OR DISTURBANCE AT THEIR ORIGINAL LOCATION OR BY SETTING OF A WITNESS CORNER OR REFERENCE POINT OR A REPLACEMENT BENCHMARK OR CONTROL POINT, BY OR UNDER THE DIRECTION OF A PROFESSIONAL LAND SURVEYOR.
16. EXISTING CONDITIONS AND BOUNDARY INFORMATION SHOWN HEREON ARE PER A SURVEY CONDUCTED BY GALENA-BENCHMARK ENGINEERING, RECEIVED ON JULY 16, 2025.
17. HIGH VOLTAGE LINES EXIST IN CLOSE PROXIMITY OF SUBJECT PROPERTY AND PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL COORDINATE WITH IDAHO POWER TO ENSURE COMPLIANCE WITH ALL REQUIRED CONSTRUCTION ACTIVITY SETBACKS PER IDAHO STATE CODE § 55-2403.

VICINITY MAP
N.T.S.

SHEET INDEX

CIVIL ENGINEER
SAMANTHA STAHLNECKER, PE
OPAL ENGINEERING, PLLC
101 E BULLION ST., STE 3E
HAILEY, IDAHO 83333

opal
OPAL ENGINEERING, PLLC
101 E. BULLION ST., STE 3E, HAILEY, ID 83333
WWW.OPAL-ENGINEERING.COM

REVISION NO	DATE	DESCRIPTION

PURPOSE: ISSUE DRAFT FOR CLIENT REVIEW (10/29/2025)

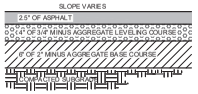
PRELIMINARY NOT FOR CONSTRUCTION

COVER SHEET

201 N RIVER STREET
PREPARED FOR SYHD PROPERTIES LLC

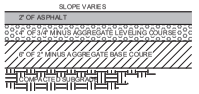
24028
PROJECT NUMBER

C0.10



NOTES:
1. SUBBASE CAN BE 2" TYPE II OR ¾" TYPE I CRUSHED AGGREGATE BASE COURSE.
2. MATERIALS SHALL CONFORM WITH CURRENT ISPWC STANDARDS, DIVISION 800 AGGREGATES AND ASPHALT.
3. PAVEMENT SECTION MAY BE MODIFIED IF A PROJECT SPECIFIC GEOTECHNICAL REPORT, STAMPED BY A LICENSED ENGINEER, IS PROVIDED.

1 C1.00 **TYPICAL ASPHALT DRIVEWAY SECTION**
N.T.S.



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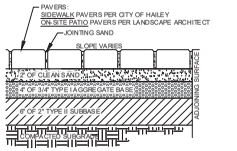
2 C1.00 **TYPICAL ASPHALT PATH SECTION**
N.T.S.



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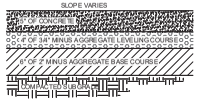
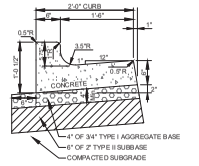
3 C1.00 **PAVER DETAIL**
N.T.S.



NOTES:
1. INSTALL SCORE JOINTS AT INTERVALS TO MATCH WIDTH OF WALK NOT TO EXCEED 5 FEET SPACING IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTION FOR SIDEWALK GREATER THAN 5 FEET IN WIDTH. INSTALL EXPANSION JOINTS EVERY 10 FEET IN LONGITUDINAL DIRECTION.
2. 1/2" TRANSVERSE PREFORMED BITUMINOUS JOINTS AT THE TERMINUS POINTS FOR CURVE AND WHERE SIDEWALK IS PLACED BETWEEN TWO PERMANENT FOUNDATIONS OR ADJACENT TO THE STRUCTURE. PLACE ½" EXPANSION JOINT MATERIAL ALONG THE BACK OF WALK THE FULL LENGTH.
3. SIDEWALK CONSTRUCTION JOINTS SHALL BE CONSTRUCTED APPROXIMATELY 2' WIDE, ¼" IN DEPTH AND FINISHED AND EDGED SMOOTH. A PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED EVERY 40' FOR NEW SIDEWALK CONSTRUCTION.
4. WHEN TRANSITIONING NEW SIDEWALK TO EXISTING, A MINIMUM 5' TRANSITIONAL PANEL SHALL BE SEPARATED AND ISOLATED WITH EXPANSION MATERIAL.
5. SIDEWALK ALIGNMENT TRANSITIONS SHALL HAVE A MINIMUM RADIUS OF 30' TO THE FACE OF CURB.
6. MATERIALS SHALL CONFORM WITH CURRENT ISPWC STANDARDS, DIVISION 800 AGGREGATES AND ASPHALT.
7. CONCRETE THICKNESS PER THIS DETAIL OR MATCH EXISTING, WHICHEVER IS GREATER.

4 C1.00 **TYPICAL CONCRETE SECTION**
N.T.S.



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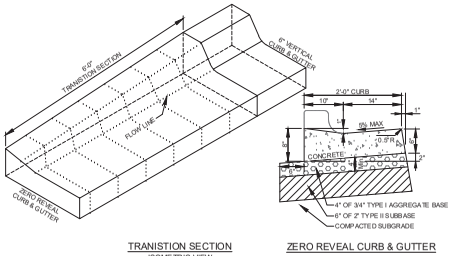
2. MATERIALS SHALL CONFORM WITH CURRENT ISPWC STANDARDS, DIVISION 800 AGGREGATES AND ASPHALT.
3. PAVEMENT SECTION MAY BE MODIFIED IF A PROJECT SPECIFIC GEOTECHNICAL REPORT, STAMPED BY A LICENSED ENGINEER, IS PROVIDED.
4. ¼-INCH PREFORMED EXPANSION JOINT MATERIAL (AASHTO M 213) AT TERMINAL POINTS OF RADII.
5. CONTINUOUS PLACEMENT PREFERRED. SCORE INTERVALS 10-FEET MAXIMUM SPACING (8-FEET W/SIDEWALK).
6. CURB AND GUTTER CONSTRUCTION SHALL CONFORM TO ISPWC DRAWING SD-701.

5 C1.00 **6" CONCRETE VERTICAL CURB & GUTTER**
N.T.S.

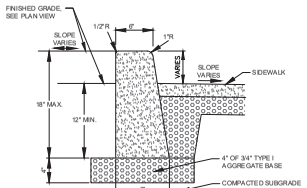


TRANISTION SECTION
ISOMETRIC VIEW

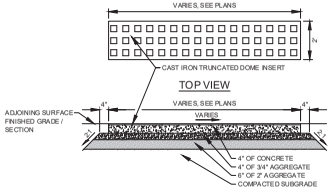
ZERO REVEAL CURB & GUTTER

NOTES:
1. SUBBASE CAN BE 2" TYPE II OR ½" TYPE I CRUSHED AGGREGATE BASE COURSE.
2. MATERIALS SHALL CONFORM WITH CURRENT ISPWC STANDARDS, DIVISION 800 AGGREGATES AND ASPHALT.
3. PAVEMENT SECTION MAY BE MODIFIED IF A PROJECT SPECIFIC GEOTECHNICAL REPORT, STAMPED BY A LICENSED ENGINEER, IS PROVIDED.
4. 1/2-INCH PREFORMED EXPANSION JOINT MATERIAL (AASHTO M 213) AT TERMINAL POINTS OF RADII.
5. CONTINUOUS PLACEMENT PREFERRED. SCORE INTERVALS 10-FEET MAXIMUM SPACING (8-FEET W/SIDEWALK).
6. CURB TRANSITION CONSTRUCTION SHALL CONFORM TO ISPWC DRAWING SD-707.

6 C1.00 **TYPICAL CURB TRANSITION DETAIL**
N.T.S.

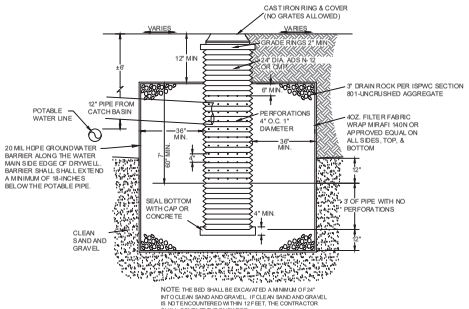


7 C1.00 **6" CONCRETE VERTICAL CURB**
N.T.S.

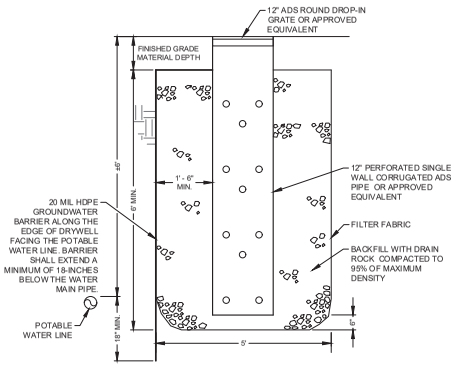


SECTION VIEW

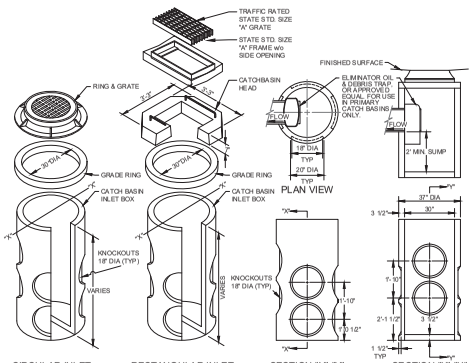
8 C1.00 **TRUNCATED DOME INSERT DETAIL**
N.T.S.



9 C1.00 **CITY OF HAILEY DRYWELL DETAIL (18.14.010.D4)**
N.T.S.



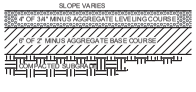
10 C1.00 **LANDSCAPE DRYWELL**
N.T.S.



CIRCULAR INLET RECTANGULAR INLET SECTION "Y"-"Y" SECTION "X"-"X"

CATCH BASIN INSTALLATION NOTES:
1. A PRIMARY CATCH BASIN IS DEFINED AS THE FIRST STORM STRUCTURE UPSTREAM OF A DRYWELL. A SATELLITE CATCH BASIN IS DEFINED AS THE STORM STRUCTURE UPSTREAM OF THE PRIMARY CATCH BASIN.
2. THE OIL & DEBRIS TRAP SHALL BE INSTALLED ON THE OUTLET OF THE PRIMARY CATCH BASIN ONLY, NOT ON SATELLITE CATCH BASINS.
3. PLACE A MINIMUM OF 4" OF COMPACTED BEDDING ON PREPARED SUBGRADE AS SPECIFIED IN ISPWC SECTION 305 - PIPE BEDDING. EXTEND BEDDING EITHER TO THE LIMITS OF THE EXCAVATION OR A TLEAST 12" OUTSIDE THE LIMITS OF THE BASE SECTION.
4. FILL THE BALANCE OF THE EXCAVATED AREA WITH SELECT MATERIAL COMPACTED LEVEL TO THE TOP OF THE BEDDING.
5. PROVIDE A SMOOTH AND LEVEL BEARING SURFACE ON THE BEDDING SURFACE.

11 C100 **30" DIAMETER CATCH BASIN**
N.T.S.



NOTES:
1. SUBBASE CAN BE 2" TYPE II OR ½" TYPE I CRUSHED AGGREGATE BASE COURSE.
2. MATERIALS SHALL CONFORM WITH CURRENT ISPWC STANDARDS, DIVISION 800 AGGREGATES AND ASPHALT.
3. PAVEMENT SECTION MAY BE MODIFIED IF A PROJECT SPECIFIC GEOTECHNICAL REPORT, STAMPED BY A LICENSED ENGINEER, IS PROVIDED.

12 C1.00 **TYPICAL GRAVEL SECTION**
N.T.S.

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PURPOSE: ISSUE DRAFT FOR CLIENT REVIEW (10/29/2025)

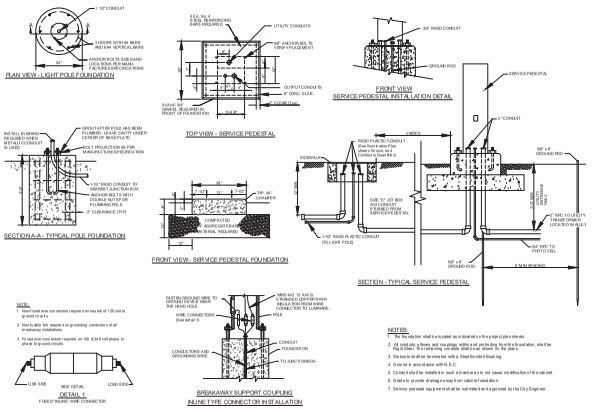
PRELIMINARY NOT FOR CONSTRUCTION

DETAIL SHEET

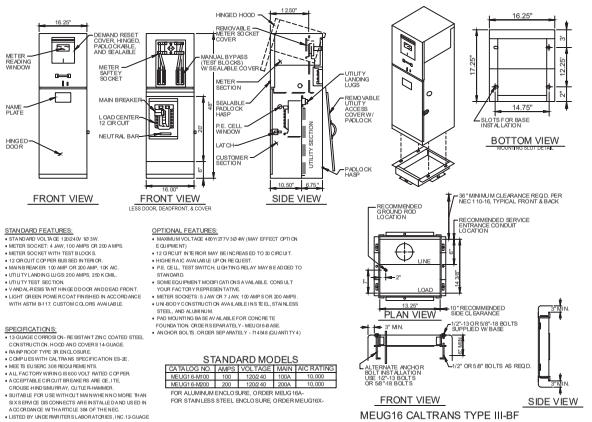
201 N RIVER STREET
PREPARED FOR SVHD PROPERTIES LLC

24028
PROJECT NUMBER

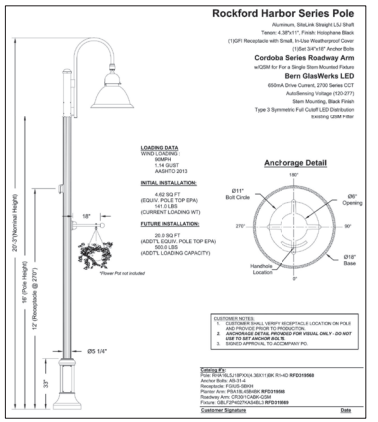
C1.00



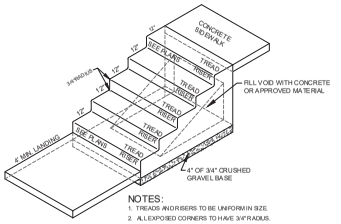
1 C1.01 CITY OF HAILEY LIGHT POLE PEDESTAL DETAIL (18.14.014.E.1)
N.T.S.

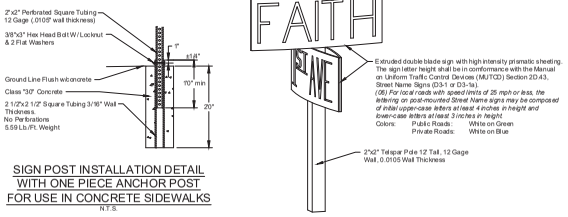


2 C1.01 CITY OF HAILEY LIGHT CONTROL DETAIL (18.14.014.E.3)
N.T.S.

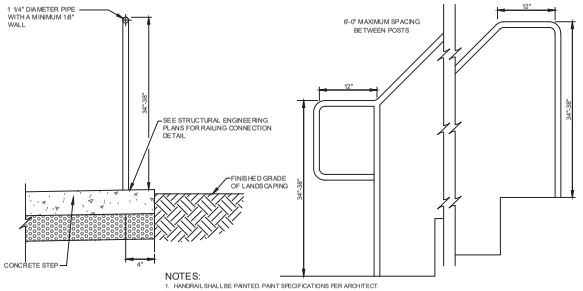


3 C1.01 CITY OF HAILEY STREET LIGHT DETAIL (18.14.014.E.2)
N.T.S.





4 C1.01 CITY OF HAILEY STREET SIGN DETAIL (18.14.014.D)
N.T.S.



5 C1.01 TYPICAL HANDRAIL AND STAIRS DETAIL
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DETAIL SHEET

201 N RIVER STREET
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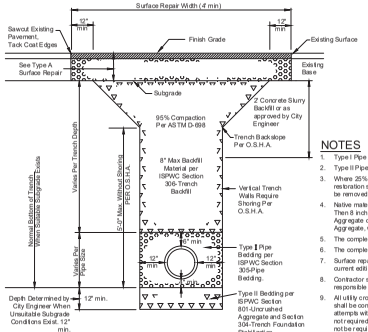
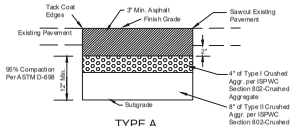
24028
PROJECT NUMBER

C1.01



EXISTING STREET
TYPICAL TRENCH SECTION

N.T.S.



TYPE A
SURFACE REPAIR AND BASE

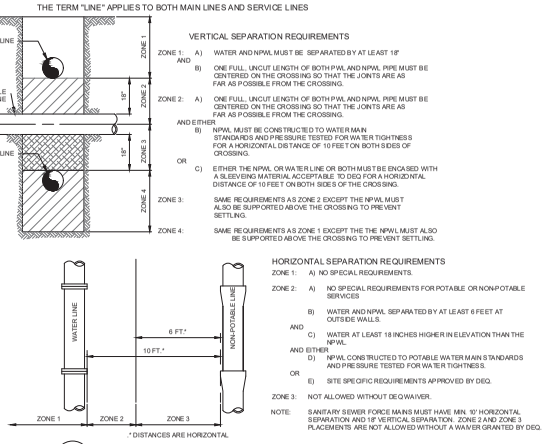
N.T.S.

NOTES

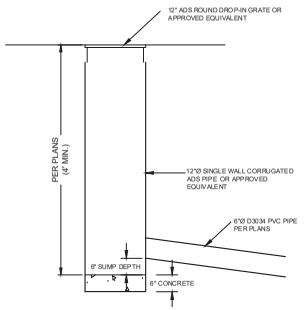
1. Type I Pipe Bedding material shall meet the requirements of the current edition of the ISPWC Standards-Section 305-Pipe Bedding.
2. Type II Pipe Bedding material shall meet the requirements of the current edition of the ISPWC Standards-Section 305-Pipe Bedding.
3. Where 25% or more of any portion of the surface area of any pavement has been damaged within the project limits, full width restoration shall be required. Any strip of remaining pavement less than 2 feet in width along curb and gutter or pavement edge shall be removed and replaced.
4. Native materials may be used for backfill unless, in the sole opinion of the City Engineer, the native material is found to be unstable. Then 8 inch minus aggregate, which meets the requirements of the current edition of the ISPWC Standards-Section 801-Uncrushed Aggregate or crushed aggregate, which meets the requirements of the current edition of the ISPWC Standards-Section 802-Crushed Aggregate, will be required as backfill.
5. The completed patch shall not deviate from existing surface more than .02 ft/10 ft in any direction.
6. The completed patch shall not pond water in excess of .02 feet in depth.
7. Surface repair in gravel shoulder areas within 3 feet of pavement edge shall be 3 inch depth of Type I crushed aggregate per the current edition of the ISPWC Standards-Section 802-Crushed Aggregate.
8. Contractor shall be responsible for maintenance of street repair for one year after installation. PUC regulated utilities shall be responsible for a period of three years.
9. All utility crossings, including but not limited to power, telephone, cable TV, gas, and water services, which cross existing paved roads shall be constructed by horizontal boring. Open cuts across paved roadways will only be allowed after a minimum of three failed attempts with approved boring tools. When utility mains are located under existing pavement, open cuts will be allowed and boring is not required. If in the judgment of the City Engineer, boring may be detrimental to the health, safety, or welfare of the public, boring will not be required and trenching will be allowed. A six foot trench, two feet deeper than the proposed utility shall be excavated adjacent to the edge of pavement for evaluation of soil conditions by the City Engineer to determine if boring shall be attempted or if trenching will be allowed.
10. All trenches shall be repaved within 72 hours of starting the work unless prior approval to delay repaving has been provided by the City Engineer.
11. Concrete Slurry Mix Design

Coarse Aggregate (3/8" minus)	2,600 lbs
Sand	800 lbs
Cement	94 lbs (max)
Water	11 gals (max)

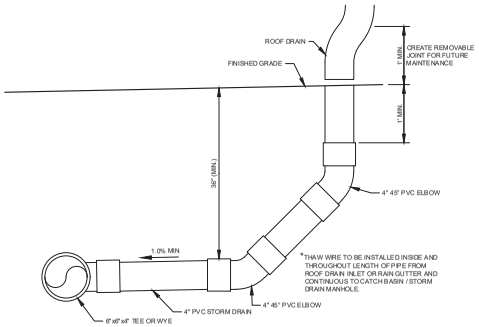
1 C1.02 TRENCH AND SURFACE REPAIR DETAIL (18.14.010.A.1)
N.T.S.



2 C1.02 POTABLE AND NON-POTABLE WATER LINE (NPWL) SEPARATION
N.T.S.



3 C1.02 LANDSCAPE CATCH BASIN
N.T.S.



4 C1.02 ROOF DRAIN CONNECTION
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DETAIL SHEET

201 N RIVER STREET
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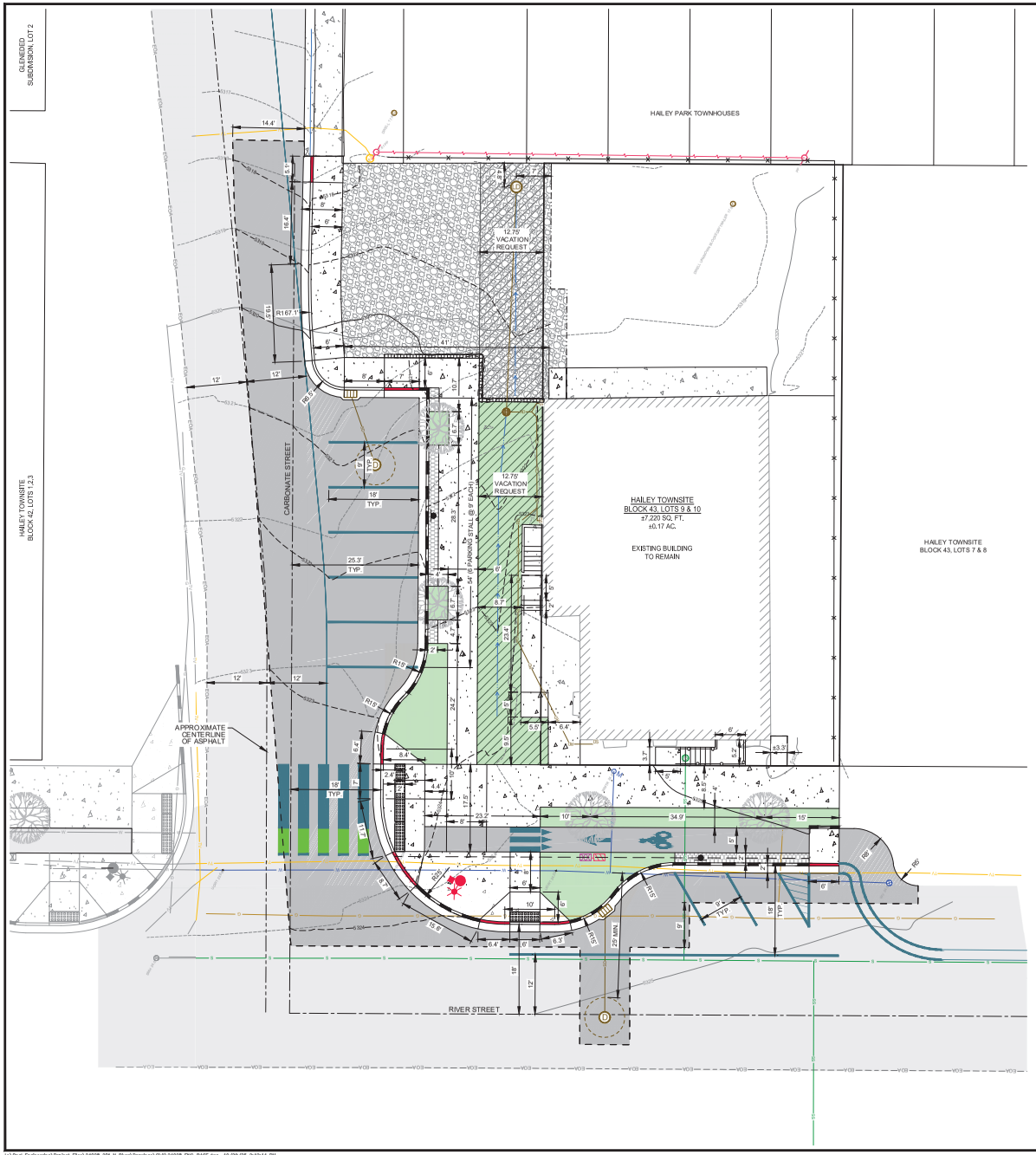

NOTE

SEE SHEET C0.10 FOR CONSTRUCTION GENERAL NOTES.

LEGEND

EXISTING ITEMS

- PROPERTY LINE
- ADJOINER'S LOT LINE
- INTERIOR LOT LINE
- SURVEY TIE LINE
- RIGHT-OF-WAY CENTERLINE
- ASPHALT CENTERLINE
- BUILDING FOOTPRINT
- FENCE LINE
- WHITE PAINT STRIPE
- SANITARY SEWER LINE
- SANITARY SEWER SERVICE LINE
- WATER LINE
- WATER SERVICE LINE
- UNDERGROUND CABLE TV LINE
- OVERHEAD POWER LINE
- GAS LINE
- CONCRETE CURB & GUTTER
- ASPHALT
- CONCRETE
- WOOD DECK/STEPS
- STEEL GRATE DECK/STEPS
- FOUND 1/2" REBAR
- FOUND 5/8" REBAR
- FOUND ALUMINUM CAP ON 5/8" REBAR
- CALCULATED POINT (NOTHING FOUND OR SET)
- SET 5/8" REBAR- PLS 22869
- BIKE LANE BOLLARD
- SEWER CLEANOUT
- WATER VALVE
- WATER METER
- CABLE TV PEDESTAL
- POWER POLE
- GUY WIRE
- DRYWELL

PROPOSED CONDITIONS

- SAWCUT LINE
- ASPHALT
- CONCRETE SIDEWALK
- CONCRETE 6" VERTICAL CURB
- CURB TRANSITION (ZERO REVEAL TO TYPICAL 6" VERTICAL)
- ZERO REVEAL CURB & GUTTER
- 6" VERTICAL CURB
- ADA ACCESS TRUNCATED DOME
- 5' CONTOUR INTERVAL
- 1' CONTOUR INTERVAL
- PAVERS
- GRAVEL
- STAIRS
- RETAINING WALL
- ROAD PAINT
- THERMOPLASTIC STOP BAR
- CROSSWALK STRIPING
- BIKE PATH STRIPING
- SIGN
- IRRIGATION JUNCTION BOX
- ELECTRICAL JUNCTION BOX
- STREET LIGHT W/ CONTROL BOX
- LANDSCAPE DRYWELL
- ROOF DRAIN PIPE
- 12" STORM DRAIN
- DRYWELL
- CATCH BASIN
- LANDSCAPE CATCH BASIN
- FLOW LINE
- STREET TREE, SEE LANDSCAPE PLANS
- HANDRAIL
- LANDSCAPE AREA
- RETAINING WALL
- RIGHT-OF-WAY VACATION

GRAPHIC SCALE

0 10 20

Scale in Feet

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SITE GEOMETRY PLAN

201 N RIVER STREET

PREPARED FOR SVHD PROPERTIES LLC

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PROJECT NUMBER

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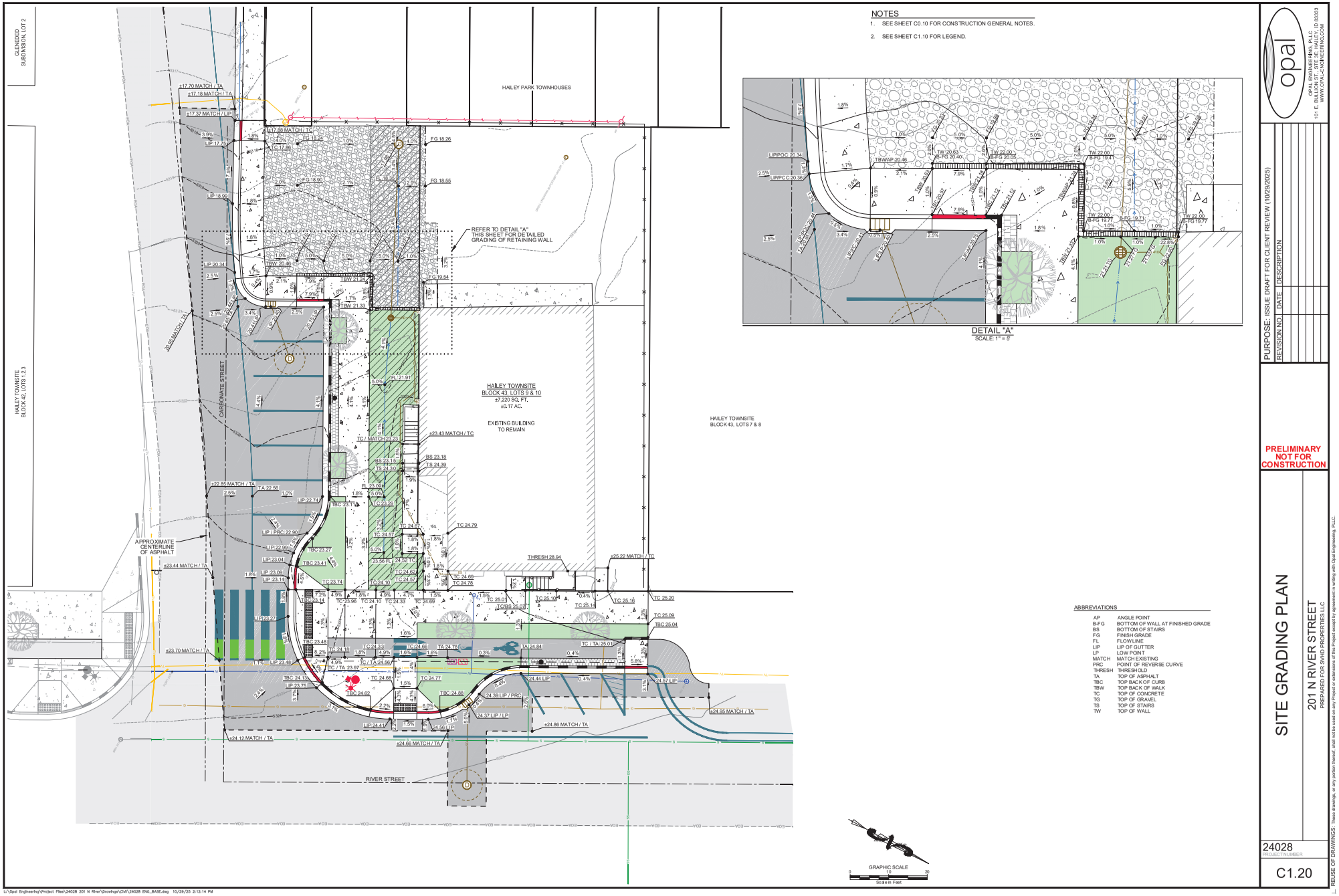

NOTES

1. SEE SHEET C0.10 FOR CONSTRUCTION GENERAL NOTES.
2. SEE SHEET C1.10 FOR LEGEND.

DETAIL "A"
SCALE: 1" = 5'

ABBREVIATIONS

AP	ANGLE POINT
B-FG	BOTTOM OF WALL AT FINISHED GRADE
BS	BOTTOM OF STAIRS
FG	FINISH GRADE
FL	FLOWLINE
LIP	LIP OF GUTTER
LP	LOW POINT
MATCH	MATCH EXISTING
PRC	POINT OF REVERSE CURVE
THRESH	THRESHOLD
TA	TOP OF ASPHALT
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TC	TOP OF CONCRETE
TG	TOP OF GRAVEL
TS	TOP OF STAIRS
TW	TOP OF WALL

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SITE GRADING PLAN

201 N RIVER STREET
PREPARED FOR SVHD PROPERTIES LLC

24028
PROJECT NUMBER

C1.20

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