November 21, 2022 at 4:00 PM 1001 11th Avenue, City Center South, Greeley, CO 80631

Agenda

- 1. Call to Order
- 2. Roll Call
- 3. Approval of the Agenda
- 4. Approval of the Minutes dated November 7, 2022
- 5. Report from Historic Greeley Inc.
- 6. Public Hearing to consider a Request for Certificate of Approval for New Construction of a Greenhouse at 515 23rd Avenue
- 7. Commission Member Reports
- 8. Staff Report
- 9. Adjournment

<u>Historic Preservation Public Hearing Procedure</u>

Public Hearing to...

- 1. Chair introduce public hearing item
- 2. Historic Preservation Staff report
- 3. Applicant Presentation
- 4. Commission questions
- 5. Chair opens public hearing
- 6. Chair closes public hearing
- 7. Applicant rebuttal
- 8. Commission discussion and vote

City of Greeley, Colorado HISTORIC PRESERVATION COMMISSION PROCEEDINGS Regular Meeting

November 07, 2022

1. Call to Order

2. Roll Call

Chair Brunswig called the meeting to order at 4:00 p.m.

The hearing clerk called the roll.

PRESENT
Chair Bob Brunswig
Commissioner Doran Azari
Commissioner Christen DePetro
Commissioner Sean Jaehn
Commissioner Gabriel Llanas
Commissioner Melissa Sizemore

Commissioner Dan Podell was absent.

3. Approval of Agenda

Elizabeth Kellums, Planner III – Historic Preservation, indicated that there were no additions or corrections to the agenda, and it was approved as presented.

4. Approval of August 15, 2022, Minutes

Bob Brunswig indicated there was a grammatical error. Commissioner DePetro moved to approve the minutes as amended dated August 15, 2022. Commissioner Azari seconded the motion. Motion carried 6-0 (one Commissioner absent).

5. Chair and Vice-Chair Elections

Commissioner DePetro nominated Bob Brunswig to continue as Chair of the Commission. Commissioner Azari seconded the motion. Motion carried 5-0 (one absent and Chair Brunswig abstained).

Commissioner Azari nominated Christen DePetro to continue as Vice-Chair of the

Commission. Commissioner Jaehn seconded the motion. Motion carried 6-0 (one Commissioner absent).

6. Report from Historic Greeley Inc.

Marshall Clough, 1619 14th Street, gave an update on Historic Greeley Inc. Mr. Clough announced that Historic Greeley Inc would be hosting their second annual Christmas Tea in December. It would be located at the Southard Gillespie House located at 11th St and 9th Ave. Mr. Clough gave a brief description of what the event would be like and of what would be on the menu.

7. A Public hearing to consider a Certificate of Approval for Exterior Alterations at 827 10th Street (stucco removal and various) (HPDR2022-0010)

Chair Brunswig called for conflicts of interest. Commissioner Jaehn disclosed he had a conflict of interest and stepped out for this public hearing.

Ms. Kellums addressed the commission and introduced the item as an application for a Certificate of Approval for exterior alteration at 827 10th Street. Ms. Kellums explained that the proposal of the project was to remove non historic stucco over the storefront and removal of the existing awning, to clean the brick, repoint mortal joints as needed, paint the sign band if needed, to replace the existing awning with a retractable awning, and install gooseneck light fixtures. Ms. Kellums mentioned the store shared a façade with Kingsford Law Office but at this point the project was just going to be at 827th Street. She presented several photographs showing the existing condition of the property as well as photographs with narratives describing the proposed changes.

Staff reviewed the application according to the criteria and the standards in Section 24-1003(j) of the Greeley Municipal Code and therefore staff recommends approval of the stucco removal, installation of the retractable awning and installation of gooseneck light fixtures. Staff further recommends conditional approval of the brick cleaning and mortar repointing with the applicant working with Staff to test the brick cleaner and determine if it will not damage the brick, as well as ensure the mortar mix for the repointing is compatible with the existing mortar. Staff recommends the applicant work with the staff to determine if painting of the sign band is needed. If determined to be needed, staff recommends approval of the painting of the sign band.

The applicant, Ashley Fusco 1319 15th Ave addressed the Commission, thanked Ms. Kellums for her presentation and offered to answer any questions. Commissioner Llanas asked if there was a window under the stucco and if it was going to be kept. Upon further review of the pictures, it was not a window but tile.

Chair Brunswig opened the public hearing at 4:18 p.m. There being no comment, the public hearing was closed at 4:18 p.m.

Commissioner Azari moved that based on the application received and the preceding analysis, the Commission finds that the proposed exterior alterations at 827 10th Street meets Criteria and standards A, C, E, F, and H of section 24-1003(j) of the Greeley Municipal Code and therefore approves the Certificate of Approval, with the condition of the brick cleaning and mortar repointing with the applicant working with Staff to test the brick cleaner and determine if it will not damage the brick and that all required permits be obtained. Commissioner DePetro seconded the motion. The motion carried 5-0. (one Commissioner absent and Commissioner Jaehn recused himself).

8. Public hearing to consider a Certificate of Approval for Exterior Alterations at 1303 9th Avenue (porch rehabilitation) (HPDR2022-0011)

Chair Brunswig called for conflicts of interest. No Commissioners disclosed conflicts of interest. Ms. Kellums addressed the Commission and introduced the item as an application for a Certificate of Approval for exterior alteration at 1303 9th Ave. Ms. Kellums explained that the applicant requests approval for a proposed porch rehabilitation project, which includes supporting the porch roof and post, deconstruction of the concrete block porch walls, repair of deteriorated features and replacement with like material and design. She presented several photographs showing the existing condition of the property as well as photographs with narratives describing the proposed changes.

Staff reviewed the application according to the criteria and the standards in Section 24-1003(j) of the Greeley Municipal Code and therefore staff recommended approval for a proposed porch rehabilitation project, which includes supporting the porch roof and post, deconstruction of the concrete block porch walls, repair of deteriorated features and replacement with like material and design.

The applicant, Paul Donaghey 204 5th Ave Longmont, CO addressed the commission, thanked Ms. Kellums for her presentation and offered to answer any questions. Commissioner Azari asked if the posts need replacement what they are going to use and if they are going to try to save as much of the original posts as they can. Mr. Donaghey answered that they would try to save as much as they can and are going to replace only when needed with similar material. He also stated they will be doing everything up to code.

Chair Brunswig opened the public hearing at 4:30 p.m. There being no comment, the public hearing was closed at 4:30 p.m.

Commissioner DePetro moved that based on the application received and the preceding analysis, the Commission finds that the proposed exterior alterations at 1303 9th Avenue meets Criteria and standards A, B, C, E, F, and H of section 24-1003(j) of the Greeley Municipal Code and therefore approves the Certificate of

Approval, with the condition that all required permits be obtained. Commissioner DePetro second the motion. The motion carried 6-0 (one Commissioner absent).

9. Commission Member Reports

Commissioner Azari mentioned he had gone to visit the facilities department at Greeley Evans School District 6. He mentioned they had a great collection of historical pictures and told the Commission it was be a great place to visit when they get a chance.

10. Staff Report

Ms. Kellums gave a reminder about the CPI conference for 2023 has been scheduled for February 8th though the 10th in Boulder. Ms. Kellums mentioned how the website for the conference was asking for people to participate in the conference planning committee and if the commissioners would be interested in participating. She also mentioned she would have another public hearing on November 21st, 2022.

11. Adjournment

With no further business before the Commission, Chair Brunswig adjourned the meeting at 4:41 p.m.

	Bob Brunswig, Chair
Elizabeth Kellums, Secretary	

Historic Preservation Commission Agenda Summary

November 21, 2022

Key Staff Contact: Elizabeth Kellums, Planner III – Historic Preservation, 970/350-9222

Title:

Public Hearing for Request for Certificate of Approval for New Construction of a Greenhouse at 515 23rd Avenue

Summary:

Caleb Bussard, applicant on behalf of owner West Greeley Conservation District, requests approval to construct a 72' x 42' greenhouse in the southwest corner of the Houston Gardens property.

Recommended Action:

Staff recommends approval conditional upon the applicant obtaining all required permits.

Attachments:

Staff Report

Attachment A – Application and Narrative for Certificate of Approval

Attachment B – Construction Documents

Attachment C – Site Photos

Attachment D - Existing Site Map

HISTORIC PRESERVATION COMMISSION SUMMARY

ITEM: Certificate of Approval

CASE NUMBER: HPDR2022-00012

PROJECT: New Construction – Greenhouse

LOCATION: 515 23rd Avenue

APPLICANT: Caleb Bussard, on behalf of owner West Greeley Conservation

District

CASE HISTORIC PRESERVATIONIST: Elizabeth Kellums

HISTORIC PRESERVATION COMMISSION HEARING DATE: November 21, 2022

HISTORIC PRESERVATION COMMISSION FUNCTION:

Review the proposal for compliance with Criteria and Standards for altering designated properties or contributing properties in an historic district in Section 24-1003j of the City of Greeley Municipal Code and approve or deny the request.

PROJECT OVERVIEW AND BACKGROUND:

Proposed Project

On October 14, 2022, contractor representative Caleb Bussard of DS Constructors and architect Kelly Deitman, Halcyon Design, on behalf of owner West Greeley Conservation District submitted an application for a Certificate of Approval for new construction of a greenhouse at Houston Gardens at 515 23rd Avenue to the Historic Preservation Office. The applicant proposes to construct a 72'x42' greenhouse constructed of 8mm twin wall clear polycarbonate walls and roof with a concrete floor, two overhead doors, and one access door. It would be located 135' southwest of the house and 33'8" north of the south property line and 60' from the west property line. The area for the proposed greenhouse is currently open space. The Engineering Development Review staff requested a drainage memo from the project engineer indicating if the project will or will not change historic drainage patterns because of the increase in imperviousness. However, there were no other potential engineering concerns because no water or sewer mains or services are being added nor are there any streets being developed.

Please see the Application and Narrative for a Certificate of Approval (Attachment A), Construction Documents (Attachment B), Site Photos (Attachment C) and the Existing Site Map (Attachment D).

Existing Conditions

The site has a historic house and detached garage, and a non-historic restroom building. The area proposed for the greenhouse is a vacant unpaved area south of the dirt driveway and west of the community gardens. A shade shelter, approved by the HPC in March 2021, is located north of the proposed greenhouse location.

Background

The Historic Preservation Commission designated Houston Gardens at 515 23rd Avenue on the Greeley Historic Register in July 2002 for historical, architectural and geographical significance. The site is subject to review by the Historic Preservation Commission for major alterations and is subject to the Historic Preservation General Design Review Guidelines.

SITE DATA:

Legal Description: GR 17300 PT NE4SE4 1 5 66 (WEST GREELEY

ANNEX) BEG SE COR SEC N0D21'W 2009.47' S89D54'W 38' TO W LN 23 AVE & TRUE POB S0D21'E 367.58' TO NE COR 3RD ADD TO HOUSTON HTS S89D54'W 369.91' N0D05'W 367.57 N80D37'W 503.7' N08D38'E 51.63'

S55D33'E 34.1' S79D33'E 504.66' S26D58'E 25.06'

N89D54'E 321.55' TO BEG City of Greeley,

County of Weld, State of Colorado

Neighborhood: N/A

Designation: Individually designated on the Greeley Historic

Register

Year Property Built: ca. 1920s

Architectural Style/Type: Vernacular with Shingle Style Features

Zoning: Residential – Low (R-L)

Dates of Significant Renovations:

Building Permit for construction of public

restrooms; Owner: Community Foundation for Greeley and Weld County; Contractor: Brent Richter; Permit #07050123; Date: 4/23/2007.

Certificate of Approval for new restroom building, 515 23rd Avenue, 14x14, 2 rooms, concrete block with wood shingle siding, vinyl windows & asphalt shingle roof; Owner: Community Foundation; Applicant: Assistance League of Greeley;

Approved 5/14/2007, Recorded 5/30/2007, Recording #3479439.

Permit for 6' + 1' chain link fence, 1 x 140- rolling gate and 2 - 4 x 6 gates; Owner: Phylabe Houston; Contractor: Everitt Lumber; Permit #760202; Date: 5/5/1976; Final: 1/10/1977.

Permit for 6' chain link with 3 strand barbed wire; Contractor: Northern Colorado Fence; Permit #770311; Date 7/13/1977.

Source: Building Permit File and Greeley Historic Register property file for 515 23rd Avenue

KEY ISSUES AND ANALYSIS:

The proposed work is evaluated according to the relevant criteria for alteration of designated properties, defined in Section 24-1003j of the Greeley Municipal Code, as follows in the staff analysis.

Greeley Municipal Code, Section 24-1003j Criteria and Standards

- 1. Alterations. Criteria and standards for alterations to a designated property or a property in a historic district are as follows:
- (a) The effect of the alteration or construction upon the general historical or architectural character of the designated property.
- (b) The architectural style, arrangement, texture and materials of existing and proposed construction, and their relationship to other buildings.
- (c) The effects of the proposed work in creating, changing or destroying the exterior architectural features and details of the structure upon which the work shall be done.
- (d) The compatibility of accessory structures and fences with the main structure on the site and with adjoining structures.
- (e) The effect of the proposed work upon the protection, enhancement, perpetuation and use of the landmark or landmark district.
- (f) Compliance with the current Secretary of the Interior's Standards for the Rehabilitation of Historic Properties, as defined in 24-1003.m.
- (g) If the property is a non-contributing property in a historic district, then alterations will be in accordance with the district designation plan as recommended by the Commission and approved by City Council.

(h) Other requirements for alterations of a designated property or contributing property in a district as are required by the procedures and bylaws established by the Commission.

Secretary of the Interior's Standards for Rehabilitation

- (1) A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.
- (2) The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
- (3) Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other buildings will not be undertaken.
- (4) Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- (5) Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- (6) Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
- (7) Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- (8) Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
- (9) New additions, exterior alterations or related new construction will not destroy historic materials, features and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
- (10) New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Applicable Guidelines from the General Design Review Guidelines

New Alterations and Additions

When planning new alterations and additions, consider the effect on significant historic materials and features of the property. Loss of historic building fabric should be minimized. The addition should not affect the ability to perceive the historic character of the building, especially from public ways, such as streets, alleys, and parks. Contemporary interpretation of the original structure is an appropriate alternative to a more replicative design. It needs to be compatible with the overall architecture but simplified in style and detailing and must appear newer.

34. Minimize negative technical effects upon original features.

- a. Consider the technical impacts of new construction on a historic structure. For example a construction process may cause vibration that results in cracks in a historic masonry wall.
- b. New alterations should be accomplished in such a way that they can be removed without destroying original materials or features.

37. Design additions and alterations to be compatible in size, scale, and appearance with the main building.

- a. An addition or alteration should be visually subordinate to the main building.
- b. An addition or alteration should be simpler than the original structure. For example, incorporate simplified versions of character defining elements of the original structure.
- c. Use roof forms that are compatible with the original structure. The shape, pitch, and material should be similar to the original structure.
- d. Maintain the solid-to-void (wall to opening) ratio of the original structure.

38. Use materials that are compatible with the primary structure.

In a district, materials similar to those of adjacent structures may also be considered.

Secondary Structures

Secondary structures, including carriage houses, garages, and sheds, are important elements of residential sites. They help establish a sense of scale and define yards. Their presence helps interpret how an entire site was used historically.

61. Locate new secondary structures to reinforce historical development patterns. Use guidelines for additions as a basis for design.

- a. Place a garage or other secondary structure at the rear of the property.
- b. Reinforce historical patterns by using an alley to access a garage.
- c. Avoid making new curb cuts for driveways.

Staff Analysis:

The proposed greenhouse project complies with the applicable criteria and standards for the following reasons:

The proposed greenhouse would have a neutral impact on the historic property, as it would be a polycarbonate structure that should not impact the historic structures on the property. The location of the greenhouse at the back of the property should minimizes any impacts on the property. It would not obstruct views of historic architectural or landscape features and it would not touch or affect historic materials. The proposed greenhouse would be a compatible use with the site. The greenhouse would enhance the use of the site by allowing gardening during the winter and thus have a positive effect on the protection, enhancement, perpetuation, and use of the property. The proposed greenhouse does not impact the integrity of the site, as the site conveys significance with or without the greenhouse. For these reasons, the proposed shade shelter would meet the Criteria and Standards in Section 24-1003(j)(1)a, b, c, and e.

The proposed greenhouse would meet the Secretary's Standards #9 and 10, and therefore Criteria and Standard f in Section 24-1003(j), for alterations because it would be compatible with the house and garage and would not affect historic fabric. It would also not impact the historical integrity of the site, and if it is removed in the future, the site would not be changed and could continue to convey significance.

The proposed project would also meet the design guidelines for new alterations and additions and for secondary structures. The structure would be more than 60 feet to the southwest of the house and would not affect the house or historic fabric. The addition of the greenhouse to Houston Gardens would not affect or obscure historic features and if removed in the future, the site would not be adversely affected. The proposed greenhouse would be compatible and visually subordinate, as it would set back from the property line and behind the house to the southwest. The proposed greenhouse would also meet the guidelines for secondary structures with the location at the rear of the property, which visually minimizes the impact of the structure on the property as a whole. For these reasons, the proposed shade shelter project would meet the design guidelines and therefore Criteria and Standard h in Section 24-1003(j) of the Greeley Municipal Code.

In summary, for these reasons, the proposed greenhouse meets the Criteria and Standards in Section 24-1003(j) of the Greeley Municipal Code, including the Secretary of the Interior's Standards and the General Design Guidelines.

Section 24-1003(j) (1) Criteria and Standards Addressed: a, b, c, e, f, and h (Secretary's Standards #9, 10) and the Design Guidelines for New Alterations and Additions and Secondary Structures

PUBLIC NOTICE:

Greeley Municipal Code Section 24-1003(f) specifies public notification requirements for Certificate of Approval applications, specifically posting a sign at the property, readily visible by adjacent property owners and from the public right-of-way, no less than 14 days prior to the public hearing. The applicant posted notice at this property on November 3, 2022. On October 31, 2022, Staff emailed a letter of notification to the applicant with the date, time and location of the public hearing. No inquiries have been received as of November 15, 2022.

STAFF RECOMMENDATION:

Approval, with the condition that all required permits be obtained.

RECOMMENDED MOTION:

A motion that, based on the application received and the preceding analysis, the Commission finds that the proposed greenhouse at Houston Gardens at 515 23rd Avenue meets (1) Criteria and Standards a, b, c, e, f, and h, including Secretary of the Interior's Standards #9, 10 of Section 24-1003(j)(1) of the Greeley Municipal Code, and therefore approves the Certificate of Approval, with the condition that all required permits be obtained.

ATTACHMENTS:

Attachment A – Application & Narrative for Certificate of Approval

Attachment B – Construction Documents

Attachment C – Site Photos

Attachment D – Existing Site Map



City of Greeley
Community Development Department
Historic Preservation Office
1100 10th Street
Greeley, CO 80631
970.350.9222
www.greeleygov.com/hp

PROCEDURES FOR MAJOR ALTERATIONS TO A HISTORIC PROPERTY

Application Packet

The City of Greeley's Historic Preservation Code, Section 24-1003 of the Greeley Municipal Code, requires that no major exterior alteration be made to any designated historic property or any property within a designated historic district without a Certificate of Approval issued by the Historic Preservation Commission. Alteration means any act or process requiring a building permit, moving permit, demolition permit or sign permit for the reconstruction, moving, improvement or demolition of any designated property or district; or any other action in which a review by either the Historic Preservation Commission or the Historic Preservation Specialist is necessary under the Historic Preservation Code and/or the district designation plan and in accordance with the definitions of major and minor alterations. The Historic Preservation Commission issues Certificates of Approval to indicate its approval of major alterations. Major alteration means a modification to a structure that has potential to significantly alter the character of the property and includes, but is not limited to, window replacement; building addition; porch enclosure; reconstruction of a portion of the primary building; addition of dormers or other alteration to the roofline; reconstruction of features on a building; material replacement with a different material (e.g., siding); alteration or replacement of a character-defining feature; demolition; relocation; and new construction. Major alteration includes any modification that is not considered maintenance or a minor alteration. The Historic Preservation Commission makes all Certificate of Approval decisions for major alterations, which may be appealed to City Council. The Commission may approve, approve with conditions or deny applications.

The Commission will review the Certificate of Approval applications according to the following criteria and standards in Section 24-1003j of the Greeley Municipal Code:

- (1) Criteria and standards for alterations to a designated property or a property in a historic district are as follows:
- (a) The effect of the alteration or construction upon the general historical or architectural character of the designated property.
- (b) The architectural style, arrangement, texture and materials of existing and proposed construction, and their relationship to the other buildings.
- (c) The effects of the proposed work in creating, changing or destroying the exterior architectural features and details of the structure upon which the work shall be done.
- (d) The compatibility of accessory structures and fences with the main structure on the site and with adjoining structures.
- (e) The effect of the proposed work upon the protection, enhancement, perpetuation and use of the landmark or landmark district.
- (f) Compliance with the current Secretary of the Interior's Standards for the Rehabilitation of Historic Properties, as defined in 24-1003(m).

- (g) If the property is a noncontributing property in a historic district, then alterations will be in accordance with the district designation plan as recommended by the Commission and approved by City Council.
- (h) Other requirements for alterations of a designated property or contributing property in a district as are required by the procedures and bylaws established by the Commission.

DEFINITIONS

Alteration means any act or process requiring a building permit, moving permit, demolition permit or sign permit for the reconstruction, moving, improvement or demolition of any designated property or district; or any other action in which a review by either the Historic Preservation Commission or the Historic Preservation Specialist is necessary under this Chapter and/or the district designation plan and in accordance with the definitions of major and minor alterations, for the purposes of this Chapter.

Maintenance, as used in this Chapter, means measures to protect and stabilize a property, including ongoing upkeep, protection and repair of historic materials and features. Maintenance shall include the limited and responsive upgrading of mechanical, electrical and plumbing systems and other Code-required work to make a property safe and functional.

Major alteration, for the purposes of this Chapter, means a modification to a structure that has potential to significantly alter the character of the property and includes, but is not limited to, window replacement; building addition; porch enclosure; reconstruction of a portion of the primary building; addition of dormers or other alteration to the roofline; reconstruction of features on a building; material replacement with a different material (e.g., siding); alteration or replacement of a character-defining feature; demolition; relocation; and new construction. Major alteration includes any modification that is not considered maintenance or a minor alteration.

Minor alteration, for the purposes of this Chapter, means a modification to a structure that does not significantly alter the character of the property and includes, but is not limited to, replacement of roof; installation and repair or replacement of gutters if exterior trim elements are not altered; reconstruction and/or repair of portions of secondary structures; addition or replacement of storm windows and doors to existing windows and doors; repair or replacement of architectural elements with the same material, design, size, color and texture; replacement of less than fifty percent (50%) of a porch railing; replacement of original material with the same material (e.g., replacing a portion of wood siding with wood siding of the same size, profile and type); removal of nonoriginal material, such as vinyl, aluminum, etc.; adding awnings; repainting masonry; and signs requiring a permit.

CERTIFICATE OF APPROVAL PROCESS

Step 1. Pre-Application Conference

- Consult with Historic Preservation Staff @ e-mail: elizabeth.kellums@greelevgov.com) or (970) 350-9222
- Receive Application Form for Certificate of Approval
- Review requirements with Historic Preservation Staff

Step 2. Formal Application

- Submit Application Form for Certificate of Approval and all required information through eTRAKiT on the City of Greeley website: http://greeleygov.com/services/etrakit
- Application requires owner signature if owner is not the applicant.
- Special information may be requested by the Commission if required for use by persons or groups providing advisory assistance.
- Incomplete applications will hold up the process. Additional information may be requested.

Step 3. Notification, Scheduling and Posting

- Allow a minimum of 21 days from the receipt of the application to the date of the public hearing. Additional time may be required on a case-by-case basis.
- The City will mail or email a notice of the hearing to the applicant and property owner no less than seven days prior to the hearing. The Historic Preservation Commission will hold the public hearing at a regularly scheduled meeting. They meet on the first and third Mondays of each month at 4:00 p.m.
- The City will post a sign at the property seven days prior to the hearing.

Step 4. Public Hearing

- Attend the Certificate of Approval Hearing. The formal hearing will follow a pre-written agenda as follows:
 - a. Chair Introduces Public Hearing Agenda Item
 - b. Historic Preservation Staff Report
 - c. Applicant presentation
 - d. Public comment.
 - Names and addresses for the record
 - e. Applicant rebuttal
 - f. Chairman calls for motion and Commission discussion

Step 5. Disposition

- Approval or denial of the Application for Certificate of Approval shall be granted after the Commission has heard all interested parties and relevant evidence.
- If the Application is approved, alteration, relocation or demolition of the structure may not commence until the Certificate of Approval has been filed with the Weld County Clerk and Recorder and all required permits have been issued. The City will get the Certificate of Approval and required attachments, such as architectural drawings, recorded by the Clerk and Recorder.
- If approved, work shall be completed within twelve (12) months of the date of Commission approval, with the option for two (2) six-month extensions, as approved by the Community Development Director.

*The <u>applicant</u> is responsible to pay all required recording fees. The Historic Preservation Staff will input the fee into TRAKiT and will inform the applicant of the cost of recording. Please provide payment in the form of electronic check or credit card through the eTRAKiT portal. Recording fees are \$15 for the first page that is 8 ½" x 11" (letter) or 8 ½" x 14" (legal) and \$5 for each additional page. For questions about what the recording fee will be, please contact the Historic Preservation Staff at 970.350.9222.



City of Greeley Community Development Department, Historic Preservation Office, 1100 10:- Street, Greeler, CO 80631 970.350.9222 www.greelcygov.com/hp

.APPUATION FORM FOR CERTIFICATE OF APPROV.,4L

MAJOR ALTERATIONS

The City of Greeley's Historic Preservation Code, Section 24-1003 of the Municipal Code, requires that no exterior major alteration is permitted of any designated historic property or property within a designated historic district without a Certificate of Approval issued by the Historic Prese1vation Commission. Please complete pages 5, 7, and 8 and add additional sheets as necessary.

5216 645 415 116 65 542 J.	
PROPERTY OWNER(S)	Kandas Nauma Wast Cusalau Canasanatian District
Name:	Kandee Nourse. West Greeley Conservation District
Address:	4302 9th St Rd
	Greeley. CO 80634
Phone:	970.534.2317
Cell phone:	
Email: -	kandee.nourse@wgcd.org
APPLICANT (if different	
From property owner) Name: Ca	aleb Bussard. OS Constructors
Address: _	903 N. Cleveland Ave.
***	Loveland CO 80537
Phone:	
Cell phone:	970.635.3534
	cbussard@dsconstructors.com
HISTORIC PROPERTY Name:	Houston Gardens
Address:	515 23rd
Historic District (if applicable):	
Legal Description:	GR 17300 PT NE4SE4 1 5 66 (WEST GREELEY ANNEX) BEG SE COR
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Applicant (Print): OS Constructors	Telephone: 970.635.3534
	Telephone. 474.000.0004
Company C-d X-L-1-7	Date: 10.12.22
Signature: Signature:	
Draparty awards signature required. If an	plicant is other than property owner, property owner approves of the applicant's
proposed project.	olicant is other than property owner, property owner approves of the applicant's
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Owner (Print): Donde No	01
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Certificate 6f Approval Major Alterations Greeley Historic Register

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MAJOR ALTERATIONS CERTIFICATE OF APPROVAL SUBMITTAL CHECKLIST

Include all pertinent information identified on the following page(s), as well as special information requested by Historic Preservation Staff. Add additional sheets for narrative/information as necessary. Additional copies may be requested by Staff, if required for use by persons or groups providing advisory assistance. Submit this application and all required attachments through the City of Greeley website project module of eTRAKiT:

http://greeleygov.com/services/etrakit

X

The need for additional documents, as listed below, will be determined in a consultation with Historic Preservation Staff and may include:

ALTERA	TIONS
	Pre-application Conference (in person or phone) (not required) 10-11-2022 Date
X	Application Form signed by applicant and owner (if different)
X	For projects involving architectural drawings, one set 11"x17" (and larger if requested) scaled project drawing(s), including name, date, project address, north arrow, graphic scale, date of drawings, and name, address & phone of owner and designer (if drawings are needed); or
	Mock-Up of signs or awnings, as needed N/A
X	Product literature, if applicable, such as for window, roof projects, etc.
	If the proposal is for replacement of historic material, such as windows or siding, provide estimates from qualified contractors for repair and restoration and for replacement. N/A
X	Digital photos accurately representing existing materials, colors, and textures of each side of the building, site or structure to be affected. Date the photographs. Provide information about the view (such as view looking to the north), name of the photographer and about the subject of the photo.

a. What is the proposed project? Include detailed information about materials, design, measurements, location on the building or property.

The project scope includes construction of a new, 72'x42' Green house. The green house is composed of a concrete foundation with interior concrete floor, concrete exterior approach aprons and landings. The green house exterior walls and roof are composed of 8mm Twin Wall Clear Polycarbonate. 2 Overhead coiling doors and one access door. The Proposed green house is located approximately 135' South West of the existing historic structure which is not utilized as an administrative office.

Narrative of the proposed project (please type or print legibly on a separate page) Please include

b. Time constraints on the project/Project urgency?

DS Constructors is under contract and the project is awaiting approval to begin construction.

responses to the following:

c. Identify which design guidelines relate to the project. Explain how the proposed project meets the guidelines. Provide justification if the proposed project does not meet the guidelines.

Guidelines are available for download on the City's historic preservation website, http://greeleygov.com/services/historic-preservation/documents

General guidelines are relevant for individually designated properties. District guidelines are also available for properties located with Greeley Historic Register designated districts.

Contact the Historic Preservation Office at 970.350.9222 or <u>elizabeth.kellums@greeleygov.com</u> for more information or for assistance.

Design Guidelines Section IV

Appropriateness of Use: The new green house will allow the ability to garden year round, and ininclement weather. Preservation of Original Features: Existing structures on the site will not be affected or changed by the erection of the new green house. The new structure will have a 10'-3" Wall Height with the gable peak being 21' -0" to maintain scale with existing buildings.

Exterior General: Existing structures on the site will not be affected or changed by the erection of the new green house. Masonry: No masonry is proposed for use on this project. There is no exterior masonry on existing structures.

Wood: No wood features will be used on the New Greenhouse.

Roofs: The roof will be composed of 8mm Twin Wall Clear Polycarbonate with one operable Vent section.

Doors and Entrances: There are 2 overhead coiling doors with one Man door access door.

Windows: There are no windows proposed for the green house. The clear polycarbonate acts as one big window.

Site Features: Existing site features will not be disturbed. The Greenhouse occupies an area that is clear.

Replacement or Substitution of Original Features: Existing structures on the site will not be affected or changed by the erection of the new green house.

Mechanical Equipment: There are visible exhaust fan shrouds on the East wall of the greenhouse.

Existing Alterations on Historic Buildings: Existing structures on the site will not be affected or changed by the erection of the new green house.

New Alterations and Additions: Existing structures on the site will not be affected or changed by the erection of the new green house.

Guidelines Related to Residential Structures have not been addressed as this is not a residential property.

Houston Gardens

Greenhouse

515 23rd Ave. Greeley, CO 80634



Vicinity Map
Not to Scale



Site Map
Not to Scale



RKING TOGETHER TO BUILD THE FUTU

3780 Garfield Ave.

Loveland, CO 80538

Architect:



Halcyon Design LLC LASBITE, 684 80645

Civil Engineer:

i2 Consultants 16911 Potts Place Mead, CO 80504

Structural Engineer:

LT Engineering 5620 Zuni St Denver, CO 80221

Mechanical/Electrical/ Plumbing Engineer:



7344 Greenridge Rd. Ste B Windsor, CO 80550

Sheet Index

A00 Cover Sheet

C1 Civil Cover & Index
C2 Site Plan
C4 Grading & Erosion Control Plan
C5 Miscellaneous Details

A01 Site Plan
A02 Code Compliance Plan, Analysis & Details
A10 Floor Plan & Slab Slope Plan, Door Schedule
A30 Building Elevations

S0.0 Structural General Notes
S1.0 Foundation Plan
S1.1 Foundation Sections
S2.0 Roof Framing Plan (reference only)

PM-1 General Mechanical Notes & Outline Spec's
P-0 Legend, Index, Notes & Schedules
P-1.0 Domestic Water, Drain & Gas Plan
M-1.0 Mechanical Floor Plan
E-0.1 Legend, Notes, Index & One-Line Diagram
E-2.0 Lighting Plan
E-3.0 Power Plan

E-0.1 Legend, Notes, Index & One-Line Diagram
E-2.0 Lighting Plan
E-3.0 Power Plan

Project Information
Jurisdiction: City of Greeley

Parcel No. 095924100094

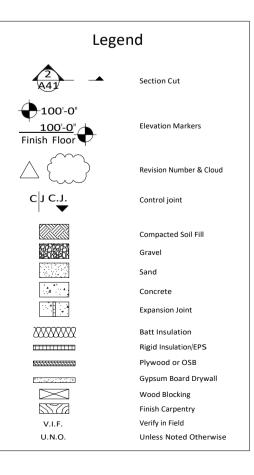
Legal Description: GR PT OF TR 4 GALLERY GREEN ANNEX BEG NW COR
NE4 S665' TO TPOB TH E 158' (M/L) TO W ROW LN 27 AVE TH N 300' TO
BEG OF CURVE(R=15' CH=N45DWO TH W140' TO W LN OF NE4 TH S
315'(M/L) TO TPOB

Subdivision: Gallery Green Annex, Lot 4, S24, T05, R66

Design Criteria:

Ground Snow Load 30 psf
Wind Speed 115 mph
Seismic Category B
Weathering Severe
Frost Depth 30"
Termite slight to moderate

Zoning: C-H Commercial High Density



Attachment B

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ITS COMMON LAW COPYRIGHT AND OTHER PROPORTION THESE PLANS. THESE PLANS ABE NOT BE REPRODUCED, CHANGED OR COPIED IN ANY FI OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIND PARTY WITHOUT FIRST.

ALL CONSTRUCTION SHALL CONFORM TO CURREI

DO NOT SCALE DRAWINGS FOR DIMENSIO

Houston Gardens Greenhouse 515 23rd Ave. Greeley, CO 80634



PO Box 684 LaSalle, CO 80645 303.906.2617



DATE 9.7.22

REVISIONS

SHEET TITLE

SHEET NUMBER

A00

Project No. 2118

LEGEND OF SYMBOLS EXISTING PROPOSED - W-----®---SANITARY SEWER ELECTRIC "11 S VAL GUY ANCHOR 4 EDEST AL 0 \.1-1 OVERHEAD TELEPHONE STORM DRAIN ---so----@-4650 CONTOURS (1') FLOW DIRECTION **EXISTING ASPHALT EXISTING CONCRETE** · · PROPOSED CONCR ETE CONCRETE WASHOUT AREA <u>@</u> VEHICLE TRACKING CONTROL @ SEDIMENT CONTROL LOG 0 INLET PROTECTION

BUILDING PERMIT SET 09/02/2022 ALL WORK WITHIN THE PUBLIC RIGHT- OF - WAY, OR EASEMENT SHALL CONFORM TO THE CITY OF GREELEY CONSTRUCTION SPECIFICATIONS AND DESIGN STANDARDS:
THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERM ITS PRIOR TO COMMENCEMENT OF ANY
WORK ON THE PROJECT. A PERMIT FROM PUBLIC WORKS DEPAR TMENT IS REQUIRED FOR ALL CONSTRUCTIO N IN PUBLIC RIGHTOF-WAY OR EASEMENTS. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD WITH CITY REPRESENTATIVES BEFORE A
PERMIT WILL BE ISSUED. CALL UTILITY NOTIFICATION CENTER OF COLORADO AT 1-8 00-922 - 1987 FOR UTILITY LOCATES AT
LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
THE CONTRACTOR SHALL NOTIFY THE CITY OF GREELEY AT 970-350-9539 AT LEAST 24 HOUR PRIOR TO ANY REQUIRED

GENERAL NOTES:

INSPECTON.

IT IS THE CONTRACTOR'S RESPONSBILITY TO NOTIFY THE OWNER/ DEVELOPER, AND THE CITY, OF ANY PROBLEMS IN CONFORMING TO THE ACCEPTED PLANS FOR ANY ELEMENT OF THE PROPOSED IMPROVEMENTS PRIOR TO ITS CONSTRUCTION.

IT IS THE RESPONSIBILITY OF THE DEVELOPER DURING CONSTRUCTION ACTIVITIES TO RESOLVE CONSTRUCTION PROBLEMS DUE TO CHANGED CONDITIONS, OR DESIGN ERRORS ENCOUNTERED BY THE CONTRACTOR DURING THE PROGRESS OF ANY PORTION OF THE PROJECT. IF, IN THE OPINION OF THE CITY, THE MODIFICATIONS PROPOSED BY THE DEVELOPER, TO THE ACCEPTED PLA NS, INVOLVE SIGNIFICANT CHANGES TO THE CHARAC TER OF THE WORK, OR TO THE FUTURE CONTIGUOUS PUBLIC OR PRIVATE IMPROVEMENTS, THE DEVELOPER SHALL BE RESPONSIBLE FOR RE-SUBMITTING THE REVISED PLANS TO THE CITY OF GREELEY FOR ACCEPTANCE PRIOR TO ANY FURTHER CONSTRUCTION RELATED TO THAT PORTION OF THE PROJECT. ANY IMPROVEMENTS NOT CONSTRUCTED IN ACCORDANCE WITH THE ACCEPTED PLANS, OR THE ACCEPTED REVISED PLANS, SHALL BE REMOVED AND RECONSTRUCTED ACCORDING TO THE APPROVED PLAN.

THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS AT AND ADJACE NT TO THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMA L WORKING HOURS. THE DUTY OF

JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE CITY TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAG PERSONS, OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY IN ACCORDANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND ANY NECESSARY SUPPLEMENTS TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL SURVEY MONUMENTS. ANY MONUMENT THAT MUST BE DESTROYED FOR CONSTRUCTION SHALL BE REPLACED. THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A

MUST BE DESTROYED FOR CONSTRUCTION SHALL BE REPLACED. THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A PROFESSIONAL LICENSED SURVEYOR (PL.) PRIOR TO DISTURBING ANY MONUMENTS.

9. PRIOR TO FINAL PLACEMENT OF SURFACE PAVEMENT, ALL UNDERGROUND UTILITY MAINS SHALL BE INSTALLED AND SERVICE CONN ECTIONS STUBBED OUT BEYOND CURB LINE, WHEN ALLOWED BY THE UTILITY. SERVICE FROM PUBLIC UTILITIES AND FROM SANITARY SEWERS SHALL BE MADE AVAILABLE FOR EACH LOT IN SUCH A MANNER THAT WILL NOT BE NECESSARY TO DISTURB THE STREET PAVEMENT, CURB, GUTTER, AND SIDEWALK WHEN CONNECTIONS ARE MADE.

10. A GEOTECHNICAL REPORT HAS BEEN PREPARED BY CIT. THOMPSON INC. PROJECT NO. FC07439-115 FOR RIGHTOF-WAY GRADING AND PAVING. REFER TO GEOTECHNICAL REPORT FOR ANY REQUIREMENTS EXCEEDING CITY STANDARDS. A FINAL PAVEME NT DESIGN REPORT IS ALSO REQUIRED. THE SOIL INVESTIGA TION FOR THIS REPORT SHALL OCCUR AFTER UTILITY CONSTRUCTION AND GRADING FOR STREETS IS COMPLETED TO WITHIN 6" OF ANTICIPATED SUBGRADE. THE FINAL PAVEMENT DESIGN REPORT SHALL BE ACCEPTED BY THE CITY OF GREELEY PR IOR TO ANY NON-STRUCTURAL CONCRETE, PAVEMENT OR SUBGRADE INSTALLATION.

SUBGRADE INSTALLA TION. THE CONTRACTOR SHALL RESTRICT WORKING HOURS TO BETWEEN 7: OOAM AND 6: OOPM ON NORMAL CITY OF GREELEY BU SINESS DAYS UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE CITY.

1-800-922-1987 OR DIAL 811 FOR UTILITY LOCATES 48 HOURS PRIOR TO ANY EXCA VATION WORK.

WATER, SANITARY SEWER AND NON-POTABLE IRRIGATION GENERAL NOTES: 1. ALL CONSTRUCTION WORK TO BE ACCEPTED BY THE CITY SHALL CONFORM TO THE CITY OF GREELEY CONSTRUCTION SPECIFICATIONS AND ALL OVERLOT GRADING IN THE RIGHT-OF-WAY OR EASEMENT SHALL BE COMPLETED PRIOR TO INSTALLING POTABLE WATER, SANITARY

1-80U-922-1987 OR DIAL 811 FOR UTILITY LOCATES 48 HOURS PRIOR TO ANY EXCA VATION WORK.

4. MAINTAIN A MINIMUM OF TEN (10) FEET HOR! ZONTAL CLEAR DISTANCE SEPARATION BETWEEN POTABLE WATER MAINS/SERVICES AND SANITARY SEWER OR NON-POTABLE IRRIGATION MAINS/SERVICES, POTABLE WATER MAINS/SERVICES ARE TO BE LOCATED 18 - INCHES MINIMUM ABOVE THE SANITARY SEWER OR NON-POTABLE IRRIGATION MAIN S/ SER VICE S. IF FIELD CONDITIONS VARY FROM THOSE SHOWN ON THESE PLANS AND THE SANITARY SEWER OR NON- POTABLE MAINS/ SERVICES CANNOT BE LOCATED BELOW THE WATER MAIN OR SERVICE, A CLEAR VERTICAL DISTANCE OF EIGHTEEN (18) INCHES BELOW CANNOT BE MAINTA INED, OR A MINIMUM TEN (10) FOOT HORIZONTAL SEPARATION CANNOT BE ACHIEVED. THE CITY SHALL BE CONTACTETY TO REVIEW THE SITUATION.

5. IN ALL INSTANCES WHERE A WATER LINE LOWERING, POTABLE OR NON-POTABLE, IS REQUIRED DUE TO UNFORSEEN FIELD CONDITIONS, A

DETAILED DRAWING SHALL BE PROVIDED TO THE CITY FOR ACCEPTANCE PRIOR TO PERFORMING THE WORK.
WHERE POTABLE WATER, SANITARY SEWER, AND NON-POTABLE IRRIGATION LINES ARE LOCATED IN COMMON UTILITY EASEMENT AREAS,

FINAL CONSTRUCTION PLANS ARE VALID FOR CONSTRUCTION ONE (1) YEAR FROM THE DATE OF CITY SIGNATURE ACCEPTANCE.
 ALL POTABLE WATER MAINS, SERVICES, AND HYDRANT LINES SHALL HAVE A MINIMUM COVER OF FIVE (5) FEET AND A MAXIMUM COVER OF SIX (6) FEET UNLESS OTHERWISE INDICATED ON THE ACCEPTED CONSTRUCTION DRAWINGS.
 ALL NON-POTABLE WATER MAINS AND SERVICES SHALL HAVE A MINIMUM COVER OF THREE AND A HALF (3.5) FEET AND A MAXIMUM COVER OF SIX (6) FEET UNLESS OTHERWISE INDICATED ON THE ACCEPTED CONSTRUCTION DRAWINGS.
 ALL NEW WATER MAINS SHALL BE BULKHEADED AND TESTED AND APPROVED PRICTION DRAWINGS.
 ALL NEW WATER MAINS SHALL BE BULKHEADED AND TESTED AND APPROVED PRICTION TO CONNECTION TO THE EXIST ING WATER SYSTEM. VALVES WHICH PASS TESTING FOR PRESSURE AND LEAKAGE AT THE TIME OF INSTALLATION AND THE TESTING WAS PERFORMED IN THE PRESENCE OF THE CITY MAY BE CONSIDERED AS A BULK HEAD.
 VERIFICATION SURVEY - TOP OF PIPE ELEVATIONS AT ALL POTABLE AND NON-POTABLE WATER LINE VALVES, AND SANITARY SEWER MANHOLE INVERTS SHALL BE SURVEYED AND PROVIDED TO THE CITY BY THE DESIGN ENGINEERFOR ACCEPTANCE PRIOR TO PAVING CONSTRUCTION. THE VERIFICATION SURVEY SHALL ALSO PROVIDES ESWER PIPE SLOPES AND LENGTH AND PROPOSED FINISHED GROUND ELEVATIONS AT ALL VALVE BOXES AND MANHOLE RIM ELEVATIONS.
 ALL UTILITY CONDUIT CROSSINGS OF POTABLE WATER, SANITARY SEWER AND NON-POTABLE IRRIGATION LINES SHALL BE ENCASED INHIGH DENSITY POLYETHYLENE (HOPE) PIPE, WITH A MINIMUM STANDARD DIMENSION RATIO (SOR) 11 ACROSS THE ENTIRE EASEMENT OR RIGHT-OF-WAY WIDTH. THE ENCASEMENT JOINT SHALL BE BUTT FUSED. FLEXIBLE JOINTS ARE NOT ALLOWED.
 WET TAPS SHALL BE DRILLED BY THE CITY FOR A FEEL. CALL 9 70- 3 50-9 310 AT LEAST & HOURS. IN ADVANCE TO PAY FEES AND SCHEDULE TAP.
 AND AND SENSON DESCRIPTION SETSING. SHALL BE BUTT FUSED. FLEXIBLE JOINTS ARE NOT ALLOWED.

ABANDONMENT OF EXISTING WATER SERVICE SHALL BE PER CITY OF GREELEY WATER AND SEWER SPECIFICATIONS. A CITY OF GREELEY REPRESENTATIVE

AN A.S.S.E. APPROVED BACKFLOW PREVENTION ASSEMBLY IS REQUIRED ON EACH DOMESTIC WATER SERVICE LINE (WATER SERVICE, DEDICATED FIRE LINE, IRRIGATION SERVICE) IMMEDIATELY AFTER IT ENTERS THE BUILDING, INSTALLATION OF A BACKFLOW PREVENTION ASSEMBLY IS REQUIRED BY FEDERAL AND STATE HEALTH REGULATIONS. THE BACKFLOW PRE VENTION ASSEMBLY SHALL BE A REDUCED PRESSURE ZONE (RPZ) DEVICE AND SHALL BE LOCATED NEAR AFLOOR DRAIN, THIS ASSEMBLY MUST BE TESTED BY A CERTIFIED TESTER UPON INSTALLATION AND THEREAFTER ON AN ANNULL, BASIS TO COMPLY WITH CITY CODE AND STATE HEALTH DEPARTMENT REGULATIONS. THE FOLLOWING LINK PROVIDES A LIST OF CERTIFIED TESTERS FOR BACKFLOW ASSEMBLIESHTIP://GREE14YOOV.COM/SER CESS/15/1)[EIB.OPUENT/CROSS-CONNECTION-AIII-BACKFLOW-PREVENTION]
BACKFLOW ASSEMBLY TEST AND MAINTENANCE REPORTS CAN BE MAILED TO THE CITY OF GREELEY WATER AND SEWER DEPARTMENT AT 100 1 11TH AVE, 2ND 150 CONTROL OF THE CONTROL PROVIDED BY A CONTROL PROVID

FLOOR, GREELEY, CO 80631, FAXED TO 970-350-9805, OR EMAILED TO DEREKHIND OF GREELEY WATER AND SEWER DEPARTMENT AT 100 1 11TH AVE, 2N PROVIDED TO THE WATER AND SEWER DEPARTMENT UPON INSTALLATION AND THEREATER ON AN ANNUAL BASIS.

BEDDING FOR ALL STORM DRAIN SHALL BE PER THE STANDARD STORM DRAIN BEDDING DETAILS - DETAILS 6-6 AND 6-7 FOR REINFORCED CONCRETE PIPE

BEDDING FOR ALL STORM DRAIN SHALL BE PER THE STANDARD STORM DRAIN BEDDING DETAILS - DETAILS -6-6 AND 6-7 FOR REINFORCED CONCRETE PIPE AND POLYWRAPPED DUCTILE IRON PIPE.

ALL STORM DRANAGE CONSTRUCTION SHALL CONFORM TO THE CITY OF GREELEYS MOST RECENT STORM DRAINAGE SPECIFICATIONS. A COPY OF THE SPECIFICATIONS MAY BE OBTAINED FROM THE CITY OR FOUND ON THE CITY'S WEB PAGE - GREELEYGOV.COM.

RCP SHALL HAVE FLEXIBLE GASKET MATERIAL (WATER TIGHT RUBBER GASKETS) MEETING ASTM C443 AND TYPE 4-G BELL AND SPIGOT JOINTS. DUCTILE IRON PIPE SHALL BE POLYTIFA PPED IN ACCORDANCE WITH AWWA STANDARD C-105.

BACKFILL MATERIAL MAY BE LOCAL SITE MATERIAL THAT IS WELL-GRADED, NON-COHESIVE GRANULAR MATERIAL FREE OF ROCKS, FROZEN LUMPS, FOREIGN MATERIAL OR STONES GREATER THAN 3" IN ANY DIMENSION, AGGREGATE BASE COURSE, OR FLOWFILL. REMOVE ALL DEBRIS INCLUDING SODA CANS, RAGS, PIPE BANDING MATERIAL, ETC. FROM THE PIPE TRENCH BEFORE BACKFILLING.

ALL AREAS IMPACTED BY THE CONSTRUCTION SHALL BE CLEARED OF PROJECT GENERATED DEBRIS BY THE CONTRACTOR AT THE EARLIEST OPPORTURY, BUT IN NO CASE SHALL ANY ROADS OR WALKWAYS BE LEFT UNCLEARED AFTER THE COMPLETION OF THE DAY'S WORK, IT SHALL BE THE CONTRACTOR'S RESPONSBILITY TO PROVIDE THE NECESSARY EQUIPMENT AND MATERIAL. TO SATISFACTORLY CLEAN THE ROADWAYS

THE CONTRACTOR SHALL BE REQUIRED TO STREET SWEEP IMPACTED STREETS DAILY, IF THE CITY DEEMS IT NECESSARY, TO KEEP THE STREETS FREE OF MUD AND OTHER DEBRIS DUE TO HAULING OPERATIONS.

THE CONTRACTOR IS RESPONSIBLEFOR DUST CONTROL. AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE NECESSARY EQUIPMENT AND MATERIALS TO SATISFACTORILY TO PROVIDE THE NECESSARY EQUIPMENT AND MATERIALS TO SATISFACTORILY CONTROL DUST CONTROL. AND IT SHALL BE THE CONTRACTOR SRESPONSIBILITY TO PROVIDE THE NECESSARY EQUIPMENT AND MATERIALS TO SATISFACTORILY CONTROL DUST CONTROL. AND IT SHALL BE THE CONTRACTOR SHALL BE USED AS THE DUST PALLIATIVE WHERE REQUIRED. THE CONTRACTOR SHALL FURNISH AND SPREAD WATER AT NO ADDITIONAL COST TO

THE CONTRACTOR IS REQUIRED TO HAVE A CURRENT CITY OF GREELEY CONTRACTOR'S LICENSE TO PERFORM ANY WORK IN THE PUBLIC RIGHT-OF-WAY OR THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO COMMENCEMENT OF ANY WORK ON THE PROJECT. A PERMIT FROM THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO COMMENCEMENT OF ANY WORK ON THE PROJECT. A PERMIT FROM PUBLIC WORKS IS REQUIRED FOR ALL CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY OR EASEMENTS. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD WITH CITY REPRESENTATIVES BEFORE A PERMIT WILL BE ISSUED.

THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSELE FOR ALL CONDITIONS AT AND ADJACENT TO THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, DURING THE PERFORMANCE OF THE WORK, THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS (7 AM-6 PM). THE DUTY OF THE CITY TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTORS PERFORMANCE IS NOT INTENDED

THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, FLAG PERSONS, OR OTHER DEVICES NECESSARY TO PROVIDE PUBLIC SAFETY IN ACCORDANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND THE GREELEY SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC

13. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES INCLUDING BUT NOT LIMITED TO ATMOS ENERGY; CENTURY LINK; XCEL ENERGY; COMCAST CABLE; AND THE CITY OF GREELEY'S WATER AND SEWER DEPARTMENT, PRIOR TO COMMENCING CONSTRUCTION. TO HAVE ALL EXISTING LINES AND

THE SIZE, TYPE, AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO LOCATE ALL UNDERGROUND UTILITIES IN -TI-ff AREA OF THE WORK BEFORE COMMENCING CONSTRUCTION.

WHERE REQUIRED. THE CONTRACTOR SHALL FURNISH AND SPREAD WATER AT NO ADDITIONAL COST TO

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE CITY OF GREELEY'S PUBLIC WORKS DEPARTMEN'

O INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN ON OR NEAD THE CONSTRUCTION SITE

STORMWATER GENERAL NOTES:

CONDUITS FIELD LOCATED

MUST BE PRESENT DURING ABANDONMENT OF SERVICES.

18. PRIOR TO EXCAVATION AND CONSTRUCTION OVER AND NEAR THE EXISTING WATER AND SEWER MAINS, PLEASE CONTACT THE WATER AND SEWER

DEPARTMENT RIGHT- OF- WAY STAFF AT (970) 350-9539, TO COMPLETE THE APPLICABLE DOCUMENTATION TO WORK WITHIN THE RIGHT OF WAY AND 19. AN A.S.S.E. APPROVED BACKFLOW PREVENTION ASSEMBLY IS REQUIRED ON EACH DOMESTIC WATER SERVICE LINE (WATER SERVICE, DEDICATED FIRE LINE

9. ON THE AS: CONSTRUCTED RECORD DRAWINGS.
SHOULD ANY VARIA TIONS BEFORE OR DURING CONSTRUCTION TO THE POTABLE WATER DISTRIBUTION, SANITARY SEWER COLLECTION, OR NON-POTABLE IRRIGATION SYSTEM DESIGNS BE CONSIDERED, NOTICE MUST FIRST BE GIVEN TO THE CITY TO DETERMINE IF IT NEEDS ACCEPTANCE BY THE CITY, IF SO, A NEW PLAN SHALL BE DRAWN AND SUBMITTED TO THE CITY FOR ACCEP TANCE BY THE DESIGN ENGINEER? HOURS PRIOR TO CONSTRUCTION.

FINAL CONSTRUCTION PLANS ARE VALID FOR CONSTRUCTION ONE (1) YEAR FROM THE DATE OF CITY SIGNATURE ACCEPTANCE.

THERE SHALL BE NO OTHER UTILITIES LOCATED HORIZONTALLY WITHIN TEN (10) FEET OF EITHER LINE EXCEPT AT APPROVED CROSSINGS.
CONTRACTOR SHALL NOTIFY THE CITY ONE (1) WEEK PR IOR TO COMMENCING WORK AFTER CITY ACCEPTED CONSTRUCTION DRAWINGS HAVE
BEEN DISTRIBUTED AND A PRECONSTRUCTION MEETING HAS BEEN HELD WITH THE CITY.
CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITIES TO BE CROSSED BY POTABLE WAT ER, SANITARY SEWER, OR NON-POTABLE
IRRIGATION LINES AT LEAST 24 HOURS PRIOR TO CROSSING TO ENSURE 18" MINIMUM CLEARANCE FOR POPEN CUT CROSSINGS AND 36"
MINIMUM CLEARANCE FOR BORED CROSSINGS. HORIZONTAL AND VERTICAL LOCATION OF CROSSED EXISTING UTILITIES SHALL BE RECORDED
ON THE AS CONSTRUCTED PECOPOR DRAWINGS.

85WFRA@PGHPAPITAPHAPAIGATHYHYNESEATIONS PRIOR TO CONSTRUCTION. CALL UTILITY NOTIFICATION CENTER OF COLORADO AT

CÓLORADO 811

i2 Consultants. Inc.

I69II Potts Place Mead, Colorado 970.217.9148

I{)

(/) 0

PROJECT CONTACTS

OW NER:	C IVIL ENG INEER:
HOUSTON GARDENS 515 23RD AVENUE GREELEY, CO 80634 970.518.2483	i2 CONSULTANTS, INC. TROY W. CAMPBELL, P.E. 169 11 POTTS PLACE MEAD, CO 805 42 970. 217.9148
ARCHITECT:	SURVEYOR:
HALCYON DESIGN LLC KELLY DEITMAN PO BOX 68 4 LASALLE, CO 80645 303.906.2617	MAJESTIC SURVEYING STEVEN PARKS, PLS 1111 DIAMOND VALLEY DRIVE #104 WINDSOR, CO 80550 970.443.0882

SURVEY NOTES:

HOR IZONTAL DATUM: MODIFIED N AD8 3 / 2 0 11 COLORADO STATE PLANE COORDINATE SYSTEM NOR TH ZONE SCALE FAC TOR: D.9 9 9 7 39 6 3 (1.000260437)

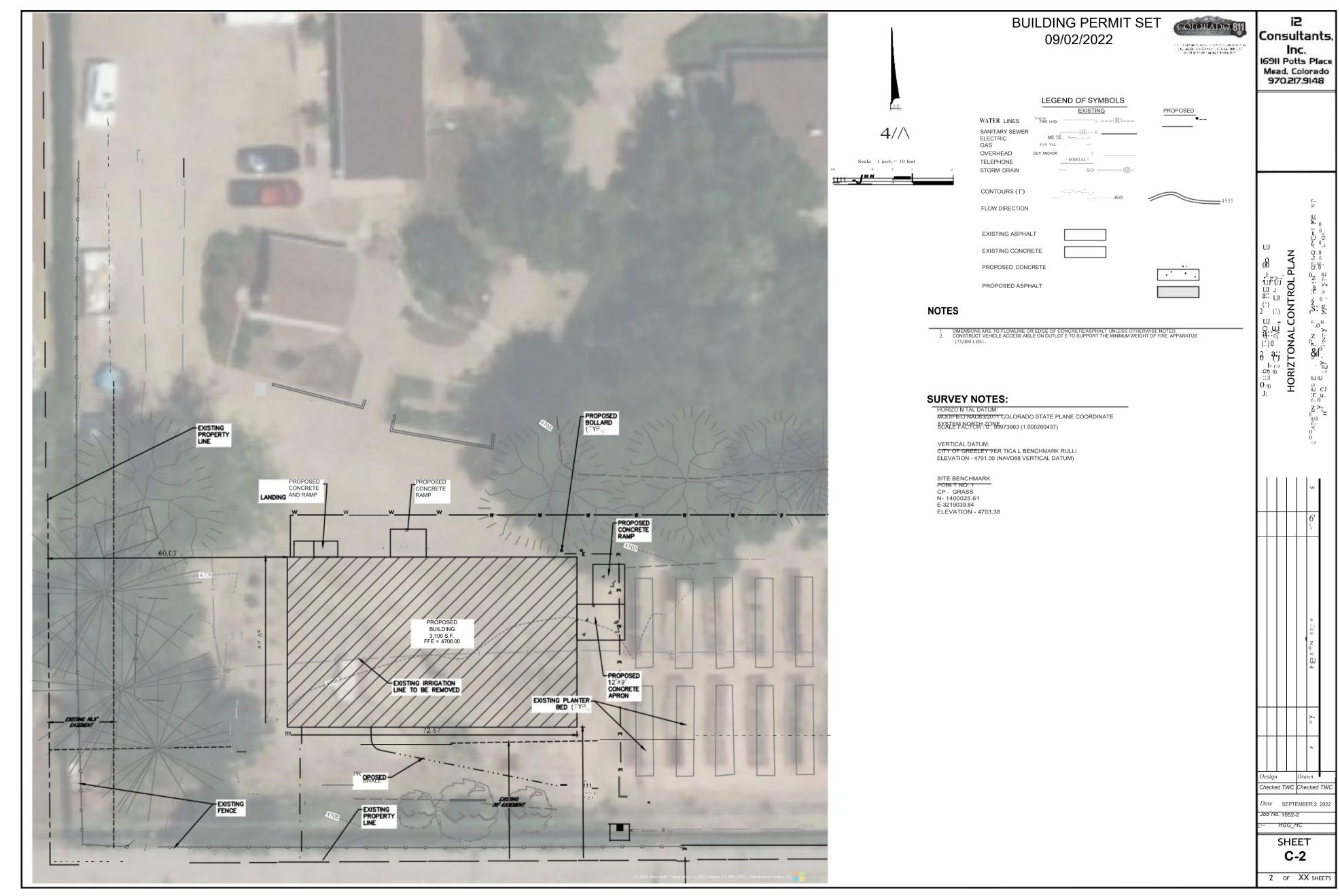
VERTICAL DATUM: CITY OF GREELEY VERTICAL BENCHMARK RULLI ELEVATION - 4791.00 (NAVD88 VERTICAL DATUM)

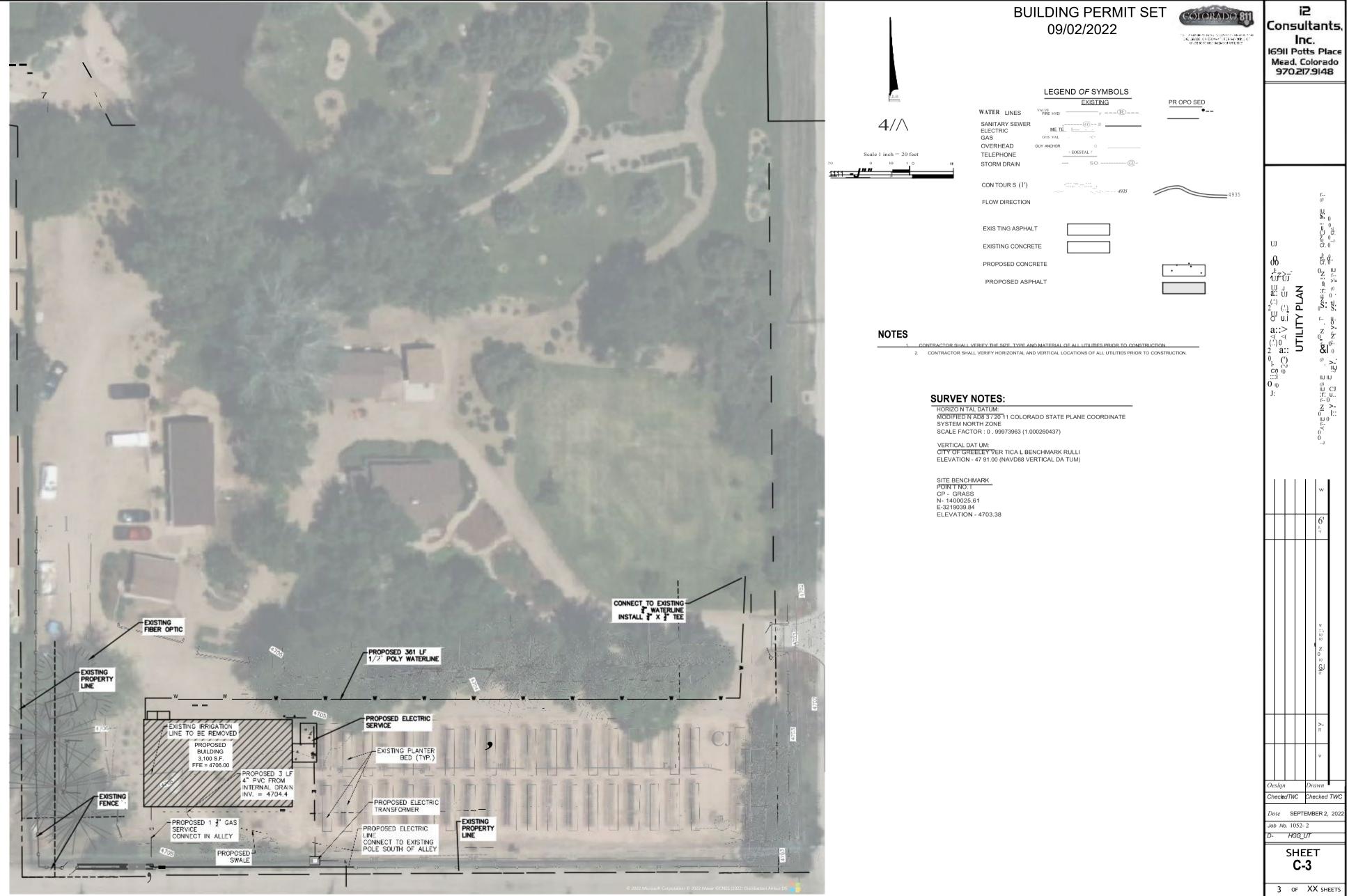
SITE BENCHMARK CP - GRASS N- 140 0025. 61 E- 3 219039.84 **ELEVATION - 4703.38**

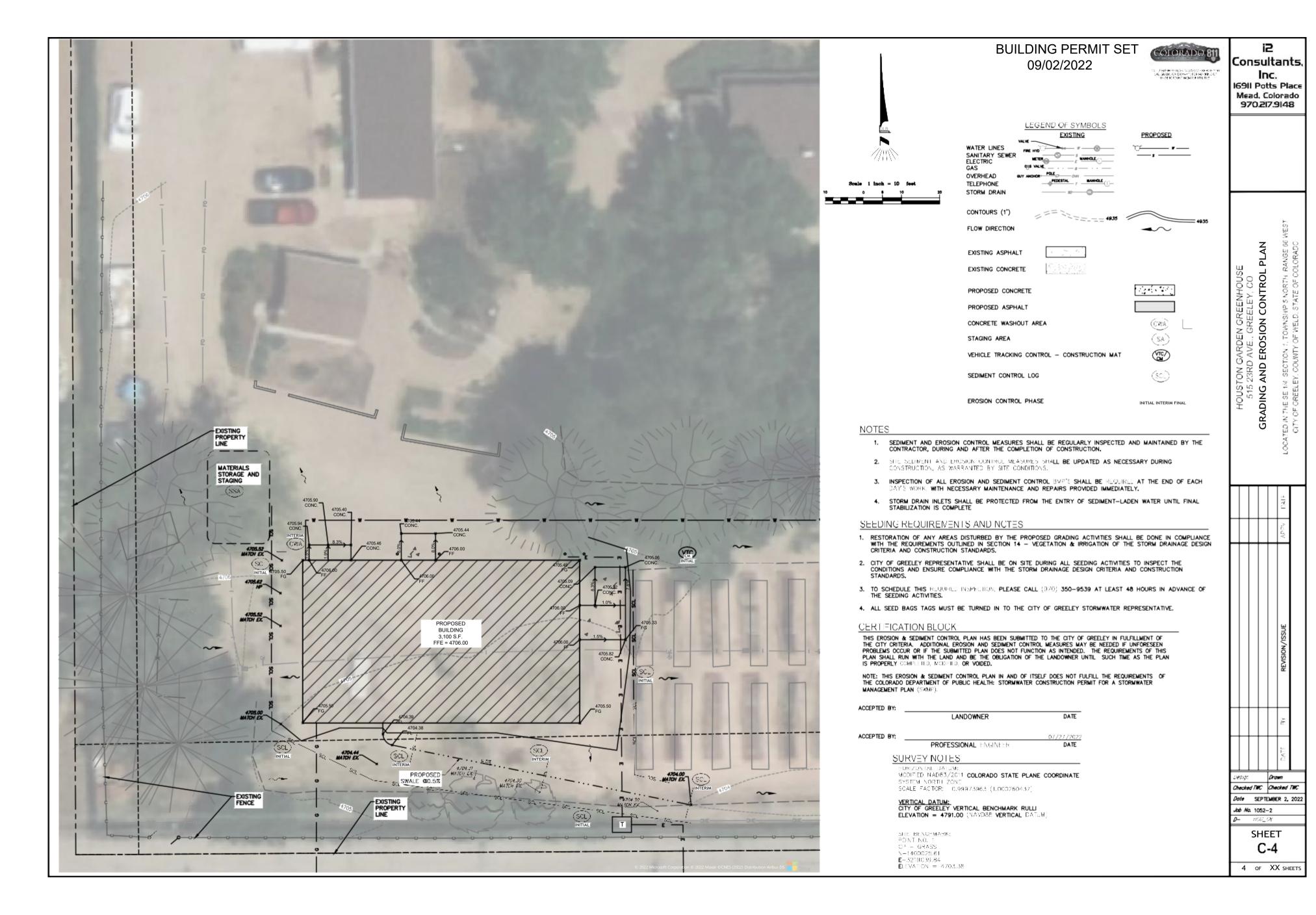
> CONSTRUCTION MUST BE IN ACCORDANCE WITH APPLICABLE CITY OF Design TWC Drown GREELEY CONSTRUCTION STANDARDS. THE CITY'S ACCEPTANCE SHALL Checked TWC Checked TWC OMISSIONS, OR DESIGN DEFICIENCIES FOR WHICH THE CITY IS HELD HARMLESS. Dote SEPTEMBER 2, 2022 Job No. 1052-2 ACCEPTED BY: FIRE MARSHAL DATE ACCEP TED BY DATE ENGINEERING DEVELOPMENT REVIEW/ CIVIL 1 OF XX SHEETS IN SPECTION S MANAGER

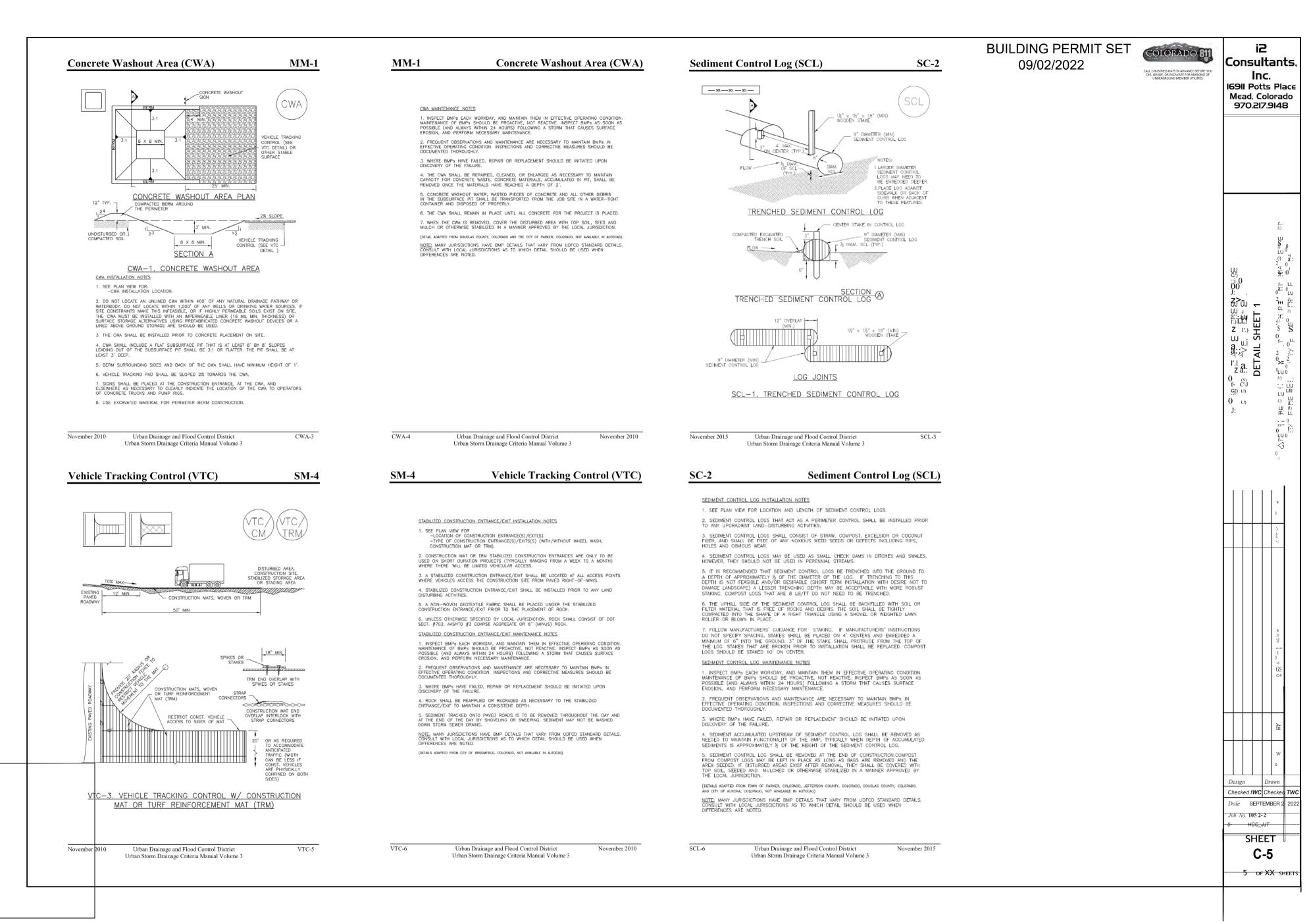
HCC CV

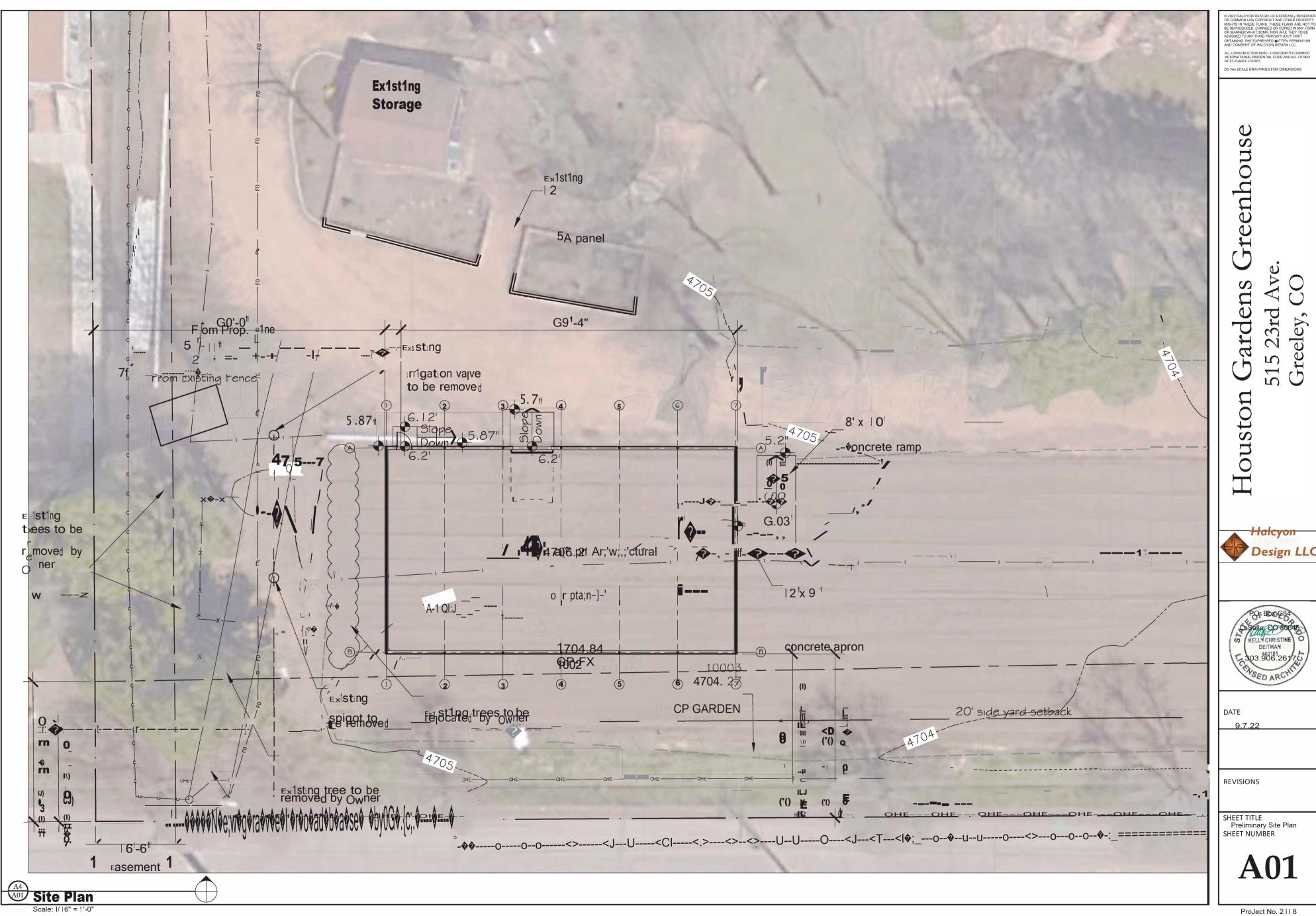
SHEET C-1











Design LLC

		29

2118 Houston Gardens Greenhouse Code Analysis 2018 IBC, 2018 IECC, ANSI A117.1-2009

Project Description

This project consists of a new greenhouse for staff and occasional volunteer use on a seasonal basis. Two overhead doors will be provided to permit the passage of large carts. An accessible

Building Floor Areas, Net Interior: Main Floor, Group U = 2,937 s.f.

Distance to Property Lines (building, not hoop houses): East = 271'

Chapter 4 Special Requirements Based on Occupancy

South = 33'-8'

2018 International Building Code Chapter 3 Occupancy Classification

Group U Utility

406.2.2 Clear height of floor area shall not be less than 7' 406.2.4 Floor surfaces shall be concrete or similar, sloped to facilitate movement of liquids to a

Chapter 5 General Building Heights & Areas Table 504.3 Allowable Building Height, Type V-B, non-sprinklered Group U = 40'

Proposed height = 21'-6" (approx.) Table 504.4 Allowable Number of Stories, Type V-B, non-sprinklered Group U Allowed = maximum 1 story

Group U Proposed = 1 story Table 506.2 Allowable Area, Type V-B, non-sprinklered Group U Allowed = 5,500 s.f. per story Group U Proposed = 2,937 s.f.

Chapter 6 Types of Construction

Assume Type V-B Construction Table 601 Building Element Protection = 0 all categories

Table 602 fire separation distance >30′ to property line, no fire rating requirement

Chapter 7 Fire Resistance Rated Construction Table 705.8 >30' distance to property lines, unlimited openings

705.11(1) Parapets not required if exterior walls are not required to be fire rated 720.2 Concealed insulation shall have flame spread index <25, smoke index <450

Chapter 8 Interior Finishes

Table 803.13 Group U Rating C for rooms: no restrictions

Chapter 9 Fire Protection

903.2.4 Automatic fire sprinkler system not explicitly required for Group U Buildings Table 906.3(1) 2-A fire extinguishers every 3,000 s.f., or every 15,000 s.f. for 10# ABC extinguisher, max. travel distance of 75'

Chapter 10 Means of Egress

1003.2 Ceiling height shall not be less than 7'-6" at means of egress Table 1004.1.2 Building Occupant Load, see also Life Safety Plans

Group U Area = Area/300 = 10 occupants 1005.3.2 Means of egress width = occupant load x0.2"

Table 1006.2.1 One exit permitted max. occupant load <49
Table 1006.3.2 Minimum one accessible means of egress required

1008 Means of egress illumination required with emergency power at exits 1009.1 Minimum one accessible means of egress required

1010.1.5 Doors on an accessible route shall have a floor or landing on each side, exterior

landings permitted to slope 2% 1010.1.6 Landings shall extend min. 44" in the direction of travel

1010.1.7 Landings at exterior egress doors shall not have threshold >1/2"
1010.1.9 Egress doors shall be openable from egress side without key or special knowledge

1010.1.10 Egress doors in Group U not explicitly required to have panic devices Table 1017.2 Exit access travel distance max. 300', worst case exit distance = 110' 1028.1 Exits shall discharge directly to the exterior of the building

Chapter 11 Accessibility

1104 At least one accessible route shall connect all accessible areas and shall coincide with circulation path

Chapter 12 Interior Environment

See Mechanical Design for ventilation requirements See Electrical Design for lighting requirements

Special Inspections as required by Table 1705.3:

Reinforcing steel, size & placement, design compliance, ACI 318: 20, 25.2, 25.3,

26.2.2-26.6.3, IBC 1908.4, by Structural Engineer or 3'd party testing (by Owner) Verifying use of required concrete design mix, ACI 318: 19, 26.4.3, 26.4.4, IBC 1904.1, 1904.2, 1908.2, 1908.3, by Structural Engineer

Slump, air content, temperature tests for concrete, break test (strength), ASTM C172, C31, ACI 318: 26.4, 26.12, IBC 1908.10, 3rd Party testing (by Owner) Concrete placement, ACI 318: 26.5, IBC 1908.6, 1908.7, 1908.8, 3rd Party testing

(by Owner) Concrete curing temperature and technique, ACI 318: 26.5, IBC 1908.9, 3rd Party

testing (by Owner)
Concrete formwork, design compliance, ACI 318: 26.11.2, by Structural Engineer

Open holes inspection of soil bearing capacity, 3rd Party testing (by Owner) Excavation depth and soil condition, 3rd Party testing (by Owner)

Compacted fill testing and classification, 3rd Party testing (by Owner) Compacted fill densities and lift thicknesses, 3rd Party testing (by Owner)

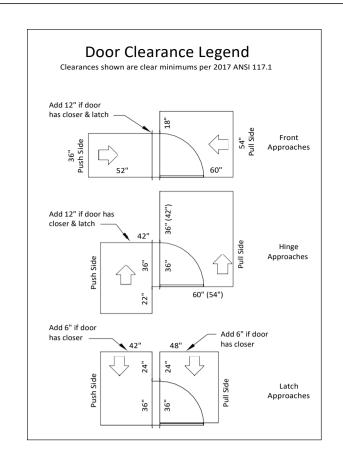
Subgrade and site preparation, 3rd Party testing (by Owner)
Reinforcing and Concrete special inspections not required by IBC 1705.3 Exceptions 1 thru 5

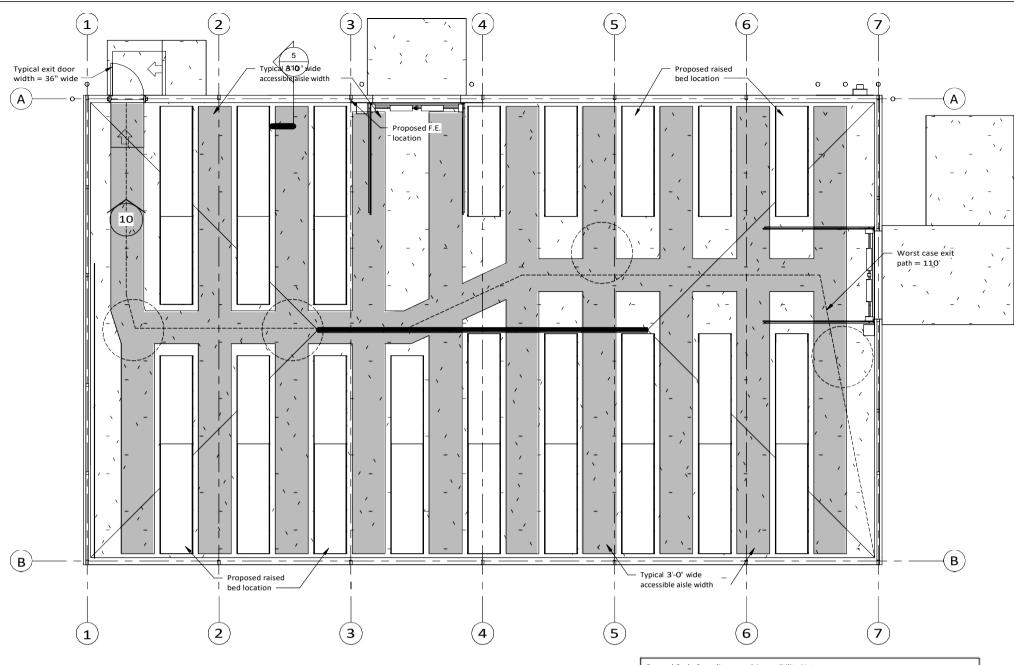
2018 International Energy Conservation Code

but are required by Architect and Structural Engineer.

C402.1.1 Greenhouse is considered a low-energy building and, as such, is not required to comply with building thermal envelope requirements.

Door insulation and foundation insulation as noted on Drawings is intended to extend the coldweather growing season of greenhouse and is not required as noted above.



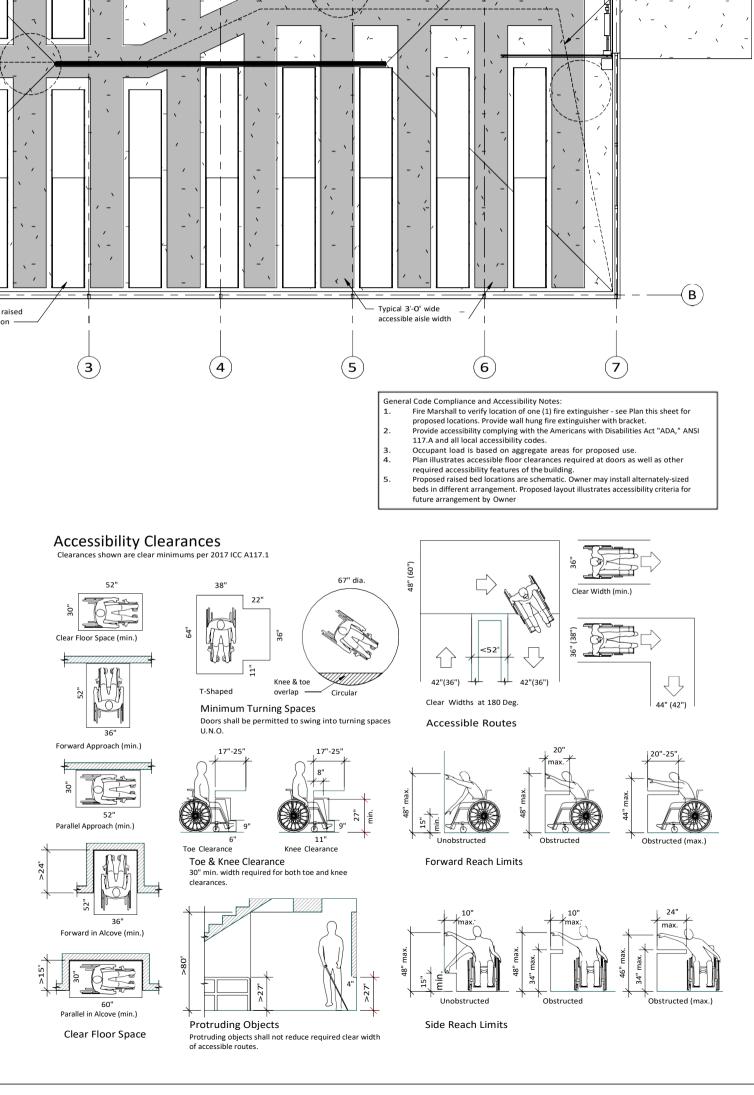


 $\underbrace{\frac{4}{A02}}_{3/16"} \underbrace{\frac{\text{Life Safety Plan}}{3/16"}}_{1-0"}$



SHEET NUMBER

A02



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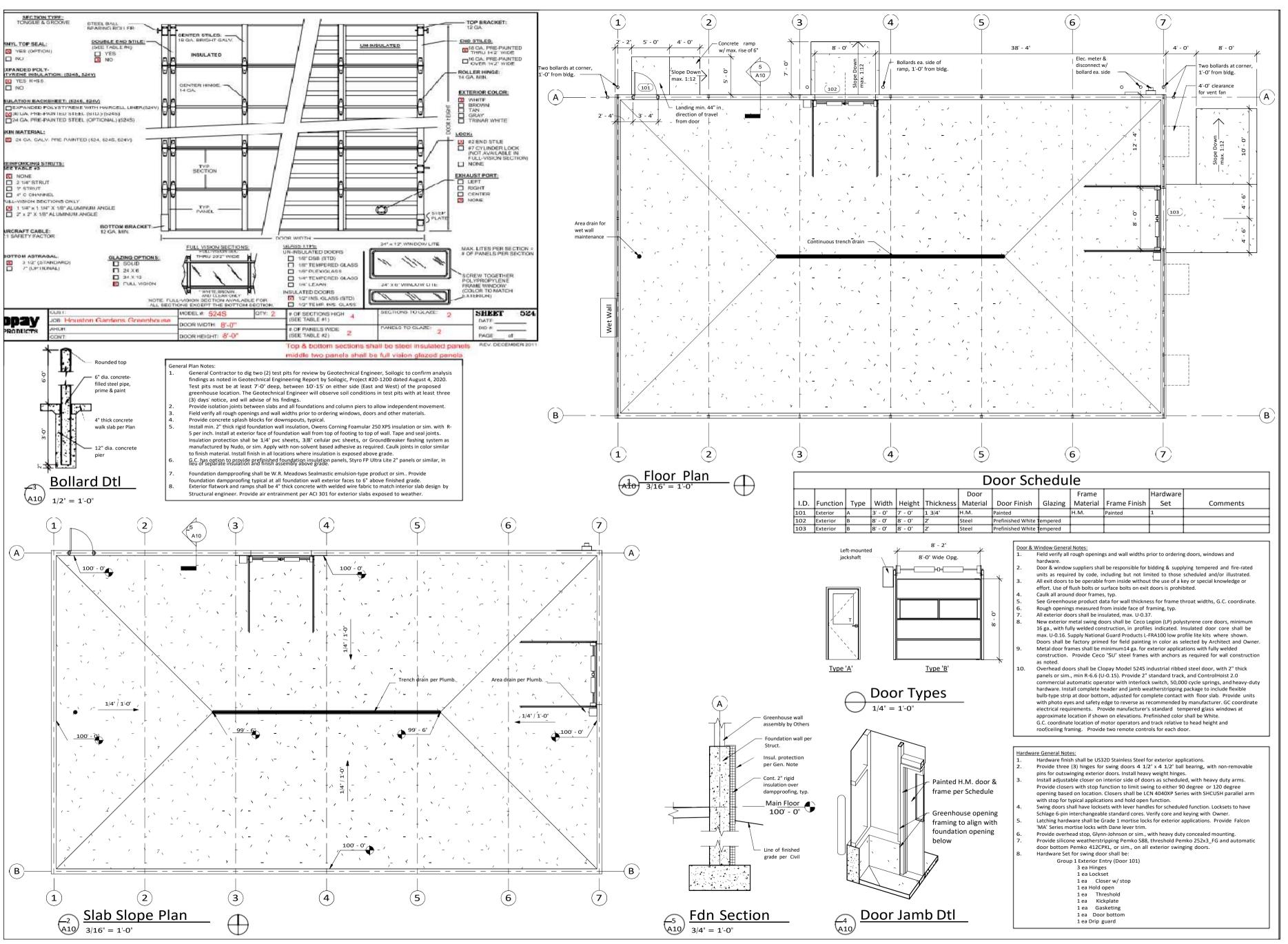


DATE 9.7.22

REVISIONS

SHEET TITLE Compliance

Project No. 2118



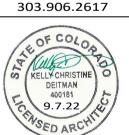
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Halcyon Design LLC

PO Box 684 LaSalle, CO 80645



DATE 9.7.22

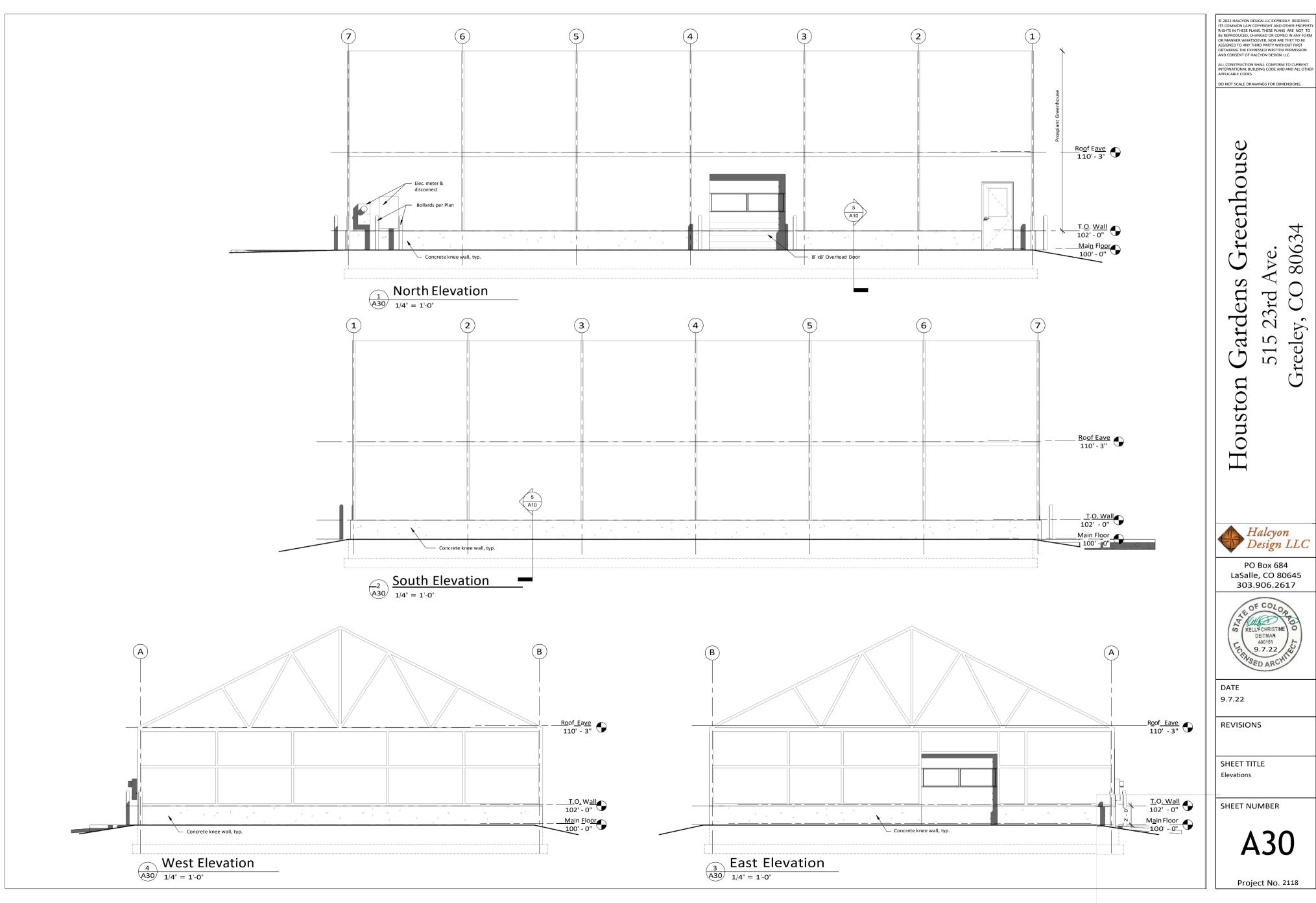
REVISIONS

SHEET TITLE

SHEET NUMBER

A10

Project No. 2118_



SPECIAL INSPECTION SCHEDLE (IBC Chapter 17):

a. Special inspections and stutural testing all be provided by an independent agency employed by the Owner for the itemsidentified in this section and in other areas of the approved

construction plans and spec fications, unless waived the Building Official. This statement of by Special Insp. tions is intended to apply only to items within the scope of work of the Structural Engineer. See Statement of Special Inspections prepared by the design pp ressional in b. The plants and credential of the soft in the control of the control

the Building Official for approval.

Duties of the Special Inspector:
 The Special Inspector shall review all work listed below for conformance with the approved construction plans and specifications and the IBC.

Owner, and Building Off cial for each visit or as required by the Building Offidal. All items not in compliance shall be brought to the immediate attention of the Contracbr for

correction, and if uncorrected, to the EOR and the Building Official.

Once corrections have been made by the Contractor, the Special Inspector shall submit a

final signed repot to the Building Ofici I stating that the work, to the best of the Special Inspector's knowledge, was in conformance with the appo ved construction plans and specifications as well as the applicable workmanship povisions of the IBC.

inspection	as agr	eed up	on by	the Special
All work	requiring	special	inspection	shal
obse rve	ed by the	Special	Inspector.	

Building Official will:
- Review and approve the qualifications of the Special Inspectors

qualified and are perfo nning their duties as required in this **Stamet** - Review submitted inspection reports.

d. Duties and responsibilities of the Contactor: The Contactor shall submit a writen statement of e sponsibility to the Owner and the Building Official prior to the commencement of work. In accordance with IBC 1704.4, the

C required but a cetification provided to the Building provided to the	ith IBC 1704.4, the
Positive dequate materials below Verify per soils report provided to the Building provided to	
Verify adequate materials below I 705.6 Soils Excavation extend proper Verify per soils report pr Verify per soils report pr Verify per soils report and compacted fill or concret depth and materials Class ication and testing of fill materials Check classification and but not less than once fill materials P Check classification and but not less than once fill but not less than once fill whickness and in-place ensities Verify properly prepared site and subgrade O. S. U. r. ei orcing st el placement g welding R. nf a ee f d be m. de p. s P ei orcin st liel ndina p L 1.3.3.2 8 A 13 P ei orcin st liel ndina E bed d bolts or late Check classification and but not less than once fill but not less than once fill concrete. Verify per soils report and but not less than once fill concrete. Verify per soils report and but not less than once fill out not less than once fill concrete. Verify per soils report and but not less than once fill out not less than	d, on-site inspection is not tion of completion must be
Excavation extend proper Excavation extend proper e i o fill materials Class ication and testing of fill materials Class ication and testing of fill materials Class ication and testing of fill materials P suface area Verify per soils report an ompacted fill or concret Verify properly prepared site and subgrade 0	ing Official (IBC 1704.2.5.2)
Excavation extend proper Excavation extend proper depth and materials Class ication and testing of fill materials Check classification and testing of fill materials Depth and materials Check classification and but not less than once fill thickness and in-place ensities Verify properly prepared site and subgrade O. S. U. r. ei orcing st el placement	prior placement of
e i o fill materials Class ication and testing of fill but not less than once fill but not less than once fill thickness and in-place ensities Verify properly prepared site and subgrade O. S. U. r. l. ei orcing st el placement g. welding R. nf. a. ee f. d. be. m. de. p. s. w. D1.4, verify per soils report proncete. P. U. ACI 318 20, 25.2, 25.3, WS D1.4, verify ASTM 0. C. 1 17.8.2 P. ei orcin st. l. iel ndina p. 1 3.3.2.8 E bed d bolts or late C. C. 1 17.8.2 P. ei orcin st. l. iel ndina p. 1 3.3.2.8 E bed d bolts or late C. A. I.3 Verify resulted designant Concrete Constr. C. (Cl. 318, 19, 26.4.3, 26. 4.3) ASTM C. 17.2 Obtain at p. frequency as required to ests per mix but not mot truck load. Slump/slump flow E ach sample A. T. C. 4 m.) o. S. S. M. s. 3 (s.u.ap. p.ecified lump sh. l. designated consistes from the designated consistency from the designated co	b
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thickness and in-place ensities Verify properly prepared site and subgrade 0	
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	na additional tests when remet d (NWC) igent when a pir temperature is
��Co�ld w�ther�ingct' — -	curing period when daily

NERAL NOTES: Houston 0 515 23ro A Greeley, 0		FOUNDATION DESIGN: B: Soil 변화(Rition)와 해안 하는 나는 Herified by Port No.1 / Peresentative of the Geotech NR 배 단하네요! excavation.	c. C ncr te all b prop rtioned utilizi Type UII c ent. Concrete succeptible to freezing sh II be formulated for to maximum fost resistance in accordance with the ACI Manual of Concrete Pra ctice.	SHOP DRAWINGS: a. Fun ish one (1) repoducible and two (2) prints each of shop and erection da wirgs for conce te mix design, reinforcing	PRE-ENQUINERED METABLIGHT DENG acturer shall re a. Reservisions grand repot any disperancies or build modifications tregist send Colored in eProfessionabns	ding
	c, ASCE 7-16, eeley Design Criteria	excavauon.	d. Cont ractor shall notify engineer of atl or during concrete fanning.	steel, metal buildings, b. S <u>ulymitta</u> ls for pre- ស្ពាgineered ស្រាស្តាonents shall include	c.	
loor Loading:		- c. Follograderpropurationalisas ingesterbridal and rotification	ebal wearner and it can we contern the content of t	d. ୧୯୯୧ର ମଧ୍ୟ ଓଡ଼େଶ ଓଡ଼େଶ Pagi ଓଡ଼େଶ Destamped by a registered Colorado	Rne fangizationed metal building manufacturer:	shall speci
Live Load Slab on Grade	100 psi, 2000 lbs.	elements.	e.		anchor bolt dimensions, material, and setting dimer d. Pre-Unified to the third by the weighter su	nsions.
oof Loading: Dead Load	self psi 20 psi	d. Design of individual and continuous to tings is based on a small representation of the second continuous to tings is based on a small representation of the second continuous to tings is based on a small representation of the second continuous to tings is based on a small representation of the second continuous to tings is based on a small representation of the second continuous to tings is based on a small representation of the second continuous to tings is based on a small representation of the second continuous to tings is based on a small representation of the second continuous to tings is based on a small representation of the second continuous to tings is based on a small representation of the second continuous to tings is based on a small representation of the second continuous to tings is based on a small representation of the second continuous to tings is the second continuous to ting the second continuous tings is the second continuous to ting the second continuous tings is the second continuous tings in the second continuous tings is the second continuous tings in the second continuous tin	be placed with setting templates. the ACI Manual of Concrete Pactice. f. exposed edges and comersshall be chamfered 3/4".	c. Shop drawings shall not contract drawing plans or details.	d. PRE-ERGINEEN EN THERS GUISTAN & SASIF BE WEST SHEET SU	ch that
Live Load (minimum)		នុក្ខរដូស្ត្រ មុខៅភ្នំរៀសក្នុង depth and density noted in the soils report,	f. exposed edges and comersshall be chamfered 3/4". g. All anchor bolts for beam and olumn bearing plates shall h. <i>১৯মন্ডানিত্ত্বৰ ক্রমন্ত্রমন্ত্রমন্ত্র</i> কিন্তার ক্রমন্তর্ভাবিত কর্মান্তর্ভাবিত কর্মান্ত	supplier prior the submittal to the Contractor.	e. Seismic calculations should include permanen equipme loa ing.	t MEP
Ground Load, Pg Flat Roof Load, Pf	per building manuf.	Design of foundation walls is based on an equivalent fuid pressure of 275 pcf (passive). The soil friction coef cient for	 Ar itect. No horizontal joints shall be p mitted in concrete except where they normally occur or where noted. 	6	f. Pre-engineered metal building design shall include consideration for component and cladding loads on	
Ex sure Factor, Ce	ully exposed)	-		 The Contr ctor shall thooughly check, coordinate, stamp, date and initid each andevery shop drawing print prior to 		
Importance Factor, I	1.0 (Risk Category II)	footings on grade is GROUT:	All construction joints shall be prepared by roughening the surf ce of th concrete in an approved mahner such that	submittal to the Architect Engineer for review. Shop drawings, which do not meet these requirements, shall be	componentsperASCE7ornotedloadsabove.	
Thermal Factor, Ct nd Design Data:	1.0 (heated)		the aggregate shall be exposed unifon ly, leaving no	conside d incomplete and returned the Contractor without review.	g. Pre-engineered met building shall be designe wi following maximum allowable live load/wind load deflections:	ith the
Enclosure Class:	Enclosed	0.45.	1.	b	deflections: Member	
Basic Wind Speed, V3s (ult) Importance Factor, I Wind Exposue	15 mph 1.0 (Risk Category II) C	All grout beneath column base plat shall be non- hrink, "Embeco","Five-Star" or equal. All exposed grout, such as	laitance, loosened particl s or damaged concrete. Refer to mechanical and electrical drawings for location of	f. Conta ctor's equ t to viate from the contract documents shall be clearly identified by "Clouding" on the shop	Horizontal Vertical	ļ
rthquake Design Data: Imporance Facor, I	per Building Manufacturer 1.0 (Risk Categov II)			da wings.		
Spectal Acceleations	Ss= 0.15g; S1=0.05g	_			Rigid Fa me	
t Cl ss Spectral Responses Seismic Design Category		"Five-Star", or equal.			Endwal Frame Roof purlin	
Basic Force Resisting System						
S smic Response, Cs Response Modification, R Design Base Shear,		at machinery base plates shall be non-shrink, non-metallic,	all ipes, conduits, etc. Pipe or ducts one-third the slab or wall thickness shall not be placed in st uctural concrete unless specifically detailed.	 g. submitt shopdrawings shall cle rly identify ems which have beencorrected. h. Review of shop da wings by Structural Engineer is limited to 	/ L/ H/240 NIA L/240	
		to achieve the final completed struch.Jre. c. Obse rvation visits to the site by the	Pipe may pass through structural concrete in sleeves, but not be embedded therein.			
		The structural de wings illustrate the completed structu with all elements in their final positions, properly supported		general compliance ith the str tual design requirements. Review by Structual Engineer does not	Wall Girt L/240 NIA	
			where shown on drawings. n. Concrete reinforcement shall be		STRUCTURAL TESTS AND INSPECTIONS (I.B.C.):	
				LIGHT-GAGE COLD-FORMED STEEL:	duties, and responsibilities b. Special Inspections shall	
					a. In addition to the inspections required in Sect	ion 109

e. Plea e see the "Special In items requiring special ins
f. This Statement of Special

spection Sched e" for the types, extents, and fequency of s pections and structua I tests as part of this project. Inspections has been developed with the under tanding that pecific

job site to assure Inspectors are

sh tement of responsibility shall contain acknowledg ment of the special inspection requirements o nt ned within this "Statement of Special Inspections."

The Contractor shall notify the responsible Special Inspector that work is ready for

activities on the the Special

- Monitor special

- 1

- Perfonn inspections as required by IBC Section 110 and the local building code.

SPECIAL INSPECTION SCHEDULE

Class D (default) BDS= 0.16g; SD1= 0.08g Steel Moment Frame or Steel Braced Frame

Steel Braced Frame
per Building Manufacturer
per Building
per Building
Equivalent Lateral Force
shall conform to governing
determination of qu tities, lengths, or fit of materials.
c. Principal openings are shown on the drawings. See
Architectua I, Mechanical, and Electrical drawings for

b. Plans, sections, and details are not to be scaled for sleeves, curbs, inserts, etc.

and braced.

T e Conta ctor, in the proper sequence, shall provide
b. shoring and bracing as may be requie d during construction
not indude inspection of the shoring and bracing elements.

STRUCTHURAL STILENAL HILD all conform ASTM F159. Bolt size shall be 3/4", unless noted other ise on the dawings.

Provide washe rs per Manual of Steel
C S. HOPS (THE COUNTY OF THE PROVIDE COUNTY OF T

Element fc (psi) w/c max. air % Exposure

5 F2, SO, WO, C1

a. All light-gage steel members erected in accordance with

Members" and its "Standard for Cold-Formed
- General Provisions"

adequate bracing and as required by c. All members designated on the plans

from steel that conforms to ASTM 570-791 with a 50,000 psi minimum yield strength.

from steel that confo nns to ASTM A446 gr. psi minimum yield strength.

paint, or similar rust-inhibitive material, hot-dipped galvanized.

 $Specification for the \, Design \, of \, Cold\text{-}Formed \, Steel \, Structural$

 $m.\,Provide\,continuous\,shear\,keys\,at\,vertical\,cold\,joints\,and$

relieve the contractor from confonning to the contact documents. Struc ual Engin r is not responsible or omissions, quantities, or dimensions.

adequately suppot ed b oe concrete is pla d. It shall be secured against displacement within tolerances permitted in Section 1907.5.2 of the I.B.C.

REINFORCING STEEL:

- REINFORCING STEEL:

 W d Rein, Bas
 Reinforcing Bars.
 ASTM A615-79, Grade 60
 Reinforcing Bars.
 ASTM A615-79, Grade 60
 ASTM A615-79, Grade 6

re-entrant comers in slabs-on-deck, provide (2) #3 x 4'-0"

- Ligh-gage subcontractor shall provide bridging and b. blocking as required for stability and stiffness of the final d. អ្នំមានមុខការ ក្រុម ស្រាស់ ស្រាស់ អ្នក ស្រាស់ មួយ នេះ ស្រាស់ អ្នក ស្រាស់ អ្នក ស្រាស់ មួយ នេះ អ្នក ស្រាស់ មួយ អ្នក ស្រាស់ មួយ អ្នក ស្រាស់ អ្នក ស្រាស់ មួយ អ្នក ស្រាស់ អ្នក ស្រាស់ មួយ អ្នក ស្រាស់ អាស្រាស់ អ្នក ស្រាស់ អ្នក ស្រាស់ អ្នក ស្រាស់ អាស្រាស់ អាសាស្រាស់ អាស្រាស់ អាស្រាស់ អាស្រាស់ អាស្រាស់ អាស្រាស់ អាស្រាស់ អាស្រាស់ អាស្រាស់ អាស្រាស់ អាសាស្រាស់ អាសាស្រាស់ អាស្រាស់ អាស្រាស់ អាស្រាស់ អាស្រាស់ អាសាស្រាស់ អាសាស្រាស់ អាសាស្រាស់ អាសាស្រាស់ អាស្រាស់ អាសាស្រាស់ អាសាស្រាស អាសាស្រាស់ អាសាស្រាស់ អាសាស្រាស់ អាសាស្រាស់

Building Oficial, the Owner shall employ on or more
Special Inspectos who shall provide tests and inspections
during construction. See section 1703 for the qualifications,
1. Inspection of fabricators (certificate)
High Strength Bolts (IBC 1704.3.3, Periodic, bearing)

Details (Table 1704.4)
4 Masonry Construction (Table 1704.5.1, Level 1)
5. Soils (Table 1704.7)

d Unless noted otherv ise=U.N.Q
e. Discrepancies betweenda wings specifications shall be confirmed with Structual engineer and the Architect.

3. Concrete Construction
Materials {ACI



Footings
Walls ,5 , .45
Int. Slabs 4,000, NW 0.50
F0, SO, WO, C1

diagonal in slab.
d. Exc as noted on the dawings, minimum concr e protection 6 r reinforcement shall be in accordance with ACI

g. Only lightg age members 54 mil and thicker may be welded.
 h. All field we ded joints or ground areas shall be touched up with a similar rust-inhibitive material.

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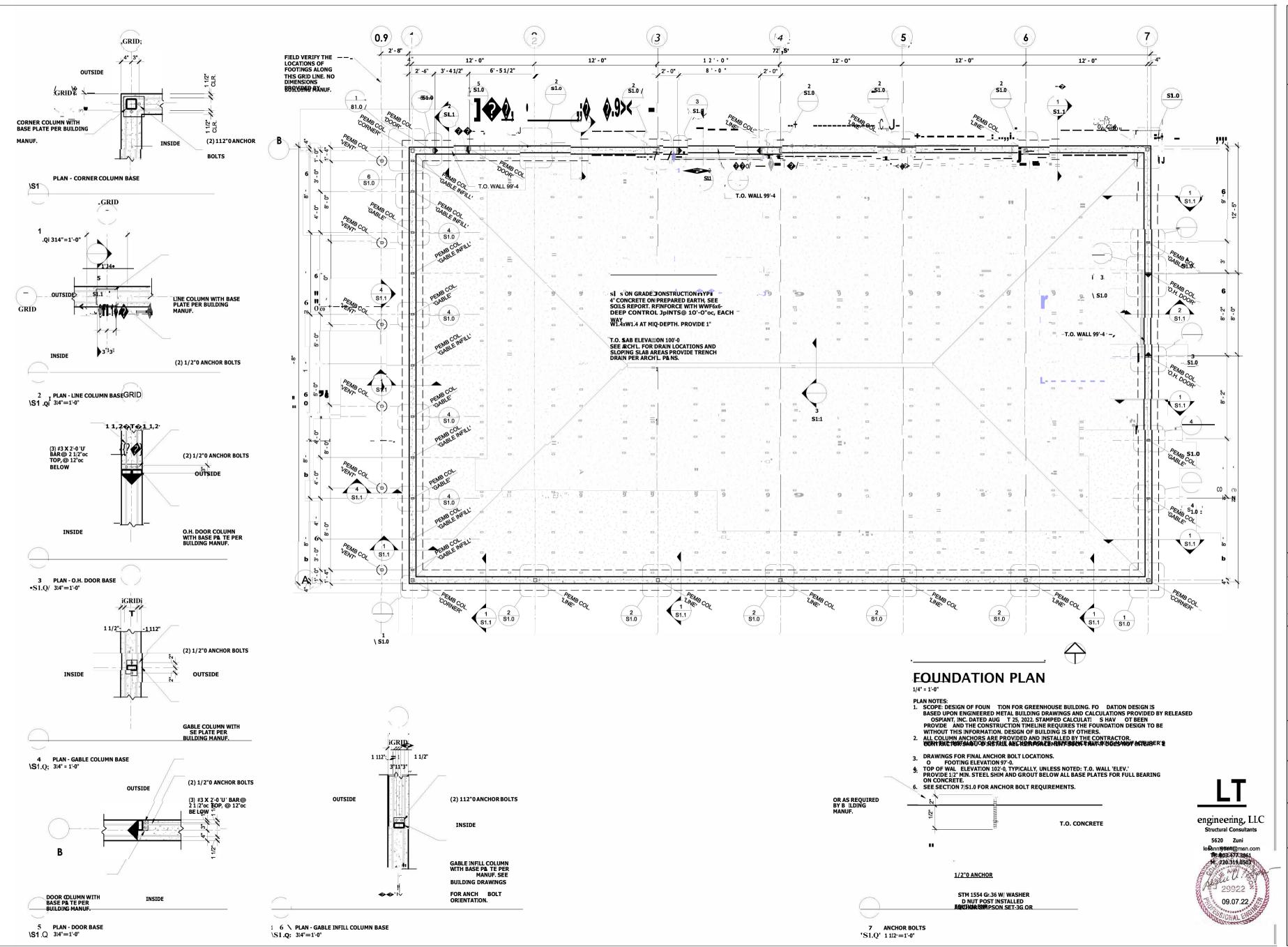
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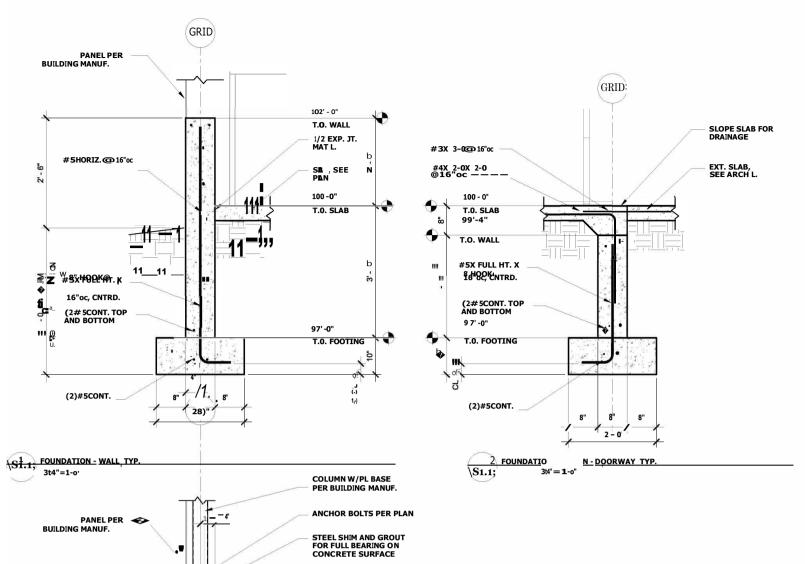
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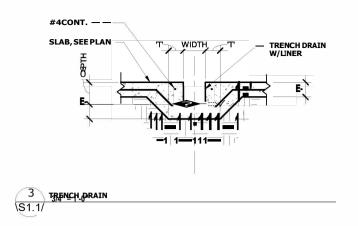
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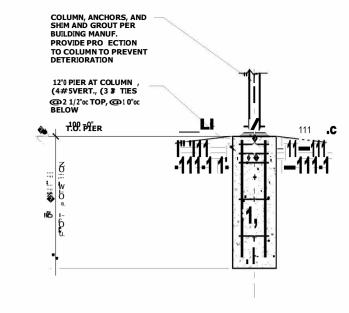
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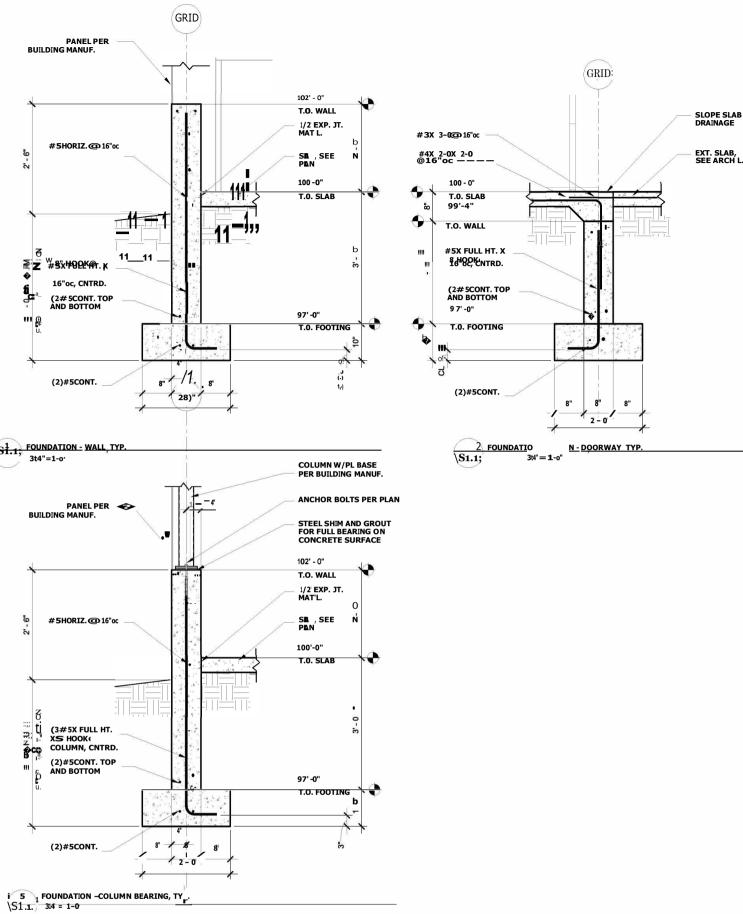
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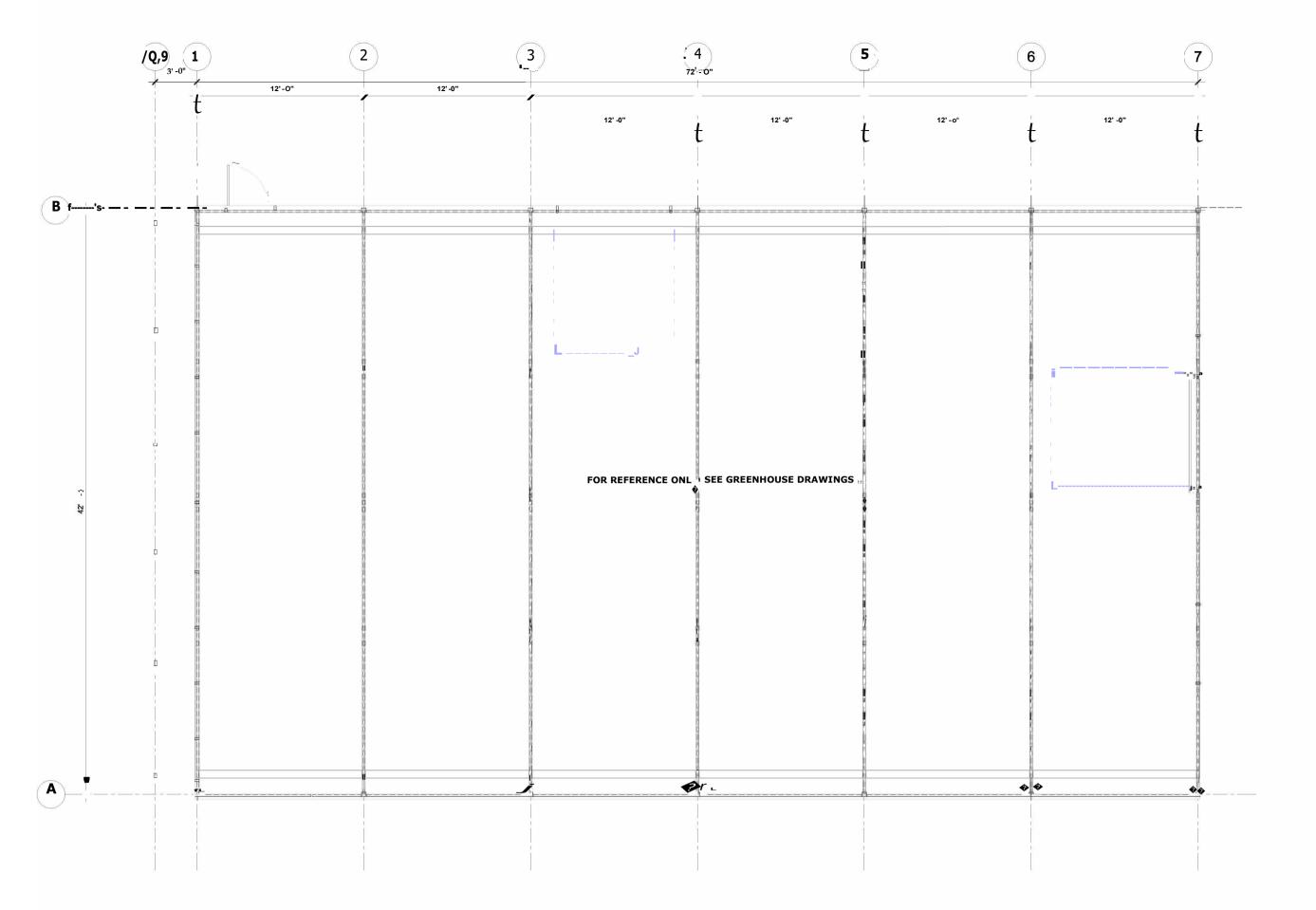
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Structural Consultants 5620Zuni S1reet





ROOF FRAMINGPLAN
.1/4" = 1'-0"





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- 1. ALL WORK INDICA ED ON THE DRAWINGS AND DESCRIBED IN THESE OUTLINE SPECIFICATIONS WILL B EXECUTED UNDER CONTRACTS BETWEEN OWNER, CENERAL CONTRACTOR AND MECHANICAL CONTRACTORS. COORDINATE WITH THE WORK BY OTHERS IN THE REVIEW OF SHOP DRAWINGS AND THE EXACT LUCATION OF RUUGH-INS FOR THEIR EQUIPMENT. COOPERATE IN THE SCHEDULING OF WORK AND IN THE USE OF SPACE. COORDINATE WORK AND RELATED TIEMS SUCH AS ROUGH-IN, BLOCKING AND STRUCTURAL SUPPORTS, GROUTING, ELECTRICAL ROUGH-IN, MECHANICAL ROUGH-IN, ETC.
- THE MECHANICAL CONTRACTOR SHALL OBTAIN ALL PERMITS PATENT RIGHTS, AND LICENSES THAT ARE REQUIREL FOR PERFORMING THE WORK UNDER ALL LAWS ORDINANCES, RULES AND REGULATIONS, OR ORDERS OF ANY OFFICER AND/OR GOVERNING BOUT, HAVING JURISDICTION FOR THE WORK UNDER THIS SECTION. THE CONTRACTOR SHALL GIVE ALL NOTICES NECESSARY IN CONNECTION WITH, PAY ALL FEES RELATING TO AND ALL COSTS AND EXPENSES INCURRED ON ACCOUNT OF THE WORK UNDER THIS SECTION. NO WORK SHALL BE COVERED BEFORE INSPECTION BY THE JURISDICTIONAL INSPECTOR AND THE OWNER'S REPRESENTATIVE.
- PRECAUTIONS SHALL BE EXERCISED AT ALL TIMES TO CONTROL DUST CREATED AS A RESULT OF ANY OPERATIONS DURING THE CONSTRUCTION PERIOD. IF SERIOUS PROBLEMS ARISE DUE TO AIR BURNE DUST, AND WHEN DIRECTED BY OWNER, OPERATIONS CAUSING SUCH PROBLEMS SHALL BE TEMPORARILY DISCONTINUED AND NECESSARY STEPS TAKEN TO CONTROL THE DUST. MAINTAIN GOOD HOUSEKEEPING PRACTICES TO REDUCE THE RISK OF FIRE DAMAGE AND INJURY TO WORKMEN. ALL SCHAM MATERIALS, RUBBISH AND TRASE SHALL BE REMOVED DAILY FROM IN AND ABOUT THE WORK AREA AND SHALL NOT BE PERMITTED TO BE SCATTERED TO ALDACENT AREAS A FIRE EXTINGUISHER SHALL BE AVAILABLE AT EACH TO CHICAGO AND THE WORK AREA AND SHALL BOTH FOR THE WORK AREA AND SHALL BUT AND ADDITION OF ANY RECTURN OF A COLUMN OF A PERMITTED TO BE SCATTERED TO ADJACENT AREAS. A FIRE EXTINGUISHER SHALL BE AVAILABLE AT EACH LOCATION WHERE CUITING OR WELDING OR CUITING WORK IS DUNK, INTERPOSED SHIELDS OF INCOMBUSTBLE MATERIAL, SHALL BE USEL TO PROTECT AGAINST FIRE DAMAGE DUE TO SPARKS AND HOT METAL. WHEN TEMPORARY HEATING DEVICES ARE USED, A WAICHMAN SHALL BE PRESENT TO COVER PERIODS WHEN DITHER WORKMEN ARE NOT ON THE PREMISES.
- 4. THE CONTRACT DUCCEVENTS ARE **DIAGRAMMATIC,** SHOWING CERTAIN PHYSICAL **RELATIONSHIPS**WHICH MUST BE ESTABLISHED WITHIN THE MECHANICAL WORK AND ITS INTERFACE WITH OTHER WORK. SUCH **ESTABLISHMENT IS THE** EXCLUSIVE **RESPONSIBILITY** OF **THE CONTRACTOR.** THE CONTRACT DOCUMENTS INDICATE **THE** AVAILABLE INFORMATION ON EXISTING UTILITIES AND SERVICES, AND ON NEW SERVICES TO BE PROVIDED TO **THE** PROJECT BY UTILITY COMPANIES AND AGENCIES.
- 5. THE EQUIPMENT AND MATERIALS INDICATED ON THE CONTRACT DOCUMENTS REPRESENT A STANDARD OF OLALITY TO BE MAINTAINED. SUBSTITUTIONS MAY BE SUBMITTED THE ENGINEER FOR REVIEW. ALL EQUIPMENT AND MATERIA'S SHALL BE NEW AND DAUGED AND INSTALLED BY ONLY QUALITIED PERSONNEL. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS, IN ADDITION TO ANY STATE AND LOCAL CODES THAT MAY APPLY. WORKMANSHIP: ALL LABOR SHALL BE CAREFULLY SKILLED FOR THIS KIND OF WORK, THOROUGH IN ALL RESPECTS AND UNDER THE DIRECTION OF A COMPETENT FOREMAN.
- 6. GENERAL SUBMITTAL REQUIREMENTS: COORDINATE SUBMITTALS SO THAT WORK WILL NOT BE DELAYED BY SUBMITTALS NO EXTENSION OF TIME WILL BE ALLOWED BECAUSE OF FAILURE TO PROPERTY COURDINATE AND SEQUENCE SUBMITTALS. DO NOT SUBMIT PRODUCT DATA, OR ALLOW ITS USE ON THE PROJECT, UNTIL COMPLANCE WITH THE REQUIREMENTS OF THE CONTRACT DUCUMENTS HAS BEEN CONFIRMED BY THE CONTRACTOR, SUBMITTAL IS FOR IN-GRMATION AND RECORD, UNLESS OTHERWISE INDICATED, PROVIDE PERMANENT MARKING ON EACH SUBMITTAL TO IDENTIFY USE PROJECT DATE, CONTRACTOR, SUBCONTRACTOR SUBMITTAL NAME AND SIMILAR INFORMATION TO DISTINGUISH IT FROM OTHER SUBMITTALS, INDICATE ANY PORTIONS OF WORK WHICH DEVIATE FROM THE CONTRACT DOCUMENTS EXPLAN THE REASONS FOR THE DESIGNATION OF WORK WHICH DEVIATE FROM THE CONTRACT DUCUMENTS EXPLAN THE REASONS FOR THE DEVIATIONS, SHOW HOW SUCH DEVIATIONS COUNDINATE WITH INTERFACING PURITURE OF OTHER WORK.

 SHOW CONTRACTORS EXECUTED REVIEW AND APPROVAL MARKING, PROVIDE SPACE FOR ENGINEERS "ACTION". MARKING, SUBMITIALS WHICH ARE RECEIVED FROM SOURCES OTHER THAN THROUGH CONTRACTORS OFFICE WILL BE RETURNED "WITHOUT ACTION," EXCEPT AS OTHERWISE INDICATED, SUBMITI SEX (6) COPIES WHERE A REQUIRED SUBMITIAL RELATES TO AN OPERATIONAL ITEM OF EQUIPMENT USED IN MORE THAN ONE SYSTEM, INCREASE THE NUMBER OF FINAL COPIES AS NECESSARY TO COMPLETE THE MAINTENANCE MANUALS FOR EACH SYSTEM, PROVIDE A PRELIMINARY, TWO—COPY SUBMITIAL FOR AUTOMATIC TEMPERATURE CONTROLS AND, WHEN PRODUCT DATA IS REQUIRED OR DESIRED BY CONTRACTOR, FOR SELECTION OF OPTIONS BY ENGINEER.

 PROVIDE ADDITIONAL DISTRIBUTION OF SUBMITTALS NOT INCLUDED IN FOREGOINS COPY SUBMITTAL REQUIREMENTS,

 TO SUBCONTRACTORS, SUPPLIERS, FABRICATORS, INSTALLERS GOVERNING AUTHORITIES AND OTHERS AS NECESSARY
 FOR PROPER PERFORMANCE OF WORK, INCLUDE SUCH COPIES IN TRANSMITTAL TO ENGINEER WHERE REQUIRED

 RECEIVE "ACTION" MARKING BEFORE FINAL DISTRIBUTION, SHOW SUCH DISTRIBUTIONS ON TRANSMITTAL FORMS
- EQUIPMENT FURNISHED UNDER THIS CONTRACT SHALL HAVE A PERMANENT LABEL CLEARLY INDICATING THE MAINTENANCE TO BE PERFORMED TO MAIN AN THE EQUIPMENT IN EFFICIENT OFERATING CONDITION.
 EQUIPMENT SUPPLIERS SHALL FURNISH THE FULL AND PARTIAL INFUL AND OUTPUT CAPACITIES TO ENABLE
 THE DETERMINATION OF COMPLIANCE WITH THE ENERGY CONSERVATION CODE
- SUBMIT THREE TYPED AND BOUND COPIES OF OPERATING AND MAINTENANCE MANUALS PRIOR TO SCHEDULING SYSTEMS **DEMONSTRATION** FOR **THE** OWNER. MANUALS SHALL HAVE NOEX WITH TAB DIVIDERS FOR EACH MAJOR EQUIPMENT SECTION TO FACILITATE LOCATING INFORMATION ON **A** SPECIFIC PIECE OF EQUIPMENT. **ALPHABETICAL** LIST OF SYSTEM **COMPONENTS,** WITH **THE** NAME, ADDRESS AND 24 HOUR TELEPHONE NUMBER OF THE COMPANY RESPONSIBLE FOR SERVICING EACH ITEM DURING THE FIRST YEAR OF OPERATION.
- DELIVERY AND STORAGE OF MATERIALS PROVIDE FOR THE SAFETY AND GOOD CONDITION OF ALL MATERIALS AND EQUIPMENT UNTIL FINAL ACCEPTANCE BY THE OWNERS REPRESENTATIVE PROTECT ALL MATERIALS AND EQUIPMENT FROM DAMAGE AND PROVIDE ADEQUATE AND PROPER STORAGE FACILITIES DURING THE PROGRESS OF THE WORK, REPLACE ALL DAMAGED AND DEFECTIVE WORK BEFORE FILING APPLICATION FOR FINAL ACCEPTANCE.
- 10 BEFORE SUBMITTING HIS BID, THE CONTRACTOR FOR THE WORK UNDER THIS SECTION SHALL CAREFULLY STUDY ALL DRAWINGS, AND SHALL MARE A CAREFUL EXAMINATION OF THE FREMISES. HE SHALL DEFINITELY DETERMINE IN ADVANCE, THE METHODS OF INSTALLATION AND CONNECTING THE APPARATUS AND THE MEANS TO BE PROVIDED FOR GETTING THE EQUIPMENT INTO PLACE, AFTER AWARD OF THE CONTRACT, NO SUBSEQUENT ALLOWANCES WILL BE MADE TO THE CONTRACTOR DUE TO HIS FAILURE TO COMPLY WITH THE ABOVE REQUIREMENTS AND ANY OTHER CONDITIONS AFFECTING THE INSTALLATION AND COMPLETION OF ALL WORK.
- 11. ACCURATELY RECORD ALL CHANGES TO THE CONTRACT DOCUMENTS ON ONE SET OF DRAWINGS. TRANSMIT THE INFORMATION TO THE ENGINEER.
- 12 FURNISH WRITTEN CERTIFIED GUARANTEL, IN ACCEPTANCE FORM, TO THE OWNER AGAINST DEFECTIVE WORKMANSHIP, MATERIALS AND OPERATING EQUIPMENT. IN ADDITION
 TO THE GUARANTEES REQUIRED ELSEWHERE, ALL WORK MATERIALS AND EQUIPMENT PROVIDED
 UNDER THE MECHANICAL SECTIONS SHALL BE GUARANTEED FOR A PERIOD OF (1) YEAR
 FROM THE DAY OF ACCEPTANCE OF THE WORK BY THE OWNER THE CONTRACTOR UNDER
 THIS GUARANTEE SHALL BE RESPONSIBLE FOR ALL DAMAGE TO ANY PART OF THE PREMISES
 CAUSED BY LEGUIPMENT AND MATERIALS FURNISHED UNDER THIS SECTION. PROVIDE CERTIFICATES FOR ALL EQUIPMENT HAVING WARRANTIES IN EXCESS OF 1 YEAR
- 13 ALL WORK AND MATERIA'S SHALL BE IN FULL ACCORDANCE WITE CURRENT SAFETY ORDERS OF THE DIVISION OF INDUSTRIAL SAFETY. THE NATIONAL FLECTRIC CODE, LOCAL BUILDING CODES, THE INTERNATIONAL MICHANICAL CODE, THE INTERNATIONAL BUILDING CODE AND OTHER APPLICABLE CODES, THE CITY OF LOVELAND, LAWS OR REGULATIONS OF HODIES LAWFULLY EMPOWERS AND HAVING JURISDICTION OVER THIS PROJECT, NOTHING IN THE PLANS OR THESE SPECIFICATIONS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODE:
- 14. RESULVE ALL QUESTIONS, DISCREPANCIES OR CONFLICTS WITH ENGINEER BEFORE ANY EQUIPMENT IS ORDERED, MATERIALS FABRICATED OR SYSTEMS INSTALLED.
- 15. PROVIDE IDENTIFICATION TAGS FOR ALL SCHEDULED EQUIPMENT.
- 16. COORDINATE THE INSTALLATION OF MECHANICAL SYSTEMS WITH OTHER TRADES AND PROVIDE OFFSEIS AS NECESSARY TO ACCOMMODATE STRUCTURE AND OTHER TRADES
- 17. PROVIDE ACCESS PANELS IN 1 CEILINGS **and/or** ductwork where required for acces ALL MOTORS CONTROLS, FIRE DAMPERS, SMOKE/FIRE DAMPLES, VALVES, AND BALANCING DAMPLES.
- 18. LEVEL ALL EQUIPMENT CURBS/BASES PRIOR TO INSTALLATION OF ANY EQUIPMENT.
- 19. SEAL ALL WALL AND ROUP PENETRATIONS WATERTIGHT WITH SIDICONE CAUCKING AND BACKER ROD U.L. CLASSIFIED AND FM APPROVED SEALANTS SHALL BE USED AT ALL PENETRATIONS OF RATED WALLS, CEILINGS AND FLOORS. PENETRATIONS OF THE ROUPING MEMBRANE SHALL BE COMPLETED. BY A GUALTIEE ROOFING CONTRACTOR TO MAINTAIN THE INTEGRITY OF THE ROOFING SYSTEM AND RELATED EXISTING WARRANTIES.

- 20. COORDINATE ALL THE MISCELLANEOUS SUPPORT AND FRAMING REQUIRED FOR THE MECHANICAL EQUIPMENT, PROVIDED BY OTHERS.
- 21. COORDINATE AND VERTY ALL OPENINGS IN STRUCTURAL WALLS, ABOVE CHILDICS, AND FLOORS WITH THE STRUCTURAL CONTRACTOR.
- 22. ALL SUPPLY AND RETURN DUCTWORK UNLESS SPECIFICALLY INDICATED SHALL BE IN ASTM A527 LOCK FRAMING QUALITY GALVANIZED SHEET METAL WITH ASTM A525 S90 ZINC COATING INSTALLED IN ACCORDANCE WITH CHAPTER 6 OF THE 2012 IMC AND THE SMACNA DUCT CONSTRUCTION STANDARDS, FOR PRESSURE CLASS "A" FOR 3" SPI AND ABOVE, CLASS "B" FOR 2" TO 3" SPI AND CLASS "C" FOR 0.5" TO 2" SPI, WITH "HARD CAST" SEALED JOINTS. THE USE OF PRESSURE SENSITIVE TAPE WILL NOT BE ACCEPTABLE. DIMENSIONS SHOWN ARE AIRWAY DIMENSIONS.
- 23. EXTERNALLY INSULATE ALL RECTANGULAR SUPPLY AND RETURN AIR DUCTWORK WITH MINIMUM 1.5°K DENSITY HERGLASS ALL INSULATION SHALL HAVE MINIMUM INSTALLED "R" VALUE OF 12.0, FLAME SPREAD RATING OF 25 OR LESS, SMOKE DEVELOPED RATING OF 50 OF LESS AND BE RATED FOR OPERATING TEMPERATURES.

 UP TO 250'F, LINE ALL EXHAUST, SUPPLY & RETURN DUCTWORK FOR 15 LF FROM FAN DUCT LINERS SHALL HAVE AN ACRYLIC COATING ON SURFACE IN CONTACT WITH THE AIR STREAM. DUCT WRAP SHALL HAVE AN ALLMINUM FOIL FACING.
- 24. ALL ROUND SA & RA DUCTS TO BE INSULATED WITH 1-1/2" "INSULSLEEVE" THAT HAS A FLAME SPREAD INDEX OF NOT THAN 25 AND A SMOKE DEVELOPED INDEX NOT MORE THAN 50 (ASTM E 84) WITH VAPOR HARRER (R VALUE = 8.0). DC NOT INSULATE EXPOSED SPIRAL DUCTWORK AND FITTINGS.
- 25. ALL DUCT PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS DEMISING WALLS TO HAVE APPROVED AUTOMATIC FIRE DAMPERS OF TO PROVIDE APPROPRIATE FIRE HALLS SHAFTS FOR ALL SUCF PENETRATIONS, VEHICL WITH LB.C/LM.C AND RESPECTIVE CITY.
- 26. ALL CONCEALED, ROUND SUPPLY AIR DUCTS 12° AND SWALLER SHALL BE GALVANIZED SHEET METAL SNAPHLOCK Round Supply duct creater than 12° shall be calvanized sheet metal spiral insulated **flexibleduct** may be used for **the** connection to **the** air outlet provided **the** length of **the** flexible duct does not exceed **6** linear feet
- 27, ALL BRANCH DUCT CONNECTIONS TO AIR OUTLETS AND AIR INLETS SHALL BE THE SAME SIZE AS THE DEVICE NECK UNLESS. SHOWN OTHERWISE ON THE DRAWINGS.
- 28 PROVIDE EQUIPMENT MIBRATION ISOLATION FROM STRUCTURE AND ASSOCIATED DUCT/PIPE SYSTEMS.
- 29 ALL BALANCING SHALL BE COMPLETED BY AN INDEPENDENT QUALIFIED AND CERTIFIED TECHNICIAN (TABB., NEBE OR SIMILAR) WITH FIVE (5) OR MORE YEARS EXPERIENCE IN ILISTING ALJUSTING AND BALANCING HVAC AND HYDRONIC SYSTEMS. ADJUST VALVES AND DAMPERS AS NECESSARY TO GREAT AND WATER QUANTITIES SHOWN. PROVIDE COMPLETE WRITTEN TEST AND BALANCE REPORT INDICATING QUANTITIES AT NEET AND OUTLET. USE VOLUME dampers for all registers for halancing of **the** systems. Air **distribution** shall be halanced FOR WITHIN 5% OF INDICATED VALUES.
- 30. Examine the areas to be excavated and the conditions under which the work is to be EXAMINE THE AREAS TO BE EXCAVATEL AND THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, MEMORY ALL ROCK AND BUOLDERS FROM EXCAVATION BEFORE INSTALLING MECHANICAL WORK. SLOPE SIDES OF EXCAVATIONS AS REQUIRED FOR STABILITY, OR PROVIDE NECESSARY SHORING, LOCATE AND PROTECT EXISTING UTILITIES AND OTHER UNDERGROUND WORK IN A MANNER WHICH WILL ENSURE THAT NO DAMAGE OF SERVICE INTERRUPTION WILL RESULT FROM EXCAVATION AND BACKFILLING, DO NOT INSTALL MECHANICAL WORK OF PROZEN EXCAVATION BASES OF SUB-BASES. MAINTAIN DRY EXCAVATIONS FOR MECHANICAL WORK BY REMOVING WATER FROM EXCAVATIONS. FROM INFLOW OF SURFACE WATER PUMP MINOR INFLOW OF GROUND WATER FROM EXCAVATIONS. STORE EXCAVATED MAIRRIAL (TEMPORARLY) IN ART THE EXCAVATION. RETAIN EXCAVATED MAIRRIAL WHICH COMPILES WITH THE REQUIREMENTS FOR BACKFILL MAIRRIAL. ON BACKFILL MAIRRIAL WHICH COMPILES WHEN HAS BEEN TESTED AND ACCEPTED. CONDITION BACKFILL MAIRRIAL BY EITHER DRYING OR ADDING WATER UNTO OKMEY TO FACILITATE COMPACTION TO ACCEPTABLE DENSITIES. BACKFILL MAIRMAL, UNIFORMLY COMPACTED USING POWER-DRIVEN OR HAND—OPERATED COMPACTION EQUIPMENT.
- 3". COORDINATE WITH THE GENERAL CONTRACTOR TO PROVIDE OPENINGS THROUGH CONCRETE FOR PIPE PENETRATION AND SIMILAR SERVICES BY CORE DRILLING AND SAWING REVIEW THE PROPOSED CUITING WITH THE INSTALLER OF THE WORK TO BE CUIT, AND COMPLY WITH HIS RECOMMENDATIONS TO MINIMIZE DAMAGE.
- 32 INSTALL IONIZATION TYPE SMOKE DETECTOR AND SAMPLING TUBE IN THE RETURN & SUPPLY AIR DUCT FROM THE RTU'S OR AHU'S (IF/WHERE INDICATED ON THE DRAWINGS). THE DETECTOR SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR AND SHALL HAVE AN AUXILIARY SET OF CONTACTS FOR CONNECTION TO THE FIRE ALARM CONTROL PANEL. THE DETECTOR SHALL BE WIRED TO SHOT DOWN THE UNITS SUPPLY FAN.
- 33. ALL DUCT, MIMING AND EQUIPMENT LOCATIONS INDICATED ON THESE DOCUMENTS ARE FOR REFERENCE ONLY AND SHALL BE USED AS A GUIDE. ALL ELEVATIONS AND FLOOR TO FLOOR HEIGHTS SHALL BE VERHILD PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY DUCT OR PIPING SYSTEM.
- 34. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE MECHANICAL REQUIREMENTS FOR ALL COLLING AND MAICHING OF EXISTING FACILITIES TO BE COMPLETED BY THE GENERAL CONTRACTOR OR OTHERS
- 35. USE ADJUSTABLE PIPE HANGERS ON SUSPENDED PIPE. ISOLATE HANGERS COMING IN CONTACT WITE BARE COPPER PIPE WITE DIELECTRIC HANGER LINERS. PROVIDE SUPPORTS BETWEEN PIPING ANI BUILDING STRUCTURE WHERE NECESSARY TO PREVENT SWAYING. CONFORM TO THE INTERNATIONAL PLUMBING AND MECHANICAL CODE FOR HANGER SIZES AND SPACING. DO NOT SUPPORT PIPE FROM OTHER PIPE OR DUCT SYSTEMS. INSTALL HANGERS AND SUPPORTS TO ALLOW CONTROLLED MOVEMENT OF PIPING. SYSTEM AND TO PERMIT PROPER MOVEMENT BETWEEN PIPE ANCHORS.
- 38. INSTALL PIPE, TUBE AND FITTINGS IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES WHICH INSTALL PIPE, TUBE AND FITTINGS IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES WHICH WILL ACHIEVE PERMANENTLY-LEAKPROOF PIPING SYSTEMS, CAPABLE OF PERFORMING EACH INDICATED SERVICE WITHOUT PIPING TAILURE. INSTALL EACH RUN WITH A MINIMUM OIL JOINTS AND COUPLINGS. BUT WITH ADEQUATE AND ACCESSIBLE UNIONS FOR DISASSEMBLY, MAINTENANCE OF REPLACEMENT OF VALVES AND EQUIPMENT. REDUCE SIZES BY USE OF REDUCING FITTINGS. INSTALL PIPING WITHOUT SPRINGING OF FORCING. SUPPORT PIPING INDEPENDENTLY AT EQUIPMENT SO ITS WHICH WILL NOT BE SUPPORTED BY THE EQUIPMENT. FURNISH ALL DEVICES NECESSARY FOR FINAL CONNECTION, INCLUDING BUT NOT LIMITED TO TAIL PIPING FOR AND SUPPINS. LOCATE PIPING RUNS EXCEPT AS OTHERWISE INDICATED VERTICALLY AND HORIZONTALLY. AVOID DIAGONAL RUNS WHEREVER POSSIBLE. OR ENTHORIZONTAL RUNS PARALLEL WITH WALLS AND COLUMN LINES. HOLD PIPING CLOSE TO WALLS, OVERHEAD CONSTRUCTION, COLUMNS AND OTHER STRUCTURAL AND PERMANENT—ENCLOSURE ELEMENTS OF THE BUILDING. LIMIT CLEARANCE OF 0.55 WHERE FURRING IS SHOWN FOR ENCLOSURE OF CONCEALMENT OF PIPING, BUT ALLOW FOR INSULATION THICKNESS, IF ANY WHERE POSSIBLE, CORE TO CONCEALMENT OF PIPING, BUT ALLOW FOR INSULATION. WHEREVER PUSS BLE IN HINISHED AND COCUMPED SPACES, CONCEAL PIPING FOR THE FORM OF ABOVE. 4P NG FROM VI-W BY LOCALING IN COLUMN ENCLOSURES, IN HOLLOW WALL CONSTRUCTION OF ABOVE
- 57. FLUSH OUT PIPING SYSTEMS WITH CLEAN WATER BEFORE PROCEEDING WITH THE REQUIRED TESTS PROVIDE TEMPORARY EQUIPMENT FOR ILSTING INCLUDING POWER AND GAUGES. TEST PIPING SYSTEM BEFORE INSULATION IS INSTALLED WHEREVER FEASIBLE. TEST EACH NATURAL SECTION OF EACH PIPING SYSTEM INDEPENDENTLY, BUT DO NOT USE PIPING SYSTEM VALVES TO ISOLATE SECTIONS WHERE TEST PRESSURE EXCEEDS VALVE PRESSURE RATING. FILL EACH SECTION OF WATER DRAIN OR VENT PIPING WITH WATER AND PRESSURZE FOR TWO HOURS AT 150% OF OPERATING PRESSURE, BUT NOT LESS THAN SCIPSOF FOR PRESSURZE PIPING AND TEN FEET FOR DRAIN AND VENT PIPING. TEST FAILS IF LEAKAGE IS OBSERVED ON IF PRESSURZE DROPE EXCEEDS 5% OF TEST PRESSURZE. REPAR PIPING SYSTEMS SECTIONS WHICH FAIL BY DISASSEMBLY AND RE-INSTALLATIONS, USING NEW MATERIALS TO THE EXTENT REQUIRED TO OVERCOME LANGUAGE. DO NOT USE CHEMICALS STOPHERA COMPOUNDS, MASTICS OR OTHER TEMPORARY REPARK METHOUS. AFTER TESTING AND REPARK WORK HAVE BEEN COMPOLITED, DRAIN TESTIVATED WATER FROM PIPING SYSTEMS. WATER FROM PIPING SYSTEMS.
- 38 FILL ALL DUMESTIC WATER LINES WITH A CHLORINE WATER SOLUTION OF 50 PARTS PER MILLION, MINIMUM. HOLD SOLUTION IN PIPE FOR AT LEAST 24 HOURS. OPEN AND CLOSE ALL VALVES 3 TIMES DURING CHLORINATION. WASTE CHLORINE SOLUTION FROM EACH OUTLET. MEASURE SOLUTION AT END. IF NOT 10 PPM, REPEAL. ALL NEW POTABLE WATER SYSTEMS SHALL BE CLEANED AS HERE'N SPECIFIED PRIOR TO TESTING OF APPLICATION OF INSULATION. COMPLY WITH CITY OF LOVELAND, CO. STANDARDS OR LARIMER COUNTY DEPARTMENT OF HEALTH REQUIREMENTS WHICHEVER IS MORE STRINGENT.
- 39 <u>BALL VALVES 1" AND SMALLER</u>: MIBOO 1585 (THREADED ENDS) OR NIBOO 5585 (SOLDERED ENDS), RATED FOR 150 PSI NON-SHOCK WOO 2-PIECE CAST BRONZE BODIES, THE SEAT, FULL PORT, BRONZE TRIM, BLOWOUT PROOF STEMS BRASS/BRONZE BALL. VALVE ENDS SHALL HAVE FULL DEPTH ANSI THREADS OR EXTENDED SOLDER

CHECK VALVES 2 1/2" AND SMALLER: NBCO T413 (THREADED ENDS) OR NBCO S413 (SOLDERED ENDS) Y-PATTERN HORIZONTAL SWING-TYPE, CLASS 125, RATED FOR 200 PSI WOG BRONZE ASIM B-62 BODY

- 40. INSTALL VALVES WITH STEMS POINTING UP, AND AS CLOSE TO VERTICAL AS POSSIBLE. INSTALL VALVES AT EACH PIECE OF EQUIPMENT, FIX URE OF APPLIANCE SC THAT THE SUPPLY AND RETURN SERVICES CAN BE SHUT OFF TO REMOVE THE TIEM WITHOUT DISTURBING THE PIFING SYSTEM. INSTALL VALVES WHERE REQUIRED FOR PROPER OFFICIALION OF PIPING AND EQUIPMENT INCLUDING VALVES IN BRANCE LINES TO ISOLATE SECTIONS OF PIPING WHERE BRANCE FLOW IS MORE THAN 10% OF THE TOTAL
- 41. NATURAL GAS PIPING ABOVE GROUND 2" AND SMALLER SHALL HE SCHEDULE 4C BLACK STEE SCREWED WITH 150 LB. MALLEABLE IRON, THREADED FITTINGS. NATURAL GAS ABOVE GROUND OVER 2° SHALL BE SCHEDULE 40 HEACK STELL, PLAIN END WITE STANDARD WEIGHT, BUTL WELD FITTINGS - REMOVE CUTTING AND THREADING BURRS BEFORE ASSEMBLING PIPING. DO NOT INSTALL DELECTIVE PIPING OR FITTINGS DO NOT USE PIPE WITH THREADS WHICH ARE CHIPPED, STRIPPED ON DAMAGED. USE TEFLON TAPE ON MALE PIPE THREADS. PLUG EACH GAS QUITET INCLUDING VALVES WITH A THREADED PLUG OR CAP IMMEDIATELY AFTER INSTALLATION, AND RETAIN UNTIL CONTINUING PIPING OF EQUIPMENT CONNECTION IS COMPLETED. AFTER ROUGHTIN OF PRIOR TO INITIAL OPERATION, TEST AND PURGE GAS PIPING IN ACCORDANCE WITH INTERNATIONAL PLUMBING CODE. TEST PIPING SYSTEM AT 100 PSIG. REPAIR OF REPLACE PIPING AS REQUIRED TO ELIMINATE LEAKS AND RELEST. AFTER EQUIPMENT INSTALLATION, TEST ALL PIPING AND VALVES UP TO GAS REGULATOR WITH "U" TUBE MANOMETER AT 10 PSIG. PAINT ALL PIPING EXPOSED TO THE ELEMENTS. 42. DOMESTIC WATER PIPING:
- ABOVE GROUND INSIDE BUILDINGS, SIZE 4" AND UNDER SHALL BE COPPER TUBE, HARD TEMPER, TYPE "L" PIPE WITH WROUGHT COPPER, OR CAST BRONZE BITTINGS AND ANTIMONY FREE AND LEAD FREE SOLDER. BELOW GROUND, SIZE 2" AND UNDER SHALL BE COPPER TUBE, ANNEALED, TYPE "K" PIPE WITH WROUGHT COPPER, BRAZED FITTINGS.
- 43. COMPRESSED AIR PIPING SHALL BE TYPE K COPPER TUBE WITH WROUGHT COPPER FITTINGS. AIR COMPRESSORS, ASSEMBLY AND ASSOCIATED PIPING SPECIALTIES JESIUMEJ, FURNISHED AND
- 44. SOIL AND VENT PIPING: ABOVE AND BELOW GROUND SHALL BE SCHEDULE 40 PVC WITH SOLVENT GLUED FITTINGS AND JOINTS IF LOCATED IN A RETURN AIR PLENUM SHALL BE CAST INON NO HUE NEOPRENE CASKET AND STAINLESS STEEL SLEEVE JOINT.
- 45. STORM/ROOF DRAINAGE PIPING: ABOVE GROUND SHALL BE CASTERON NO HUB NEOPRENE CASKET AND STAINLESS STEEL SLEEVE JOINT BELOW GROUND SHALL BE SCHEDULE 40 PVC WITH SOLVENT GLUED FITTINGS AND JOINTS.
- 46. INSTALL FULL SIZE CONDENSATE DRAIN WITH TRAP SEAL DEPTH EQUAL TO 1.5 x UNIT TOTAL STATIC PRESSURE FOR FACE COOLING COIL, DO NOT DIRECT CONNECT CONDENSATE DISCHARGE IC WAS'L DRAIN OF VENT.
- CLEAR AND DRY PIPE SURFACES PRIOR TO INSULATING. EXTEND PIPING INSULATION WITHOUT INTERRUPTION
 THROUGH WALLS FLOORS AND SIMILAR PIPING PENETRATIONS, EXCEPT WHERE OTHERWISE INDICATED. INSTALL
 PROTECTIVE SHEETMETAL SHIELD AROUND BOTTOW HALF OF PIPE INSULATION AT EACH PIPE SUPPORT
 SUFFICIENT TO PREVENT CRUSH ME OF THE INSULATION. AT CONTRACTORS OPTION, INSTALL PRE-MANUFACTURED
 HEAVY DENSITY PIPE SHIELDS IN LIEU OF PIPE INSULATION AT EACH PIPE SUPPORT. EXCEPT AS NO.LD,
 COVER VALVES, FLANGES FITTINGS AND SIMILAR THINGS IN FACE PIPING SYSTEM WITH EQUIVALENT
 HICKNESS AND COMPOSITION OF INSULATION AS APPELED TO ADJOINING PIPE RUN. DO NOT
 COVER VALVE OPERATORS. THREADED ON SOLDER JOINT STRAINERS ON BLOWDOWN END OF STRAINERS.
 MARK LOCATION OF UNIONS AND FLANGES COVERED BY INSULATION WITH PERMANENT PAINT OF TINK
 HAINTED STENGEL ON APPROVED LABEL. MAINTAIN INTEGRITY OF VAPOR—BARRIER JACKETS ON INSULATION
 OF COLD PIPES AND PROTECT TO PREVENT PUNCTURE OR OTHER DAMAGE. INSULATION ON PIPE
 WITHOUT STITUMS INSULATION. SEAL ALL TRAINSVERS JOINTS WITH ABJESTME. PROVIDE COMPOSITE
 INSTALLATION (INSULATION, JACKET, COVERING, SEALER, MASTIC AND ADHESIVE) COMPLYING WITH THE
 FOLLOWING: FLAME SPREAD 25 OR LESS. SMOKE DEVELOPED: 50 OF LESS. METHOD ASIM E84
 (NFPA 255). FIBERGLASS PIPE INSULATION: SCHULLER MICRO-LOK 850, HEAVY DENSITY PIPE INSULATION
 WITH AP-T JACKET. FIBERGLASS FITTING INSULATION: SCHULLER TIPES.

 WITHOUT STITUM OF THE INSULATION INSPRIL. DOMESTIC HOT WAS BE PIPHING (ABOVE GRADE): 2° AND
 SMALLER PIPHING: 1° TIBLINGLASS 2-1/2° AND LARGER PIPHING: 1-1/2° FIBERGLASS, RUNOUT PIPHING UP TO 2° NOT
 EXCEPTING 12 FEET IN LENGTH 1/2° FIBERGLASS. DOMESTIC COLD WATER PIPHING (ABOVE GRADE): ALL SIZES = 1/2°
 HIBERGLASS. ROOF DRAIN BOWLS AND DOWN LEADERS: 1° HIBERGLASS. 47. CLEAN AND DRY PIPE SURFACES PRIOR TO INSULATING. EXTEND PIPING INSULATION WITHOUT INTERRUPTION
- 48 MAINTAIN ALL REQUIRED CLEARANCES FOR OLLISIDE AIR INTAKES AND EXHAUST/VENTILATION AIR INTERIS

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OO NOT SCALE DRAWINGS FOR DIMENSIONS



PO Box 684 LaSalle, CO 80645 303.906.2617



DATE

09.07.22

REVISIONS

SHEET TITLE **GENERAL NOTES**

SHEET NUMBER

MEP, Civil & Environmental Engineering Services 7355 Greenridge Rd - Suite B - Windsor, CO 80550 (S16) 547-5714 - www.pivotalengwest.or

Project No. 22-043

37

GENERAL NOTES

- 1. UPON COMPLETION OF JOB, FURNISH DANER COMPLETE OFFRAHON AND MAINTENANCE MANUALS, MEET WITH OWNER OR DWNER'S REPRESENTATIVE TO INSTRUCT ON OPERATIONS PROCEDURES.
- 2. COORDINATE EXACT LOCATIONS AND ELEVATIONS FOR ALL PLUMBING PIPING SYSTEMS AND EQUIPMENT WITH STRUCTURE FOUNDATION AND ALL OTHER TRADES AS REQUIRED.
- 3. ALL WORK IS TO BE IN COMPLIANCE WITH THE CITY OF GREELEY BUILDING CHPARIMENT THE INTERNATIONAL PLUMBING CODE. AND THE INTERNATIONAL BUILDING AND MECHANICAL CODES.
- 4. REINFORCEMENT OF STRUCTURE FOR ALL NEW EQUIPMENT IS TO BE DESIGNED, PROVIDED AND INSTALLED BY OTHERS.
- 5. MAINTAIN MINIMUM $10^{\circ}-0^{\circ}$ separation between plumbing vents and outside air inlets.
- 6. PLUMBING PLANS ARE DIAGRAMMATIC AND SCHEMATIC IN NATURE, COORDINATE ALL PIPE ROUTING AND EQUIPMENT LOCATIONS WITH STRUCTURE, FIELD VERIFY REQUIREMENTS.
- 7. ALL PLUMBING EQUIPMENT & MATERIALS SELECTIONS SCHEDULED ON THESE DRAWINGS ARE USED FOR THE DESIGN BASIS OF THE PLUMBING SYSTEMS, MANUFACTURER SUBSTITUTIONS OF EQUIPMENT & MATERIALS MUST ACQUIRE THE ENGINEER'S APPROVAL AT OR BEFORE THE EQUIPMENT SUBMITTAL PHASE OF PROJECT.

PLUM	IBING FIXTURE SCHEDULE
TAG	DESCRIPTION
UH-1	UNIT HEATER (PROVIDED BY DITHERS). MFG. LENNOX MODEL LF2S-200A ALUMNIZED STEEL UNIT HEATER. 200MBH INPUT, 133MBH OUTPUT AT 5000', FROMDE \(\begin{align*} \text{FLEXIBLE} \\ \text{CONNECTOR, CAS SHUT OF VALVE AND 6" BODD FEG. PROVIDE HORIZONIAL UPSIDER WHIT KIT INCLUDING HORIZONIAL DRAIN SECTION, WALL THINBLE AND TERMINATION TEE. CONNECT PACTURING TO HORIZONIAL DRAIN AND DISCHARGE TO AN APPROPRIATE LOCATION. \(\begin{align*} \text{TOX MPE, 1.75MP, 6' FLUE. \end{align*} \)
RPBP-1	REDUCED PRESSURE BACKFLOW PREVENTER (SHEENHOUSE WET WALL) Wikins wodel 875x12-s. Low-lead Size 1°Cm, provide model ac-5 air cap fitting. (Or approved Equal)
WPRV-1	WATER PRESSURE REDUCING VALVE WILKINS MODEL 600XI, BRONZE 600X, STAINLESS STEEL DIAPHRAGM AND DISC. 1°0W (OF APPROVED EQUAL)
TD-1	TRENCH DRAIN WATTS MODEL DEAD LEVEL P. 30' LONG x 6" WIDE IN MULTIPLE SECTIONS, 1/8" FRE—SLOPED COMPOSITE TRENCH WITH RADIUS BOTTOM, STEEL ANGLE FRAME, END/SIDE OUTLET, GRATE LOCK DOWN ASSENSITY, DUCTLE IBON GRATE. (O: APPROVED EQUAL)
AD-1	AREA URAIN Zurn, wodel z662—HF-YA, 16°X16°, dura-coated cast iron body drain with ductile fron top, bottom outlet, and sediment bucket, sizing per plans, (or approved equal)
GPRV-1	CAS PRESSURE REDUCING VALVE MAXIFOR, MODEL 325 OR 210, 2.005 CAS TO 11° M.C. WITH VENT PROTECTOR FOR OUTDOOR APPLICATIONS, AND VENT JUNTER FOR INDOOR APPLICATIONS, SIZING PER PLANS, (OR APPROVED EQUAL)
FCO	FLOOR CLEANOUT ZURN, MODEL ZN-1400 WITH NICKEL BRONZE TOP IN FINISHED AREAS. (OF APPROVED EQUAL)
GCO	GRADE CLEAN-CUIT U.R. SMITH, MODEL 4023, CAST RON WITH DOUBLE FLANDED HOUSING AND SECURED SCORIATED CAST ROH COMER WITH LIFTING DEVICE, (OR APPROMED EQUAL)

DESIGN CRITERIA

PROJECT SITE: GREELLY, COLORADO 2018 INTERNATIONAL BUILDING CODE 2018 INTERNATIONAL MECHANICAL CODE 2018 INTERNATIONAL PLUMBING CODE CODES: 2018 INTERNATIONAL FUEL GAS CODE 2018 INTERNATIONAL ENERGY CONSERVATION CODE

DRAWING INDEX NUMBER DRAWING TITLE GENERAL MECHANICAL NOTES AND OUTLINE SPECIFICATIONS. . . . P-0 GENERAL NOTES, LEDEND, SCHEDULES AND DIAGRAMS. . . . DOMESTIC WATER AND GAS PLAN . . . P-1.0 | • | • MECHANICAL FLOOR PLAN

LEGEND SANITARY SEWER VENT PIPING GREASE SANITARY SEWER PIPING SANITARY SEWER PIPING DOMESTIC COLD WATER PIPING DOMESTIC HOT WATER PIPING NON POTABLE WATER PIPING NATURAL GAS PIPING EXISTING PIPING PIPE CAP GAS COCK INCREASER/REDUCER CHECK VALVE BALL VALVE PRESSURE REDUCING VALVE RELIEF VALVE REDUCED PRESSURE BACKFLOW PREVENTER PIPE OFFSET UP PIPE OFFSET DOWN _x * (MINIMUM PIPING SLOPE IN DIRECTION OF FLOW PIPE ELBOW DOWN PIPE ELBOW UP TEE OFF BOTTOM OF PIPE TEE OFF TOP OF PIPE • POINT OF NEW CONNECTION ABOVE FINISHED FLOOR WALL CLEAN-OUT FLOOR CLEAN-OUT GRADE CLEAN OUT VENT THROUGH ROOF ##0000 F CHEEN COLD WATER HOT WATER EXISTING NEW - SHEET NUMBER

PROJECT NOTES

- . PLUMHING CONTEMPTOR TO COORDING E ANY PLOMBING DESIGN CONFLICTS WITH MECHANICAL ENGINEER, ASCHIECT & STRUCTURAL ENGINEER VIA REQUEST FOR INFORMATION OR SUBMITTAL PACKAGE PRIOR TO FARRICATION AND
- PROVIDE ISOLATION AS REQUIRED BY THE INTERNATIONAL BUILDING CODES FOR ALL PIPING PENETRATIONS THROUGH THE FLOOR SLAB.

engineering WEST MEP, Civil & Environmental Engineering Services 7355 Greenridge Rd. Suite D Windson, CO 30550 (816) 647-8714 www.prvotalengwest.com

DO NOT SCALE DRAWINGS FOR DIMENSIONS

Greenhous Ave. Gardens 23rd Greeley, 2 2 ouston H



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DATE

09.07.22

REVISIONS

SHEET TITLE LEGEND, INDEX, NOTES AND SCHEDULES

SHEET NUMBER

P-0

GENERAL CONSTRUCTION NOTES:

- 1. GAS PIPING SHALL BE INSPECT OF TESTED AND PURGED AS PER 2018 IFGC SECTION 406. ALL METALLIC GAS PIPING SHALL BE COATED WITH A CORROSION INHIBITOR.
 2. CONTRACTOR SHALL VERIFY GAS SUPPLY AVAILABLE FOR GREENHOUSE. IF THE AVAILABLE GAS SUPPLY PRESSURE IS LESS THAN 7000 THEY SHALL CONTACT ENGINEER FOR RESOLUTION BEFORE PROCEEDING.
 3. SCHEDULE 40 STEEL PIPE IS THE DESIGN BASIS. CORRUGATED STAINLESS STEEL PIPE IS NOT ALLOWED.
 4. ALL HORIZONTAL AND VERTICAL GAS PIPING SHALL BE SUPPORTED AS PER 2018 IMC TABLE 305.4
 5. LOCATION OF DOMESTIC WATER ENTRY POINT AND NATURAL GAS ENTRY POINT IS SCHEMATIC IN NATURE. CONTRACTOR SHALL COORDINATE WITH CIVIL FOR EXACT LOCATIONS.

KEY NOTES

(THIS SHEET ONLY)

EVAPORATIVE PAD WALL-BY OTHERS.

1" BUILDING SERVICE FROM METER AND TAP. SEE CIVIL FOR CONTINUATION.

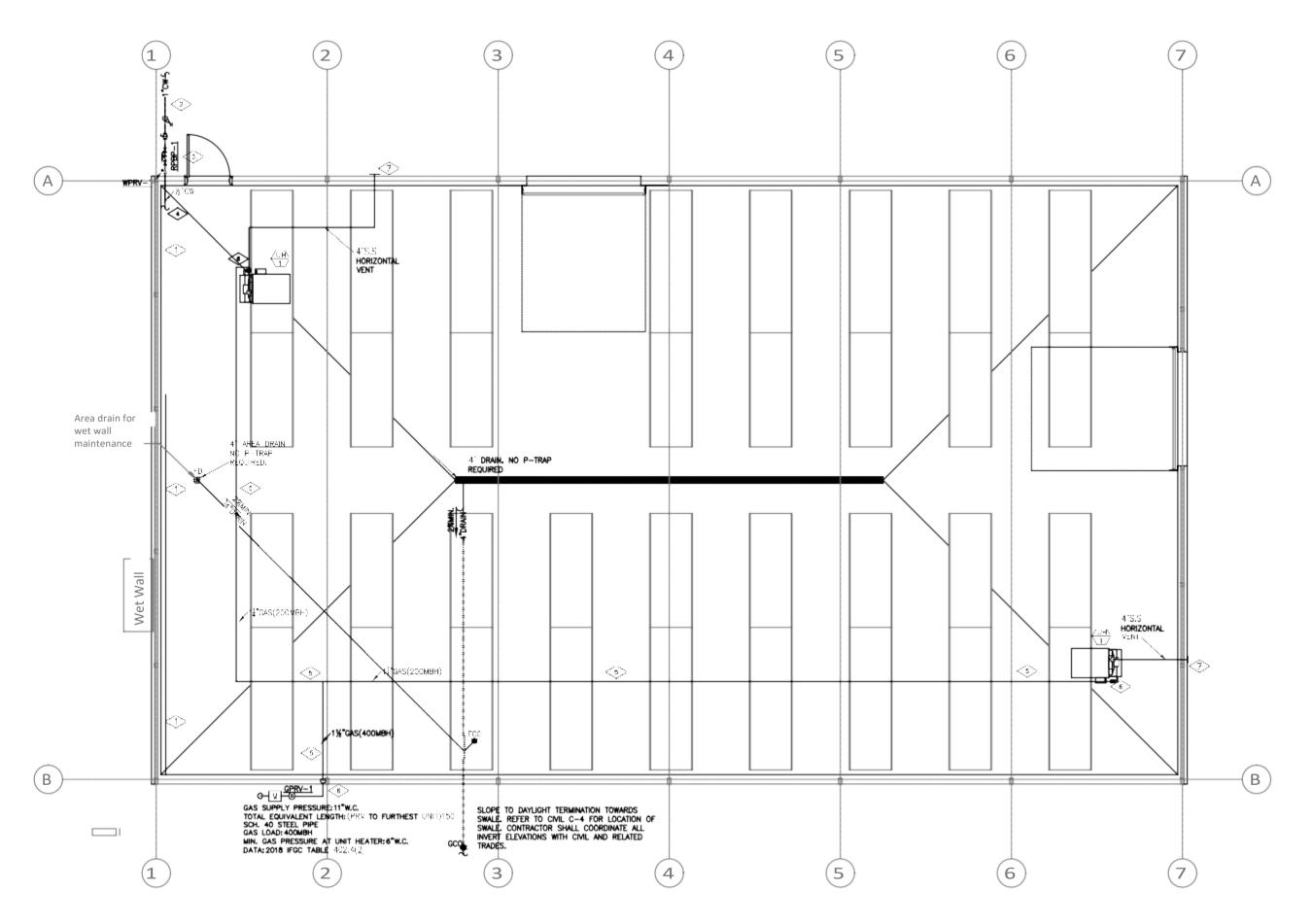
PROVIDE DRIP FUNNEL BELOW RPBP AND ROUTE FULL-SIZE DRAIN PIPING TO DRAIN. PROVIDE AIR-GAP FITTING.

CONNECT TO MAKE UP VALVE AS PER MEC'S INSTALLATION INSTRUCTIONS.

RUN GAS PIPING AS HIGH AS PRACTICAL AND SUPPORT FROM STRUCTURE. DO NOT ATTACH GAS PIPING TO CONDUIT, VENTS, CABLE TRAYS ETC.

CONNECTIONS TO EQUIPMENT SHALL INCLUDE UL RATED F FLEXIBLE CONNECTOR, δ' DRIP LET AND GAS SHUT-OFF VALVE.

install with stainless steel horizontal vent kit including wall thimble and termination tee, vent termination shall be 10' horizontally or 3' above any OPENINGS INTO GREENHOUSE.





DOMESTIC WATER, DRAIN AND GAS PLAN SCALE = 1/4" = 1"-0"



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Greenhous Ve A Gardens 515 23rd Greeley, 23rd 9 ouston

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DATE

09.07.22

REVISIONS

SHEET TITLE

DOMESTIC WATER, DRAIN AND GAS PLAN

SHEET NUMBER

P-1.0

- GAS PIPING SHALL BE INSPECTED. TESTED AND PURGED AS PER 2018 IFGC SECTION 406. ALL METALLIC GAS PIPING SHALL BE COATED WITH A CORROSION INHIBITOR.
 ALL VENT TERMINATIONS SHALL BE 10' HORIZONTALLY OR 3' VERTICALLY ABOVE ANY OPENINGS INTO BUILDING.
 INSTALL VENT PIPING AS PER MEC'S INSTALLATION INSTRUCTIONS.

- KEY NOTES (THIS SHEET ONLY)
- INSTALL WITH STAINLESS STEEL HORIZONTAL VENT KIT INCLUDING WALL THIMBLE AND TERMINATION TEE. VENT TERMINATION SHALL BE 10' HORIZONTALLY OR 3' ABOVE ANY OPENINGS INTO GREENHOUSE.
- install pvc tubing to horizontal drain section discharge and route to approved location.

DO NOT SCALE DRAWINGS FOR DIMENSIONS





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09.07.22

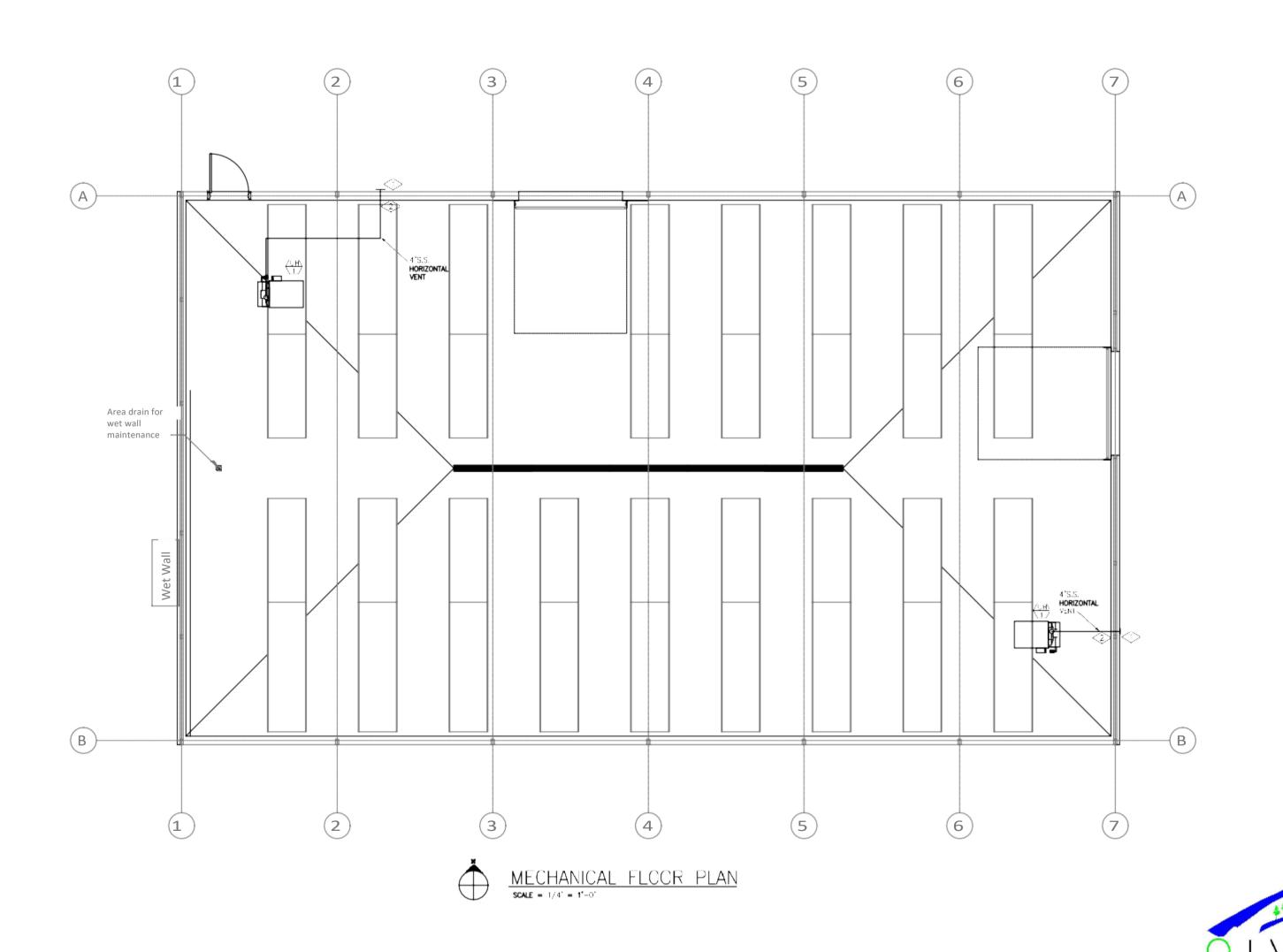
REVISIONS

SHEET TITLE MECHANICAL FLOOR PLAN

SHEET NUMBER

engineering WEST MEP, Civil & Environmental Engineering Services 7355 Greenridge Rd., Suite B. Windson, CO 80550 (S16) 547-5714 vzevz.pivotalengszest.com

M-1.0



ELECTRICAL SPECIFICATIONS

The scope of the work covered Perein consists of furnishing all labor, materials, necessary equipment and services to complete the Electrical Work and related work in full accordance as indicated on the drawings as specified herein or both and subject to the terms and conditions of the Contract.

Electrical Contractor is generally responsible to insure all work, both old and new, complies with the NEC. and any applicable local and state codes and ordinances.

Drawings are diagrammatic and indicate the general arrangement of systems and work included in the contract. Drawings are not to be scaled. The Architectural drawings and details shall be examined for exact location of fixtures and equipment. Any conflict shall be immediately brought to the attention of the Architect or Engineer before proceeding with the work.

Materials or products specified herein and/or indicated on drawings by trade name, manufacturer's name or catalog number shall be provided as specified.

Gooderation With Other Trades

The Subcontractor shall give full cooperation to other trades and shall furnish in writing to the contractor, with copies to the Engineer, any information necessary to permit the work or all trades to be installed satisfactorily and with the least possible interference or deay. Coordinate all conduit runs and equipment satisfactorily and with the least possible interference or delay. Coardinate all conduit runs and equilibrium traces. Verify nameplate electrical data of actual equipment furnished by others before beginning installation.

6. Gutting, Patching, And Finishing

The Electrical Contractor shall do all cutting, crilling, etc. required for work under this section of the

The Subcontractor shall do all brench and pit excavating and backfilling required for work under this section of the specifications, inside and outside the building, all required sharing, bracing, pumping and all protection for safety of persons and property.

8. Material And Workmanship

All materials and apparatus required for the work shall be new unless indicated otherwise on the plans.

Electrical Contractor shall provide and install all electrical as shawn, verifying all mounting heights and exact locations of all wall-mounted electrical devices with prohitect prior to rough-in.

Connections and junction boxes to equipment are disparamentals. Verify exact location of connection to

Panelboards

Panels shall be as manufactured by Square-D. G.E. Siemens or equivalent of sizes, ratings, and frements shown on the plans. Pane's shall be of dead front construction. All bussing shall be as specified on panel schedules.

Multi-pale breakers shall have a single handle to trip all poles at once.

A laminoted block plastic with white lettering plastic nomeplates with the identification number as shown on the panel schedule shall be imported on the outside of the door with sheet metal screws. Nameplate size shall be 3" wide X = 1/2" high with 1/2" high engrowing. Provide a completed directory, typed and mounted in a clear plastic sleeve, on the interior of the panel door.

mrovide a complete grounding network for the entire electrical system to comply with NEU requirements. All conduits shall have a ground wire installed. A conduit ground shall not be used.

11. Disconnect Switches

Equipment disconnect switches shall be boudre D, G.t., blemens newly duty or the type and rating on the plans. Fuses shall be provided of the appropriate type and rating for the equipment to be served.

Switches - All general use lighting (SPSI toggle with or without pilot) switches to be rated $20A_{\rm o}$ 120-277V. as manufactured by Levitan, Lutran, P & S, or equivalent. Coordinate color with

 $\label{eq:controller} \mbox{ He ceptodes } - \mbox{ All general use duplex receptodes to Le rated 20A, 120V as manufactured by Leviton, Lutron, P & S, or equivalent. Coordinate color with Cwner/Architect. Receptodes in patient core areas$ shall be haspital grade and red in color when on the critical branch. Label all cover plates with serving circuits.

Conductors - All conductors shall be rated 600V, copper, type IHAN, XHHA/IHHN. Where indicated cluminum conductors may be used and shall be type THHW/XHHAL. Conductors of ∯8 AAC and larger shall be stranded. HCF listed cobles are permitted in patient care areas per NEC 517.

Lighting factures - Lighting factures shall be as indicated on the facture schedule or approved equals.

13. Conduit

Conduit shall be EMI, GRC, SCH. 40 EVC, SCH. 80 EVC liquid Eight metal Fexible, or metal flexible.

GRC shall be used at exposed exterior locations and for panel feeders. Hex shall be used to connection to all fixed equipment, except in damp or well locations, where liquid tight metal flexible shall be used at all exposed interior locations. All remaining locations may use PVC.

HCF (sted cables are permitted in patient care areas per NEC 517

Insulating bushings with double lock-nuts shall be used for entrance of $1-1/4^\circ$ or larger into enclosures.

Sizes indicated are minimums larger sizes may be used to facilitate wire pulls, etc.

Provide a 4' x 8' x 3/4" plyecod backboard for telephone distribution. A driven ground rad shall be installed adjacent to the backboard. Install empty conduit(s) as indicated on the plans with pullwire

A 3/4° conduit shall be routed from all the telephone outlets to the ceiling space. Terminate conduit in ceiling space with a 90 degree pend and bushing at end of concuit. Extend conduit to nearest occessible ceiling space if no access to the ceiling space above the outlet is present. Provide a conduit path through all obstructions to the backboard.

15. Equipment Furnished by Citiers
Electrical Contractor and provide conduit, wire and disconnect switches indicated on drawings, to connect electrical equipment supplied by others which shall include both new and relocation of existing equipment. All final electrical connections are to be by electrical contractor.

Record Drawings

The Contractor shall keep accurate records of actual construction including device locations and conduit runs if different from the plans.

The Contractor shall provide the owner with a reproducible set of plans of the complete electrical and special systems as installed. The scale on these drawings shall be no smaller than the scale used or the original plans.

17. <u>Testing</u>

Final tests shall be made only after the braineer is satisfied that all work has been completed.

Acceptance testing of electrical gear shall be in accordance with NEC 517 and NEIA SID AIS = Acceptance Testing Standards for Electrical Power Distribution Equipment and Systems.

After testing, a final inspection shall be made by the Engineer and other authorized persons with the

Final acceptance of the project shall not prejudice the Owner's right to require replacement and/or repair any defective work or materials.

OUTLETS DUPLEX RECEPTACLE (120 V DEDICATED DUPLEX RECEPTACLE (120V \$ WEATHERPROOF RECEPTACLE GROUND FAULT RECEPTACLE ISOLATED GROUND RECEPTACLE SWITCHED RECEPTACLE HALF SWITCHED RECEPTACLE DOUBLE DUPLEX RECEPTACLE SPECIAL EQUIPMENT RECEPTACLE LOCKING RECEPTACLE FLUSH FLOOR TELEPHONE OUTLET TELEPOWER POLE (Telelaphone, Pepower, Cecomputer)

JUNCTION BOX

CIRCUIT UP

PLUCMOLD

CIRCUIT DOWN

END OF CONDUIT RUN

WREMOLD (2-Channel)

HOME RUN (with circuit numbers)

END OF RUN, CAP AND STAKE
"RUN CONTINUES" INDICATION

 $\ensuremath{\mathfrak{T}}$ — THERMOSIAT (fine voltage U.O.N. SINGLE-POLE SWITCH DOUBLE-POLE SWITCH ₩ HUMIDISTAT (line voltage U.O.N.) THREE-WAY SWITCH FOUR-WAY SWITCH SWITCH WITH PILOT LIGHT KEY SWITCH WEATHERPROOF SWITCH TIME SWITCH FLUSH FLOOR RECEPTACLE, DUPLEX DIMMER SWITCH (WATTACK SHOWN) LICHTING CONTACTOR LIGHT SENSOR WALL CHAMER / COCUPANCY SENSOR

DATA, TELEPHONE, OR FAX OUTLET (S) CEILING CCCUPANCY SENSOR

SWITCHES

CIRCUITRY and RACEWAYS SOUND and SIGNAL VOLUME CONTROL BUZZER CHIME TELEVISION ANTENNA OUTLET MICROPHONE OUTLET

∇_I INTERCOM OUTLET.

● PHOTOCELL (voltage as required)

III TIME CLOCK (24 hour U.O.N.) PUSHBUTTON STATION (number of buttons indicated) IRRIGATION CONTROLLER DESIGNATIONS A REVISION NOTE FLAG NOTE KEY NOTE FEEDER NUMBER UON UNLESS OTHERWISE NOTED DEVICE DESIGNATED WEATHER PROOF AC DEVICE ABOVE COUNTER CLG DEVICE IN CEILING FLR DEVICE IN FLOOR ABOVE FINISHED FLOOR EXISTING TO REMAIN EXISTING TO BE RELOCATED EXISTING TO BE DEMOLISHED

umlshed by DIV. 15 U.O.N.)

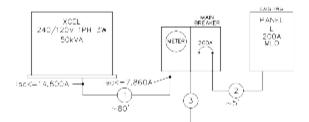
furnished by DIV. 15 U.C.N.)

CONTROL

MOUNTING HEIGHTS NOTES: KEY HEIGHT KEY HEIGHT 80" 0 3" ALL MOUNTING HEIGHTS SHALL CONFORM TO THE LATEST EDITION OF THE AMERICANS WITH н 48" MAX B"A.C. 0 46" MAX J 48" MAX 45° MAX K 75° MAX D , DIMENSIONS APPLY UNLESS OTHERWISE NOTED ON DRAWING 18" MIN L 80"-96" E F 3" MN M 4" MN 6" MN N _ @ -23 -27 ∦ €−Φ**▼**▽ DEVICE MOUNTING HEIGHT DETAIL

FEEDER SCHEDULE

- (1) (3-#4/0 AL.**)** 2" C.
- (2) (3-#4/0 AL, #6 GND CU.) 2" C.
- (3) #4 CU TO BLDG. STEEL & GND ROD ARRAY #4 CU UFER GND IF AVAILABLE



ONE-LINE DIAGRAM

KEY NOTES

.Y)	DRAW	NG INDEX			
	CODES:	2020 NATIONAL ELECTRICAL CODE 2018 INTERNATIONAL ENERGY CODE			
			EW SET 23/22	WIT 55.1	
	NUMBER	DRAWING TITLE	8EV 08/	/60 HER	L
	E-0.1	LEGEND, NOTES, INDEX SCHEDULES & ONE-LINE DIAGRAM	•		
	E-2.0	LIGHTING PLAN	•	•	
	E-3.0	POWER PLAN	•		
					_
					Т

ANE				Job # 2								
WOLT	AGE		120/240	AIC A	MPS			10,000		BUSSING		. A
										NEUTRAL BUS		Y
RAT	ED AMPS	5	200	MAIN	LUG ONLY			200		GROUND BUS		Y
	NSE + HE		1 * 60	FEED				BOTTOM				
	OF CIRC		30	MOUN	TING			SURFACE		FEED THROUGH LUGS		N
MAN	NUFACTU	RER	Siemens	COVER	₹ TYPE			N3R		FED FROM	Main Disconnect	
PAN	iel type		LC	ISOLA	TED GND			NO		NOTE: "L" BREAKERS TO BE "L	OCK ON"	
CIR(BKR	CIRCUIT DESCRIP	TION	Cat.	WATTS	L1	L2	WATTS	Cat.		BKR	CI
,	20A-1P	Unit Heaters (1)		 	1,680	Li	₩	795	┿	Lanting	20A-1P	⊢
		Co2 Generator		Ë	120	⊣ ~	12	783	+	Spare	20A-1P	
5		Shade Water (5)		ΙĒ	300	14		936	F	HAF Fons (4)	20A-1P	_
7		Roof Vent Motor		<u> </u>	300	⊣ —	12	600		Cooling Pod Pump (8)	20A-1P	_
á		Gable / Pad Ver		1 2 1	300	Li	 ~ 	408		Exhaust Fan (3)	20A-2P	_
ň			ral North	Ř	540	┫-	12	408	ΤĒ	* (5)		1
13	20A-1P	Recepts - Gener	ral South	R	540	Li	1	408	Ē	Exhaust Fon (3)	20A-2P	1
15	20A-1P	Saore		- 1 - 1		┫ ̄	12	408	Ē			1
17	20A-1P	Spare		\neg		Li	Н	408	Ε	Exhaust Fan (3)	20A-2P	1
19	20A-1P	Spare		\neg		7	L2	408	Ε	•	•	7
21				\Box		Li	П	1,176	E	Door Opener North	20A-1P	2
23							1.2	1,176	Ε	Door Opener East	20A-1P	1 2
25						Li	П			Spore	20A-1P	1 2
27							1.2			Spare	20A-1P	
29				\Box		Li	П		\perp	Spare	20A-1P	Ľ
oteg	o ny	Connected	Demand Factor	Dema	nd	$\overline{}$	_	Connected	1	Demand		
R-	Recept.		N.E.C. 220.44		.080	LINE	E L			5,555		
L-	Lighting	795	1,25	9	94	LINE	E L	3,96	0	5,555		
4-	Heating	1,680	1		,680	1		-,				
0-	Cooling	0	1)	TOT	AL	10,91	1	11,110		
E-	Equip.	7,356	1	7	7,356	DEA	AND	AMPERAGE	:			
W -	Misc.	Ò	1)		1	1,110	/ 240	46 Amps		
atal:		10,911			1,110	_				-		

(THIS SHEET ON

KEY	EQUIPMENT		CHARACTERISTICS		CIRCUII				PROTECTION				NOTES
		HP	RLA/FL4	Watte	PH	Volts		MOCP	Breaker	Switch	Fuee	Disconnect at unit	
1	Unit Heater		7.0		1	120	8.8	20	20			Fused Switch	2
2	Co2 Generator 120/240V Xfmr		1.0		1	120	1.3	20	20			J-Box	2
3	Exhaust Fan		3.4		1	240	4.3	20	20			2-Pole Switch	1
4	HAF Fon		1.3		1	120	1.6	20	20			Snap Switch	1
5	Shade Motor		2.5		1	120	3.1	20	20			Snap Switch	2
6	Roof Vent Motor		2.5		1	120	3.1	20	20			Snap Switch	2
7	Gable / Pad Vent Motor		2.5		1	120	3.1	20	20			Snop Switch	2
8	Cooling Pad Pump		5.0		1	120	6.3	20	20			Snop Switch	1
	SEED Control Ponel		2.0		1	120	2.5	15	15			Direct Wire	
	Control Fanel Contactors		1.0		1	120	1.3	15	15			Direct Wire	
NOTES					Ш								
1	Power to be routed through con	ntrol po	nel conta	ctors fo	rc	ontrol.							
2	Low Voltage control via control	panel.											

LUMINAIRE SCHEDULE						
Tag	Lomps	Description	Manufacturer	Part No.	Voltage	Notes
A	75.5W LED	8' Stirp with Lens and Gasket	Lithonia	FEM L96 12000LM LPACE WD MVOLT GZTO 40K 800F	120	
ww	15W LED	Exterior Cutoff Wall Mount	Lithonia	WDGE1 LED P2 40K 80CRI MVOLT DDEXD	120	
WW1	10W LED	Exterior Cutoff Wall Mount	Lithonia	WDGE1 LED P1 40K BOCRI MVOLT DDBXD	120	
Notes:						



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PO Box 684 LaSalle, CO 80645 303.906.2617



DATE 09.07.22

REVISIONS

SHEET TITLE

LEGEND, NOTES, INDEX, & ONE-LINE DIAGRAM

SHEET NUMBER

GENERAL LIGHTING NCTES:

- . CONNECT ALL EXIT AND EM LIGHTS TO CIRCUITS SHOWN AHEAD OF LOCAL SWITCHING.
- 2. LUMINAIRES DENOTED THE SHALL BE CONNECTED AHEAD OF LOCAL SWITCHING.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LIGHTING FIXTURE LOCATIONS.
- 4. ALL CONDUCTORS SHALL BE COPPER AND #12 UNLESS OTHERWISE NOTED.
- ALL SWITCHES CONVENIENCE RECEPTACLES AND PLATES SHALL BE WHITE NONMETALLIC UNLESS NOTED. CONFIRM COLOR WITH ARCHITECT PRIOR TO ORDERING DEVICES.
- COPIES OF ALL INSTALLATION, OPERATIONAL AND MAINTENANCE MATERIALS ARE TO BE SAVED AND PROVIDED TO THE PROJECT MANAGER FOR ASSEMBLY AND DELIVERY TO THE CONTRACTOR AND OWNER.
- 7. LABEL ALL JUNCTION BOXES WITH CIRCUIT NUMBERING DURING ROUGH-IN OF CONDUIT SYSTEM.
- 8. THE ELECTRICAL CONTRACTOR JOS FOREMAN SHALL DOCUMENT ALL UNDERGROUND FEEDERS AS WELL AS ANY DEVIATIONS TO THE CONSTRUCTION DOCUMENTS ON THE RECORD DRAWINGS. SHOW DIMENSIONS ONLY WHEN ACCURACY CAN BE ASSURED.
- 9. ALL EXPOSED CONDUIT IN CEILING TO BE PAINTED TO MATCH CEILING.

KEY NOTES

TYPE 'D' FIXTURES TO INSTALLED AT ~10' A.F.F.

OCCUPANCY SENSORS TO BE SENSOR SWITCH SBOR OUTDOOR RATED SERIES WOUNTED ON J-BOX SUSPENDED AT ~10" A.F.F.

(THIS SHEET ONLY)

PROVIDE 7-DAY ASTRONOMICAL TIME CLOCK FOR EXTERIOR LIGHTING CONTROL.

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ALL CONSTRUCTION SHALL CONFORM TO CURRE INTERNATIONAL RESIDENTIAL CODE AND ALL OTHER

DO NOT SCALE DRAWINGS FOR DIMENSIONS

Houston Gardens Greenhouse 515 23rd Ave. Greeley, CO



PO Box 684 LaSalle, CO 80645 303.906.2617



DATE

09.07.22

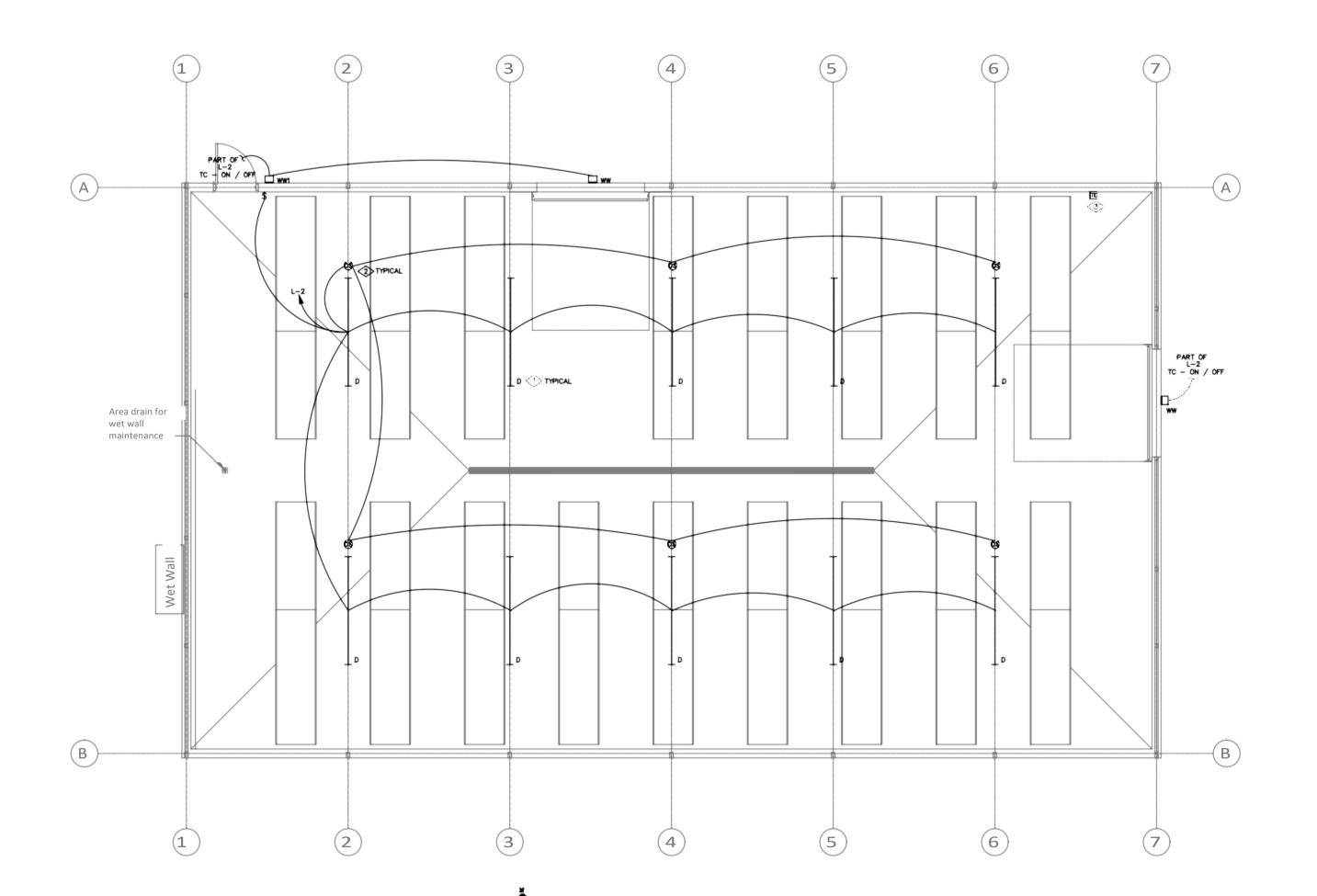
REVISIONS

SHEET TITLE

LIGHTING PLAN

SHEET NUMBER

MEP, Civil & Environmental Engineering Services 7355 Greenridge Rd. Suite B Windsor, CO 50550 (S16) 547-5714 Windsor, CO 50550 www.pivotaleng/vest.com E - 2.0



GENERAL POWER NOTES:

- REFER TO MECHANICAL PLANS FOR EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT.
- 2. ALL CONDUCTORS SHALL BE COPPER AND #12 UNLESS OTHERWISE NOTED.
- 3. ALL SWITCHES CONVENIENCE RECEPTACLES, AND PLATES SHALL BE WHITE NONMETALLIC UNLESS NOTED. CONFIRM COLOR WITH ARCHITECT PRIOR TO ORDERING DEVICES.
- 4. PROVIDE POWER TO VVT'S AS REQUIRED BY M.C., (REFER TO MECHANICAL PLANS).
- COPIES OF ALL INSTALLATION, OPERATIONAL AND MAINTENANCE MATERIALS ARE TO BE SAVED AND PROVIDED TO THE PROJECT MANAGER FOR ASSEMBLY AND DELIVERY TO THE CONTRACTOR AND OWNER.
- 6. LABEL ALL JUNCTION BOXES WITH CIRCUIT NUMBERING DURING ROUGH-IN OF CONDUIT SYSTEMS.
- 7. THE ELECTRICAL CONTRACTOR UOB FOREMAN SHALL DOCUMENT ALL UNDERGROUND FEEDERS AS WELL AS ANY DEVIATIONS TO THE CONSTRUCTION DOCUMENTS ON THE RECORD DRAWINGS. SHOW DIMENSIONS ONLY WHEN ACCURACY CAN BE ASSURED.
- 8. FIRE ALARM DEVICES ARE NOT SHOWN ON DRAWINGS AT THIS TIME. FIRE ALARM SHOP DRAWINGS SHALL BE PROVIDED BY A LICENSED FIRE ALARM CONTRACTOR AND SIGNED AND SEALED BY A PROFESSIONAL ENGINEER.
- 9. ALL EXPOSED CONDUIT IN CEILING TO BE PAINTED TO MATCH CEILING.

KEY NOTES

(THIS SHEET CNLY)

OURDINATE ALL EQUIPMENT AND CONTROL PARTL CONNECTIONS AND FINAL LOCATIONS WITH OWNER, C.C. AND EQUIPMENT PROVIDER.

COORDINATE OVERHEAD DOOR OPENER REQUIREMENTS WITH EQUIPMENT VENDOR.

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ALL CONSTRUCTION SHALL CONFORM TO CURP

DO NOT SCALE DRAWINGS FOR DIMENSIONS

Houston Gardens Greenhouse 515 23rd Ave. Greeley, CO



PO Box 684 LaSalle, CO 80645 303.906.2617



DATE

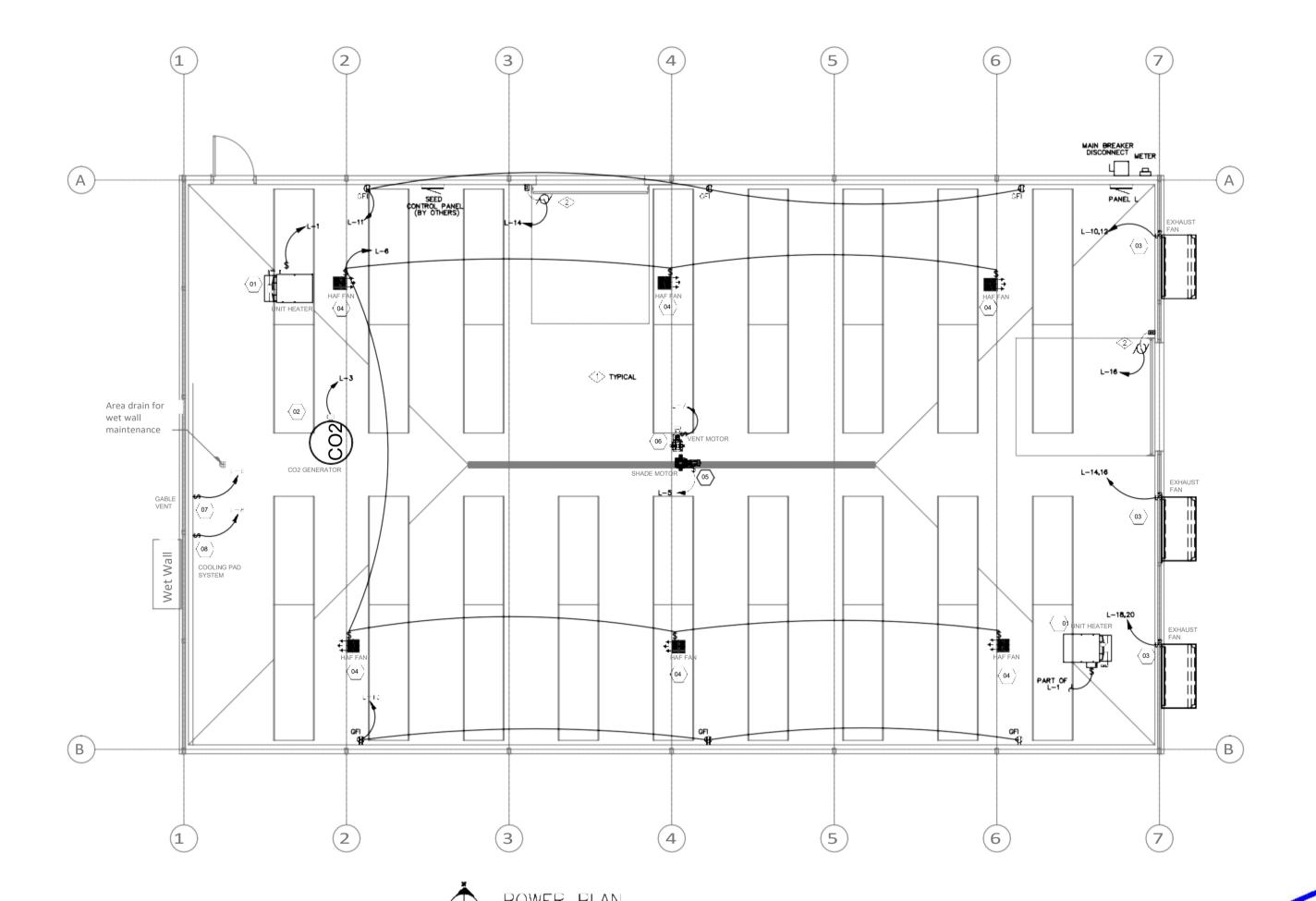
09.07.22

REVISIONS

SHEET TITLE
POWER PLAN

SHEET NUMBER

MEP, Civil & Environmental Engineering Services 7355 Greenridge Rd. Suite 3 Windsor, CO 30550 (816) 647-8714 Wave,protalengwest.com E-3.0

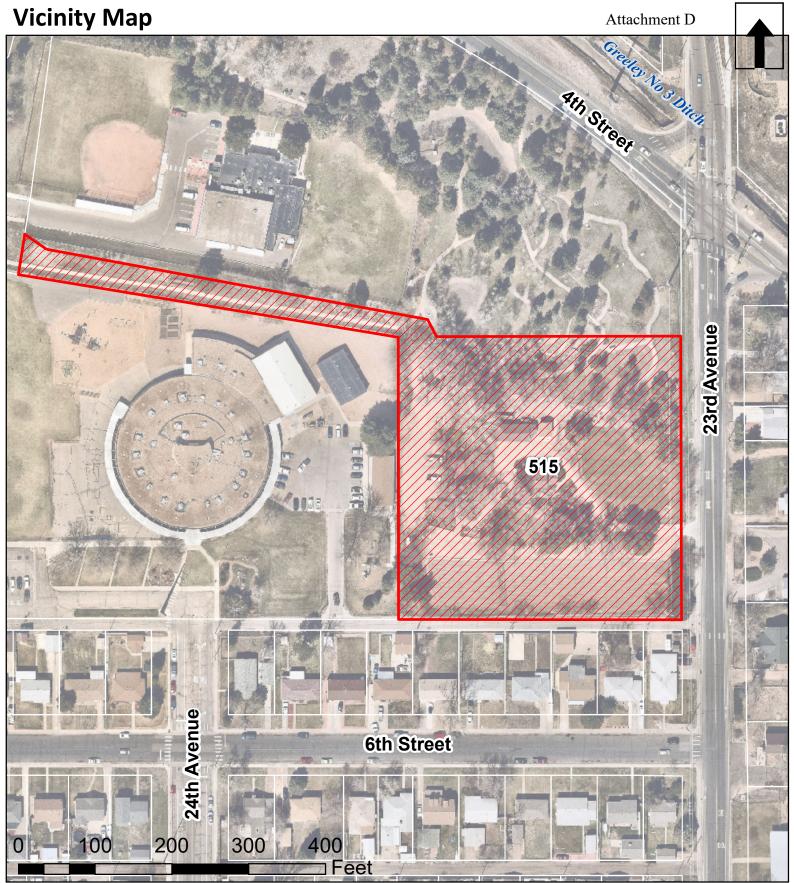


Houston Gardens historic structures photos

October 2022, photos provided by Caleb Bussard, DS Constructors, applicant



515 23rd Avenue





515 23rd Ave.



R-L (Residential Low Density) Zoning



COMMUNITY DEVELOPMENT