Project:

SVA GREELEY
Site & Shell Project

1911 59TH Ave.
Greeley, CO 80634

CITY OF GREELEY
BUILDING INSPECTION DEPARTMENT
REVIEWED
UNDER SECTION 107.3.1
OF THE INTERNATIONAL BUILDING CODE
KEEP APPROVED PLANS ON JOB SITE
DATE: 03/14/2025 BY: wagym

THIS SUBMITTAL HAS BEEN REVIEWED FOR CODE COMPLIANCE AND IS SUBJECT TO FIELD INSPECTION.
BY: wagym DATE: 03/14/2025

PROVIDE ENGINEERED STAMPED 3RD PARTY INSPECTION REPORT TO THE BUILDING INSPECTION DEPARTMENT BY FINAL INSPECTION

ALL TRADES MUST COMPLY WITH THE 2021 INTERNATIONAL BUILDING INTERNATIONAL MECHANICAL INTERNATIONAL PLUMBING INTERNATIONAL ENERGY CODE AND THE 2023 NATIONAL ELECTRICAL CODE

ANY ALTERATIONS OR DELETIONS TO THESE PLANS MUST BE PREVIOUSLY APPROVED BY THE CITY OF GREELEY BUILDING INSPECTION DEPT.

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

All Contractors Responsible for Verifying City of Greeley Building Code Amendments

THE DIRECTIVE IF ANY OF THE BUILDING OFFICIAL SHALL TAKE PRECEDENCE OVER THIS DRAWING REGARDING LOCATION AND NUMBER OF EXIT LIGHTS

Project Directory

Owner:
SVA Greeley LLC
4144 Timberline Road
Fort Colins, CO 80525
Phone: (970) 217-9544

Architecture:
Battista Design Group, P.C.
3650 Wadsworth Blvd.
Wheat Ridge, CO 80033
Phone: (303) 428-4895
Fax: (303) 428-5472

Civil Engineer:
HCI Engineering
621 Southpark Dr., Suite 1600
Littleton CO, 80120
Phone: (303) 979-3900

Landscape Design:
Valerian, LLC
970 Yuma St., Suite 130
Denver, CO 80204
Phone: (303) 865-4918

Structural Engineer:
Next Level, Inc.
7186 S. Forest Lane
Centennial, CO 80122
Phone: (303) 260-9456

Mechanical Engineer:
Swanson-Levary Engineering
10080 E 112th Way
Henderson, CO 80640
Phone: (720) 737-1733
Fax: (303) 660-5999

Electrical Engineer:
Rossi Engineering, Inc.
5376 South Gibraltar Court
Centennial, CO 80015
Phone: (303) 720-9827

General Contractor:
BVB General Contractors, LLC
1289 S. 4th Ave.
Brighton, CO 80601
Phone: (303) 637-0981
Fax: (303) 659-1887

Public Agencies

Building Department:
City of Greeley
1100 10th Street
Greeley, CO 80631
Phone: (970) 350-9830

Fire Department:
Greeley Fire Department
1155 10th Ave
Greeley, CO 80631
Phone: (970) 350-9500

Electric/Gas:
Xcel Energy
1500 6th Avenue
Greeley, Colorado, 80631
Phone: (800) 895-4999
Builders Call Line
Phone: 1-800-628-2121
Fax: 1-800-628-2521
Hours 7:00 a.m. - 4:00 p.m.
E-mail: BCLCO@xcelenergy.com

Wastewater:
Greeley Water and Sewer
1001 11th Avenue, 2nd Floor
Greeley, CO 80631
Monday - Friday, 8am - 5pm
Phone: (970) 350-9811

Sheet index

GENERAL

G0.0	Cover Sheet
G0.1	Wall Types
G1.1	General Information, Abbreviations, Code Data Symbols, Wall Types, Materials, etc.

SITE

SP.1	Site Plan

ARCHITECTURAL

A0.1	Door-Window and Hardware Schedules
A1.0	Overall Foundation-Slab Plan
A1.0.1	Foundation-Slab Plan - North
A1.0.2	Foundation-Slab Plan -South
A1.1	Overall Floor Plan
A1.1.1	Floor Plan - North
A1.1.2	Floor Plan - South
A1.2	Overall Roof and Tower Plan and Upper Roof Plan
A1.2.1	Roof and Tower Plan - North
A1.2.2	Roof and Tower Plan - South
A1.2.3	Upper Roof Plan - North
A1.2.4	Upper Roof Plan - South
A1.3	Roof Membrane Details
A1.3.1	Roof Membrane Details
A1.4	Awning and Trash Enclosure Details
A2.1	Overall East and West Building Elevations
A2.1.1	East Building Elevation
A2.1.2	West Building Elevation
A2.2	North and South Building Elevations
A3.1	Building Sections
A3.2	Building Sections
A3.3	Building Sections
A3.4	Building Sections
A4.1	Wall Sections
A4.2	Wall Sections
A4.3	Wall Sections
A4.4	Wall Sections
A5.1	Details
A5.2	Details
A5.3	Details

Sheet index Cont.

STRUCTURAL

S1.0	Cover Sheet, Design Criteria & Project Notes
S1.1	Structural Special Inspections & Schedules
S1.2	Typical Details & Trash Enclosure
S1.3	Roof Design Load Diagrams
S2.1A	Foundation/Floor Plan - North
S2.1B	Foundation/Floor Plan - South
S2.2A	Main Roof Framing Plan - North
S2.2B	Main Roof Framing Plan - South
S2.3A	Upper Roof Framing Plan - North
S2.3B	Upper Roof Framing Plan - South
S3.1	Foundation / Floor Details
S4.1	Framing Details

MECHANICAL/PLUMBING

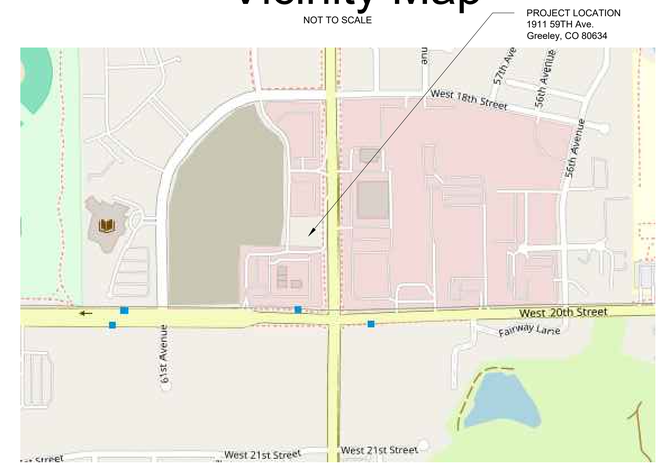
M-1	Mechanical Plan & Notes

ELECTRICAL

E1	Site Electrical Plan
E2	One-Line, Schedules & 1st Floor Electrical Plan
E3	Electrical Specifications
E4	Comcheck

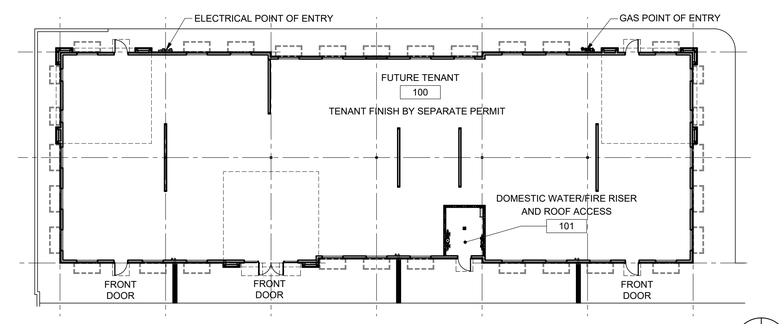
Vicinity Map

NOT TO SCALE



Core/Shell Building Key Plan

Single Story Building Slab on Grade



NORTH

February, 2025

SVA GREELEY
Site & Shell Project
1911 59th Ave.
Greeley, CO 80634

NOTE:
FULL SUBMITTALS/SHOP DRAWINGS REQUIRED FROM ALL TRADES/DISCIPLINES

SUBMIT ALL R.F.I.'S IN WRITING

* ALL TRADES TO CROSS REFERENCE ALL DRAWINGS FOR ITEMS PERTAINING TO THEIR DISCIPLINE OF WORK, FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR(S) FROM THE RESPONSIBILITY OF PROVIDING SUCH AT NO ADDITIONAL COST TO THE OWNER

ONLY COMPLETE SETS OF DRAWINGS TO BE DISTRIBUTED TO SUB-CONTRACTORS DO NOT BREAK APART DRAWING SETS*

CORE AND SHELL ONLY
NO INTERIOR WORK
SHELL ONLY

DEFERRED SUBMITTALS:

ROOF TRUSS
FIRE ALARM & SPRINKLERS

CITY OF GREELEY
Building Inspection Department
Reviewed as to Conformance
with the 2023 NEC
03/13/2025 Dusty Shepherd

Must Comply with the 2023 NEC

Must Comply with 2021 IECC

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/12/2025
LICENSED ARCHITECT

sheet — of —

G0.0

ONLINE CERTIFICATIONS DIRECTORY

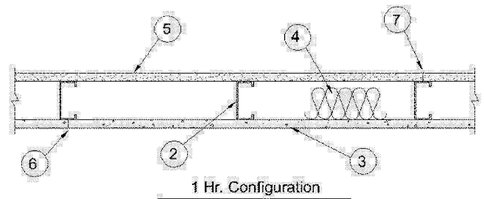
Design No. U404
BXUV.U404
Fire Resistance Ratings - ANSI/UL 263

Design No. U404

May 26, 2017

Nonbearing Wall Rating — 1 and 2 Hr (See Items 3 and 5)

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



1 Hr. Configuration

1. Steel Floor and Ceiling Runners — (Not Shown) — Channel shaped, 3-1/2 in. wide by 1-1/4 in. deep, fabricated from min 20 MSG (0.0329 in., min bare metal thickness) galvanized steel. Attached to floor and ceiling with steel fasteners spaced 24 in. OC max.
2. Steel Studs — Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, 3-1/2 in. min width, min 1-1/2 in. flanges and 1/4 in. return, spaced a max of 16 in. OC. Studs friction-fit into floor and ceiling runners. Studs to be cut 5/8 to 3/4 in. less than assembly height.
3. Cementitious Backer Units* — 1/2 in. or 5/8 in. thick, applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with corrosion resistant, chamfered, ribbed wafer head screws with a minimum head diameter of .400 inch. For nonbearing systems, fastened to studs and bottom runners with the uppermost screws placed 1/2 in. to 2 in. below the bottom edge of the leg of the top runner. Horizontal joints need not be backed by framing. 1 Hr System - Screws shall be min 1-1/4 in. long and spaced a max of 8 in. OC. All vertical joints staggered one stud cavity from gypsum board vertical joints on the opposite side of studs. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. 2-Hr System - For the base layer in Configuration B, the screws shall be min 1-1/4 in. long and spaced a max of 12 in. OC. For the face layers, screws shall be 1-5/8 in. long and spaced a max of 8 in. OC. All face layer joints offset min 12 in. from underlying base layer joints. Joints in either layer need not be staggered from joints on the opposite side of the wall.

UNITED STATES GYPSUM CO — Type DCB

4. **Batts and Blankets* —** Min 3 in. thick mineral wool insulation batts, friction-fitted between studs .

INDUSTRIAL INSULATION GROUP L L C — Type SAFB

JOHNS MANVILLE — Type SAFB

ROXUL INC — Type AFB

THERMAFIBER INC — Type SAFB

5. **Gypsum Board* —** 5/8 in. thick, with square or tapered edges, applied vertically or horizontally with vertical joints centered over studs. Horizontal joints need not be backed by framing. Fastened with Type S-12 screws. **1-Hr System** - For vertical application, fastened to studs and runners with 1 in. long screws spaced max 8 in. OC at vertical edges and spaced max 12 in. OC in the field. For horizontal application, fastened to studs and runners with 1 in. long screws spaced max 8 in. OC. Vertical joints staggered one stud cavity from cement board vertical joints on opposite side of studs. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. **2-Hr System** - Base layer with an overlying gypsum board face layer, fastened with 1 in. long screws spaced max 16 in. OC to studs and runners. Base layer with an overlying cement board face layer, fastened with 1 in. long screws spaced max 12 in. OC to studs and runners. Face layers fastened with 1-5/8 in. long screws spaced max 16 in. OC to studs and runners with screws offset 8 in. from face layer screws. Face layer joints offset min 12 in. from base layer joints. Joints in either layer need not be staggered from joints on the opposite side of the wall. When used in widths other than 48 in., gypsum panels to be installed horizontally.

CGC INC — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, SGX, ULX, USGX, WRC or WRX (Joint tape and compound, Items 6 and 7, optional for use with Type USGX).

UNITED STATES GYPSUM CO — Type AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULIX, ULX, WRC, WRX, USGX (Joint tape and compound, Items 6 and 7, optional for use with Type USGX).

USG BORAL ZAWAWI DRYWALL L L C SFZ — Types C, SCX

USG MEXICO S A DE C V — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX (Joint tape and compound, Items 6 and 7, optional for use with Type USGX).

5A. **Gypsum Board* —** (As an alternate to Item 5 may be used as the base layer on one or both sides of wall, For direct attachment only) - Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field.

RAY-BAR ENGINEERING CORP — Type RB-LBG

5B. **Gypsum Board* —** (As an alternate to Item 5 may be used as the base layer on one or both sides of wall, For direct attachment only). Nominal 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 (or #6 by 1-1/4 in. long bugle head fine driller) steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field.

NEW ENGLAND LEAD BURNING CO INC, DBA NELCO — Nelco

5C. **Gypsum Board* —** (As an alternate to Item 5) For Direct Application to Studs Only- For use as the base layer or as the face layer. Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in OC in the field when applied as the base layer. When applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, max 5/16 in. diam by max 0.140 in. thick. compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D". Fasteners for face layer gypsum panels (Item 5) when installed over lead backed board to be min 2-1/2 in.

MAYCO INDUSTRIES INC — Type X-Ray Shielded Gypsum

5D. **Gypsum Board* —** ((As an alternate to Items 5 may be used as the base layer on one or both sides of wall, For direct attachment only)) For Direct Application to Studs Only- Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Fasteners for face layer gypsum panels (Item 5) when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel.

RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

6. **Joints —** Covered with glass fiber mesh tape and latex modified Portland cement mortar or basecoat, or Type I organic adhesive.

7. **Joints —** When tapered edge gypsum board is used, face layer joints covered with joint compound and paper tape. As an alternate, gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with joints reinforced. When square-edge gypsum board is used, treatment of joints is optional.

8. **Vapor Retarder, Water Barrier or Weather Resistive Barrier —** (Optional — Not shown) — As required.

9. **Lead Batten Strips —** (Not Shown, For use With Item 5A) - Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. Strips placed on the interior face of studs and attached from the exterior face of the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 5A) and optional at remaining stud locations. Required behind vertical joints.

9A. **Lead Batten Strips —** (Not Shown, for use with Item 5C) Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of .0140 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 5) and optional at remaining stud locations.

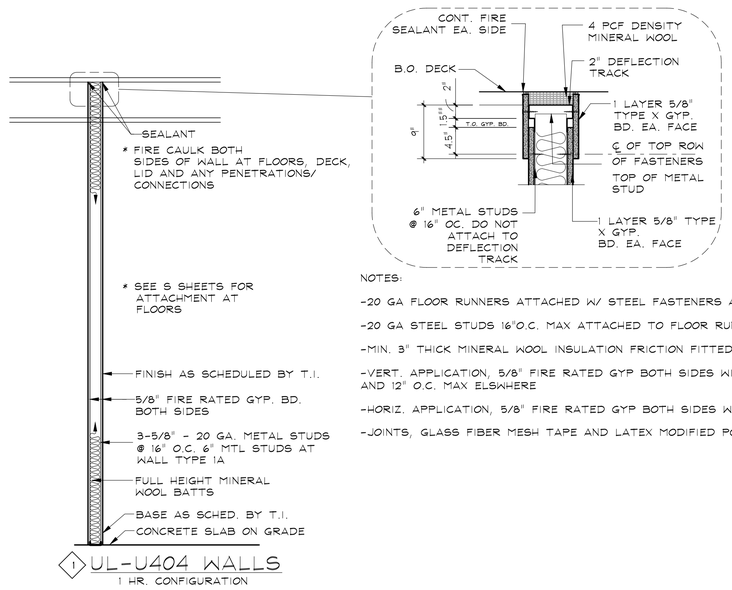
10. **Lead Discs or Tabs —** (Not Shown, For use With Item 5A) - Used in lieu of or in addition to the lead batten strips (Item 9) or optional at other locations - Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards (Item 5A) underneath screw locations prior to the installation of the screws. Lead discs or tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".

10A. **Lead Discs —** (Not Shown, for use with Item 5C) Max 5/16 in. diam by max 0.140 in. thick lead discs compression fitted or adhered over steel screw heads. Lead discs to have a purity of 99.5% meeting the Federal Specification QQ-L-201f, Grades "B, C or D".

11. **Lead Batten Strips —** (Not Shown, For Use With Item 5B) Lead batten strips, 2 in. wide, max 10 ft long with a max thickness of 0.142 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 5B) and optional at remaining stud locations.

12. **Lead Tabs —** (Not Shown, For Use With Item 5B) 2 in. wide, 5 in. long with a max thickness of 0.142 in. Tabs friction-fit around front face of stud, the stud folded back flange, and the back face of the stud. Tabs required at each location where a screw (that secures the gypsum boards, Item 5B) will penetrate the steel stud. Lead tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead tabs may be held in place with standard adhesive tape if necessary.

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



1 UL-U404 WALLS
1 HR. CONFIGURATION

NOTES:

-20 GA FLOOR RUNNERS ATTACHED W/ STEEL FASTENERS AT 24" O.C. MAX

-20 GA STEEL STUDS 16"O.C. MAX ATTACHED TO FLOOR RUNNERS W/3/8" L. TYPE S-12 STEEL SCREWS ON BOTH SIDES

-MIN. 3" THICK MINERAL WOOL INSULATION FRICTION FITTED BTWN STUDS

-VERT. APPLICATION, 5/8" FIRE RATED GYP BOTH SIDES WITH 1" L. TYPE S-12 SCREWS AT 8" O.C. ON VERT EDGES AND 12" O.C. MAX ELSWHERE

-HORIZ. APPLICATION, 5/8" FIRE RATED GYP BOTH SIDES WITH 1" L. TYPE S-12 SCREWS AT 8" O.C. MAX

-JOINTS, GLASS FIBER MESH TAPE AND LATEX MODIFIED PORTLAND CEMENT MORTAR OR BASECOAT

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

WALL TYPES

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/12/2025
LICENSED ARCHITECT

Designed:	Project Number: SVA2025
Drawn:	Scale: As Shown
Checked:	Drawing Number:
Reviewed:	G0.1
Date: Feb., 2025	of

H1	WALL TYPES
N.T.S.	RE:

COPYRIGHT 2018 — BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.

GRAPHIC SYMBOLS

SYM	DESCRIPTION
A	COLUMN GRID LINE
A	COLUMN GRID LINE EXISTING
A1 / A500	WALL SECTION REFERENCE SECTION NUMBER DRAWING ON WHICH SECTION IS SHOWN
A1 / A300	EXTERIOR ELEVATION REFERENCE ELEVATION NUMBER DRAWING ON WHICH ELEV IS SHOWN
A1 / A201 A1 / A201	BUILDING SECTION REFERENCE SECTION NUMBER DRAWING ON WHICH SECTION IS SHOWN
A1 / A601	DETAIL SECTION REFERENCE DETAIL NUMBER DRAWING ON WHICH DETAIL IS SHOWN
A1 / A102	DETAIL PLAN REFERENCE DETAIL NUMBER DRAWING ON WHICH DETAIL IS SHOWN
A201 A1	INTERIOR ELEVATION REFERENCE ELEVATION NUMBER DRAWING ON WHICH ELEV. IS SHOWN
101	DOOR NUMBER
LOBBY 101	ROOM NAME ROOM NUMBER
℄	CENTER LINE
MATCH LINE	MATCH LINE
EL. XXX'-X"	VERTICAL ELEVATION MARK
A1 NORTH ELEVATION	DRAWING TITLE/ REFERENCE
NORTH	NORTH ARROW
1	REVISION MARK
1	SPECIFIC PLAN NOTE OR ACCESSORY TAG
A101	SHEET NUMBER
W1	WINDOW TYPE, BORROWED LIGHT TYPE OR LOUVER TYPE TAG
1	WALL OR PARTITION TYPE
	ONE HOUR RATED WALL / OPENINGS
	TWO HOUR RATED WALL / OPENINGS

MATERIALS

SYM	DESCRIPTION
	CONCRETE
	PRECAST CONCRETE (LARGE SCALE)
	STEEL
	WOOD FRAMING
	PLYWOOD
	RIGID INSULATION
	BATT INSULATION
	METAL STUD WALL
	GYPSUM WALLBOARD
	ACOUSTICAL TILE
	BRICK
	CONCRETE MASONRY UNITS

ABBREVIATIONS

A	
AB	ANCHOR BOLT
ACT	ACOUSTICAL TILE
ADJ	ADJACENT/ ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
ALUM	ALUMINUM
ANOD	ANODIZED
ALT	ALTERNATE NO.
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATELY
APVD	APPROVED
ARCH	ARCHITECT
ASSBY	ASSEMBLY
AUTO	AUTOMATIC/ AUTOMATION
AVG	AVERAGE
AWI	AMERICAN WOODWORKING INSTITUTE
AWT	ACOUSTICAL WALL TREATMENT
B	
B/B	BACK TO BACK
BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING
BLST	BALLAST
BM	BEAM/BENCH MARK
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BRG	BEARING
BSMT	BASEMENT
BTWN	BETWEEN
BUR	BUILT UP ROOFING
CB	CATCH BASIN
CBB	CEMENTITOUS BACKER BOARD
C/C	CENTER TO CENTER
CAB	CABINET
CB	CATCH BASIN
CEM	CEMENT
CEM PLAS	CEMENT PLASTER
CER	CERAMIC
CF	CUBIC FOOT/FEET
CFCI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED
CFOI	CONTRACTOR FURNISHED/OWNER INSTALLED
CFLG	COUNTER FLASHING
CF/MF	COLD FORMED METAL FRAMING
CG	CORNER GUARD
CIP	CAST IN PLACE
CJ	CONTROL JOINT/ CONSTRUCTION JOINT
CL	CENTERLINE
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CLT	CLEAT
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
COND	CONDITION
CONST	CONSTRUCTION
CONT	CONTINUE/CONTINUATION OR CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
COP	COPING
CORR	CORRIDOR
CPT	CARPET
CSK	COUNTER SUNK
CT	CERAMIC TILE
CTR	CENTER
CU FT	CUBIC FOOT/FEET
CW	COLD WATER
CY	CUBIC YARDS
	DEPTH/DEEP
DBL	DOUBLE
DEMO	DEMOLITION
DET	DETAIL
DF	DRINKING FOUNTAIN
DEL	DELETE
DETN	DETENTION
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DISP	DISPENSER
DMPF	DAMPPROOFING
DN	DOWN
DR	DOOR/DRAIN
DS	DOWNSPOUT
DTL	DETAIL
DWG	DRAWING
D	
E/(E)	EAST/EXISTING
EA	EACH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
EL	REFERENCE ELEVATION
ELEC	ELECTRIC/ELECTRICAL
ELEV	ELEVATOR/ELEVATION
EMERG	EMERGENCY
ENCL	ENCLOSURE
ENGR	ENGINEER/ENGINEERING
EOS	EDGE OF SLAB
EPDM	ETHYLENE PROPYLENE DIENE MONOMOR
EQ	EQUAL
EQL SP	EQUALLY SPACED
EQUIP	EQUIPMENT
EST	ESTIMATE
ETC	ET CETERA
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EXIST	EXISTING
EXP	EXPOSED
EXPAN	EXPANSION
EXT	EXTERIOR/EXTERNAL
F / F	FACE TO FACE
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OWNER
FD	FLOOR DRAIN
FDTN	FOUNDATION
FDV	FIRE DEPARTMENT VALVE CABINET
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
F F EL	FINISHED FLOOR ELEVATION
FF INSUL	FOIL BACKED INSULATION
FIN GR	FINISHED GRADE
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FIN	FINISH
FIXT	FIXTURE
FL	FLOW LINE
FLR	FLOOR/FLOORING
FLUOR	FLUORESCENT
FND	FOUNDATION
FR	FRAME/FIRE RATED/FIRE RETARTANT
FT	FOOT/FEET
FTG	FOOTING
FURG	FURRING
FURN	FURNISH
FUT	FUTURE
FT	FOOT/FEET
FVC	FIRE VALVE CABINET
FTG	FOOTING
FURG	FURRING
FURN	FURNISH
FUT	FUTURE
FVC	FIRE VALVE CABINET

G	
GA	GAGE
GAL	GALLONS
GALV	GALVANIZED
GYP BD	GYPSUM BOARD
GYP SHTG	GYPSUM SHEATHING BOARD.
GC	GENERAL CONTRACTOR
GEN	GENERAL/GENERATOR
GI	GALVANIZED IRON
GL	GLASS
GLZ	GLAZING
GND	GROUND
H	
HC	HANDICAPPED ACCESSIBLE / HOLLOW CORE
HD	HEAD
HDW	HARDWARE
HDWD	HARDWOOD
HM	HOLLOW METAL
HT	HEIGHT
HORIZ	HORIZONTAL
HP	HIGH POINT/HORSEPOWER
HVAC	HEATING VENTILATION AND AIR CONDITIONING
HWH	HOT WATER HEATER
HW	HOT WATER
I	
IBC	INSTALLED BY CONTRACTOR
ID	INSIDE DIAMETER
ID	INTERIOR DESIGN
INV EL	INVERT ELEVATION
IF	INSIDE FACE
IN	INCHES
INCAND	INCANDESCENT
INCL	INCLUDING
INSTL	INSTALL
INSUL	INSULATE/INSULATION
INT	INTERIOR/INTERNAL
INV	INVERT
J	
JAN	JANITOR
J BOX	JUNCTION BOX
JAN CLO	JANITOR CLOSET
JT	JOINT
K	
KIT	KITCHEN
L	
LAB	LABORATORY
LAM	LAMINATE
LAV	LAVATORY
LBS	POUNDS
LF	LINEAR FEET
LH	LEFT HAND
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LPT	LOW POINT
LT	LIGHT
LTG	LIGHTING
LVR	LOUVER
M	
MAINT	MAINTENANCE
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MED	MEDIUM
MEMB	MEMBRANE
MFG	MANUFACTURING
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
ML	METAL LATH
MO	MASONRY OPENING
MOD BIT	MODIFIED BITUMEN
MR	MOISTURE RESISTANT
MS	MOP SINK
MTD	MOUNTED
MTL	METAL
MULL	MULLION
N	
N	NORTH
N/A	NOT APPLICABLE
NCOMBL	NONCOMBUSTIBLE
NEG	NEGATIVE
NIC	NOT IN CONTACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O	
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OF/CI	OWNER FURNISHED / CONTRACTOR INSTALLED
OFF	OFFICE
OF/OI	OWNER FURNISHED / OWNER INSTALLED
OH	OPPOSITE HAND/ OVERHEAD/OVERHANG
O/O	OUT TO OUT
OPNG	OPENING
OPP	OPPOSITE
ORD	OVERFLOW ROOF DRAIN
ORIG	ORIGINAL
ORN	ORNAMENTAL
ORS	OVERFLOW ROOF SCUPPER
P	
PTN	PARTITION
PAT	PATTERN
PBD	PARTICLE BOARD
PCC	PRECAST CONCRETE
PERF	PERFORATED
PERM	PERMANENT
PL	PLATE/PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER/PLASTIC
PLBG	PLUMBING
PLYWD	PLYWOOD
POL	POLISHED
PNL	PANEL
PT	PAINT
PR	PAIR
PREFAB	PREFABRICATED
PREFIN	PREFINISHED
PRELIM	PRELIMINARY
PREP	PREPARATION
PROJ	PROJECT
PT CONC	POST TENSION CONCRETE
PTD	PAINTED
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
Q	
QT	QUARRY TILE
QTY	QUANTITY
R	
R	RADIUS/RISER
RA	RETURN AIR
RB	RUBBER BASE
RBR	RUBBER
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
RDG INS	RIGID INSULATION
REBAR	REINFORCED STEEL BAR
REC	RECESSED
RE/REF	REFERENCE
REFR	REFRIGERATOR
REINF	REINFORCED/REINFORCEMENT
REM	REMOVE
REQ'D	REQUIRED
REV	REVISION
RH	RIGHT HAND
RL	ROOF LEADER
RLG	RAILING
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RP	REFERENCE POINT
RTG	RATING
RTU	ROOF TOP UNIT
RVL	REVEAL

S	
S	SOUTH
SALV	SALVAGE
SAN	SANITARY
SB	SPLASH BLOCK
SCND	SOLID CORE WOOD DOOR
SCHED	SCHEDULE/SCHEDULED
SCHEM	SCHEMATIC
SEC	SECOND
SECT	SECTION
SF	SQUARE FOOT/FEET
SGL	SINGLE
SHT	SHEET
SHT MTL FLASH	SHEET METAL FLASHING
SHTHG	SHEATHING
SIM	SIMILAR
SLNT	SEALANT
SM	SURFACE MOUNTED/SMALL
SM	SHEET METAL
SMACNA	SHEET METAL AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION
SPLY	SUPPLY
SPEC	SPECIFICATION(S)
SPRT	SUPPORT
SQ	SQUARE
SST	STAINLESS STEEL
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STL JST	STEEL JOIST
STOR	STORAGE
STRUCT	STRUCTURAL
SURF	SURFACE
SUSP	SUSPENDED
SYMM	SYMMETRICAL
T	
T	TREAD
T & B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TBD	TO BE DETERMINED
TEL	TELEPHONE
TEMP	TEMPERATURE/TEMPORARY
TERR	TERRAZZO
THK	THICK
THRESH	THRESHOLD
THRU	THROUGH
THRD GL	TEMPERED GLASS
TO	TOP OF ____
TOJ	TOP OF JOIST
TOC	TOP OF CONCRETE/TOP OF CURB
TOM	TOP OF MASONRY
TOP	TOP OF PARAPET
TOS	TOP OF STEEL/TOP OF SLAB
TOW	TOP OF WALL
TRTD	TREATED
TS	TUBE STEEL
TYP	TYPICAL
U	
UBC	UNIFORM BUILDING CODE
UC	UNDERCUT
UL	UNDERWRITER'S LABORATORIES
UNFIN	UNFINISHED
UON	UNLESS OTHERWISE NOTED
UR	URINAL
UTIL	UTILITY
V	
VAR	VARIES
VNR	VENEER
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VTR	VENT THROUGH ROOF
VNC	VINYL WALL COVERING
W	
W	WEST/WIDTH
W/	WITH
WBL	WOOD BLOCKING
WC	WATER CLOSET/WALL COVERING
WD	WOOD
WDW	WINDOW
WF	WIDE FLANGE
WGL	WIRED GLASS
WH	WATER HEATER/WEEP HOLE
W/O	WITHOUT
WP	WATERPROOFING/WORKING POINT
WR	WATER RESISTANT
WT	WEIGHT
WWF	WELDED WIRE FABRIC
Y	
YD	YARD/YARDS
	MISCELLANEOUS
#	NUMBER/POUNDS
&	AND
@	AT/EACH/RATE
'	FEET/MINUTES
"	INCHES/SECONDS
°	DEGREES
Ø	DIAMETER
∠	ANGLE

BUILDING CODE DATA

CODES IN EFFECT

City of Greeley, Co.

2021 International Building Code
2021 International Residential Code
2021 International Property Maintenance Code
2021 International Mechanical Code
2021 International Plumbing Code
2021 International Existing Building Code
2021 International Energy Conservation Code
2021 International Fuel Gas Code
2023 National Electrical Code

OCCUPANCY TYPE

Group B

BUILDING TYPE

Type V-B Sprinklered

CODE SUMMARY

ZONING:	C-H (Commercial High Intensity)
OCCUPANCY:	Group B
BLDG. TYPE:	Type V-B, Sprinklered
AREA/HT:	1 Story, Main Building 30'-2" in height to top of parapet and 8,696 gsf, (V-B Maximum = 9,000 sf & 2 Story)
AREA CORE/SHELL BLDG:	7,449 Total Gross SF exterior footprint
OCCUPANT LOAD:	7,449 sf. ÷ 150 = 50 occupants Final Occupant Load T.B.D. By Tenant Finish
EXITING:	Exit width provided: (5 provided 2 required) 5 Exits: 4 Exits @ 34" 1 Exits @ 68" 102" Max. Length of common path of egress is 100'
FIRE PROTECTION:	Contractor to verify sprinkler and alarm requirements with Fire Department. Engineered alarm drawings will be submitted by the sub contractor to the fire department for review and approval if required
RESTROOM FACILITIES:	To be provided with tenant finish

GENERAL REQUIREMENTS

1. GENERAL REQUIREMENTS

1.1 SUMMARY:

THE WORK INCLUDES BUT IS NOT LIMITED TO THE SITEWORK AND CORE-SHELL BUILDING IMPROVEMENTS OF THE FACILITY AT THE REFERENCED ADDRESS, INCLUDING RELATED UTILITIES, GRADING, PAVING, LANDSCAPING, ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND ALARMS AND SPECIAL EQUIPMENT, SYSTEMS AND COORDINATION THEREOF AS NECESSARY FOR FULL AND COMPLETE INTENDED USE BY THE OWNER, THE INTENT OF WHICH IS INDICATED IN THE CONSTRUCTION DOCUMENTS.

1.2 GENERAL CONDITIONS OF THE CONTRACT:

A. THE CONTRACT DOCUMENTS INCLUDE "GENERAL CONDITIONS, SEE SPECIFICATION BOOK

B. THE ARCHITECT SHALL BE THE SOLE INTERPRETER OF THE INTENT OF THE CONTRACT DOCUMENTS

1.3 GENERAL NOTES:

1. CONTRACTORS RESPONSIBLE FOR VISITING SITE TO BECOME FAMILIAR WITH EXISTING SITE CONDITIONS PRIOR TO BID AND START OF WORK.
2. ALL WORK TO BE IN ACCORDANCE WITH APPLICABLE CODES AND ORDINANCES.
3. ALL RFI'S MUST BE SUBMITTED IN WRITING.
4. FULL SUBMITTALS/SHOP DRAWINGS REQUIRED FROM ALL TRADES.
5. ANY CONFLICTS OR DISCREPANCIES MUST BE REPORTED TO THE ARCHITECT IMMEDIATELY UPON THEIR DISCOVERY.
6. ALL WORK SHALL ALSO CONFORM TO THE OWNERS BUILDING STANDARDS AND DETAILS, G.C. TO COORDINATE AND VERIFY
7. G.C. SHALL COORDINATE ALL WORK BY OWNERS VENDORS INCLUDING BUT NOT LIMITED TO COMPUTER, TELEPHONE, SECURITY AND BUILDING CONTROL SYSTEMS. G.C. SHALL REVIEW SAID CONTRACTS AND DRAWINGS AND DISCUSS SAME WITH VENDORS PRIOR TO BID AND CONSTRUCTION.
8. INSTALL ALL ITEMS, EQUIPMENT AND MATERIALS PER MANUFACTURERS INSTRUCTIONS.
9. G.C. SHALL BE RESPONSIBLE FOR SECURING AND PAYING FOR ALL PERMITS AND INSPECTIONS
10. G.C. SHALL BE RESPONSIBLE FOR COORDINATING ANY REQUIRED TESTING AND INSPECTIONS AND FORWARDING THAT INFORMATION TO THE ARCHITECT AND OWNER.
11. FIRE SPRINKLERS AND FIRE ALARMS TO BE AS REQUIRED BY THE LOCAL FIRE DISTRICT. SPRINKLER AND ALARM SUBCONTRACTORS TO PREPARE SHOP DRAWINGS AND SUBMIT FOR/OBTAIN PERMITS AS REQUIRED.

1.4 BIDDING

A. CONTRACTORS BY PROVIDING A BID REPRESENT THAT THEY:
1) UNDERSTAND THE REQUIREMENTS OF THE CONSTRUCTION CONTRACT
2) HAVE VISITED THE SITE AND ARE FAMILIAR WITH THE CONDITIONS
3) PROVIDED A BID BASED UPON FULL EXECUTION OF THE INTENT OF THE CONTRACT DOCUMENTS
4) CONSULTED WITH THE OWNER REGARDING ACCESS, STORAGE, RESTROOMS, TRASH REMOVAL, ETC. AND ANY OTHER NECESSITIES OF CONSTRUCTION AND HAVE INCLUDED THOSE COSTS IN THE BID SUBMITTED
5)HAVE VERIFIED THE ADEQUACY OF NEW AND EXISTING WORK REQUIRED BY CONTRACT DOCUMENTS

B. ALLOWANCES: ALLOWANCE PRICE SHALL INCLUDE ONLY THE TAILGATE DELIVERY AND MATERIAL COSTS AS INVOICED FROM THE MANUFACTURER OR SUPPLIER. INSTALLATION SHALL BE INCLUDED IN THE BASE PRICE
C. ALTERNATES: ITEMIZE ALL INCLUSIVE ADD/DEDUCT PRICES FOR ALL ALTERNATES LISTED IN CONTRACT DOCUMENTS
D. SUBSTITUTIONS: NO SUBSTITUTIONS SHALL BE INCORPORATED INTO THE WORK WITHOUT PRIOR WRITTEN APPROVAL OF THE ARCHITECT. NO SUBSTITUTIONS WILL BE ENTERTAINED UNLESS THEY REPRESENT A COST SAVINGS TO THE OWNER WITHOUT SACRIFICING QUALITY OR FUNCTION.
E. COMPLETE BID BREAKDOWNS SHALL BE SUBMITTED INCLUDING GENERAL CONDITIONS, OVERHEAD AND PROFIT AND ALL DIVISIONS OF THE WORK IN CSI FORMAT

1.5 SUBMITTALS

A. SUBMIT 3 COPIES MIN. OF SHOP DRAWINGS, PRODUCT DATA AND FINISH SAMPLES (OR ELECTRONIC COPIES)
B. ALLOW 5 WORKING DAYS FOR ARCHITECTS REVIEW OF SUBMITTALS
C. G.C. MUST CERTIFY IN WRITING THAT SUBMITTALS COMPLY WITH DESIGN INTENT UPON SUBMITTING TO THE ARCHITECT
D. SUCCESSFUL G.C. SHALL SUBMIT WITHIN 7 DAYS OF CONTRACT AWARD, AND MONTHLY THEREAFTER FOR ARCHITECTS REVIEW: 1) CONSTRUCTION SCHEDULE 2) SUBMITTAL SCHEDULE
E. G.C. SHALL SUBMIT A PUNCH LIST FOR OWNERS REVIEW 1 WEEK PRIOR TO APPLICATION FOR FINAL PAYMENT

1.6 FINAL CLEAN

A. CONTRACTOR TO PROVIDE FOR A COMPLETE AND FINAL CLEAN OF ALL WORK ASSOCIATED WITH THIS PROJECT
B. SURPLUS MATERIALS SHALL BE DELIVERED, AT OWNERS OPTION, TO THE OWNER

1.7 PROJECT CLOSE-OUT

A. CONTRACTOR TO PROVIDE OPERATION/MAINTENANCE MANUALS TO OWNER FOR ALL CONTRACTOR PROVIDED & INSTALLED EQUIPMENT, FIXTURES AND FINISHES/MATERIALS

FIRE BLOCKING REQUIRED

1. AT CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS, AND AT 10' FT. INTERVALS BOTH VERTICAL AND HORIZONTAL.

2. AT ALL INTER-CONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS SOFFITS, DROPPED CEILINGS, AND COVE CEILINGS.

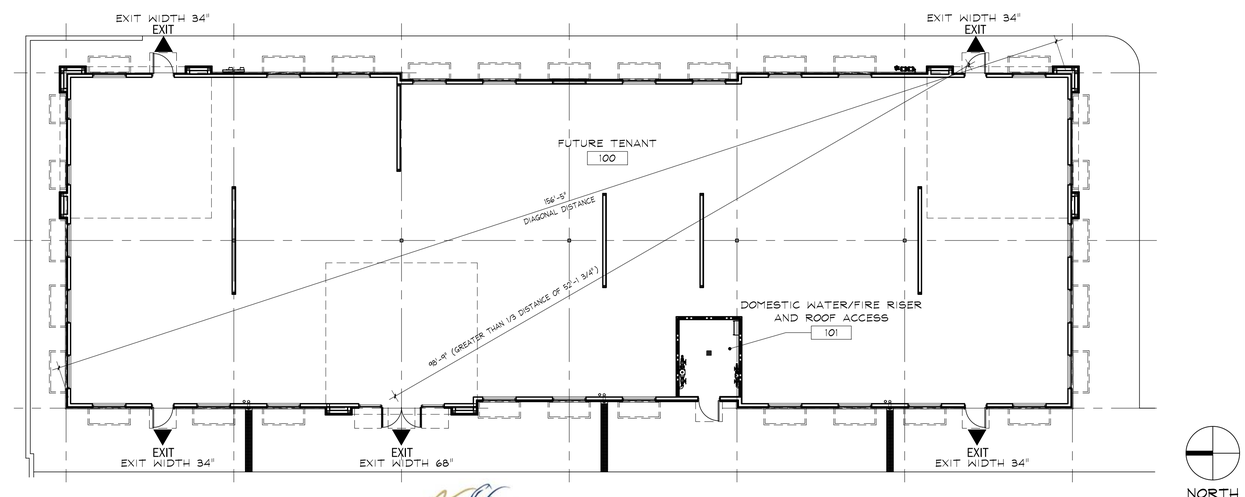
3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS, AT THE TOP AND THE BOTTOM OF THE RUN AND BETWEEN STUDS ALONG AND IN LINE WITH THE RUN OF STAIRS, IF THE WALLS UNDER THE STAIRS ARE UNFINISHED.

4. IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, FIREPLACES, AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS, USE NON-COMBUSTIBLE MATERIALS.

5. AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY CHASES FOR FACTORY-BUILT CHIMNEYS.

6. WALLS HAVING PARALLEL OR STAGGERED STUDS FOR SOUND CONTROL, SHALL HAVE FIRE BLOCKS OF MINERAL FIBER OR GLASS FIBER, OR OTHER APPROVED NON-RIGID MATERIAL.

7. THE INTEGRITY OF ALL FIRE BLOCKING, AND DRAFT STOPS, SHALL BE MAINTAINED.



No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

GENERAL AND CODE INFO

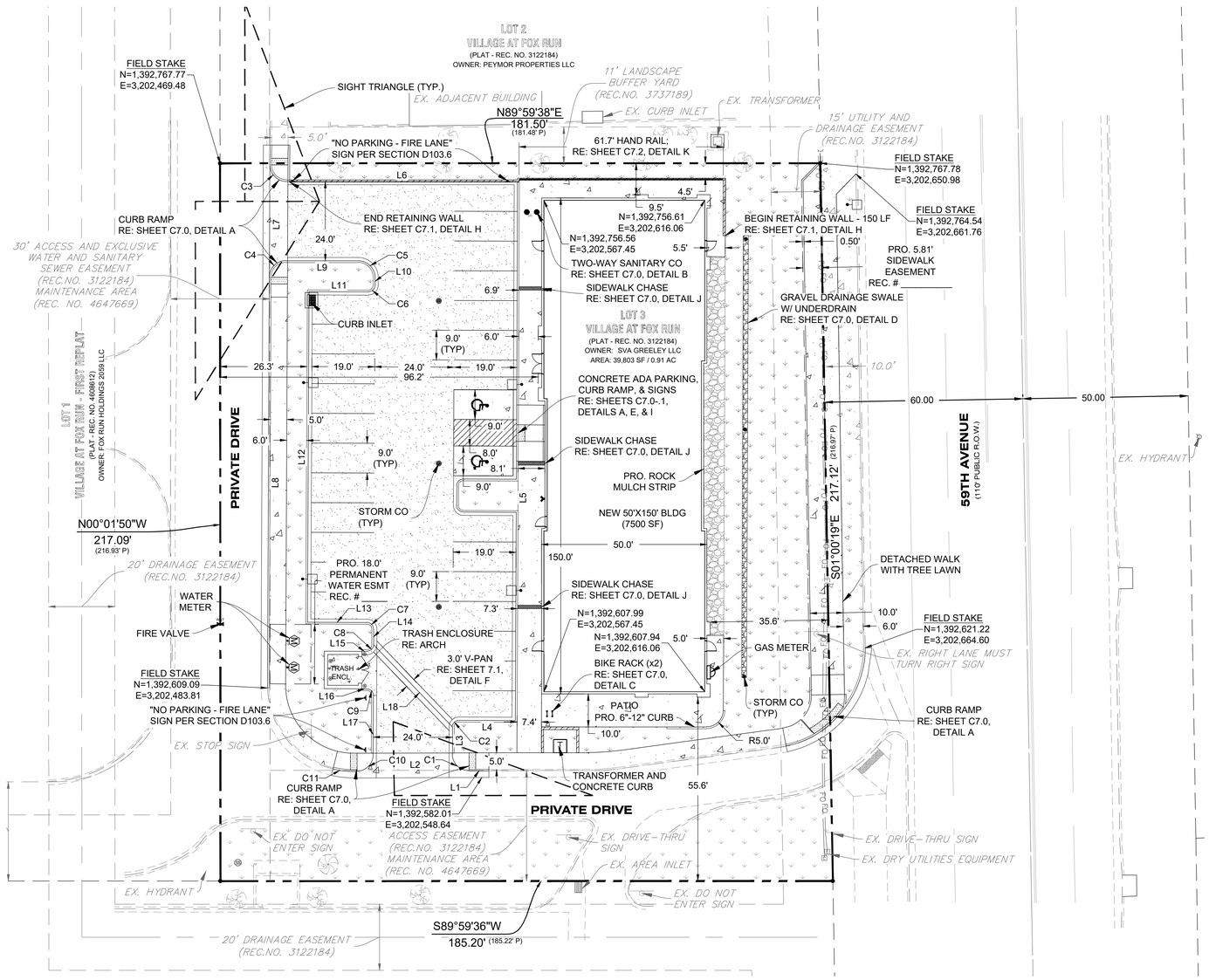
STATE OF COLORADO PAUL A. BATTISTA B-3015 02/12/2025 LICENSED ARCHITECT

Designed:	Project Number: SVA2025
Drawn:	Scale: As Shown
Checked:	Drawing Number:
Reviewed:	G1.1
Date: Feb., 2025	of

G1 — LIFE SAFETY PLAN
3/32"=1'-0" — RE:

City of Greeley Colorado

COPYRIGHT 2018 — BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



LEGEND

EXISTING		PROPOSED
	CURB AND GUTTER (SPILL)	
	CURB AND GUTTER (CATCH)	
C E F	ELECTRICAL BOX	E
	SITE LIGHT	
	SIGN	
ST SS	MANHOLES	ST SAN
	INLET	
M	METER PIT	M
WAT	GATE VALVE	WAT
	THRUST BLOCK	
CO	CLEAN OUT	CO
	TREE	
	UTILITY POLE	
G	GAS METER	G
	FIRE HYDRANT	

HATCHING LEGEND

EXISTING		PROPOSED
	CONCRETE	
	LANDSCAPE	
	ASPHALT	

LINE TABLE		
LINE #	BEARING	DISTANCE
L1	N89°47'23"E	5.99
L2	N89°45'11"E	33.83
L3	S00°13'38"W	8.25
L4	N89°46'22"W	17.00
L5	S00°13'38"W	163.08
L6	N89°59'38"E	69.89
L7	S00°16'02"W	34.00
L8	S00°16'02"W	124.20
L9	S89°59'38"W	21.93
L10	N00°13'38"E	2.37
L11	S89°43'58"E	17.99
L12	N00°16'02"E	100.00
L13	N89°43'58"W	18.00
L14	N00°13'38"E	4.70
L15	S89°55'19"E	1.50
L16	N89°45'57"W	1.50
L17	N00°13'38"E	18.02
L18	S43°48'54"E	34.52

CURVE TABLE					
CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	7.89	5.00	90°26'15"	S44°59'29"E	7.10
C2	3.14	2.00	90°00'00"	S45°13'38"W	2.83
C3	7.88	5.00	90°16'23"	S44°52'10"E	7.09
C4	7.83	5.00	89°43'37"	S45°07'50"W	7.05
C5	7.89	5.10	88°37'02"	N45°13'25"W	7.13
C6	3.14	2.00	89°59'56"	N45°13'36"E	2.83
C7	3.14	2.00	90°00'00"	N44°46'22"W	2.83
C8	3.14	2.00	89°51'02"	N45°09'10"E	2.82
C9	3.14	2.00	89°59'35"	N44°46'09"W	2.83
C10	7.65	5.00	87°36'52"	N44°02'05"E	6.92
C11	7.37	26.16	16°09'17"	S84°04'51"E	7.35

NOTES:
1. "FIELD STAKES" SHOWN TO DEFINE ALLOWABLE LIMITS OF DISTURBANCE. SEE THE EROSION CONTROL SHEETS (C8.0-C8.2) FOR THE DEFINING LINE OF ALLOWABLE DISTURBANCE.

WATER AND SEWER SHALL BE INSTALLED BY LICENSED PLUMBING CONTRACTOR

N

0' 20' 40' 60'
SCALE: 1" = 20'

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**, Call before you dig.
811
CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name: SITE & HC PLAN
Sheet Number: SP.1

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Site Plan.dwg PLOTDATE: 2025-02-06

DOOR AND FRAME SCHEDULE

DOOR NO.	SIZE WIDTH	SIZE HEIGHT	SIZE THICK	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	DOOR GLASS	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	DETAILS HEAD	DETAILS JAMB(S)	DETAILS SILL	FIRE RATING	H W	REMARKS
100	3'-0"	8'-0"	1-3/4"	A	ALU	ANO	GL1	2	ALU	ANO	-	-	-	-	02	ENTRANCE LOCK
100A	PR. 3'-0"	8'-0"	1-3/4"	A	ALU	ANO	GL1	1	ALU	ANO	-	-	-	-	01	ENTRANCE LOCK
100B	3'-0"	8'-0"	1-3/4"	A	ALU	ANO	GL1	2	ALU	ANO	-	-	-	-	02	ENTRANCE LOCK
100C	3'-0"	8'-0"	1-3/4"	A	ALU	ANO	GL1	2	ALU	ANO	-	-	-	-	02	ENTRANCE LOCK
100D	3'-0"	8'-0"	1-3/4"	A	ALU	ANO	GL1	2	ALU	ANO	-	-	-	-	02	ENTRANCE LOCK
101	3'-0"	8'-0"	1-3/4"	C	HM	PNT	-	3	HM	PNT	-	-	-	-	03	STOREROOM LOCK

GLAZING TYPES

TYPE	GLAZING MATERIAL
1	1" INSULATED GLASS WITH ARGON, LOW 'E', SOLAR GRAY COATING
2	1/4" LOW 'E' GLASS. GRAY TINTED
T	INDICATES TEMPERED GLASS

DOOR HARDWARE SCHEDULE

HARDWARE SET	QTY.	DESCRIPTION	CATALOG NUMBER	FINISH	MFR	REMARKS
HW SET: 01 DOORS:	2 EA	CONT. HINGE	112HD	628	IVE	FREE EGRESS AT ALL TIMES.
	1 EA	PANIC HARDWARE	CD-9847-EO	626	VON	PANIC HARDWARE DEVICE LATCH MAY BE MECHANICALLY
	1 EA	PANIC HARDWARE	CD-9847-NL-OP-110MD	626	VON	HELD IN RETRACTED STATE BY MECHANICAL CYLINDER
	2 EA	MORTISE CYLINDER	20-001 (CAM/COLLAR AS REQ.)	626	SCH	DOGGING FEATURE FOR PUSH/PULL OPERATION.
	1 EA	RIM CYLINDER	20-022	626	SCH	
	2 EA	90 DEG OFFSET PULL	8190EZHD 10" O	630	IVE	
	2 EA	SURFACE CLOSER	4050 SCUSH	689	LCN	WITH SPRING STOP
	2 SET	CLOSER BRACKET(S)	AS REQ. TO INSTALL CLOSER	689	LCN	
	1 SET	SEALS	BY ALUM DOOR/FRAME MFR.			
	1 EA	MEETING STILE SEAL	BY ALUM DOOR/FRAME MFR.			
	2 EA	DOOR SWEEP	BY ALUM DOOR/FRAME MFR.			
	1 EA	THRESHOLD	655A - OR AS REQ. BY SILL DET.	A	ZER	
HW SET: 02 DOORS:	1 EA	CONT. HINGE	112HD	628	IVE	FREE EGRESS AT ALL TIMES.
	1 EA	PANIC HARDWARE	CD-9847-NL-OP-110MD	626	VON	PANIC HARDWARE DEVICE LATCH MAY BE MECHANICALLY
	1 EA	MORTISE CYLINDER	20-001 (CAM/COLLAR AS REQ.)	626	SCH	HELD IN RETRACTED STATE BY MECHANICAL CYLINDER
	1 EA	RIM CYLINDER	20-022	626	SCH	DOGGING FEATURE FOR PUSH/PULL OPERATION.
	1 EA	90 DEG OFFSET PULL	8190EZHD 10" O	630	IVE	
	1 EA	SURFACE CLOSER	4050 SCUSH	689	LCN	WITH SPRING STOP
	1 SET	CLOSER BRACKET(S)	AS REQ. TO INSTALL CLOSER	689	LCN	
	1 SET	SEALS	BY ALUM DOOR/FRAME MFR.			
	1 EA	DOOR SWEEP	BY ALUM DOOR/FRAME MFR.			
	1 EA	THRESHOLD	655A - OR AS REQ. BY SILL DET.	A	ZER	
HW SET: 03 DOORS:	3 EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE	FREE EGRESS AT ALL TIMES. PANIC HARDWARE DEVICE LATCH MAY BE
	1 EA	STOREROOM LOCK	AL80PD NEP	626	SCH	MECHANICALLY HELD IN RETRACTED STATE BY MECHANICAL CYLINDER DOGGING
	1 EA	LOCK GUARD	LG12	630	IVE	FEATURE FOR PUSH/PULL OPERATION.
	1 EA	SURFACE CLOSER	4050 SCUSH	689	LCN	WITH SPRING STOP
	1 EA	PROTECTION PLATE	8400 10" X 2" LDW B-CS	630	IVE	
	1 EA	RAIN DRIP	142AA	AA	ZER	
	1 EA	GASKETING	429A @ HEAD & JAMBS	A	ZER	
	1 EA	DOOR SWEEP	39A	A	ZER	
	1 EA	THRESHOLD	655A - OR AS REQ. BY SILL DET.	A	ZER	

1010.2.2 Hardware. Door handles, pulls, latches, locks and other operating devices on doors required to be *accessible* by Chapter 11 shall not require tight grasping, tight pinching or twisting of the wrist to operate.

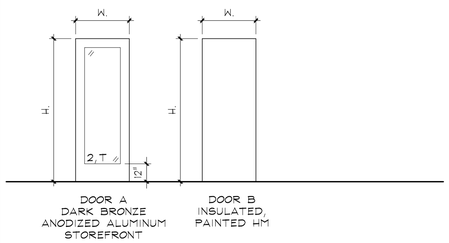
1010.2.3 Hardware height. Door handles, pulls, latches, locks and other operating devices shall be installed 34 inches (864 mm) minimum and 48 inches (1219 mm) maximum above the finished floor. Locks used only for security purposes and not used for normal operation are permitted at any height.

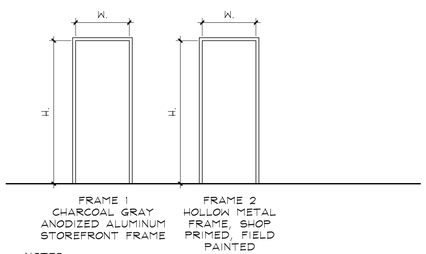
In buildings in occupancy Group A having an *occupant load* of 300 or less, Groups B, F, M and S, and in *places of religious worship*, the main door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:

3.1. The locking device is readily distinguishable as locked.

3.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.

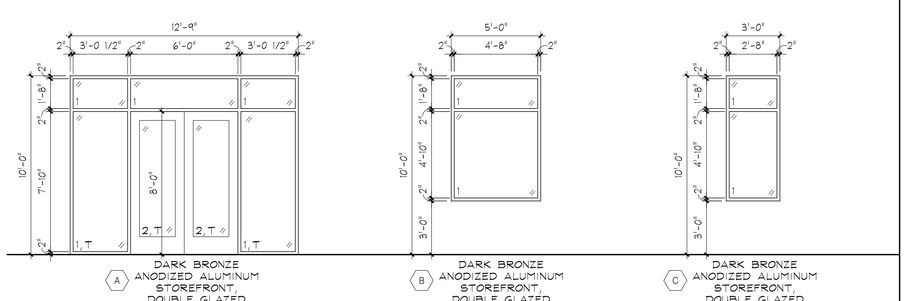
3.3. The use of the key-operated locking device is revocable by the *building official* for due cause.





NOTES:

1. FRAMES TO BE WELDED HOLLOW METAL FRAMES - SHOP PRIMED AND FIELD PAINTED WITH SEMI-GLOSS OIL BASED PAINT, OR KYNAR FINISH ALUMINUM STOREFRONT, SEE SCHEDULE
2. SUBMIT SHOP DRAWINGS AND SAMPLES FOR REVIEW
3. DOORS TO BE KYNAR FINISH ALUMINUM OR PAINTED HOLLOW METAL, SEE SCHEDULE



A1	DOOR, FRAME AND WINDOW TYPES
1/4 " = 1'-0"	RE:

Manufacturer Legend: Substitutions:

(BYO) By Others
(FAL) FalconSchlage, Marks
(GLY) Glynn Johnson Rixson, ABH
(IVE) Ives Hinges, Stanley, McKinney
(IVE) Ives Trimco, Rockwood
(NGP) National Guard Products Pemko, Zero International
(SCH) Schlage No Substitution
(STA) Stanley

Schedule Notes:

A. General:
1. Intent of Hardware Groups
a. The following schedule of hardware groups shall be considered a guide only. It shall be the hardware supplier's responsibility to furnish all required hardware.
b. Where items of hardware aren't definitely or correctly specified and are required for completion of the Work, a written statement of such omission, error, or other discrepancy shall be sent to the Architect, prior to date specified for receipt of bids for clarification by addendum; or, furnish such items in the type and quality established by this specification, and appropriate to the service intended.
c. Adjustments to the Contract Sum will not be allowed for omissions or items of hardware not clarified prior to bid opening.
2. Furnish all items in US26D (BHMA 626/652), Satin Chrome unless otherwise specified, Thresholds and Weatherstrip shall be Mill Finish Aluminum. Closers shall be Powder Coated Aluminum. Trim and Flat Goods may be furnished in US32D (BHMA 630), Satin Stainless Steel.

B. Lock and Latchsets:
1. General Contractor to arrange for a keying meeting, and programming meeting with Architect, Owner and hardware supplier, and other involved parties to ensure locksets and locking hardware, are functionally correct and keying and programming complies with project requirements.
2. Provide 2 3/4 inch backset.
3. Provide strikes with extended lips where required to protect trim from being marred by latch bolt. Provide strike lips that do not project more than 1/8" beyond doorframe trim. Provide wrought box strikes on all locks and latches.

C. Panic Hardware
1. Exit devices shall be touchpad style powder coated to the standard architectural finishes to match the balance of the door hardware.
2. Trim: as specified in sets, function numbers as listed in sets. .
3. Exit devices shall be UL listed panic exit hardware.
4. Provide hex key dogging on panic exit hardware.
5. After installation of all exit devices, General Contractor to have Manufacturer's representative inspect installation and advise if devices are adjusted correctly.

D. Door Closers:
1. Door closers shall have fully hydraulic, full rack and pinion action with a high strength cast iron or aluminum cylinder.
2. Spring power shall be continuously adjustable over the full range of closer sizes, and allow for reduced opening force for the physically handicapped. Closers shall have separate adjustment for latch speed, general speed, and backcheck.
3. Refer to door and frame details and furnish accessories such as drop plates, special templates, spacers and supports as required to correctly install door closers. State degree of door swing in the hardware schedule. Place closers inside building, stairs and rooms.
4. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with accessibility requirements.
5. Door control devices backcheck shall be properly located for protection of the door, frame, and applied hardware.

E. Threshold and Gasketing
1. Door Jambs must be cleaned of all dirt, grease, oil, solvents or solvent residue and dust before applying Pressure-Sensitive Adhesive backed Weatherstripping.
2. Thresholds: Set thresholds for exterior in full bed of sealant.

F. Cylinders and Keying:
1. Hardware supplier shall meet with the Owner to finalize keying requirements and obtain keying instructions in writing. All cylinders shall be masterkeyed by supplier as directed by Owner. Quantities of permanent keys will be as determined by the Owner. Permanent keys shall be stamped with the applicable key mark as determined by the Owner for identification, and shall be stamped "Do Not Duplicate". Deliver all permanent keys direct to Owner from supplier by secure courier return receipt requested. If required by Owner all cylinders shall be construction keyed, furnish 5 construction keys.

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

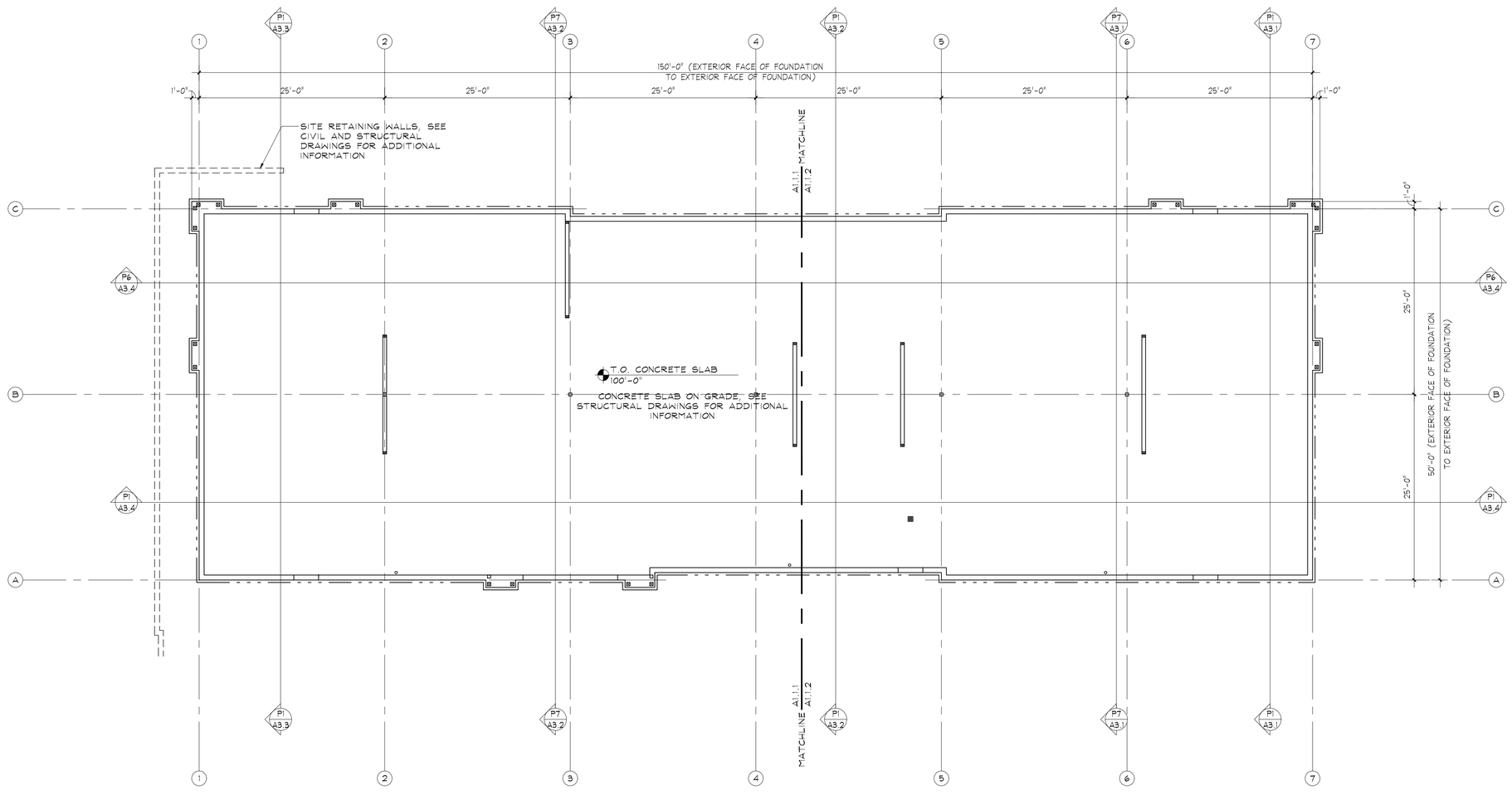
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

DOOR AND HARDWARE SCHEDULE
DOOR AND WINDOW TYPES

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed:	Project Number: SVA2025
Drawn:	Scale: As Shown
Checked:	Drawing Number:
Reviewed:	A0.1
Date: Feb., 2025	of

COPYRIGHT 2018 - BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



NOTES:

1. SEE S SHEETS FOR ADDITIONAL INFORMATION. COORDINATE WALL/CURB HEIGHTS WITH STRUCTURAL, NOTIFY ARCHITECT OF ANY DISCREPANCIES.

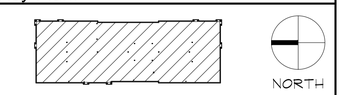
2. PROVIDE WATER STOPS IN ALL JOINTS IN CONCRETE WALLS AS OCCURS

3. SEE SHEETS A1.0.1 AND A1.0.2 FOR ADDITIONAL INFORMATION.

Foundation Walls
Moisture Barrier Schedule

— - - - — WATERPROOFING, FULL HEIGHT

Key Plan:



No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

OVERALL FOUNDATION-SLAB PLAN

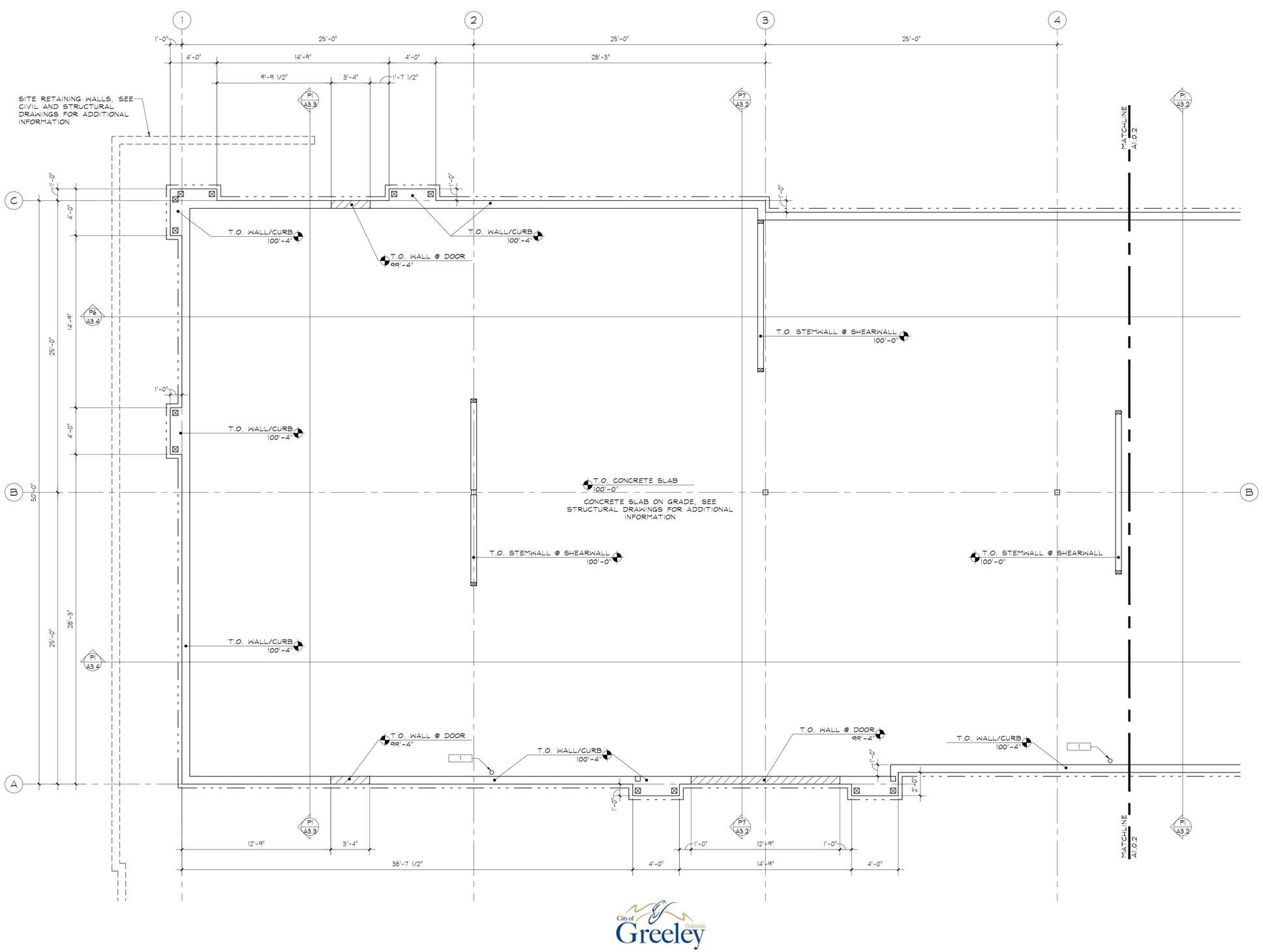
STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A1.0
Date: Feb., 2025	of

NORTH

P1	OVERALL FOUNDATION-SLAB PLAN
1/8" = 1'-0"	

COPYRIGHT 2018 – BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



NOTES:

1. SEE S SHEETS FOR ADDITIONAL INFORMATION. COORDINATE WALL/CURB HEIGHTS WITH STRUCTURAL, NOTIFY ARCHITECT OF ANY DISCREPANCIES.

2. PROVIDE WATER STOPS IN ALL JOINTS IN CONCRETE WALLS AS OCCURS

3. SEE SHEETS A1.0.1 AND A1.0.2 FOR ADDITIONAL INFORMATION.

KEYNOTES: (THIS SHEET ONLY)

1 ROOF DRAIN LEADER

Foundation Walls
Moisture Barrier Schedule

WATERPROOFING, FULL HEIGHT

Key Plan:

NORTH

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

FOUNDATION-SLAB PLAN - NORTH

STATE OF COLORADO
PAUL BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

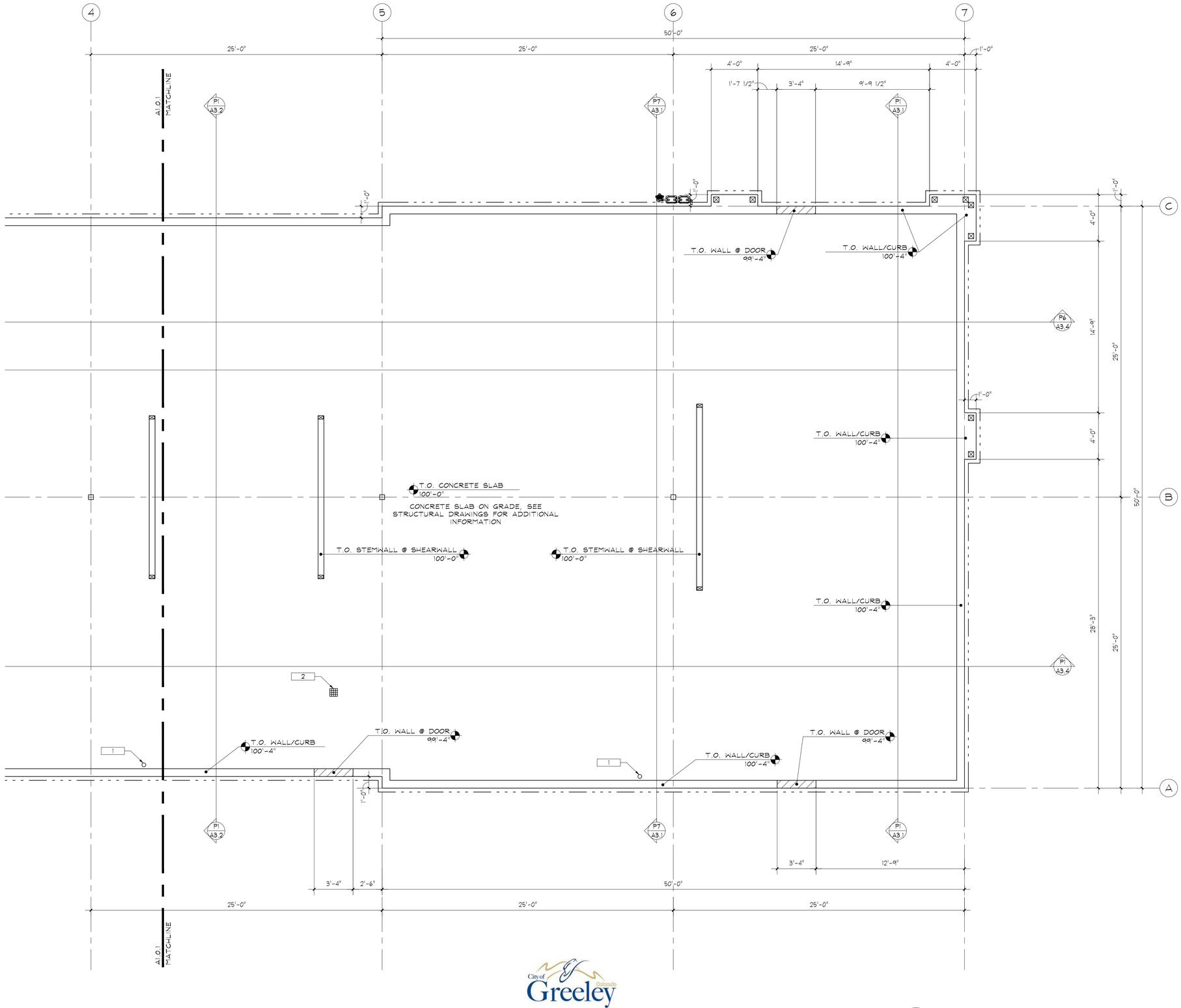
Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A1.0.1
Date: Feb., 2025	of

NORTH

P1	FOUNDATION-SLAB PLAN - NORTH
1/4" = 1'-0"	

City of Greeley Colorado

COPYRIGHT 2018 – BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



NOTES:

1. SEE S SHEETS FOR ADDITIONAL INFORMATION. COORDINATE WALL/CURB HEIGHTS WITH STRUCTURAL, NOTIFY ARCHITECT OF ANY DISCREPANCIES.

2. PROVIDE WATER STOPS IN ALL JOINTS IN CONCRETE WALLS AS OCCURS

3. SEE SHEETS A1.0.1 AND A1.0.2 FOR ADDITIONAL INFORMATION.

KEYNOTES: (THIS SHEET ONLY)

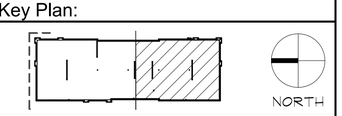
1 ROOF DRAIN LEADER

2 FLOOR DRAIN

Foundation Walls
Moisture Barrier Schedule

WATERPROOFING, FULL HEIGHT

Key Plan:



No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

FOUNDATION-SLAB PLAN - SOUTH

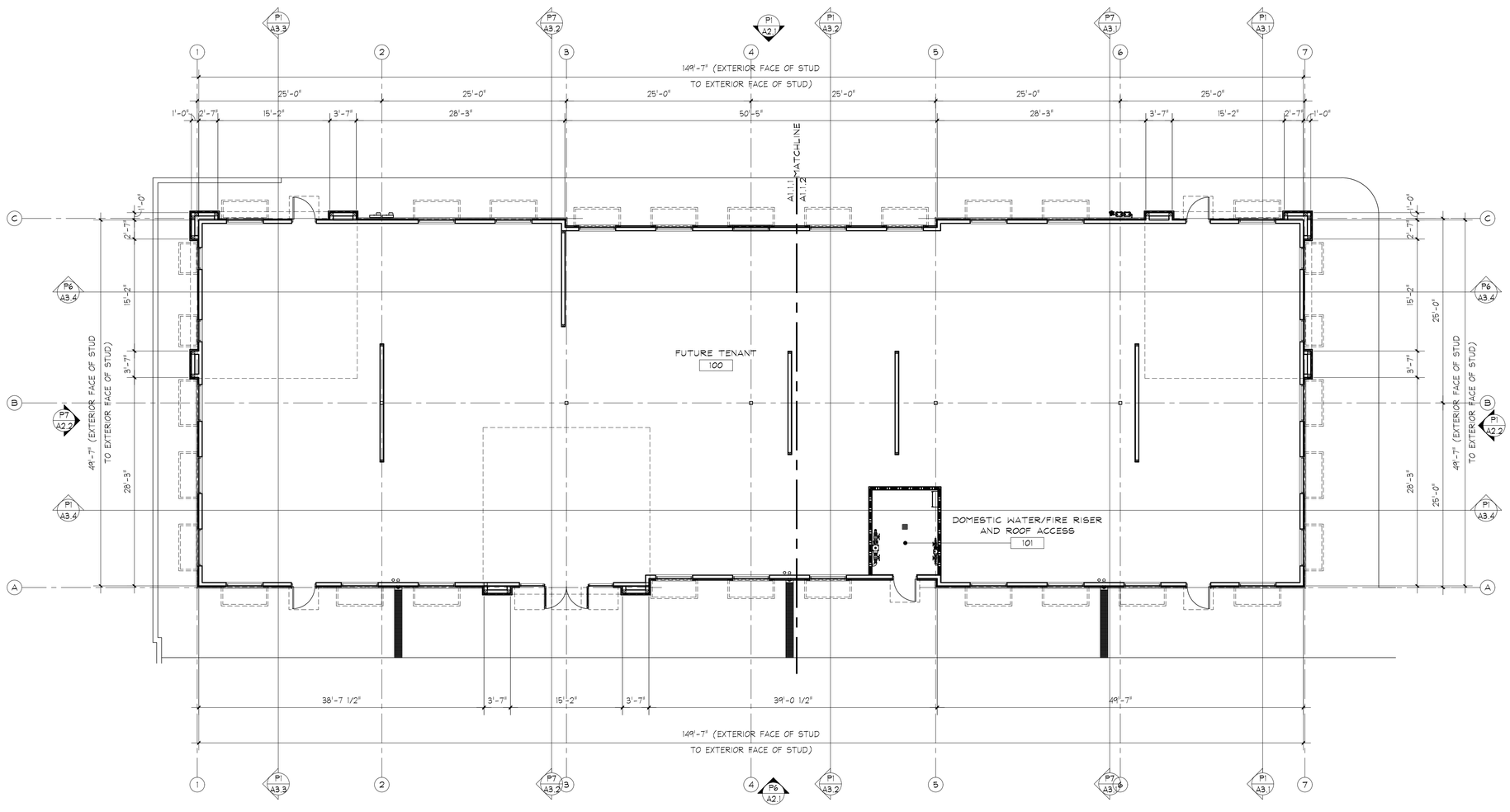
STATE OF COLORADO PAUL J. BATTISTA B-3015 02/11/2025 LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A1.0.2
Date: Feb., 2025	of

NORTH

P1	FOUNDATION-SLAB PLAN - SOUTH
1/4" = 1'-0"	

COPYRIGHT 2018 – BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



NOTES:

1. DIMENSIONS TO EXTERIOR WALLS ARE FACE OF EXTERIOR STUD UNLESS NOTED OTHERWISE. DIMENSIONS GOVERN OVER SCALING OF DRAWINGS. REPORT ANY CONFLICTS OR DISCREPANCIES TO ARCHITECT.

2. PROVIDE CAULK OR SEALANT AT ALL JOINTS OR CRACKS WHERE DISSIMILAR MATERIALS INTERSECT AND ARE PERPENDICULAR TO EACH OTHER, AND THE INTERSECTION IS EXPOSED TO VIEW, UNLESS INDICATED OTHERWISE.

3. SEE MEP DRAWINGS FOR ADDITIONAL INFORMATION.

4. SEE SHEETS A1.1.1 AND A1.1.2 FOR ADDITIONAL INFORMATION.

FIRE BLOCKING REQUIRED

1. AT CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS, AND AT 10' FT. INTERVALS BOTH VERTICAL AND HORIZONTAL.

2. AT ALL INTER-CONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS SOFFITS, DROPPED CEILINGS, AND COVE CEILINGS.

3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS, AT THE TOP AND THE BOTTOM OF THE RUN AND BETWEEN STUDS ALONG AND IN LINE WITH THE RUN OF STAIRS, IF THE WALLS UNDER THE STAIRS ARE UNFINISHED.

4. IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, FIREPLACES, AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS, USE NON-COMBUSTIBLE MATERIALS.

5. AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY CHASES FOR FACTORY-BUILT CHIMNEYS.

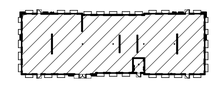
6. WALLS HAVING PARALLEL OR STAGGERED STUDS FOR SOUND CONTROL, SHALL HAVE FIRE BLOCKS OF MINERAL FIBER OR GLASS FIBER, OR OTHER APPROVED NON-RIGID MATERIAL.

7. THE INTEGRITY OF ALL FIRE BLOCKING, AND DRAFT STOPS, SHALL BE MAINTAINED.

Plan Legend:

1 HR PARTITION

Key Plan:



NORTH

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

OVERALL FLOOR PLAN

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

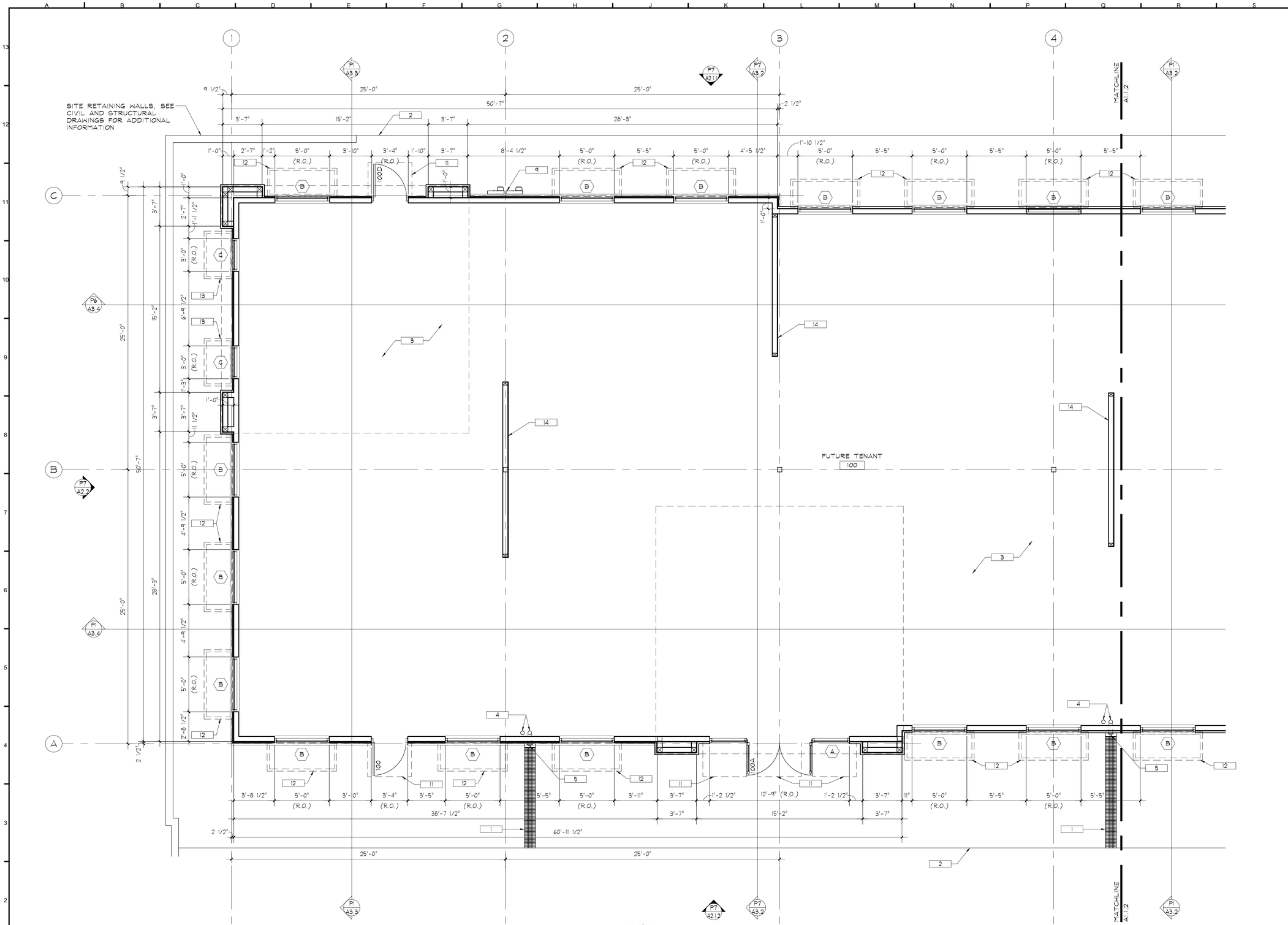
Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A1.1
Date: Feb., 2025	of

City of Greeley Colorado

NORTH

P1	OVERALL FLOOR PLAN
1/8" = 1'-0"	

COPYRIGHT 2018 – BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



NOTES:

1. DIMENSIONS TO EXTERIOR WALLS ARE FACE OF EXTERIOR STUD UNLESS NOTED OTHERWISE. DIMENSIONS GOVERN OVER SCALING OF DRAWINGS. REPORT ANY CONFLICTS OR DISCREPANCIES TO ARCHITECT.

2. PROVIDE CAULK OR SEALANT AT ALL JOINTS OR CRACKS WHERE DISSIMILAR MATERIALS INTERSECT AND ARE PERPENDICULAR TO EACH OTHER, AND THE INTERSECTION IS EXPOSED TO VIEW, UNLESS INDICATED OTHERWISE.

3. SEE MEP DRAWINGS FOR ADDITIONAL INFORMATION.

KEYNOTES: (THIS SHEET ONLY)

1	SIDEWALK TRENCH
2	CONCRETE SIDEWALK
3	CONCRETE SLAB ON GRADE, SEE STRUCTURAL
4	ROOF AND OVERFLOW DRAIN LEADERS
5	BRASS LAMB'S TONGUE
6	DOMESTIC WATER
7	FIRE RISER
8	ROOF ACCESS AND LADDER RE: K8/A5.3
9	ELECTRICAL GEAR AND METERS
10	NATURAL GAS
11	AWNING STRUCTURE ABOVE, TYPE 1 SEE SHEET A1.4
12	AWNING STRUCTURE ABOVE, TYPE 2 SEE SHEET A1.4
13	AWNING STRUCTURE ABOVE, TYPE 2A SEE SHEET A1.4
14	SHEARWALL, RE: STRUCTURAL FOR ADDITIONAL INFO.

FIRE BLOCKING REQUIRED

1. AT CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS, AND AT 10' FT. INTERVALS BOTH VERTICAL AND HORIZONTAL.

2. AT ALL INTER-CONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS SOFFITS, DROPPED CEILINGS, AND COVE CEILINGS.

3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS, AT THE TOP AND THE BOTTOM OF THE RUN AND BETWEEN STUDS ALONG AND IN LINE WITH THE RUN OF STAIRS, IF THE WALLS UNDER THE STAIRS ARE UNFINISHED.

4. IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, FIREPLACES, AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS, USE NON-COMBUSTIBLE MATERIALS.

5. AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY CHASES FOR FACTORY-BUILT CHIMNEYS.

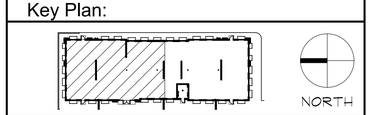
6. WALLS HAVING PARALLEL OR STAGGERED STUDS FOR SOUND CONTROL, SHALL HAVE FIRE BLOCKS OF MINERAL FIBER OR GLASS FIBER, OR OTHER APPROVED NON-RIGID MATERIAL.

7. THE INTEGRITY OF ALL FIRE BLOCKING, AND DRAFT STOPS, SHALL BE MAINTAINED.

Plan Legend:

1 HR PARTITION

Key Plan:



No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

FLOOR PLAN - NORTH

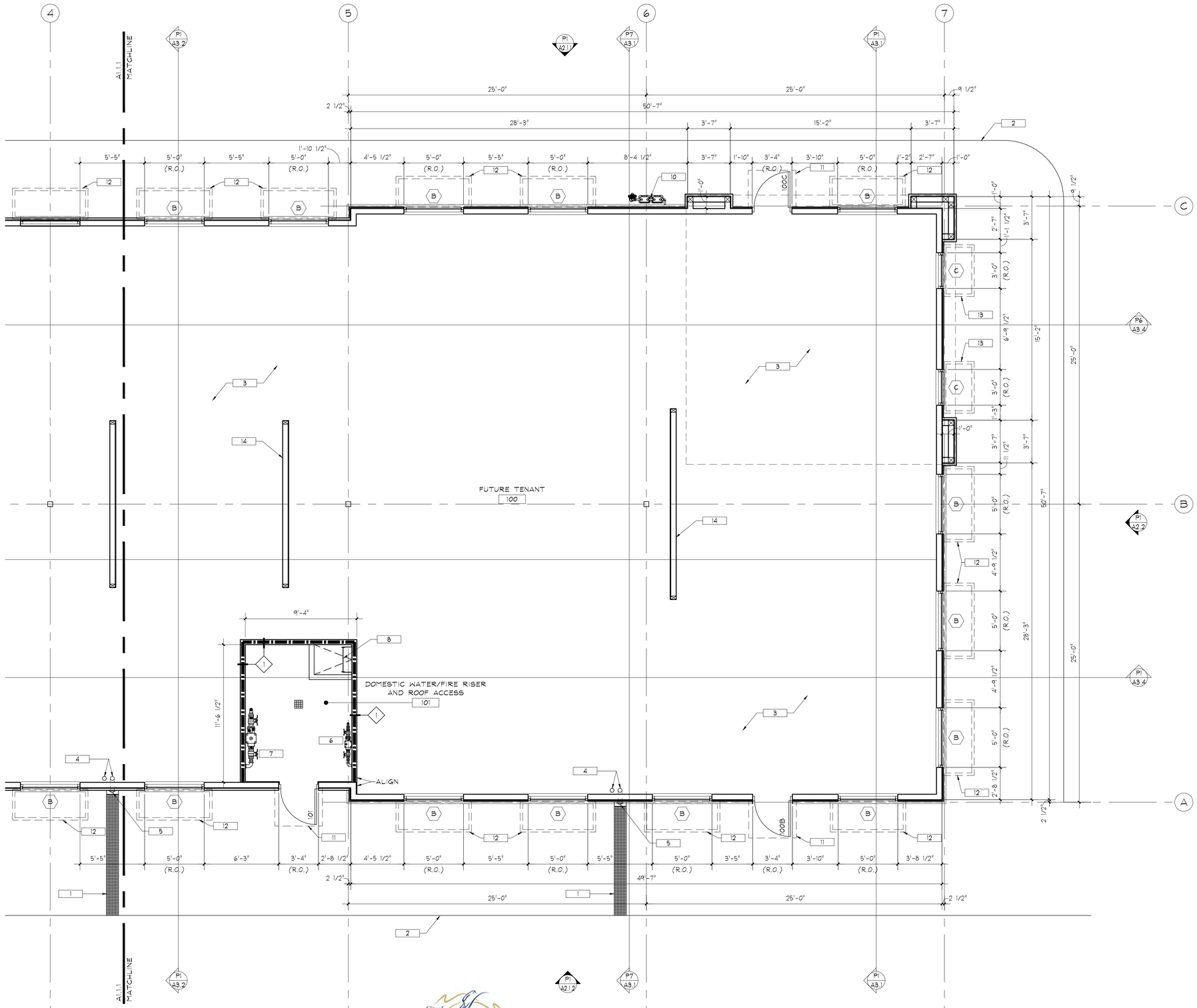
STATE OF COLORADO PAUL J. BATTISTA B-3015 02/11/2025 LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A1.1.1
Date: Feb., 2025	of

NORTH

P1	FLOOR PLAN - NORTH
1/4" = 1'-0"	

COPYRIGHT 2018 - BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



NOTES:

1. DIMENSIONS TO EXTERIOR WALLS ARE FACE OF EXTERIOR STUD UNLESS NOTED OTHERWISE. DIMENSIONS GOVERN OVER SCALING OF DRAWINGS. REPORT ANY CONFLICTS OR DISCREPANCIES TO ARCHITECT.

2. PROVIDE CAULK OR SEALANT AT ALL JOINTS OR CRACKS WHERE DISSIMILAR MATERIALS INTERSECT AND ARE PERPENDICULAR TO EACH OTHER, AND THE INTERSECTION IS EXPOSED TO VIEW, UNLESS INDICATED OTHERWISE.

3. SEE MEP DRAWINGS FOR ADDITIONAL INFORMATION.

KEYNOTES: (THIS SHEET ONLY)

1	SIDEWALK TRENCH
2	CONCRETE SIDEWALK
3	CONCRETE SLAB ON GRADE, SEE STRUCTURAL
4	ROOF AND OVERFLOW DRAIN LEADERS
5	BRASS LAMB'S TONGUE
6	DOMESTIC WATER
7	FIRE RISER
8	ROOF ACCESS AND LADDER RE: K8/A5.3
9	ELECTRICAL GEAR AND METERS
10	NATURAL GAS
11	AWNING STRUCTURE ABOVE, TYPE 1 SEE SHEET A1.4
12	AWNING STRUCTURE ABOVE, TYPE 2 SEE SHEET A1.4
13	AWNING STRUCTURE ABOVE, TYPE 2A SEE SHEET A1.4
14	SHEARWALL, RE: STRUCTURAL FOR ADDITIONAL INFO.

FIRE BLOCKING REQUIRED

1. AT CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS, AND AT 10' FT. INTERVALS BOTH VERTICAL AND HORIZONTAL.

2. AT ALL INTER-CONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS SOFFITS, DROPPED CEILINGS, AND COVE CEILINGS.

3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS, AT THE TOP AND THE BOTTOM OF THE RUN AND BETWEEN STUDS ALONG AND IN LINE WITH THE RUN OF STAIRS, IF THE WALLS UNDER THE STAIRS ARE UNFINISHED.

4. IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, FIREPLACES, AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS, USE NON-COMBUSTIBLE MATERIALS.

5. AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY CHASES FOR FACTORY-BUILT CHIMNEYS.

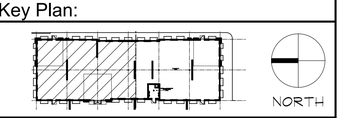
6. WALLS HAVING PARALLEL OR STAGGERED STUDS FOR SOUND CONTROL, SHALL HAVE FIRE BLOCKS OF MINERAL FIBER OR GLASS FIBER, OR OTHER APPROVED NON-RIGID MATERIAL.

7. THE INTEGRITY OF ALL FIRE BLOCKING, AND DRAFT STOPS, SHALL BE MAINTAINED.

Plan Legend:

1 HR PARTITION

Key Plan:



No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

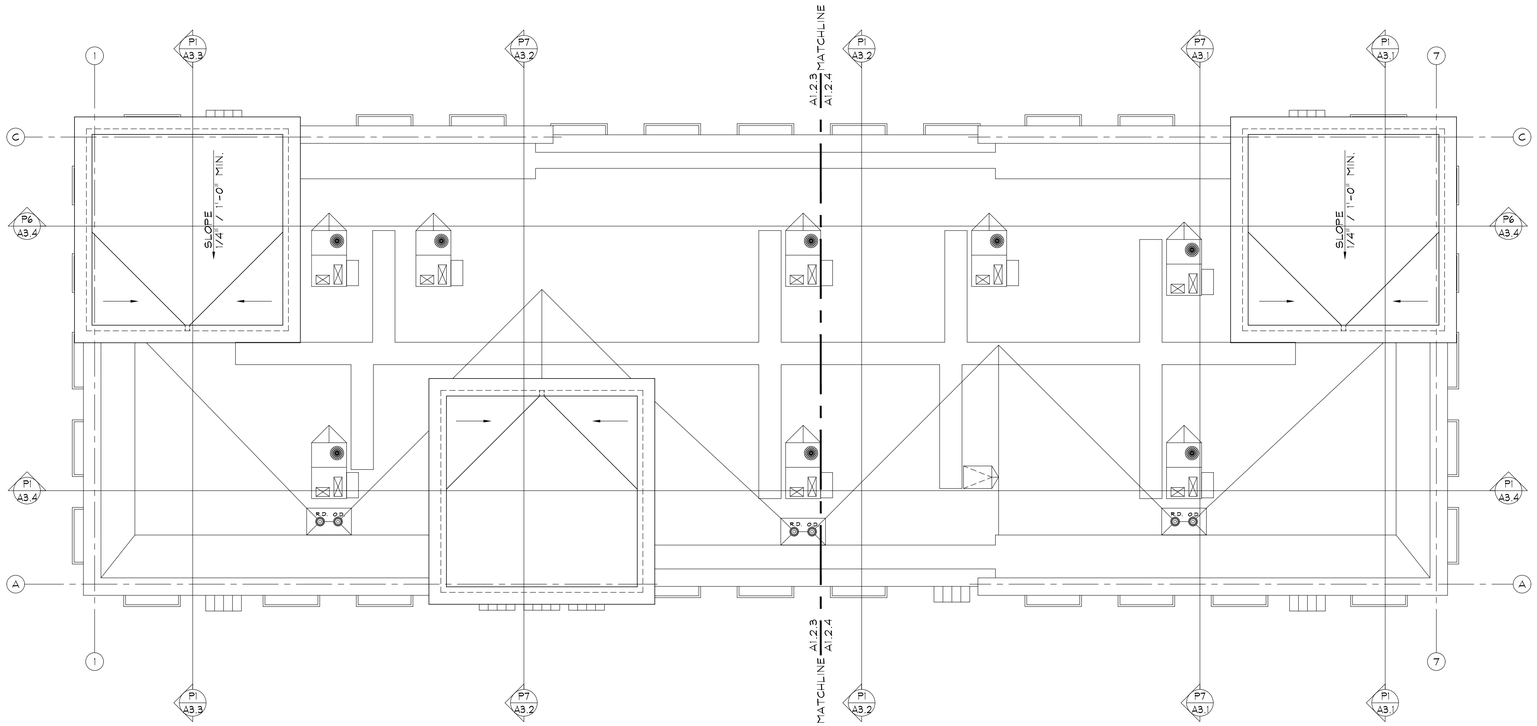
FLOOR PLAN - SOUTH

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A1.1.2
Date: Feb., 2025	of

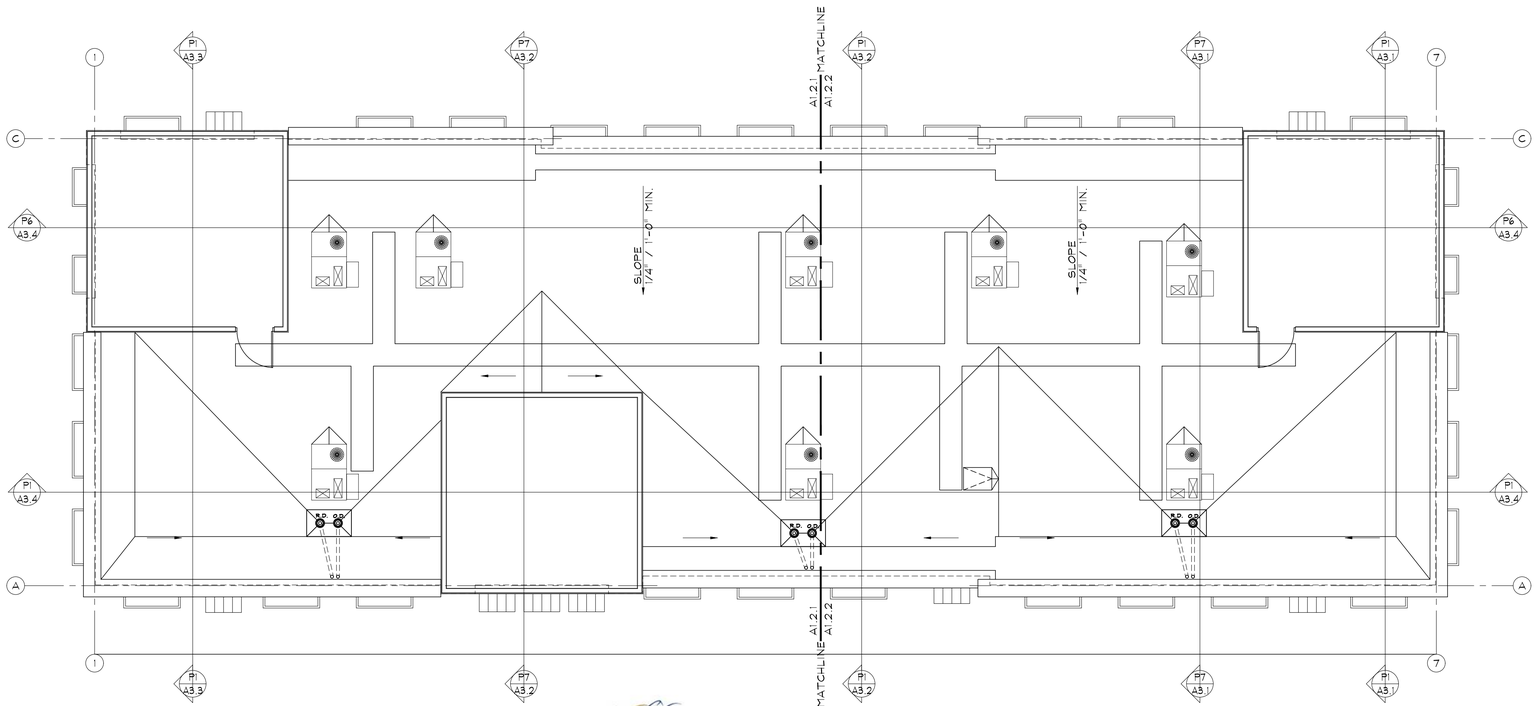
P1 — FLOOR PLAN - SOUTH
1/4" = 1'-0"

COPYRIGHT 2018 - BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



NORTH

P7	OVERALL UPPER ROOF PLAN
1/8" = 1'-0"	



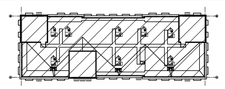
NORTH

P1	OVERALL ROOF AND TOWER PLAN
1/8" = 1'-0"	

NOTES:

1. SEE SHEETS A1.2.1, A1.2.2, A1.2.3 AND A1.2.4 FOR KEYNOTES AND ADDITIONAL INFORMATION.

Key Plan:



No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

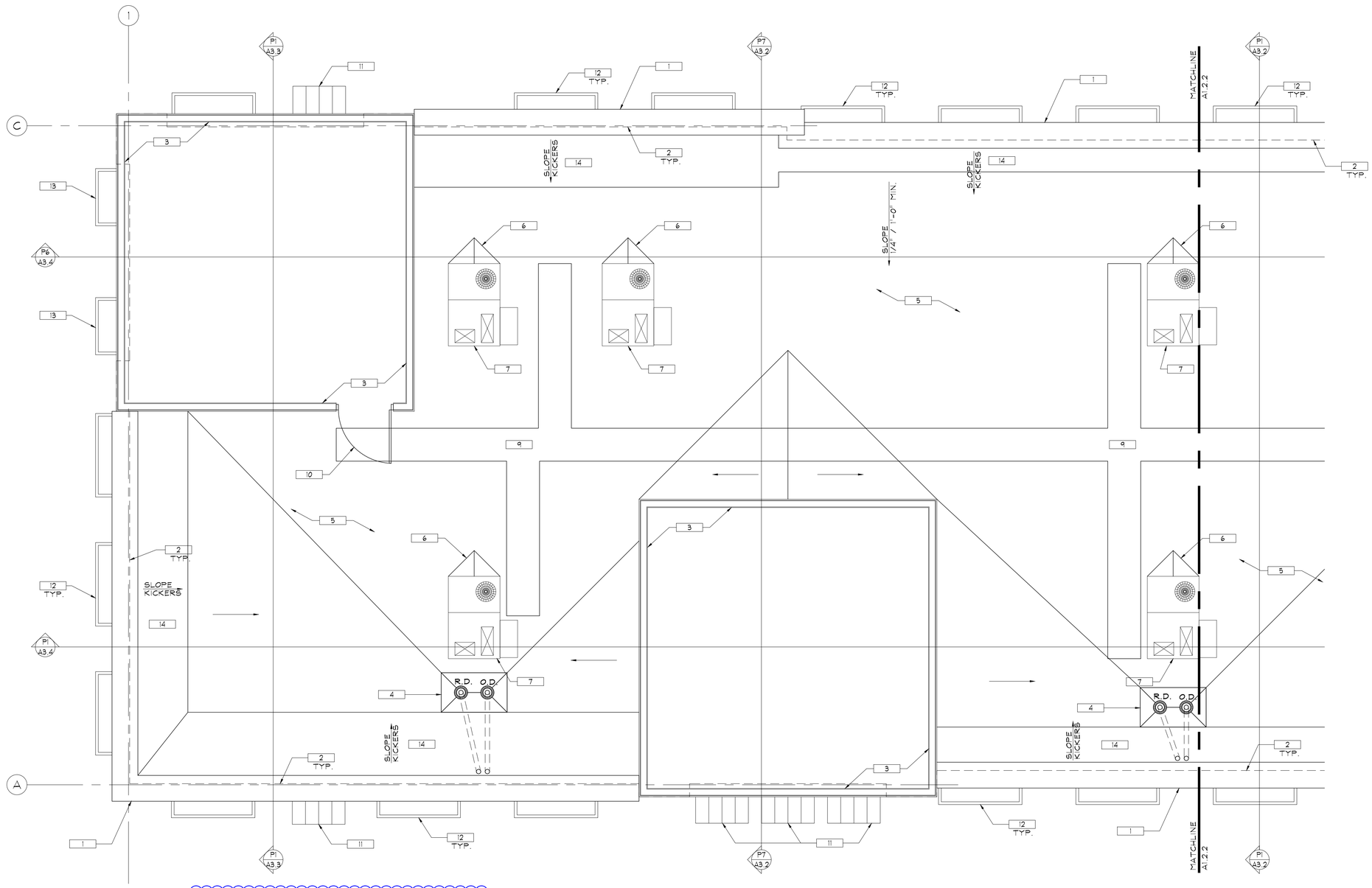
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

OVERALL ROOF AND TOWER PLAN
AND UPPER ROOF PLAN

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A1.2
Date: Feb., 2025	of

COPYRIGHT 2016 – BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



[BE] 304.11 Guards. Guards shall be provided where various components that require service and roof hatch openings are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof, or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of components that require service and each end of the roof hatch parallel to the roof edge. The top of the guard shall be located not less than 42 inches (1067 mm) above the elevated surface adjacent to the guard. The guard shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code.*

City of Greeley Colorado

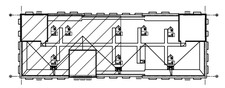
NORTH

P1	ROOF AND TOWER PLAN - NORTH
1/4" = 1'-0"	

KEYNOTES: (THIS SHEET ONLY)

1. PREFINISHED METAL CAP FLASHING
2. LINE OF WALL BELOW
3. TOWER WALL FRAMING, SEE SECTIONS AND WALL SECTIONS FOR ADDITIONAL INFO.
4. ROOF AND OVERFLOW DRAIN, RE: K1/A5.3
5. 60 MIL TPO ROOFING ON 1/2" UNDERLAYMENT ON 6" R-40± POLYISO ROOF INSULATION. SEE SHEET A1.3 FOR ADDITIONAL ROOFING INFO
6. POLYISO DRAINAGE CRICKETS UNDER TPO ROOFING
7. APPROXIMATE LOCATIONS OF RTU'S -SEE M AND S SHEETS
8. ROOF ACCESS HATCH ON CURB THIS GENERAL AREA,COORDINATE WITH ARCHITECT ON LOCATION, RE: A6/A5.3
9. TPO WALK-PADS, 30" WIDE x REQUIRED LENGTH. INSTALL WITH TENANT FINISH IN CONJUNCTION WITH RTU LOCATION
10. 4'-0" X 4'-0" INSULATED METAL ACCESS PANEL
11. AWNING STRUCTURE BELOW, TYPE 1 SEE SHEET A1.4
12. AWNING STRUCTURE BELOW, TYPE 2 SEE SHEET A1.4
13. AWNING STRUCTURE BELOW, TYPE 2 SEE SHEET A1.4
14. TPO ROOFING OVER KICKERS

Key Plan:



No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

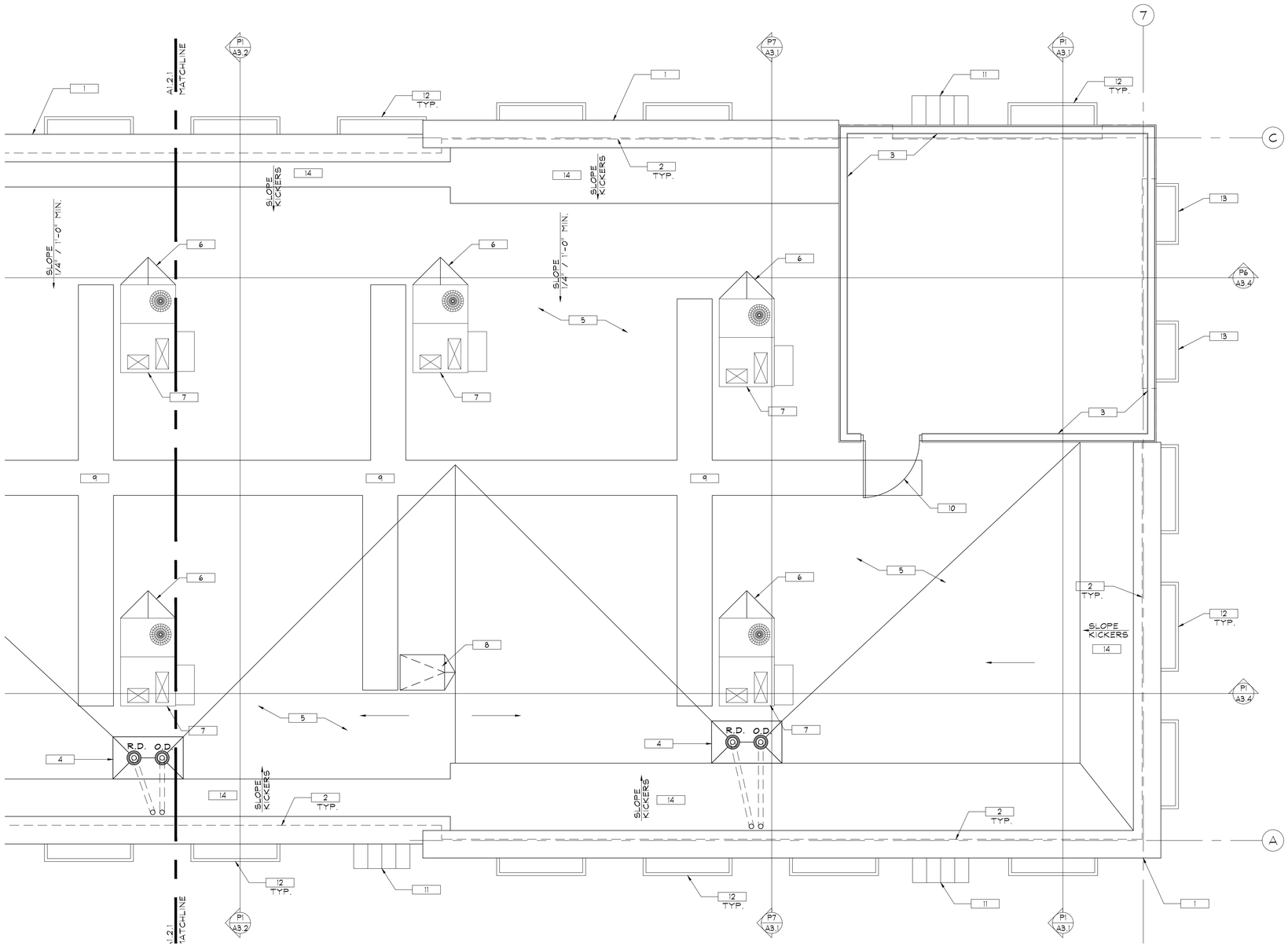
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

ROOF AND TOWER PLAN - NORTH

STATE OF COLORADO PAUL J. BATTISTA B-3015 02/11/2025 LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number: A1.2.1
Reviewed: PJB	
Date: Feb., 2025	of

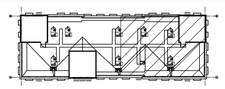
COPYRIGHT 2018 – BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



KEYNOTES: (THIS SHEET ONLY)

1. PREFINISHED METAL CAP FLASHING
2. LINE OF WALL BELOW
3. TOWER WALL FRAMING, SEE SECTIONS AND WALL SECTIONS FOR ADDITIONAL INFO.
4. ROOF AND OVERFLOW DRAIN, RE: K1/A5.3
5. 60 MIL TPO ROOFING ON 1/2" UNDERLAYMENT ON 6" R-40± POLYISO ROOF INSULATION. SEE SHEET A1.3 FOR ADDITIONAL ROOFING INFO
6. POLYISO DRAINAGE CRICKETS UNDER TPO ROOFING
7. APPROXIMATE LOCATIONS OF RTU'S -SEE M AND S SHEETS
8. ROOF ACCESS HATCH ON CURB THIS GENERAL AREA,COORDINATE WITH ARCHITECT ON LOCATION, RE: A6/A5.3
9. TPO WALK-PADS, 30" WIDE x REQUIRED LENGTH. INSTALL WITH TENANT FINISH IN CONJUNCTION WITH RTU LOCATION
10. 4'-0" X 4'-0" INSULATED METAL ACCESS PANEL
11. AWNING STRUCTURE BELOW, TYPE 1 SEE SHEET A1.4
12. AWNING STRUCTURE BELOW, TYPE 2 SEE SHEET A1.4
13. AWNING STRUCTURE BELOW, TYPE 2 SEE SHEET A1.4
14. TPO ROOFING OVER KICKERS

Key Plan:



No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

ROOF AND TOWER PLAN - SOUTH

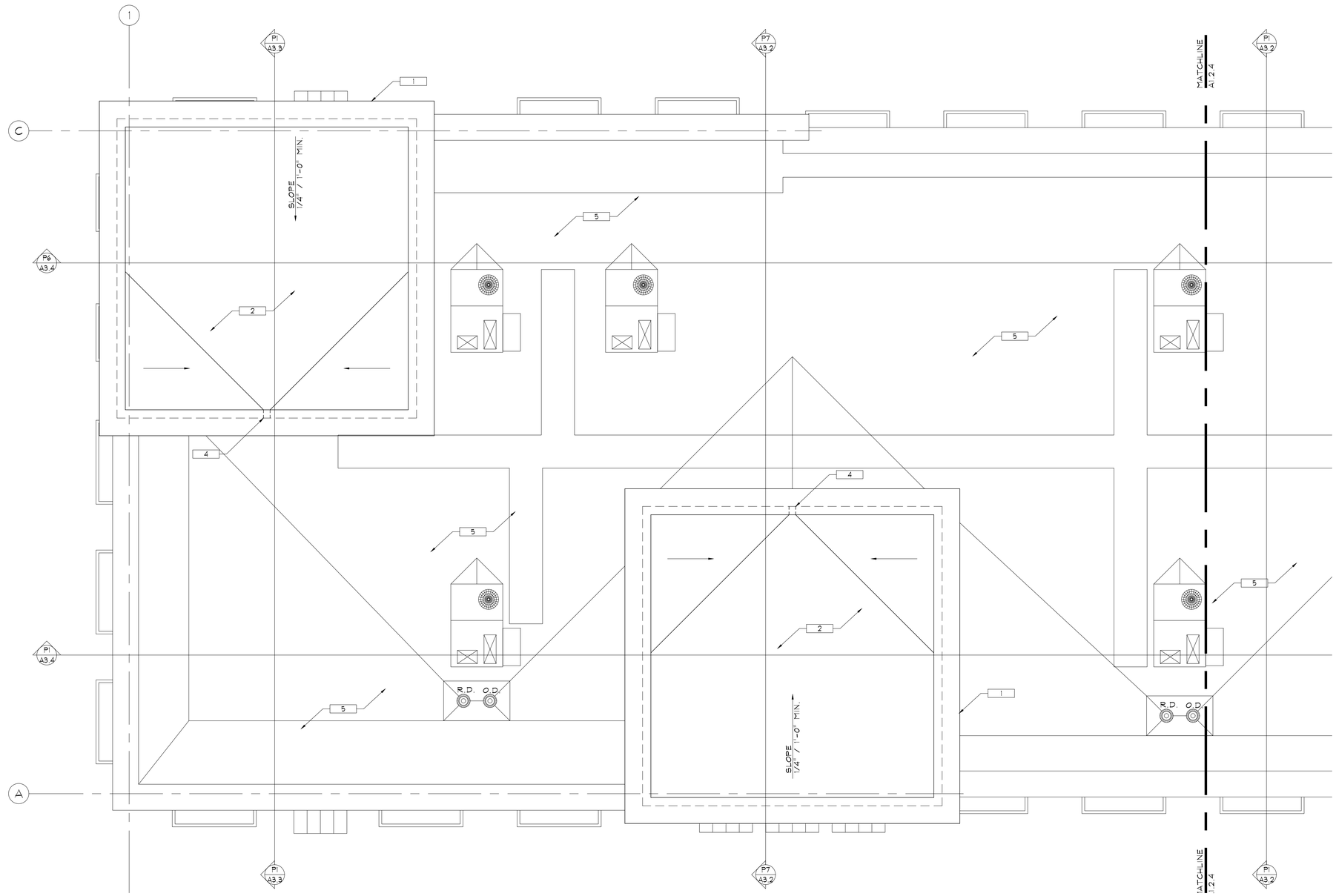
STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A1.2.2
Date: Feb., 2025	of

NORTH

P1	ROOF AND TOWER PLAN - SOUTH
1/4" = 1'-0"	

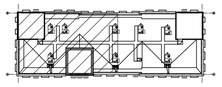
COPYRIGHT 2018 - BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



KEYNOTES: (THIS SHEET ONLY)

1. PREFINISHED METAL CAP FLASHING
2. 60 MIL TPO ROOFING ON 1/2" UNDERLAYMENT ON 6" R-40± POLYISO ROOF INSULATION. SEE SHEET A1.3 FOR ADDITIONAL ROOFING INFO
3. BUILT-UP POLYISO INSULATION UNDER TPO ROOFING, SLOPE MINIMUM 1/4" PER FOOT TO METAL THRU-WALL SCUPPER
4. METAL THRU-WALL SCUPPER SEE, H11/A5.2
5. SEE SHEETS A1.2.1 AND A1.2.2 FOR MAIN ROOF INFORMATION

Key Plan:



No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

UPPER ROOF PLAN - NORTH

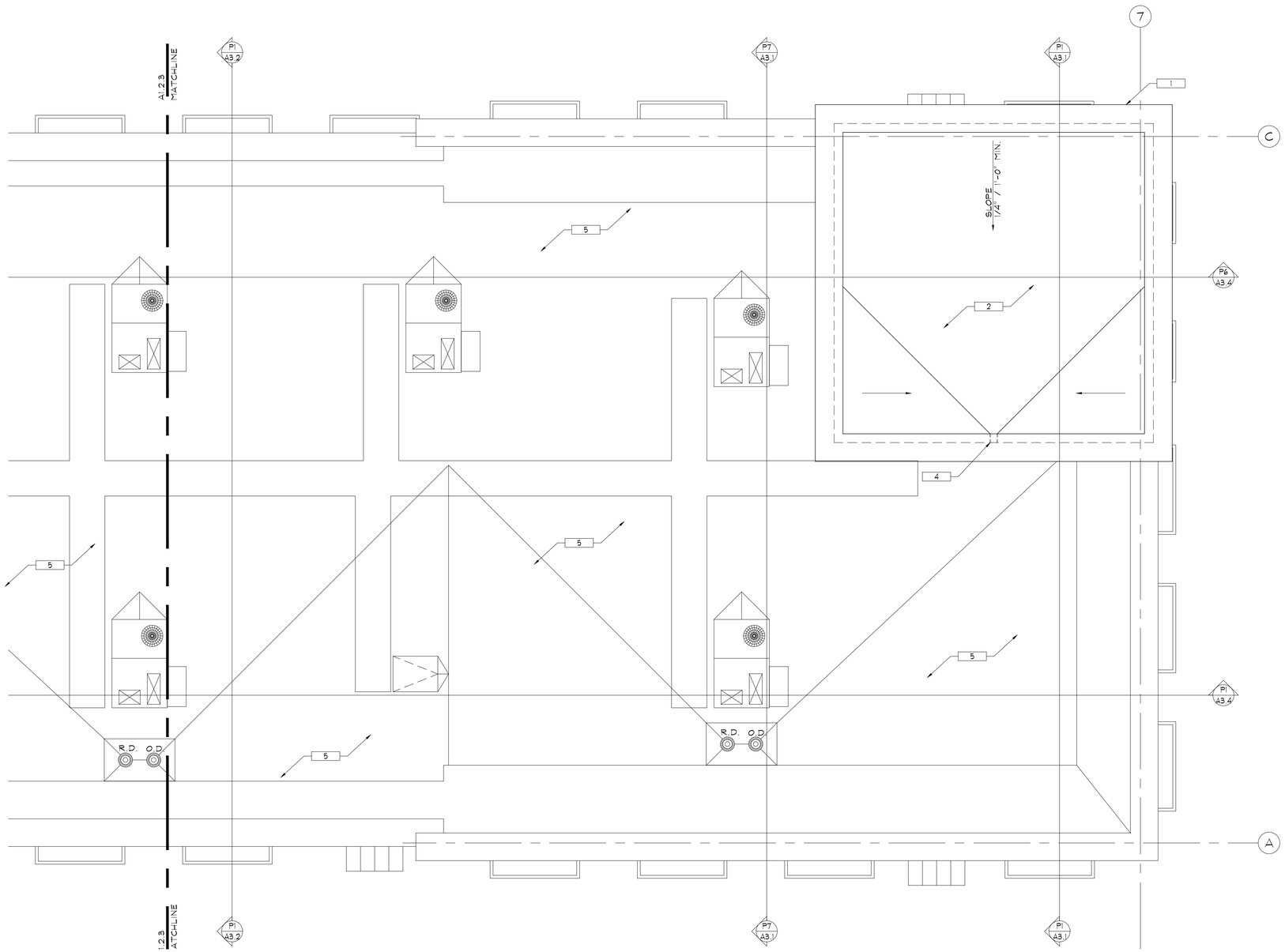
STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A1.2.3
Date: Feb., 2025	of

NORTH

P1	UPPER ROOF PLAN - NORTH
1/4" = 1'-0"	

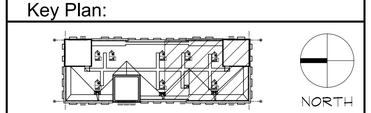
COPYRIGHT 2018 — BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for title or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



KEYNOTES: (THIS SHEET ONLY)

1. PREFINISHED METAL CAP FLASHING
2. 60 MIL TPO ROOFING ON 1/2" UNDERLAYMENT ON 6" R-40± POLYISO ROOF INSULATION. SEE SHEET A1.3 FOR ADDITIONAL ROOFING INFO
3. BUILT-UP POLYISO INSULATION UNDER TPO ROOFING, SLOPE MINIMUM 1/4" PER FOOT TO METAL THRU-WALL SCUPPER
4. METAL THRU-WALL SCUPPER SEE, H11/A5.2
5. SEE SHEETS A1.2.1 AND A1.2.2 FOR MAIN ROOF INFORMATION

Key Plan:



No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

UPPER ROOF PLAN - SOUTH

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A1.2.4
Date: Feb., 2025	of

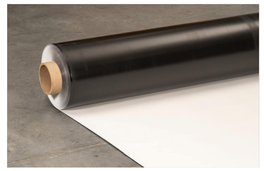
NORTH

P1	UPPER ROOF PLAN - SOUTH
1/4" = 1'-0"	

COPYRIGHT 2018 - BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.

TECHNICAL DATA BULLETIN

VersiWeld® TPO Reinforced Membrane



Overview

Versico's VersiWeld TPO reinforced membrane is a premium, heat-weldable, single-ply thermoplastic polyolefin (TPO) sheet designed for new roof construction and re-roofing applications. VersiWeld High Slope (HS) membrane is formulated with additional flame retardant for higher-slope fire code approvals. VersiWeld Plus is 80 mils (2.03 mm) thick for significantly higher strength and weatherability.

VersiWeld TPO membranes use advanced polymerization technology that combines the flexibility of ethylene-propylene (EP) rubber with the heat weldability of polypropylene. All VersiWeld TPO membranes include OctaGuard XT™, an industry-leading, state-of-the-art weathering package. OctaGuard XT technology enables VersiWeld TPO to withstand the extreme weatherability testing that is intended to simulate exposure to severe climates.

Physical properties of the membrane are enhanced by a strong polyester fabric that is encapsulated between the TPO-based top and bottom plies. The combination of the fabric and TPO plies provides high breaking and tearing strength, as well as excellent puncture resistance. The relatively smooth surface of the membrane produces a total surface fusion weld that results in a consistent, watertight, monolithic roof assembly. The membrane is environmentally friendly and safe to install.

Features and Benefits

- VersiWeld TPO available in 4-, and 6-ft (121.92 cm and 182.88 cm) perimeter sheets and 8-, 10-, and 12-ft (243.84 cm, 304.80 cm, and 365.76 cm) VersiWeld field sheets*
- Outstanding puncture resistance
- Excellent fire resistant assemblies
- Environmentally friendly and stable formulation
- Excellent resistance to impact and low temperatures
- Excellent chemical resistance to acids, bases and restaurant exhaust emissions
- UL 2218 Class 4 hail rating
- Exceptional resistance to heat, solar UV, ozone and oxidation
- Manufactured using a hot-melt extrusion process for complete scrim encapsulation
- Enhanced with the OctaGuard XT weathering package
- Standard Colors:

  White, Gray, Tan
- Special Colors:

  Slate Gray, Med Bronze, Terra Cotta, Patina Green, Rock Brown

* VersiWeld HS Special Color TPO membranes are available in limited sizes. Refer to Versico's VersiWeld HS TPO Special Color Program Sell Sheet for details.

Sustainable Attributes

Versico Roofing Systems' focus has always been innovation – innovation to solve problems, improve performance, reduce labor, and above all, improve sustainability. Versico is committed to driving sustainable and efficient processes in the design and manufacturing of our products.

- Up to 10% pre-consumer recycled content
- Fully recyclable when used in mechanically attached systems
- 3rd-party verified Environmental Product Declaration available
- NSF P151 certification for rainwater catchment*
- California Title 24 compliant**
- Free of Living Building Challenge red list chemicals

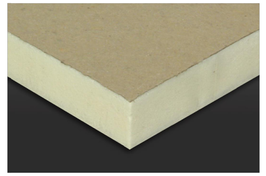
* White only, produced in Tooele, UT
** White and Tan only

VERSICO ROOFING SYSTEMS

BUILDING VALUE

TECHNICAL DATA BULLETIN

VersiCore® Polyiso



Overview

VersiCore is a rigid-roof insulation panel composed of a closed-cell polyisocyanurate foam core bonded on each side to glass-reinforced felt (GRF).

Features and Benefits

- VersiCore polyiso insulation provides the highest R-value per inch of commercially available insulation products
- Zero ozone-depleting components, HFC- and HCFC-free formulation
- Approved for direct application to steel decks

Panel Characteristics

- Available in 4' x 4' (1220 mm x 1220 mm) and 4' x 8' (1220 mm x 2440 mm) panels in thickness of ½" (13 mm) to 4.5" (115 mm)

Applications

- Single-Ply Roof Systems (Ballasted, Mechanically Attached, Fully Adhered)

Installation

Ballasted Single-Ply Systems
Each VersiCore panel is loosely laid on the roof deck. Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Versico's specifications.

Mechanically Attached Single-Ply Systems
VersiCore panels must be secured to the roof deck with fasteners and plates (appropriate to the deck type). Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Versico's specifications.

Fully Adhered Single-Ply Systems
VersiCore panels must be secured to the roof deck with fasteners and plates (appropriate to deck type). Butt edges and stagger joints of adjacent panels. Install the roof membrane according to Versico's specifications.

VersiCore 4' x 8' panels can be secured to the roof deck with Versico's Flexible DASH® Adhesive, either full coverage or bead spacing.

VersiCore 4' x 4' panels may be adhered to prepared concrete deck with a full mopping of Type III or IV asphalt.

REVIEW CURRENT VERSICO SPECIFICATIONS AND DETAILS FOR SPECIFIC INSTALLATION REQUIREMENTS.

Codes and Compliances

- ASTM C1289, Type II, Class 1, Grade 2 (20 psi), Grade 3 (25 psi)
- International Building Code (IBC) Section 2603
- UL Standard 790, 263 and 1256: Component of Class A Roof Systems (refer to UL Roof Materials' system directory)
- FM® Standards 4450/4470: Class 1 approval for steel roof-deck constructions (refer to FM RoofNav™)
- California Code of Regulations, Title 24, Insulation Quality Standard License #TI-1418
- Third-party certification with the PIMA Quality Mark for Long-Term Thermal Resistance (LTTR) values
- CAN/ULC S704, Type 2, Class 3 (20 psi), Type 3, Class 3 (25 psi)
- Florida Building Code Approval
- CDPH compliant for maximum allowable concentrations of target VOCs

Precautions

Insulation must be protected from open flame and kept dry at all times. Install only as much insulation as can be covered the same day by completed roof-covering material. Protect installed product from excessive foot traffic. Versico will not be responsible for specific building and roof design by others, for deficiencies in construction or workmanship, for dangerous conditions on the job site or for improper storage and handling. Technical specifications shown in this literature are intended to be used as general guidelines only and are subject to change without notice. Call Versico for more specific details, or refer to PIMA Technical Bulletin No. 109: Storage & Handling Recommendations for Polyiso Roof Insulation.

VERSICO ROOFING SYSTEMS

BUILDING VALUE

TECHNICAL DATA BULLETIN

Weathered Membrane Cleaner

Overview

Let Versico simplify your next EPDM or TPO installation with Weathered Membrane Cleaner. Weathered Membrane Cleaner is used to clean both new and in-service VersiGard® EPDM black and white membrane and VersiWeld® TPO membrane prior to the seaming process. It helps to loosen and remove dirt and other contaminants from the surface of the EPDM and TPO membranes and leaves a suitable surface for welding or the subsequent application of primer. Weathered Membrane Cleaner should be used when preparing EPDM membranes for application of primer, adhesives, QA Seam Tape and flashing. Do not use Weathered Membrane Cleaner on PVC membranes – instead use PVC Membrane Cleaner.

Features and Benefits

- Easily removes dirt and other contaminants from EPDM and TPO membranes
- Prepares EPDM membrane for application of primer, adhesives and tape
- Prepares aged or contaminated TPO membrane for welding

Coverage Rate

Coverage rate depends on the age of the membrane and the amount of dirt/debris on the surface. Assume 400 ft² (37 m²) (one surface) per gallon.

Application

EPDM

1. Remove as much loose material as possible from the membrane surface where the adhesive or pressure-sensitive product will be applied by brooming or wiping the area with a dry rag. Extreme conditions of accumulated dirt may require a low sudsing detergent and water cleaning (rinse area thoroughly with CLEAN water and allow to dry).
2. Saturate a clean Splice Wipe (or equivalent) with Weathered Membrane Cleaner. SCRUB the area in a circular motion. Continue to clean the area, changing wipes frequently, until the surface is a consistent color with no streaking. Additional cleaning is required at factory seams (scrub parallel to the seam). Allow to dry.
3. Apply primer according to product instructions and/or roofing system specification.

TPO

Weathered Membrane Cleaner may be used to remove construction dirt or to prepare aged TPO membrane prior to welding.

New TPO

1. Saturate a clean Splice Wipe (or equivalent) with Weathered Membrane Cleaner.
2. Wipe the area to be cleaned until the membrane is a consistent color with no streaking and allow to dry.
3. Weld the cleaned material together with an appropriate hot-air welder.

Welding Aged Material

1. Using a Primer Pad and Weathered Membrane Cleaner, scrub the area to be welded. (The cleaner will become white with membrane residue during this step of the procedure.)
2. Clean all residue from the area to be welded with a Splice Wipe (or equivalent). Allow to dry.
3. Weld the cleaned material together with an appropriate hot-air welder.

REVIEW CURRENT VERSICO SPECIFICATIONS AND DETAILS FOR SPECIFIC APPLICATION REQUIREMENTS.

VERSICO ROOFING SYSTEMS

BUILDING VALUE

TECHNICAL DATA BULLETIN

VersiWeld® TPO Primer

Overview

Versico's TPO Primer is a high-solids-content, clear (translucent color), polymer-based splice primer used to prepare TPO membrane for improved adhesion to pressure-sensitive (PS) TPO accessories.

Features and Benefits

- One-step primer allows for excellent adhesion of PS TPO accessories to TPO membrane
- Quick flash-off time for faster installation

Coverage Rates

200–250 ft² (19–24 m²) (one surface) per gallon

Application

1. Thoroughly stir this product until all settled pigment is blended into the solution. Solids suspended in TPO Primer tend to settle; stir or agitate the solution frequently during use.
2. The surface to which the TPO Primer is being applied should be dry and clean. TPO membrane can be cleaned with Weathered Membrane Cleaner prior to primer application.
3. Apply TPO Primer using a paintbrush or medium-nap paint roller. The membrane surface should be uniform in color with no streaking or puddling. Apply primer to a wider area than the actual splice area to ensure complete coverage.
4. Allow primer to flash off completely before applying PS TPO accessories. Drying conditions will vary depending on ambient air conditions.

REVIEW CURRENT VERSICO SPECIFICATIONS AND DETAILS FOR SPECIFIC APPLICATION REQUIREMENTS.

Precautions

- WARNING! HARMFUL IF SWALLOWED. FLAMMABLE LIQUID. MAY BE IRRITATING TO SKIN AND EYES.
- Wash thoroughly after handling. Avoid contact with eyes, skin and clothing. Use of permeation-resistant gloves (that meet ANSI/ISEA 105-2005) and safety glasses recommended. Keep away from heat, sparks, motors and open flame. DO NOT SMOKE WHILE USING. Keep lid closed when not in use.
- If swallowed, DO NOT INDUCE VOMITING. Call physician immediately. In case of eye contact, flush with water for at least 15 minutes. In case of skin contact, wash with soap and water. If irritation develops, call physician.
- In case of fire, handle as a solvent or gasoline fire. Use dry chemical, carbon dioxide or foam fire extinguishers. Water fog or spray may be used to smother the fire and cool containers. Do not use a solid stream of water to fight fire because it can scatter and spread the fire.
- Use TPO Primer full strength. Do not thin. Thinning will affect performance.
- Jobsite storage temperatures in excess of 90°F (32°C) may affect product shelf life. Should the primer be stored at temperatures lower than 60°F (15°C), restore to room temperature prior to use.
- KEEP OUT OF THE REACH OF CHILDREN.
- REVIEW THE MATERIAL SAFETY DATA SHEET FOR COMPLETE SAFETY INFORMATION PRIOR TO USE.

VERSICO ROOFING SYSTEMS

BUILDING VALUE

TECHNICAL DATA BULLETIN

VersiWeld® Bonding Adhesive

Overview

VersiWeld Bonding Adhesive is a high-strength solvent-based contact adhesive that allows bonding of VersiWeld TPO membrane to various porous and non-porous substrates.

Features and Benefits

- Solvent-based bonding adhesive that allows for quick drying
- Can be roller-applied with medium nap roller
- Provides excellent adhesion to various substrates

Coverage Rate

60 sq. ft. (5.6 m²) per gallon finished surface. Coverage rates are average and may vary due to conditions on the jobsite. Porous surfaces and substrates may require more bonding adhesive than the typical coverage rate.

Mixing

Stir thoroughly until all settled pigments are dispersed and the adhesive is uniform in color. Minimum 5 minutes stirring is recommended.

Application

1. The surface, on or against which adhesive is to be applied, shall be clean, smooth, dry, free of fins, sharp edges, loose and foreign materials, oil and grease. Depressions greater than ¼" (6 mm) should be feathered, using epoxy, mortar or other approved patching material. All sharp projections shall be removed by sweeping, blowing or vacuum cleaning.
2. After thorough stirring (minimum 5 minutes), apply VersiWeld Bonding Adhesive to substrate and membrane using a 9" (23 mm) medium nap roller. Application shall be continuous and uniform avoiding globs or puddles. An open time of 5 to 50 minutes, based on drying conditions is recommended before assembly. VersiWeld Bonding Adhesive must be allowed to dry until it does not string or stick to a dry finger touch. Any coated area which has been exposed to rain should be allowed to dry and then recoated. Do not apply adhesive to splice areas to be hot-air welded.
3. Roll the membrane onto the adhesive coated substrate while avoiding wrinkles. Immediately brush down the bonded portion of the sheet with a soft bristle push broom or a 150 lb. segmented roller to achieve maximum contact.

REVIEW CURRENT VERSICO SPECIFICATIONS AND DETAILS FOR SPECIFIC APPLICATION REQUIREMENTS.

Precautions

1. Review the applicable Safety Data Sheet for complete safety information prior to use.
2. VersiWeld Bonding Adhesive is EXTREMELY FLAMMABLE. It contains solvents that are dangerous fire and explosion hazards when exposed to heat, flame or sparks. Do not smoke while applying. Do not use in a confined or unventilated area. Vapors are heavier than air and may travel along ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electrical motors, static discharge, or other ignition sources at locations distant from material handling point and flashback. All containers should be grounded when material is transferred from one container to another. A red caution label is required when shipping. A fire extinguisher should be available. In case of fire, use water spray, foam, dry chemical or carbon dioxide. Do not use a solid stream of water because it can scatter and spread the fire.
3. Avoid breathing vapors. Keep container closed when not in use. Use with adequate ventilation. If inhaled, remove to fresh air. If not breathing, perform artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately. During application, efforts must be made to prevent fumes from entering the building via air ventilation ducts. Do not place open containers or mix adhesive near fresh air intake units. When possible, shut down or seal off the closest units.

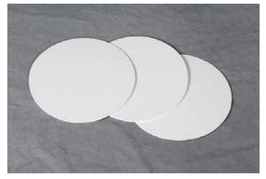
VERSICO ROOFING SYSTEMS

BUILDING VALUE

TECHNICAL DATA BULLETIN

VersiWeld® TPO T-Joint Covers

Certified Fabricated Accessory



Overview

Let Versico simplify your next VersiWeld TPO installation with pre-punched T-Joint Covers. VersiWeld TPO T-Joint Covers are used to seal step-offs at splice intersections. T-Joint Covers are mandatory on all 60- and 80-mil TPO systems and on 45-mil systems where step-offs have not been properly sealed. VersiWeld TPO T-Joint Covers consist of 60-mil non-reinforced flashing punched into a perfect 4.5"-diameter circle and packaged 100 parts per carton. Available in white, tan and gray.

Versico's VersiWeld TPO T-Joint Covers are part of the Certified Fabricated Accessory (CFA) Program. Certified Fabricated Accessories are the only factory-fabricated accessories that meet the stringent quality tolerances required to be included in a Versico warranted roofing system.

Features and Benefits

- Every T-Joint cover is a perfect 4.5"-diameter circle
- More consistent appearance than hand-cut flashing
- Provides substantial labor savings compared to field- cut flashing
- Seals channels at splice intersections created by seam step-offs

Installation

1. If membrane has been exposed to the weather, clean splice intersection area with Weathered Membrane Cleaner.
2. Use a lower temperature setting on the hand heat welder than is used when welding reinforced TPO membrane. (Typically a setting of 6 on a scale of 10 is appropriate for welding TPO T-Joint Covers.)
3. Center the T-Joint Cover over the splice intersection, begin welding at the center point and work towards the outside. Use the edge of the roller to crease the T-Joint Cover into membrane step-offs to achieve a proper seal.
4. Using a probe, check all splices for voids and cold- welds only once the T-Joint Cover has completely cooled. Make any needed repairs.

REVIEW CURRENT VERSICO SPECIFICATIONS AND DETAILS FOR SPECIFIC INSTALLATION REQUIREMENTS.

Precautions

- The TPO T-Joint Cover is not intended to overlay fasteners and plates as this requires the use of reinforced membrane.
- Store T-Joint Covers in a cool, shaded area and cover with light-colored, breathable, waterproof tarpaulins. T-Joint Covers that have been exposed to the weather must be prepared with Weathered Membrane Cleaner before hot-air welding.

Typical Properties and Characteristics

Size	4.5" (114 mm)
Thickness	0.060" (1.5 mm)
Packaging	100 per box
Weight (per box)	3.5 lbs. (1.6 kg)
Material	Non-Reinforced TPO
Color	White, Gray, Tan

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

LEED® Information

Pre-consumer Recycled Content	0%
Post-consumer Recycled Content	0%
Manufacturing Location	Bloomingdale, IL
Solar Reflectance Index (SRI)	N/A

VERSICO ROOFING SYSTEMS

A SINGLE SOURCE FOR SINGLE-PLY ROOFING
800.992.7663 • www.versico.com

© 2020 Versico. Printed in U.S.A.
VC-1314 – "VersiWeld TPO T-Joint Covers Technical Data Bulletin" – 09.18.20

Versico, VersiWeld and the Versico logo are trademarks of Versico.
LEED is a registered trademark of the U.S. Green Building Council.

TECHNICAL DATA BULLETIN

VERSIWELD TPO INSIDE CORNERS

Certified Fabricated Accessory

Overview

Let Versico simplify your next VersiWeld TPO installation with prefabricated Inside Corners. TPO Inside Corners are pre-molded and are used for flashing inside corners on a variety of details. Installation is fast and easy with no cutting or stretching required.

Versico's TPO Inside Corners are part of the Certified Fabricated Accessory (CFA) Program. Certified Fabricated Accessories are the only factory-fabricated TPO accessories that meet the stringent quality tolerances required to be included in a Versico warranted roofing system.

Features and Benefits

- Forms easily into "out-of-square" corners that are not exactly 90°
- Provide substantial labor savings compared to field fabricating the flashing detail from non-reinforced flashing
- More consistent appearance than inside corners field-fabricated from flashing

Installation

1. Position the TPO Inside Corner into the building corner, begin welding at the innermost corner point and work away from the corner.
2. Use a lower temperature setting on the heat welder than when welding reinforced TPO membrane. (Typically a setting of 6 on a scale of 10 is appropriate for welding TPO Inside Corners).
3. Use the edge of the roller to crease the corner flashing into any membrane step-off to create a proper seal.
4. Probe all welded edges of the corner only once the material has completely cooled to ensure watertight performance.

REVIEW CURRENT VERSICO SPECIFICATIONS AND DETAILS FOR SPECIFIC INSTALLATION REQUIREMENTS.

Precautions

Store TPO Inside Corners in a cool, shaded area and cover with light-colored, breathable,waterproof tarpaulins. TPO Inside Corners or TPO membrane that has been exposed to the weather prior to use must be prepared with Weathered Membrane Cleaner before hot air welding.

TYPICAL PROPERTIES AND CHARACTERISTICS	
Thickness	0.060" (1.5 mm)
Packaging	12 per bag
Color	White, Gray, Tan
Material	Injection-molded TPO

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

LEED® INFORMATION	
Pre-consumer Recycled Content	0%
Post-consumer Recycled Content	0%
Manufacturing Location	Bloomingdale, IL
Solar Refl ectance Index (SRI)	N/A

VERSICO

A SINGLE SOURCE FOR SINGLE-PLY ROOFING
Versico, LLC PO Box 1289, Carlisle, PA 17013
Tel: **800.992.7663** Fax: 717.960.4036 Web: **www.versico.com**

© 2014 Versico, LLC. 03.27.14

Versico and the Versico logo are trademarks of Versico, LLC.
LEED is a registered trademark of the U.S. Green Building Council.

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

City of Greeley Colorado

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

TPO ROOF MEMBRANE
DETAILS

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A1.3
Date: Feb., 2025	of

COPYRIGHT 2018 — BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.

TECHNICAL DATA BULLETIN

VERSICO'S VERSIWELD® OUTSIDE CORNERS

Certified Fabricated Accessory

Overview

Let Versico simplify your next VersiWeld TPO installation with their prefabricated Outside Corners. VersiWeld TPO Outside Corners are pre-molded and are used for flashing outside corners on a variety of details. Installation is fast and easy with no cutting or stretching required.

Versico's VersiWeld TPO Outside Corners are part of the Certified Fabricated Accessory (CFA) Program. Certified Fabricated Accessories are the only factory-fabricated accessories that meet the stringent quality tolerances required to be included in a Versico warranted roofing system.

Intended Uses

VersiWeld TPO Outside Corners are used for flashing outside corners on a variety of details.

Features and Benefits

- Provide a substantial labor savings compared to field fabricating from non-reinforced flashing
- Pre-stretched, multi-wave design allows wrapping outside corners that are out of square and not exactly 90 degrees
- More consistent appearance than outside corners field-fabricated from flashing

Installation

1. Place the center point of the VersiWeld Outside Corner over the outside intersection of the corner.
2. Begin welding at the innermost center point and work away from the center by first welding the vertical portion of the flashing.
3. Use a lower temperature setting on the heat welder than when welding reinforced TPO membrane. (Typically a setting of 6 on a scale of 10 is appropriate for welding VersiWeld TPO Outside Corners.)
4. Use the edge of the roller to crease the corner flashing into any membrane step-off to create a proper seal.
5. Probe all welded edges of the corner only once the material has completely cooled to ensure watertight performance.

Precautions

1. Store VersiWeld TPO Outside Corners in a cool, shaded area and cover with light-colored, breathable, waterproof tarpaulins. VersiWeld TPO Outside Corners or TPO membrane that has been exposed to the weather prior to use must be prepared with Weathered Membrane Cleaner before hot-air welding.

VERSIWELD OUTSIDE CORNERS TYPICAL PROPERTIES AND CHARACTERISTICS	
Color	White, Gray, Tan
Thickness	0.060" (1.5 mm)
Packaging	12 per bag
Material	Injection-molded TPO

VERSICO

A SINGLE SOURCE FOR SINGLE-PLY ROOFING

Versico, LLC PO Box 1289, Carlisle, PA 17013
Tel: **800.992.7663** Fax: 717.960.4036 Web: **www.versico.com**

© 2009 Versico, LLC. 12/09.
Versico, VersiWeld and the Versico logo are trademarks of Versico, LLC.

TECHNICAL DATA BULLETIN

VERSIWELD® TPO UNIVERSAL CORNERS

Overview

Versico's labor-saving, pre-molded VersiWeld TPO Universal Corners are ideal for flashing corners on a variety of details. Installation is quick and simple with no stretching required.

Versico's VersiWeld TPO Universal Corners are a part of the Certified Fabricated Accessory (CFA) program. CFAs are the only factory-fabricated TPO accessories that meet the stringent quality tolerances required to be included in a Versico warranted roofing system.

Features and Benefits

- Conforms easily to details on new construction installations, where right angles are common
- Each Universal Corner can be cut into one outside corner or one inside corner
- Large, 6"-wide deck flange reduces the need for T-Joint Covers (when used as an outside corner)
- Provides a substantial labor savings compared to field-fabricating from non-reinforced flashing
- More professional, consistent appearance than field-fabricated corners

Installation

See the diagram on page two for cutting instructions. The cutting instructions are also molded into each part. Use a lower temperature setting on the heat welder than when welding reinforced TPO membrane. Typically, a setting of 6 on a scale of 10 is appropriate for welding Universal Corners.

Outside Corner

1. Clean the surface to be welded with Weathered Membrane Cleaner.
2. Place the outside corner into position over the outside intersection of the corner.
3. Begin welding at the bottom point of the outside corner. Weld straight up the vertical portion of the corner. Weld each side of the outside corner, working from the inside toward the outside.
4. Weld the bottom flange starting on the inside and working towards the outer edges. Use the edges of the roller to crease the corner into any membrane step-off to create a proper seal.
5. Once the material has completely cooled, probe all welded edges of the corner to ensure watertight performance.

Inside Corner

1. Clean the surfaces to be welded with Weathered Membrane Cleaner.
2. Position the inside corner into the corner setting. Begin welding at the innermost corner point and work up and away from the corner. Weld each side of the inside corner, working from the inside toward the outside.
3. Weld the bottom flange starting on the inside and working towards the outer edges. Use the edge of the roller to crease the corner into any membrane step-off to create a proper seal.
4. Once the material has completely cooled, probe all welded edges of the corner to ensure watertight performance.

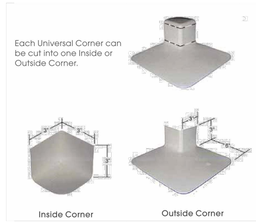
REVIEW CURRENT VERSICO SPECIFICATIONS AND DETAILS FOR SPECIFIC INSTALLATION REQUIREMENTS.

VERSICO ROOFING SYSTEMS

A SINGLE SOURCE FOR SINGLE-PLY ROOFING

Versico, PO Box 1289, Carlisle, PA 17013
Tel: **800.992.7663** Fax: 717.960.4036 Web: **www.versico.com**

TECHNICAL DATA BULLETIN



Precautions

Store TPO Universal Corners in a cool, shaded area and cover with light-colored, breathable, waterproof tarpaulins. TPO Universal Corners or TPO membrane that has been exposed to the weather prior to use must be prepared with Weathered Membrane Cleaner before hot-air welding.

TYPICAL PROPERTIES AND CHARACTERISTICS	
Property	**Value**
Thickness	0.060" (1.5 mm)
Packaging	20 per carton
Color	White, gray and tan
Material	Injection-molded TPO

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

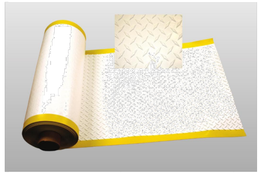
LEED® INFORMATION	
Pre-consumer Recycled Content	0%
Post-consumer Recycled Content	0%
Manufacturing Location	Bloomingdale, IL

© 2016 Versico. 12.07.16
Versico and VersiWeld trademarks of Versico.

TECHNICAL DATA BULLETIN

TPO Heat Weldable Walkway Rolls

Certified Fabricated Accessory



Overview

Versico's VersiWeld® TPO Heat Weldable Walkway Roll is designed to protect the VersiWeld TPO membrane in areas exposed to repetitive foot traffic and other hazards. Walkways must be installed at all traffic concentration points (i.e. roof hatches, access doors, rooftop ladders, etc.) regardless of traffic frequency. Walkways must also be installed if regular maintenance (once a month or more) is necessary to service rooftop equipment.

Versico's VersiWeld TPO Walkway Rolls are part of the Certified Fabricated Accessory (CFA) program. Certified Fabricated Accessories are the only factory-fabricated TPO accessories that meet the stringent quality tolerances required by Versico.

Features and Benefits

- Increased slip resistance created with a diamond- plate tread pattern
- Walkway edges are trimmed in safety yellow to better define the designated traffic flow
- The yellow edges are smooth without tread lugs for easier welding
- Superior weathering package for long-term performance
- Stocked in white, tan and gray, special colors available (minimum quantities apply)

Installation

1. Use Weathered Membrane Cleaner to prepare the membrane area that will be welded to the walkway material.
2. Position the walkway material. Cut the Walkway Rolls into maximum 10' lengths and position with a minimum 1" gap between adjacent pieces to allow for water drainage. Cut the walkway so a 4" minimum gap is created over any field splices. Since the attachment of the walkway to the membrane is permanent, this will allow access to the field seams.
3. Using an automated welder, **weld all four sides of the walkway material to the membrane**. Typically the same speed and temperature settings will be used for this procedure as for welding membrane to membrane. A test weld is always recommended prior to performing welds to the installed membrane. A hand-held welder may be utilized; however, productivity will be decreased.

REVIEW CURRENT VERSICO SPECIFICATIONS AND DETAILS FOR SPECIFIC INSTALLATION REQUIREMENTS.

Precautions

- Walkway Rolls are a maintenance item and are not covered under the Versico membrane systems warranty.
- This product is to be used as a walkway only and is not designed as a perimeter warning line or a substitute for ballast. For safety reasons, walkway rolls should not be installed within 10' (3m) of the roof perimeter.
- Allow the walkway to relax and warm up in the sun prior to welding in place.
- When possible, weld the walkway rolls when the ambient temperature is above 60° F (16° C) to help prevent wrinkles.

VERSICO ROOFING SYSTEMS

BUILDING VALUE

TECHNICAL DATA BULLETIN

VERSIWELD® TPO PIPE SEALS

Certified Fabricated Accessory

Overview

Let Versico simplify your next VersiWeld TPO installation with TPO Molded Pipe Seals. TPO Pipe Seals are injection molded, pre-formed flashings for pipes ¾" (19.0 mm) to 8" (203.2 mm) in diameter. TPO Pipe Seals are packaged in boxes of eight and come with universal stainless steel clamping rings.

VersiWeld TPO Molded Pipe Seals are part of the Certified Fabricated Accessory (CFA) program. Certified Fabricated Accessories are the only factory-fabricated TPO accessories that meet the stringent quality tolerances required to be included in a Versico warranted roofing system.

Features and Benefits

- Provides a reliable method of waterproofing round pipe penetrations
- Provides a substantial labor savings compared to field fabricating from non-reinforced flashing
- Provides more consistent appearance than field-fabricated pipe flashings
- Double-ribbed cutting guide provides easier, smoother and straighter cuts
- Rib design also keeps the clamp in the proper position for the life of the roofing system

Installation

1. Cut pipe seal between the two raised "ribs" to the desired diameter as illustrated on the flange of the pipe seal. (Do not cut off both raised "ribs").
2. Pull pipe seal over pipe until base flange is in contact with the membrane. (Application of heat to the top portion of the pipe seal may be necessary to allow installation over the pipe).
3. Mark pipe around the top of the TPO Pipe Seal.
4. Pull TPO Pipe Seal upwards on pipe until mark on the pipe is visible.
5. Install Water Cut-off Mastic below mark which indicates the top of the installed TPO Pipe Seal.
6. Pull TPO Pipe Seal back down over pipe and into position.
7. Heat weld the TPO Pipe Seal base flange to deck membrane (the hand-welder temperature setting should be between 5 and 6).
8. Install a stainless steel universal clamping ring to provide constant compression of the sealant.

REVIEW CURRENT VERSICO SPECIFICATIONS AND DETAILS FOR SPECIFIC INSTALLATION REQUIREMENTS.

Precautions

1. Remove all lead and other flashing.
2. Temperature of pipe must not exceed 160°F (71°C).
3. When used with mechanically attached membrane, install a minimum of four fastening plates around pipe penetrations. Position fastening plates around the penetration so the plates are covered by the pipe seal flange. A minimum 1½-inch wide weld must be maintained around the outer edge of the flange beyond the plates. If fastening plates cannot be installed in a manner to allow a minimum 1½-inch weld, the plates must be placed outside the TPO Pipe Seal flange and covered with a reinforced VersiWeld overlay.
4. Store pre-molded pipe seals in a cool, shaded area and cover with light-colored, breathable, waterproof tarpaulins. TPO Pipe Seals or membrane that has been exposed to the weather prior to use must be prepared with Weathered Membrane Cleaner prior to hot-air welding.

VERSICO ROOFING SYSTEMS

A SINGLE SOURCE FOR SINGLE-PLY ROOFING

Versico, PO Box 1289, Carlisle, PA 17013
Tel: **800.992.7663** Fax: 717.960.4036 Web: **www.versico.com**

City of Greeley Colorado

TOTAL ROOFING SYSTEM WARRANTY

VERSICO ROOFING SYSTEMS

WARRANTY NO.:
BUILDING OWNER:
NAME OF BUILDING:
BUILDING ADDRESS:
DATE OF COMPLETION OF THE VERSICO TOTAL ROOFING SYSTEM:
DATE OF ISSUE:

Versico, a division of Carlisle Construction Materials Incorporated (Versico), warrants to the Building Owner (Owner) of the above described building, that; subject to the terms, conditions, and limitations stated in this warranty, Versico will repair any leak in the Versico Roofing System (Versico Total Roofing System) installed by a Versico Authorized Roofing Contractor for a period of -- years, commencing with the date of Versico's acceptance of the Versico Total Roofing System installation. However, in no event shall Versico's obligations extend beyond -- years, subsequent to the date of substantial completion of the Versico Total Roofing System. See below for exact date of warranty expiration.

The Versico Total Roofing System is defined as the following Versico brand materials: Membrane, Flashings, Adhesives and Sealants, Insulation, Cover Boards, Fasteners, Fastener Plates, Fastening Bars, Insulation Adhesives and any other Versico brand products utilized in this installation.

TERMS, CONDITIONS, LIMITATIONS

1. Owner shall provide Versico with written notice via letter, fax or email within thirty (30) days of any leak in the Versico Total Roofing System. Owner should send written notice of a leak to Versico's Warranty Services Department at the address set forth at the bottom of this warranty. By so notifying Versico, the Owner authorizes Versico or its designee to investigate the cause of the leak. Should the investigation reveal the cause of the leak to be outside the scope of this Warranty, investigation and repair costs for this service shall be paid by the Owner.

2. If, upon inspection, Versico determines that the leak is caused by a defect in the Versico Total Roofing System's materials, or workmanship of the Versico Authorized Roofing Contractor in installing the same, Owner's remedies and Versico's liability shall be limited to Versico's repair of the leak. Versico shall have sole responsibility in determining the method of repair of the area.

3. This warranty shall not be applicable if, upon Versico's inspection, Versico determines that any of the following has occurred:
(a) The Versico Total Roofing System is damaged by: natural disasters, lightning, fire, insects, animals, windblown debris or objects, earthquakes, tornados, hail, hurricanes, and winds of (3 second) peak gust speeds of -- mph or higher measured at 10 meters above ground; or
(b) Loss of integrity of the building envelope and/or structure, including, but not limited to, partial or complete loss of roof decking, wall panels, windows, rooftop units, doors or other envelope components; or
(c) All associated building components, including but not limited to the deck substrate, joists, columns and foundation, must also meet wind speed design requirements.
(d) The Versico Total Roofing System is damaged by any acts, accidents, misuse, abuse, vandalism, civil disobedience or the like; or
(e) Deterioration or failure of building components, including, but not limited to, the roof substrate, walls, mortar, HVAC units, non Versico brand metal work, etc., occurs and causes a leak, or otherwise damages the Versico Total Roofing System; or
(f) Deterioration of metal materials and accessories caused by marine salt water, atmosphere, or by regular spray of either salt or fresh water; or
(g) Acids, oils, harmful chemicals and the like come in contact with the Versico Total Roofing System and cause a leak, or otherwise damage the Versico Total Roofing System; or
(h) The Versico Total Roofing System encounters leaks or is otherwise damaged by condensation resulting from any condition within the building that may generate moisture; or
(i) The Versico Authorized Contractor or any additional contractor or subcontractor failed to follow Versico's published specifications and details for the approved system assembly or failure to correct all installation deficiencies listed in any Versico inspection report.

4. This Warranty shall be null and void if any of the following shall occur:
(a) If, after installation of the Versico Total Roofing System by a Versico Authorized Roofing Contractor, there are any alterations or repairs made on or through the roof or objects such as, but not limited to, structures, fixtures, solar arrays, wind turbines, roof gardens or utilities are placed upon or attached to the roof without first obtaining written authorization from Versico; or
(b) Failure by the Owner to use reasonable care in maintaining the roof, said maintenance to include, but not be limited to, those items listed on Versico's Care & Maintenance Guide which accompanies this Warranty.

5. In addition, it shall be Owner's sole responsibility to remove and re-install, at Owner's expense, all obstructions, including, but not limited to, structures, fixtures, solar arrays, wind turbines, roof gardens, utilities or other overburden from the affected area as determined by Versico that would hinder or impede repairs being made in the most expedient and least expensive manner possible. Owner shall be responsible for all costs associated with any loss of power generation in the event that removal of a solar array is required to repair the roofing system.

6. During the term of this Warranty, Versico shall have free access to the roof during regular business hours.

7. Versico shall have no obligation under this Warranty with respect to materials, supplies, service, and/or warranty charges have not been paid in full to the Versico Authorized Roofing Contractor, Versico, or material suppliers.

8. Versico's failure at any time to enforce any of the terms or conditions stated herein shall not be construed to be a waiver of such provision.

9. Versico shall not be responsible for the cleanliness or discoloration of the Versico Total Roofing System caused by environmental conditions including, but not limited to, dirt, pollutants or biological agents.

10. Versico shall have no liability under any theory of law for any claims, repairs, restoration, or other damages including, but not limited to, consequential or incidental damages relating, directly or indirectly, to the presence of any irritants, contaminants, vapors, fumes, molds, fungi, bacteria, spores, mycotoxins, or the like in the building or in the air, land, or water serving the building.

11. This warranty shall be transferable upon a change in ownership of the building when the Owner has completed certain procedures, including notification and an inspection of the Roofing System by a Versico representative.

12. Any dispute, controversy or claim between the Owner and Versico concerning this Limited Warranty shall be settled by mediation. In the event that the Owner and Versico do not resolve the dispute, controversy or claim in mediation, the Owner and Versico agree that any and all suits, proceedings, or claims shall be filed in either the state courts of Cumberland County, Pennsylvania or in the United States District Court for the Middle District of Pennsylvania. Each party irrevocably consents to the jurisdiction and venue of the above-identified courts.

13. Roof System Design Assembly: Versico, as manufacturer of commercial roofing products with the sole purpose of offering products for an Owner, design professional, architect, consultant, or engineer when designing/choosing a roof system assembly, assumes no liability nor implies to the suitability of the products for any particular assembly or specific building operation or structure. The Owner, design professional, architect, consultant, or engineer is solely responsible for the assembly chosen for a particular building structure to include the responsibility to properly calculate wind uplift values, design dead loads and live loads, and suitability and condition of building envelope substrate, decking, parapets, drainage, slope, and other attributes pertaining to the performance of the roof system assembly.

14. The Versico Authorized Contractor or any additional contractor or subcontractor are not agents of Versico.

VERSICO DOES NOT WARRANT PRODUCTS UTILIZED IN THIS INSTALLATION WHICH IT HAS NOT FURNISHED AND SPECIFICALLY DISCLAIMS LIABILITY, UNDER ANY THEORY OF LAW, ARISING OUT OF THE INSTALLATION AND PERFORMANCE OF, OR DAMAGES SUSTAINED BY OR CAUSED BY PRODUCTS NOT FURNISHED BY VERSICO OR THE PRIOR EXISTING ROOFING MATERIAL OVER WHICH THE VERSICO ROOFING SYSTEM HAS BEEN INSTALLED.

THE REMEDIES STATED HEREIN ARE THE SOLE AND EXCLUSIVE REMEDIES FOR FAILURE OF THE VERSICO TOTAL ROOFING SYSTEM OR ITS COMPONENTS. THERE ARE NO WARRANTIES EITHER EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY, WHICH EXTEND BEYOND THE FACE HEREOF. VERSICO SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR DAMAGE TO THE BUILDING OR ITS CONTENTS UNDER ANY THEORY OF LAW.

BY: James Heisey

AUTHORIZED SIGNATURE:
TITLE: Director of Sales
This Warranty Expires:

Versico Care and Maintenance Guide

In order to ensure the long-term performance of your Roofing System and continued warranty service and coverage, regular rooftop maintenance inspections are necessary. While normal aging will occur on all roofs, if not detected early, problems stemming from abuse, contamination, accidents and severe weather can result in extensive and costly repairs or premature failure of the roofing system. Single-ply Roofing Systems are typically low-slope and easy to inspect, but caution must be taken to ensure safety. Versico disclaims and assumes no liability for any rooftop activity.

- Owner must retain records related to the Roofing System. Such records include, but are not limited to: the warranty document and serial number, maintenance inspection logs, rooftop traffic logs, service logs, and invoices for work performed on the roofing system.
- Inspect the roof at least every six months (preferably spring and fall) and immediately following any weather event that includes excessive rainfall, high winds and/or hail warnings. Increased number of rooftop maintenance inspections may be required on some roofs as the location may dictate, such as higher trees near the building which will accumulate leaves and debris on the roof and have adverse effects on drainage. In addition, rooftop maintenance inspections should occur after regular maintenance of any rooftop unit.

When inspecting the Roofing System, pay special attention to the following:
- Walls/Parapets/Roof Edge – Wind damage often begins at the perimeter of the roof. Ensure all membrane terminations and edge metal and copings are secure.
- Roof Deck Membrane – Inspect the field of the roof, scanning for damage caused by wind blown debris or traffic.
- Penetrations/Rooftop Units – Inspect the membrane, flashings and terminations around penetrations and roof top units for possible damage from service work. Ensure the units and terminations are secure.
- Remove debris (leaves, dirt, trash, etc.) – Good roofing practice dictates that water should drain from the roof and that ponded water should evaporate within 48 to 72 hours after a rainfall. Debris can inhibit drainage.

Additional Maintenance Items:
- Foot Traffic – Walkways must be provided if regular traffic is required or if rooftop equipment has a regular thirty (30) day or less maintenance schedule.
- Petroleum Products & Chemicals - Keep all lipids containing petroleum products or chemicals off the membrane to avoid product degradation.
- Animal Fats/Vegetable Oils: EPDM Membranes - Do not exhaust animal fats/vegetable oils directly onto EPDM roof surfaces. TPO & PVC Membranes – Animal fats/vegetable oils must be regularly removed and the rooftop surface cleaned with a mixture of soap and water.

What to do if a leak occurs:
- After verifying the leak is through the roofing system, contact Versico at 1-800-233-0551 or at www.versico.com.
- If minor, emergency temporary repairs are made to a suspected leak area, use Versico's Lap Sealant or a good-grade rubber caulk to address the repair area (do not use asphaltic roof cement). Please note, Versico is not responsible for the cost associated with any emergency temporary repairs.

Alterations to the Roofing System:
- Alterations to the Roofing System must be completed by a Versico Authorized Contractor. The Versico Authorized Contractor must notify Versico when the revision work is complete. The necessary form can be found on the Versico website via the Authorized Contractors login.

Warranty Transfer:
- Warranties shall be transferable upon a change in ownership of the building when the Owner has completed certain procedures. This form can be found on the Versico website for additional guidelines.

SAMPLE
SAMPLE
SAMPLE

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

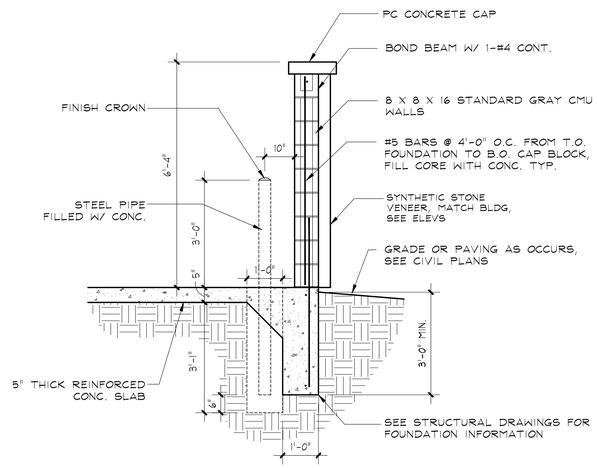
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

TPO ROOF MEMBRANE
DETAILS

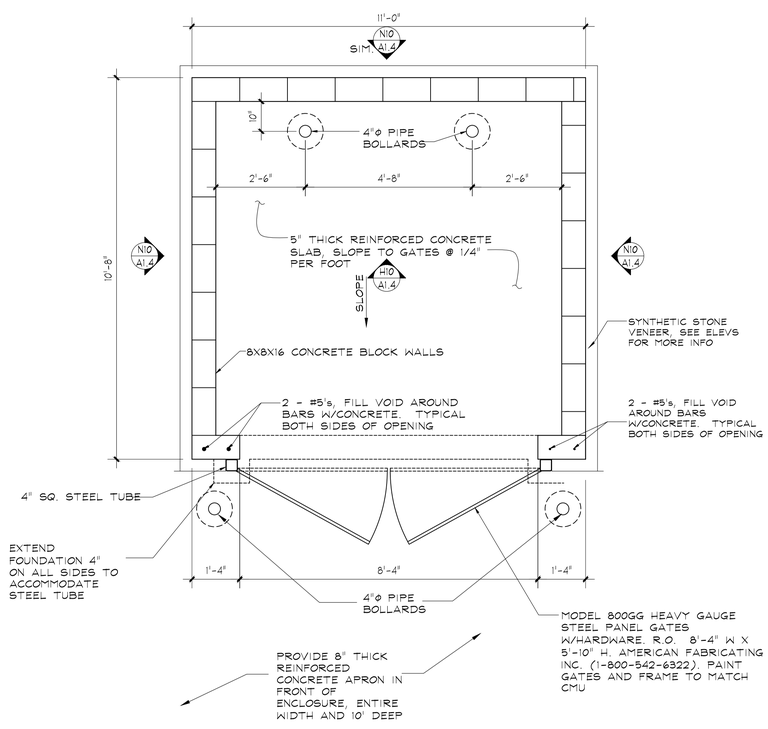
STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: LJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A1.3.1
Date: Feb., 2025	of

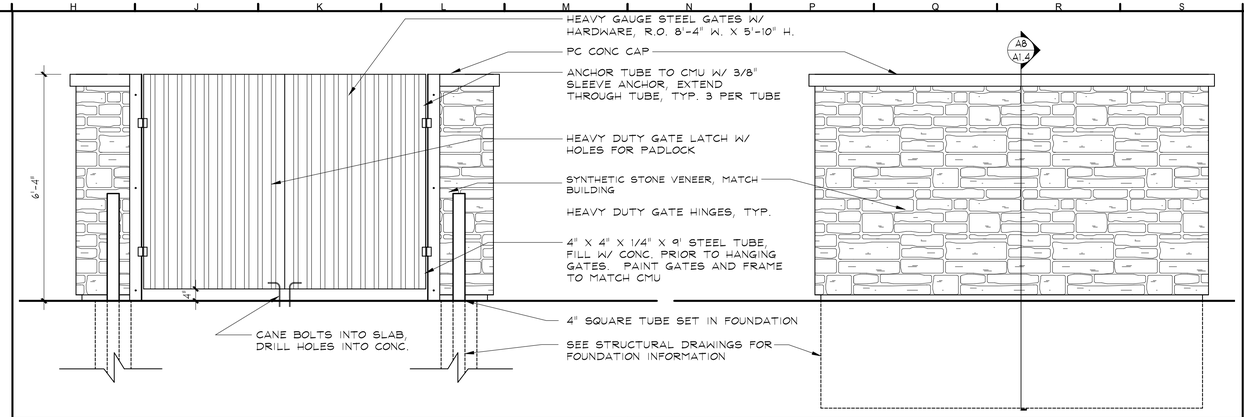
COPYRIGHT 2018 — BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



A8	TRASH ENCLOSURE WALL SECTION
1/2" = 1'-0"	

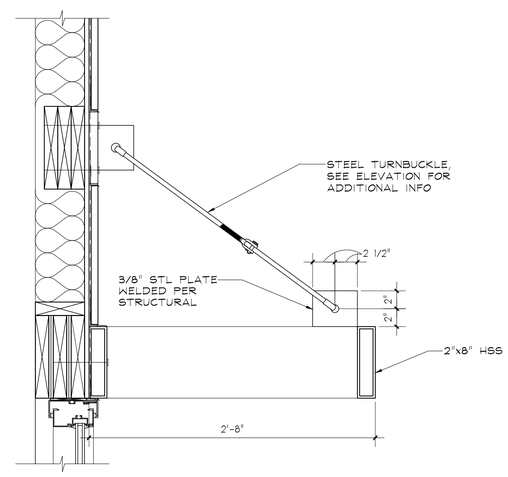


A1	TRASH ENCLOSURE PLAN
1/2" = 1'-0"	

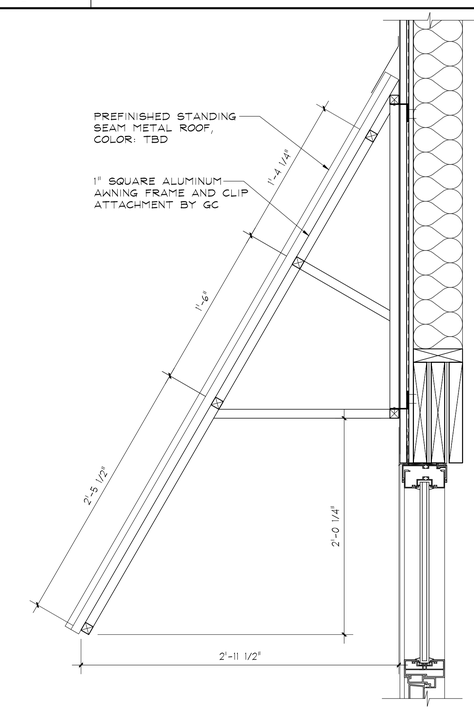


H10	TRASH ENCLOSURE ELEVATION
1/2" = 1'-0"	SIDE AND BACK

N10	TRASH ENCLOSURE ELEVATIONS
1/2" = 1'-0"	FRONT

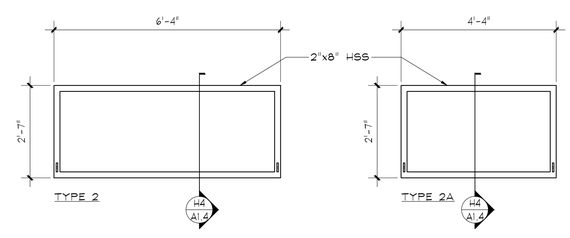


H4	AWNING SECTION - TYPE 2
1 1/2" = 1'-0"	



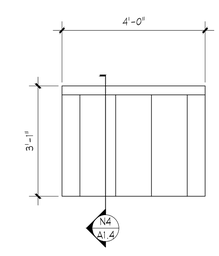
N4	AWNING SECTION - TYPE 1
1 1/2" = 1'-0"	

NOTE: GRIND SMOOTH ALL WELDS



H1	ENLARGED AWNING PLAN - TYPE 2 AND 2A
1/2" = 1'-0"	

NOTE: GRIND SMOOTH ALL WELDS



N1	ENLARGED AWNING PLAN - TYPE 1
1/2" = 1'-0"	

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

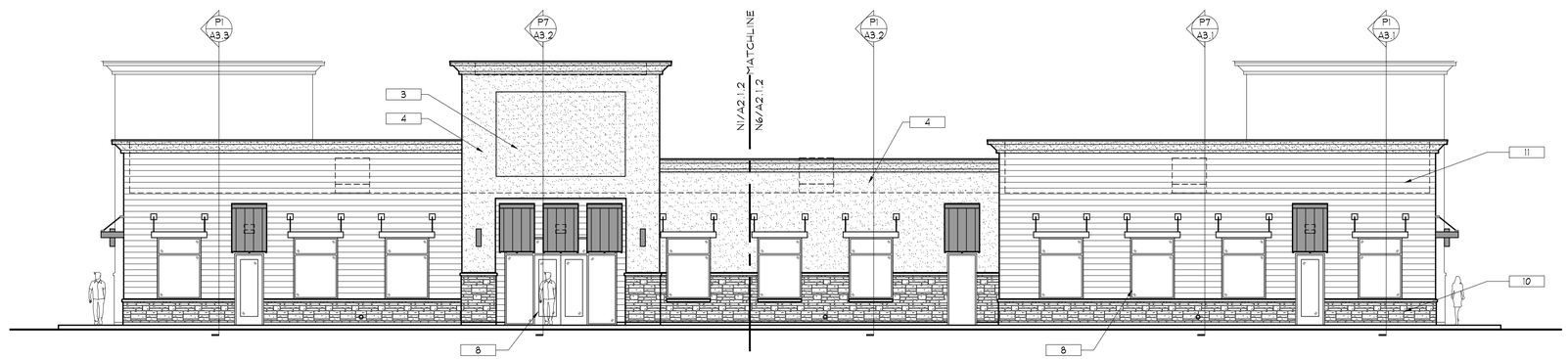
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

AWNING AND TRASH ENCLOSURE
DETAILS

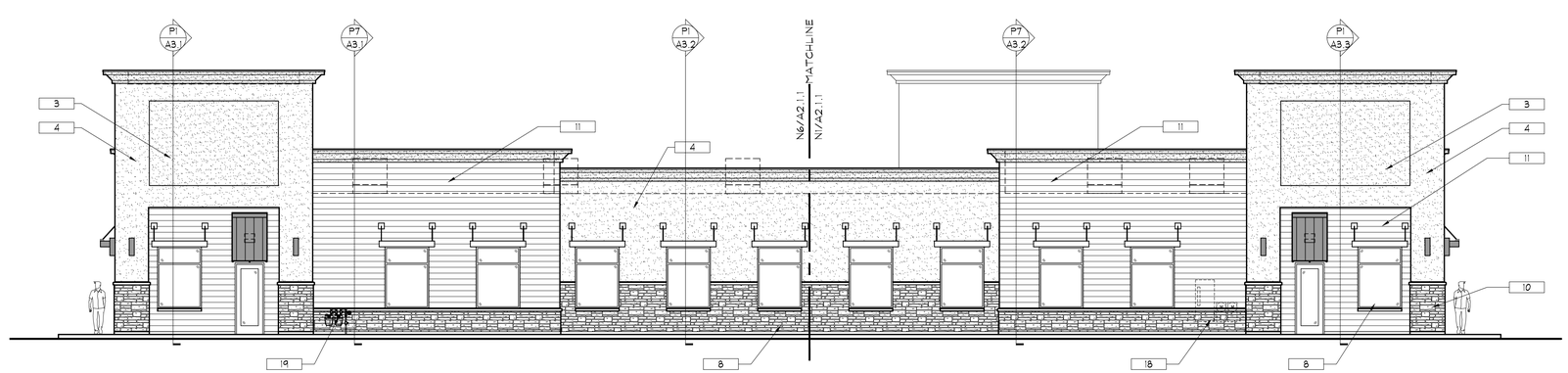
STATE OF COLORADO — PAUL J. BATTISTA B-3015 02/11/2025 — LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A1.4
Date: Feb., 2025	of

COPYRIGHT 2018 — BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



P6	OVERALL WEST BUILDING ELEVATION
1/8" = 1'-0"	



P1	OVERALL EAST BUILDING ELEVATION
1/8" = 1'-0"	

NOTE: SEE SHEETS A2.1.1 AND A2.1.2 FOR ADDITIONAL KEYNOTES AND INFORMATION.

KEYNOTES:

1. METAL CAP FLASHING TO MATCH ADJACENT STUCCO CORNICE, DARK BROWN
2. STUCCO CORNICE, DARK BROWN
3. STUCCO FIELD COLOR #1, LIGHT TAN
4. STUCCO FIELD COLOR #2, MEDIUM TAN
5. STEEL PLATES, RODS AND TURNBUCKLES, DARK BRONZE
6. TUBE STEEL AWNINGS, DARK BRONZE
7. SLOPED STANDING SEAM METAL AWNINGS, DENIM BLUE COLOR
8. ALUMINUM STOREFRONT WINDOWS AND DOORS, DARK BRONZE
9. P.C. CONC. SILL TRIM PIECE AND/OR CAP STONE, BUFF COLOR
10. MANUFACTURED STONE VENEER, BLEND OF TANS AND BROWNS
11. WOOD LOOK MANUFACTURED CONC. PLANKS, MEDIUM BROWN
12. HEAVY STEEL TRASH GATES, DARK BROWN
13. WALL PACK/EGRESS LIGHT, DARK BRONZE
14. WALL SCONCE ACCENT LIGHT, DARK BRONZE
15. INSULATED METAL DOOR, DARK BROWN
16. LINE OF ROOF BEYOND, ROOFTOP EQUIPMENT TO BE SCREENED BY PARAPETS
17. POTENTIAL SIGNAGE LOCATION, SIGNAGE BY SEPARATE PERMIT
18. ELECTRICAL SERVICE
19. GAS SERVICE
20. ROOFTOP HVAC UNITS BEYOND
21. EMERGENCY ROOF OVERFLOW DRAIN, TO SIDEWALK CHASE. ROOF DRAINS/DOWNSPOUTS TO BE INTERNAL AND HARD PIPED TO STORM SEWER

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

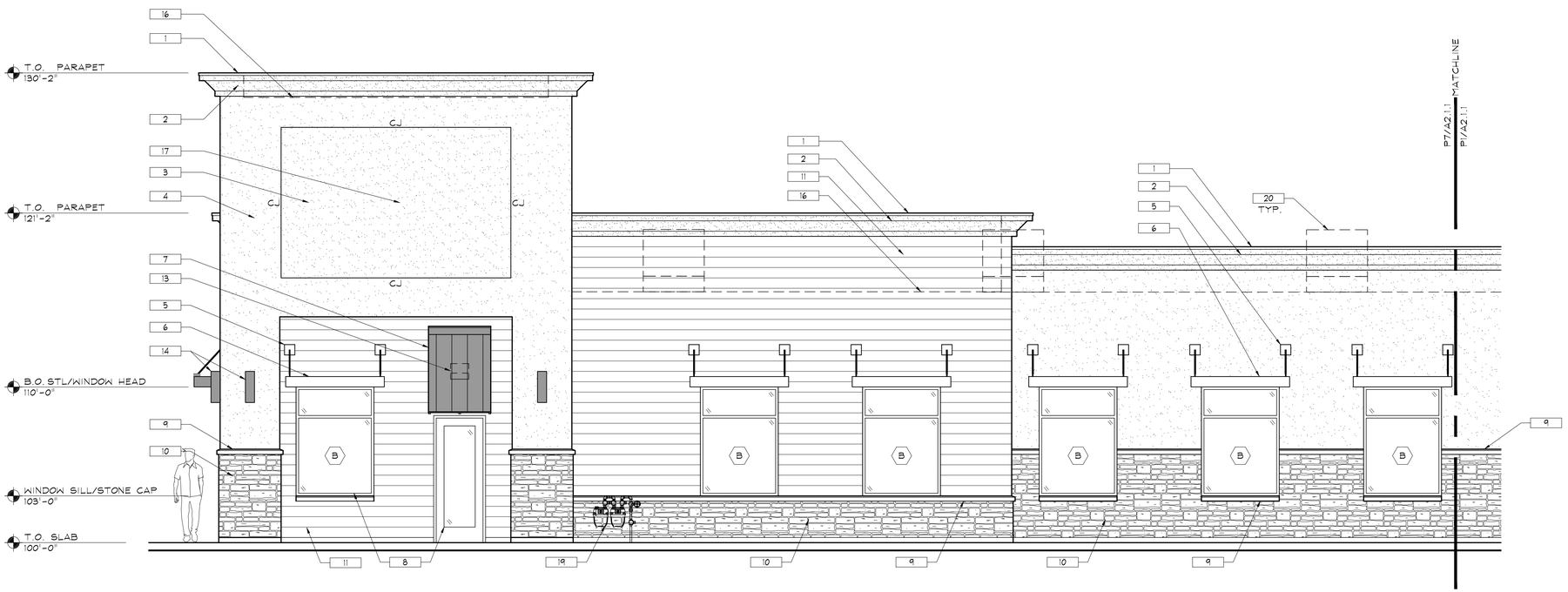
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

OVERALL EAST AND WEST
BUILDING ELEVATIONS

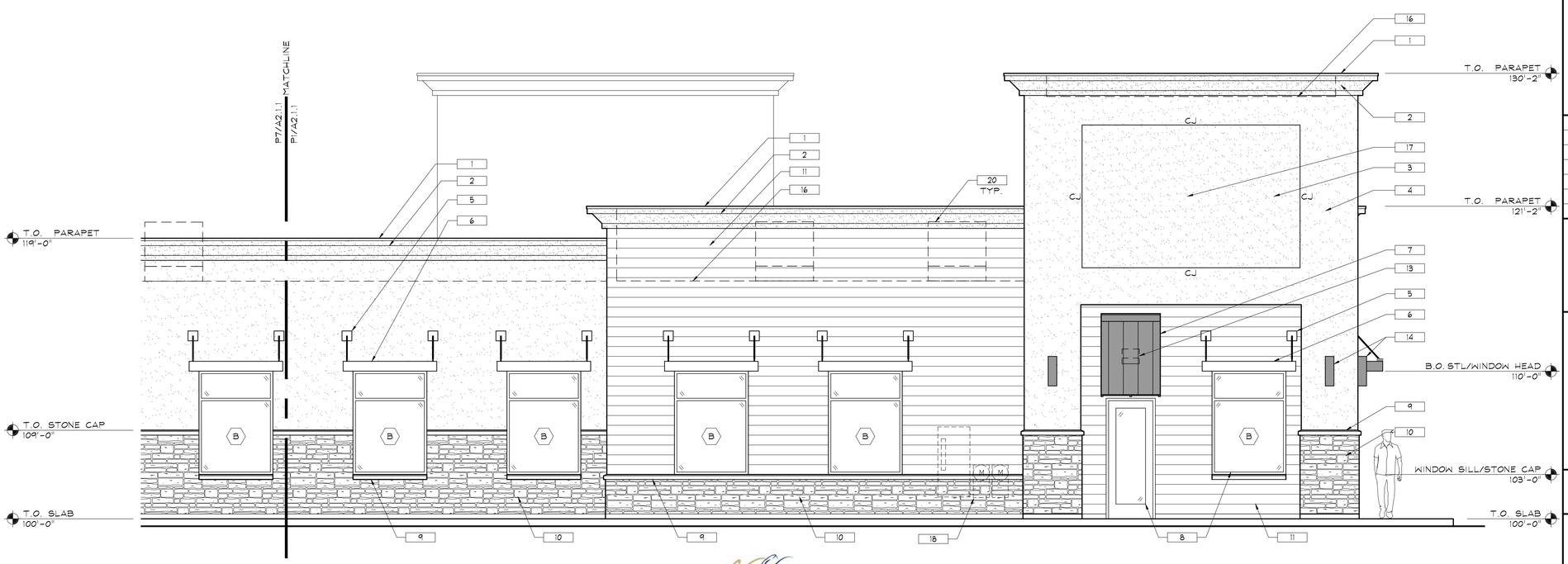
STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A2.1
Date: Feb., 2025	of

COPYRIGHT 2018 – BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



P7	PARTIAL EAST BUILDING ELEVATION
1/4" = 1'-0"	



P1	PARTIAL EAST BUILDING ELEVATION
1/4" = 1'-0"	

KEYNOTES:

1. METAL CAP FLASHING TO MATCH ADJACENT STUCCO CORNICE, DARK BROWN
2. STUCCO CORNICE, DARK BROWN
3. STUCCO FIELD COLOR #1, LIGHT TAN
4. STUCCO FIELD COLOR #2, MEDIUM TAN
5. STEEL PLATES, RODS AND TURNBUCKLES, DARK BRONZE
6. TUBE STEEL AWNINGS, DARK BRONZE
7. SLOPED STANDING SEAM METAL AWNINGS, DENIM BLUE COLOR
8. ALUMINUM STOREFRONT WINDOWS AND DOORS, DARK BRONZE
9. P.C. CONC. SILL TRIM PIECE AND/OR CAP STONE, BUFF COLOR
10. MANUFACTURED STONE VENEER, BLEND OF TANS AND BROWNS
11. WOOD LOOK MANUFACTURED CONC. PLANKS, MEDIUM BROWN
12. HEAVY STEEL TRASH GATES, DARK BROWN
13. WALL PACK/EGRESS LIGHT, DARK BRONZE
14. WALL SCONCE ACCENT LIGHT, DARK BRONZE
15. INSULATED METAL DOOR, DARK BROWN
16. LINE OF ROOF BEYOND, ROOFTOP EQUIPMENT TO BE SCREENED BY PARAPETS
17. POTENTIAL SIGNAGE LOCATION, SIGNAGE BY SEPARATE PERMIT
18. ELECTRICAL SERVICE
19. GAS SERVICE
20. ROOFTOP HVAC UNITS BEYOND
21. EMERGENCY ROOF OVERFLOW DRAIN, TO SIDEWALK CHASE. ROOF DRAINS/DOWNSPOUTS TO BE INTERNAL AND HARD PIPED TO STORM SEWER

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

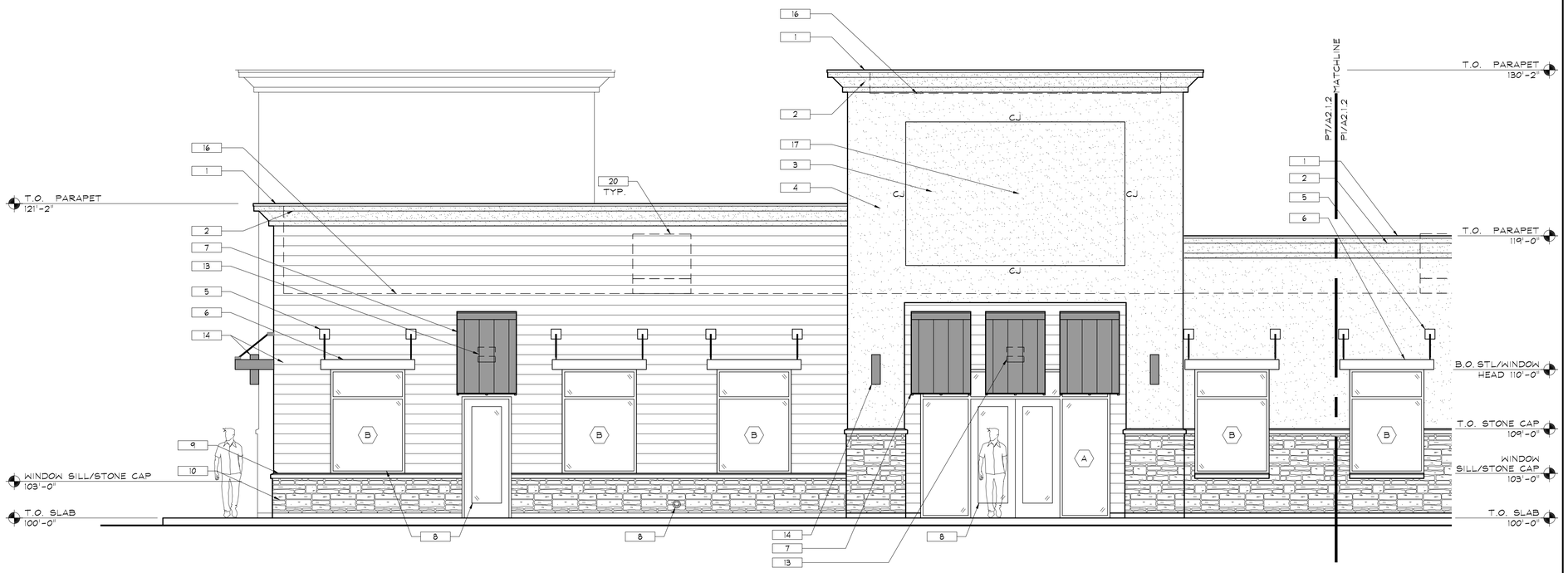
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

EAST BUILDING ELEVATION

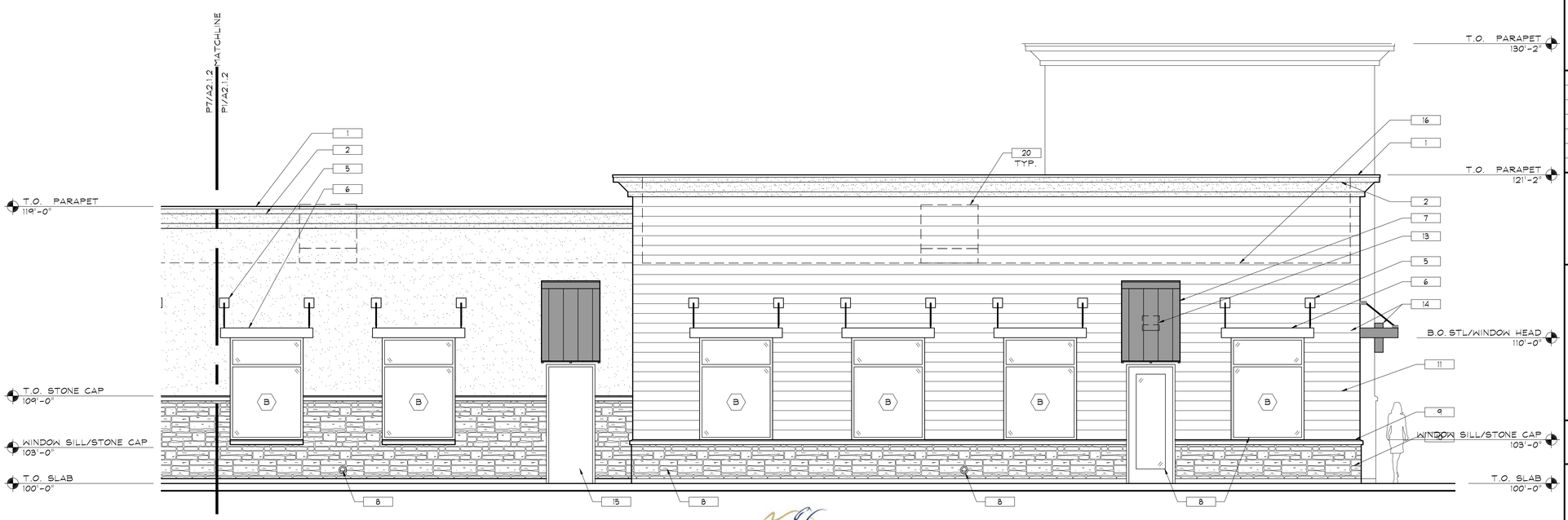
STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A2.1.1
Date: Feb., 2025	of

COPYRIGHT 2018 - BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



P7	PARTIAL WEST BUILDING ELEVATION
1/4" = 1'-0"	



P1	PARTIAL WEST BUILDING ELEVATION
1/4" = 1'-0"	

KEYNOTES:

1. METAL CAP FLASHING TO MATCH ADJACENT STUCCO CORNICE, DARK BROWN
2. STUCCO CORNICE, DARK BROWN
3. STUCCO FIELD COLOR #1, LIGHT TAN
4. STUCCO FIELD COLOR #2, MEDIUM TAN
5. STEEL PLATES, RODS AND TURNBUCKLES, DARK BRONZE
6. TUBE STEEL AWNINGS, DARK BRONZE
7. SLOPED STANDING SEAM METAL AWNINGS, DENIM BLUE COLOR
8. ALUMINUM STOREFRONT WINDOWS AND DOORS, DARK BRONZE
9. P.C. CONC. SILL TRIM PIECE AND/OR CAP STONE, BUFF COLOR
10. MANUFACTURED STONE VENEER, BLEND OF TANS AND BROWNS
11. WOOD LOOK MANUFACTURED CONC. PLANKS, MEDIUM BROWN
12. HEAVY STEEL TRASH GATES, DARK BROWN
13. WALL PACK/EGRESS LIGHT, DARK BRONZE
14. WALL SCONCE ACCENT LIGHT, DARK BRONZE
15. INSULATED METAL DOOR, DARK BROWN
16. LINE OF ROOF BEYOND, ROOFTOP EQUIPMENT TO BE SCREENED BY PARAPETS
17. POTENTIAL SIGNAGE LOCATION, SIGNAGE BY SEPARATE PERMIT
18. ELECTRICAL SERVICE
19. GAS SERVICE
20. ROOFTOP HVAC UNITS BEYOND
21. EMERGENCY ROOF OVERFLOW DRAIN, TO SIDEWALK CHASE. ROOF DRAINS/DOWNSPOUTS TO BE INTERNAL AND HARD PIPED TO STORM SEWER

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

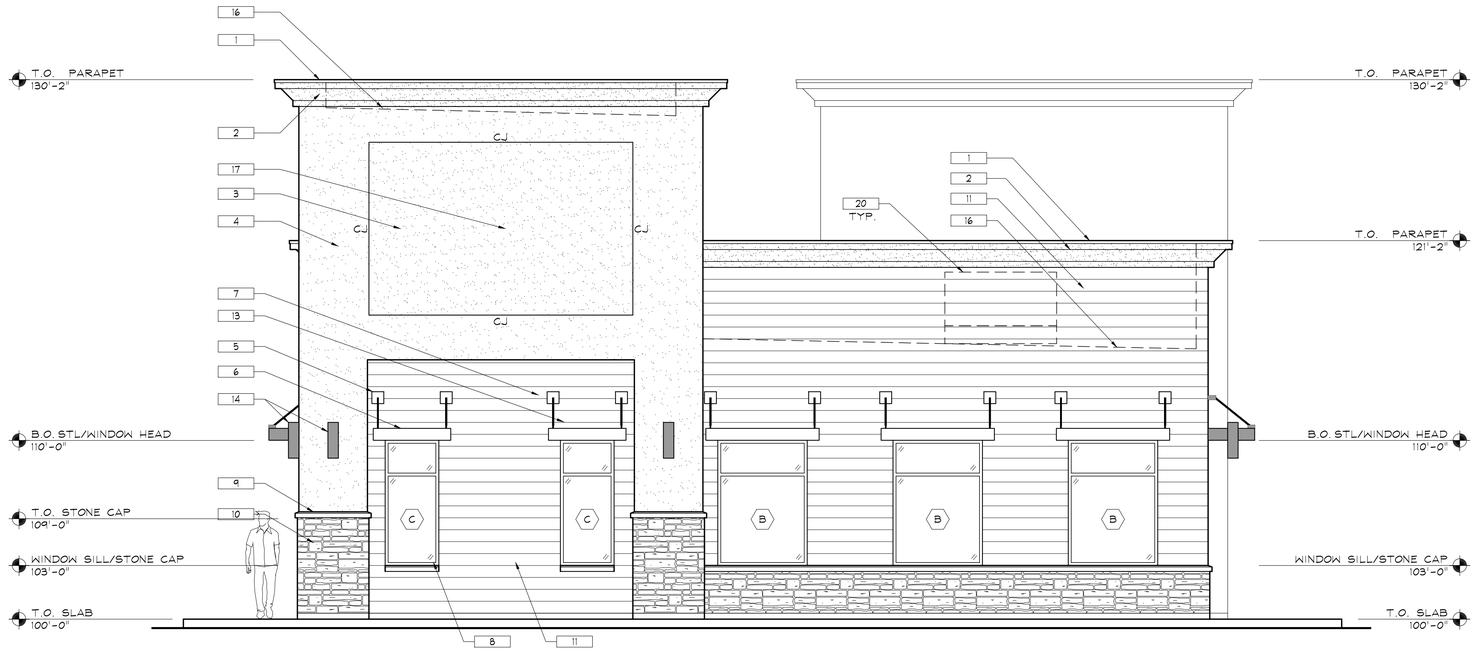
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

WEST BUILDING ELEVATION

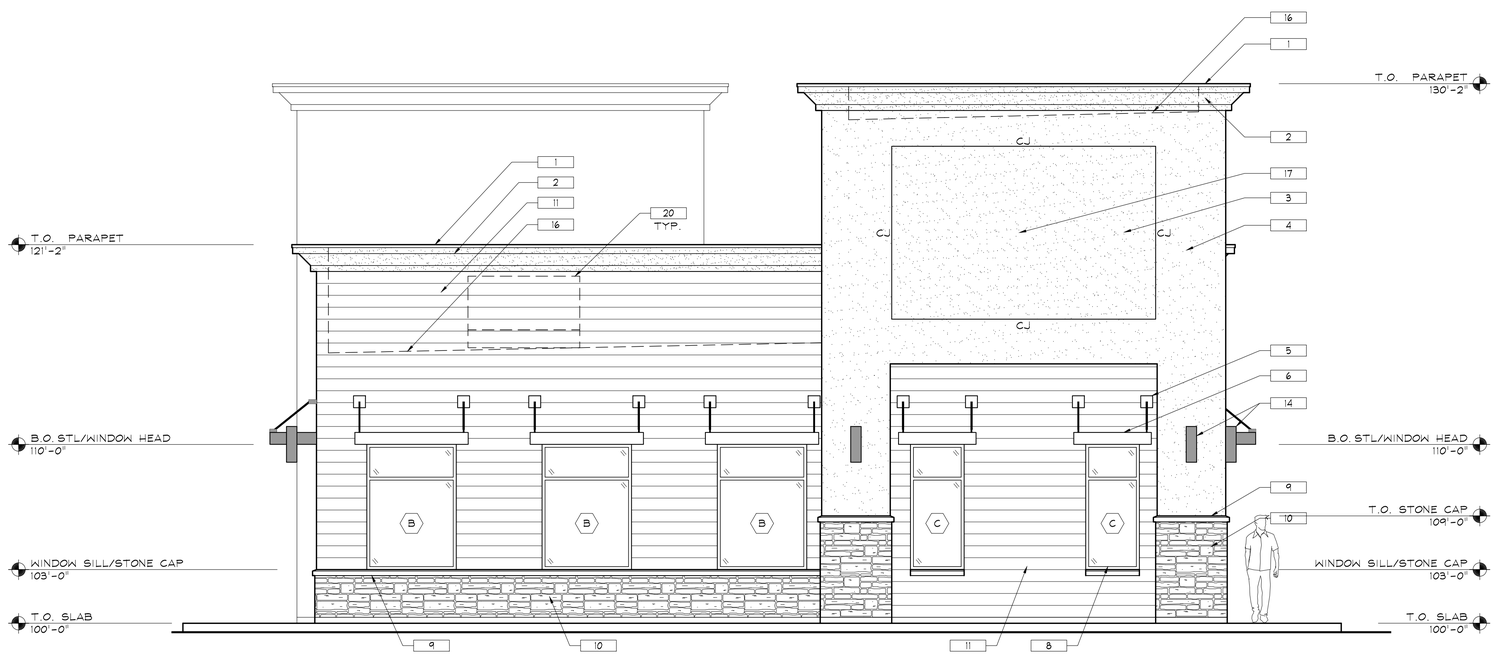
STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A2.1.2
Date: Feb., 2025	of

COPYRIGHT 2018 - BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



P7	NORTH BUILDING ELEVATION
1/4" = 1'-0"	



P1	SOUTH BUILDING ELEVATION
1/4" = 1'-0"	

KEYNOTES:

1. METAL CAP FLASHING TO MATCH ADJACENT STUCCO CORNICE, DARK BROWN
2. STUCCO CORNICE, DARK BROWN
3. STUCCO FIELD COLOR #1, LIGHT TAN
4. STUCCO FIELD COLOR #2, MEDIUM TAN
5. STEEL PLATES, RODS AND TURNBUCKLES, DARK BRONZE
6. TUBE STEEL AWNINGS, DARK BRONZE
7. SLOPED STANDING SEAM METAL AWNINGS, DENIM BLUE COLOR
8. ALUMINUM STOREFRONT WINDOWS AND DOORS, DARK BRONZE
9. P.C. CONC. SILL TRIM PIECE AND/OR CAP STONE, BUFF COLOR
10. MANUFACTURED STONE VENEER, BLEND OF TANS AND BROWNS
11. WOOD LOOK MANUFACTURED CONC. PLANKS, MEDIUM BROWN
12. HEAVY STEEL TRASH GATES, DARK BROWN
13. WALL PACK/EGRESS LIGHT, DARK BRONZE
14. WALL SCONCE ACCENT LIGHT, DARK BRONZE
15. INSULATED METAL DOOR, DARK BROWN
16. LINE OF ROOF BEYOND, ROOFTOP EQUIPMENT TO BE SCREENED BY PARAPETS
17. POTENTIAL SIGNAGE LOCATION, SIGNAGE BY SEPARATE PERMIT
18. ELECTRICAL SERVICE
19. GAS SERVICE
20. ROOFTOP HVAC UNITS BEYOND
21. EMERGENCY ROOF OVERFLOW DRAIN, TO SIDEWALK CHASE. ROOF DRAINS/DOWNSPOUTS TO BE INTERNAL AND HARD PIPED TO STORM SEWER

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

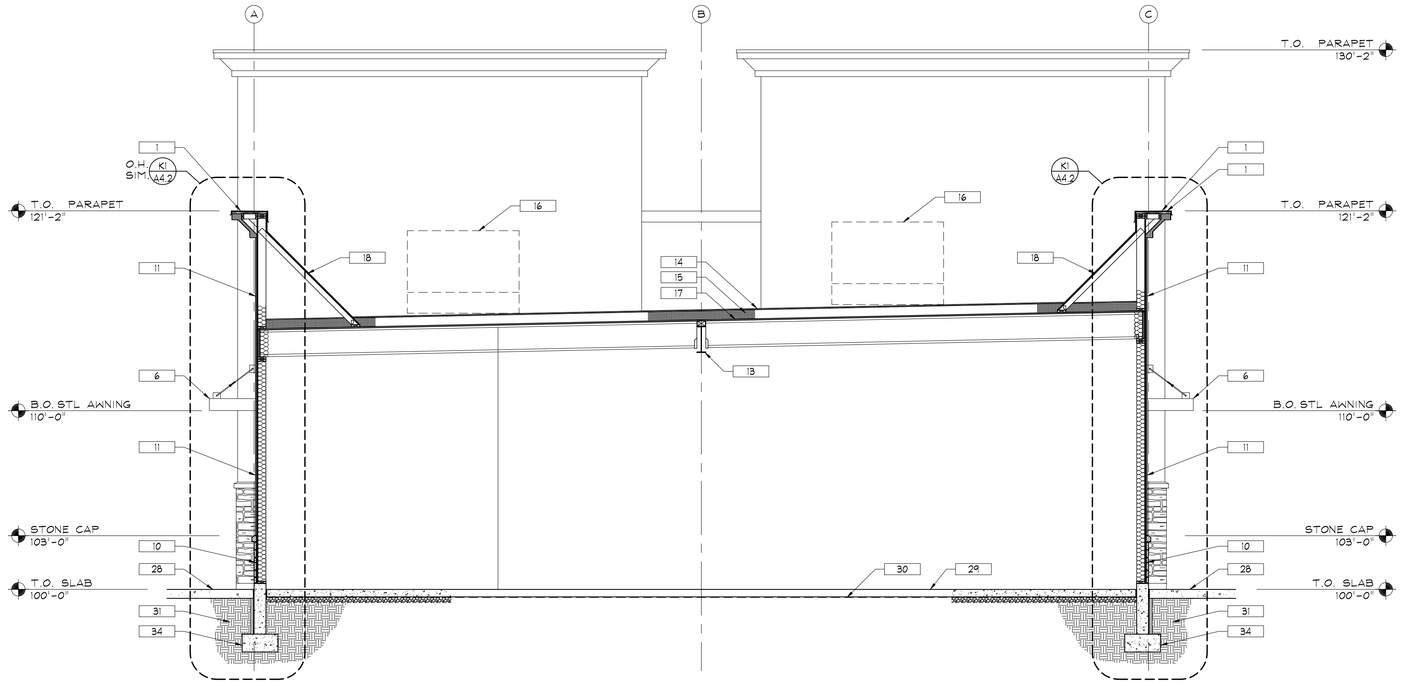
NORTH AND SOUTH
BUILDING ELEVATION

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

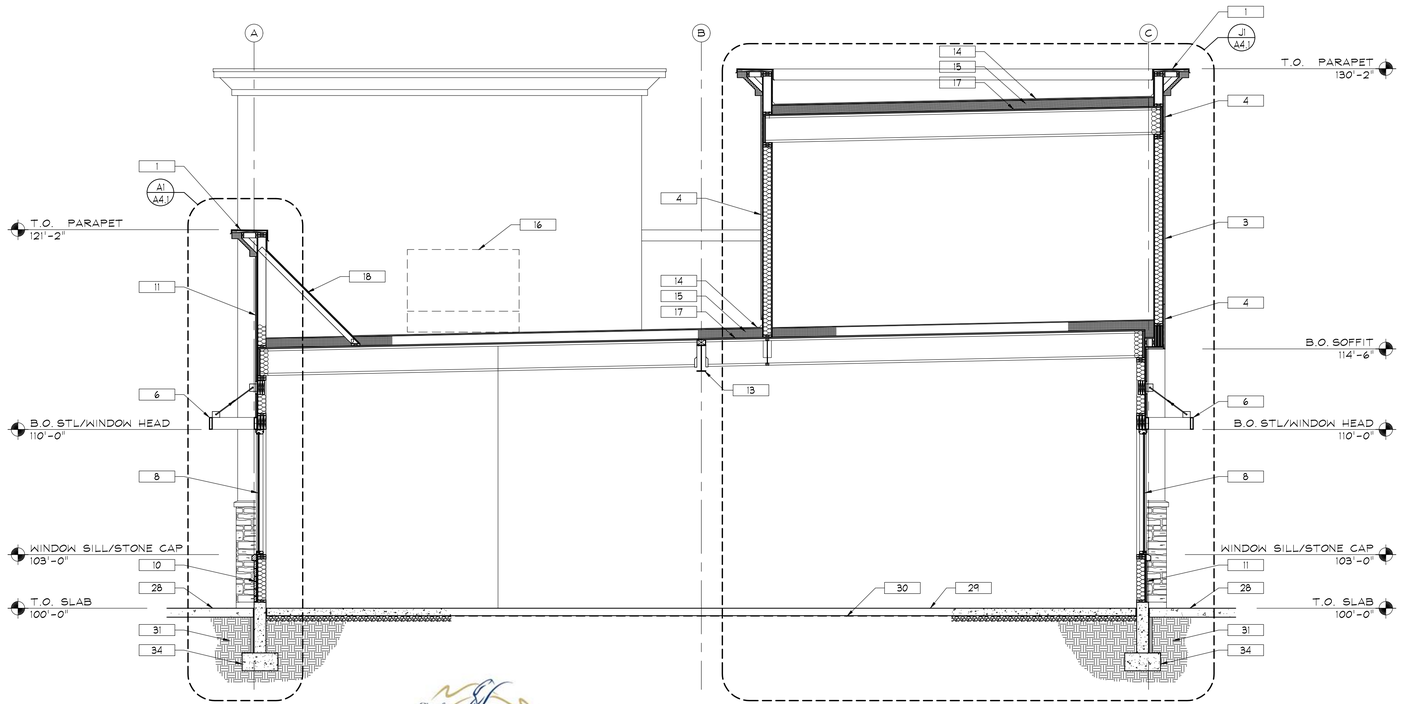
Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A2.2
Date: Feb., 2025	of

City of Greeley Colorado

COPYRIGHT 2018 – BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



P7	BUILDING SECTION
1/4" = 1'-0"	



P1	BUILDING SECTION
1/4" = 1'-0"	

KEYNOTES:

1. METAL CAP FLASHING TO MATCH ADJACENT STUCCO CORNICE, DARK BROWN
2. STUCCO CORNICE, DARK BROWN
3. STUCCO FIELD COLOR #1, LIGHT TAN
4. STUCCO FIELD COLOR #2, MEDIUM TAN
5. STEEL PLATES, RODS AND TURNBUCKLES, DARK BRONZE
6. TUBE STEEL AWNINGS, DARK BRONZE
7. SLOPED STANDING SEAM METAL AWNINGS, DENIM BLUE COLOR
8. ALUMINUM STOREFRONT WINDOWS AND DOORS, DARK BRONZE
9. P.C. CONC. SILL TRIM PIECE AND/OR CAP STONE, BUFF COLOR
10. MANUFACTURED STONE VENEER, BLEND OF TANS AND BROWNS
11. WOOD LOOK MANUFACTURED CONC. PLANKS, MEDIUM BROWN
12. FLASHING AND COUNTER FLASHING
13. STEEL BEAM, SEE STRUCT.
14. 60 MIL TPO ROOFING, SEE SHEET A1.3 FOR ADD. INFO.
15. ± 6" R-40 POLYISO RIGID INSULATION W/ PROTECTION BOARD
16. ROOFTOP HVAC UNITS BEYOND, SEE M SHEETS
17. SHEATHING OVER PRE-ENGINEERED ROOF JOISTS, SEE STRUCTURAL FOR ADDITIONAL INFORMATION
18. 2x KICKER, SEE STRUCT. FOR ADDITIONAL INFO.
19. LINE OF WALL/BUILDING BEYOND
20. AIR INFILTRATION BARRIER/BLDG. WRAP TYP OVER ALL VERTICAL EXTERIOR SHEATHING AND INSIDE DOOR AND WINDOW OPENINGS
21. MIN. R-19 KRAFT FACED BATT INSULATION
22. 2x WOOD FRAMING, SEE STRUCT.
23. EXTERIOR SHEATHING, SEE STRUCT.
24. HEADER, SEE STRUCT.
25. LVL BEAM, SEE STRUCT.
26. CONT. SEALANT (OVER BACKER WHERE APPROPRIATE) PER VARIOUS SYSTEM REQUIREMENTS AND BETWEEN DISSIMILAR MATERIALS, SEE SPECS AND MANUF. PRODUCT DATA AND INSTRUCTIONS
27. CONT. PRESURE TREATED BOTTOM PLATE OVER SILL SEAL AND ANCHOR BOLTS PER STRUCT.
28. EXTERIOR CONCRETE WALK, SLOPE AWAY FROM BUILDING, TYP.
29. 5" CONCRETE SLAB ON GRADE OVER GRAVEL LAYER PER SOILS REPORT, SEE STRUCTRAL
30. VAPOR BARRIER UNDER SLAB TO BE 10 MIL. CLASS C POLYETHYLENE WITH SEALED JOINTS.
31. STRUCT. FILL, SEE STRUCT. AND SOILS REPORT
32. ISOLATION/EXPANSION MATERIAL
33. 2" X 24" VERT RIGID INSUL CONT.
34. CONCRETE FOUNDATION, SEE STRUCTURAL
35. WATERPROOFING ON FOUNDATION AND OVER TOP OF FOOTING

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

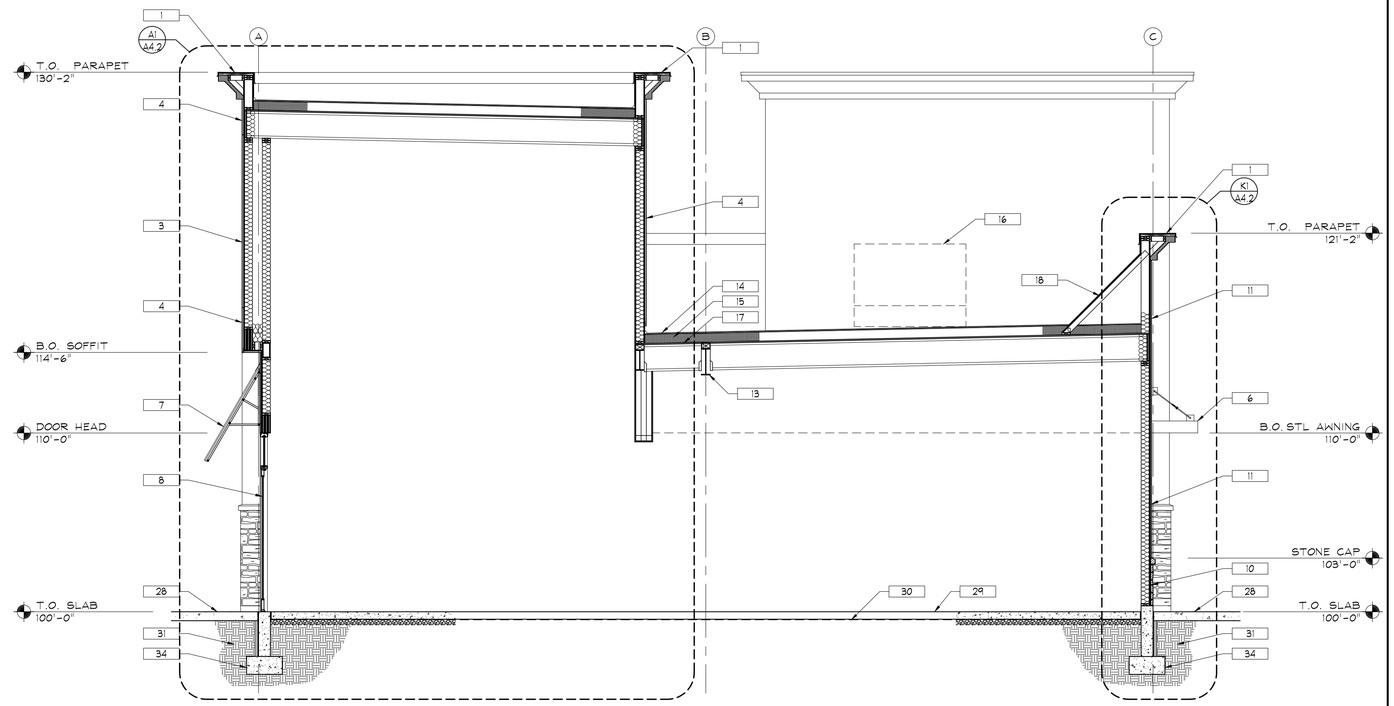
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

BUILDING SECTIONS

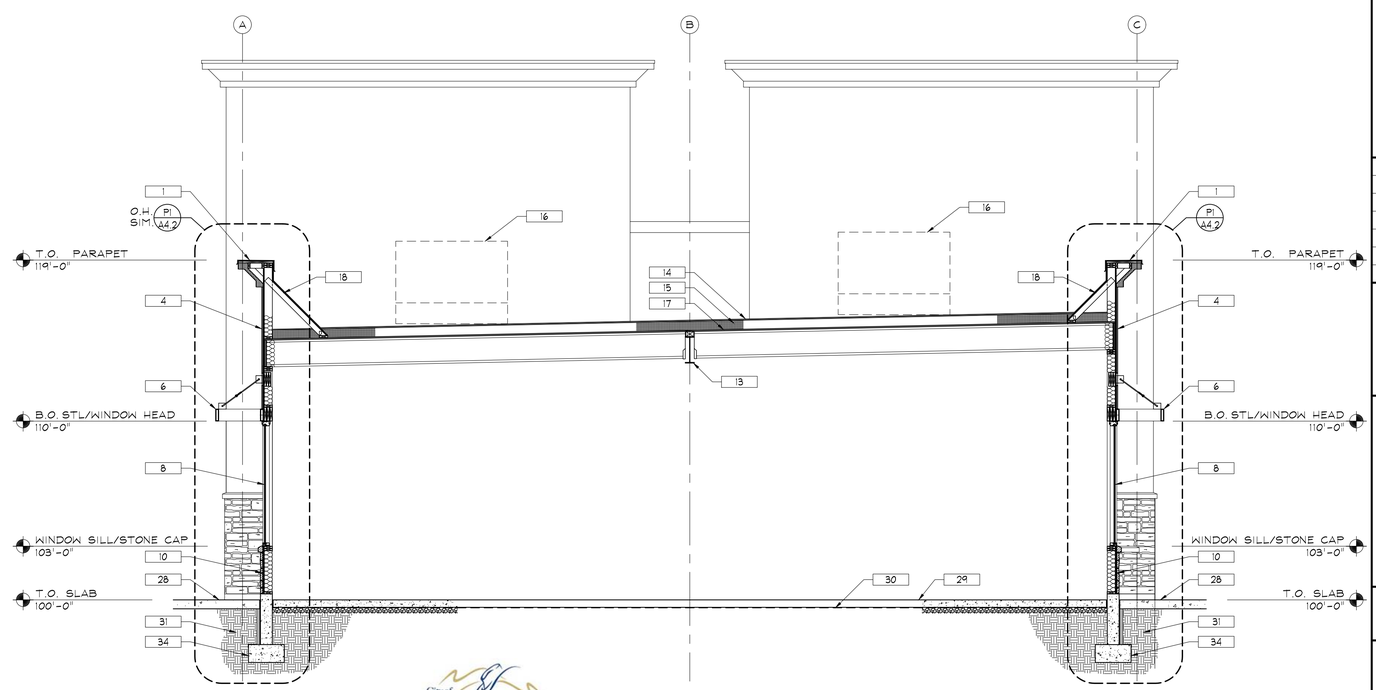
STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A3.1
Date: Feb., 2025	of

COPYRIGHT 2018 - BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



P7	BUILDING SECTION
1/4" = 1'-0"	



P1	BUILDING SECTION
1/4" = 1'-0"	

KEYNOTES:

1. METAL CAP FLASHING TO MATCH ADJACENT STUCCO CORNICE, DARK BROWN
2. STUCCO CORNICE, DARK BROWN
3. STUCCO FIELD COLOR #1, LIGHT TAN
4. STUCCO FIELD COLOR #2, MEDIUM TAN
5. STEEL PLATES, RODS AND TURNBUCKLES, DARK BRONZE
6. TUBE STEEL AWNINGS, DARK BRONZE
7. SLOPED STANDING SEAM METAL AWNINGS, DENIM BLUE COLOR
8. ALUMINUM STOREFRONT WINDOWS AND DOORS, DARK BRONZE
9. P.C. CONC. SILL TRIM PIECE AND/OR CAP STONE, BUFF COLOR
10. MANUFACTURED STONE VENEER, BLEND OF TANS AND BROWNS
11. WOOD LOOK MANUFACTURED CONC. PLANKS, MEDIUM BROWN
12. FLASHING AND COUNTER FLASHING
13. STEEL BEAM, SEE STRUCT.
14. 60 MIL TPO ROOFING, SEE SHEET A1.3 FOR ADD. INFO.
15. ± 6" R-40 POLYISO RIGID INSULATION W/ PROTECTION BOARD
16. ROOFTOP HVAC UNITS BEYOND, SEE M SHEETS
17. SHEATHING OVER PRE-ENGINEERED ROOF JOISTS, SEE STRUCTURAL FOR ADDITIONAL INFORMATION
18. 2x KICKER, SEE STRUCT. FOR ADDITIONAL INFO.
19. LINE OF WALL/BUILDING BEYOND
20. AIR INFILTRATION BARRIER/BLDG. WRAP TYP OVER ALL VERTICAL EXTERIOR SHEATHING AND INSIDE DOOR AND WINDOW OPENINGS
21. MIN. R-19 KRAFT FACED BATT INSULATION
22. 2x WOOD FRAMING, SEE STRUCT.
23. EXTERIOR SHEATHING, SEE STRUCT.
24. HEADER, SEE STRUCT.
25. LVL BEAM, SEE STRUCT.
26. CONT. SEALANT (OVER BACKER WHERE APPROPRIATE) PER VARIOUS SYSTEM REQUIREMENTS AND BETWEEN DISSIMILAR MATERIALS, SEE SPECS AND MANUF. PRODUCT DATA AND INSTRUCTIONS
27. CONT. PRESURE TREATED BOTTOM PLATE OVER SILL SEAL AND ANCHOR BOLTS PER STRUCT.
28. EXTERIOR CONCRETE WALK, SLOPE AWAY FROM BUILDING, TYP.
29. 5" CONCRETE SLAB ON GRADE OVER GRAVEL LAYER PER SOILS REPORT, SEE STRUCTRAL
30. VAPOR BARRIER UNDER SLAB TO BE 10 MIL. CLASS C POLYETHYLENE WITH SEALED JOINTS.
31. STRUCT. FILL, SEE STRUCT. AND SOILS REPORT
32. ISOLATION/EXPANSION MATERIAL
33. 2" X 24" VERT RIGID INSUL CONT.
34. CONCRETE FOUNDATION, SEE STRUCTURAL
35. WATERPROOFING ON FOUNDATION AND OVER TOP OF FOOTING

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

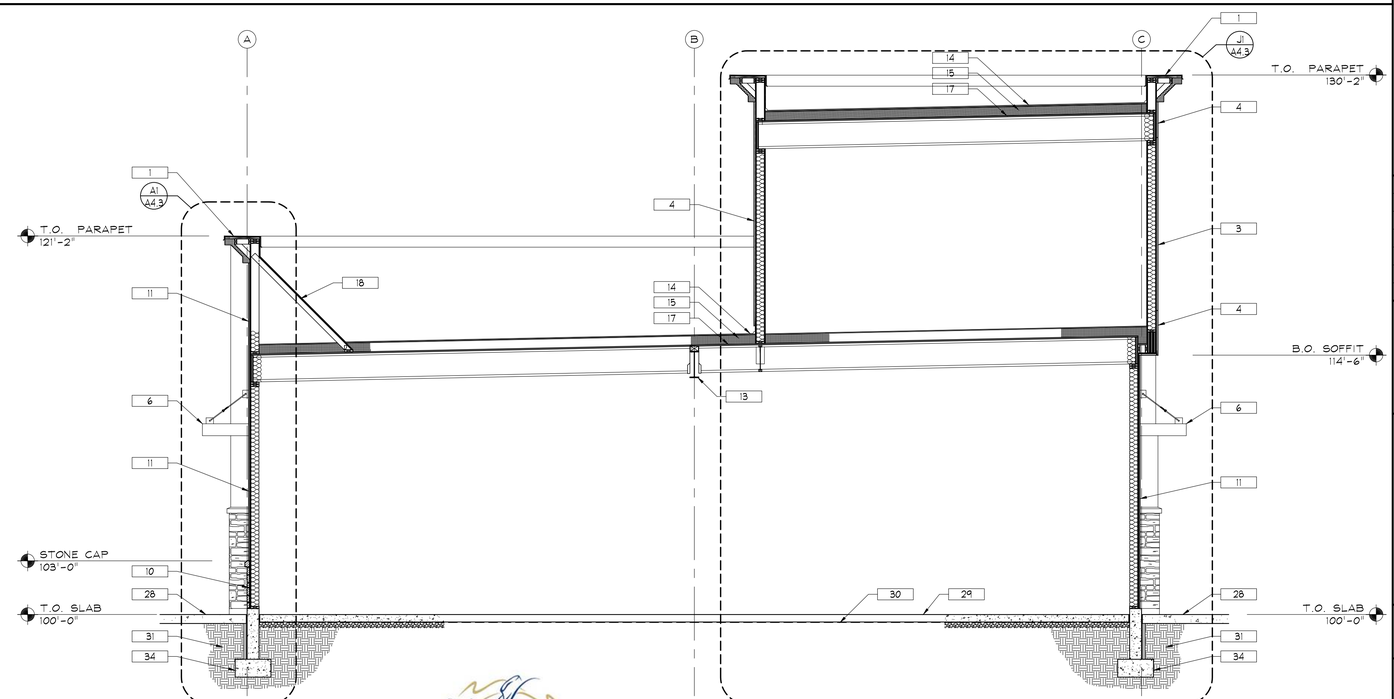
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

BUILDING SECTIONS

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A3.2
Date: Feb., 2025	of

COPYRIGHT 2018 - BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



P1	BUILDING SECTION
1/4" = 1'-0"	

KEYNOTES:

1. METAL CAP FLASHING TO MATCH ADJACENT STUCCO CORNICE, DARK BROWN
2. STUCCO CORNICE, DARK BROWN
3. STUCCO FIELD COLOR #1, LIGHT TAN
4. STUCCO FIELD COLOR #2, MEDIUM TAN
5. STEEL PLATES, RODS AND TURNBUCKLES, DARK BRONZE
6. TUBE STEEL AWNINGS, DARK BRONZE
7. SLOPED STANDING SEAM METAL AWNINGS, DENIM BLUE COLOR
8. ALUMINUM STOREFRONT WINDOWS AND DOORS, DARK BRONZE
9. P.C. CONC. SILL TRIM PIECE AND/OR CAP STONE, BUFF COLOR
10. MANUFACTURED STONE VENEER, BLEND OF TANS AND BROWNS
11. WOOD LOOK MANUFACTURED CONC. PLANKS, MEDIUM BROWN
12. FLASHING AND COUNTER FLASHING
13. STEEL BEAM, SEE STRUCT.
14. 60 MIL TPO ROOFING, SEE SHEET A1.3 FOR ADD. INFO.
15. ± 6" R-40 POLYISO RIGID INSULATION W/ PROTECTION BOARD
16. ROOFTOP HVAC UNITS BEYOND, SEE M SHEETS
17. SHEATHING OVER PRE-ENGINEERED ROOF JOISTS, SEE STRUCTURAL FOR ADDITIONAL INFORMATION
18. 2x KICKER, SEE STRUCT. FOR ADDITIONAL INFO.
19. LINE OF WALL/BUILDING BEYOND
20. AIR INFILTRATION BARRIER/BLDG. WRAP TYP OVER ALL VERTICAL EXTERIOR SHEATHING AND INSIDE DOOR AND WINDOW OPENINGS
21. MIN. R-19 KRAFT FACED BATT INSULATION
22. 2x WOOD FRAMING, SEE STRUCT.
23. EXTERIOR SHEATHING, SEE STRUCT.
24. HEADER, SEE STRUCT.
25. LVL BEAM, SEE STRUCT.
26. CONT. SEALANT (OVER BACKER WHERE APPROPRIATE) PER VARIOUS SYSTEM REQUIREMENTS AND BETWEEN DISSIMILAR MATERIALS, SEE SPECS AND MANUF. PRODUCT DATA AND INSTRUCTIONS
27. CONT. PRESURE TREATED BOTTOM PLATE OVER SILL SEAL AND ANCHOR BOLTS PER STRUCT.
28. EXTERIOR CONCRETE WALK, SLOPE AWAY FROM BUILDING, TYP.
29. 5" CONCRETE SLAB ON GRADE OVER GRAVEL LAYER PER SOILS REPORT, SEE STRUCTRAL
30. VAPOR BARRIER UNDER SLAB TO BE 10 MIL. CLASS C POLYETHYLENE WITH SEALED JOINTS.
31. STRUCT. FILL, SEE STRUCT. AND SOILS REPORT
32. ISOLATION/EXPANSION MATERIAL
33. 2" X 24" VERT RIGID INSUL CONT.
34. CONCRETE FOUNDATION, SEE STRUCTURAL
35. WATERPROOFING ON FOUNDATION AND OVER TOP OF FOOTING

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

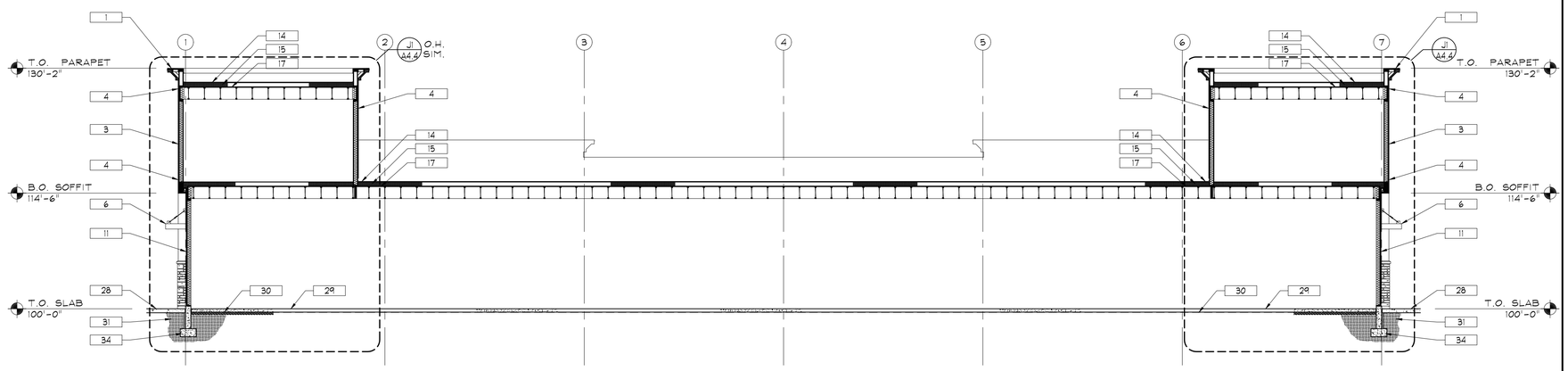
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

BUILDING SECTIONS

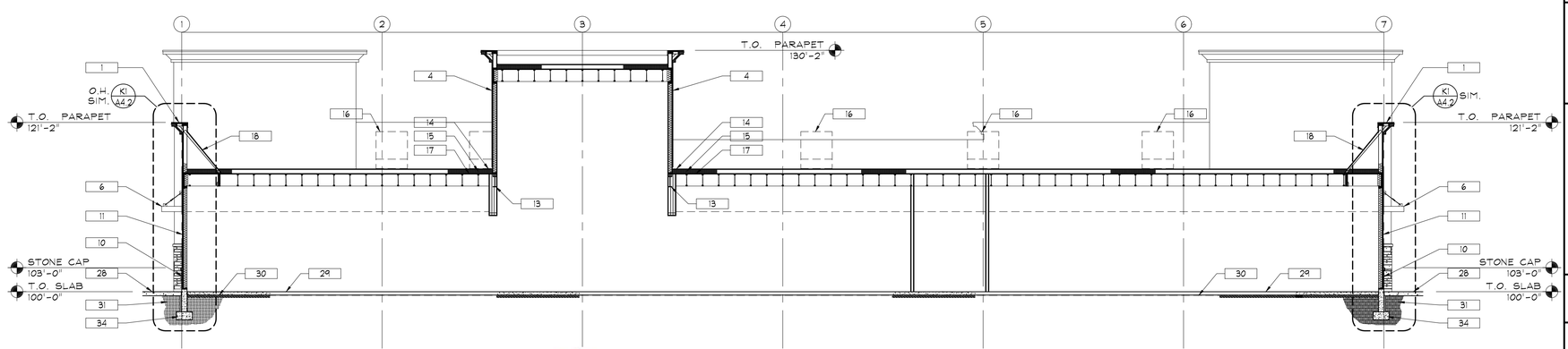
STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A3.3
Date: Feb., 2025	of

COPYRIGHT - 2018 - BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



P6	BUILDING SECTION
1/8" = 1'-0"	



P1	BUILDING SECTION
1/8" = 1'-0"	

KEYNOTES:

1. METAL CAP FLASHING TO MATCH ADJACENT STUCCO CORNICE, DARK BROWN
2. STUCCO CORNICE, DARK BROWN
3. STUCCO FIELD COLOR #1, LIGHT TAN
4. STUCCO FIELD COLOR #2, MEDIUM TAN
5. STEEL PLATES, RODS AND TURNBUCKLES, DARK BRONZE
6. TUBE STEEL AWNINGS, DARK BRONZE
7. SLOPED STANDING SEAM METAL AWNINGS, DENIM BLUE COLOR
8. ALUMINUM STOREFRONT WINDOWS AND DOORS, DARK BRONZE
9. P.C. CONC. SILL TRIM PIECE AND/OR CAP STONE, BUFF COLOR
10. MANUFACTURED STONE VENEER, BLEND OF TANS AND BROWNS
11. WOOD LOOK MANUFACTURED CONC. PLANKS, MEDIUM BROWN
12. FLASHING AND COUNTER FLASHING
13. STEEL BEAM, SEE STRUCT.
14. 60 MIL TPO ROOFING, SEE SHEET A1.3 FOR ADD. INFO.
15. ± 6" R-40 POLYISO RIGID INSULATION W/ PROTECTION BOARD
16. ROOFTOP HVAC UNITS BEYOND, SEE M SHEETS
17. SHEATHING OVER PRE-ENGINEERED ROOF JOISTS, SEE STRUCTURAL FOR ADDITIONAL INFORMATION
18. 2x KICKER, SEE STRUCT. FOR ADDITIONAL INFO.
19. LINE OF WALL/BUILDING BEYOND
20. AIR INFILTRATION BARRIER/BLDG. WRAP TYP OVER ALL VERTICAL EXTERIOR SHEATHING AND INSIDE DOOR AND WINDOW OPENINGS
21. MIN. R-19 KRAFT FACED BATT INSULATION
22. 2x WOOD FRAMING, SEE STRUCT.
23. EXTERIOR SHEATHING, SEE STRUCT.
24. HEADER, SEE STRUCT.
25. LVL BEAM, SEE STRUCT.
26. CONT. SEALANT (OVER BACKER WHERE APPROPRIATE) PER VARIOUS SYSTEM REQUIREMENTS AND BETWEEN DISSIMILAR MATERIALS, SEE SPECS AND MANUF. PRODUCT DATA AND INSTRUCTIONS
27. CONT. PRESURE TREATED BOTTOM PLATE OVER SILL SEAL AND ANCHOR BOLTS PER STRUCT.
28. EXTERIOR CONCRETE WALK, SLOPE AWAY FROM BUILDING, TYP.
29. 5" CONCRETE SLAB ON GRADE OVER GRAVEL LAYER PER SOILS REPORT, SEE STRUCTRAL
30. VAPOR BARRIER UNDER SLAB TO BE 10 MIL. CLASS C POLYETHYLENE WITH SEALED JOINTS.
31. STRUCT. FILL, SEE STRUCT. AND SOILS REPORT
32. ISOLATION/EXPANSION MATERIAL
33. 2" X 24" VERT RIGID INSUL CONT.
34. CONCRETE FOUNDATION, SEE STRUCTURAL
35. WATERPROOFING ON FOUNDATION AND OVER TOP OF FOOTING

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

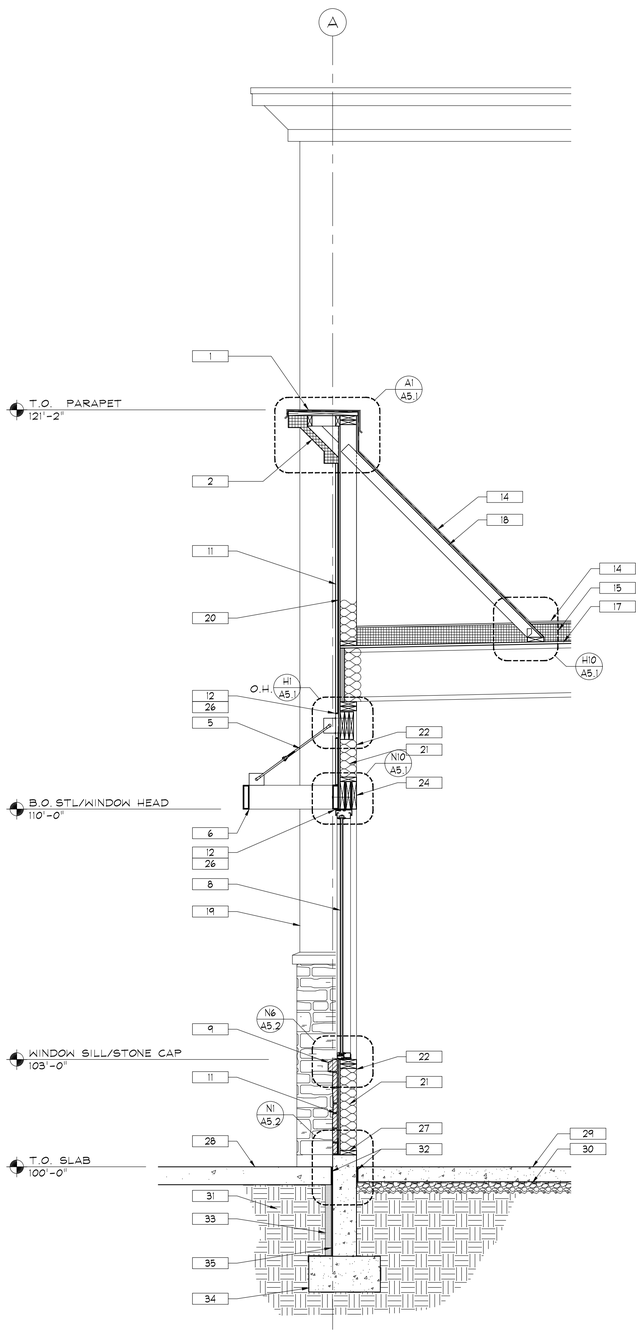
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

BUILDING SECTIONS

STATE OF COLORADO
PAUL BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

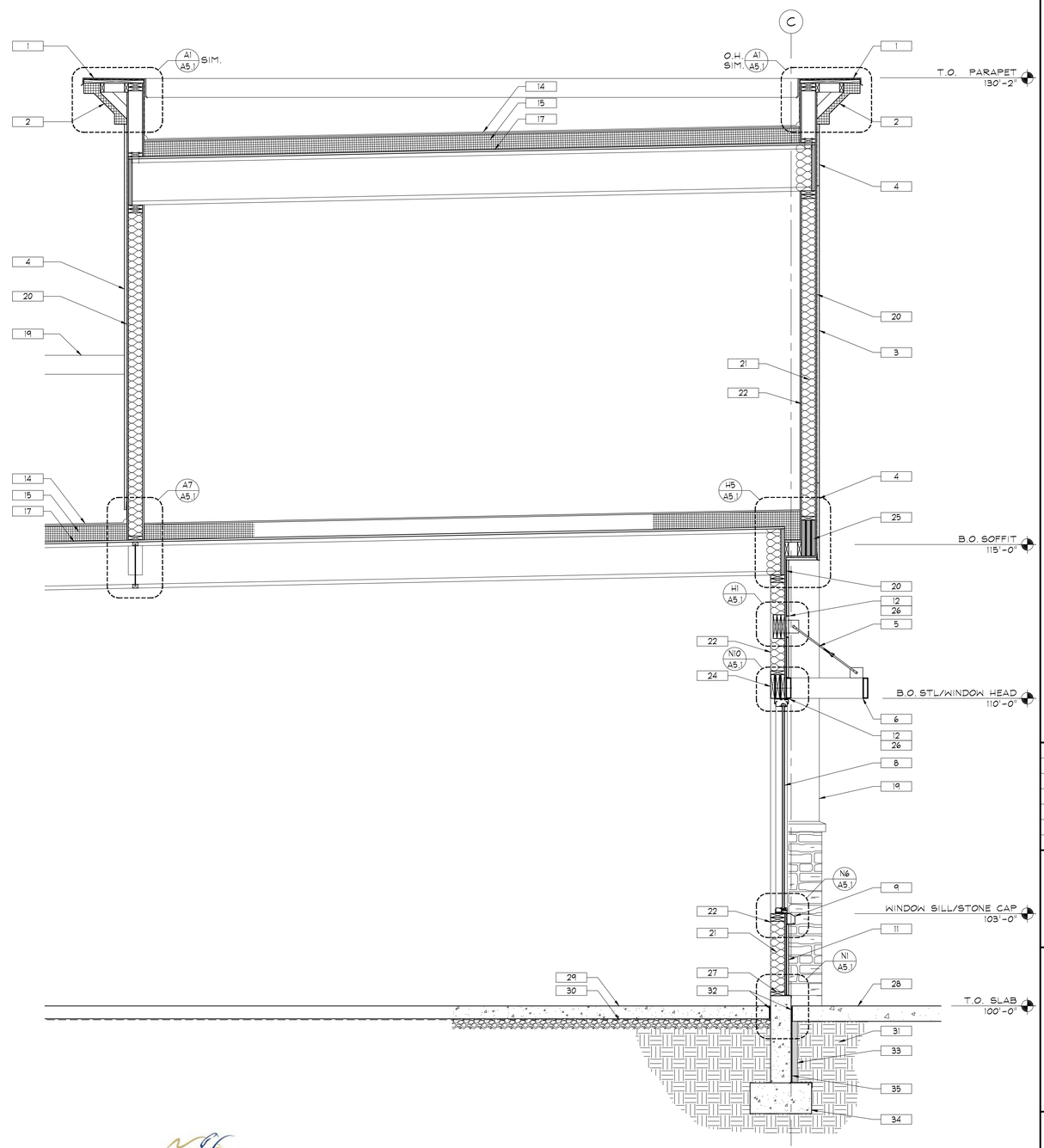
Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A3.4
Date: Feb., 2025	of

COPYRIGHT 2018 — BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



A1 WALL SECTION

1/2" = 1'-0"



J1 WALL SECTION

1/2" = 1'-0"

KEYNOTES:

1. METAL CAP FLASHING TO MATCH ADJACENT STUCCO CORNICE, DARK BROWN
2. STUCCO CORNICE, DARK BROWN
3. STUCCO FIELD COLOR #1, LIGHT TAN
4. STUCCO FIELD COLOR #2, MEDIUM TAN
5. STEEL PLATES, RODS AND TURNBUCKLES, DARK BRONZE
6. TUBE STEEL AWNINGS, DARK BRONZE
7. SLOPED STANDING SEAM METAL AWNINGS, DENIM BLUE COLOR
8. ALUMINUM STOREFRONT WINDOWS AND DOORS, DARK BRONZE
9. P.C. CONC. SILL TRIM PIECE AND/OR CAP STONE, BUFF COLOR
10. MANUFACTURED STONE VENEER, BLEND OF TANS AND BROWNS
11. WOOD LOOK MANUFACTURED CONC. PLANKS, MEDIUM BROWN
12. FLASHING AND COUNTER FLASHING
13. STEEL BEAM, SEE STRUCT.
14. 60 MIL TPO ROOFING, SEE SHEET A1.3 FOR ADD. INFO.
15. ± 6" R-40 POLYISO RIGID INSULATION W/ PROTECTION BOARD
16. ROOFTOP HVAC UNITS BEYOND, SEE M SHEETS
17. SHEATHING OVER PRE-ENGINEERED ROOF JOISTS, SEE STRUCTURAL FOR ADDITIONAL INFORMATION
18. 2x KICKER, SEE STRUCT. FOR ADDITIONAL INFO.
19. LINE OF WALL/BUILDING BEYOND
20. AIR INFILTRATION BARRIER/BLDG. WRAP TYP OVER ALL VERTICAL EXTERIOR SHEATHING AND INSIDE DOOR AND WINDOW OPENINGS
21. MIN. R-19 KRAFT FACED BATT INSULATION
22. 2x WOOD FRAMING, SEE STRUCT.
23. EXTERIOR SHEATHING, SEE STRUCT.
24. HEADER, SEE STRUCT.
25. LVL BEAM, SEE STRUCT.
26. CONT. SEALANT (OVER BACKER WHERE APPROPRIATE) PER VARIOUS SYSTEM REQUIREMENTS AND BETWEEN DISSIMILAR MATERIALS, SEE SPECS AND MANUF. PRODUCT DATA AND INSTRUCTIONS
27. CONT. PRESURE TREATED BOTTOM PLATE OVER SILL SEAL AND ANCHOR BOLTS PER STRUCT.
28. EXTERIOR CONCRETE WALK, SLOPE AWAY FROM BUILDING, TYP.
29. 5" CONCRETE SLAB ON GRADE OVER GRAVEL LAYER PER SOILS REPORT, SEE STRUCTRAL
30. VAPOR BARRIER UNDER SLAB TO BE 10 MIL. CLASS C POLYETHYLENE WITH SEALED JOINTS.
31. STRUCT. FILL, SEE STRUCT. AND SOILS REPORT
32. ISOLATION/EXPANSION MATERIAL
33. 2" X 24" VERT RIGID INSUL CONT.
34. CONCRETE FOUNDATION, SEE STRUCTURAL
35. WATERPROOFING ON FOUNDATION AND OVER TOP OF FOOTING

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

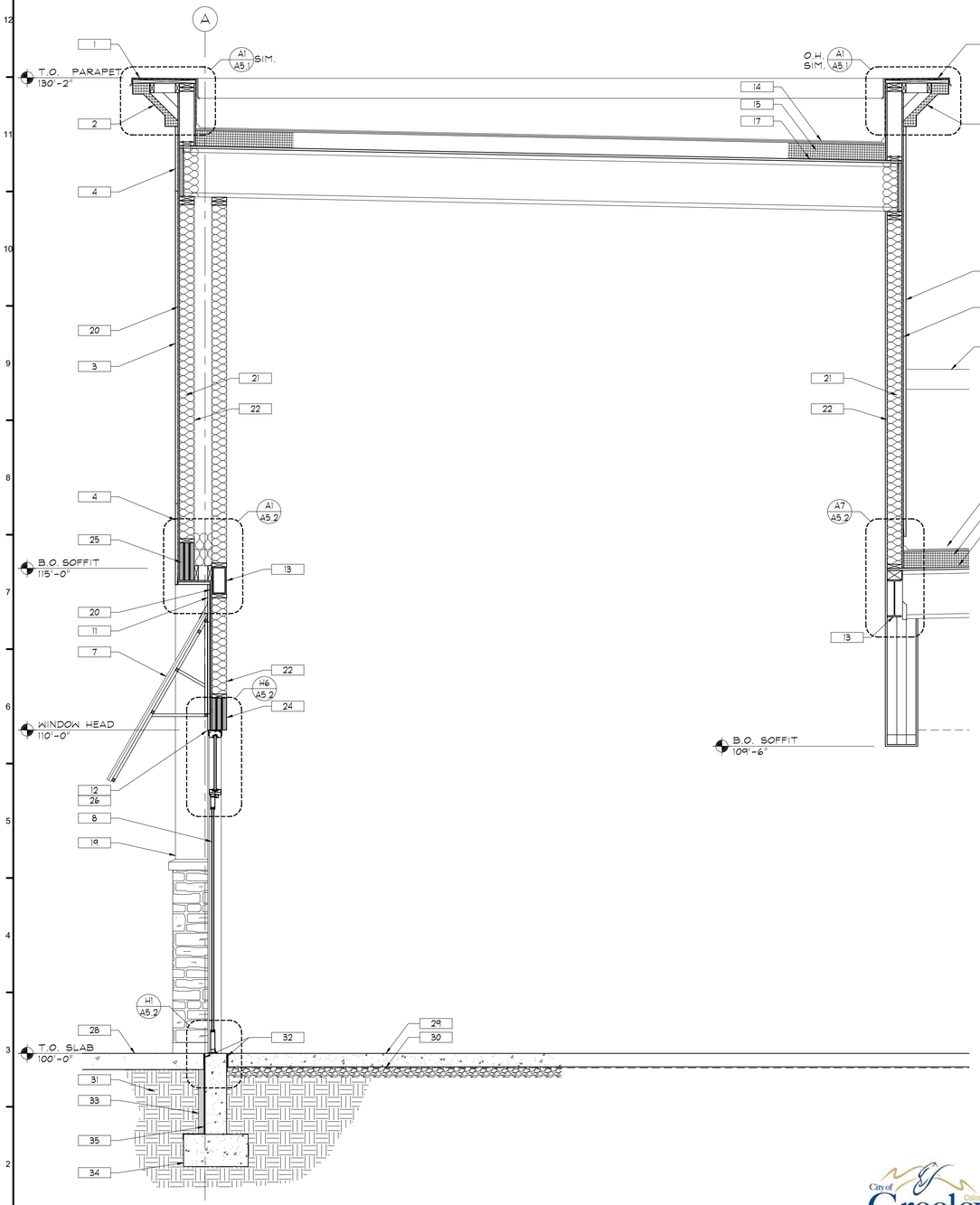
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

WALL SECTIONS

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

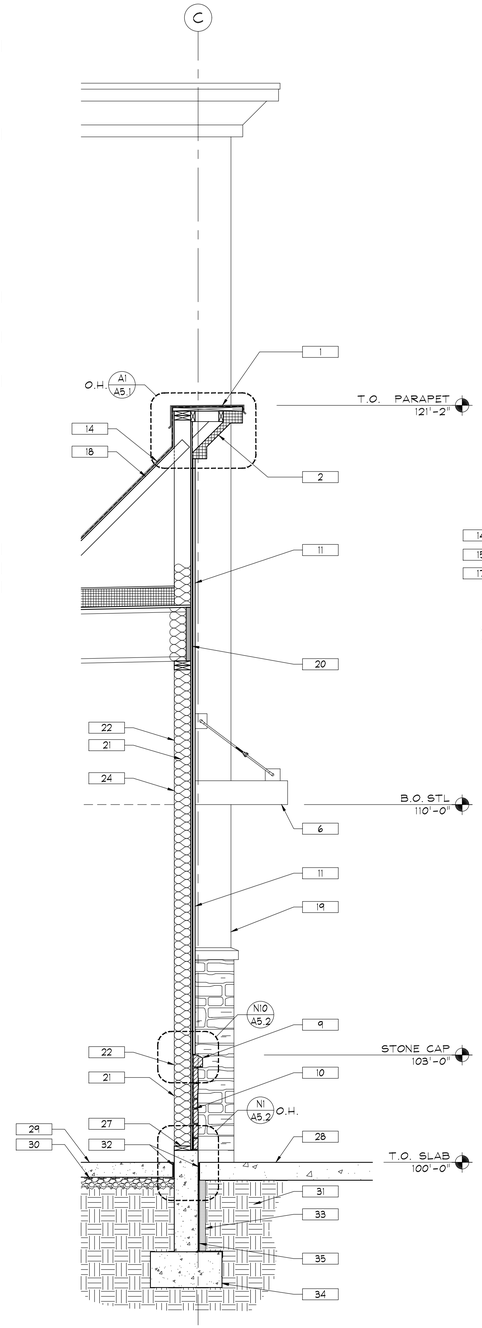
Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A4.1
Date: Feb., 2025	of

COPYRIGHT 2018 — BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for title or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



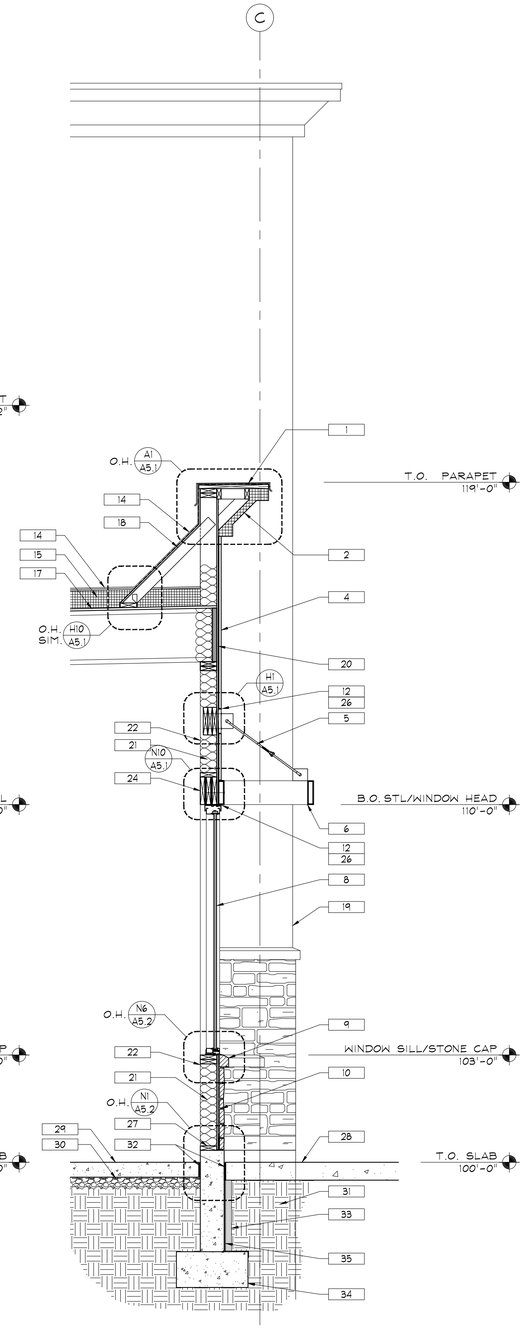
A1 WALL SECTION

1/2" = 1'-0"



K1 WALL SECTION

1/2" = 1'-0"



P1 WALL SECTION

1/2" = 1'-0"

KEYNOTES:

1. METAL CAP FLASHING TO MATCH ADJACENT STUCCO CORNICE, DARK BROWN
2. STUCCO CORNICE, DARK BROWN
3. STUCCO FIELD COLOR #1, LIGHT TAN
4. STUCCO FIELD COLOR #2, MEDIUM TAN
5. STEEL PLATES, RODS AND TURNBUCKLES, DARK BRONZE
6. TUBE STEEL AWNINGS, DARK BRONZE
7. SLOPED STANDING SEAM METAL AWNINGS, DENIM BLUE COLOR
8. ALUMINUM STOREFRONT WINDOWS AND DOORS, DARK BRONZE
9. P.C. CONC. SILL TRIM PIECE AND/OR CAP STONE, BUFF COLOR
10. MANUFACTURED STONE VENEER, BLEND OF TANS AND BROWNS
11. WOOD LOOK MANUFACTURED CONC. PLANKS, MEDIUM BROWN
12. FLASHING AND COUNTER FLASHING
13. STEEL BEAM, SEE STRUCT.
14. 60 MIL TPO ROOFING, SEE SHEET A1.3 FOR ADD. INFO.
15. ± 6" R-40 POLYISO RIGID INSULATION W/ PROTECTION BOARD
16. ROOFTOP HVAC UNITS BEYOND, SEE M SHEETS
17. SHEATHING OVER PRE-ENGINEERED ROOF JOISTS, SEE STRUCTURAL FOR ADDITIONAL INFORMATION
18. 2x KICKER, SEE STRUCT. FOR ADDITIONAL INFO.
19. LINE OF WALL/BUILDING BEYOND
20. AIR INFILTRATION BARRIER/BLDG. WRAP TYP OVER ALL VERTICAL EXTERIOR SHEATHING AND INSIDE DOOR AND WINDOW OPENINGS
21. MIN. R-19 KRAFT FACED BATT INSULATION
22. 2x WOOD FRAMING, SEE STRUCT.
23. EXTERIOR SHEATHING, SEE STRUCT.
24. HEADER, SEE STRUCT.
25. LVL BEAM, SEE STRUCT.
26. CONT. SEALANT (OVER BACKER WHERE APPROPRIATE) PER VARIOUS SYSTEM REQUIREMENTS AND BETWEEN DISSIMILAR MATERIALS, SEE SPECS AND MANUF. PRODUCT DATA AND INSTRUCTIONS
27. CONT. PRESURE TREATED BOTTOM PLATE OVER SILL SEAL AND ANCHOR BOLTS PER STRUCT.
28. EXTERIOR CONCRETE WALK, SLOPE AWAY FROM BUILDING, TYP.
29. 5" CONCRETE SLAB ON GRADE OVER GRAVEL LAYER PER SOILS REPORT, SEE STRUCTRAL
30. VAPOR BARRIER UNDER SLAB TO BE 10 MIL. CLASS C POLYETHYLENE WITH SEALED JOINTS.
31. STRUCT. FILL, SEE STRUCT. AND SOILS REPORT
32. ISOLATION/EXPANSION MATERIAL
33. 2" X 24" VERT RIGID INSUL CONT.
34. CONCRETE FOUNDATION, SEE STRUCTURAL
35. WATERPROOFING ON FOUNDATION AND OVER TOP OF FOOTING

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

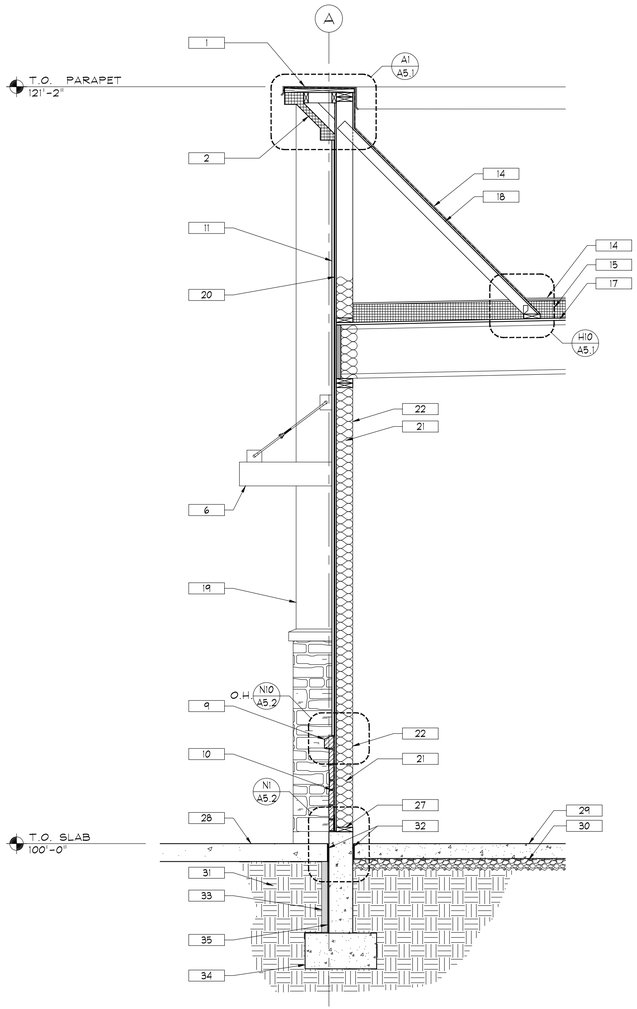
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

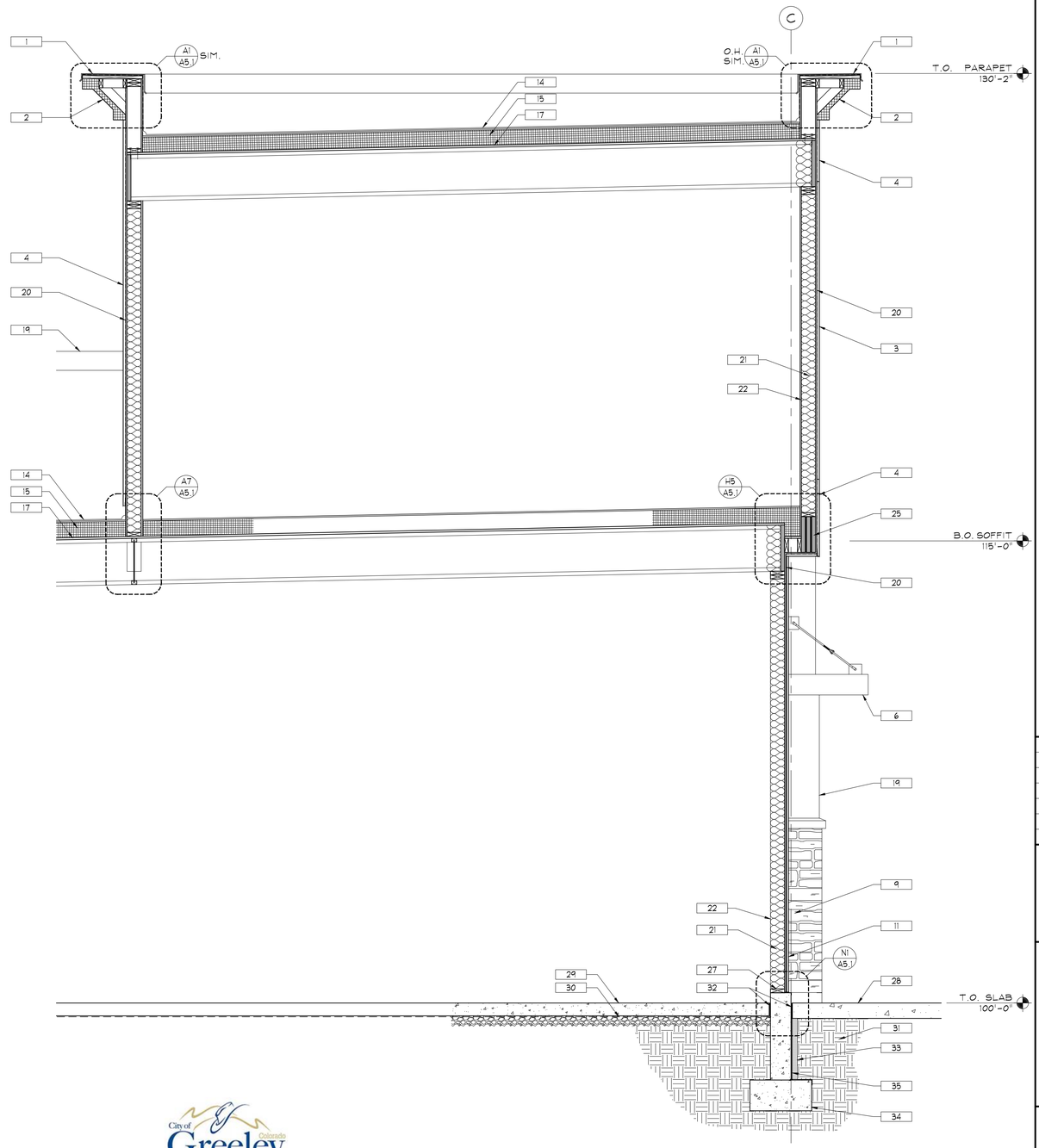
WALL SECTIONS

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A4.2
Date: Feb., 2025	of

COPYRIGHT 2018 - BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.





A1	WALL SECTION
1/2" = 1'-0"	

J1	WALL SECTION
1/2" = 1'-0"	

KEYNOTES:

1. METAL CAP FLASHING TO MATCH ADJACENT STUCCO CORNICE, DARK BROWN
2. STUCCO CORNICE, DARK BROWN
3. STUCCO FIELD COLOR #1, LIGHT TAN
4. STUCCO FIELD COLOR #2, MEDIUM TAN
5. STEEL PLATES, RODS AND TURNBUCKLES, DARK BRONZE
6. TUBE STEEL AWNINGS, DARK BRONZE
7. SLOPED STANDING SEAM METAL AWNINGS, DENIM BLUE COLOR
8. ALUMINUM STOREFRONT WINDOWS AND DOORS, DARK BRONZE
9. P.C. CONC. SILL TRIM PIECE AND/OR CAP STONE, BUFF COLOR
10. MANUFACTURED STONE VENEER, BLEND OF TANS AND BROWNS
11. WOOD LOOK MANUFACTURED CONC. PLANKS, MEDIUM BROWN
12. FLASHING AND COUNTER FLASHING
13. STEEL BEAM, SEE STRUCT.
14. 60 MIL TPO ROOFING, SEE SHEET A1.3 FOR ADD. INFO.
15. ± 6" R-40 POLYISO RIGID INSULATION W/ PROTECTION BOARD
16. ROOFTOP HVAC UNITS BEYOND, SEE M SHEETS
17. SHEATHING OVER PRE-ENGINEERED ROOF JOISTS, SEE STRUCTURAL FOR ADDITIONAL INFORMATION
18. 2x KICKER, SEE STRUCT. FOR ADDITIONAL INFO.
19. LINE OF WALL/BUILDING BEYOND
20. AIR INFILTRATION BARRIER/BLDG. WRAP TYP OVER ALL VERTICAL EXTERIOR SHEATHING AND INSIDE DOOR AND WINDOW OPENINGS
21. MIN. R-19 KRAFT FACED BATT INSULATION
22. 2x WOOD FRAMING, SEE STRUCT.
23. EXTERIOR SHEATHING, SEE STRUCT.
24. HEADER, SEE STRUCT.
25. LVL BEAM, SEE STRUCT.
26. CONT. SEALANT (OVER BACKER WHERE APPROPRIATE) PER VARIOUS SYSTEM REQUIREMENTS AND BETWEEN DISSIMILAR MATERIALS, SEE SPECS AND MANUF. PRODUCT DATA AND INSTRUCTIONS
27. CONT. PRESURE TREATED BOTTOM PLATE OVER SILL SEAL AND ANCHOR BOLTS PER STRUCT.
28. EXTERIOR CONCRETE WALK, SLOPE AWAY FROM BUILDING, TYP.
29. 5" CONCRETE SLAB ON GRADE OVER GRAVEL LAYER PER SOILS REPORT, SEE STRUCTRAL
30. VAPOR BARRIER UNDER SLAB TO BE 10 MIL. CLASS C POLYETHYLENE WITH SEALED JOINTS.
31. STRUCT. FILL, SEE STRUCT. AND SOILS REPORT
32. ISOLATION/EXPANSION MATERIAL
33. 2" X 24" VERT RIGID INSUL CONT.
34. CONCRETE FOUNDATION, SEE STRUCTURAL
35. WATERPROOFING ON FOUNDATION AND OVER TOP OF FOOTING

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

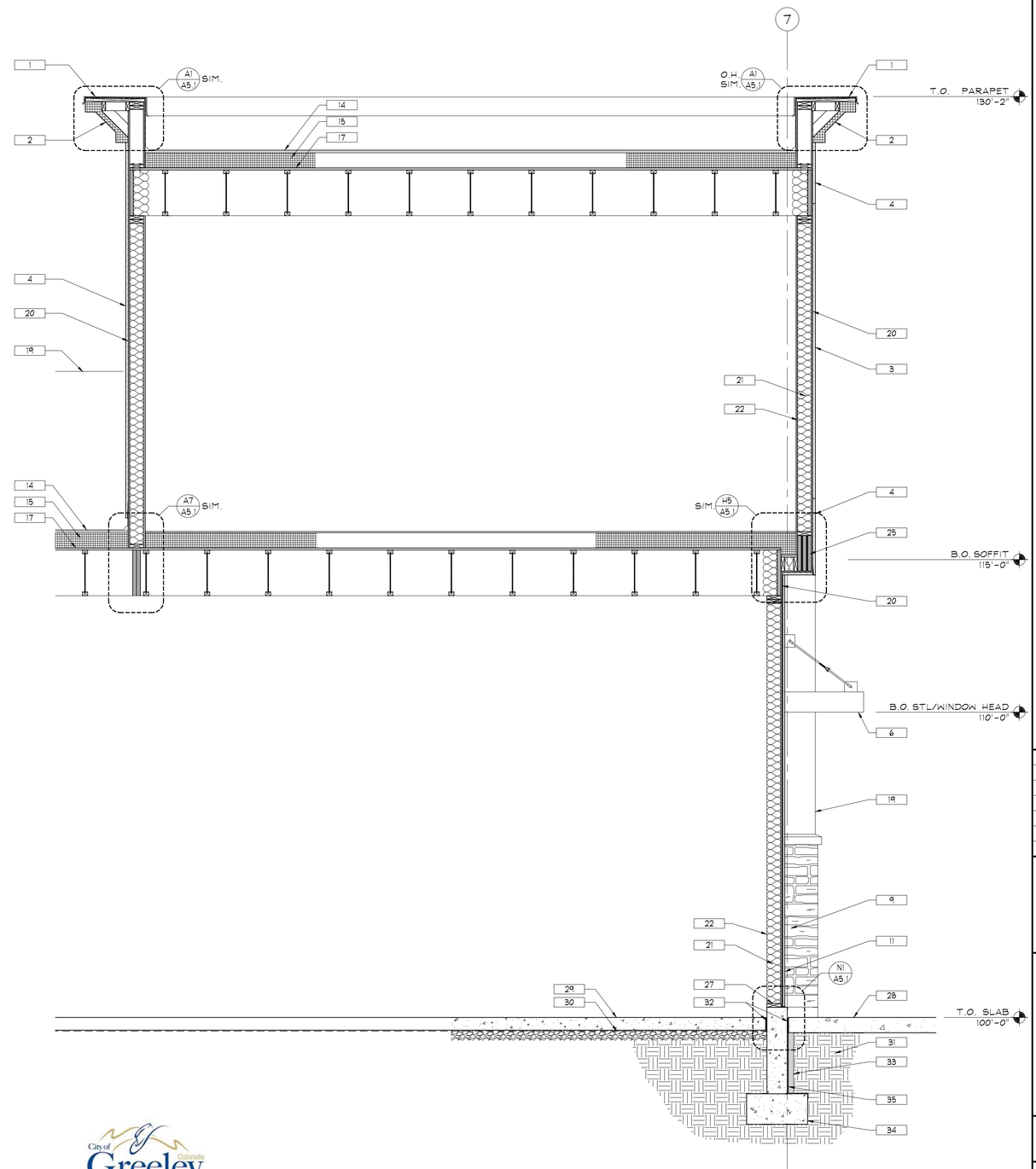
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

WALL SECTIONS

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A4.3
Date: Feb., 2025	of

COPYRIGHT 2018 — BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



KEYNOTES:

1. METAL CAP FLASHING TO MATCH ADJACENT STUCCO CORNICE, DARK BROWN
2. STUCCO CORNICE, DARK BROWN
3. STUCCO FIELD COLOR #1, LIGHT TAN
4. STUCCO FIELD COLOR #2, MEDIUM TAN
5. STEEL PLATES, RODS AND TURNBUCKLES, DARK BRONZE
6. TUBE STEEL AWNINGS, DARK BRONZE
7. SLOPED STANDING SEAM METAL AWNINGS, DENIM BLUE COLOR
8. ALUMINUM STOREFRONT WINDOWS AND DOORS, DARK BRONZE
9. P.C. CONC. SILL TRIM PIECE AND/OR CAP STONE, BUFF COLOR
10. MANUFACTURED STONE VENEER, BLEND OF TANS AND BROWNS
11. WOOD LOOK MANUFACTURED CONC. PLANKS, MEDIUM BROWN
12. FLASHING AND COUNTER FLASHING
13. STEEL BEAM, SEE STRUCT.
14. 60 MIL TPO ROOFING, SEE SHEET A1.3 FOR ADD. INFO.
15. ± 6" R-40 POLYISO RIGID INSULATION W/ PROTECTION BOARD
16. ROOFTOP HVAC UNITS BEYOND, SEE M SHEETS
17. SHEATHING OVER PRE-ENGINEERED ROOF JOISTS, SEE STRUCTURAL FOR ADDITIONAL INFORMATION
18. 2x KICKER, SEE STRUCT. FOR ADDITIONAL INFO.
19. LINE OF WALL/BUILDING BEYOND
20. AIR INFILTRATION BARRIER/BLDG. WRAP TYP OVER ALL VERTICAL EXTERIOR SHEATHING AND INSIDE DOOR AND WINDOW OPENINGS
21. MIN. R-19 KRAFT FACED BATT INSULATION
22. 2x WOOD FRAMING, SEE STRUCT.
23. EXTERIOR SHEATHING, SEE STRUCT.
24. HEADER, SEE STRUCT.
25. LVL BEAM, SEE STRUCT.
26. CONT. SEALANT (OVER BACKER WHERE APPROPRIATE) PER VARIOUS SYSTEM REQUIREMENTS AND BETWEEN DISSIMILAR MATERIALS, SEE SPECS AND MANUF. PRODUCT DATA AND INSTRUCTIONS
27. CONT. PRESURE TREATED BOTTOM PLATE OVER SILL SEAL AND ANCHOR BOLTS PER STRUCT.
28. EXTERIOR CONCRETE WALK, SLOPE AWAY FROM BUILDING, TYP.
29. 5" CONCRETE SLAB ON GRADE OVER GRAVEL LAYER PER SOILS REPORT, SEE STRUCTRAL
30. VAPOR BARRIER UNDER SLAB TO BE 10 MIL. CLASS C POLYETHYLENE WITH SEALED JOINTS.
31. STRUCT. FILL, SEE STRUCT. AND SOILS REPORT
32. ISOLATION/EXPANSION MATERIAL
33. 2" X 24" VERT RIGID INSUL CONT.
34. CONCRETE FOUNDATION, SEE STRUCTURAL
35. WATERPROOFING ON FOUNDATION AND OVER TOP OF FOOTING

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

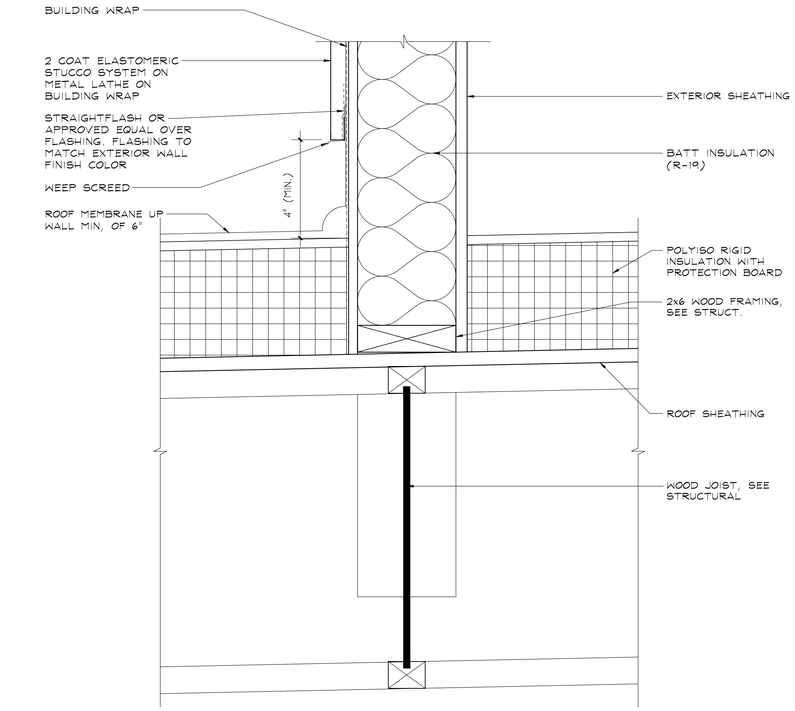
WALL SECTIONS

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A4.4
Date: Feb., 2025	of

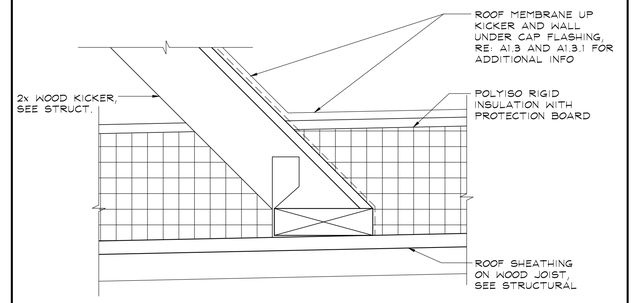
J1	WALL SECTION
1/2" = 1'-0"	

COPYRIGHT 2018 – BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



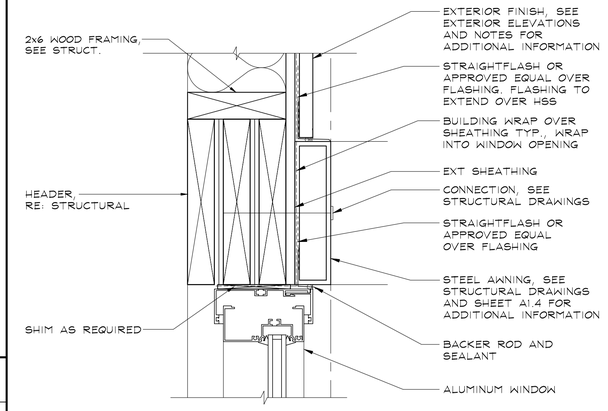
A7 — TOWER WALL @ ROOF

3" = 1'-0"



H10 — KICKER @ ROOF

3" = 1'-0"



N10 — WINDOW HEAD @ WOOD LOOK CONCRETE PLANKS AND AWNING

3" = 1'-0"

NOTES:

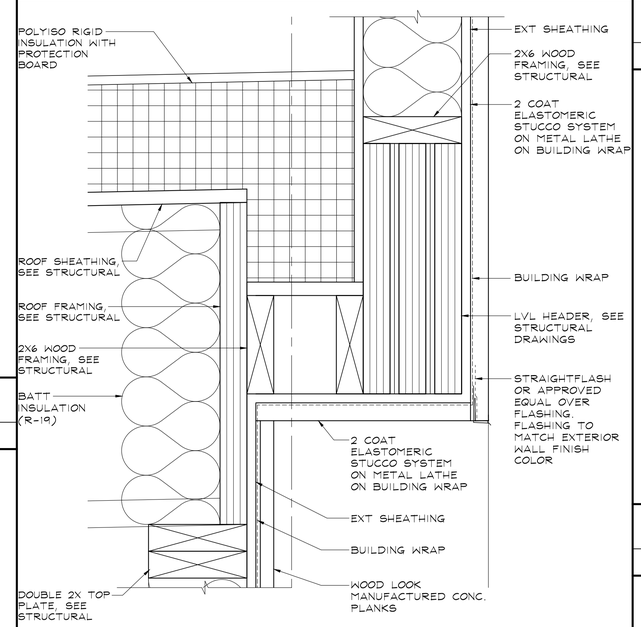
1. SEE EXTERIOR ELEVATIONS AND BUILDING SECTIONS FOR ADDITIONAL INFO ON FINISHES.

2. DRYWALL AND AIR BARRIER IN OCCUPIED SPACE BY TENANT FINISH.

3. STUCCO LOCATIONS, COORDINATE WITH EXTERIOR ELEVATIONS FOR LOCATION - PROVIDE 2 COAT ELASTOMERIC STUCCO SYSTEM ON METAL LATHE ON BUILDING WRAP.

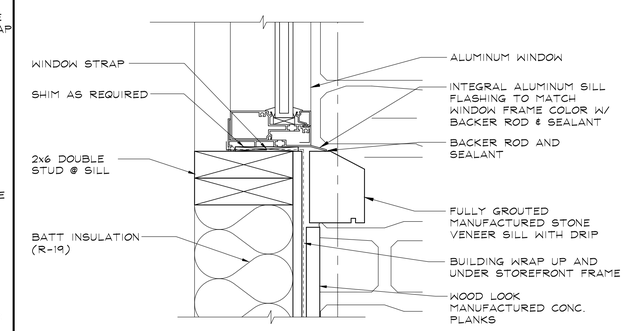
4. TILE LOCATIONS, COORDINATE WITH EXTERIOR ELEVATIONS FOR LOCATION - PROVIDE MEMBRANE, LATH SCRATCH & BROWN COAT, MORTAR BED, WATERPROOFING AND MEGALITE CRACK PREVENTION TO FOLLOW TILE MANUFACTURER INSTALLATION REQUIREMENTS.

5. PROVIDE CONTINUOUS SEALANT OVER BACKER ROD AS REQUIRED FOR VARIOUS SYSTEM REQUIREMENTS AND AT ALL JOINTS WHERE DISSIMILAR MATERIALS INTERSECT AND ARE PERPENDICULAR TO EACH OTHER.



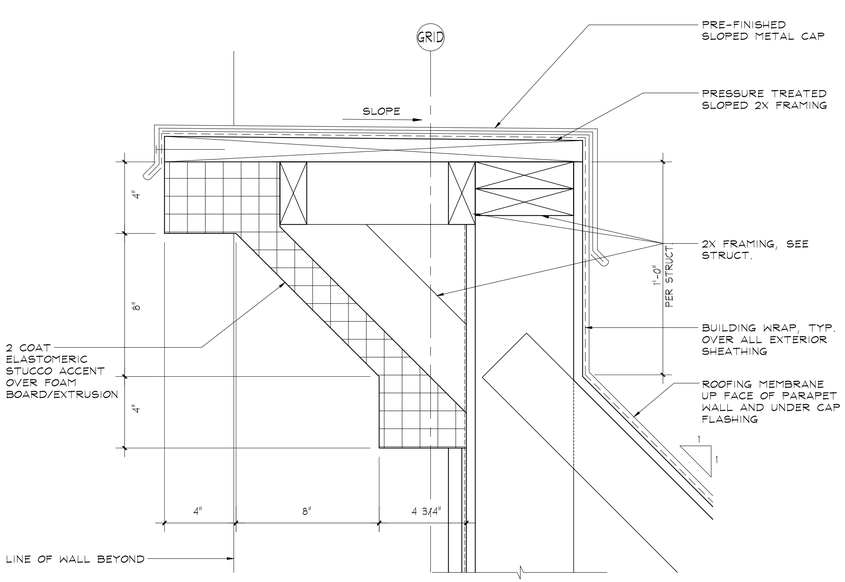
H5 — EXTERIOR SOFFIT

3" = 1'-0"



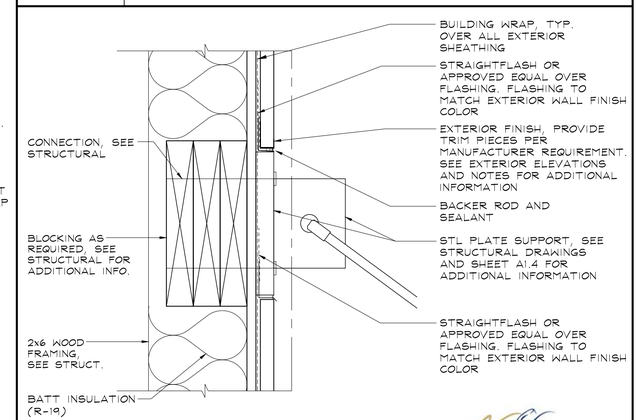
N6 — WINDOW SILL @ WOOD LOOK CONCRETE PLANKS

3" = 1'-0"



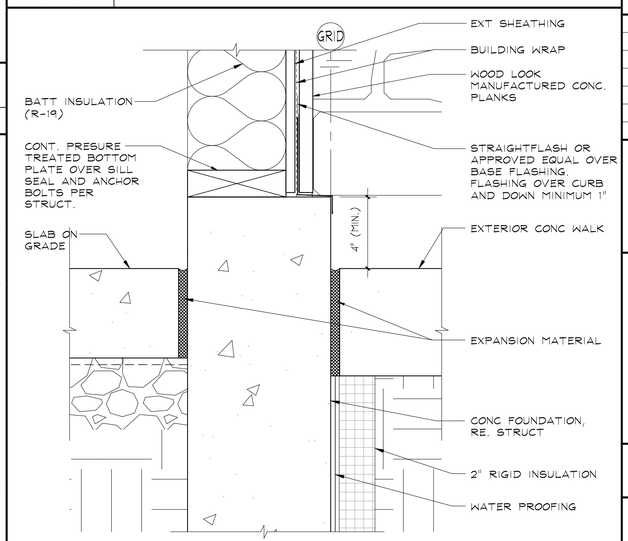
A1 — PARAPET @ STUCCO CORNICE

3" = 1'-0"



H1 — AWNING CONNECTION

3" = 1'-0"



N1 — BASE @ WOOD LOOK CONCRETE PLANKS

3" = 1'-0"

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

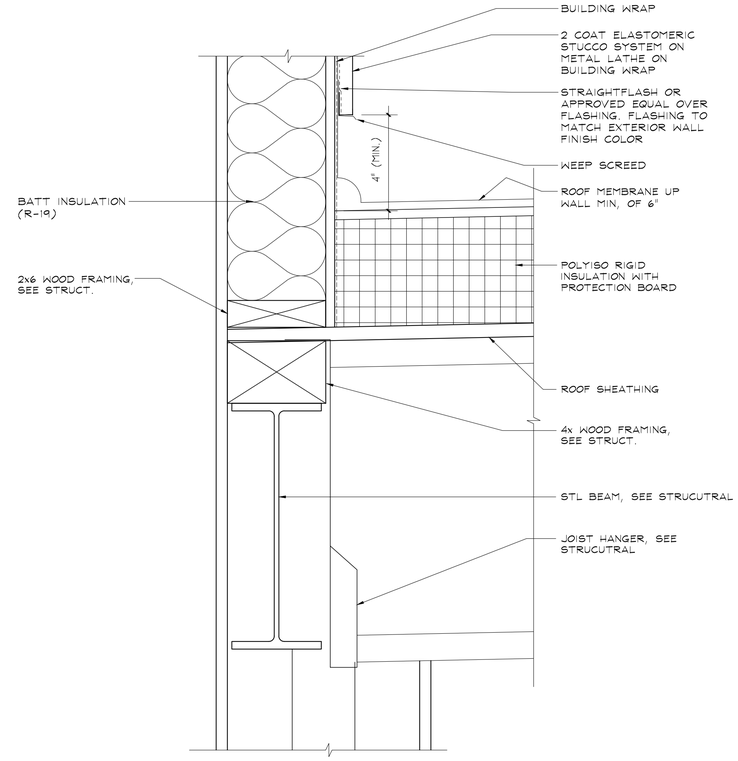
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

DETAILS

STATE OF COLORADO — PAUL J. BATTISTA B-3015 — 02/11/2025 — LICENSED ARCHITECT

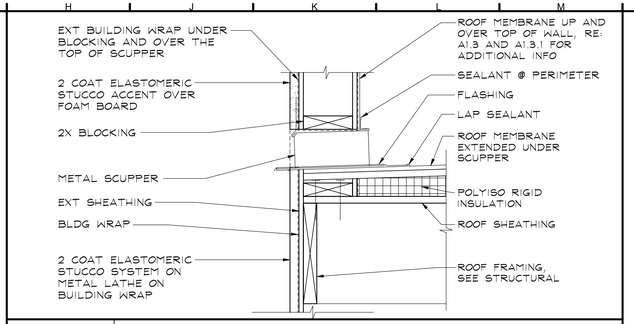
Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number: A5.1
Reviewed: PJB	
Date: Feb., 2025	of

COPYRIGHT 2018 - BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



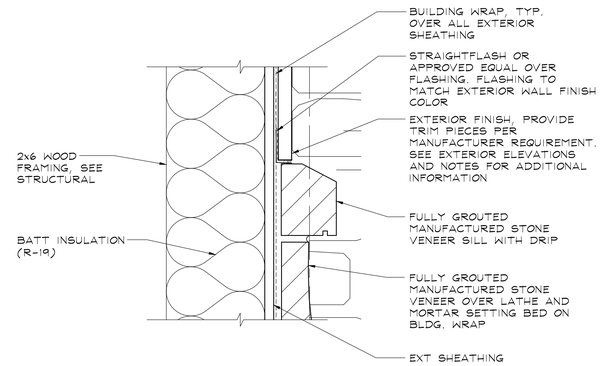
A7 TOWER WALL @ BEAM

3" = 1'-0"



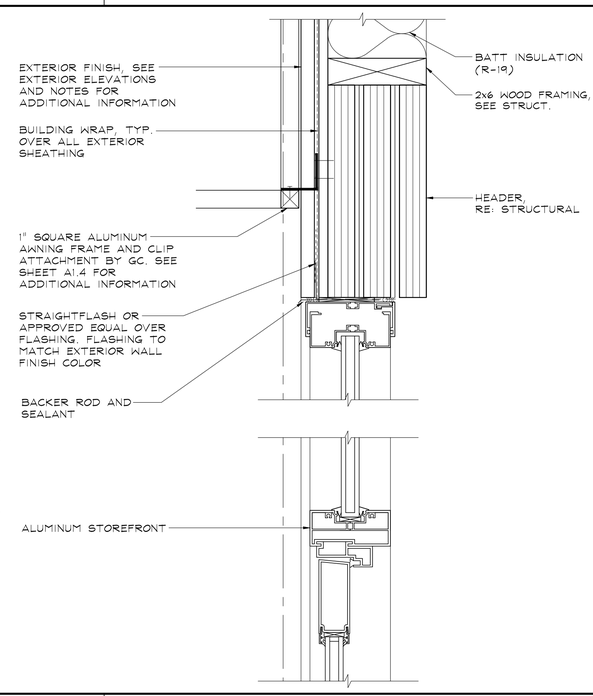
H11 THRU-WALL SCUPPER

1 1/2" = 1'-0"



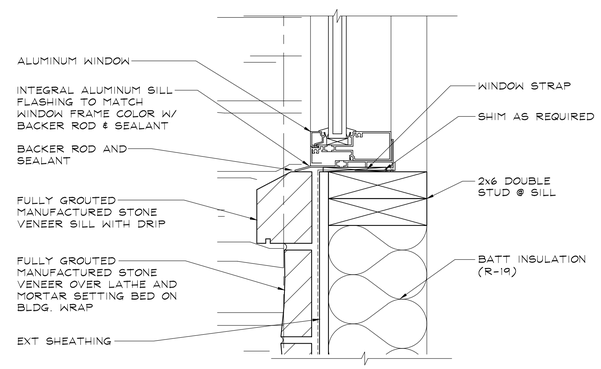
N10 WOOD LOOK TILE @ STONE CAP

3" = 1'-0"



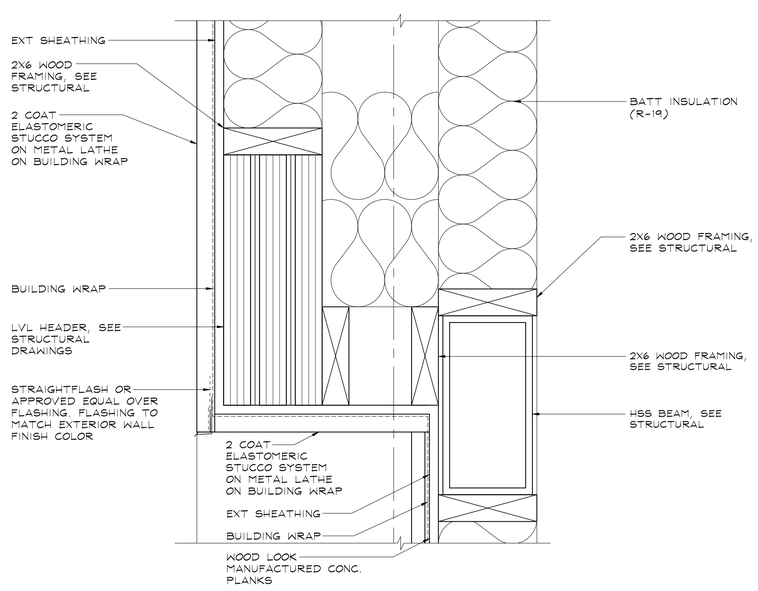
H5 WINDOW/DOOR HEAD

3" = 1'-0"



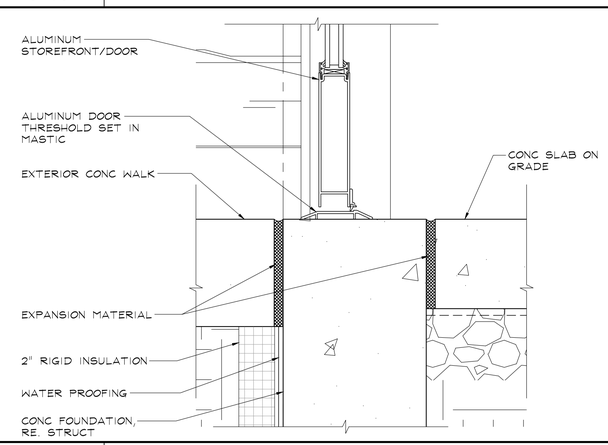
N6 WINDOW SILL @ STONE

3" = 1'-0"



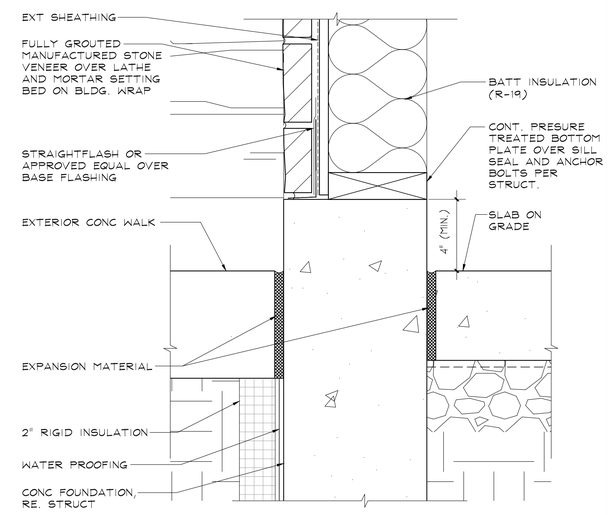
A1 EXTERIOR SOFFIT @ ENTRY

3" = 1'-0"



H1 ALUMINUM THRESHOLD

3" = 1'-0"



N1 BASE @ STONE

3" = 1'-0"

NOTES:

1. SEE EXTERIOR ELEVATIONS AND BUILDING SECTIONS FOR ADDITIONAL INFO ON FINISHES.

2. DRYWALL AND AIR BARRIER IN OCCUPIED SPACE BY TENANT FINISH.

3. STUCCO LOCATIONS, COORDINATE WITH EXTERIOR ELEVATIONS FOR LOCATION - PROVIDE 2 COAT ELASTOMERIC STUCCO SYSTEM ON METAL LATHE ON BUILDING WRAP.

4. TILE LOCATIONS, COORDINATE WITH EXTERIOR ELEVATIONS FOR LOCATION - PROVIDE MEMBRANE, LATH SCRATCH & BROWN COAT, MORTAR BED, WATERPROOFING AND MEGALITE CRACK PREVENTION TO FOLLOW TILE MANUFACTURER INSTALLATION REQUIREMENTS.

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

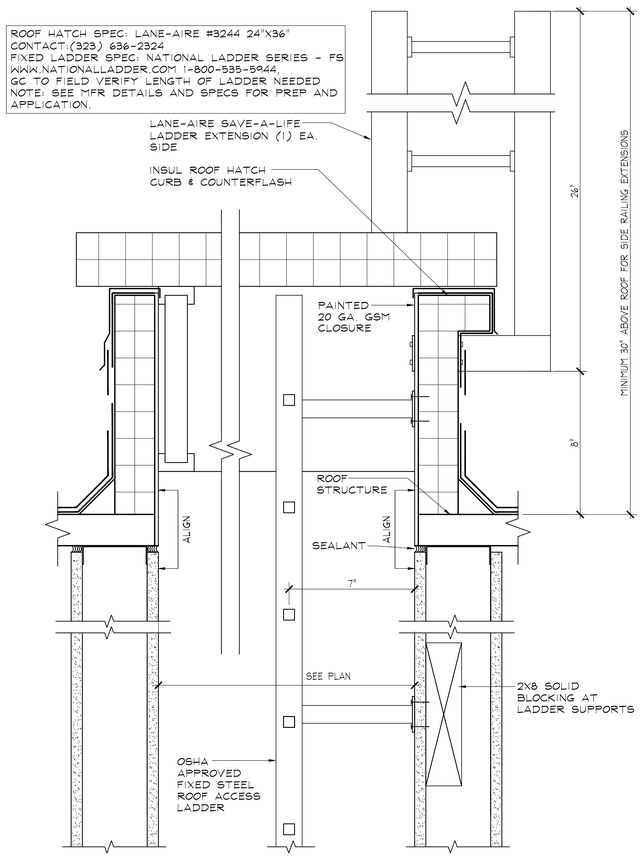
SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

DETAILS

STATE OF COLORADO
PAUL J. BATTISTA
B-3015
02/11/2025
LICENSED ARCHITECT

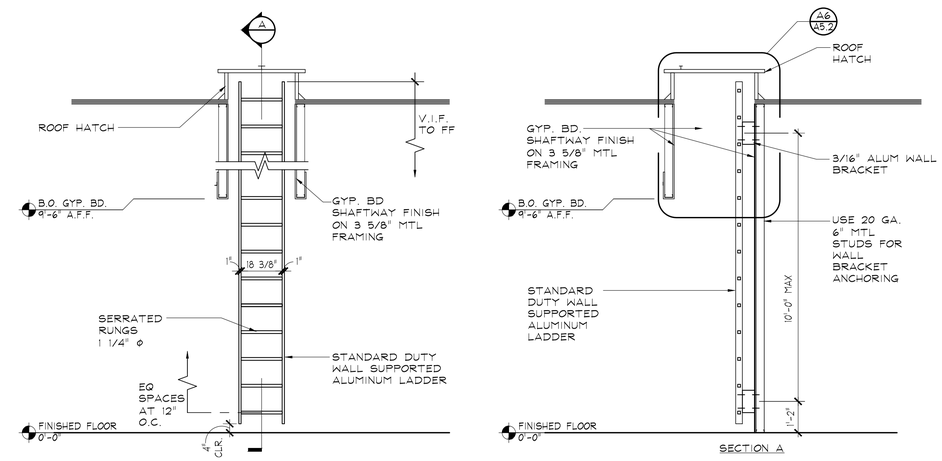
Designed: PJB	Project Number: SVA2025
Drawn: IJF	Scale: As Shown
Checked: PJB	Drawing Number:
Reviewed: PJB	A5.2
Date: Feb., 2025	of

COPYRIGHT 2018 – BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.



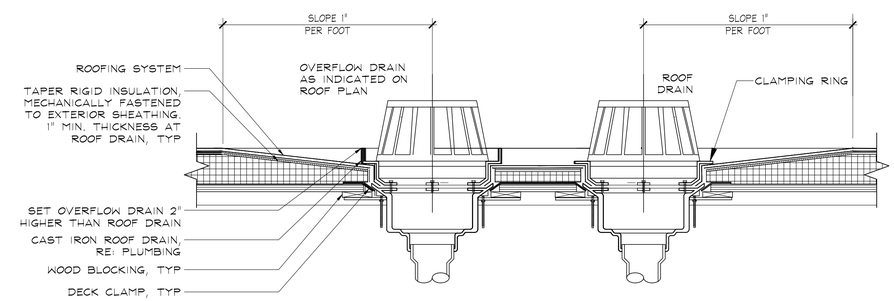
A6 — ROOF HATCH

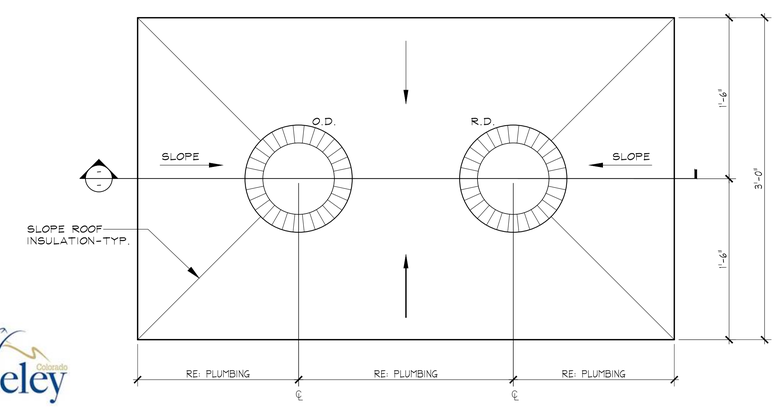
3" = 1'-0"



K8 — ROOF ACCESS LADDER

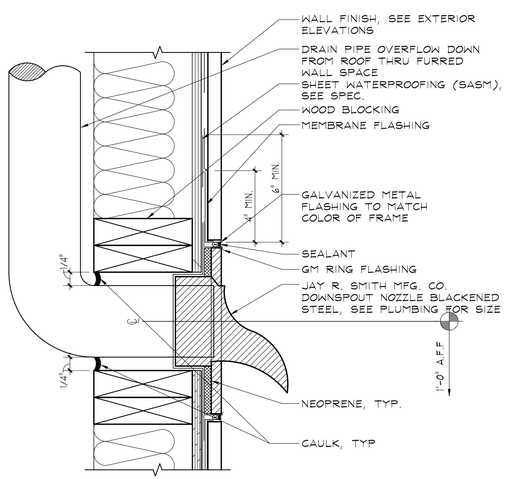
3/8" = 1'-0"





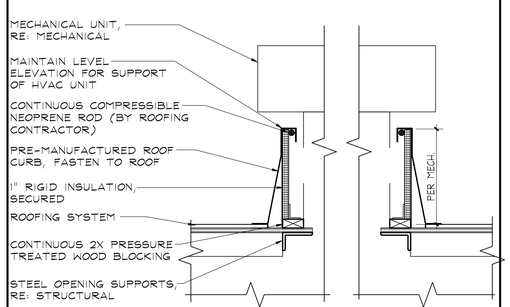
K1 — ROOF AND OVERFLOW DRAIN

1 1/2" = 1'-0"



A1 — ROOF/OVERFLOW THRU-WALL LAMBS-TONGUE

3" = 1'-0"



F1 — MECHANICAL ROOF CURB

1" = 1'-0"

No	Revision / Submissions	Date

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

DETAILS

STATE OF COLORADO — PAUL J. BATTISTA B-3015 02/11/2025 — LICENSED ARCHITECT

Designed:	Project Number: SVA2025
Drawn:	Scale: As Shown
Checked:	Drawing Number:
Reviewed:	A5.3
Date: Feb., 2025	of

COPYRIGHT 2018 — BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.

ABBREVIATIONS

(E)	EXISTING	lb(s)	POUND(S)
/	PER	LLH	LONG LEG HORIZONTAL
@	AT	LLV	LONG LEG VERTICAL
AB	ANCHOR BOLT	LONG	LONGITUDINAL
ABV	ABOVE	LRFD	LOAD RESISTANCE FACTOR DESIGN
ADDL	ADDITIONAL	LT	LIGHT
ADJ	ADJUSTABLE	LT WT	LIGHT WEIGHT
AESS	ARCH. EXPOSED STRUCT. STEEL	LTL	LINTEL
AFF	ABOVE FINISHED FLOOR	LVL	LAMINATED VENEER LUMBER
AHJ	AUTHORITY HAVING JURISDICTION	MAS	MASONRY
AHU	AIR HANDLING UNIT	MAT	MATERIAL(S)
ALT	ALTERNATE	MAX	MAXIMUM
ALUM	ALUMINUM	MECH	MECHANICAL
APPROX	APPROXIMATE	MED	MEDIUM
ARCH	ARCHITECT(URAL)	MEP	MECHANICAL/ELECTRICAL/PLUMBING
ASD	ALLOWABLE STRESS DESIGN	MEZZ	MEZZANINE
BD	BOARD	MFR	MANUFACTURE / MANUFACTURER
BL	BRICK LEDGE	MIN	MINIMUM
BLDG	BUILDING	MISC	MISCELLANEOUS
BLKG	BLOCKING	ML	MICROLLAM
BM	BEAM	MTL	METAL
BO	BOTTOM OF	N	NORTH
BOD	BASIS OF DESIGN	N/S	NEAR SIDE
BOTT	BOTTOM	NO	NUMBER
BRG	BEARING	NOM	NOMINAL
BSMT	BASEMENT	NTS	NOT TO SCALE
BTWN	BETWEEN	oc	ON CENTER
CANT	CANTILEVER	OD	OUTSIDE DIAMETER
CF	COLD-FORMED	OF	OUTSIDE FACE
CIP	CAST-IN-PLACE	OH	OVERHEAD / OPPOSITE HAND
CJ	CONTROL JOINT	OPNG	OPENING
CJP	COMPLETE JOINT PENETRATION	OPP	OPPOSITE
CL	CENTER LINE	OSB	ORIENTED STRAND BOARD
CLG	CEILING	PAF	POWDER ACTUATED FASTENER
CLR	CLEAR	PC	PRECAST
CMU	CONCRETE MASONRY UNIT	PEN	PENETRATION
CNTRD	CENTERED	PERIM	PERIMETER
COL	COLUMN	PERP	PERPENDICULAR
CONC	CONCRETE	PJP	PARTIAL JOINT PENETRATION
CONN	CONNECTION	PL	PLATE
CONST	CONSTRUCTION	PLBG	PLUMBING
CONT	CONTINUOUS	plf	POUNDS PER LINEAL FOOT
COORD	COORDINATE	PLWD	PLYWOOD
D / DL	DEAD LOAD	psf	POUNDS PER SQUARE FOOT
DBL	DOUBLE	psi	POUNDS PER SQUARE INCH
DIA	DIAMETER	PT	POST-TENSIONED/PRESSURE TREATED
DIAG	DIAGONAL	RAD	RADIUS
DIM	DIMENSION	RE	REFERENCE / REFER TO
DIV	DIVISION	REINF	REINFORCED(ING)
DN	DOWN	REQD	REQUIRED
DTL	DETAIL	REV	REVISION
DWG	DRAWING	RO	ROUGH OPENING
DWL	DOWEL	RTU	ROOF TOP UNIT
E	EARTHQUAKE/SEISMIC LOAD / EAST	S	SOUTH
E/F	EACH FACE	S / SL	SNOW LOAD
E/S	EACH SIDE	SA	SUPPLY AIR
EA	EACH	SC	SLIP-CRITICAL
EIFS	EXTERIOR INSUL. FINISH SYSTEM	SCHED	SCHEDULE
EJ	EXPANSION JOINT	SECT	SECTION
ELEC	ELECTRIC(AL)	SF	SQUARE FEET
ELEV	ELEVATION	SHT	SHEET
EMBED	EMBEDMENT	SIM	SIMILAR
ENCL	ENCLOSURE	SOG	SLAB-ON-GRADE
ENGR	ENGINEER	SPEC	SPECIFICATION(S)
EO	EDGE OF	SQ	SQUARE
EOR	ENGINEER OF RECORD	SS	STAINLESS STEEL
EQ	EQUAL	STD	STANDARD
EQUIP	EQUIPMENT	STIFF	STIFFENER
EST	ESTIMATE	STL	STEEL
EXP	EXPANSION	STOR	STORAGE
EXT	EXTERIOR	STRUCT	STRUCTURAL
F/S	FAR SIDE	SYM	SYMMETRICAL
FF	FINISH FLOOR	T&B	TOP AND BOTTOM
FFE	FINISHED FLOOR ELEVATION	T&G	TONGUE AND GROOVE
FIN	FINISH(ED)	T/C	TENSION-CONTROL
FNDN	FOUNDATION	TBD	TO BE DETERMINED
FO	FACE OF	THK	THICK(NESS)
FT	FEET/FOOT	THRU	THROUGH
FTG	FOOTING	TL	TOTAL LOAD
FV	FIELD VERIFY	TO	TOP OF
GA	GAUGE	TOBL	TOP OF BRICK LEDGE
GALV	GALVANIZED	TOC	TOP OF CONCRETE
GC	GENERAL CONTRACTOR	TOF	TOP OF FOOTING
GYP	GYPSUM	TOM	TOP OF MASONRY
GYP BD	GYPSUM BOARD	TOP	TOP OF PILASTER / PIER
HAS	HEADED ANCHOR STUD	TOS	TOP OF STEEL / SLAB
HORZ	HORIZONTAL	TOW	TOP OF WALL
HSS	HOLLOW STRUCTURAL SECTION	TRANSV	TRANSVERSE
HT	HEIGHT	TS	TUBE STEEL
HVAC	HEATING/VENTILATING/AIR CONDITIONING	TYP	TYPICAL
IBC	INTERNATIONAL BUILDING CODE	ULT	ULTIMATE
ID	INSIDE DIAMETER	UNO	UNLESS NOTED OTHERWISE
IF	INSIDE FACE	VERT	VERTICAL
IN	INCHES / INCH	VIF	VERIFY IN FIELD
INCL	INCLUDING	W	WIDE/WIDTH
INSUL	INSULATION / INSULATING	W	WIND LOAD
INT	INTERIOR	W/	WITH
JNT	JOINT	W/C	WATER/CEMENT
JST	JOIST	W/O	WITHOUT
K	KIPS	WD	WOOD
klf	KIPS PER LINEAL FOOT	WF	WIDE-FLANGE
ksf	KIPS PER SQUARE FOOT	WP	WORK POINT
ksi	KIPS PER SQUARE INCH	WT	WEIGHT
L / LL	LIVE LOAD	WWR	WELDED WIRE REINFORCING

SHEET INDEX

SHEET #	SHEET NAME
S1.0	COVER SHEET, DESIGN CRITERIA & PROJECT NOTES
S1.1	STRUCTURAL SPECIAL INSPECTIONS & SCHEDULES
S1.2	TYPICAL DETAILS & TRASH ENCLOSURE
S1.3	ROOF DESIGN LOAD DIAGRAMS
S2.1A	FOUNDATION/FLOOR PLAN - NORTH
S2.1B	FOUNDATION/FLOOR PLAN - SOUTH
S2.2A	MAIN ROOF FRAMING PLAN - NORTH
S2.2B	MAIN ROOF FRAMING PLAN - SOUTH
S2.3A	UPPER ROOF FRAMING PLAN - NORTH
S2.3B	UPPER ROOF FRAMING PLAN - SOUTH
S3.1	FOUNDATION / FLOOR DETAILS
S4.1	FRAMING DETAILS

SYMBOLS

- NORTH ARROW
- SECTION DETAIL — 1 / S1 — DETAIL NUMBER, SHEET REFERENCE
- PLAN / GENERAL DETAIL — 1 / S1 — DETAIL NUMBER, SHEET REFERENCE
- ELEVATION DETAIL — 1 / S1
- SPOT ELEVATION — XXXXX / XXX'–XX"
- GRIDLINE - NEW — X
- GRIDLINE - EXISTING — X
- BOXED NOTE INDICATES TYPICAL NOTE — XXXXXXX XXXXXXX
- SPAN DIRECTION OF DECK/SHEATHING
- MOMENT CONNECTION
- REVISION NUMBER — 1
- CLOUD REVISION
- FOOTING/DRILLED PIER TYPE — #
- COLUMN TYPE — X
- STEP
- SLOPE
- GRAPHIC SCALE BAR — 0' 2' 4' 8'

MATERIALS

- CAST-IN-PLACE CONCRETE
- PRECAST OR EXISTING CONCRETE
- STEEL
- CONCRETE MASONRY
- BRICK MASONRY
- SOIL SUBGRADE
- GRAVEL FILL
- RIGID INSULATION

NOTE TO CONTRACTOR

READ ALL STRUCTURAL NOTES AND COORDINATE WITH THE STRUCTURAL ENGINEER TO RESOLVE ANY QUESTIONS, DISCREPANCIES, OR CONFLICTS PRIOR TO COMMENCING WITH CONSTRUCTION OPERATIONS.

CONTRACTOR SHALL INFORM AND UPDATE THE STRUCTURAL ENGINEER AS TO THE STATUS AND SCHEDULE OF CONSTRUCTION, AND SHALL COORDINATE WITH THE STRUCTURAL ENGINEER TO SCHEDULE PERIODIC SITE VISITS TO OBSERVE COMPLETED AND ONGOING PORTION OF THE WORK.

STRUCTURAL ENGINEER'S APPROVAL OF ALL REQUIRED SUBMITTALS INDICATED IN THE GENERAL NOTES SHALL BE PROCURED PRIOR TO FABRICATION OR CONSTRUCTION OF EACH APPLICABLE PORTION OF THE WORK.

COORDINATE ALL REQUIRED STRUCTURAL SPECIAL INSPECTIONS AND TESTS WITH THE INSPECTION AGENCY ENGAGED BY THE OWNER.

DESIGN CRITERIA

1. **CODES & STANDARDS:**
   A. INTERNATIONAL BUILDING CODE 2021 EDITION
   B. GREELEY, COLORADO CODE AMENDMENTS
   C. ASCE/SEI 7-16 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
   D. ACI 318-19 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
   E. ANSI/AISC 360-16 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS
   F. ANSI/AWC NDS-2018 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION
   G. TMS 402/602-2016 BUILDING CODE AND SPECIFICATIONS FOR MASONRY STRUCTURES

2. **GRAVITY LOADS USED IN DESIGN:**
   A. ROOF SNOW LOAD — 30 psf + DRIFTING REQUIREMENTS
   B. SUPERIMPOSED ROOF DEAD LOAD — 15 psf
   C. FLOOR LIVE LOAD — 50 psf
   D. OFFICE PARTITION LIVE LOAD — 15 psf
   E. LOBBY, 1ST FLOOR CORRIDOR LIVE LOAD — 100 psf
   F. MECHANICAL EQUIPMENT LOADS — RE: MECHANICAL DRAWINGS
   G. SNOW LOAD DESIGN CRITERIA
      1. GROUND SNOW LOAD, Pg = 30 psf
      2. FLAT ROOF SNOW LOAD, Pf = 21 psf
      3. SNOW EXPOSURE FACTOR, Ce = 1.0
      4. SNOW LOAD IMPORTANCE FACTOR, Is = 1.0
      5. THERMAL FACTOR, Ct = 1.0

3. **WIND LOAD DESIGN CRITERIA:**
   A. BUILDING RISK CATEGORY II
   B. BASIC DESIGN WIND SPEED = 115 mph
   C. EXPOSURE CATEGORY C

4. **SEISMIC LOAD DESIGN CRIERIA:**
   A. BUILDING RISK CATEGORY II
   B. SEISMIC IMPORTANCE FACTOR, Ie = 1.0
   C. SITE CLASS D
   D. SITE SPECTRAL RESPONSE ACCELERATIONS:
      1. Ss = 0.153
      2. S1 = 0.051
      3. SDs = 0.163
      4. SD1 = 0.082
   E. SEISMIC DESIGN CATEGORY B
   F. BASIC SEISMIC FORCE RESISTING SYSTEM: WOOD-FRAMED SHEARWALLS WITH WOOD PANELS
   G. RESPONSE MODIFICATION FACTOR, R = 6.5
   H. SEISMIC RESPONSE COEFFICIENT, Cs = 0.0251
   I. ANALYSIS PROCEDURE USED: EQUIVALENT LATERAL FORCE PROCEDURE

5. **LATERAL FORCE RESISTING SYSTEM DESCRIPTION:**
   A. LATERAL FORCE RESISTANCE AND STABILITY OF THE BUILDING IN THE COMPLETED STRUCTURE IS PROVIDED BY VERTICAL WOOD-FRAMED SHEARWALLS.
   B. THE WOOD ROOF DECKS SERVE AS HORIZONTAL DIAPHRAGMS THAT DISTRIBUTE LATERAL WIND AND SEISMIC FORCES TO THE VERTICAL LATERAL ELEMENTS. THE VERTICAL LATERAL ELEMENTS CARRY APPLIED LATERAL LOADS TO THE BUILDING FOUNDATIONS.

6. **FOUNDATIONS:**
   A. SOIL DATA WAS TAKEN FROM RECOMMENDATIONS SET FORTH IN PROJECT GEOTECHNICAL REPORT BY NINYO & MOORE DATED OCTOBER 23, 2024 (PROJECT NO. 803044001).
   REFER TO GEOTECHNICAL REPORT FOR COMPLETE SOILS INFORMATION.
   B. MAXIMUM TOTAL LOAD SOIL BEARING PRESSURE CAPACITY USED IN DESIGN IS 3,000 psf.

GENERAL NOTES

1. CONTRACTOR RESPONSIBILITY DURING CONSTRUCTION/ERECTION:
   A. THE STRUCTURE IS DESIGNED TO FUNCTION AS A COMPLETED UNIT, WITH ALL SPECIFIED ELEMENTS AND CONNECTIONS IN PLACE AND FULLY INSTALLED.
   B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, SPECIFICATION, AND IMPLEMENTATION OF ANY AND ALL TEMPORARY BRACING OR SHORING REQUIRED TO ACCOMMODATE THE CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION AND SEQUENCES OF ERECTION. SUCH BRACING OR SHORING SHALL BE LEFT IN PLACE AS LONG AS MAY BE REQUIRED FOR SAFETY AND UNTIL ALL STRUCTURAL FRAMING AND DIAPHRAGMS ARE IN PLACE WITH CONNECTIONS COMPLETED.
   C. THE COMPLETED STRUCTURE HAS BEEN DESIGNED ONLY FOR APPLICABLE CODE-PRESCRIBED LOADS ANTICIPATED DURING ITS SERVICE LIFE AS INDICATED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL ENGINEERING AND OTHER MEASURES REQUIRED TO ACHIEVE THE CONTRACTOR'S MEANS, METHODS, AND SEQUENCES OF CONSTRUCTION AND TO WITHSTAND ALL TEMPORARY CONSTRUCTION LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED, INCLUDING BUT NOT LIMITED TO ERECTION LOADING AND STOCKPILING OF MATERIALS AND EQUIPMENT.
2. ALL DIMENSIONS ON STRUCTURAL DRAWINGS SHALL BE CHECKED AGAINST ARCHITECTURAL.
3. STRUCTURAL DRAWINGS ARE NOT TO BE SCALED TO DETERMINE DIMENSIONAL INFORMATION, TO VERIFY OR COORDINATE ANY INFORMATION PRESENTED OR FOR ANY OTHER PURPOSE.
4. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, AND GENERAL NOTES, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
5. STRUCTURAL ENGINEER'S APPROVAL MUST BE SECURED FOR ALL SUBSTITUTIONS.
6. VERIFY ALL OPENINGS THROUGH FLOOR, ROOF AND WALLS WITH MECHANICAL AND ELECTRICAL CONTRACTORS.
7. STRUCTURAL SPECIAL INSPECTIONS SHALL BE PROVIDED AS SPECIFIED AND IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.
8. THE STRUCTURAL ENGINEER'S PERIODIC OBSERVATIONS OR PRESENCE ON SITE DOES NOT REPLACE OR PRECLUDE THE NEED FOR ANY INDEPENDENT THIRD PARTY STRUCTURAL SPECIAL INSPECTIONS SPECIFIED HEREIN.
9. SIGNIFICANT PERMANENT EQUIPMENT SIZES, WEIGHTS, AND LOCATIONS INDICATED ON THE DRAWINGS ARE AS PROVIDED TO THE STRUCTURAL ENGINEER DURING DESIGN. CHANGES IN SIZES, WEIGHTS, OR LOCATIONS FROM THAT INDICATED MUST BE SUBMITTED IN WRITING FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER. REQUIRED SUPPORTS OR BRACES NOT SHOWN ON THE DRAWINGS ARE THE RESPONSIBILITY OF THE EQUIPMENT SUPPLIER.
10. THE FOLLOWING IS A LIST OF DELEGATED DESIGN AND/OR PERFORMANCE-SPECIFIED ELEMENTS TO BE DESIGNED BY OTHERS AND PRESENTED FOR APPROVAL AS A DEFERRED SUBMITTAL.
    A. PRE-MANUFACTURED WOOD I-JOIST AND LVL FRAMING ELEMENTS

CONTRACTOR SUBMITTALS

1. GENERAL CONTRACTOR SHALL PROVIDE THE FOLLOWING MATERIAL SPECIFICATION AND SHOP DRAWING SUBMITTALS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PROCEEDING WITH EACH APPLICABLE PORTION OF THE WORK.
2. ITEMS TO BE SUBMITTED AS SPECIFIED IN THE DRAWINGS:
   A. CONCRETE DESIGN MIXTURES
   B. CONCRETE STEEL REINFORCING SHOP DRAWINGS
   C. STRUCTURAL STEEL SHOP DRAWINGS
   D. MASONRY MORTAR AND GROUT DESIGN MIXTURES
   E. MASONRY ELEMENT AND ASSEMBLY SPECIFICATIONS
3. DELEGATED DESIGN AND/OR PERFORMANCE-SPECIFIED ELEMENTS TO BE DESIGNED AND PROVIDED BY THE CONTRACTOR:
   [SUBMITTALS ARE TO INCLUDE SUPPORTING CALCULATIONS STAMPED AND SIGNED BY A QUALIFIED STRUCTURAL ENGINEER LICENSED IN THE STATE OF COLORADO. DRAWINGS AND CALCULATIONS ARE TO INCLUDE THE INDICATED ELEMENTS AND THEIR ATTACHMENTS TO THE MAIN BUILDING STRUCTURE.]
   A. PRE-MANUFACTURED WOOD I-JOIST AND LVL FRAMING ELEMENTS
4. GENERAL CONTRACTOR SHALL REVIEW EACH SUBMITTAL AND CHECK FOR COORDINATION WITH OTHER WORK AND FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS, AND SHALL AFFIX THEIR STAMP INDICATING APPROVAL PRIOR TO SENDING TO THE ARCHITECT AND STRUCTURAL ENGINEER.
5. SUBMITTALS THAT DO NOT BEAR THE CONTRACTOR'S APPROVAL STAMP WILL NOT BE REVIEWED AND WILL BE RETURNED WITHOUT ACTION.DO NOT REPRODUCE CONTRACT DOCUMENTS, COPY STANDARD PRINTED INFORMATION, OR USE ELECTRONIC DRAWING FILES AS THE BASIS FOR SHOP DRAWINGS.
6. GENERAL CONTRACTOR SHALL PROVIDE COPIES OF ALL FINAL, APPROVED, FOR CONSTRUCTION MATERIAL SPECIFICATION AND SHOP DRAWING SUBMITTALS TO THE ARCHITECT AND STRUCTURAL ENGINEER.

MATERIAL SPECIFICATIONS & NOTES

1. **CONCRETE:**
   A. CONCRETE SHALL BE MADE WITH STONE AGGREGATE (NORMAL-WEIGHT CONCRETE) AND SHALL DEVELOP THE FOLLOWING 28 DAY COMPRESSIVE STRENGTHS (F'C) WITH THE INDICATED DESIGN MIXTURE PROPERTIES:
      1. FOOTINGS — 3,500 psi
      2. FOUNDATION WALLS & PILASTERS — 3,500 psi ; 0.55 MAX W/C RATIO ; 5% AIR
      3. INTERIOR SLABS ON GRADE — 3,500 psi
      4. SITE TRASH ENCLOSURE SLAB & FOUNDATION — 4,000 psi ; 0.40 MAX W/C RATIO ; 6% AIR
   B. RE: CIVIL FOR CONCRETE MIXTURES TO BE USED FOR EXTERIOR SITE SLAB, PAVING, AND FLATWORK, ETC.
   C. PROPORTIONS OF MATERIALS IN CONCRETE MIXTURES SHALL BE ESTABLISHED TO PROVIDE WORKABILITY AND CONSISTENCY TO PERMIT CONCRETE TO BE PLACED READILY INTO FORMS AND AROUND REINFORCEMENT, UNDER CONDITIONS OF PLACEMENT TO BE EMPLOYED, WITHOUT SEGREGATION OR EXCESSIVE BLEEDING. CONTRACTOR SHALL SELECT AN APPROPRIATE SLUMP, AND ADMIXTURES MAY BE USED AS NEEDED TO OBTAIN ACCEPTABLE RESULTS.
   D. TYPE I/II PORTLAND CEMENT SHALL BE USED, UNLESS NOTED OTHERWISE.
   E. FOR CONCRETE MIXTURES USED FOR FLOOR SLABS, THE MINIMUM CEMENTITIOUS CONTENT SHALL BE 540 lbs. PER CUBIC YARD. WHEN FLY ASH IS USED AS A SUPPLEMENTARY CEMENTITIOUS MATERIAL, QUANTITY SHALL NOT BE LESS THAN 15% NOR MORE THAN 25% BY WEIGHT OF TOTAL CEMENTITIOUS MATERIAL.
   F. FOR CONCRETE PLACED BY PUMPING, THE DESIGN MIXTURE SHALL BE PROPORTIONED TO ENSURE FLOWABILITY TO FACILITATE PUMPING. ENTRAINED AIR MAY BE USED TO FACILITATE PUMPING, SUBJECT TO THE PROVISIONS AND LIMITS INCLUDED HEREIN.
   G. WHERE AIR CONTENT IS INDICATED ABOVE, PROVIDE AIR ENTRAINING ADMIXTURES. AIR CONTENT VALUE INDICATED INCLUDES BOTH ENTRAINED AND ENTRAPPED AIR, AND MAY BE PROVIDED WITHIN A RANGE OF +/- 1.5%. AIR CONTENT INDICATED IS BASED ON A NOMINAL AGGREGATE SIZE OF ¾". IF ANOTHER AGGREGATE SIZE IS TO BE USED, ADJUST REQUIRED AIR CONTENT PER ACI 318 TABLE 19.3.3.1.
   H. THE ADDITION OF ENTRAINED AIR IS NOT PERMITTED IN MIXTURES TO BE USED AS FLOOR SLABS, UNLESS THE CONTRACTOR CAN DEMONSTRATE TO THE ARCHITECT THAT SUCH SLAB MIXTURES WITH ENTRAINED AIR WILL PROVIDE AN ACCEPTABLE FINISH WITHOUT BLISTERS.
   I. VERIFY ALKALINITY OF CONCRETE SLAB SURFACE, SLAB VAPOR TRANSMISSION AND SLAB FLATNESS/LEVELNESS ARE COMPATIBLE WITH FLOOR SYSTEMS AND ADHESIVES PRIOR TO INSTALLING FLOORING.
   J. NO CHLORIDE ADMIXTURES SHALL BE ADDED TO CONCRETE WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.
   K. ALL REINFORCING BARS SHALL BE ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE. WELDED WIRE REINFORCING SHALL CONFORM TO ASTM A185 OR ASTM A497.
   L. CONCRETE PROTECTION FOR REINFORCEMENT (UNLESS NOTED OTHERWISE):
      1. CONCRETE POURED AGAINST EARTH — 3"
      2. CONCRETE POURED IN FORMS BUT EXPOSED TO WEATHER OR EARTH
         #5 BARS OR SMALLER — 1-1/2"
         BARS LARGER THAN #5 — 2"
      3. SLABS AND WALLS NOT EXPOSED TO WEATHER OR EARTH — 3/4"
   M. NO SPLICES OF REINFORCEMENT SHALL BE MADE AND NO WELDING TO REINFORCING SHALL BE PERMITTED EXCEPT AS DETAILED OR AUTHORIZED BY THE STRUCTURAL ENGINEER. REINFORCING LAP SPLICES ARE TO BE A MINIMUM OF 48 BAR DIAMETERS, UNLESS NOTED OTHERWISE. WIRE FABRIC REINFORCEMENT MUST LAP ONE FULL MESH PLUS 2" AT SIDE AND END LAPS, BUT NOT LESS THAN 6", AND SHALL BE WIRED TOGETHER. MAKE ALL BARS CONTINUOUS AT CORNERS OR PROVIDE CORNER BARS OF EQUAL SIZE AND SPACING.
   N. DETAIL BARS IN ACCORDANCE WITH THE ACI DETAILING MANUAL AND ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
   O. PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING AT POSITIONS SHOWN.
   P. PLACE 2-#5 BARS (1 EACH FACE) WITH 2'-0" PROJECTION AROUND ALL OPENINGS AND RE-ENTRANT CORNERS IN CONCRETE SLABS AND WALLS, UNLESS NOTED OTHERWISE.
   Q. CONCRETE WORK SHALL NOT HAVE JOINTS IN A HORIZONTAL PLANE. ALL CONSTRUCTION JOINTS SHALL BE AS DETAILED OR AS APPROVED BY THE STRUCTURAL ENGINEER.
   R. ALLOW FOR ADDITIONAL CONCRETE THICKNESS TO COMPENSATE FOR STRUCTURAL MEMBER AND FORMWORK DEFLECTIONS.
   S. SLAB-ON-GRADE CONTROL JOINTS ARE TO BE SPACED A MAXIMUM OF 12'-0" ON CENTER AND ARE TO COINCIDE WITH COLUMN CENTERLINES AND RE-ENTRANT CORNERS.
2. **STRUCTURAL STEEL:**
   A. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36, EXCEPT WIDE FLANGE SHAPES WHICH SHALL CONFORM TO ASTM A992 (GRADE 50), PIPE SECTIONS WHICH SHALL CONFORM TO ASTM A53 (GRADE B), AND HSS SECTIONS WHICH SHALL CONFORM TO ASTM A500 (GRADE C)
   B. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC STEEL CONSTRUCTION MANUAL, INCLUDING ANSI/AISC 303 - CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS.
   C. ALL WELDERS SHALL HAVE EVIDENCE OF PASSING THE AWS STANDARD QUALIFICATION TESTS, AND HAVE A CURRENT CERTIFICATION.
   D. MINIMUM WELD SIZE SHALL NOT BE LESS THAN 3/16" CONTINUOUS FILLET WELD, UNLESS NOTED OTHERWISE.
   E. CONNECTIONS MADE WITH HIGH STRENGTH STEEL BOLTS SHALL CONFORM TO THE AISC SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS.
   F. ANCHOR RODS SHALL CONFORM TO ASTM F1554 GRADE 36 AND ARE TO BE HOOKED, UNLESS NOTED OTHERWISE.
   G. FABRICATE BEAMS SUCH THAT ROLLING OR FABRICATION INDUCED CAMBER IS UP AFTER ERECTION.
   H. NON-SHRINK GROUT SHALL COMPLY WITH ASTM C1107 AND ACHIEVE A MINIMUM COMPRESSIVE STRENGTH OF 6,000 psi AT 28 DAYS.
   I. ALL STEEL OR STEEL CONNECTIONS PERMANENTLY EXPOSED BELOW GRADE SHALL BE COATED WITH A ZINC RICH PAINT OR AN ASPHALTIC MASTIC.
3. **WOOD - GENERAL:**
   A. ALL SAWN DIMENSION LUMBER FOR STRUCTURAL FRAMING SHALL BE VISUALLY-GRADED, SURFACED DRY HEM FIR, NO.2 GRADE OR BETTER.
   B. TIMBER CONNECTORS SPECIFIED ARE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY. CONNECTORS BY OTHER MANUFACTURERS MAY BE USED IF THEY HAVE A CURRENT ICC-ES EVALUATION REPORT AND THEIR LOAD CAPACITY IS EQUAL TO OR GREATER THAN THE CONNECTOR SPECIFIED. USE MANUFACTURER'S FURNISHED FASTENERS.
   C. INSTALL A CONTINUOUS ROW OF HORIZONTAL BLOCKING AT MID-HEIGHT OF SINGLE STORY WALLS OVER 10'-0" TALL.
   D. GLUE AND NAIL TOGETHER ALL PLIES OF BUILT-UP MEMBERS.
   E. PROVIDE FULL-HEIGHT 2x KING STUD AT ALL BEAM AND HEADER BEARING LOCATIONS, UNLESS NOTED OTHERWISE.
   F. SHEATHING FOR ROOFS AND WALLS SHALL BE APA RATED WITH EXPOSURE 1 BOND CLASSIFICATION, AND SHALL CONFORM TO THE PROVISIONS OF APA PRP-108 OR VOLUNTARY PRODUCT STANDARD PS 1-07.
   G. SHEATHING THICKNESS AND FASTENING REQUIREMENTS SHALL BE AS FOLLOWS:
      1. SHEARWALLS: ALL DESIGNATED SHEARWALLS SHALL HAVE THE SHEATHING THICKNESS AND NAILING SPECIFIED IN THE DRAWINGS. ALL SHEARWALL PANEL EDGES SHALL BE SOLID BLOCKED AT INTERMEDIATE FRAMING MEMBERS.
      2. NON SHEARWALLS: TYPICAL WALLS NOT DESIGNATED AS SHEARWALLS SHALL HAVE ONE LAYER OF 15/32" SHEATHING FASTENED WITH 8D NAILS @ 6" O.C. ALONG PANEL EDGES AND @ 12" O.C. AT INTERMEDIATE FRAMING MEMBERS. NON SHEARWALL PANEL EDGES NEED NOT BE BLOCKED AT INTERMEDIATE FRAMING MEMBERS.
      3. ROOF DIAPHRAGMS: ONE LAYER OF 23/32" SHEATHING FASTENED WITH 10D NAILS SPACED @ 6" O.C. ALONG PANEL EDGES AND @ 12" O.C. AT INTERMEDIATE FRAMING MEMBERS.
   H. SMOOTH COMMON NAILS SHALL BE USED ON ALL ROOF AND WALL SHEATHING.
   I. PLACE SHEATHING WITH 8'-0" DIMENSION PERPENDICULAR TO SPAN OF FRAMING MEMBERS AND WITH END JOINTS STAGGERED. ROOF DIAPHRAGMS SHALL NOT BE GLUED.
   J. FASTEN ALL WOOD MEMBERS PER IBC TABLE 2304.10.1, UNLESS NOTED OTHERWISE.
   K. LVL BEAMS AND I-JOISTS SHALL BE ERECTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL PLATES, BLOCKING, BRIDGING AND OTHER RELATED ITEMS SHALL BE FURNISHED BY THE MANUFACTURER.
4. **PREFABRICATED WOOD ROOF I-JOISTS:**
   A. SUPPLIER SHALL DESIGN AND PROVIDE JOISTS IN ACCORDANCE WITH THE DESIGN CRITERIA OUTLINED IN THE DRAWINGS. SUPPLIER SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS STAMPED AND SIGNED BY A COLORADO LICENSED PROFESSIONAL ENGINEER FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER PRIOR TO DELIVERY TO THE PROJECT SITE.
   B. RE: DESIGN CRITERIA NOTES THIS SHEET AND SHEET S1.3 FOR APPLICABLE DESIGN LOADS.
   C. JOISTS SHALL BE DESIGNED TO PROVIDE FOR MAXIMUM VERTICAL DEFLECTIONS AS FOLLOWS:
      1. MAXIMUM TOTAL LOAD DEFLECTION: L/240 OF JOIST SPAN
      2. MAXIMUM SNOW LOAD DEFLECTION: L/360 OF JOIST SPAN
   D. ALL JOISTS SHALL BE ERECTED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS, INCLUDING CONSIDERATIONS FOR TEMPORARY BRACING.
   E. ALL REQUIRED BRIDGING AND BLOCKING SHALL BE INSTALLED PRIOR TO INSTALLING SHEATHING.
5. **MASONRY:**
   A. CONCRETE MASONRY BLOCK UNITS SHALL BE MEDIUM WEIGHT AND SHALL CONFORM TO ASTM C90.
   B. MORTAR FOR STRUCTURAL WALLS SHALL CONFORM TO ASTM C270.
   C. GROUT FOR MASONRY SHALL CONFORM TO ASTM C476 AND SHALL DEVELOP A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2,000 psi.
   D. ALL MASONRY ASSEMBLIES SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH (F'M) OF 1,500 psi IN 28 DAYS.
   E. STANDARD HORIZONTAL STEEL LADDER MESH REINFORCING SHALL BE PROVIDED IN BED JOINTS OF STRUCTURAL MASONRY WALLS, SPACED AT 16" ON CENTER, UNLESS NOTED OTHERWISE.
   F. SPECIFIED VERTICAL REINFORCING SHALL EXTEND FOR THE FULL HEIGHT OF THE WALL AND SHALL BE GROUTED IN PLACE USING A MAXIMUM OF 5'-0" LIFTS. HIGH LIFT GROUTING MAY BE DONE UP TO A HEIGHT OF 15'-0" AS LONG AS CLEANOUTS ARE PROVIDED AT THE BASE OF EACH GROUTED CELL. ALL CELLS MUST BE CLEANED PRIOR TO GROUTING, AND ALL VERTICAL REINFORCING MUST BE ADEQUATELY SECURED INTO POSITION.
   G. PROVIDE ONE ADDITIONAL VERTICAL BAR AT THE FOLLOWING LOCATIONS: WALL CORNERS, ENDS OF WALLS, AND EACH SIDE OF OPENINGS.
   H. PROVIDE HORIZONTAL BOND BEAM REINFORCED WITH A MINIMUM OF 1-#5 CONTINUOUS BARS AT THE TOP OF ALL STRUCTURAL WALLS
6. **POST-INSTALLED ANCHORS:**
   A. POST-INSTALLED ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ALL MANUFACTURER'S RECOMMENDATIONS, SPECIFICATIONS AND PRINTED INSTALLATION INSTRUCTIONS (MPII), AND SHALL BE INSTALLED ONLY INTO DRY BASE MATERIALS.
   B. FOR EXPANSION ANCHORS INSTALLED INTO CONCRETE, THE CONCRETE BASE MATERIAL SHALL REACH THE REQUIRED MINIMUM COMPRESSIVE STRENGTH (F'C) SPECIFIED IN THE DRAWINGS PRIOR TO ANCHOR INSTALLATION.
   C. FOR ADHESIVE ANCHORS INSTALLED INTO CONCRETE, THE CONCRETE BASE MATERIAL AT THE TIME OF ANCHOR INSTALLATION SHALL HAVE A MINIMUM AGE OF 21 DAYS, A MINIMUM CONCRETE TEMPERATURE OF 50 DEGREES F, AND SHALL REACH THE REQUIRED MINIMUM COMPRESSIVE STRENGTH (F'C) SPECIFIED IN THE DRAWINGS PRIOR TO ANCHOR INSTALLATION.

nextlevel
STRUCTURAL ENGINEERS
nlengineers.com

COLORADO LICENSED
MATTHEW W. NICHOLS
36279
03-11-25
PROFESSIONAL ENGINEER

Structural Engineer
Next Level, Inc.
7186 S. Forest Lane
Centennial, CO 80122
303.260.9456

Architect
Battista Design Group, P.C.
3650 Wadsworth Blvd.
Wheat Ridge, CO 80033
Paul Battista
303.428.4895

SVA GREELEY SHELL BUILDING

1911 59th. Avenue - Greeley, CO 80634

Principal
Matt Nichols, P.E.
303.260.9456
matt@nlengineers.com

Project Number 25-001

02.11.2025

Rev	Description	Date

COVER SHEET, DESIGN CRITERIA & PROJECT NOTES

S1.0

STATEMENT OF STRUCTURAL SPECIAL INSPECTIONS & TESTS

1 GENERAL

A. SPECIAL INSPECTIONS AND TESTS SHALL BE PROVIDED IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.
B. THE OWNER OR THE OWNER'S AUTHORIZED AGENT, OTHER THAN THE CONTRACTOR, SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM SPECIAL INSPECTIONS AND TESTS DURING CONSTRUCTION ON THE TYPES OF WORK OUTLINED HEREIN.
C. APPROVED AGENCIES SHALL PROVIDE ALL INFORMATION AS NECESSARY FOR THE BUILDING OFFICIAL TO DETERMINE THAT THE AGENCY MEETS OR EXCEEDS THE APPLICABLE CODE-SPECIFIED REQUIREMENTS.
D. PRIOR TO THE START OF CONSTRUCTION, THE APPROVED AGENCIES SHALL PROVIDE WRITTEN DOCUMENTATION TO THE BUILDING OFFICIAL, ARCHITECT AND STRUCTURAL ENGINEER, DEMONSTRATING THE COMPETENCE AND RELEVANT EXPERIENCE OR TRAINING OF THE SPECIAL INSPECTORS WHO WILL PERFORM THE SPECIAL INSPECTIONS AND TESTS DURING CONSTRUCTION.
E. THE CONSTRUCTION OR WORK FOR WHICH SPECIAL INSPECTION OR TESTING IS REQUIRED SHALL REMAIN ACCESSIBLE AND EXPOSED FOR SPECIAL INSPECTION OR TESTING PURPOSES UNTIL COMPLETION OF THE REQUIRED SPECIAL INSPECTIONS OR TESTS.
F. APPROVED AGENCIES SHALL KEEP RECORDS OF SPECIAL INSPECTIONS AND TESTS AND SHALL SUBMIT REPORTS OF SPECIAL INSPECTIONS AND TESTS CONFORMING TO CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE TO THE BUILDING OFFICIAL, ARCHITECT AND STRUCTURAL ENGINEER.
DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL, ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO COMPLETION OF THE APPLICABLE PHASE OF THE WORK.
G. SPECIAL INSPECTIONS SHALL BE PROVIDED ON A PERIODIC OR CONTINUOUS BASIS, AS STATED OR INDICATED BELOW.
[P] PERIODIC INSPECTION – PART-TIME OR INTERMITTENT OBSERVATION BY THE SPECIAL INSPECTOR OF WORK BEING PERFORMED. SPECIAL INSPECTOR SHALL BE PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. OBSERVATION OF ALL WORK (100% VISUAL) SHALL BE MADE AT THE COMPLETION OF THE WORK.
[C] CONTINUOUS INSPECTION – FULL-TIME OBSERVATION BY THE SPECIAL INSPECTOR OF WORK BEING PERFORMED. SPECIAL INSPECTOR SHALL BE PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. OBSERVATION OF ALL WORK (100% VISUAL) SHALL BE MADE AT THE COMPLETION OF THE WORK.

2 INSPECTION OF STEEL CONSTRUCTION

ITEM	FREQUENCY
1. MATERIAL VERIFICATION OF STRUCTURAL STEEL A. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360 B. FOR OTHER STEEL, IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE CONSTRUCTION DOCUMENTS	[P]
2. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, ANCHOR RODS, NUTS AND WASHERS A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS	[P]
3. MATERIAL VERIFICATION OF WELD FILLER METALS A. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATIONS IN THE CONSTRUCTION DOCUMENTS	[P]
4. INSPECTION OF HIGH STRENGTH BOLTING:	
A. SNUG-TIGHT JOINTS VERIFY CONNECTED MATERIALS HAVE BEEN DRAWN TOGETHER AND PROPERLY SNUGGED.	[P]
5. INSPECTION OF WELDING OF STRUCTURAL STEEL:	
A. FIT-UP OF FILLET AND GROOVE WELDS	[P]
B. CONFIGURATION AND FINISH OF ACCESS HOLES	[P]
C. CONTROL & HANDLING OF WELD MATERIALS	[P]
D. NO WELDING OVER CRACKED TACK WELDS	[P]
E. ACCEPTABLE ENVIRONMENTAL CONDITIONS (WIND SPEED, PRECIPITATION AND TEMPERATURE)	[P]
F. CONFORMANCE WITH WPS AND WELDING TECHNIQUES	[P]
G. VERIFY THE FOLLOWING FOR ALL SPECIFIED WELDS: SIZE, LENGTH AND LOCATION; VISUAL ACCEPTANCE CRITERIA; ARC STRIKES; WEB K-AREA WELDS FREE OF CRACKS; BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED); REPAIR ACTIVITIES	[P]
H. SINGLE-PASS FILLET WELDS </= 5/16"	[P]
6. INSPECTION OF STEEL FRAME AND JOINT DETAILS FOR COMPLIANCE:	
A. DETAILS SUCH AS BRACING AND STIFFENING	[P]
B. MEMBER LOCATIONS	[P]
C. APPLICATION OF JOINT DETAILS AT EACH CONNECTION	[P]

NOTES:
A. WELDING INSPECTION AND WELDING INSPECTOR QUALIFICATION FOR STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH AWS D1.1.
B. WELDING PROCEDURE SPECIFICATIONS (WPSS), PROCEDURE QUALIFICATION RECORDS (PQRS) FOR WPSS THAT ARE NOT PREQUALIFIED, WELDING PERSONNEL PERFORMANCE QUALIFICATION RECORDS (WPQRS) AND CONTINUITY RECORDS, AS APPLICABLE, SHALL BE SUBMITTED TO THE APPROVED AGENCY FOR REVIEW AND APPROVAL.
C. INSTALLATION OF HIGH-STRENGTH BOLTS SHALL BE INSPECTED IN ACCORDANCE WITH AISC 360 & RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS.

3 INSPECTION OF CONCRETE CONSTRUCTION

ITEM	FREQUENCY
1. INSPECTION OF REINFORCING STEEL AND PLACEMENT VERIFY GRADE, FINISH, SIZE, BAR QUANTITY, LOCATION, SPACING, COVER, HOOK LENGTHS, SPLICE LENGTHS, SPLICE LOCATIONS, BEND DIAMETERS, SURFACE CONDITIONS AND SUPPORTS.	[P]
2. INSPECTION OF ANCHORS CAST IN CONCRETE VERIFY TYPE, FINISH, DIAMETER, LENGTH, QUANTITY, EMBEDMENT LENGTH, SPACING AND EDGE DISTANCES. VERIFY USE OF PLACING TEMPLATE WHERE SPECIFIED.	[P]
3. VERIFY USE OF APPROVED DESIGN MIXTURE FOR EACH TRUCK LOAD	
4. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	[C]
5. INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES PER ACI 318 26.5.2	[C]
6. INSPECTION OF FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	[P]

4 TESTING OF STRUCTURAL CONCRETE

A. SAMPLES FOR PREPARING STRENGTH TEST SPECIMENS OF EACH CONCRETE MIXTURE PLACED EACH DAY SHALL BE OBTAINED AT THE POINT OF PLACEMENT AND SHALL AT A MINIMUM BE TAKEN AS FOLLOWS: (A) AT LEAST ONCE A DAY (B) AT LEAST ONCE FOR EACH 100 CU. YD. OF CONCRETE (C) AT LEAST ONCE FOR EACH 5,000 S.F. OF SURFACE AREA FOR SLABS OR WALLS. SAMPLING OF CONCRETE SHALL BE IN ACCORDANCE WITH ASTM C172.
B. WHEN FREQUENCY OF TESTING WILL PROVIDE FEWER THAN FIVE COMPRESSIVE-STRENGTH TESTS FOR EACH CONCRETE MIXTURE, TESTING SHALL BE CONDUCTED FROM AT LEAST FIVE RANDOMLY SELECTED BATCHES OR FROM EACH BATCH IF FEWER THAN FIVE ARE USED.
C. SLUMP: ASTM C143; ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE.
D AIR CONTENT: ASTM C231; TEST EACH COMPOSITE SAMPLE PER ASTM C231 (PRESSURE METHOD) FOR NORMAL-WEIGHT CONCRETE OR ASTM C173 (VOLUMETRIC METHOD) FOR LIGHT-WEIGHT CONCRETE.
E. TEMPERATURE: ASTM C1064; TEST EACH COMPOSITE SAMPLE AND AT 60-MINUTE INTERVALS. REQUIRED WHEN AIR TEMPERATURE IS 40°F AND BELOW OR 80°F AND ABOVE.
F. COLD WEATHER CURING: ASTM C1074; RECORD MAXIMUM AND MINIMUM CONCRETE TEMPERATURE DURING CURING PERIOD WHEN A DAILY AVERAGE AIR TEMPERATURE OF 40°F OR BELOW IS EXPECTED FOR 3 SUCCESSIVE DAYS DURING CURING PERIOD.
G. COMPRESSION TEST SPECIMENS: ASTM C31;
CAST AND CURE FOUR (4) 6X12 CYLINDER SPECIMENS OR SIX (6) 4X8 CYLINDER SPECIMENS FOR EACH COMPOSITE SAMPLE.
H. COMPRESSIVE STRENGTH TESTS: ASTM C39;
TEST ONE (1) 6X12 OR ONE (1) 4X8 SPECIMEN AT 7 DAYS
TEST TWO (2) 6X12 OR THREE (3) 4X8 SPECIMENS AT 28 DAYS
TEST ONE (1) 6X12 OR TWO (2) 4X8 SPECIMENS AT 56 DAYS IF 28-DAY TESTS DO NOT ACHIEVE THE SPECIFIED STRENGTH.
TEST SPECIMEN ACCEPTANCE CRITERIA TO BE IN ACCORDANCE WITH ACI 318

5 INSPECTION OF POST-INSTALLED ANCHORS [ANCHOR BOLTS, RODS & REINFORCING STEEL]

ITEM	FREQUENCY
1. MANUFACTURER, TYPE, DIAMETER, LENGTH AND FINISH OF ANCHOR	[C]
2. MAXIMUM SPECIFIED IMPACT WRENCH TORQUE RATING MAINTAINED FOR SCREW ANCHORS	[C]
3. ACCEPTABILITY OF BASE MATERIAL	[C]
4. INSPECTION DURING ANCHOR INSTALLATION VERIFY DRILLING METHOD, HOLE DIMENSIONS, HOLE CLEANING, ANCHOR AND ADHESIVE PLACEMENT, ANCHOR EMBEDMENT, WRENCH TORQUE, EDGE DISTANCES AND SPACING.	[C]
5. INSPECTION AFTER INSTALLATION OF ATTACHED ASSEMBLY VERIFY ANCHOR LOCATIONS, SPACING, EDGE DISTANCES, AND ANCHOR FLUSH WITH AND PERPENDICULAR TO THE RECEIVING SURFACE. VERIFY ANCHOR HEADS HAVE NOT BEEN CUT OFF AND THAT MANUFACTURER'S STAMP MARK IS READABLE AND HAS NOT BEEN DAMAGED OR OBSCURED.	[C]

NOTES:
A. MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) AND RELEVANT ICC-ES REPORTS SHALL BE USED ALONG WITH THE CONSTRUCTION DOCUMENTS TO DETERMINE COMPLIANCE.
B. CONTINUOUS INSPECTION OF ALL POST-INSTALLED ANCHORS SHALL BE REQUIRED, REGARDLESS OF WHETHER PERIODIC INSPECTION IS PERMITTED BY THE RELEVANT ICC-ES REPORTS.
C. PRIOR TO ANCHOR INSTALLATION, REVIEW AND VERIFY CONTRACTOR'S INSTALLATION PROCEDURE.
D. VERIFY THAT THE FULL CURE TIME AS OUTLINED IN THE GENERAL NOTES HAS ELAPSED PRIOR TO APPLICATION OF TORQUE OR LOAD TO ANCHOR.

6 INSPECTION OF MASONRY CONSTRUCTION

ITEM	FREQUENCY
1. VERIFY COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND APPROVED SUBMITTALS	[P]
2. AT THE START OF MASONRY CONSTRUCTION, VERIFY:	
A. PROPORTIONS OF SITE-PREPARED MORTAR	[P]
B. CONSTRUCTION OF MORTAR JOINTS	[P]
C. LOCATION OF REINFORCEMENT, CONNECTORS AND ANCHORAGES	[P]
3. DURING MASONRY CONSTRUCTION, VERIFY:	
A. SIZE AND LOCATION OF STRUCTURAL MEMBERS	[P]
B. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	[P]
C. SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT AND ANCHORAGES	[P]
D. PREPARATION, CONSTRUCTION AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F)	[P]
4. PRIOR TO GROUTING, VERIFY:	
A. GROUT SPACE IS CLEAN	[P]
B. PLACEMENT OF REINFORCING AND CONNECTORS AND ANCHORAGES	[P]
C. PROPORTIONS OF SITE-PREPARED GROUT	[P]
D. CONSTRUCTION OF MORTAR JOINTS	
5. VERIFY GROUT PLACEMENT	[C]

7 INSPECTION OF WOOD CONSTRUCTION

ITEM	FREQUENCY
1. ROOF DIAPHRAGMS:	
A. SHEATHING THICKNESS AND GRADE	[P]
B. NOMINAL SIZE OF FRAMING MEMBERS AT ADJOINING PANEL EDGES	[P]
C. NAIL DIAMETER AND LENGTH	[P]
D. NUMBER OF FASTENER LINES	[P]
E. SPACING BETWEEN FASTENERS IN EACH LINE AND AT PANEL EDGES	[P]
2. SHEARWALLS:	
A. SHEATHING THICKNESS AND GRADE	[P]
B. NOMINAL SIZE AND SPACING OF TYPICAL FRAMING MEMBERS AND AT ADJOINING PANEL EDGES	[P]
C. NAIL DIAMETER AND LENGTH	[P]
D. NUMBER OF FASTENER LINES	[P]
E. SPACING BETWEEN FASTENERS IN EACH LINE AND AT PANEL EDGES	[P]
F. LOCATION, SIZE AND TYPE OF HOLDOWNS	[P]
3. NAILING, BOLTING, ANCHORING AND FASTENING OF:	
A. DRAG STRUTS AND COLLECTORS	[P]
B. HOLD-DOWNS	[P]

8 INSPECTION OF SOILS

ITEM	FREQUENCY
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE REQUIRED BEARING CAPACITY	[P]
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	[P]
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	[P]
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF FILL	[P]
5. PRIOR TO PLACEMENT OF CONTROLLED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	[P]

NOTES:
A. THE APPROVED PROJECT GEOTECHNICAL REPORT SHALL BE USED ALONG WITH THE CONSTRUCTION DOCUMENTS TO DETERMINE COMPLIANCE.
B. DURING FILL PLACEMENT, THE SPECIAL INSPECTOR SHALL DETERMINE THAT PROPER MATERIALS AND PROCEDURES ARE USED IN ACCORDANCE WITH THE PROVISIONS OF THE APPROVED PROJECT GEOTECHNICAL REPORT

REINFORCING BAR LAP SPLICE SCHEDULE

BAR SIZE	'TOP BAR' SPLICE LENGTH	'OTHER BAR' SPLICE LENGTH
#3	27"	21"
#4	35"	27"
#5	44"	34"
#6	52"	40"
#7	77"	59"
#8	86"	66"

NOTES:
1. 'TOP BARS' ARE HORIZONTAL BARS PLACED SUCH THAT 12" OF FRESH CONCRETE IS CAST BELOW THE BAR.
2. ALL BARS THAT ARE NOT 'TOP BARS' ARE 'OTHER BARS'.
3. REFER TO THE CONCRETE MATERIAL AND SPECIFICATION NOTES FOR ADDITIONAL INFORMATION AND REQUIREMENTS

STEEL BEAM SHEAR TAB CONNECTION SCHEDULE

BEAM SIZE	NUMBER OF ¾" Ø BOLTS	SHEAR TAB THK x LENGTH	FILLET WELD SIZE
W14	3	⅜"x9"	¼"
W16	4	⅜"x12"	¼"
W18	4	⅜"x12"	¼"

NOTES:
1. MINIMUM EDGE DISTANCE = 1½" FOR ALL CONNECTED PARTS.
2. BOLT SPACING = 3".
3. STANDARD HOLES TO BE PROVIDED IN SUPPORTED WEB.
4. SHORT-SLOTTED HOLES TO BE PROVIDED IN SHEAR TAB PLATES.
5. ALL BOLTS ARE TO BE A325.

HEADER SCHEDULE

MARK	HEADER	# OF TRIMMER STUDS	# OF KING STUDS
H1	(3) 2x10	1	2
H2	(3) 11⅞" LVL	2	3
H3	(3) 14" LVL	3	3

NOTES:
1. TYPICAL HEADERS, U.N.O.
2. RE: PLAN FOR MARK LOCATIONS.
3. GLUE AND NAIL PLY'S PER TYPICAL DETAIL THIS SHEET.
4. RE: 4/S1.2 FOR LATERAL STRAPS TO BE INSTALLED AT CORNERS OF OPENINGS LOCATED WITHIN LENGTH OF SHEARWALLS INDICATED ON PLAN.

LATERAL WOOD SHEARWALL SCHEDULE

MARK	APA RATED SHEATHING	SHEATHING NAILING	SILL PLATE ANCHORS	HOLDOWN	HOLDOWN ANCHOR	HOLDOWN END STUDS/POST
SW1	15/32" (EXTERIOR FACE)	8d @ 4" o.c. (PANEL EDGES) 8d @ 12" o.c. (FIELD)	⅝"ø x 1'-0" (HOOKED) @ 24" o.c. W/ BPS5/8-6 PLATE WASHERS (RE: NOTE 13 BELOW)	HDU5-SDS2.5 W/ (14) ¼" x 2½" SDS SCREWS INTO END STUDS	⅝"ø SSTB24	(2) 2x6
SW2	7/16"	8d @ 4" o.c. (PANEL EDGES) 8d @ 12" o.c. (FIELD)	⅝"ø x 1'-0" (HOOKED) @ 18" o.c. W/ BPS5/8-6 PLATE WASHERS (RE: NOTE 13 BELOW)	HDU8-SDS2.5 W/ (20) ¼" x 2½" SDS SCREWS INTO END POST	⅞"ø x 30" PAB7-30	6x4 POST

NOTES:
1. RE: PLAN FOR SHEARWALL MARK LOCATIONS AND EXTENTS.
2. RE: PLAN AND DETAILS FOR ADDITIONAL REQUIREMENTS AND DIMENSIONAL INFORMATION.
3. SHEARWALL STUDS SHALL BE 2x6 MINIMUM @ 16" MAX. o.c.
4. PANEL EDGES AT SHEARWALLS SHALL BE FULLY BLOCKED WITH 2x6 MATERIAL.
5. RE: 5/S1.2 FOR TYPICAL SHEARWALL HOLDOWN DETAIL.
6. RE: 6/S1.2 FOR TYPICAL SSTB HOLDOWN ANCHOR DETAIL.
7. RE: 7/S3.1 FOR PAB ANCHOR DETAIL.
8. SET HEIGHT OF SSTB ANCHORS USING EMBEDMENT MARK INDICATED TO ACCOMMODATE 2x SILL PLATE.
9. SECURE ANCHORS TO FORMWORK AND ADJACENT REINFORCING BARS TO PREVENT ANCHOR FROM BEING MOVED OR MISALIGNED DURING THE CONCRETE POUR.
10. INSTALL HOLDOWN HARDWARE AND ANCHORS IN CONFORMANCE WITH ALL SUPPLIER'S SPECIFICATIONS AND RECOMMENDATIONS, USING SUPPLIER PROVIDED FASTENERS AND ACCESSORIES.
11. HOLDOWN ANCHORS SHALL BE AS SPECIFIED AND SHALL BE CAST-IN-PLACE. POST-INSTALLED WEDGE OR EPOXIED ANCHOR ALTERNATES ARE NOT ACCEPTABLE.
12. RE: 4/S1.2 FOR ADDITIONAL LATERAL STRAPS TO BE INSTALLED AT CORNERS OF OPENINGS LOCATED WITHIN LENGTH OF SHEARWALLS.
13. RE: 7/S1.2 FOR SILL ANCHOR PLATE WASHER INSTALLATION AT LATERAL SHEARWALLS.
14. SHEATHING SHALL BE PROVIDED IN 4x8 PANELS AND INSTALLED WITH LONG DIMENSION ORIENTED HORIZONTALLY.

nextlevel STRUCTURAL ENGINEERS
nlengineers.com
COLORADO LICENSED MATTHEW W. NICHOLS 36279 03-11-25 PROFESSIONAL ENGINEER

Structural Engineer
Next Level, Inc.
7186 S. Forest Lane
Centennial, CO 80122
303.260.9456

Architect
Battista Design Group, P.C.
3650 Wadsworth Blvd.
Wheat Ridge, CO 80033
Paul Battista
303.428.4895

SVA GREELEY
SHELL BUILDING
1911 59th. Avenue - Greeley, CO 80634

Principal
Matt Nichols, P.E.
303.260.9456
matt@nlengineers.com

Project Number 25-001

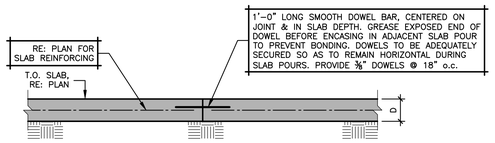
02.11.2025

Rev	Description	Date

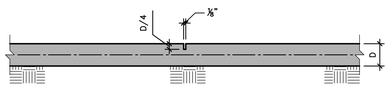
STRUCTURAL SPECIAL INSPECTIONS & SCHEDULES

S1.1

BOXED NOTES INDICATE TYPICAL NOTES, U.N.O.



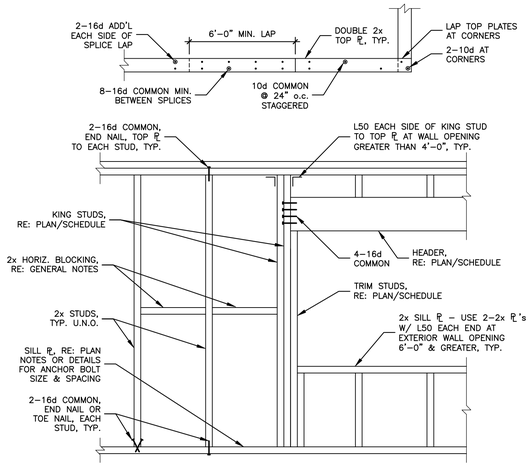
TYPICAL CONSTRUCTION JOINT



NOTES:
1. JOINTS MUST BE TOOLED OR SAW CUT AS SOON AS THE SLAB CAN SUPPORT EQUIPMENT.
2. LOCATE AT MAXIMUM SPACING OF APPROXIMATELY 12'-0" EACH DIRECTION AND AT COLUMN CENTERLINES AND RE-ENTRANT CORNERS.

TYPICAL CONTROL JOINT

1 SLAB-ON-GRADE CONSTRUCTION & CONTROL JOINT 3/4"=1'-0"



2 TYPICAL WOOD STUD WALL FRAMING DETAIL N.T.S.

NOTES: 1. HEADERS SHALL BE 2-2x8 MINIMUM, TYP. U.N.O.
2. 2x SOLID BLOCKING REQUIRED AT CEILING LINES

SAWN LUMBER (2" NOM. THICKNESS) CONNECTION SCHEDULE

PLY TO PLY CONNECTION	2 PLY	3 PLY
2-ROWS 10d NAILS @ 12" o.c.	ONE FACE	EACH FACE

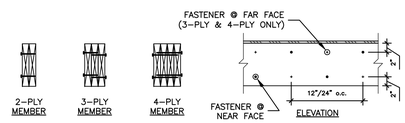
FOR COLUMNS OVER 3-PLY, ATTACH EACH ADDITIONAL PLY W/ 2 ROWS OF 10d NAILS @ 12" o.c.

LVL 1-3/4" THICK, MEMBER DEPTH <= 14" CONNECTION SCHEDULE

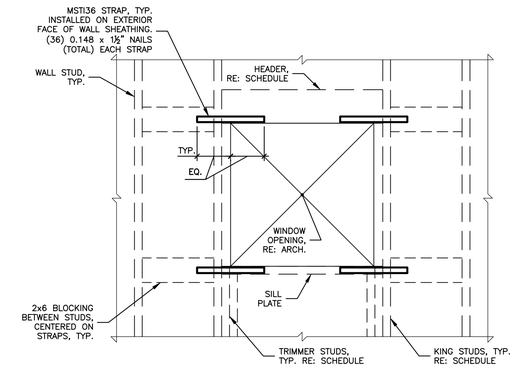
PLY TO PLY CONNECTION	2 PLY	3 PLY	4 PLY
2-ROWS 12d NAILS @ 12" o.c.	ONE FACE	EACH FACE	——
2-ROWS ¼"x6" SDS SCREWS @ 24" o.c.	——	——	EACH FACE

LVL 1-3/4" THICK, MEMBER DEPTH > 14" CONNECTION SCHEDULE

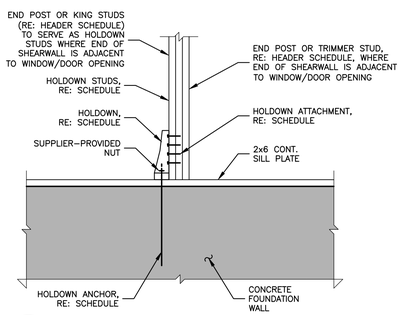
PLY TO PLY CONNECTION	2 PLY	3 PLY	4 PLY
3-ROWS 16d NAILS @ 12" o.c.	ONE FACE	EACH FACE	——
3-ROWS ¼"x6" SDS SCREWS @ 24" o.c.	——	——	EACH FACE



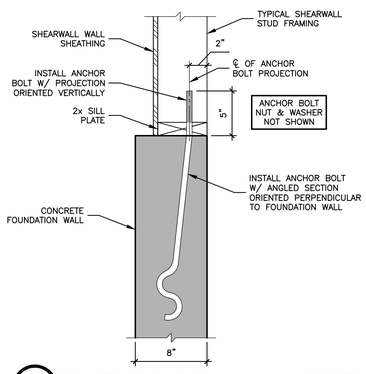
3 TYPICAL MULTIPLE WOOD PLY CONNECTIONS N.T.S.



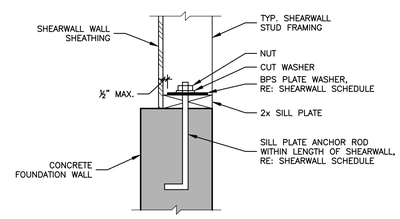
4 STRAPS AT WINDOW OPENING WITHIN LENGTH OF SHEARWALL N.T.S.



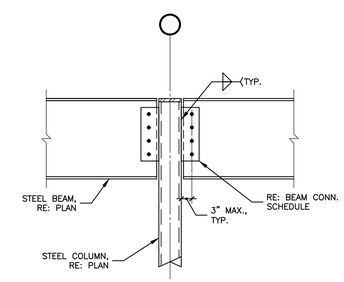
5 TYPICAL SHEARWALL HOLDOWN DETAIL 3/4"=1'-0"



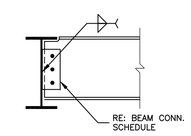
6 TYPICAL SSTB HOLDOWN ANCHOR 1-1/2"=1'-0"



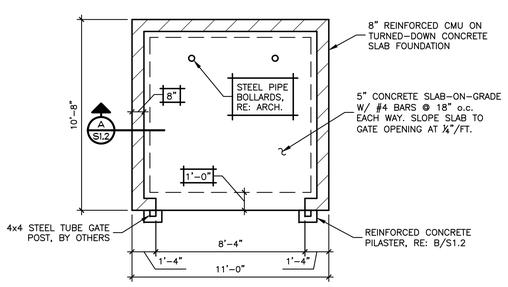
7 SILL PLATE ANCHOR ROD PLATE WASHER AT SHEARWALLS 1-1/2"=1'-0"



8 TYPICAL STEEL BEAM TO HSS COLUMN CONNECTION 3/4"=1'-0"

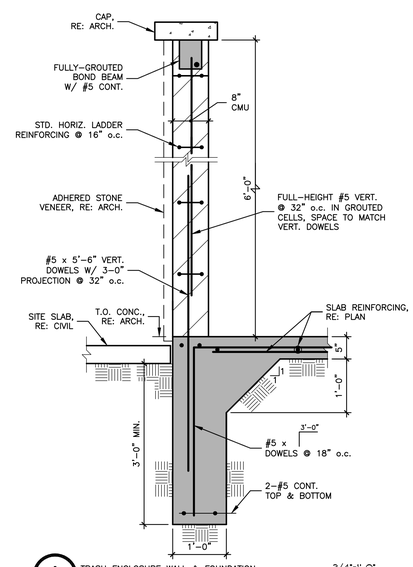


9 TYPICAL STEEL BEAM TO BEAM CONNECTION 3/4"=1'-0"

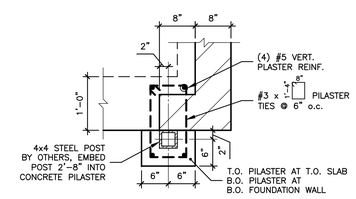


TRASH ENCLOSURE PLAN 1/4"=1'-0"

NOTES:
1. BOXED ⟷ NOTES INDICATE TYPICAL NOTES, UNLESS NOTED OTHERWISE.
2. RE: CIVIL FOR SITE PLAN LOCATION AND ORIENTATION.
3. ENCLOSURE GATE BY OTHERS.
4. SLAB & TURNED-DOWN EDGE TO BE CONSTRUCTED OVER PROPERLY PREPARED AND COMPACTED SUBGRADE, RE: PROJECT GEOTECHNICAL REPORT.



A TRASH ENCLOSURE WALL & FOUNDATION 3/4"=1'-0"



B PLAN DETAIL - TRASH ENCLOSURE GATE POST 3/4"=1'-0"

nextlevel STRUCTURAL ENGINEERS

nlengineers.com

COLORADO LICENSED MATTHEW W. NICHOLS 36279 03-11-25 PROFESSIONAL ENGINEER

Structural Engineer
Next Level, Inc.
7186 S. Forest Lane
Centennial, CO 80122
303.260.9456

Architect
Battista Design Group, P.C.
3650 Wadsworth Blvd.
Wheat Ridge, CO 80033
Paul Battista
303.428.4895

SVA GREELEY SHELL BUILDING

1911 59th. Avenue - Greeley, CO 80634

Principal
Matt Nichols, P.E.
303.260.9456
matt@nlengineers.com

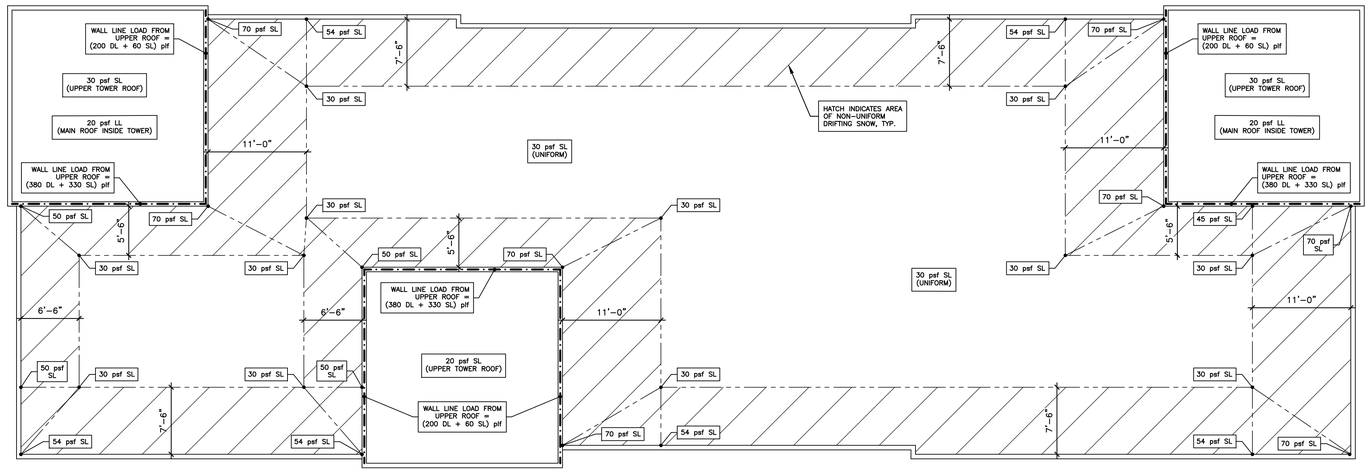
Project Number 25-001

02.11.2025

Rev	Description	Date

TYPICAL DETAILS & TRASH ENCLOSURE

S1.2

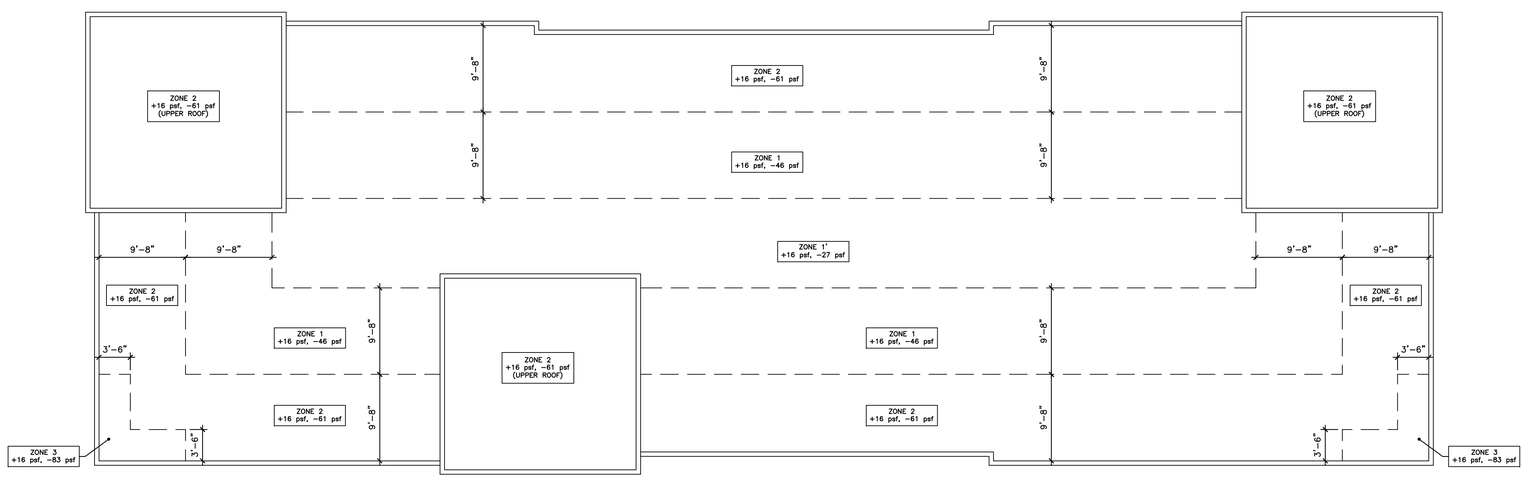


ROOF GRAVITY DESIGN LOAD DIAGRAM

N.T.S.

NOTES:

1. 'DL' INDICATES DEAD LOAD. 'LL' INDICATES LIVE LOAD. 'SL' INDICATES SNOW LOAD.
2. UNIFORM SUPERIMPOSED ROOF DL = 15 psf TO BE INCLUDED.
3. DRIFTING SNOW LOADS IN HATCHED AREAS VARY UNIFORMLY BETWEEN VALUES INDICATED.
4. RE: GENERAL NOTES ON SHEET S1.0 FOR ADDITIONAL DESIGN INFORMATION.
5. ALL DESIGN LOADS INDICATED IN THE DRAWINGS SHALL BE USED, CONSIDERING ALL APPLICABLE LOAD COMBINATIONS FROM IBC SECTION 1605.



ROOF WIND DESIGN LOAD DIAGRAM

N.T.S.

NOTES:

1. VALUES REPRESENT TOTAL (NOT NET) WIND LOADS.
2. VALUES SHOWN ARE ULTIMATE (NOT ASD) LOADS, COMPUTED PER ASCE 7-16.
3. (+) VALUES INDICATE DOWNWARD WIND LOADS. (-) VALUES INDICATED UPWARD WIND LOADS.
4. RE: GENERAL NOTES ON SHEET S1.0 FOR ADDITIONAL DESIGN INFORMATION.
5. RE: DETAIL 1/S4.1 FOR ADDITIONAL VERTICAL PARAPET KICKER WIND LOAD REACTIONS.
6. WIND LOADS SHALL BE COMBINED WITH ALL OTHER DESIGN LOADS INDICATED IN THE DRAWINGS, CONSIDERING ALL APPLICABLE LOAD COMBINATIONS FROM IBC SECTION 1605.

nextlevel
STRUCTURAL ENGINEERS

plengineers.com

COLORADO LICENSED
MATTHEW W. NICHOLS
36279
03-11-25
PROFESSIONAL ENGINEER

Structural Engineer
Next Level, Inc.
7186 S. Forest Lane
Centennial, CO 80122
303.260.9456

Architect
Battista Design Group, P.C.
3650 Wadsworth Blvd.
Wheat Ridge, CO 80033
Paul Battista
303.428.4895

SVA GREELEY
SHELL BUILDING
1911 59th. Avenue - Greeley, CO 80634

Principal
Matt Nichols, P.E.
303.260.9456
matt@nlengineers.com

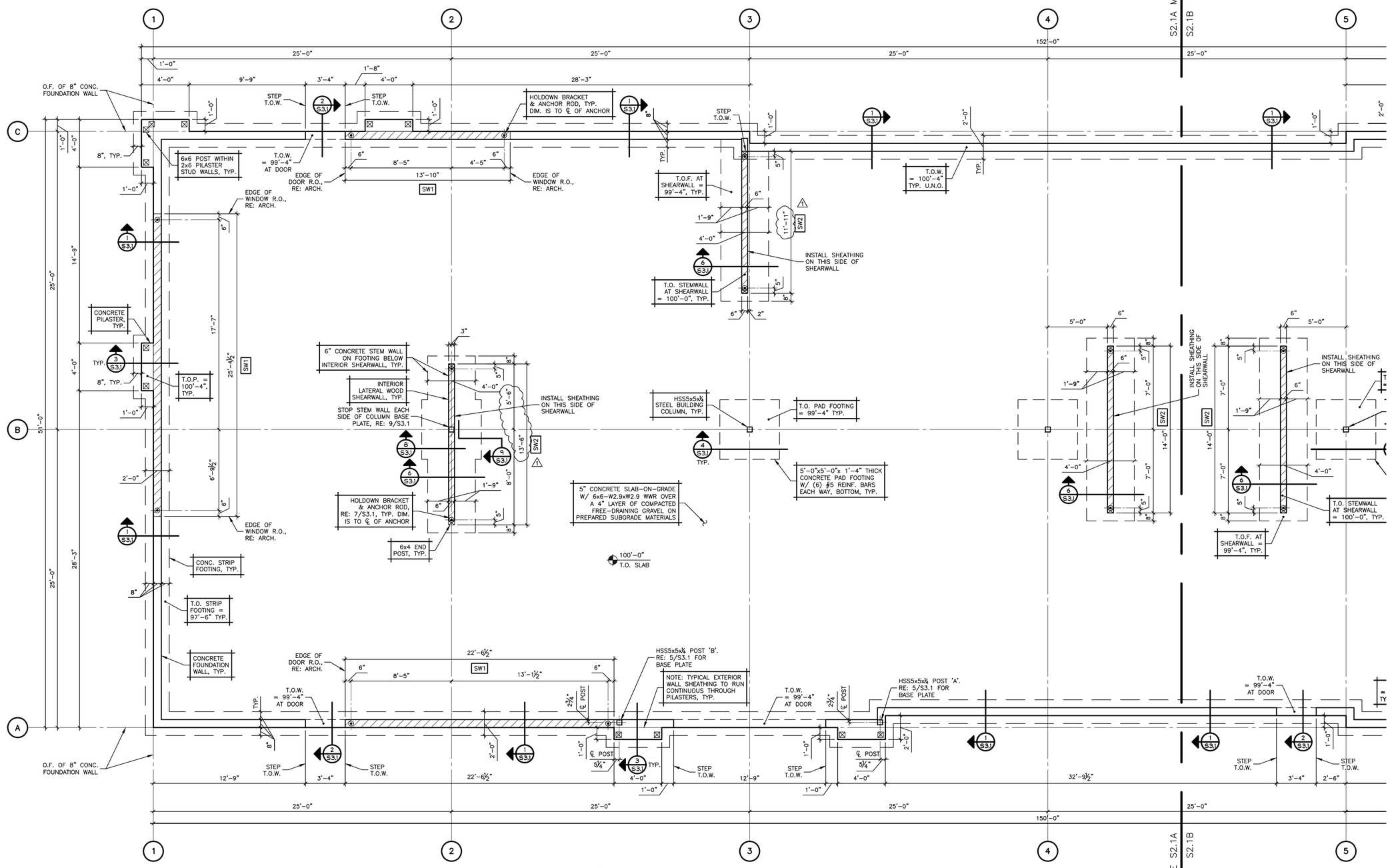
Project Number 25-001

02.11.2025

Rev	Description	Date

ROOF DESIGN LOAD DIAGRAMS

S1.3



FOUNDATION/FLOOR PLAN – NORTH

1/4"=1'-0"

NOTES:

1. BOXED NOTES INDICATE TYPICAL NOTES, UNLESS NOTED OTHERWISE.
2. TOP OF SLAB ELEVATION = 100'-0". RE: CIVIL PLANS FOR U.S.G.S. ELEVATION.
3. RE: GENERAL NOTES AND DETAIL FOR TYPICAL SLAB-ON-GRADE CONSTRUCTION AND CONTROL JOINT REQUIREMENTS.
4. TOP OF CONCRETE WALL WALL (T.O.W.) = 100'-4", UNLESS NOTED OTHERWISE.
5. TOP OF PILASTER ELEVATION (T.O.P.) = 100'-4", UNLESS NOTED OTHERWISE.
6. ALL FOOTINGS AND FLOOR SLABS SHALL BE CONSTRUCTED OVER PROPERLY CONDITIONED AND COMPACTED SUBGRADE MATERIALS. THE EXISTING FILL MATERIAL WITHIN THE BUILDING FOOTPRINT SHOULD BE REMOVED TO FIRM EOLIAN SOILS, CONDITIONED AND COMPACTED AS ENGINEERED FILL AS SPECIFIED IN THE PROJECT GEOTECHNICAL REPORT. ENGINEERED FILL SHOULD EXTEND LATERALLY 5 FEET OR MORE BEYOND THE FOUNDATION LIMITS AND COVER THE LIMITS OF THE APPURTENANCES THAT ARE ADJACENT TO THE BUILDING. REFER TO THE PROJECT GEOTECHNICAL REPORT FOR ADDITIONAL SUBGRADE PREPARATION REQUIREMENTS AND RECOMMENDATIONS.
7. COMPLETED FOUNDATION EXCAVATION SHALL BE OBSERVED BY A QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO FOUNDATION CONSTRUCTION TO VERIFY SUBGRADE CONDITIONS SPECIFIED IN THE PROJECT GEOTECHNICAL REPORT.
8. CENTER ALL PAD FOOTINGS UNDER COLUMNS, UNLESS NOTED OTHERWISE.
9. CENTER ALL STRIP FOOTINGS UNDER FOUNDATION WALLS, UNLESS NOTED OTHERWISE.
10. RE: ARCHITECTURAL AND M/E/P DRAWINGS FOR REQUIRED SLEEVES OR BLOCKOUTS IN FOUNDATION WALLS AND FLOOR SLABS.
11. RE: ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND ELEVATIONS NOT SHOWN.

nextlevel STRUCTURAL ENGINEERS
plengineers.com
COLORADO LICENSED MATTHEW W. NICHOLS 36279 03-11-25 PROFESSIONAL ENGINEER

Structural Engineer
Next Level, Inc.
7186 S. Forest Lane
Centennial, CO 80122
303.260.9456

Architect
Battista Design Group, P.C.
3650 Wadsworth Blvd.
Wheat Ridge, CO 80033
Paul Battista
303.428.4895

SVA GREELEY
SHELL BUILDING
1911 59th. Avenue - Greeley, CO 80634

Principal
Matt Nichols, P.E.
303.260.9456
matt@nlengineers.com

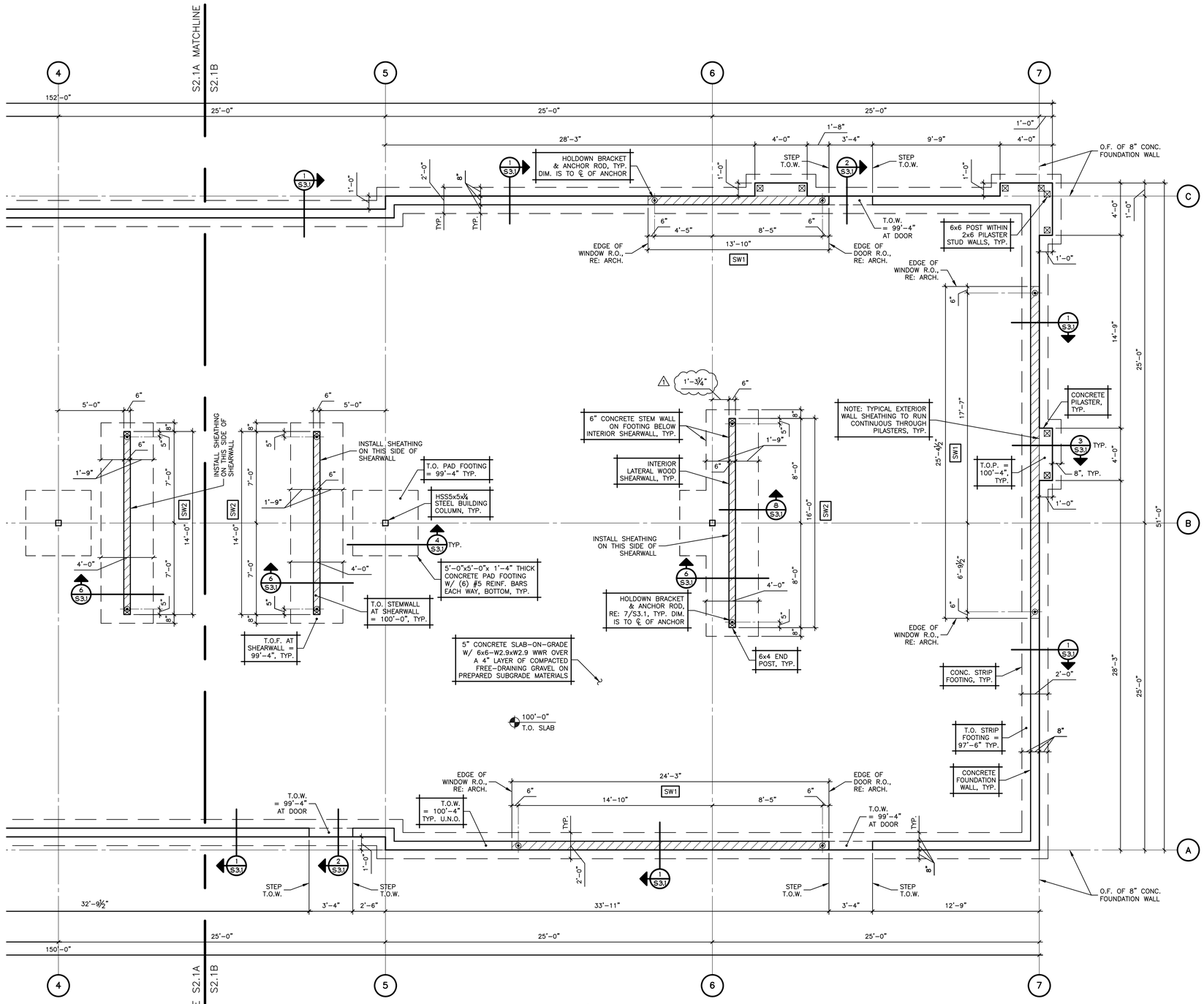
Project Number 25-001

02.11.2025

Rev	Description	Date
1	SHEARWALL REVISIONS	03.12.25

FOUNDATION / FLOOR PLAN - NORTH

S2.1A



FOUNDATION/FLOOR PLAN – SOUTH

1/4"=1'-0"

NOTES:

1. BOXED NOTES INDICATE TYPICAL NOTES, UNLESS NOTED OTHERWISE.
2. TOP OF SLAB ELEVATION = 100'-0". RE: CIVIL PLANS FOR U.S.G.S. ELEVATION.
3. RE: GENERAL NOTES AND DETAIL FOR TYPICAL SLAB-ON-GRADE CONSTRUCTION AND CONTROL JOINT REQUIREMENTS.
4. TOP OF CONCRETE WALL WALL (T.O.W.) = 100'-4", UNLESS NOTED OTHERWISE.
5. TOP OF PILASTER ELEVATION (T.O.P.) = 100'-4". UNLESS NOTED OTHERWISE.
6. ALL FOOTINGS AND FLOOR SLABS SHALL BE CONSTRUCTED OVER PROPERLY CONDITIONED AND COMPACTED SUBGRADE MATERIALS. THE EXISTING FILL MATERIAL WITHIN THE BUILDING FOOTPRINT SHOULD BE REMOVED TO FIRM EOLIAN SOILS, CONDITIONED AND COMPACTED AS ENGINEERED FILL AS SPECIFIED IN THE PROJECT GEOTECHNICAL REPORT. ENGINEERED FILL SHOULD EXTEND LATERALLY 5 FEET OR MORE BEYOND THE FOUNDATION LIMITS AND COVER THE LIMITS OF THE APPURTENANCES THAT ARE ADJACENT TO THE BUILDING. REFER TO THE PROJECT GEOTECHNICAL REPORT FOR ADDITIONAL SUBGRADE PREPARATION REQUIREMENTS AND RECOMMENDATIONS.
7. COMPLETED FOUNDATION EXCAVATION SHALL BE OBSERVED BY A QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO FOUNDATION CONSTRUCTION TO VERIFY SUBGRADE CONDITIONS SPECIFIED IN THE PROJECT GEOTECHNICAL REPORT.
8. CENTER ALL PAD FOOTINGS UNDER COLUMNS, UNLESS NOTED OTHERWISE.
9. CENTER ALL STRIP FOOTINGS UNDER FOUNDATION WALLS, UNLESS NOTED OTHERWISE.
10. RE: ARCHITECTURAL AND M/E/P DRAWINGS FOR REQUIRED SLEEVES OR BLOCKOUTS IN FOUNDATION WALLS AND FLOOR SLABS.
11. RE: ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND ELEVATIONS NOT SHOWN.

nextlevel STRUCTURAL ENGINEERS
nlengineers.com
COLORADO LICENSED MATTHEW W. NICHOLS 36279 03-11-25 PROFESSIONAL ENGINEER

Structural Engineer
Next Level, Inc.
7186 S. Forest Lane
Centennial, CO 80122
303.260.9456

Architect
Battista Design Group, P.C.
3650 Wadsworth Blvd.
Wheat Ridge, CO 80033
Paul Battista
303.428.4895

SVA GREELEY
SHELL BUILDING
1911 59th. Avenue - Greeley, CO 80634

Principal
Matt Nichols, P.E.
303.260.9456
matt@nlengineers.com

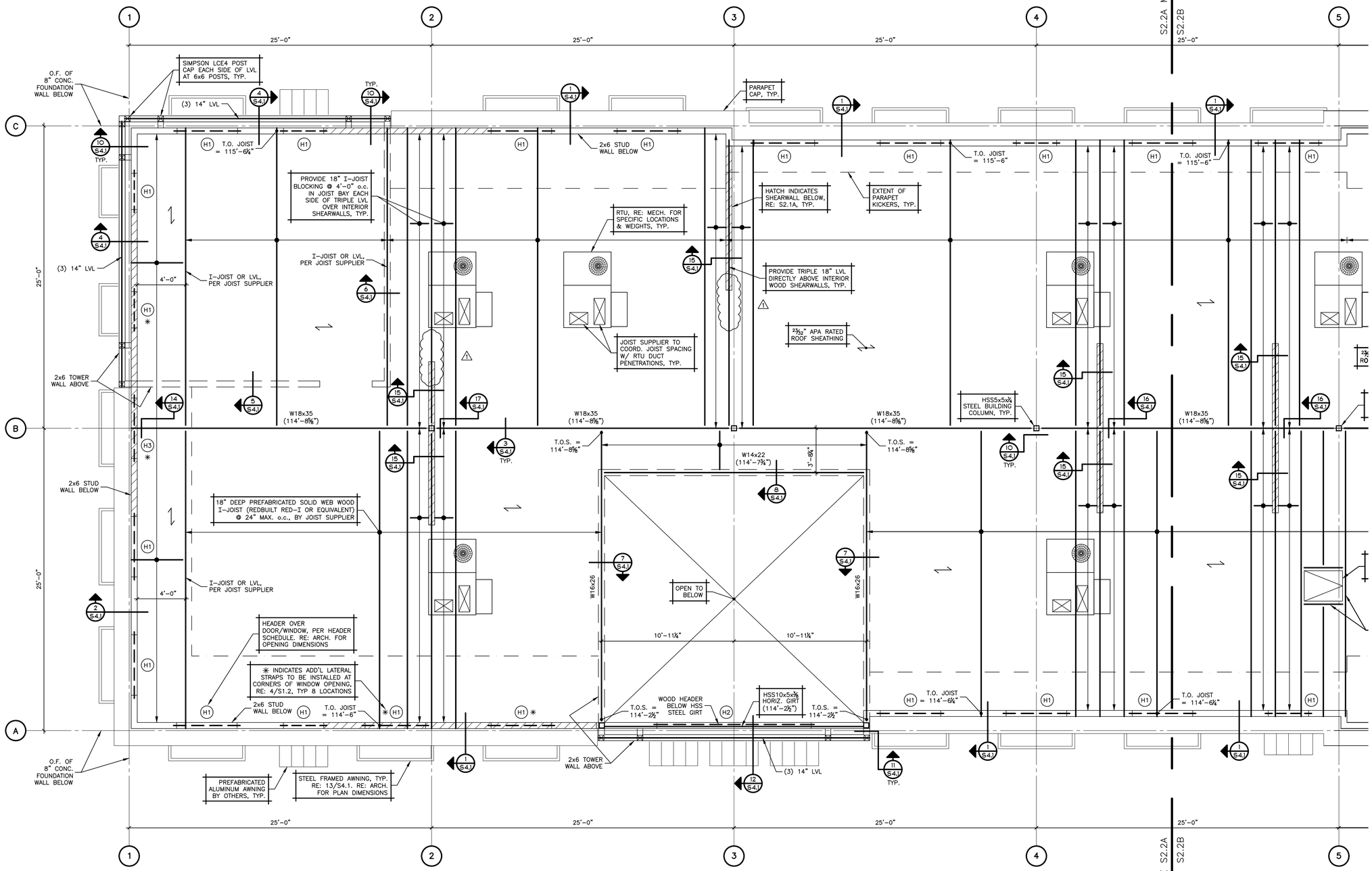
Project Number 25-001

02.11.2025

Rev	Description	Date
1	SHEARWALL REVISIONS	03.12.25

FOUNDATION / FLOOR PLAN - SOUTH

S2.1B



MAIN ROOF FRAMING PLAN – NORTH

1/4"=1'-0"

NOTES:

1. BOXED NOTES INDICATE TYPICAL NOTES, UNLESS NOTED OTHERWISE.
2. INDICATES SPAN DIRECTION OF ROOF SHEATHING. RE: GENERAL NOTES FOR FASTENING REQUIREMENTS.
3. TOP OF LEVEL STEEL BEAM ELEVATION NOTED THUS: (XXX'-XX").
4. T.O.S. INDICATES TOP OF STEEL ELEVATION OF SLOPING STEEL BEAM. SLOPE TOP OF BEAMS BETWEEN ELEVATIONS NOTED.
5. COORDINATE SIZE AND LOCATION OF MECHANICAL UNITS AND ROOF PENETRATIONS FOR MECHANICAL DUCTWORK WITH ARCHITECT, MECHANICAL ENGINEER AND SUPPLIER.
6. RE: ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND ELEVATIONS NOT SHOWN.

nextlevel STRUCTURAL ENGINEERS
nlengineers.com

COLORADO LICENSED MATTHEW W. NICHOLS 36279 03-11-25 PROFESSIONAL ENGINEER

Structural Engineer
Next Level, Inc.
7186 S. Forest Lane
Centennial, CO 80122
303.260.9456

Architect
Battista Design Group, P.C.
3650 Wadsworth Blvd.
Wheat Ridge, CO 80033
Paul Battista
303.428.4895

SVA GREELEY
SHELL BUILDING
1911 59th. Avenue - Greeley, CO 80634

Principal
Matt Nichols, P.E.
303.260.9456
matt@nlengineers.com

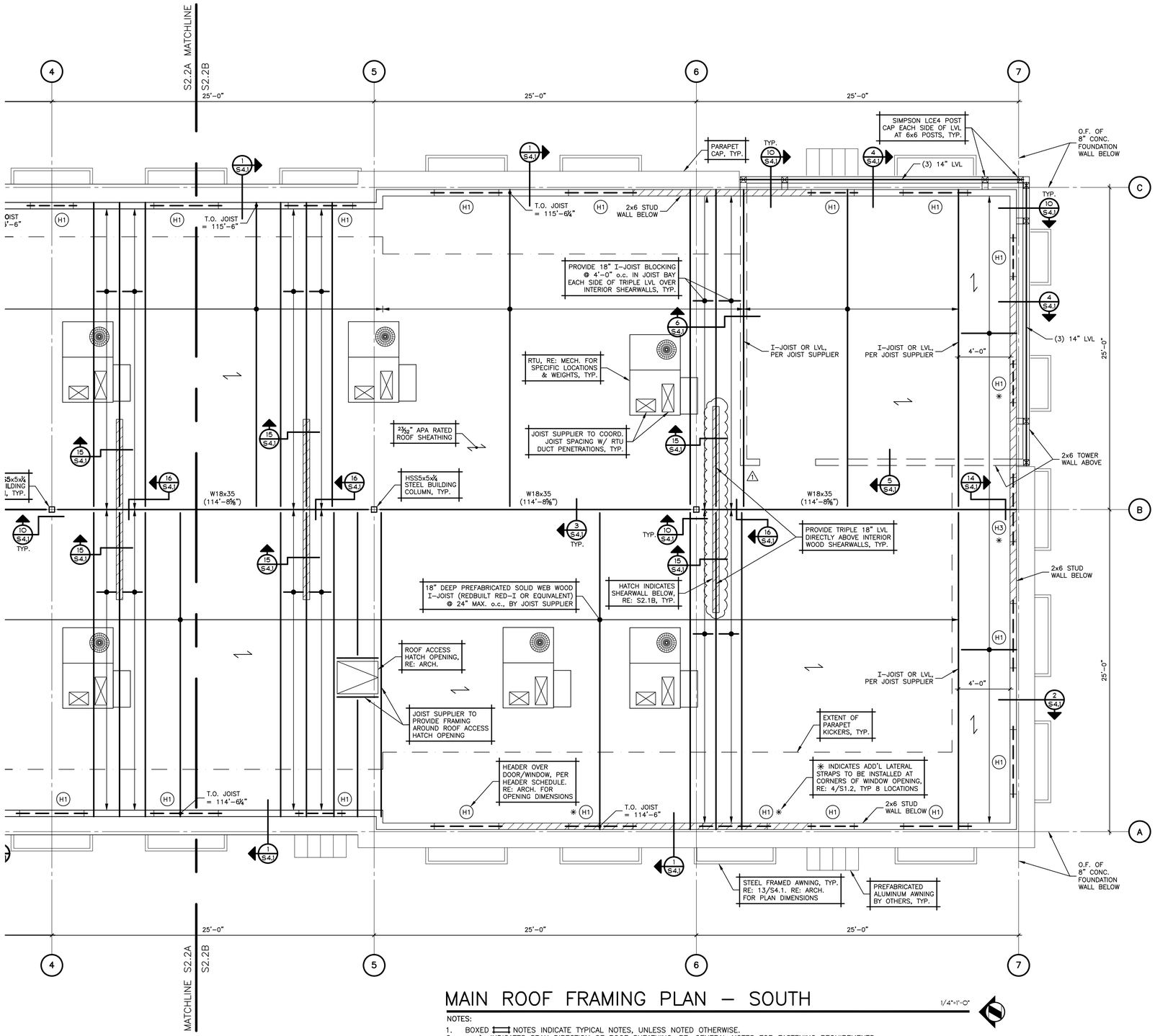
Project Number 25-001

02.11.2025

Rev	Description	Date
1	SHEARWALL REVISIONS	03.12.25

MAIN ROOF FRAMING PLAN - NORTH

S2.2A



MAIN ROOF FRAMING PLAN – SOUTH

1/4"=1'-0"

NOTES:

1. BOXED NOTES INDICATE TYPICAL NOTES, UNLESS NOTED OTHERWISE.
2. INDICATES SPAN DIRECTION OF ROOF SHEATHING. RE: GENERAL NOTES FOR FASTENING REQUIREMENTS.
3. TOP OF LEVEL STEEL BEAM ELEVATION NOTED THUS: (XXX'-XX").
4. T.O.S. INDICATES TOP OF STEEL ELEVATION OF SLOPING STEEL BEAM. SLOPE TOP OF BEAMS BETWEEN ELEVATIONS NOTED.
5. COORDINATE SIZE AND LOCATION OF MECHANICAL UNITS AND ROOF PENETRATIONS FOR MECHANICAL DUCTWORK WITH ARCHITECT, MECHANICAL ENGINEER AND SUPPLIER.
6. RE: ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND ELEVATIONS NOT SHOWN.

nextlevel STRUCTURAL ENGINEERS
nlengineers.com

COLORADO LICENSED MATTHEW W. NICHOLS 36279 03-11-25 PROFESSIONAL ENGINEER

Structural Engineer
Next Level, Inc.
7186 S. Forest Lane
Centennial, CO 80122
303.260.9456

Architect
Battista Design Group, P.C.
3650 Wadsworth Blvd.
Wheat Ridge, CO 80033
Paul Battista
303.428.4895

SVA GREELEY
SHELL BUILDING
1911 59th. Avenue - Greeley, CO 80634

Principal
Matt Nichols, P.E.
303.260.9456
matt@nlengineers.com

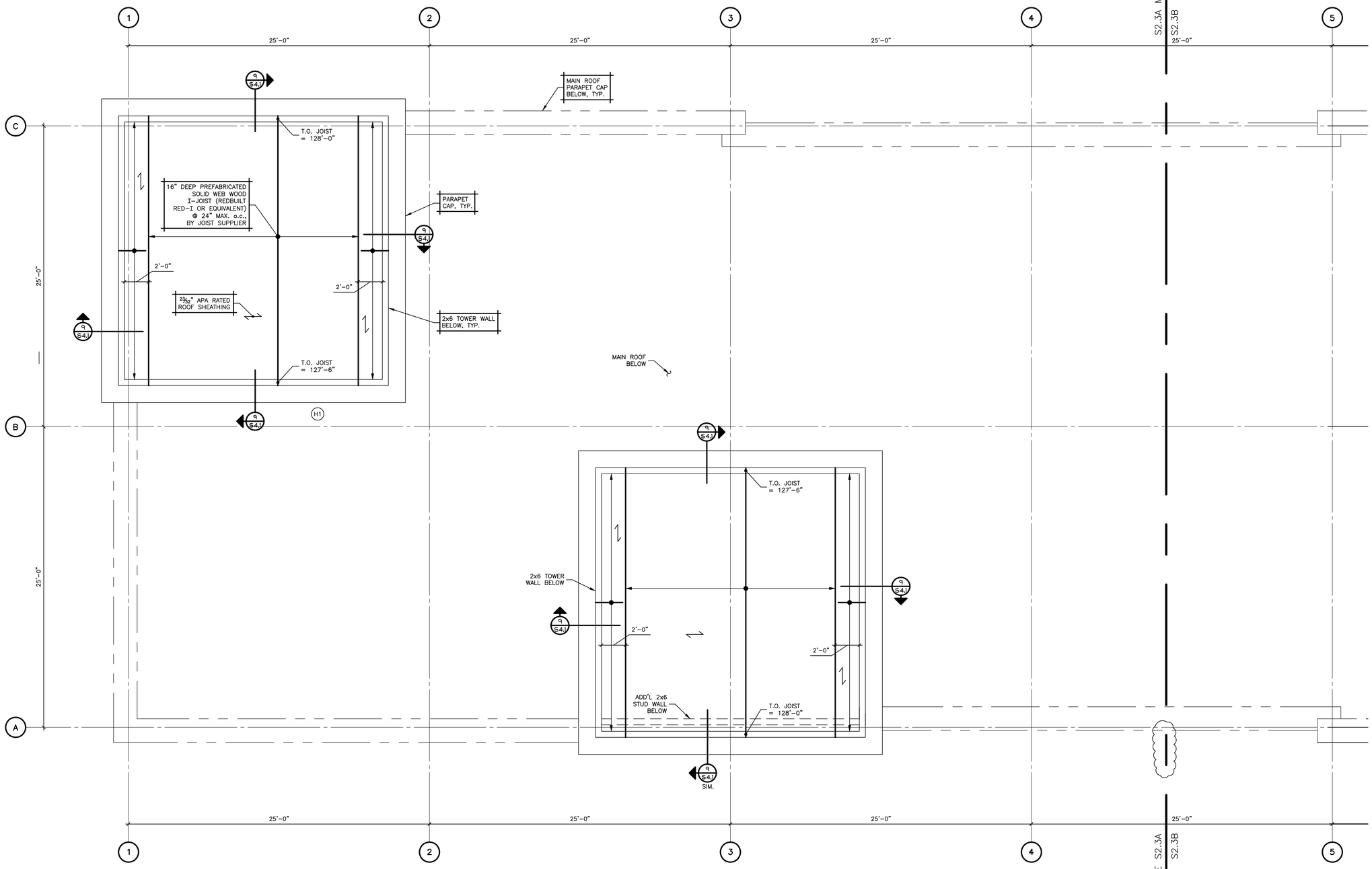
Project Number 25-001

02.11.2025

Rev	Description	Date
1	SHEARWALL REVISIONS	03.12.25

MAIN ROOF FRAMING PLAN - SOUTH

S2.2B



UPPER ROOF FRAMING PLAN – NORTH

1/4"=1'-0"

NOTES:

1. BOXED NOTES INDICATE TYPICAL NOTES, UNLESS NOTED OTHERWISE.
2. INDICATES SPAN DIRECTION OF ROOF SHEATHING. RE: GENERAL NOTES FOR FASTENING REQUIREMENTS.
3. RE: ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND ELEVATIONS NOT SHOWN.

nextlevel STRUCTURAL ENGINEERS

nlengineers.com

COLORADO LICENSED MATTHEW W. NICHOLS 36279 03-11-25 PROFESSIONAL ENGINEER

Structural Engineer
Next Level, Inc.
7186 S. Forest Lane
Centennial, CO 80122
303.260.9456

Architect
Battista Design Group, P.C.
3650 Wadsworth Blvd.
Wheat Ridge, CO 80033
Paul Battista
303.428.4895

SVA GREELEY
SHELL BUILDING

1911 59th. Avenue - Greeley, CO 80634

Principal
Matt Nichols, P.E.
303.260.9456
matt@nlengineers.com

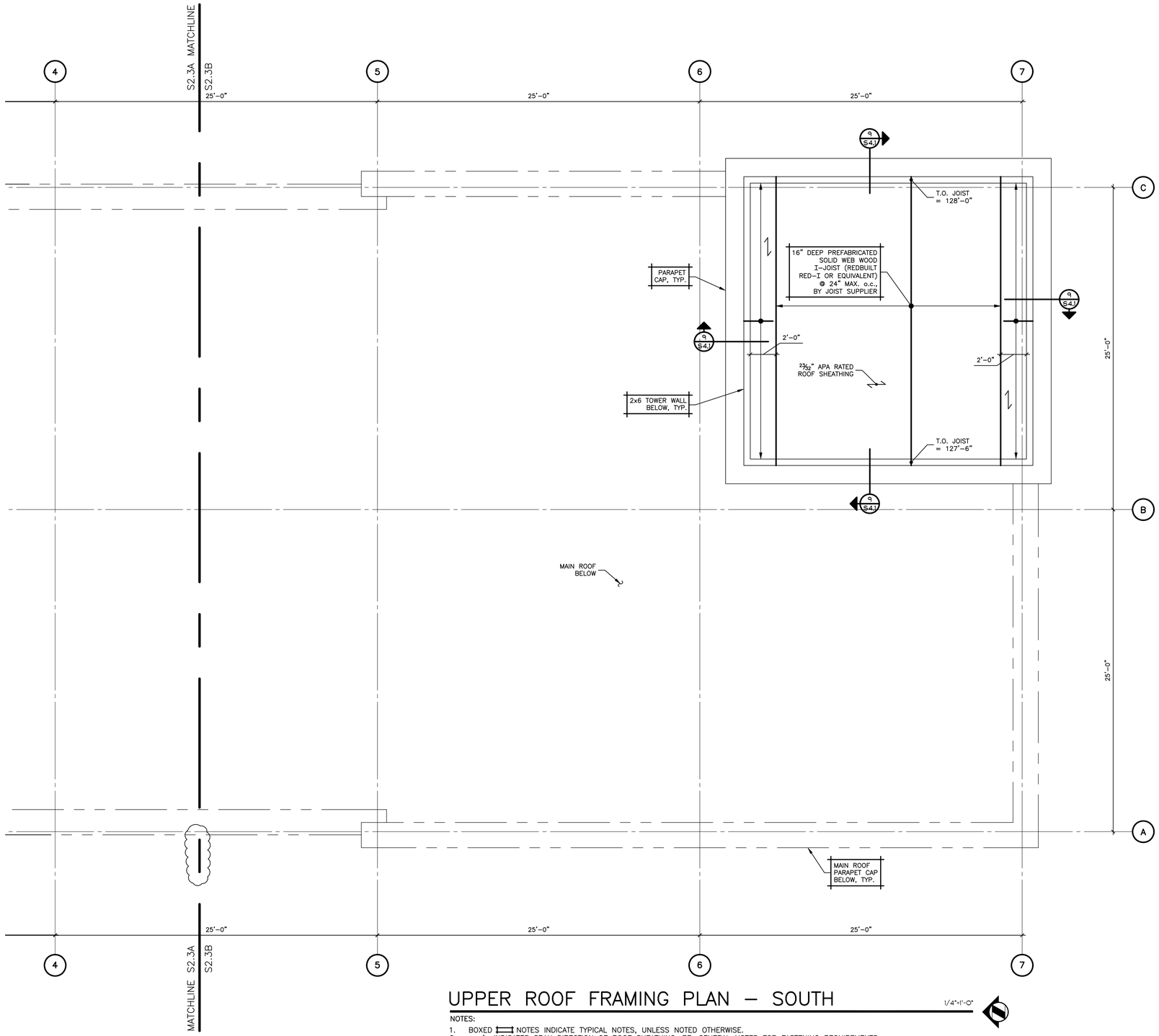
Project Number 25-001

02.11.2025

Rev	Description	Date

UPPER ROOF FRAMING PLAN - NORTH

S2.3A



UPPER ROOF FRAMING PLAN – SOUTH

1/4"=1'-0"

NOTES:

1. BOXED NOTES INDICATE TYPICAL NOTES, UNLESS NOTED OTHERWISE.
2. INDICATES SPAN DIRECTION OF ROOF SHEATHING. RE: GENERAL NOTES FOR FASTENING REQUIREMENTS.
3. RE: ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND ELEVATIONS NOT SHOWN.

nextlevel STRUCTURAL ENGINEERS

nlengineers.com

COLORADO LICENSED MATTHEW W. NICHOLS 36279 03-11-25 PROFESSIONAL ENGINEER

Structural Engineer
Next Level, Inc.
7186 S. Forest Lane
Centennial, CO 80122
303.260.9456

Architect
Battista Design Group, P.C.
3650 Wadsworth Blvd.
Wheat Ridge, CO 80033
Paul Battista
303.428.4895

SVA GREELEY SHELL BUILDING

1911 59th. Avenue - Greeley, CO 80634

Principal
Matt Nichols, P.E.
303.260.9456
matt@nlengineers.com

Project Number 25-001

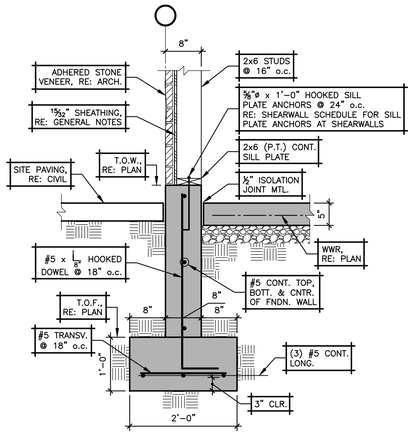
02.11.2025

Rev	Description	Date

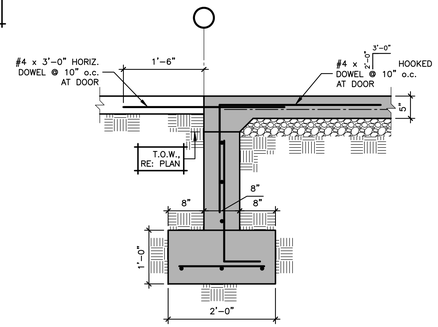
UPPER ROOF FRAMING PLAN - SOUTH

S2.3B

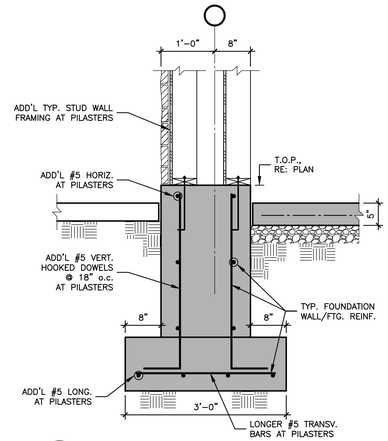
BOXED NOTES INDICATE TYPICAL NOTES, U.N.O.



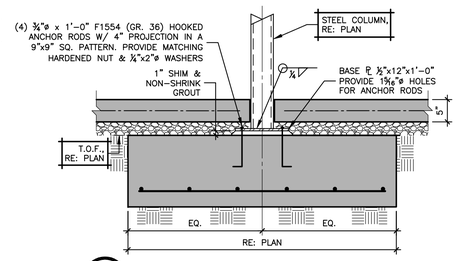
1 3/4"=1'-0"



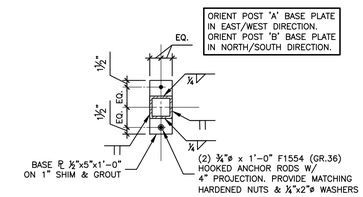
2 3/4"=1'-0"



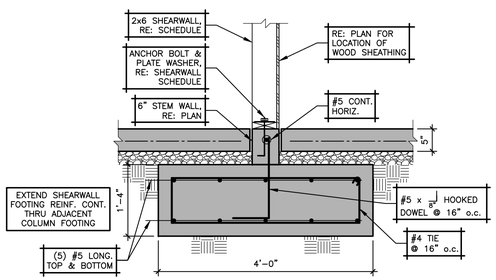
3 3/4"=1'-0"



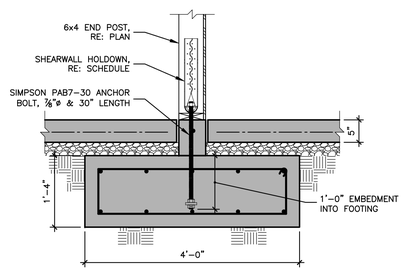
4 3/4"=1'-0"



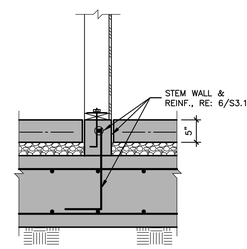
5 BASE ℄ DETAIL – HSS POST 'A' & 'B' 3/4"=1'-0"



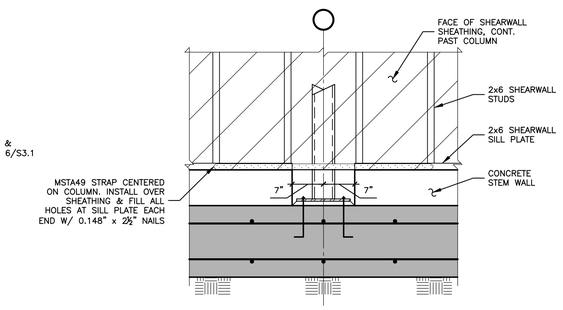
6 3/4"=1'-0"



7 3/4"=1'-0"



8 3/4"=1'-0"



9 3/4"=1'-0"

nextlevel
STRUCTURAL ENGINEERS

nlengineers.com

COLORADO LICENSED
MATTHEW W. NICHOLS
36279
03-11-25
PROFESSIONAL ENGINEER

Structural Engineer
Next Level, Inc.
7186 S. Forest Lane
Centennial, CO 80122
303.260.9456

Architect
Battista Design Group, P.C.
3650 Wadsworth Blvd.
Wheat Ridge, CO 80033
Paul Battista
303.428.4895

SVA GREELEY
SHELL BUILDING
1911 59th. Avenue - Greeley, CO 80634

Principal
Matt Nichols, P.E.
303.260.9456
matt@nlengineers.com

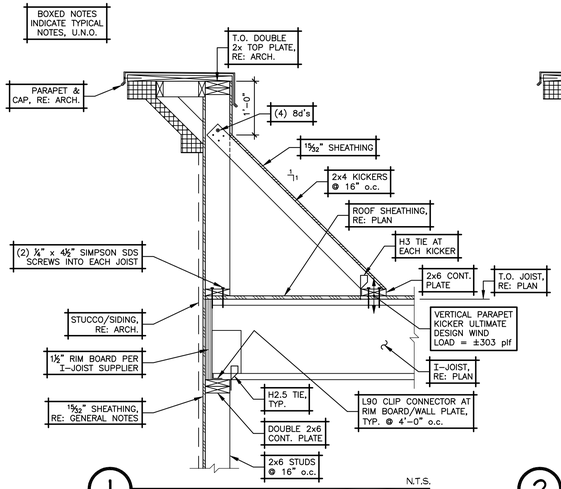
Project Number 25-001

02.11.2025

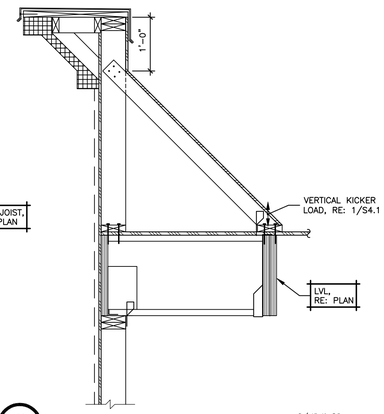
Rev	Description	Date

FOUNDATION/
FLOOR DETAILS

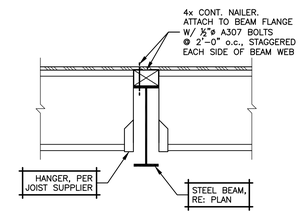
S3.1



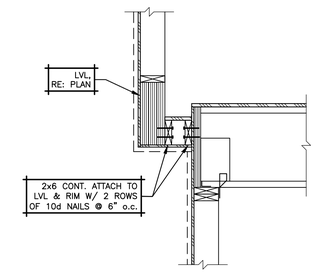
1 N.T.S.



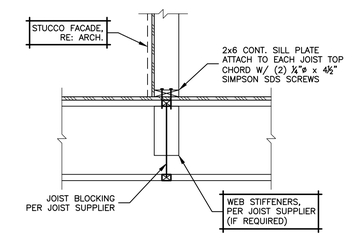
2 3/4"=1'-0"



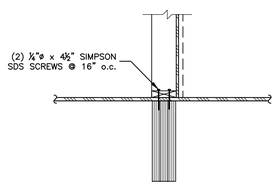
3 3/4"=1'-0"



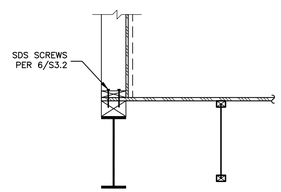
4 3/4"=1'-0"



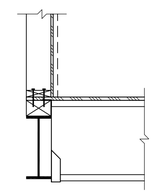
5 3/4"=1'-0"



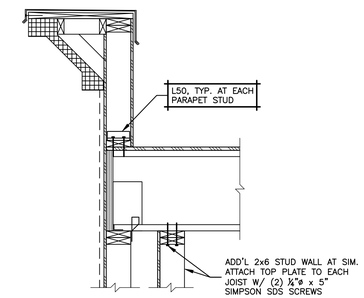
6 3/4"=1'-0"



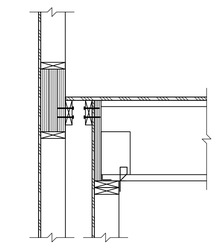
7 3/4"=1'-0"



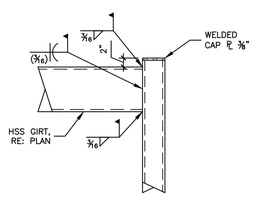
8 3/4"=1'-0"



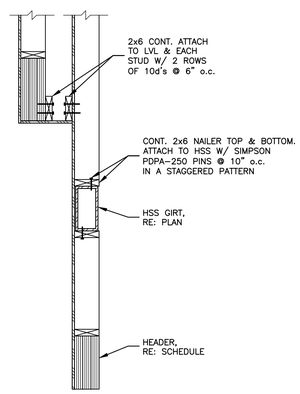
9 3/4"=1'-0"



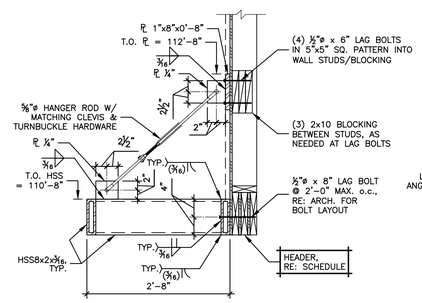
10 3/4"=1'-0"



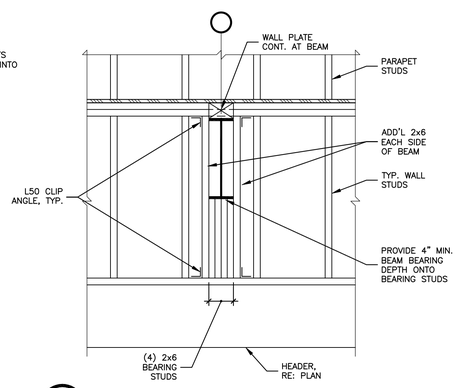
11 3/4"=1'-0"



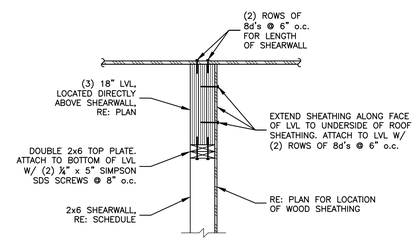
12 3/4"=1'-0"



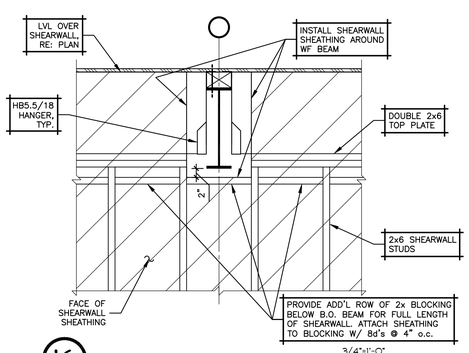
13 3/4"=1'-0"



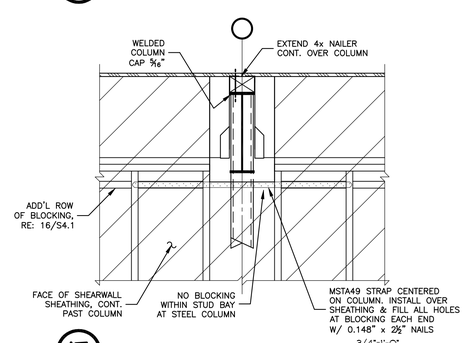
14 3/4"=1'-0"



15 3/4"=1'-0"



16 3/4"=1'-0"



17 3/4"=1'-0"

nextlevel STRUCTURAL ENGINEERS
nlengineers.com
COLORADO LICENSED PROFESSIONAL ENGINEER MATTHEW W. NICHOLS 36279 03-11-25

Structural Engineer
Next Level, Inc.
7186 S. Forest Lane
Centennial, CO 80122
303.260.9456

Architect
Battista Design Group, P.C.
3650 Wadsworth Blvd.
Wheat Ridge, CO 80033
Paul Battista
303.428.4895

SVA GREELEY SHELL BUILDING

1911 59th. Avenue - Greeley, CO 80634

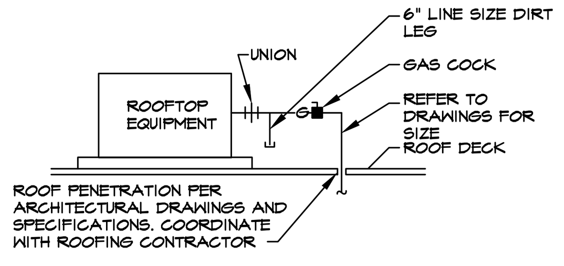
Principal
Matt Nichols, P.E.
303.260.9456
matt@nlengineers.com

Project Number	25-001
	02.11.2025

Rev	Description	Date

FRAMING DETAILS

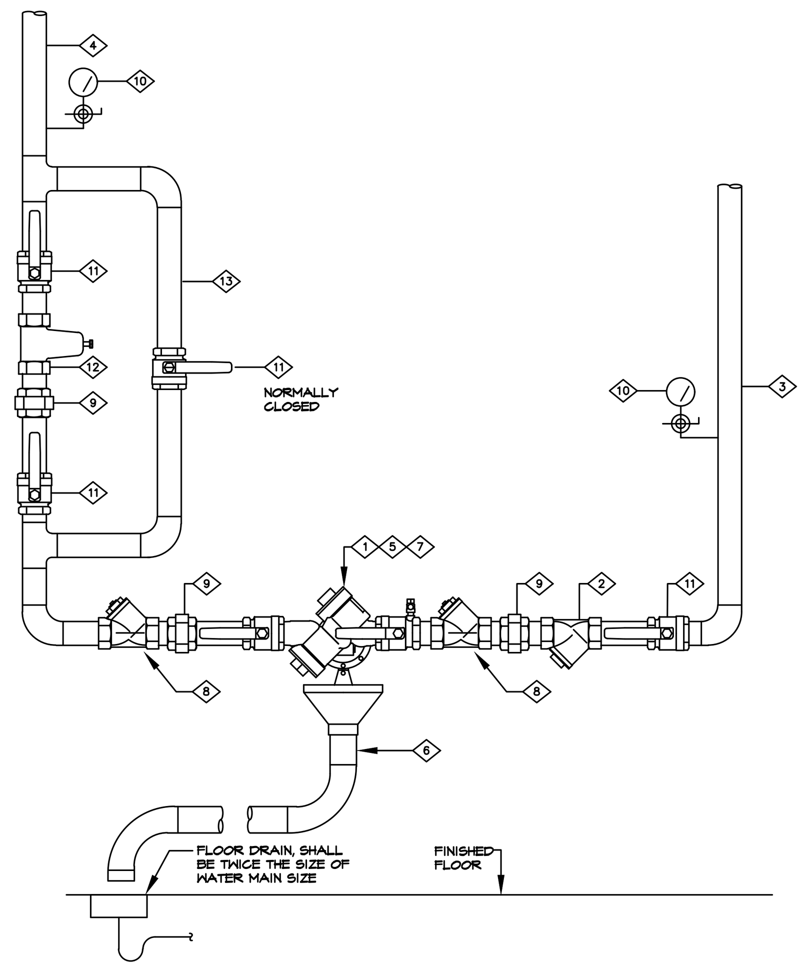
S4.1



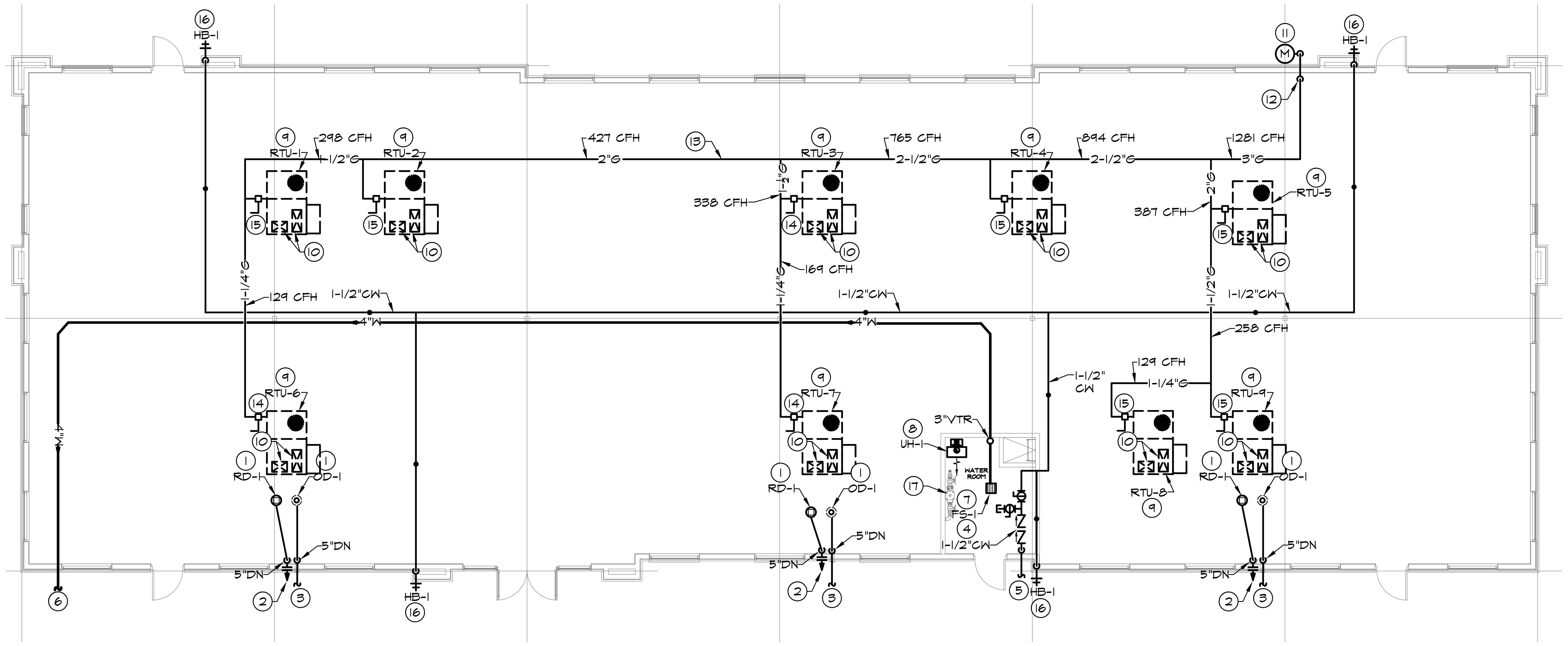
TYPICAL GAS TO RTU DETAIL
NOT TO SCALE

WORK NOTES:

1. 1-1/2" BFP-1, REDUCED PRESSURE BACKFLOW PREVENTER ASSEMBLY, FEBCO MODEL 860. PROVIDE WITH FUNNEL AND DRAIN PIPING TO FLOOR DRAIN.
2. WYE STRAINER, FEBCO MODEL 650 WITH BLOW DOWN PLUGGED.
3. 1-1/2" DOMESTIC WATER MAIN FROM BUILDING MAIN OR POINT OF ENTRY INTO BUILDING.
4. 1-1/2" WATER TO BUILDING.
5. SUPPORT BFP FROM WALL OR FROM PIPE SUPPORTS.
6. FROM AIR GAP FITTING EXTEND INDIRECT DRAIN TO FLOOR DRAIN. INDIRECT DRAIN PIPING SIZE TO MATCH FUNNEL OUTLET. PIPING TO BE BE COPPER WITH SOLDER JOINTS. SUPPORT FROM FLOOR WITH UNISTRUT AND ANCHOR SECURELY TO AVOID MOVEMENT.
7. PROVIDE TESTING AND REPORT ON BACKFLOW PREVENTERS IN ACCORDANCE WITH THE COLORADO CROSS CONNECTION STANDARDS AND STATE PLUMBING CODE REQUIREMENTS.
8. SOFT SEAT BRASS CHECK VALVE.
9. UNION, TYP. LOCATE SO VALVES CAN BE REMOVED FROM PIPING.
10. PRESSURE GAUGE.
11. FULL PORT ISOLATION BALL VALVE (TYPICAL).
12. WATTS 223 PRESSURE REGULATING VALVE. SET OUTLET PRESSURE AT 65 PSI.
13. FULL SIZE BYPASS WITH BALL VALVE (NORMALLY CLOSED). WHERE WATER PRESSURE IS LESS THAN 65 PSI CLOSE OFF PRV AND USE BYPASS.



REDUCED PRESSURE BACKFLOW PRENVENTER DETAIL
NOT TO SCALE



GENERAL NOTES

1. All work shall be in accordance with local codes. These codes shall be followed as a minimum, providing higher grades of materials and workmanship where required. All work shall conform to the requirements of authorities having jurisdiction, and local regulatory agencies.
2. This Contractor is responsible for all aspects of job-site safety. The Engineer is not responsible for means, methods and safety measures employed by the Contractor in the installation of the work depicted on these drawings.
3. Contractor shall inspect the proposed area of construction, and the construction documents prior to bid, to verify that there is adequate clearance for the proposed mechanical installation . In the event the Contractor has observed a discrepancy, or foresees a problem, he must notify the Engineer immediately. All hidden conditions, and unforseen circumstances must be brought to the attention of the Engineer and the Architect immediately when observed.
4. Contractor shall verify existing conditions prior to the fabrication of ductwork and piping components. Carefully coordinate location of equipment and ductwork with ceiling, light fixtures, structural elements, pipes, conduits, and the work of other trades.
5. The mechanical drawings indicate general design and arrangement of pipes, ductwork, equipment, and systems. Drawings are diagrammatic in nature, and do not indicate every required offsets, fittings, etc. Follow drawings as close as actual construction and the work of other trades permits. Provide all minor incidental items such as fittings, offsets, etc. as required, even if not specifically shown on the drawings, or indicated in the specifications.
6. Where the floor slab and foundation walls have already been constructed, the Contractor shall X-Ray the floor slab and foundation walls as necessary to confirm location of structural elements and objects embedded in, or attached to the slab, prior to making any slab or foundation wall penetrations.
7. Refer to the Architectural drawings and existing conditions at the site for exact location of partitions, walls, plumbing fixtures and general construction. Coordinate all grilles, registers, and louver locations with the Architectural drawings.
8. Provide all earthwork, trenching, backfill and compaction per the most recent soils report. Obtain soils report from the Building Owner/Building Management prior to the commencement of work.
9. The Contractor shall warrant all work for a period of one (1) year following acceptance of the work by the Building Owner/Building Management.

HVAC GENERAL NOTES

1. The work included under these construction documents consists of providing all equipment, labor, supervision, and construction procedures necessary for the installation of complete mechanical system(s) required by, or shown on these drawings. Contractor shall pay for all permits and/or fees required for the work.
2. All work shall be installed in accordance with local codes. All work shall conform to the requirements of authorities having jurisdiction, and local regulatory agencies.
3. This Contractor is responsible for all aspects of job-site safety. The Engineer is not responsible for means, methods and safety measures employed by the Contractor in the installation of the work depicted on these drawings.
4. The mechanical drawings indicate general design and arrangement of pipes, ductwork, equipment, and systems. Drawings are diagrammatic in nature, and do not indicate every required offsets, fittings, etc. Follow drawings as close as actual construction and the work of other trades permits.
5. All work shall be installed from field dimensions to assure that it can be installed as shown. Any conflicts shall be brought to the attention of the Architect and the Engineer immediately for resolution prior to fabrication of components, or installation of equipment. Carefully coordinate location of equipment and ductwork with ceiling, light fixtures, existing systems, structural elements, and the work of other trades.
6. Provide and connect all appliances, equipment, ductwork, piping, and accessories as specified and indicated for this project, in accordance with all applicable codes, manufacturer's published installation instructions, and as specified. Provide complete mechanical connections and terminations as indicated, and as required for complete and functional system(s). Coordinate with other trades, the Architect and conditions at the site to establish the actual location of each system.
7. The Contractor is responsible to coordinate all work under his contract, with the work of all other trades.
8. The equipment specified on these drawings has been selected as the basis for the design. The use of specified, or approved equals shall be coordinated by the Contractor as to space, configuration, and performance. Materials, equipment, and installation shall be guaranteed for a period of one (1) year after Building Owner acceptance.
9. All equipment shall be installed in accordance with the manufacturer's recommendations and published installation instructions, maintaining all necessary clearances for service and repair.
10. Installation of equipment on the roof, and all roof penetrations shall be coordinated with the structure, and with the Roofing Contractor. Access to the units shall meet the requirements of current codes as adopted by the local authority having jurisdiction for roof access.
11. Contractor shall verify existing conditions at the site prior to the purchase or fabrication of materials, components, equipment, and the commencement of work. The bid shall serve as evidence of the Contractor's knowledge of the existing conditions. Notify the Architect and the Engineer of any conflicts requiring resolution as soon as such conflicts become apparent. Carefully coordinate location of equipment and ductwork with ceiling, light fixtures, structural elements, piping, conduits, and the work of other trades.
12. Refer to the Architectural drawings for exact location of partitions, walls, and general construction. Coordinate all grilles, registers, and louver locations with the Architectural drawings.
13. Where applicable, all new ductwork shall be sheet-metal, fabricated and installed in accordance with SMACNA Standard for low velocity ducts. Dimensions shown are outside sheet-metal. Provide 1" acoustic duct liner in rectangular ducts. Exhaust ductwork shall not be acoustically lined. Rigid round ducts shall be spiral round type only. All new rigid ductwork within the area of this scope of work shall be sealed with Rexcel, high velocity duct sealer 644600W/B as made by Rexcel Coatings Corporation of El Paso, Texas, "Iron Grip", "Flexigrip" or equal. Duct tape, or any other adhesive tape, is not acceptable as sealant for rigid ducts. Flexible ducts exposed to view, located above GB ceilings, or used for exhaust, shall be corrugated soft aluminum, U.L. approved, and be 4'- 0" minimum, 8'- 0" maximum in unbroken length. Splicing of flexible ducts is not permitted. Ductwork shall be painted per the Architects instructions. (Typical)
14. Piping in exterior walls shall be located at the interior part of the wall, with insulation between the pipe and the exterior part of the wall.
15. Where applicable, all duct and pipe penetrations through walls shall be properly sealed.
16. Use turning vanes in all 90 and 45 degree duct turns in rectangular ducts.
17. The Tenant shall provide and install programmable electronic thermostats to control the new packaged rooftop HVAC units under the tenant improvement phase. Thermostats shall be as made by Honeywell model 7300 electronic programmable thermostat, complete with one averaging temperature sensor.
18. Provide and install smoke detector in the return air duct of each rooftop HVAC unit specified to provide 2,000 or more CFM. Detector shall shut down HVAC unit upon smoke detection. Detector furnished by the Electrical Contractor, installed in the duct by the Mechanical Contractor, and wired by the Electrical Contractor.
19. Line voltage wiring, and wiring required to be in conduit, by the Electrical Contractor. Low voltage wiring not required to be in conduit, by the Mechanical Contractor.

PLUMBING SPECIFICATIONS AND GENERAL NOTES

1. All plumbing work shall be performed in accordance with the latest edition of the International Plumbing Code (IPC), International Mechanical Code (IMC), International Fuel Gas Code (IFGC), and as adopted by the local authorities having jurisdiction, as required by the State of Colorado and the amendments of local authorities having jurisdiction.
2. Prior to installation of any piping, this Contractor shall verify that the piping can be routed as shown in coordination with Contractors of other divisions of the work and the physical constraints of the Structural and Architectural work.
3. This Contractor shall furnish all labor, materials, tools, supervision and equipment required to complete the plumbing work as shown on the plumbing drawings. Provide all items such as fittings, hangers, insulation, and accessories required as part of the work even though not indicated. Drawings are diagrammatic in nature, and do not show all fittings, riser nipples, arm-overs, hangers, etc. Plumbing drawings are schematic and are not to be scaled. Refer to the Architectural Drawings for dimensions.
4. This Contractor shall maintain at the site one (1) copy of all drawings in good order and record changes made during the construction. Upon completion of work, this Contractor shall prepare and submit to the Owner a reproducible "As-Built" drawing.
5. Provide sleeves for all pipes passing through concrete walls and floors. Provide chrome plated escutcheons for piping penetrations through ceilings, walls and floors where piping is exposed, in order to connect to equipment or fixtures in finished areas. Conceal all other work in finished areas.
6. This Contractor shall not cut through structural members without written consent from the Structural Engineer and the General Contractor.
7. This Contractor shall secure and maintain for the term of this contract all insurance policies or coverage as required by contract and the laws of the State.
8. Coordinate all work with the work of other trades to insure that all work can be installed in an expedient and workmanlike manner. This Contractor shall cooperate with other Contractors in the placement of work to avoid conflicts and to maintain project progress. The General Contractor shall be advised of all conflicts.
9. This Contractor shall obtain permits and pay fees associated with the plumbing system installation. This Contractor shall also be responsible for arranging plumbing inspections with the appropriate building officials.
10. This Contractor is responsible for excavation required for plumbing work. When in-filling excavations, compact to 95% AASHTO Proctor density in 6 inch maximum layers at optimum moisture content. Should any settlement occur within the first year, this Contractor shall rework to original elevation and resolve any damage incurred to the Owner's satisfaction.
11. All materials, equipment and devices furnished by this Contractor shall be guaranteed to be free from mechanical defects or faulty workmanship for a period of one year from date of acceptance by Owner.
12. Permanently seal around all pipe penetrations through foundation walls.
13. Properly seal fire rated wall penetrations with fire stopping materials as specified by the Architect where applicable. (Division 7).
14. Provide testing in accordance with the International Plumbing Code and General Conditions of the Contract. Conduct testing on piping and related systems in accordance with the referenced code, the State of Colorado, local jurisdiction and the latest standards.
15. Hangers, supports, and components shall be factory fabricated according to MSS-SP-2009. Pipe supports shall be adjustable band hangers, similar and equal to B Line Fig. B 3172 and Fig. B 3172 CT, with zinc electroplating for steel pipe, and copper electroplating for copper tube.
16. Insulation shall have a flame spread rating of 25 or less and a smoke developed rating of 50 or less and shall be manufactured by Certainteed, Knauf or Owens-Corning. All potable cold water shall be insulated with 1/2" thick and all potable hot water shall be insulated with 1" thick fiberglass pipe insulation and vapor barrier. Minimum thermal conductivity shall be 0.3 at 200oF.
17. Soil, waste and vent pipes and fittings below grade shall be service weight hub and spigot cast iron with neoprene gaskets or schedule 80 PVC pipe.
18. Soil and Waste above grade: DWV copper, service weight cast iron soil pipe with no-hub fittings, or Schedule 40 PVC pipe.
19. Potable water piping routed within the building shall be type "L" copper tube with wrought copper fittings and 95% tin, 5% antimony soldered joints. All potable water piping within the building shall be insulated. Insulation shall be covered with all-service jacket. Potable water piping under the floor slab and outside the building shall be type K copper without joints. When joints are necessary, they shall be braised. It may be necessary to install vinyl wrapping for copper pipes below grade if there is reason to believe that the soil is corrosive.
20. Natural gas piping 2" and larger shall be black steel Sch. 40 ASTM A53, type S grade B pipe for butt weld, and fittings to be seamless carbon steel butt weld, ASTM A234; 1-1/2" and smaller: Sch. 40 black steel ASTM with 150 lb. malleable iron fittings and threaded joints. Concealed gas pipe shall have welded joints. Gas piping shall be painted per the building standards.
21. Provide valves with proper pressure rating and application determined by the system type and working pressure. The following manufactures are acceptable: Apollo, Milwaukee, Nibco, Dezurik or equal.
22. Provide a pressure reducing station with strainers and ball valves at the domestic water service entry if the water service pressure exceeds 60 psi.
23. All condensing appliances located inside the building shall have condensate drainage properly piped into the adjacent floor drain.
24. Soil, waste and vent systems shall be air pressure tested at 10 psig for 30 minutes with no leaks. Potable water pipes, valves, and fittings shall be disinfected , and air pressure tested at 125 psig for 60 minutes with no drop in pressure. Natural gas systems shall be tested at 100 psig air pressure for three (3) hours with no drop in pressure, with joints tested using standard soap and brush inspection.
25. Storm drainage piping above ground: no-hub cast iron service weight, cispi 301, with joints made of neoprene gaskets and stainless steel clamp and shield assemblies.
Below ground: service weight cast iron, class b, astm a74, hub and spigot, cispi hsn compression type with astm c564 neprene gaskets.

HVAC EQUIPMENT

Rooftop HVAC unit selection is based on Carrier. Trane and York may bid equal equipment. All packaged rooftop HVAC units above 5.0 Ton nominal capacity shall be equipped with power exhaust. Rooftop HVAC units shall be provided with insulated factory roof curb, belt drive, hail guards and coil guards. All units shall be equipped with single point enthalpy controlled economizer cycle.

Contractor shall install formed "P" trap with minimum depth of 2" on all rooftop HVAC units condensate drain connection. Condensate shall daylight on roof. All units shall be furnished with standard factory color, and shall be clearly marked as to the area they serve per the requirements of the International Mechanical Code (IMC). All cooling capacities listed are at 5300 feet above sea level

ROOFTOP HVAC UNIT (RTU-1, 2, 4, 5, 8 AND 9)
Carrier single package rooftop unit model 48JCRV04F2M5-3U4F0.
Gross sensible cooling capacity: 32,490 BTUH
Gross total cooling capacity: 26,800 BTUH
1,200 CFM at 1.0" w.g. ESP, 81oF db/62oF wb EAT and 95oF ambient.
Gas fired heating section input: 115 MBH. Output: 82 MBH at altitude.
Electrical Data: MCA: 22.0 Amps. MOCP: 30 Amps at 208-3-60.
Approximate operating weight: 961 lbs.
1)Provide staged fan with EC Motor and powered exhaust.
2)Provide hinged access doors.
3)Provide 14" roof curb.
4)Provide louvered condenser coil hail guard.
5)Provide factory installed convenience outlet.
6)Provide installed fused disconnect.
7)Provide return air smoke detector.
8)Provide 100% design supply low leak economizer with fault protection. Provide high-limit shutoff.
9)Provide Connectastat programmable thermostat with 5 degree dead band.
10)Provide SEER of 20.0 minimum.

Fan speed shall be adjusted to deliver 1,200 CFM. Blance outside air to 300 cfm. Install smoke detector in the return air duct of the unit. Detector shall be provided by the Electrical Contractor, installed in the duct by the Mechanical Contractor, and wired by the Electrical Contractor. Smoke detector shall be compatible with, and connected to the building smoke control system where applicable. The smoke detector shall shut down unit upon smoke detection per section 606 of the International Mechanical Code (IMC).

ROOFTOP HVAC UNIT (RTU-3, 6 AND 7)
Carrier single package rooftop unit model 48LCF0052N5-0N5C0.
Gross sensible cooling capacity: 41,300 BTUH
Gross total cooling capacity: 41,300 BTUH
1,600 CFM at 1.0" w.g. ESP, 81oF db/62oF wb EAT and 95oF ambient.
Gas fired heating section input: 150 MBH. Output: 91 MBH at altitude.
Electrical Data: MCA: 32.0 Amps. MOCP: 45 Amps at 208-3-60.
Approximate operating weight: 873 lbs.
1)Provide staged fan with EC Motor and powered exhaust.
2)Provide hinged access doors.
3)Provide 14" roof curb.
4)Provide louvered condenser coil hail guard.
5)Provide factory installed convenience outlet.
6)Provide installed fused disconnect.
7)Provide return air smoke detector.
8)Provide 100% design supply low leak economizer with fault protection. Provide high-limit shutoff.
9)Provide Connectastat programmable thermostat with 5 degree dead band.
10)Provide SEER of 19.0 minimum.

Fan speed shall be adjusted to deliver 2,000 CFM. Blance outside air to 500 cfm. Install smoke detector in the return air duct of the unit. Detector shall be provided by the Electrical Contractor, installed in the duct by the Mechanical Contractor, and wired by the Electrical Contractor. Smoke detector shall be compatible with, and connected to the building smoke control system where applicable. The smoke detector shall shut down unit upon smoke detection per section 606 of the International Mechanical Code (IMC).

ELECTRIC UNIT HEATER (UH-1)
QMark model MUH-03-81 with adjustable discharge louvers, built-in integral thermostat and optional wall bracket model MMB-10. Install unit suspended from the wall, immediately below the ceiling. 3.0 kW at 208 V-1-60, 350 CFM. Bottom of unit heater shall be at no more that 8'-0" AFF. Approximate dimensions: 14" W x 16" H x 7.5" D. Approximate operating weight: 27 lbs. Thermostat shall be set to 50°F (Adjustable).

PLUMBING FIXTURES AND EQUIPMENT

NOTE: Final selection, and approval of all plumbing fixtures is the responsibility of the Building Owner. The following fixture specifications represent the Engineers understanding of the required fixtures. These specifications shall be reviewed by the Building Owner. Contractor shall not place any purchase orders for the fixtures prior to obtaining written approval from the Building Owner.

FLOOR SINK (FS-1): Josam model 49000 indirect floor sink waste receptor. 8" square by 6" deep acid resistant porcelain enameled interior, and nickel bronze grate. Flashing flange and removable Lumaloy dome bottom strainer. Provide complete with cast iron "P" trap, and half grate configuration, unless shown otherwise.

ROOF DRAIN (RD-1): J.R. Smith model 1470-NB or equal. See plans for size.

OVERFLOW DRAIN (OD-1): J.R. Smith model 1070 or equal. See plans for size.

BACKFLOW PREVENTION DEVICE (BFP-1): Febco 1-1/2" reduced pressure backflow preventer model 825-Y complete with discharge drain funnel, test cocks and optional ball valve shut-offs. Install bronze Y strainer upstream of the device.

HOSE BIBB (HB-1): Woodford Model B-65 freezeless wall hydrant with chrome finish brass casing with hinged locking cover and 3/4" hose connection outlet and integral vacuum breaker.

All plumbing fixtures must be approved by the Building Owner prior to placement of the purchase order. Provide and install all anchors, supports, traps and trim, for a complete installation. Provide stop valves on all hot and cold water connections to fixtures. Properly caulk around fixtures with silicone based caulking compound. Note: Fixtures shall be installed to meet all current ADA requirements where applicable. Where plumbing equipment and trim protrude into knee space below ADA designated lavatories and sinks, they shall be covered with safety covers as made by Brocar Products, Inc. of Cincinnati, Ohio under the trade name Trap Wrap, or as made by Truebro, Inc. of Ellington, Connecticut, under the trade name Handi-Lav-Guard.

MECHANICAL PLAN KEYED NOTES

1. Total storm drain area = horizontal area + ½ X vertical area = 3,000 sqft.
2. Terminate overflow drain with lambs tongue. Refer to architect for details.
3. Storm drain down through slab and 5'-0" outside building and connect to storm drain system. Refer to civil drawings for continuation and invert elevation.
4. Provide 1-1/2" Febco model 860 or equal, reduced pressure backflow preventer as shown. Dumping port of backflow prevention device shall be piped into adjacent floor sink. Install bronze Y strainer upstream of the device.
5. Connect new 1-1/2" potable cold water pipe to the potable water service as shown. See Civil drawings for additional information.
6. 4" sanitary waste pipe 5'-0" outside the building. Refer to the Civil drawings for information and continuation. Pipe shall slope at a minimum of 1/8" per L.F.
7. Rough-in and connect 4" waste and 1-1/2" vent to the floor sink specified.
8. Provide new electric unit heater immediately below the ceiling, complete with thermostat. Adjust front louvers to discharge the air in a downward direction. Set thermostat to 50oF.
9. Provide new packaged rooftop HVAC unit on the roof with full perimeter roof curb. Air intake shall be no less than 10'-0" from any exhaust discharge, or sanitary vent. Install formed "P" trap for condensate drain in accordance with the manufacturer's published installation instructions. Place 24" x 24" concrete paver on the roof below the condensate drain discharge. Contractor shall label unit as to the area it serves, per the requirements of current codes as adopted by the local authority having jurisdiction.
10. Supply and return air ducts duct opening to remain without ductwork under the shell package. Temporarily suspend below the unit new Carrier Connectastat electronic programmable thermostat. (Typical)
11. Contractor shall coordinate with the local utility company to install gas service. Design service for 1,140 MBH (1,281 CFH) capacity. Gas pipe sizing is based on 0.5" w.g. pressure drop and total developed length as noted in accordance with Table 402.4(2) of the International Fuel Gas Code (IFGC). Install gas meter in this location. Installation of the gas meters by the local utility company. Gas piping downstream of the meter , by this contractor. Connection to the gas meter shall occur after appliances have been connected to the gas pipe.
12. Provide new gas pipe up through to the roof. Terminate with roof jack. Properly seal roof penetration. Gas pipe routed concealed inside a wall shall have no threaded joints within the concealed space. If joints are required, they shall be welded. Coordinate riser locations with final tenant improvement drawings. (Typical)
13. Gas pipe routed on the roof. Install pipe supports per the requirements of Table 415.1 of the International Fuel Gas Code (IFGC) Typical of all gas piping on the roof.
14. Connect gas pipe to the new packaged rooftop HVAC unit. Gas pipe connection to the rooftop HVAC unit shall be made with lubricated plug valve and 6" dirt leg. Connected load: 150 MBH/169 CFH. Total developed length: 250 feet.
15. Connect gas pipe to the new packaged rooftop HVAC unit. Gas pipe connection to the rooftop HVAC unit shall be made with lubricated plug valve and 6" dirt leg. Connected load: 115 MBH/129 CFH. Total developed length: 250 feet.
16. Rough-in and connect 1/2" CW to hose bibb specified.
17. Fire service entry into the building. See the "Design-Build" fire protection contractor's drawings for additional information.

City of Greeley Colorado

SWANSON-LEVARY ENGINEERING, LLC
10080 EAST 112TH WAY
HENDERSON, CO 80640
303-660-3535
ryan@swansoneng.com

Not all dimensions appearing on this drawing have been verified. If dimensions are to be used for placement of permanent objects, and/or greater precision is needed, they must be verified prior to use.

All rights reserved. © Swanson-Levary Engineering, LLC The information contained herein is the property of Swanson-Levary Engineering LLC. This drawing shall be used only for the above referenced project and location. Any duplication, disclosure, or other use without the express written consent of Swanson-Levary Engineering, LLC is strictly prohibited. Swanson-Levary Engineering, LLC is not responsible for any claims, damages, or expenses arising out of the unauthorized use or the information contained in this document.

No	Revision / Submissions	Date

NORTH

BATTISTA DESIGN GROUP
3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

MECHANICAL PLAN

COLORADO LICENSED PROFESSIONAL ENGINEER RYAN MICHAEL SWANSON 42788 2-10-25

Designed: RMS	Project Number: 45010.0	
Drawn: RMS	Scale: 1/4"=1'-0"	
Checked: RMS	Drawing Number:	
Reviewed: RMS	M-1	
Date: FEB 2025	1 of 2	

PANEL "P1"

VOLTS: 208/120V,3PH,4W
MAINS: 600A M.L.O.
A.I.C.: 22KA

MTG: FLUSH NEMA 1
MFGR: CH/ITE/SQD/GE
TYPE: BOLT-ON

DESCRIPTION	T	KVA	BKR	CKT#		CKT#	BKR	KVA	T	DESCRIPTION
RTU-1	M	2.38	30A	1	•	2	30A	2.38	M	RTU-2
-	M	2.38		3	•	4		2.38	M	-
-	M	2.38	3P	5	•	6	3P	2.38	M	-
RTU-3	M	3.46	45A	7	•	8	30A	2.38	M	RTU-4
-	M	3.46		9	•	10		2.38	M	-
-	M	3.46	3P	11	•	12	3P	2.38	M	-
RTU-5	M	2.38	30A	13	•	14	45A	3.46	M	RTU-6
-	M	2.38		15	•	16		3.46	M	-
-	M	2.38	3P	17	•	18	3P	3.46	M	-
RTU-7	M	3.46	45A	19	•	20	30A	2.38	M	RTU-8
-	M	3.46		21	•	22		2.38	M	-
-	M	3.46	3P	23	•	24	3P	2.38	M	-
RTU-9	M	2.38	30A	25	•	26				SPACE
-	M	2.38		27	•	28				SPACE
-	M	2.38	3P	29	•	30				SPACE
SPACE				31	•	32				SPACE
SPACE				33	•	34				SPACE
SPACE				35	•	36				SPACE
SPACE				37	•	38	200A	0.90	P	SUBFEED P2
SPACE				39	•	40		0.72	P	-
SPACE				41	•	42	3P		P	-

LOAD KVA	REC	MTR	TOTAL
CONNECTED	1.6	73.9	75.5
NEC DEMAND	1.6	76.5	78.1
AMPS			217

PHASE KVA	A	=	25.5	B	=	25.4	C	= 24.6
PHASE IMBALANCE (%)	A/B	=	0.7	B/C	=	2.9	C/A	= 3.7

PANEL "P2" **

VOLTS: 208/120V,3PH,4W
MAINS: 200A M.L.O.
A.I.C.: 22KA

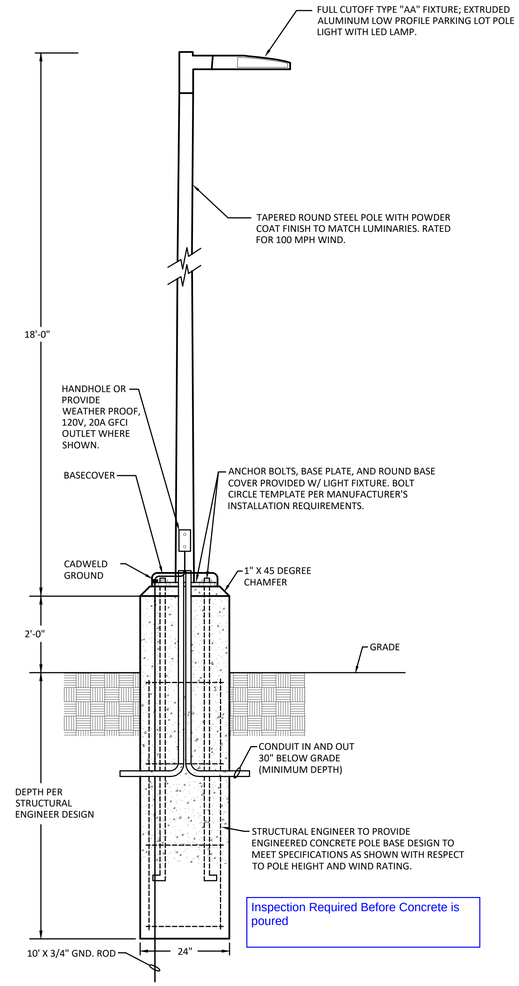
MTG: FLUSH NEMA 1
MFGR: CH/ITE/SQD/GE
TYPE: BOLT-ON

DESCRIPTION	T	KVA	BKR	CKT#		CKT#	BKR	KVA	T	DESCRIPTION
ROOF RECS	R	0.90	20A1P	1	•	2	20A1P			SPARE
ROOF RECS	R	0.72	20A1P	3	•	4	20A1P			SPARE
SPARE			20A1P	5	•	6	20A1P			SPARE
SPARE			20A1P	7	•	8	20A1P			SPARE
SPARE			20A1P	9	•	10	20A1P			SPARE
SPARE			20A1P	11	•	12	20A1P			SPARE
SPARE			20A1P	13	•	14	20A1P			SPARE
SPARE			20A1P	15	•	16	20A1P			SPARE
SPARE			20A1P	17	•	18	20A1P			SPARE
SPARE			20A1P	19	•	20	20A1P			SPARE
SPARE			20A1P	21	•	22	20A1P			SPARE
SPARE			20A1P	23	•	24	20A1P			SPARE
SPARE			20A1P	25	•	26	20A1P			SPARE
SPARE			20A1P	27	•	28	20A1P			SPARE
SPARE			20A1P	29	•	30	20A1P			SPARE
SPARE			20A1P	31	•	32	20A1P			SPARE
SPARE			20A1P	33	•	34	20A1P			SPARE
SPARE			20A1P	35	•	36	20A1P			SPARE
SPARE			20A1P	37	•	38	20A1P			SPARE
SPARE			20A1P	39	•	40	20A1P			SPARE
SPARE			20A1P	41	•	42	20A1P			SPARE
SPARE			20A1P	43	•	44				SPACE
SPARE			20A1P	45	•	46				SPACE
SPARE			20A1P	47	•	48				SPACE
SPARE			20A1P	49	•	50				SPACE
SPARE			20A1P	51	•	52				SPACE
SPARE			20A1P	53	•	54				SPACE
SPARE			20A1P	55	•	56				SPACE
SPARE			20A1P	57	•	58				SPACE
SPARE			20A1P	59	•	60				SPACE
SPARE			20A1P	61	•	62				SPACE
SPARE			20A1P	63	•	64				SPACE
SPARE			20A1P	65	•	66				SPACE
SPARE			20A1P	67	•	68				SPACE
SPARE			20A1P	69	•	70				SPACE
SPARE			20A1P	71	•	72				SPACE
SPARE			20A1P	73	•	74				SPACE
SPARE			20A1P	75	•	76				SPACE
SPARE			20A1P	77	•	78				SPACE
SPARE			20A1P	79	•	80				SPACE
SPARE			20A1P	81	•	82				SPACE
SPARE			20A1P	83	•	84				SPACE

LOAD KVA	REC	TOTAL
CONNECTED	1.6	1.6
NEC DEMAND	1.6	1.6
AMPS		4

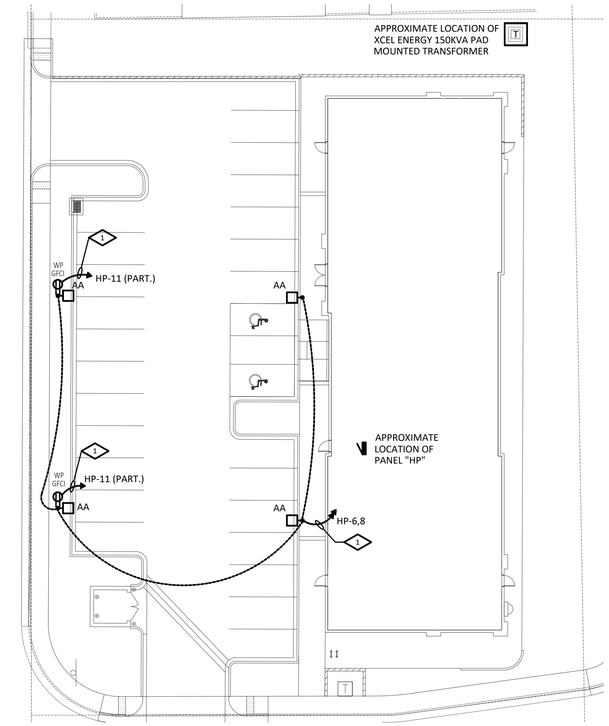
PHASE KVA	A	=	0.9	B	=	0.7	C	= 0.0
PHASE IMBALANCE (%)	A/B	=	25.0	B/C	=	0.0	C/A	= 0.0

** PROVIDE SINGLE SECTION 84-CIRCUIT PANEL.



Inspection Required Before Concrete is poured

FIXTURE TYPE "AA" POLE BASE DETAIL



NORTH

1	SITE ELECTRICAL PLAN
1" = 20'-0"	

DETAIL NOTES

1. PROVIDE (2 #10 THWN CU & #10 CU GND) 3/4"C. HOME RUN.

Light Fixture Schedule

Designation	Lamps		Fixture Characteristics	Fixture Mounting				Fixture Specification		
	# of lamps	Lamp Type	Description	Finish	Method	Ceiling Type	Recess Depth	Manufacturer	Catalog #	Voltage
AA	1	166W (21,598 Lumens) LED 5000K	20' Full Cutoff Site Pole Light With Type III Optics	Bronze	Pole Mounted: 18'-0" Pole With 2'-0" Base	N/A	N/A	McGraw Edison	GLEON SA3 C 750 U T3 BZ	208
BB	1	12W (1,180 Lumens) LED 3000K	18" Decorative Exterior Wall Sconce - Full Cut-Off - Dark Sky Compliant	Satin Bronze	Wall @ 8'-6"	N/A	N/A	Lightway	618-LED-F2B-2-A-Z1	120
CCE	1	14W LED 3000K	Full Cut-Off Exterior Egress Light With 90 Minutes of Battery Backup	Carbon Bronze	Above Door	N/A	N/A	Lumark	AXCS1A W BK	120
FE	1	35W (4,718 Lumens) LED 4000K	4' LED Strip Light	White	Surface	N/A	N/A	Metalux	4SNLED-LD5-46SL-LC-UNV-L840-CD1-U-EL14W	120
X	--	LED	Universal Mount LED Exit Sign with 90 Minute Emegency Battery Backup	White/Green	Varies	Varies	N/A	Sure-Lites	LPX70GWH	120

No	Revision / Submissions	Date

ROSSI ENGINEERING INC.
5376 S. GIBRALTAR CT.
CENTENNIAL, CO 80015
303.720.9827
VROSSI@ROSSIENGINEERING.NET

BATTISTA DESIGN GROUP
3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

SITE ELECTRICAL PLAN, POLE BASE DETAIL & SCHEDULES

COLORADO REGISTERED PROFESSIONAL ENGINEER 35418

Designed: JH	Project Number: 25-010
Drawn: JH	Scale: As Shown
Checked: VJR	Drawing Number: E1
Reviewed: VRW	
Date: 02/12/2025	1 of 4

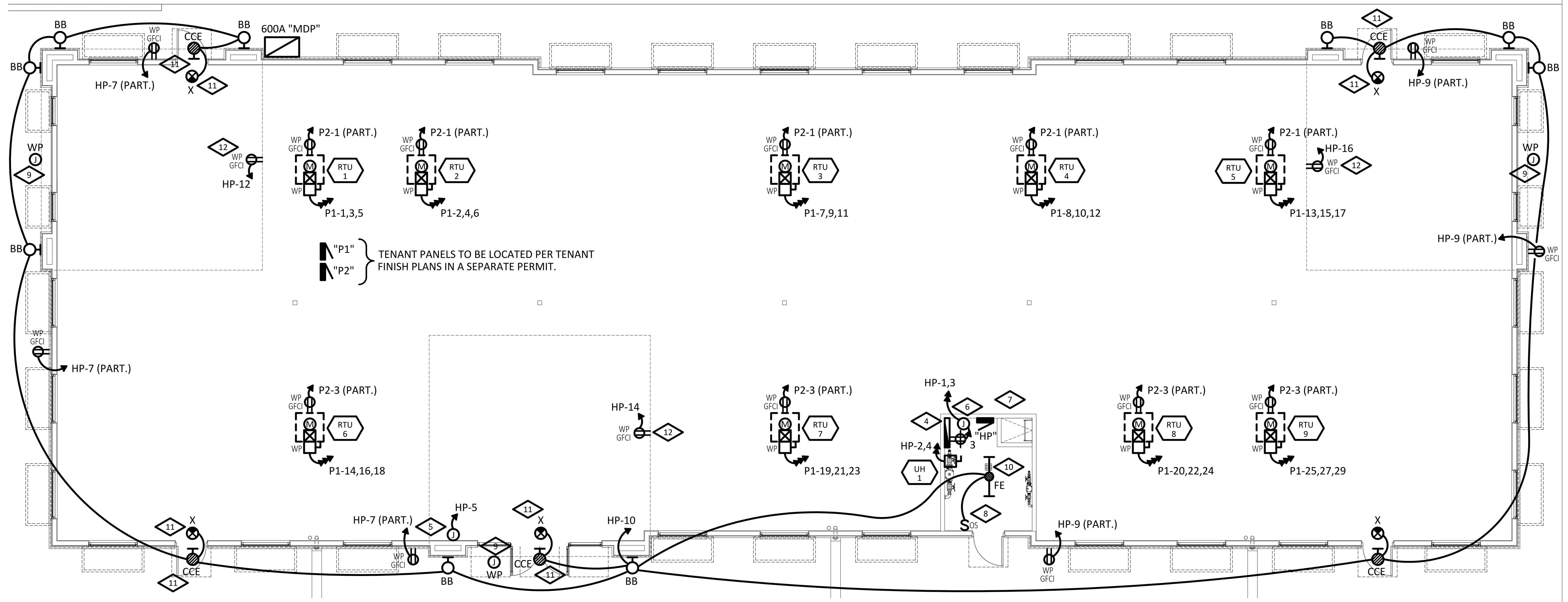
COPYRIGHT 2024 - BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.

SYMBOL LEGEND

Symbol	Description
	Distribution Equipment; Switchgear, Panelboards
	Branch Circuit Panel
	Telephone Terminal
T	Transformer
	Fused Disconnect Switch (Non-Fused When Fusing Not Required)
	Combination Starter/Disconnect Sw.
	Magnetic Starter or Contactor
M M	Meter
M	Motor Outlet and Connection
	Fused Disconnect Sw., Diagrammatic
	Circuit Breaker, Diagrammatic
2	Indicates Detail Note
RTU 21	Indicates Mechanical Equipment
22	Indicates Kitchen Equipment, Riser, or Room Number
	Circuit Run; In Walls and Above Ceiling (Concealed)
	Circuit Run; Underground or in Floor
	Circuit Run; Exposed
	Circuit Risers; Up,Down
	Home Run; Arrows Indicate Number of Circuits
	Overhead Service Entrance
B	Letter Indicates Fixture Type, See Schedule for Description
Ba	Lower Case Subscript Indicates Switching
	Shading Indicates Connection to Emergency, Egress, or Night-Light Circuit
	Fixtures Surface Mounted on Ceiling
	Fixtures Recessed in Ceiling
	Wall Mounted Fixtures
	Exit Lights; Mounting Faces and Arrows as Indicated
K	Porcelain Keyless Lampholder with 100W A19 Lamp; PC Indicates Pull Chain
	Duplex Receptacle; Wall
	Double Duplex Receptacle
	Switched Receptacle; Half, Full
IG	Isolated Ground Receptacle
AC	Above Counter Receptacle; +4" Above Top Of Backsplash
WP	Weatherproof Duplex Receptacle
GFI	Ground Fault Interrupt Duplex Receptacle
AG	Ground Fault Interrupt Duplex Receptacle; Above Counter
TR	Tamper Resistant Duplex Receptacle
	Ceiling Mtd. Duplex Receptacle
	Special Configuration Receptacle
	Duplex Receptacle; Floor
	Recessed Clock Style Receptacle
J	Junction Box; Wall
J	Junction Box; Ceiling
	Telephone Outlet; Wall
	Computer Data Outlet; Wall
	Combination Telephone & Computer Data Outlet; Wall
	Telephone Outlet; Floor
	Special Configuration Combination Floor Outlet/Box
	T.V. Outlet
Sa	Single Pole Switch; Subscripts Indicate Switching
S2	Double Pole Switch
S3 S4	Three and Four Way Switching
SP	Switch with Pilot Light
SK	Key Operated Switch
SLV	Low Voltage Switch
SOS	Occupancy Sensor Switch
OS	Ceiling Mounted Occupancy Sensor
SS	Gang Mounted Switching
	Combination Switch and Duplex Receptacle
STO	Thermal Overload Switch
D	Dimmer Switch
TC	Time Clock
P	Photo Cell
H	Hood Outlet and Connection
D	Disposer Receptacle and Connection
WM PM	Surface Raceway
	Pushbutton Stations
	Tele-Power Pole

DETAIL NOTES

1. (1) 4" CONDUIT WITH PULL ROPE RUN TO TELEPHONE PEDESTAL. VERIFY EXACT LOCATION OF TELEPHONE PEDESTAL PRIOR TO BID. 36" MINIMUM RADIUS SWEEPS. COORDINATE MAXIMUM LENGTHS AND PULL BOX REQUIREMENTS WITH PROVIDER PRIOR TO BIDS.
2. 6-POLE MECHANICALLY HELD CONTACTOR IN NEMA-1 ENCLOSURE, TORK MODEL DGUM-200A (2-CHANNEL) AND TORK ROOF MOUNTED PHOTOCELL MODEL #EPC1. MOUNT PHOTOCELL ON ROOF AND FACE NORTH. LOCATE TIMECLOCK AS CLOSE AS POSSIBLE TO PANEL.
3. PROVIDE INTERSYSTEM BONDING TERMINATION (IBT) DEVICE PER 2015 NEC 250.94. IBT IS TO BE ACCESSIBLE FOR CONNECTION AND INSPECTION, SHALL CONSIST OF A SET OF TERMINALS WITH THE CAPACITY FOR CONNECTION OF NOT LESS THAN (3) INTERSYSTEM BONDING CONDUCTORS AND NOT INTERFERE WITH OPENING THE ENCLOSURE FOR A SERVICE, BUILDING OR STRUCTURE DISCONNECTING MEANS, OR METERING EQUIPMENT. CONNECT VIA #6 AWG CU CONDUCTOR TO NEUTRAL-GROUND CONNECTION IN MAIN DISCONNECT.
4. BUILDING MAIN TELEPHONE BOARD; REFER TO TELEPHONE RISER DETAIL ON THIS SHEET FOR ADDITIONAL INFORMATION. COORDINATE FINAL LOCATION WITH TENANT FINISH PLANS.
5. PROVIDE 120V CONNECTION FOR FIRE ALARM PANEL; COORDINATE EXACT LOCATION IN FIELD.
6. PROVIDE 120-VOLT, 20-AMP CONNECTION FOR IRRIGATION CONTROLLER. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.
7. COORDINATE FINAL LOCATION OF PANEL "HP" WITH ARCHITECT PRIOR TO ROUGH-IN.
8. PROVIDE DUAL TECHNOLOGY WALL MOUNTED OCCUPANCY SENSOR FOR CONTROL OF FIXURES IN THE ROOM; WATTSTOPPER DW-100 OR EQUAL, (TYPICAL THIS SYMBOL).
9. PROVIDE WEATHERPROOF JUNCTION BOX ON EXTERIOR OF BUILDING FOR FUTURE TENANT SIGNAGE. SIGN TO BE POWERED FROM TENANTS PANEL. COORDINATE EXACT LOCATION WITH OWNER/ARCHITECT PRIOR TO ROUGH-IN.
10. EMERGENCY BATTERY PACK TO OPERATE ONLY UNDER POWER OUTAGE. FIXTURE TO OPERATE NORMALLY UNDER NORMAL CONDITIONS, (NOT A NIGHT LIGHT). RUN SWITCHED AND UNSWITCHED POWER TO BATTERY PACK.
11. CONNECT ALL SHADED FIXTURES AHEAD OF SWITCHING FOR CONTINUOUS EGRESS & NIGHTLIGHT FUNCTIONS, (TYPICAL).
12. LOCATE 120V, 20A, WP, GFCI RECEPTACLE ON HIGH TOWER ROOF; COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.



1	ELECTRICAL PLAN
1/8" = 1'-0"	

PANEL "HP"

VOLTS: 208/120V,3PH,4W
MAINS: 100A M.L.O.
A.I.C.: 10KA

MTG: SURFACE NEMA 1
MFGR: CH/ITE/SQD/GE
TYPE: BOLT-ON

	DESCRIPTION	T	KVA	BKR	CKT#	CKT#	BKR	KVA	T	DESCRIPTION
	IRRIGATION CNTRL	R	0.18	20A1P	1	2	20A	1.50	H	UH-1
	TTB	R	0.36	20A1P	3	4	2P	1.50	H	-
**	FACP	R	0.18	20A1P	5	6	20A	0.33	L	PARKING LOT LTG
	BUILDING RECS	R	0.54	20A1P	7	8	2P	0.33	L	-
	BUILDING RECS	R	0.54	20A1P	9	10	20A1P	0.20	L	EXTERIOR BLDG LTG
	EXTERIOR POLE RECS	R	0.36	20A1P	11	12	20A1P	0.18	R	HIGH TOWER ROOF RC
	SPARE			20A1P	13	14	20A1P	0.18	R	HIGH TOWER ROOF RC
	SPARE			20A1P	15	16	20A1P	0.18	R	HIGH TOWER ROOF RC
	SPARE			20A1P	17	18	20A1P			SPARE
	SPACE				19	20				SPACE
	SPACE				21	22				SPACE
	SPACE				23	24				SPACE
	SPACE				25	26				SPACE
	SPACE				27	28				SPACE
	SPACE				29	30				SPACE

LOAD KVA	LTG	REC	HTR	TOTAL
CONNECTED	0.9	2.7	3.0	6.6
NEC DEMAND	1.1	2.7	3.0	6.8
AMPS				19

PHASE KVA	A	= 2.7	B	= 2.8	C	= 1.1
PHASE IMBALANCE (%)	A/B	= 1.6	B/C	= 163.9	C/A	= 159.7

** PROVIDE LOCKABLE BREAKER FOR FACP.

Isc CALCULATIONS - THREE PHASE

POINT #1, AT THE NEW 150KVA TRANSFORMER (ASSUMED);

Isc 26,000 A

POINT #2, AT THE NEW 600A "MDP";

f = 1.73 x Length x Isc (source) / L-L Volts x Wire Factor
f = 1.73 x 50 x 26000 A / 208 x 42782
f = 0.25

M = 1 / 1+f = 1 / 1 + 0.25 = 0.80

Isc = M x Isc (source) = 0.80 x 26000 A = 20,755 A

POINT #3, AT THE NEW PANEL "HP";

f = 1.73 x Length x Isc (source) / L-L Volts x Wire Factor
f = 1.73 x 100 x 20755 A / 208 x 2425
f = 7.12

M = 1 / 1+f = 1 / 1 + 7.12 = 0.12

Isc = M x Isc (source) = 0.12 x 20755 A = 2,556 A

POINT #4, AT THE NEW PANEL "P1";

f = 1.73 x Length x Isc (source) / L-L Volts x Wire Factor
f = 1.73 x 25 x 20755 A / 208 x 37512
f = 0.12

M = 1 / 1+f = 1 / 1 + 0.12 = 0.90

Isc = M x Isc (source) = 0.90 x 20755 A = 18,613 A

POINT #5, AT THE NEW PANEL "P2";

f = 1.73 x Length x Isc (source) / L-L Volts x Wire Factor
f = 1.73 x 5 x 18613 A / 208 x 12122
f = 0.06

M = 1 / 1+f = 1 / 1 + 0.06 = 0.94

Isc = M x Isc (source) = 0.94 x 18613 A = 17,496 A

600A SERVICE LOAD SUMMARY **

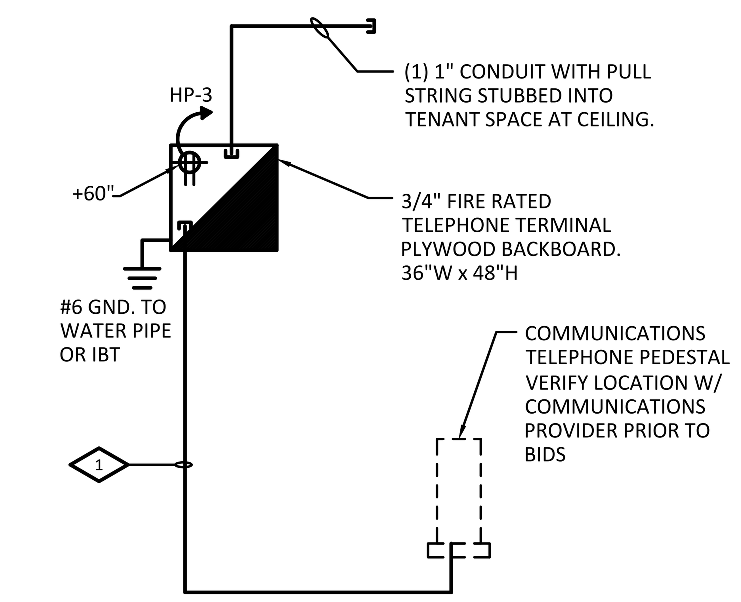
LOAD KVA	LTG	REC	MTR	HTR	TOTAL
CONNECTED	0.9	4.3	73.9	3.0	82.1
NEC DEMAND	1.1	4.3	76.5	3.0	84.9
AMPS					236

PHASE KVA	A	= 28.3	B	= 28.1	C	= 25.7
PHASE IMBALANCE (%)	A/B	= 0.5	B/C	= 9.5	C/A	= 10.0

** LOAD SUMMARY INCLUDES PANELS "HP", "P1" AND "P2".

CITY OF GREELEY
Building Inspection Department
Reviewed as to Conformance
with the 2023 NEC

03/13/2025 Dusty Shepherd

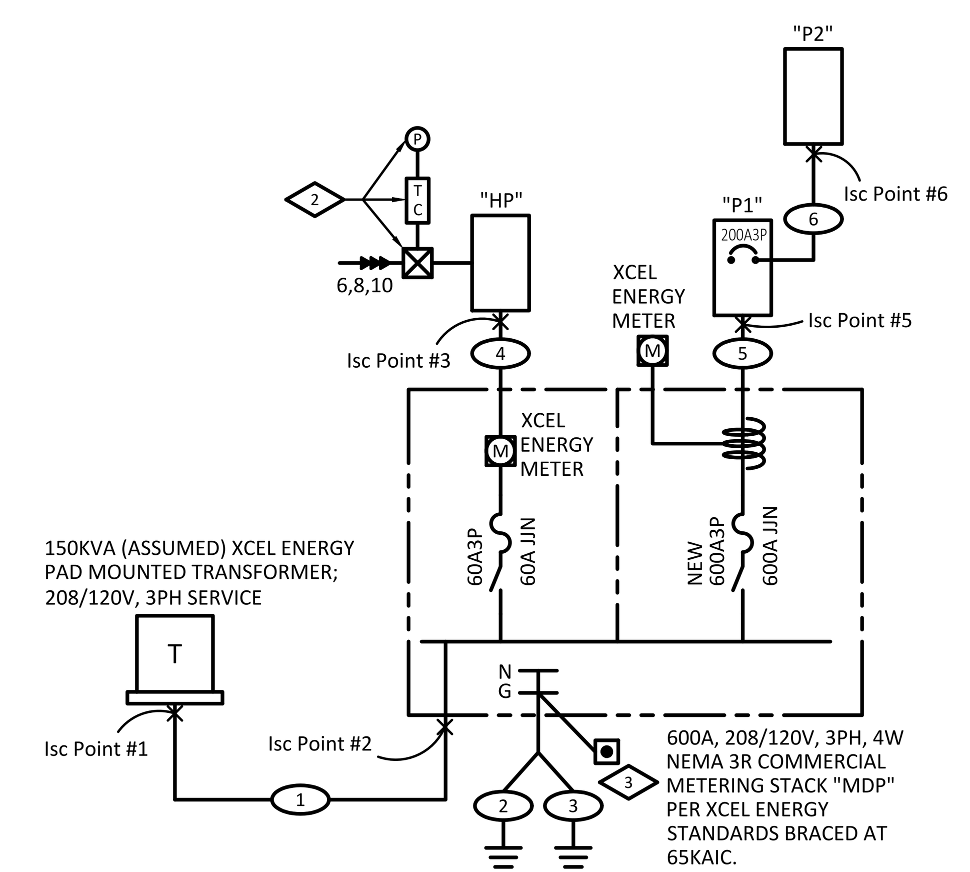


TELEPHONE RISER

Grounding and Bonding of Service Grounding Electrode Location 250.24(A)

Must Comply with the 2023 NEC

Field Label
AFC 110.24
SCCR 408.6



ONE-LINE DIAGRAM

NO SCALE
NOTE: ALL ITEMS ARE NEW

FEEDER SCHEDULE

1. 2 SETS OF (4-500 KCMIL XHHW AL) 4"C.
2. #2/0 CU GND TO BLDG STEEL, UFER & COLD WATER PIPE
3. #6 CU TO 5/8" X 8' CLAD STEEL GROUND ROD
4. (4 #6 THWN CU & #10 CU GND) 1"C.
5. 2 SETS OF (4-500 KCMIL XHHW AL & #2/0 AL GND) 3"C.
6. (4-250 KCMIL XHHW AL & #4 AL GND) 2-1/2"C.

No	Revision / Submissions	Date

ROSSI ENGINEERING INC.
5376 S. Gibraltar Ct.
Centennial, CO 80015
303.720.9827
VROSSI@ROSSIENGINEERING.NET

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

SYMBOLS, ONE-LINE, ELECTRICAL PLAN, SCHEDULES & ISC CALCS

COLORADO REGISTERED PROFESSIONAL ENGINEER VERNON R. WILSON 35418

Designed: JH	Project Number: 25-010
Drawn: JH	Scale: As Shown
Checked: VJR	Drawing Number: E2
Reviewed: VRW	
Date: 02/12/2025	2 of 4

COPYRIGHT 2024 – BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.

SECTION 26000

ELECTRICAL SYSTEMS

PART 1 - GENERAL 1.01 CONDITIONS AND REQUIREMENTS
A. REFER TO THE GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS, AND DIVISION 1 - GENERAL REQUIREMENTS.
B. PROVISIONS OF THIS SECTION SHALL APPLY TO ALL OF DIVISION 16 WORK.

1.02 SCOPE OF WORK
A. FURNISH AND INSTALL ALL MATERIALS AND EQUIPMENT, AND PROVIDE ALL LABOR REQUIRED AND NECESSARY TO COMPLETE THE WORK SHOWN ON THE DRAWINGS AND/OR AS SPECIFIED IN DIVISION 16, AND ALL OTHER WORK AND MISCELLANEOUS ITEMS, NOT SPECIFICALLY MENTIONED, BUT REASONABLY INFERRED FOR A COMPLETE INSTALLATION INCLUDING ALL ACCESSORIES AND APPURTENANCES REQUIRED FOR OPERATING AND TESTING THE SYSTEM. IT IS THE INTENT OF THE DRAWINGS AND SPECIFICATIONS THAT ALL SYSTEMS BE COMPLETE AND READY FOR OPERATION.

1.03 CODES, REGULATIONS, AND STANDARDS
A. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH LOCAL BUILDING CODES, GOVERNING LAWS, ORDINANCES AND REGULATIONS, 2017 NATIONAL ELECTRICAL CODE, INTERNATIONAL BUILDING CODE, AND RULES AND REGULATIONS OF THE LOCAL POWER COMPANY.

1.04 MATERIAL STANDARDS
A. ALL MATERIAL SUPPLIED SHALL BE NEW AND SHALL BE EQUAL TO OR EXCEED MINIMUM REQUIREMENTS OF NEMA, IEEE, AND/OR UL.
B. ALL MATERIALS SHALL BEAR THE UNDERWRITERS' LABORATORIES, INC., LABEL PROVIDED A STANDARD HAS BEEN ESTABLISHED FOR THE MATERIAL IN QUESTION.

1.05 PERMITS AND FEES
A. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL LOCAL FEES, PERMITS, AND SERVICES OF INSPECTION AUTHORITIES REQUIRED BY WORK HEREUNDER. THE CONTRACTOR SHALL COORDINATE FULLY WITH THE LOCAL UTILITY COMPANIES WITH RESPECT TO THEIR SERVICES.

1.06 CONSTRUCTION DRAWINGS
A. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF ELECTRICAL WORK. LOCATIONS ARE APPROXIMATE AND SHALL BE SUBJECT TO MINOR MODIFICATIONS AS DICTATED BY FIELD CONDITIONS AND AS DIRECTED BY ARCHITECT AND/OR ENGINEER.

1.07 COORDINATION OF WORK
A. CONTRACTOR SHALL BE RESPONSIBLE FOR EXACT FITTING OF ALL MATERIALS, EQUIPMENT, ETC., IN BUILDING. ALL DIMENSIONS SHALL BE VERIFIED ON JOB.

1.08 SPECIFIED ITEMS AND BID ALTERNATES
A. EQUIPMENT OR MATERIALS SPECIFIED EXCLUSIVELY BY TRADE, NAME OF MANUFACTURER, OR BY CATALOG REFERENCE SHALL FORM BASIS OF WORK AND CONTRACT THEREFORE.
B. CONTRACTORS DESIRING TO USE ALTERNATE EQUIPMENT OR MATERIALS; MANUFACTURERS OR SUPPLIERS DESIRING TO FURNISH ALTERNATE MATERIALS OR EQUIPMENT IN LIEU OF THOSE SPECIFIED; SHALL SUBMIT REQUESTS FOR APPROVAL OF ALTERNATES TO ARCHITECT NOT LESS THAN SEVEN CALENDAR DAYS PRIOR TO SCHEDULED CLOSING DATE FOR RECEIPT OF BIDS OR PROPOSALS.
C. REQUESTS FOR APPROVAL OF PROPOSED ALTERNATES SHALL BE MADE IN WRITING AND SHALL INCLUDE COMPLETE DATA SHEETS, CATALOG CUTS, SAMPLES, AND APPROPRIATE CALCULATIONS.
D. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION, COMPLETE IN ALL RESPECTS, AND OPERATION OF ALL EQUIPMENT OR MATERIALS USED AS RESULT OF APPROVAL OF REQUESTS TO SUBSTITUTE. NO ADDITIONAL PAYMENT WILL BE ISSUED DUE TO THE INCORPORATION OF APPROVED SUBSTITUTIONS.

1.09 SHOP DRAWINGS
A. FURNISH SIX COPIES OF SHOP DRAWINGS AND MATERIAL LISTS, AS HEREIN CALLED FOR, TO ARCHITECT PRIOR TO COMMENCEMENT OF WORK. MATERIAL LISTS SHALL INCLUDE CATALOG CUTS, DIAGRAMS AND OTHER DESCRIPTIVE MATERIAL, AND SHALL BE SUBMITTED AT THE SAME TIME IN BROCHURE ARRANGEMENT WITH ONE OF EACH REQUESTED ITEM IN EACH OF THE SIX BROCHURES. SHOP DRAWINGS SHALL BE SUBMITTED FOR THE FOLLOWING:
1. PANELBOARDS
2. DISCONNECT SWITCHES
3. LIGHTING FIXTURES
B. THE CONTRACTOR SHALL REVISE AND RESUBMIT SHOP DRAWINGS AND MATERIAL LISTS AS REQUIRED FOR APPROVAL.

1.10 OPERATION AND MAINTENANCE MANUALS
A. PROVIDE TWO COPIES OF OPERATING AND MAINTENANCE MANUALS FOR ALL EQUIPMENT AND/OR SYSTEMS.

1.11 GUARANTEE
A. THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND EQUIPMENT FURNISHED AND INSTALLED HEREUNDER AGAINST ALL DEFECTS AND FAULTY INSTALLATION FOR A PERIOD OF 365 CALENDAR DAYS FROM DATE OF FINAL ACCEPTANCE OF WORK BY OWNER.

1.12 AS-BUILT DOCUMENTS
A. THE CONTRACTOR SHALL MAINTAIN ON THE JOB AN UP-TO-DATE SET OF WORKING DRAWINGS AND SPECIFICATIONS, MARKED UP TO SHOW ELECTRICAL SYSTEMS AS INSTALLED. THESE DRAWINGS AND SPECIFICATIONS SHALL BE AVAILABLE FOR INSPECTION BY THE ARCHITECT OR THEIR REPRESENTATIVE.
B. UPON COMPLETION OF THE WORK, THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE OWNER WITH ONE SET OF AS-BUILT DRAWINGS AND MARKED UP SPECIFICATIONS, CERTIFIED ACCURATE BY ENDORSEMENT.

1.13 SITE EXAMINATION
A. THE ELECTRICAL CONTRACTOR SHALL EXAMINE PROJECT SITE AND ALL CONDITIONS THEREON AND SHALL TAKE INTO CONSIDERATION ALL SUCH CONDITIONS AS MAY AFFECT THE WORK HEREUNDER.

1.14 TEMPORARY POWER
A. PROVIDE TEMPORARY POWER AND LIGHTING FOR CONSTRUCTION IN ACCORDANCE WITH STATE AND LOCAL SAFETY LAWS AND IN PARTICULAR FEDERAL OSHA REQUIREMENTS AND THE NATIONAL ELECTRICAL CODE.

1.15 SLEEVES, INSERTS, AND EMBEDDED ITEMS
A. SLEEVES, INSERTS, HANGERS, ETC., FURNISHED UNDER THIS DIVISION AND INSTALLED UNDER ANOTHER DIVISION SHALL BE SUPPLIED IN SUCH MANNER AS WILL PERMIT ORDERLY PROGRESS OF WORK BY OTHERS.

1.16 CUTTING AND PATCHING
A. THE ELECTRICAL CONTRACTOR SHALL CUT, CHANNEL, CHASE, AND/OR DRILL FLOORS, WALLS, PARTITIONS, CEILINGS, OR OTHER SURFACES AS REQUIRED FOR INSTALLATION, SUPPORT, ANCHORAGE, ETC., OF THE WORK. ALL PATCHING SHALL BE DONE BY THE GENERAL CONTRACTOR.

1.17 DELIVERY AND STORAGE
A. ELECTRICAL CONTRACTOR SHALL MAKE PROVISIONS FOR DELIVERY AND SAFE STORAGE OF MATERIALS FOR THIS CONTRACT AND SHALL ASSUME FULL RESPONSIBILITY FOR CONDITION AND/OR SAFEKEEPING OF MATERIALS FURNISHED BY OTHERS ON ACCEPTANCE OF MATERIALS.

1.18 INSPECTIONS AND TESTS
A. WORK SHALL BE SUBJECT TO INSPECTION BY ARCHITECT AND/OR ENGINEER AT ALL TIMES.
B. AFTER ELECTRICAL INSTALLATION IS COMPLETED AND AT SUCH TIME AS THE ARCHITECT OR ENGINEER MAY DIRECT, THE CONTRACTOR SHALL CONDUCT AN OPERATING TEST FOR APPROVAL. INSTALLATION SHALL BE DEMONSTRATED TO BE IN ACCORDANCE WITH REQUIREMENTS OF THE DRAWINGS AND THIS SPECIFICATION. ANY DEFECTS REVEALED SHALL BE CORRECTED PROMPTLY AND THE TESTS RECONDUCTED.
C. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ALL DEFECTIVE AND/OR FAULTY WORKMANSHIP, MATERIALS, AND/OR EQUIPMENT AND SHALL REPAIR AND/OR REPLACE ALL OTHER WORK DAMAGED AS A RESULT OF SUCH DEFECTIVE AND/OR FAULTY INSTALLATION, MATERIALS AND/OR EQUIPMENT WITHOUT CHARGE TO OWNER DURING GUARANTEE PERIOD.
D. PARTIAL OCCUPANCY OF SITE BY OWNER SHALL NOT BE CONSTRUED AS FINAL ACCEPTANCE OF WORK.

PART 2 - PRODUCTS 2.01 BRANCH CIRCUIT PANELS
A. CIRCUIT BREAKER TYPE PANELBOARDS WITH MAIN LUGS OR MAIN CIRCUIT BREAKERS WHERE SHOWN, WITH NUMBER AND SIZE OF FULL WIDTH THERMAL MAGNETIC BOLTED BRANCH CIRCUIT BREAKERS WITH MINIMUM AIC RATING AS INDICATED. CIRCUIT BREAKERS SHALL BE LABELED FOR USE WITH CONDUCTORS WITH MINIMUM OF 75° INSULATION. PANELBOARDS ARE TO BE SURFACE OR FLUSH MOUNTED WITH SIZE OF BUS AS INDICATED. TWO AND THREE POLE BREAKERS SHALL HAVE COMMON TRIP AND SINGLE OPERATING HANDLE. PROVIDE SEPARATE GROUND BUS IN EACH PANELBOARD.
B. PANELBOARDS SHALL BE CONSTRUCTED OF CODE GAUGE GALVANIZED STEEL. FRONTS ARE TO BE COMPLETE WITH DOOR IN DOOR, LATCH AND MASTER-KEYED LOCKS. FRONTS SHALL HAVE ADJUSTABLE TRIM CLAMPS AND DIRECTORY FRAMES.
C. LIGHTING AND MISCELLANEOUS POWER PANELS: 208V OR 240V, 3 PHASE 208/120V, SINGLE OR 3 PHASE 240/120V, SINGLE PHASE 10,000 AIC MINIMUM CUTLER-HAMMER TYPE PRL1 OR EQUIVALENT BY SQUARE D OR SIEMENS.

2.02 DISCONNECT SWITCHES
A. MAIN DISCONNECT SWITCHES RATED 800 AMPERES AND ABOVE SHALL BE BOLTED PRESSURE CONTACT TYPE, CUTLER-HAMMER OR EQUAL BY SQUARE D OR SIEMENS.
B. PROVIDE ENCLOSED, HEAVY DUTY, FUSIBLE OR NON-FUSIBLE SAFETY SWITCHES WHERE REQUIRED.
C. EACH ENCLOSURE SHALL BE NEMA TYPE SUITABLE FOR THE SURROUNDING AREA AND CONDITIONS, AND SHALL BE LABELED FOR USE WITH CONDUCTORS HAVING MINIMUM OF 75° INSULATION. CONSULT MECHANICAL DRAWINGS AND SPECIFICATIONS OF MECHANICAL EQUIPMENT. DISCONNECTS AS APPROPRIATE FOR ACTUAL EQUIPMENT PROVIDED TO THE PROJECT. ALL SWITCHES SHALL BE LABELED FOR FEEDER OR MOTOR SUPPLIED.
D. PROVIDE FUSE REJECTION KITS FOR ALL FUSIBLE SWITCHES RATED 600 AMPERES AND BELOW.

2.03 FUSES
A. FUSES SHALL BE OF THE TIME DELAY TYPE; CLASS "R" WITH REJECTION FEATURE UP TO 600 AMPERES, BOLT-IN CLASS "L" ABOVE 600 AMPERES. "FUSETRON", "LOW PEAK", OR "HI-CAP" AS MANUFACTURED BY THE BUSSMAN MANUFACTURING COOMPANY OR EQUIVALENT BY GOULD, INC. (GOULD SHAWMUTT FUSES). THE CONTRACTOR SHALL FURNISH AND INSTALL ONE COMPLETE SET OF FUSES FOR ALL FUSE HOLDING DEVICES SIZED IN ACCORDANCE WITH THE ASSOCIATED MOTOR AND/OR CONDUCTORS TO BE PROTECTED. FURNISH TO OWNER A MINIMUM OF THREE SPARES FOR EACH SIZE INSTALLED. PROVIDE A SPARE FUSE CABINET MOUNTED IN MAIN ELECTRICAL ROOM FOR FUSE STORAGE. PROVIDE A NAMEPLATE ON THE CABINET WHICH READS "SPARE FUSES".

2.04 CONDUIT AND FITTINGS
A. PROVIDE CONDUIT AND FITTINGS AS INDICATED AND AS REQUIRED PER PART 3 - INSTALLATION OF THIS SPECIFICATION.
B. GALVANIZED RIGID STEEL CONDUIT (GRC): ZINC COATED, THREADED TYPE CONFORMING TO UL 6. PROVIDE ZINC COATING FUSED TO INSIDE AND OUTSIDE WALLS. PROVIDE CLOSED-END THREAD PROTECTORS.
C. INTERMEDIATE METALLIC TUBING (IMC): ZINC COATED THREADED TYPE CONFORMING TO UL PROVIDE ZINC COATING FUSED TO INSIDE AND OUTSIDE WALLS. PROVIDE CLOSED-END THREAD PROTECTORS.
D. ELECTRIC METALLIC TUBING (EMT): COMPLY WITH UL 794.
E. PVC EXTERNALLY COATED RIGID STEEL CONDUIT (PVC COATED GRC): PROVIDE RIGID STEEL ZINC COATED WITH AN ADDITIONAL 40 MIL. THICK COATING OF PVC AND INTERNAL GALVANIZED SURFACE. PVC COATING SHALL BE BONDED TO THE CONDUIT. EXTRUDED EXTERIOR COATING IS NOT ACCEPTABLE.
F. FLEXIBLE STEEL CONDUIT: FORMED FROM CONTINUOUS LENGTH OF SPIRALLY-WOUND, INTERLOCKED ZINC-COATED STRIP STEEL.
G. LIQUID-TIGHT, FLEXIBLE METAL CONDUIT: FORMED FROM A CONTINUOUS LENGTH OF FLEXIBLE, INTERLOCKED, AND DOUBLE-WRAPPED STEEL; GALVANIZED INSIDE AND OUTSIDE; COATED WITH LIQUID-TIGHT JACKET OF FLEXIBLE POLYVINYL CHLORIDE (PVC).
H. RIGID METAL CONDUIT FITTINGS: CAST-MALLEABLE IRON, GALVANIZED.
I. INTERMEDIATE METALLIC TUBING FITTINGS:
J. ELECTRIC METALLIC TUBING FITTINGS: STEEL OR IRON, COMPRESSION (SET SCREW).
K. FLEXIBLE METALLIC CONDUIT FITTINGS: STEEL THREADLESS HINGED CLAMP TYPE.
L. FLEXIBLE NON-METALLIC CONDUIT FITTINGS: PLASTIC
M. CONDUIT BODIES: GALVANIZED STEEL CONDUIT BODIES OF TYPES, SHAPES, AND SIZES AS REQUIRED TO FULFILL JOB REQUIREMENTS AND NEC REQUIREMENTS. CONDUIT BODIES SHALL HAVE THREADED CONDUIT ENTRANCE ENDS, REMOVABLE COVERS, EITHER CAST OR GALVANIZED STEEL, AND CORROSION-RESISTANT SCREWS.

2.06 CONDUCTORS
A. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE COPPER. THE USE OF ALUMINUM WILL BE ACCEPTED ONLY TO THE EXTENT SPECIFICALLY INDICATED ON THE DRAWINGS. CONDUCTORS SIZED #10 AWG AND SMALLER SHALL BE SOLID ANNEALED COPPER, #8 AWG AND LARGER SHALL BE STRANDED.
B. MINIMUM CONDUCTOR SIZES SHALL BE #12 AWG FOR WIRING AT 120 VOLTS AND ABOVE, AND #18 AWG FOR SIGNAL AND CONTROL CIRCUITS. FOR 120 VOLT CIRCUITS 75 FEET OR LONGER TO THE FIRST OUTLET, MINIMUM SIZE SHALL BE INCREASED TO #10 AWG (FOR 277 VOLT CIRCUITS 150 FEET).
C. CONDUCTORS SHALL HAVE INSULATION RATED AT 600 VOLTS UNLESS OTHERWISE NOTED. THE FOLLOWING INSULATION STANDARDS SHALL APPLY:
1. UNDERGROUND AND WET LOCATIONS: TYPE THW OR THWN FOR #8 AWG AND LARGER; TW OR THWN FOR #10 AWG AND SMALLER.
2. INDOORS: TYPE THW, THWN, OR THHN FOR #8 AWG AND LARGER; TW, THWN, OR THHN FOR #10 AWG AND SMALLER.
3. AMPACITIES: CONDUCTOR AMPACITIES SHALL BE APPLIED PER NEC TABLE 310-16. RATINGS FOR CONDUCTORS HAVING 75°C INSULATION SHALL NOT BE EXCEEDED REGARDLESS OF WHICH INSULATION TYPE IS USED.
D. CONNECTORS SHALL BE 3-M "SCOTCHLOCK", BUCHANAN "B-CAPS", IDEAL "WING NUT", OR BUCHANAN SPLICE CAPS. ALL CONNECTORS SHALL BE RATED AT 600 VOLTS FOR GENERAL USE, OR 1000 VOLTS FOR USE WITHIN FLUORESCENT OR HIGH INTENSITY DISCHARGE (HID) LIGHTING FIXTURES.

2.07 CABINETS AND WIREWAYS
A. CODE GAUGE GALVANIZED STEEL. CABINETS TO HAVE HINGED COVERS AND MASTER KEYED LOCKS. PROVIDE CABINET SIZES AS INDICATED, AND WIREWAY SIZED FOR APPLICATION PER NEC ARTICLE 362. PROVIDE APPROVED NEMA TYPE ENCLOSURE SUITABLE FOR LOCATION AND CONDITIONS ENCOUNTERED. FINISH SHALL BE ANSI 61 GRAY ENAMEL.

2.08 OUTLET BOXES
A. CAST METAL BOXES FOR EXPOSED CONDUIT AND IN EQUIPMENT ROOMS. ALL OUTLETS FOR EXTERIOR APPLICATION SHALL BE CAST, WEATHERPROOF TYPE, WITH GASKET AND CAST COVER PLATE. PROVIDE GALVANIZED OR ZINC COATED, COMPRESSED STEEL OUTLET BOXES FOR ALL OTHER APPLICATIONS. BOXES TO BE 4 INCHES SQUARE OR OCTAGONAL UNLESS OTHERWISE REQUIRED FOR SPECIFIC OUTLET OR STRUCTURAL CONDITIONS, AND OF DEPTH AS REQUIRED.

2.09 WIRING DEVICES
A. PROVIDE SPECIFICATION GRADE DEVICES IN ALL AREAS. HUBBELL, LEVITON, BRYANT, OR PASS AND SEYMOUR. ALL DEVICES SHALL BE OF THE SAME MANUFACTURER.
B. SWITCHES SHALL BE RATED FOR THE LOAD CONTROLLED. SWITCHES SHALL BE LEVITON #1201 (15 AMP) OR #1221 (20 AMP) OR EQUAL. ALL OTHER SWITCHES SHALL BE OF SIMILAR PREMIUM SPECIFICATION GRADE QUALITY.
C. THERMAL OVERLOAD SWITCHES SHALL BE PROPERLY SIZED OVERLOAD HEATER ELEMENTS.
D. RECEPTACLES SHALL BE RATED FOR THE CIRCUIT LOAD SERVED. RECEPTACLES SHALL BE LEVITON #5252 (15 AMP) OR #5352 (20 AMP) OR EQUAL. ALL OTHER RECEPTACLES SHALL BE OF SIMILAR PREMIUM SPECIFICATION GRADE QUALITY.
E. PROVIDE STAINLESS STEEL COVERPLATES FOR ALL DEVICES IN KITCHEN AREAS AND AREAS WITH SURFACE MOUNTED RACEWAY AND BOXES. PROVIDE 0.140 INCH SMOOTH NYLON MATCHING COVERPLATES FOR ALL OTHER SWITCHES, RECEPTACLES, TELEPHONE, JUNCTION, AND UNUSED OUTLETS. DEVICE AND PLATE COLORS SHALL BE WHITE OR LIGHT COLOR ON LIGHT FINISHED SURFACES, AND BLACK, BROWN, OR OTHER DARK COLOR ON DARK FINISHED SURFACES. VERIFY COLOR OF DEVICES AND COVERPLATES WITH ARCHITECT BEFORE ORDERING.

2.10 LIGHTING FIXTURES AND LAMPS
A. ALL FIXTURES SHALL BEAR THE UNDERWRITERS LABORATORIES SEAL OF APPROVAL.
B. FIXTURE TYPES ARE INDICATED ON THE DRAWINGS BY MEANS OF LETTERS. REFER TO THE FIXTURE SCHEDULE FOR FIXTURE SPECIFICATIONS. WHEN A FIXTURE TYPE IS INDICATED IN A ROOM OR AREA, ALL OTHER FIXTURES IN THE ROOM OR AREA SHALL BE OF THE SAME TYPE UNLESS NOTED OTHERWISE.
C. ALL FLUORESCENT LAMPHOLDERS SHALL BE WHITE PHENOLIC COMPOUND, POSITIVE SPRING ACTION TYPE. FLUORESCENT FIXTURES WITH RAPID START LAMPS SHALL BE EQUIPPED WITH HIGH POWER FACTOR ETL/CBM APPROVED ENERGY SAVING CLASS "P" BALLASTS (UNIVERSAL "SLH" OR ADVANCE MARK III). ALL BALLASTS SHALL BE GUARANTEED FOR TWO YEARS OR MORE.
D. CLASS P, CERTIFIED CBM, HIGH POWER FACTOR, PREMIUM LOW HEAT, HIGH FREQUENCY ELECTRONIC BALLAST WITH AUTOMATIC RESET THERMAL PROTECTION. BALLAST SHALL OPERATE AT 10 PERCENT OR LESS TOTAL HARMONIC DISTORTION. ADVANCE MARK V OR EQUAL BY MOTOROLA OR MAGNETEK.
E. FIXTURES EXPOSED TO COLD WEATHER AND COLD TEMPERATURE SHALL BE WEATHERPROOF AND OF THE LOW TEMPERATURE TYPE SUITABLE FOR OPERATION AT CONDITIONS ENCOUNTERED.
F. ALL FIXTURES SHALL BE SO MANUFACTURED THAT ALL METALLIC PARTS WILL BE CONTINUOUSLY GROUNDED. WHERE ACRYLIC LENSES ARE SPECIFIED, THICKNESS OF SUCH LENS SHALL BE NOMINAL 0.125 INCH.
G. INCANDESCENT LAMPS SHALL BE RATED 110 VOLTS. FLUORESCENT LAMPS SHALL BE F32T8 RAPID START TYPE OR AS NOTED ON DRAWINGS. NO SUBSTITUTIONS WILL BE ALLOWED FOR HIGH INTENSITY DISCHARGE (HID) AND FLUORESCENT LAMPS LISTED BY SPECIFIC MANUFACTURERS. ALL LAMPS SHALL BE GENERAL ELECTRIC, SYLVANIA, OR PHILLIPS UNLESS OTHERWISE NOTED.

2.11 FIRE ALARM SYSTEM
A. FURNISH AND INSTALL A COMPLETE DESIGN/BUILD, ELECTRICALLY SUPERVISED, CLASS B MULTIPLE-ZONE, CONTINUOUS RINGING FIRE ALARM SYSTEM AS DESCRIBED HEREIN PER LOCAL FIRE DEPARTMENT REQUIREMENTS. SYSTEM SHALL BE CAPABLE OF SUPPORTING ENTIRE BUILD-OUT OF FACILITY AND SHALL INCLUDE NECESSARY REQUIREMENTS FOR MEDICAL OFFICE TYPE TENANTS. ALL COMPONENTS OF THE ENTIRE SYSTEM SHALL BE NEW AND LISTED, LABELED, AND APPROVED FOR ITS APPLICATION AS FIRE ALARM EQUIPMENT FOR NFPA 72A BY UNDERWRITERS LABORATORIES, INC., AND FACTORY MUTUAL. ACTUATION OF ANY MANUAL OR AUTOMATIC ALARM INITIATING DEVICE SHALL CAUSE DESIGNATED ALARM SIGNALING UNITS TO RING CONTINUOUSLY, LIGHT THE RESPECTIVE ZONE ALARM LAMP ON THE REMOTE ANNUNCIATOR, AND PROVIDE AN ALARM SIGNAL SUITABLE FOR MONITORING BY AN APPROVED CENTRAL STATION.
B. PRIMARY POWER SHALL BE 120 VAC MONITORED, AND A POWER-ON LAMP SHALL BE PROVIDED. UPON POWER OUTAGE, THE SYSTEM SHALL LIGHT A POWER TROUBLE CONDITION LAMP, INDICATE A TROUBLE CONDITION, AND AUTOMATICALLY TRANSFER POWER SUPPLY TO STANDBY BATTERIES. THE CONTROL PANEL SHALL ALSO MONITOR THE BATTERIES, AND UPON A LOW BATTERY CONDITION, LIGHT THE LOW BATTERY LAMP AND INDICATE A TROUBLE CONDITION. UPON GROUND FAULT DETECTION, THE GROUND DETECTION LAMP SHALL LIGHT AND A TROUBLE SIGNAL SHALL BE INDICATED. PROVIDE A LAMP TEST SWITCH TO TEST ALL LAMPS ON THE CONTROL PANEL.
C. PROVIDE A MUNICIPAL TRIP CIRCUIT THAT IS A DISTINCT SEPARATE CIRCUIT UTILIZED FOR NO OTHER PURPOSE. A MUNICIPAL TRIP DISCONNECT TEST SWITCH SHALL BE PROVIDED. THE MUNICIPAL TRIP DISCONNECT LAMP SHALL INDICATE THAT THE MUNICIPAL TRIP IS DISCONNECTED.
D. MANUAL STATIONS SHALL BE DESIGNED FOR SEMI-FLUSH MOUNTING. PLASTIC STATIONS WILL NOT BE ACCEPTABLE. STATIONS SHALL BE OF THE BREAK-GLASS DESIGN, AND MUST BE OPENED TO BE RESET. IT SHALL BE POSSIBLE, FOR TESTING PURPOSES, TO INITIATE AN ALARM WITHOUT BREAKING THE GLASS. PROVIDE A MINIMUM OF ONE SPARE GLASS ROD PER MANUAL STATION.
E. SMOKE DETECTORS SHALL BE LOW VOLTAGE, TWO WIRE, DUAL CHAMBER, IONIZATION TYPE. EACH DETECTOR SHALL BE SELF-COMPENSATING FOR THE EFFECTS OF AIR VELOCITY, TEMPERATURE, HUMIDITY AND ATMOSPHERIC PRESSURE. EACH DETECTOR SHALL CONTAIN AN INTEGRAL, VISUAL INDICATION OF ALARM VISIBLE FOR 360°.
F. ALARM HORNS SHALL BE SUITABLE FOR INDOOR OR OUTDOOR APPLICATION. ALL HORNS SHALL BE 24 VDC POLARIZED. THE MINIMUM SOUND LEVEL SHALL BE 95 DB AT 10 FEET. HORNS SHALL BE SEMI-FLUSHED MOUNTED.
G. VISUAL SIGNALS SHALL BE PROVIDED WITH EACH FIRE SIGNALING DEVICE. ONE ENCLOSURE SHALL INCORPORATE BOTH DEVICES. THE VISUAL SIGNAL SHALL FLASH ON ALARM OCCURRENCE. THE BEZEL SHALL EXTEND 1-1/2 INCHES MINIMUM FROM THE FINISHED WALL, AND BE APPROXIMATELY 3-1/2 INCHES BY 5 INCHES ENGRAVED "FIRE".
H. EQUIPMENT SHALL BE AS FOLLOWS AS MANUFACTURED BY EDWARDS, INC., OR PRIOR APPROVED EQUAL:
1. CONTROL PANEL: 5751B
2. IONIZATION SMOKE DETECTOR: 5250B
3. THERMAL DETECTOR: 285A
4. ALARM HORN: 894B
5. REMOTE LIGHT: RL-85
6. REMOTE ANNUNCIATOR: G1344

PART 3 - EXECUTION

3.01 CONDUIT
A. ALL WIRING SHALL BE INSTALLED IN CONDUIT. CONDUIT SHALL BE OF SIZE REQUIRED BY NEC OR LARGER AS INDICATED ON DRAWINGS, AND SHALL BE INSTALLED ACCORDING TO NEC. BENDS SHALL BE MADE WITH AN APPROVED HICKEY OR CONDUIT BENDING MACHINE. FACTORY BENDS OVER 1-1/4 INCHES ARE APPROVED.
B. EXPOSED CONDUIT SHALL NOT BE INSTALLED IN FINISHED AREAS UNLESS PRIOR APPROVED BY ARCHITECT. EXPOSED CONDUIT MAY BE INSTALLED IN EQUIPMENT ROOMS AND AT SURFACE MOUNTED EQUIPMENT. ALL EXPOSED CONDUIT SHALL BE RUN AT RIGHT ANGLES AND PARALLEL TO THE BUILDING LINES.
C. ALL UNDERGROUND CONDUIT SHALL BE INSTALLED AT A MINIMUM OF 30 INCHES BELOW FINISHED GRADE. CONDUITS INSTALLED BELOW CONCRETE SLABS SHALL BE A MINIMUM OF 12 INCHES BELOW SLAB. ALL UNDERGROUND CONDUITS SHALL BE INSTALLED IN SELECT BACKFILL IN ACCORDANCE WITH THE EARTHWORK SECTION OF THESE SPECIFICATIONS. ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, WITH PVC COATED GRC ELBOWS FOR ALL RADIUS BENDS.
D. USE APPROVED TYPE COUPLINGS AND CONNECTORS IN ALL CONDUIT RUNS, AND MAKE ALL JOINTS TIGHT. PROVIDE PREMIUM QUALITY COMPRESSION (SET SCREW) TYPE COUPLINGS. PROVIDE INSULATED BUSHINGS FOR ALL TERMINATIONS IN PIPE SIZES 1-1/4 INCHES AND LARGER. PROVIDE WEATHERPROOF FITTINGS FOR RUNS EXPOSED TO WEATHER AND HIGH HUMIDITY, AND CONCRETE TIGHT FITTINGS FOR CONDUITS INSTALLED IN CONCRETE SLABS. PROVIDE SEAL-OFF FITTINGS WHERE CONDUITS ENTER OR LEAVE HAZARDOUS WIRING AREA OR AREAS OF WIDELY DIFFERENT TEMPERATURE AND/OR HUMIDITY.
E. MAXIMUM CONDUIT SIZE FOR INSTALLATION IN CONCRETE SLABS OR WALLS SHALL BE 1 INCH.
F. PRIOR TO PULLING OF CONDUCTORS, CONDUITS SHALL BE CLEANED OF ALL FOREIGN MATTER. PROVIDE 200 POUND TEST NYLON PULL-LINES IN ALL CONDUITS INTENDED FOR FUTURE USE (E.G. TELEPHONE, ETC.).
G. PROVIDE CONDUIT WITH APPROPRIATE FITTINGS INSTALLED AS REQUIRED PER THE FOLLOWING CRITERIA:
1. BELOW GRADE IN EARTH: USE PVC OR PVC COATED RIGID STEEL CONDUIT. GRC IS REQUIRED WHERE UNDERGROUND OR UNDERSLAB CONDUITS PENETRATE A CONCRETE SLAB OR FOUNDATION WALL.
2. ABOVE GRADE, EXTERIOR (EXCEPT ROOFS): USE GRC, IMC, OR EMT WITH WEATHERPROOF FITTINGS.
3. ON ROOFS: USE GRC.
4. ABOVE GRADE, INTERIOR:
a. IN LOCATIONS SUBJECT TO DAMAGE: USE GRC WITH THREADED GRC FITTINGS.
b. IN WET OR DAMP LOCATIONS: USE GRC WITH WEATHERPROOF FITTINGS.
c. IN HAZARDOUS LOCATIONS: USE GRC, IMC, OR EMT AS REQUIRED FOR THE CLASSIFICATION OR THE AREA WITH MATCHING COMPRESSION OR THREADED FITTINGS.
d. IN DRY LOCATIONS, BLOCK WALLS, OR CONCRETE WALLS: USE GRC, IMC, OR EMT WITH COMPRESSION (SET-SCREW) FITTINGS.
5. IN SLAB ON GRADE: USE PVC OR PVC COATED GRC.
6. IN CONCRETE SLABS ABOVE THE GROUND FLOOR: USE PVC, GRC, IMC, OR EMT. (ALT. -- NO CONDUITS ARE ALLOWED IN CONCRETE SLABS.)
7. USE FLEXIBLE METALLIC CONDUIT IN THE FOLLOWING APPLICATIONS:
a. RECESSED LIGHTING FIXTURES
b. MOTOR CONNECTIONS
c. CONNECTION BETWEEN FAN PLENUM AND STRUCTURE
d. AT EXPANSION JOINTS
e. AT TRANSFORMER AND OTHER EQUIPMENT WHICH PRODUCES VIBRATION
8. USE FLEXIBLE NON-METALLIC CONDUIT IN THE FOLLOWING APPLICATIONS:
a. AT ALL LOCATIONS LISTED ABOVE FOR FLEXIBLE METALLIC CONDUIT WHERE EXPOSED TO MOISTURE IN WET OF DAMP LOCATIONS.
H. PROVIDE SLEEVES WHERE CONDUIT PENETRATES A FIRE RATED WALL. SLEEVE SHALL BE RATED AS REQUIRED TO MAINTAIN THE FIRE RATING OF THE WALL THAT IS BEING PENETRATED.
I. USE PVC COATED OR BITUMINOUS COATED GALVANIZED RIGID METAL ELBOWS FOR STUB UPS AND 90O BENDS IN UNDERGROUND CONDUITS AND FOR ALL RISERS TO GRADE AND ENTRY FROM BUILDING EXTERIOR.

3.02 WIRING
A. NO WIRE SHALL BE INSTALLED PRIOR TO COMPLETION OF WORK WHICH MIGHT CAUSE DAMAGE TO CONDUCTORS. ALL SERVICE CONDUCTORS, FEEDERS, AND BRANCH CIRCUITS SHALL BE COLOR CODED IN ACCORDANCE WITH ARTICLE 210-5 OF THE NEC. COLOR CODING SHALL BE VIA COLORED INSULATION OR TAPE AT ALL TERMINATION LOCATIONS. WIRING FOR SPECIAL SYSTEMS SUCH AS MECHANICAL EQUIPMENT, ETC., SHALL BE IN ACCORDANCE WITH MANUFACTURERS WIRING DIAGRAMS FURNISHED.
B. WIRING SHALL BE CONTINUOUS FROM OUTLET TO OUTLET OR JUNCTION BOX. SPLICES SHALL BE HELD TO A MINIMUM, AND SHALL BE MADE ONLY AT READILY ACCESSIBLE PULL BOX, JUNCTION BOX, OR OUTLET BOX. THE INSULATION VALUE OF THE JOINT SHALL EQUAL THAT OF THE CONDUCTOR. SPLICES AND CONNECTION SHALL BE MADE BY TWISTING TIGHT AND INSTALLING INSULATED PRESSURE OR WIRE NUT CONNECTORS FOR #10 AWG AND SMALLER, AND WITH STEEL CRIMP-ON SLEEVES AND OVERALL NYLON INSULATOR FOR #8 AWG AND LARGER.
C. WHERE ALUMINUM CONDUCTORS ARE INDICATED, ALL TERMINATIONS SHALL BE ACCOMPLISHED WITH APPROVED COMPRESSION TERMINATORS (BURNDY HYPLUG OR EQUAL). ALL ALUMINUM TERMINATIONS SHALL BE TREATED WITH DEOXIDIZING SOLUTION (BURNDY PENETROX OR EQUAL).
D. COLOR CODE ALL CONDUCTORS. WIRE SIZES #8 AWG OR SMALLER SHALL HAVE INTEGRAL COLOR-CODED INSULATION. WIRE SIZES #6 AWG AND LARGER MAY HAVE BLACK INSULATION BUT IDENTIFIED BY COLOR-CODED ELECTRICAL TAPE AT ALL JUNCTION, SPLICE, PULL, OR TERMINATION POINTS. COLOR TAPE SHALL BE APPLIED TO AT LEAST 6 INCHES OF THE CONDUCTOR.
E. COLOR CODE WIRES AS FOLLOWS: 208/120 VOLTS PHASES: A-BLACK, B-RED, C-BLUE, NEUTRAL-WHITE, GROUND-GREEN
F. COLOR CODING OF WIRES USED FOR SIGNAL AND COMMUNICATION SYSTEMS ARE SPECIFIED UNDER THE RESPECTIVE SECTIONS FOR THESE SYSTEMS.

3.03 GROUNDING
A. PROVIDE GROUNDING ELECTRODE CONDUCTORS SIZED IN ACCORDANCE WITH THE DRAWINGS BETWEEN THE SERVICE GROUND BUS AND THE FOLLOWING GROUNDING ELECTRODES FOR THE MAIN SERVICE GROUNDING SYSTEM:
1. DOMESTIC AND FIRE PROTECTION METALLIC WATER PIPES.
2. THE METAL FRAME OR STRUCTURE OF THE BUILDING.
3. A MINIMUM OF 20 INCHES OF #2 AWG BARE SOLID COPPER CONDUCTOR LOCATED NEAR THE BOTTOM OF THE CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH EARTH. ELECTRODE SHALL BE CADWELDED, OR EQUAL, TO ALL VERTICAL REINFORCING BARS, AND SHALL BE ENCASED BY AT LEAST 2 INCHES OF CONCRETE.
B. THE SERVICE NEUTRAL SHALL BE CONNECTED TO THE GROUND BUS WITH AN UNSPLICED CLASS B STRANDED COPPER CONDUCTOR SIZED PER NEC TABLE 250-66. PROVIDE AN EQUIPMENT BONDING JUMPER TO THE NON-CURRENT CARRYING PARTS OF THE MAIN SERVICE SIZED PER NEC TABLE 250-112.
C. ALL ELECTRICAL NEUTRALS, RACEWAYS, AND NON-CURRENT CARRYING PARTS OF ELECTRICAL EQUIPMENT AND ASSOCIATED ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH NEC ARTICLE 250. AN IDENTIFIED GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL FLEXIBLE METALLIC OR PVC CONDUITS. CONNECT GROUND WIRE TO THE GROUND TERMINAL OF ALL DEVICES. PROVIDE GROUND BOND JUMPER FROM GROUNDING TERMINAL TO OUTLET BOX WHERE GROUND WIRE IS NOT PULLED.

3.04 OUTLET BOXES
A. BOXES SHALL BE SUITABLE FOR REQUIREMENTS OF EACH OUTLET AND OF SUCH DIMENSIONS AS WILL FIT STRUCTURAL CONDITIONS. BOXES SHALL BE INSTALLED IN RIGID MANNER USING EXPANSION SHIELDS, POWER ACTUATED FASTENERS, ETC., ON CONCRETE OR MASONRY AS REQUIRED.
B. PROVIDE SINGLE GANG (OR AS REQUIRED FOR OUTLET) PLASTER OR TILE RINGS FOR ALL FLUSH OUTLETS INSTALLED AT FINISHED WALL AND CEILING SURFACES (TILE, GYPSUM BOARD, PLASTER, ETC.).
C. OUTLETS SHOWN "BACK-TO-BACK" ARE TO BE INSTALLED WITH A MINIMUM OF 6 INCHES HORIZONTAL SEPARATION TO MINIMIZE SOUND TRANSMISSION. "THROUGH-THE-WALL" TYPE BOXES ARE NOT PERMITTED.

3.05 WIRING DEVICES
A. WALL SWITCH OUTLETS SHOWN AT DOOR LOCATIONS SHALL BE INSTALLED ON LATCH SIDE OF DOOR. ALL DEVICES SHALL BE MOUNTED VERTICALLY. THE FOLLOWING MOUNTING HEIGHTS TO CENTERLINE OF DEVICE FROM FINISHED FLOOR SHALL APPLY UNLESS OTHERWISE NOTED:
1. WALL SWITCH OUTLETS: 48"
2. GENERAL PURPOSE RECEPTACLES: 16"
3. RECEPTACLE OUTLETS IN UTILITY AND EQUIPMENT ROOMS: 42"
4. TELEPHONE OUTLET: 16"
5. TELEPHONE OUTLET FOR WALL TELEPHONE: 54"
B. PROVIDE COVERPLATES FOR ALL OUTLETS.

3.06 LIGHTING
A. ALL LIGHTING FIXTURES AND EQUIPMENT AS INDICATED ON THE DRAWINGS AND AS DESCRIBED HEREIN SHALL BE FURNISHED AND INSTALLED. ALL FIXTURES SHALL BEAR THE UL SEAL OF APPROVAL.
B. ALL FIXTURES SHALL BE SECURELY SUPPORTED AND ALL OUTLETS SHALL BE SECURELY ANCHORED. FURNISH ALL SUPPORTS NECESSARY FOR INSTALLATION INCLUDING STRUCTURAL MEMBERS WHERE REQUIRED.
C. PROVIDE SEPARATE JUNCTION BOX AND WIRE TO RECESSED FIXTURES, IN FLEXIBLE CONDUIT WITH TYPE AF WIRE UNLESS UL APPROVED PREWIRED FIXTURES ARE USED. OPENINGS CUT IN CEILINGS FOR RECESSED FIXTURES SHALL BE COMPLETELY CONCEALED AFTER FIXTURE TRIM IS INSTALLED. WHERE FLEXIBLE CONDUIT IS USED WITH THREE OR FOUR LAMP FLUORESCENT FIXTURES, PROVIDE SEPARATE LEADS FOR EACH BALLAST, WITH INBOARD LAMPS CONNECTED TO ONE BALLAST, AND OUTBOARD LAMP(S) CONNECTED TO THE OTHER BALLAST. ALL INTERIOR LIGHTING SHALL BE LOCALLY SWITCHED.

3.07 FLOOR MOUNTED EQUIPMENT
A. PROVIDE 4 INCH HIGH CONCRETE CURBS FOR ALL FLOOR MOUNTED EQUIPMENT IN ACCORDANCE WITH THE CONCRETE SECTION OF THESE SPECIFICATIONS. CURBS TO BE 2 INCHES LONGER, IN ALL DIMENSIONS, THAN EQUIPMENT MOUNTED THEREON.

3.08 BRANCH CIRCUIT PANELS
A. A TYPED DIRECTORY, PROPERLY IDENTIFYING EACH CIRCUIT, SHALL BE MOUNTED IN EACH DIRECTORY FRAME. INSTALL PANELS UP 6 FOOT, 6 INCHES TO TOP OF TRIM OR AS DIRECTED BY ARCHITECT. FOR BRANCH CIRCUIT PANELS, PROVIDE ENGRAVED LAMINATED PLASTIC NAMEPLATES (1 INCH BY 3 INCHES WITH 1/4 INCH HIGH BLACK LETTERS ON WHITE BACKGROUND) LISTING NAME, VOLTAGE, AND AMPACITY RATING IN ACCORDANCE WITH IDENTIFICATIONS ON SERVING SWITCHBOARD. DOORS AND TRIM INSTALLED IN FINISHED AREAS SHALL BE PRIME COATED.

3.09 TELEPHONE RACEWAYS
A. FURNISH AND INSTALL COMPLETE TELEPHONE RACEWAYS SYSTEM AS INDICATED ON THE DRAWINGS. INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH ALL REQUIREMENTS AND RECOMMENDATIONS OF THE TELEPHONE COMPANY. PROVIDE PLASTIC BUSHINGS FOR ALL ROUGH CONDUIT TERMINATIONS, AND 200 POUND TEST NYLON PULL-LINES IN ALL CONDUITS INTENDED FOR FUTURE USE. VERIFY ALL CONDUIT SIZES, TERMINAL SIZES, AND LOCATIONS WITH THE TELEPHONE COMPANY. 3.10 WIRING FOR MECHANICAL EQUIPMENT
A. FURNISH AND INSTALL CIRCUITS, FEEDERS, DISCONNECT SWITCHES, OUTLETS AND MAKE ALL CONNECTIONS TO MOTORS AND/OR CONTROLS FOR HEATING, VENTILATING, AIR CONDITIONING, AND PLUMBING EQUIPMENT AS CALLED FOR IN THE DRAWINGS AND SPECIFICATIONS.
B. FLEXIBLE CONDUIT SHALL BE USED FOR CONNECTIONS TO MOTORS AND/OR OTHER EQUIPMENT WHERE VIBRATION IS ENCOUNTERED AND/OR AS CALLED FOR ON THE DRAWINGS. EVERY EFFORT SHALL BE MADE TO MAINTAIN A MAXIMUM FLEXIBLE CONDUIT LENGTH OF 3 FEET.
C. INSTALL AND CONNECT ALL MAGNETIC STARTERS AND LINE VOLTAGE CONTROLLERS, PUSHBUTTON STATIONS, THERMOSTATS, ETC., FURNISHED BY OTHERS. LOCATE AS DIRECTED BY MECHANICAL CONTRACTOR. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR ALL POWER AND CONTROL OUTLETS AND REQUIRED WIRING.
D. LINE VOLTAGE CONTROL WIRING, INCLUDING INTERLOCKS WITH OTHER MECHANICAL EQUIPMENT, SHALL BE BY ELECTRICAL CONTRACTOR, AT THE DIRECTION OF AND UNDER THE SUPERVISION OF THE MECHANICAL CONTRACTOR.
E. PROVIDE WEATHERPROOF SWITCHES FOR ALL EQUIPMENT LOCATED ON ROOF OR WHERE EXPOSED TO WEATHER.

END OF SECTION 26000

No	Revision / Submissions	Date

ROSSI ENGINEERING INC.
5376 S. GIBRALTAR CT.
CENTENNIAL, CO 80015
303.720.9827
VROSSI@ROSSIENGINEERING.NET

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

ELECTRICAL SPECIFICATIONS

City of Greeley Colorado

COLORADO REGISTERED PROFESSIONAL ENGINEER VERNON R. WILLSON 35418

Designed: JH	Project Number: 25-010
Drawn: JH	Scale: As Shown
Checked: VJR	Drawing Number: E3
Reviewed: VRW	
Date: 02/12/2025	3 of 4

COPYRIGHT 2024 - BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.

COM*check* Software Version COMcheckWeb
Interior Lighting Compliance Certificate

Project Information

Energy Code:	2021 IECC
Project Title:	25-010 - SVA Greeley Core and Shell
Project Type:	New Construction

Construction Site:	Owner/Agent:	Designer/Contractor:
1911 59th Avenue Greeley, Colorado 80634		

Additional Efficiency Package(s)
Credits: 10.0 Required 0.0 Proposed

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Healthcare Core/Shell (Health Care-Clinic)	7215	0.81	5844
		Total Allowed Watts =	5844

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
1-Healthcare Core/Shell (Health Care-Clinic)				
LED: FE: 4' LED Strip: Other:	1	1	35	35
			Total Proposed Watts =	35

Interior Lighting PASSES: Design 99% better than code

Interior Lighting Compliance Statement
Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2021 IECC requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Justin Hayes - Electrical Engineer	JUSTIN HAYES	02-12-2025
Name - Title	Signature	Date

COM*check* Software Version COMcheckWeb
Exterior Lighting Compliance Certificate

Project Information

Energy Code:	2021 IECC
Project Title:	25-010 - SVA Greeley Core and Shell
Project Type:	New Construction
Exterior Lighting Zone	2 (Light industrial area with limited nighttime use (LZ2))

Construction Site:	Owner/Agent:	Designer/Contractor:
1911 59th Avenue Greeley, Colorado 80634		

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Parking Lot (Parking area)	9760 ft2	0.04	Yes	390
Building Exterior (Illuminated area of facade wall or surface)	8000 ft2	0.07	No	600
			Total Tradable Watts (a) =	390
			Total Allowed Watts =	990
			Total Allowed Supplemental Watts (b) =	400

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Parking Lot (Parking area, 9760 ft2): Tradable Wattage				
LED: AA: 20' LED Site Pole: Other:	1	4	166	664
Building Exterior (Illuminated area of facade wall or surface, 8000 ft2): Non-tradable Wattage				
LED: BB: Exterior LED Sconce: Other:	1	9	12	108
LED: CE: Exterior Egress Light: Other:	1	5	14	70
			Total Tradable Proposed Watts =	664

Exterior Lighting PASSES: Design 16% better than code

Exterior Lighting Compliance Statement
Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2021 IECC requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Justin Hayes - Electrical Engineer	JUSTIN HAYES	02-12-2025
Name - Title	Signature	Date

COM*check* Software Version COMcheckWeb
Inspection Checklist
Energy Code: 2021 IECC

Requirements: 0.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C103.2 [PR8][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C406 [PR9][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3.1 [EL22][1]	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1, C405.2.1.1 [EL18][1]	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, corridors, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1.2 [EL19][1]	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more within 20 minutes of when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor. Lights not turned off by occupant sensors is done so by time-switch.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1.3 [EL20][1]	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) general lighting in each zone permitted to turn on upon occupancy in control zone, 3) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 4) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.2, C405.2.2.1 [EL21][2]	Each area not served by occupancy sensors (per C405.2.1.1) have time-switch controls and functions detailed in sections C405.2.2.1.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.4, C405.2.4.1, C405.2.4.2 [EL23][2]	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.5 [EL27][1]	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.7 [EL28][1]	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.7 [EL26][2]	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.8 [EL27][2]	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.9.1, C405.9.2 [EL28][2]	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.10 [EL29][2]	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.1.1 [EL30][2]	At least 90% of dwelling unit permanently installed lighting shall have lamp efficacy >= 65 lm/W or luminaires with efficacy >= 45 lm/W or comply with C405.2.4 or C405.3.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.11, C405.11.1 [EL31][2]	50% of 15/20 amp receptacles installed in enclosed offices, conference rooms, copy rooms, break rooms, classrooms and workstations and > 25% of branch circuit feeders for modular furniture will have automatic receptacle control in accordance with C405.11.1.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI17][3]	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.5.1 [FI19][1]	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Exterior Lighting fixture schedule for values.*
C408.1.1 [FI57][1]	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.5 [FI16][3]	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.3 [FI33][1]	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

City of Greeley Colorado

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

No	Revision / Submissions	Date

ROSSI ENGINEERING INC.
5376 S. Gibraltar Ct.
Centennial, CO 80015
303.720.9827
vrossi@rossiengineering.net

3650 Wadsworth Boulevard
Wheat Ridge, Colorado 80033
Phone: 303-428-4895
Fax: 303-428-5472
Email: info@battistadesign.net
www.battistadesign.net
BATTISTA DESIGN GROUP

SVA GREELEY
Shell Building
1911 59th AVENUE
GREELEY, CO 80634

COMCHECK

COLORADO REGISTERED PROFESSIONAL ENGINEER VERNON R WILSON 35418

Designed: JH	Project Number: 25-010
Drawn: JH	Scale: As Shown
Checked: VJR	Drawing Number:
Reviewed: VRW	E4
Date: 02/12/2025	4 of 4

COPYRIGHT 2024 — BATTISTA DESIGN GROUP, P.C.
This document, and the ideas and design concepts incorporated herein, as an instrument of professional service, can not be used, in whole or in part for this or any other project, without the written authorization of BATTISTA DESIGN GROUP, P.C.

SVA GREELEY - DENTAL BUILDING

CONSTRUCTION DOCUMENTS

LOT 3 OF THE VILLAGE AT FOX RUN SUBDIVISION
SE 1/4 OF SECTION 9, TOWNSHIP 5 NORTH, RANGE 66 WEST OF THE 6TH P.M.
LOCATED AT 1911 59TH AVENUE, CITY OF GREELEY, COUNTY OF WELD, STATE OF COLORADO
0.91 AC.
PROJECT NUMBER: SPR2024-0022

LEGAL DESCRIPTION:

LOT 3, THE VILLAGE AT FOX RUN, A SUBDIVISION TO THE
CITY OF GREELEY, COUNTY OF WELD, STATE OF COLORADO.

BASIS OF BEARING:

BEARINGS ARE BASED ON THE EAST LINE OF LOT 3, THE VILLAGE AT FOX RUN HAVING A NAD83 COLORADO STATE PLANE NORTH ZONE GRID BEARING OF S01°00'19"E AS MEASURED AND BOUNDED BY A FOUND #5 REBAR, 0.2' BELOW GRADE, AT THE NORTHEAST CORNER OF SAID LOT AND BY A FOUND REBAR WITH 1" ORANGE PLASTIC CAP STAMPED "PLS 34995", 0.4' BELOW GRADE, AT THE SOUTHEAST CORNER OF SAID LOT.

BENCHMARK:

CITY OF GREELEY CONTROL POINT 56609D, ALSO BEING THE SOUTHEAST CORNER OF SECTION 9, TOWNSHIP 5 NORTH, RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN - 3-1/4" DIAMETER ALUMINUM CAP STAMPED "MCRAE & SHORT INC" "LS 7242" "1994", 0.4' BELOW GRADE IN A RANGE BOX, IN THE INTERSECTION OF 20TH STREET AND 59TH AVENUE. ELEVATION: 4849.03 FEET (NAVD 1988 DATUM). THE CONTOURS SHOWN HEREON ARE AT ONE (1) FOOT INTERVALS.

CONTACTS:

OWNER/DEVELOPER:
SVA GREELEY, LLC
KEITH VAN TASSELL
4609 S TIMBER RD, SUITE 103B
FORT COLLINS, CO 80528
PH: 970-217-9544

CIVIL ENGINEER / APPLICANT:
HCI ENGINEERING
A DIVISION OF HABERER CARPENTRY INC.
COLE HABERER, PE
621 SOUTHPARK DR., SUITE 1600
LITTLETON, CO 80210
PH: 303-979-3900

LANDSCAPE ARCHITECT:
VALERIAN, LLC
CASSIE KASLON
165 S UNION BLVD, SUITE 366
LAKEWOOD, CO 80227
PH: 303-347-1200

ARCHITECT:
BATTISTA DESIGN
PAUL BATTISTA
3650 WADSWORTH BLVD
WHEAT RIDGE, CO 80033
PH: (303) 428-4895

SURVEYOR:
ENGINEERING SERVICE COMPANY
JEFFERY A MILLER
14190 E EVANS AVE
AURORA, CO 80014
PH: (303) 337-1393

PHOTOMETRIC ENGINEER:
ROSSI ENGINEERING, INC
VINCE ROSSI
5376 S GIBRALTAR CT
CENTENNIAL, CO 80015
PH: (303) 720-9827

VICINITY MAP
N.T.S

MASTER LEGEND

EXISTING		PROPOSED
	CURB AND GUTTER (SPILL)	
	CURB AND GUTTER (CATCH)	
ST	STORM SEWER	
SS	SANITARY SEWER	SAN
W	WATER LINE	WAT WAT
G	GAS LINE	GAS GAS
E	ELECTRICAL	ELEC ELEC
FO	FIBER OPTIC LINE	FO FO
C E F	ELECTRICAL BOX	E
	SITE LIGHT	
	SIGN	
ST SS	MANHOLES	ST SAN
	INLET	
M	METER PIT	M
WAT	GATE VALVE	WAT
	THRUST BLOCK	
CO	CLEAN OUT	CO
	TREE	
	UTILITY POLE	
G	GAS METER	G
	FIRE HYDRANT	
(XXX)	SLOPE	XXX
5420	MAJOR CONTOUR	5420
5420	MINOR CONTOUR	5421
(XXXX)	SPOT ELEVATION	XXXX

HATCHING LEGEND

EXISTING		PROPOSED
	CONCRETE	
	LANDSCAPE	
	ASPHALT	

Sheet List Table

Sheet Number	Sheet Title
C1.0	COVER
C1.1	GREELEY NOTES
C1.2	HCI NOTES
C2.0	DEMO PLAN
C3.0	SITE & HC PLAN
C4.0	UTILITY PLAN
C5.0	GRADING PLAN
C6.0	DRAINAGE PLAN
C7.0	SITE DETAILS (1)
C7.1	SITE DETAILS (2)
C7.2	SITE DETAILS (3)
C7.3	PUBLIC DETAILS (1)
C7.4	PUBLIC DETAILS (2)
C7.5	PUBLIC DETAILS (3)
C7.6	PUBLIC DETAILS (4)
C8.0	EROSION CONTROL PLAN - INITIAL
C8.1	EROSION CONTROL PLAN - INTERIM
C8.2	EROSION CONTROL PLAN - FINAL
C8.3	EC DETAILS (1)
C8.4	EC DETAILS (2)
C8.5	EC DETAILS (3)
C8.6	EC DETAILS (4)

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE CITY OF GREELEY AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR THE ACCURACY OF ALL DESIGN, REVISIONS, AND RECORD CONDITIONS THAT I HAVE NOTED ON THESE PLANS.

COLE C. HABERER, P.E. DATE
STATE OF COLORADO NO. 43259

CONSTRUCTION MUST BE IN ACCORDANCE WITH APPLICABLE CITY OF GREELEY CONSTRUCTION STANDARDS. THE CITY'S ACCEPTANCE SHALL NOT RELIEVE THE DESIGN ENGINEER'S RESPONSIBILITY FOR ERRORS, OMISSIONS, OR DESIGN DEFICIENCIES FOR WHICH THE CITY IS HELD HARMLESS.

ACCEPTED BY: _____ _____
FIRE MARSHAL DATE

ACCEPTED BY: _____ _____
ENGINEERING DEVELOPMENT REVIEW/CIVIL INSPECTIONS MANAGER DATE

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma

PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**,
Call before you dig.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name:
COVER
Sheet Number:
C1.0

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Cover.dwg PLOTDATE: 2025-02-06

STORMWATER GENERAL NOTES:

1. ALL STORMWATER FACILITY CONSTRUCTION SHALL CONFORM TO THE MOST RECENT VERSION OF CITY OF GREELEY STANDARD DETAILS. CONSTRUCTION SPECIFICATIONS FOR STORMWATER FACILITIES NOT COVERED BY THE CITY'S STANDARD DETAILS SHALL BE THOSE IN THE MOST RECENT VERSION OF THE CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR THOSE PUBLISHED BY THE MILE HIGH FLOOD DISTRICT (MHFD). DETAILS NOT COVERED BY THE CITY'S STANDARD DETAILS SHALL BE THOSE IN THE CDOT MISCELLANEOUS STANDARD PLANS (M-STANDARDS) OR THOSE PUBLISHED BY THE MHFD OR AS APPROVED BY THE CITY OF GREELEY.
2. CITY STANDARD DETAILS ARE NOT TO SCALE UNLESS A SCALE IS INDICATED.
3. REMOVE ALL DEBRIS FROM TRENCHES, INCLUDING SODA CANS, RAGS, PIPE BANDING MATERIAL, ETC. BEFORE BACKFILLING.
4. ALL REBAR USED FOR STORM DRAINAGE STRUCTURES SHALL BE EPOXY COATED.
5. THE CONTRACTOR MUST FOLLOW THE REQUIREMENTS IN THE STATE STORMWATER PERMIT INCLUDING DAILY STREET AND WALKWAY SWEEPING AND DUST CONTROL, USING WATER AS A DUST PALLIATIVE WHERE REQUIRED. COSTS FOR THIS WORK ARE INCLUDED IN THE ACCEPTED TOTAL BID AND NO ADDITIONAL PAYMENT SHALL BE MADE.
6. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AS-CONSTRUCTED RECORD DRAWINGS TO THE CITY OF GREELEY'S PUBLIC WORKS DEPARTMENT IN ACCORDANCE WITH THE CITY'S STORM DRAINAGE DESIGN CRITERIA.
7. THE CONTRACTOR IS REQUIRED TO HAVE A CURRENT CITY OF GREELEY CONTRACTOR'S LICENSE TO PERFORM ANY WORK IN PUBLIC RIGHT-OF-WAY OR EASEMENTS.
8. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO COMMENCEMENT OF ANY WORK.
9. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR ALL CONSTRUCTION-RELATED CONDITIONS AT AND ADJACENT TO THE JOB SITE, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, DURING THE PERFORMANCE OF THE WORK AT ALL TIMES. ANY CITY INSPECTIONS COMPLETED DURING CONSTRUCTION ARE NOT INTENDED TO EVALUATE THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.
10. WORKING HOURS SHALL BE BETWEEN 7:00 AM AND 6:00 PM ON NORMAL CITY OF GREELEY BUSINESS DAYS UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE CITY.
11. THE OWNER SHALL ENSURE THAT THE SIZE AND TYPE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK ARE LOCATED AND SHOWN ON THE CONSTRUCTION DRAWINGS. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES INCLUDING, BUT NOT LIMITED TO, ATMOS ENERGY, CENTURYLINK, XCEL ENERGY, COMCAST, AND THE GREELEY WATER AND SEWER DEPARTMENT, PRIOR TO COMMENCING CONSTRUCTION, TO HAVE ALL EXISTING UTILITIES FIELD LOCATED.

GENERAL NOTES:

1. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY, OR EASEMENT SHALL CONFORM TO THE CITY OF GREELEY CONSTRUCTION SPECIFICATIONS AND DESIGN STANDARDS.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO COMMENCEMENT OF ANY WORK ON THE PROJECT. A PERMIT FROM PUBLIC WORKS DEPARTMENT (970-350-9881) IS REQUIRED FOR ALL CONSTRUCTION IN PUBLIC RIGHT-OF-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 1-800-922-1987 FOR UTILITY LOCATES AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
3. THE CONTRACTOR SHALL NOTIFY CONSTRUCTION SERVICES (970) 350-9539 AT LEAST 24 HOUR PRIOR TO REQUIRED INSPECTION.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY 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.
5. 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 PLANS, INVOLVE SIGNIFICANT CHANGES TO THE CHARACTER 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.
6. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE 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. 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.
7. 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 THE GREELEY SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
8. 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 PROFESSIONAL LICENSED SURVEYOR (PLS) PRIOR TO DISTURBING ANY MONUMENTS.
9. PRIOR TO FINAL PLACEMENT OF SURFACE PAVEMENT, ALL UNDERGROUND UTILITY MAINS SHALL BE INSTALLED AND SERVICE CONNECTIONS 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. CONTRACTOR SHALL RESTRICT WORKING HOURS TO BETWEEN 7:00 AM AND 6:00 PM ON NORMAL CITY OF GREELEY BUSINESS DAYS UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE CITY.

WATER AND SANITARY SEWER GENERAL NOTES:

1. ALL CONSTRUCTION WORK TO BE ACCEPTED BY THE CITY SHALL CONFORM TO THE CITY OF GREELEY CONSTRUCTION SPECIFICATIONS AND DESIGN STANDARDS.
2. ALL OVER LOT GRADING IN THE RIGHT-OF-WAY OR EASEMENT SHALL BE COMPLETED PRIOR TO INSTALLING POTABLE WATER, SANITARY SEWER, OR NON-POTABLE IRRIGATION LINES.
3. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION. CALL UTILITY NOTIFICATION CENTER OF COLORADO AT 1-800-922-1987 OR DIAL 811 FOR UTILITY LOCATES 48 HOURS PRIOR TO ANY EXCAVATION WORK.
4. MAINTAIN A MINIMUM OF TEN (10) FEET HORIZONTAL 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 MAINS/SERVICES. 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 MAINTAINED, OR A MINIMUM TEN (10) FOOT HORIZONTAL SEPARATION CANNOT BE ACHIEVED, THE CITY SHALL BE CONTACTED IMMEDIATELY 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.
6. WHERE POTABLE WATER, SANITARY SEWER, AND NON-POTABLE IRRIGATION LINES ARE LOCATED IN COMMON UTILITY EASEMENT AREAS, THERE SHALL BE NO OTHER UTILITIES LOCATED HORIZONTALLY WITHIN TEN (10) FEET OF EITHER LINE EXCEPT AT APPROVED CROSSINGS.
7. CONTRACTOR SHALL NOTIFY THE CITY ONE (1) WEEK PRIOR TO COMMENCING WORK AFTER CITY ACCEPTED CONSTRUCTION DRAWINGS HAVE BEEN DISTRIBUTED AND A PRE-CONSTRUCTION MEETING HAS BEEN HELD WITH THE CITY.
8. CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITIES TO BE CROSSED BY POTABLE WATER, SANITARY SEWER, OR NON-POTABLE IRRIGATION LINES AT LEAST 24 HOURS PRIOR TO CROSSING TO ENSURE 18" MINIMUM CLEARANCE FOR OPEN CUT CROSSINGS AND 36" MINIMUM CLEARANCE FOR BORED CROSSINGS. HORIZONTAL AND VERTICAL LOCATION OF CROSSED EXISTING UTILITIES SHALL BE RECORDED ON THE AS-CONSTRUCTED RECORD DRAWINGS.
9. SHOULD ANY VARIATIONS 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 ACCEPTANCE BY THE DESIGN ENGINEER 72 HOURS PRIOR TO CONSTRUCTION.
10. FINAL CONSTRUCTION PLANS ARE VALID FOR CONSTRUCTION ONE (1) YEAR FROM THE DATE OF CITY SIGNATURE ACCEPTANCE.
11. 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.
12. 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.
13. ALL NEW WATER MAINS SHALL BE BULKHEADED AND TESTED AND APPROVED PRIOR TO CONNECTION TO THE EXISTING 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 BULKHEAD.
14. 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 ENGINEER FOR ACCEPTANCE PRIOR TO PAVING CONSTRUCTION. THE VERIFICATION SURVEY SHALL ALSO PROVIDE SEWER PIPE SLOPES AND LENGTH AND PROPOSED FINISHED GROUND ELEVATIONS AT ALL VALVE BOXES AND MANHOLE RIM ELEVATIONS.
15. ALL UTILITY CONDUIT CROSSINGS OF POTABLE WATER, SANITARY SEWER AND NON-POTABLE IRRIGATION LINES SHALL BE ENCASED IN HIGH DENSITY POLYETHYLENE (HDPE) PIPE, WITH A MINIMUM STANDARD DIMENSION RATIO (SDR) 11 ACROSS THE ENTIRE EASEMENT OR RIGHT-OF-WAY WIDTH. THE ENCASEMENT JOINT SHALL BE BUTT FUSED. FLEXIBLE JOINTS ARE NOT ALLOWED.
16. WET TAPS SHALL BE DRILLED BY THE CITY FOR A FEE. CALL 970-350-9810 AT LEAST 48 HOURS IN ADVANCE TO PAY FEES AND SCHEDULE TAP.
17. 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 PREVENTION ASSEMBLY SHALL BE A REDUCED PRESSURE ZONE (RPZ) DEVICE AND SHALL BE LOCATED NEAR A FLOOR DRAIN. THIS ASSEMBLY MUST BE TESTED BY A CERTIFIED TESTER UPON INSTALLATION AND THEREAFTER ON AN ANNUAL BASIS TO COMPLY WITH CITY CODE AND STATE HEALTH DEPARTMENT REGULATIONS. [CHAPTER 14.08.195], [VOLUME III, APPENDIX A6]

   THE FOLLOWING LINK PROVIDES A LIST OF CERTIFIED TESTERS FOR BACKFLOW ASSEMBLIES:
   HTTP://GREELEYGOV.COM/SERVICES/WS/DEVELOPMENT/CROSS-CONNECTION-AND-BACKFLOW-PREVENTION

   BACKFLOW ASSEMBLY TEST AND MAINTENANCE REPORTS CAN BE MAILED TO THE CITY OF GREELEY WATER AND SEWER DEPARTMENT AT 1001 11TH AVE, 2ND FLOOR, GREELEY, CO 80631, FAXED TO 970-350-9805, OR EMAILED TO CHRISSY.LUTZ@GREELEYGOV.COM ALL BACKFLOW TEST REPORTS NEED TO BE PROVIDED TO THE WATER AND SEWER DEPARTMENT UPON INSTALLATION AND THEREAFTER ON AN ANNUAL BASIS.
18. APPROPRIATE BACKFLOW PREVENTION ASSEMBLIES ARE REQUIRED ON THE APPLICABLE USES INCLUDING DOMESTIC WATER SERVICE, FIRE SPRINKLER SYSTEM, AND LANDSCAPE IRRIGATION SYSTEM. ALL BACKFLOW TEST REPORTS SHALL BE PROVIDED TO THE CITY OF GREELEY WATER AND SEWER DEPARTMENT UPON INSTALLATION AND ON AN ANNUAL BASIS THEREAFTER.
19. 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 EASEMENTS.
20. ABANDON THE EXISTING WATER LINE PER CITY OF GREELEY WATER AND SEWER SPECIFICATIONS. A CITY OF GREELEY REPRESENTATIVE MUST BE PRESENT DURING ABANDONMENT OF SERVICES.

GENERAL GRADING, EROSION & SEDIMENT CONTROL NOTES:

1. CONTRACTOR SHALL INSTALL ALL PERIMETER SEDIMENT AND EROSION CONTROL DEVICES INCLUDING, BUT NOT LIMITED TO, SILT FENCE, INLET PROTECTION, VTC PAD, WHEEL WASHOUT, AND SEDIMENT BASINS BEFORE COMMENCING ANY LAND CLEARING OR GRADING ACTIVITIES. THE CONTRACTOR SHALL LIMIT TOPSOIL STRIPPING OPERATIONS TO WITHIN THE AREAS IN WHICH THEY WILL BE IMMEDIATELY WORKING. THE CONSTRUCTION OF UNDERGROUND UTILITIES SHALL BE INCLUDED AS A LAND DISTURBING ACTIVITY. ALL EXCAVATED MATERIAL SHALL BE PLACED WHERE SEDIMENT WILL ERODE BACK INTO THE TRENCH. ALL TRENCHES SHALL BE BACKFILLED BY THE END OF THE DAYS WORK; BACKFILL SHALL BE PERMANENTLY STABILIZED BEFORE CONSTRUCTION IS CONSIDERED COMPLETE.
2. ALL DISTURBED AREAS AND SOIL STOCKPILES SHALL BE ADEQUATELY STABILIZED AS DEFINED IN THE URBAN DRAINAGE FLOOD CONTROL DISTRICT (UDFCD), VOLUME 3, CONSTRUCTION BEST MANAGEMENT PRACTICES, SECTION 3.0 "EROSION CONTROL". ALL DISTURBED SOILS AND SOIL STOCKPILES SHALL BE WATERED AND MAINTAINED IN A ROUGHENED CONDITION AT ALL TIMES DURING CONSTRUCTION ACTIVITIES TO PREVENT WIND-CAUSED EROSION. ALL LAND DISTURBING ACTIVITIES WILL BE IMMEDIATELY DISCONTINUED WHEN FUGITIVE DUST IMPACTS ADJACENT PROPERTIES, AS DETERMINED BY CITY INSPECTOR. PERMANENT OR TEMPORARY NATIVE SEED (SEE SDDC MANUAL SECTION 14 FOR SEEDING SPECIFICATIONS) SOIL STABILIZATION SHALL BE REQUIRED WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED. IF DISTURBED AREAS OR STOCKPILES ARE NOT BROUGHT TO FINAL GRADE WITHIN 30 DAYS FOLLOWING THE INITIAL DISTURBANCE, OR RE-DISTURBANCE, TEMPORARY STABILIZATION MEASURES SHALL BE REQUIRED. NO SOIL STOCKPILE SHALL EXCEED TEN (10) FEET IN HEIGHT. ALL SOIL STOCKPILE SIDE SLOPES SHALL NOT EXCEED A SLOPE OF 4V:1H.
3. ALL STORM SEWER INLETS SHALL BE PROTECTED FROM THE ENTRY OF SEDIMENT-LADEN WATER. HAY BALES ARE NOT RECOGNIZED BY THE CITY OF GREELEY AS AN ACCEPTABLE FORM OF EROSION CONTROL.
4. INSPECTION OF ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL BE REQUIRED AT THE END OF EACH DAY'S WORK, WITH NECESSARY MAINTENANCE AND REPAIRS PROVIDED IMMEDIATELY. THE CITY OF GREELEY INSPECTOR SHALL, AT THEIR DISCRETION, REQUIRE ANY EROSION CONTROL DEVICES BE REPAIRED , REPLACED, RELOCATED, MODIFIED, OR REMOVED. SUCH REQUESTS SHALL BE COMPLETED WITHIN 5 WORKING DAYS FOLLOWING RECEIPT OF THE WRITTEN REQUEST FROM THE INSPECTOR. ALL PUBLIC RIGHT OF WAY POLLUTED WITH DIRT, MUD, OR DEBRIS SHALL BE SWEPT CLEAN AT THE END OF EACH DAYS WORK OR AFTER STORM EVENTS, AS NECESSARY. ALL TEMPORARY AND PERIMETER EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AS SOON AS THEIR FUNCTION HAS BEEN FULFILLED. SEDIMENT TRAPS/BASINS SHALL BE CLEANED AND REMOVED, OR STABILIZED, WHEN ALL UPSTREAM AREAS ARE PERMANENTLY STABILIZED. THE SITE CONTRACTOR IS RESPONSIBLE FOR PROPERLY DISPOSING OFF ALL SILT FROM THE SITE, IF IT IS NOT REUSABLE ON SITE.
5. THE LANDOWNER SHALL BE HELD RESPONSIBLE FOR THE LONG-TERM STABILITY OF CUT AND FILL SLOPES AND THE SUCCESSFUL ESTABLISHMENT OF PERMANENT VEGETATIVE COVER ON EXPOSED SOIL AS DEFINED IN THE UDFCD, VOLUME 3, CONSTRUCTION BEST MANAGEMENT PRACTICES, SECTION 3.2 "MULCHING".
6. ALL CONSTRUCTION SUPPLIES OR MATERIALS USED OR STORED ON SITE MUST BE DISPOSED OF PROPERLY AND MUST MEET ALL APPLICABLE MATERIAL SAFETY DATA SHEET CRITERIA.
7. THE STATE STORMWATER DISCHARGE PERMIT HOLDER MAY BE LIABLE FOR ANY VIOLATIONS RESULTING FROM THE ACTIONS TAKEN BY SITE CONTRACTORS, SUBCONTRACTORS, MAINTENANCE CREWS, ETC.
8. RESTORATION OF ANY AREAS DISTURBED BY THE PROPOSED GRADING ACTIVITIES SHALL BE DONE IN COMPLIANCE WITH THE REQUIREMENTS OUTLINED IN SECTION 14 - VEGETATION & IRRIGATION OF THE STORM DRAINAGE DESIGN CRITERIA AND CONSTRUCTION STANDARDS.
9. CITY OF GREELEY REPRESENTATIVE SHALL BE ON SITE DURING ALL SEEDING ACTIVITIES TO INSPECT THE CONDITIONS AND ENSURE COMPLIANCE WITH THE STORM DRAINAGE DESIGN CRITERIA ANDCONSTRUCTION STANDARDS.
10. TO SCHEDULE THIS REQUIRED INSPECTION, PLEASE CALL (970) 336-4074 AT LEAST 48 HOURS IN ADVANCE OF THE SEEDING ACTIVITIES.
11. ALL SEED BAGS TAGS MUST BE TURNED IN TO THE CITY OF GREELEY REPRESENTATIVE.

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**.
Call before you dig.

811

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name:
GREELEY NOTES
Sheet Number:
C1.1

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Cover.dwg PLOTDATE: 2025-02-06

DEMOLITION NOTES:

1. TREE REMOVAL/RELOCATION SHALL BE COORDINATED WITH LANDSCAPE PLANS AND OWNER'S REPRESENTATIVE.

2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND VERIFY THE EXTENTS OF REQUIRED DEMOLITION PRIOR TO CONSTRUCTION. ADDITIONAL SCOPE MAY BE REQUIRED THAN SHOWN HEREON. THE CONTRACTOR SHALL COORDINATE ALL DEMOLITION WITH STRUCTURAL MECHANICAL, ELECTRICAL, PLUMBING, LANDSCAPING AND ARCHITECTURAL DRAWINGS.

3. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR BURIED UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES PRIOR TO CONSTRUCTION.

4. THESE PLANS ARE BASED ON THE SURVEY BY FALCON SURVEYING DATED 5/22/2023. HCI ENGINEERING HAS NOT CONDUCTED ANY ON SITE INVESTIGATION FOR EXISTING UTILITIES. ADDITIONAL UTILITIES, IN USE OR ABANDONED, MIGHT EXIST ON, NEAR OR CROSSING THE SUBJECT PROPERTY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT ON SITE INVESTIGATION FOR UNKNOWN UTILITIES AND CONFIRM UTILITY LOCATIONS SHOWN HEREON. THE CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCY.

5. CONTRACTOR SHALL PRESERVE EXISTING VEGETATION OUTSIDE OF THE PROJECT LIMITS. ANY DAMAGE TO VEGETATION OR SITE IMPROVEMENTS OUTSIDE OF THE PROJECT LIMITS DUE TO CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.

6. BARRIERS/FENCING SHALL BE PROVIDED PRIOR TO SITE DEMOLITION TO PROVIDE FOR SAFETY OF WORKERS AND PASSERSBY. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ROUTES DURING CONSTRUCTION.

7. THE CONTRACTOR SHALL SUBMIT A DETAIL DEMOLITION PLAN OUTLINING REMOVAL.

8. THE CONTRACTOR SHALL PROVIDE FOR DUST CONTROL DURING DEMOLITION TO INCLUDE COVERING TRUCKS HAULING DEBRIS OFFSITE, PERIODICALLY CLEANING AND SWEEPING ADJACENT STREETS AND DRIVES AND/OR USING DUST PALLIATIVE AS NEEDED.

9. THE CONTRACTOR SHALL SAW CUT EXISTING ASPHALT PAVEMENT AT DEMOLITION LIMITS. APPLY SS-1 TACKCOAT AT EDGE PRIOR TO PLACING NEW ASPHALT.

10. EXISTING CONCRETE AT DEMOLITION LIMITS SHALL BE SCORED THEN BROKEN AT THE JOINT TO CREATE A ROUGH SURFACE TO ACCEPT NEW CONCRETE.

11. THE CONTRACTOR SHALL REFER TO PROJECT SPECIFICATIONS FOR THE DISPOSAL OF ALL DEMOLISHED ITEMS.

12. THOROUGHLY CLEAN ALL AREAS, SURFACES, BUILDINGS AND STRUCTURES IMPACTED BY DEMOLITION ACTIVITIES PRIOR TO START OF NEW CONSTRUCTION.

13. DEMOLITION SHALL INCLUDE (AT A MINIMUM):
    - REMOVAL OF ASPHALT, CONCRETE, AND OR GRAVEL SURFACES.
    - REMOVAL OR TREES, BUSHES AND FOLIAGE, AS DIRECTED BY LANDSCAPE. TREE REMOVAL OR TRANSPLANTING SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND LANDSCAPE.
    - REMOVAL OF FENCE.
    - REMOVAL OF ANY UNSATISFACTORY SOIL, AS IDENTIFIED BY THE GEOTECHNICAL ENGINEER.

GRADING NOTES:

1. ALL EARTHWORK REQUIRED OF THIS CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE PROJECT SPECIFICATIONS, GEOTECHNICAL INVESTIGATION FOR THE SITE AND THE APPROPRIATE GOVERNING AGENCIES STANDARDS AND SPECIFICATIONS.

2. A PRE CONSTRUCTION MEETING SHALL BE SCHEDULED WITH THE DEVELOPER, ENGINEER, CONTRACTOR AND THE APPROPRIATE GOVERNING AGENCY PRIOR TO ANY CONSTRUCTION.

3. REFER TO THE GEOTECHNICAL REPORT AND STRUCTURAL DRAWINGS FOR COMPACTION AND EARTHWORK REQUIREMENTS FOR THE BUILDING PADS AND ADJACENT AREAS. THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.

4. IF THE SUBGRADE SHOULD BECOME FROZEN, DESICCATED, SATURATED, OR DISTURBED, THE AFFECTED MATERIAL SHOULD BE REMOVED OR THESE MATERIALS SHOULD BE SCARIFIED, MOISTURE CONDITIONED, AND RECOMPACTED PRIOR TO FOUNDATION, FLOOR SLAB AND PAVEMENT CONSTRUCTION.

5. FILL SHOULD BE PLACED AND COMPACTED IN HORIZONTAL (8") LIFTS, USING EQUIPMENT AND PROCEDURES THAT WILL PRODUCE RECOMMENDED MOISTURE CONTENTS AND DENSITIES THROUGHOUT THE LIFT. REFER TO GEOTECHNICAL REPORT FOR COMPACTION REQUIREMENTS.

6. THE PLACEMENT AND COMPACTION OF FILL AND BACKFILL SHOULD BE OBSERVED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER. REFER TO THE COMPACTION REQUIREMENTS IN THE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.

7. ALL SOILS USED FOR FILL AND BACKFILL MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO INSTALLATION. THE GEOTECHNICAL ENGINEER SHALL OBSERVE AND TEST THE FILL COMPACTION, APPROVE THE FILL MATERIALS AND COMMENT, AS NEEDED, ON THE METHOD OF PLACING AND COMPACTION, IN WRITING, TO THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE GEOTECHNICAL ENGINEER WHEN TESTS ARE TO BE MADE. THE GEOTECHNICAL ENGINEER SHALL APPROVE ALL FOUNDATION EXCAVATIONS AND GIVE WRITTEN APPROVAL OF THE COMPLETED FOUNDATIONS TO THE ARCHITECT. QUALITY CONTROL BY AN INDEPENDENT TESTING AGENCY AND GEOTECHNICAL ENGINEER SHALL IN NO WAY RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR PERFORMING ALL WORK IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS.

8. NO RUBBLE OR DEBRIS INCLUDING TIMBER, CONCRETE RUBBLE, TREES, BRUSH, AND ASPHALT SHALL BE PLACED IN THE BACKFILL UNDER ANY OF THE PROPOSED BUILDINGS, STREETS, CURB & GUTTER, SIDEWALK, DRAINAGE STRUCTURES, WITHIN FIVE (5) FEET OF A BUILDING FOOTPRINT OR BE IN THE PLACEMENT OF ANY UNCLASSIFIED FILL. PROPERLY GRADED RUBBLE MAY BE USED IN SOME LOCATIONS AS SPECIFIED AND VERIFIED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND HAULING OF SUCH MATERIALS TO A SUITABLE SPOIL AREA. COSTS ASSOCIATED WITH THE REMOVAL OF SUCH MATERIALS SHALL BE PAID FOR AS DOCUMENTED IN THE PROJECT SPECIFICATIONS.

9. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, MAINTENANCE AND OPERATION OF ANY REQUIRED DEWATERING SYSTEM. THE CONTRACTOR SHALL PERFORM SUCH INDEPENDENT INVESTIGATION AS DEEMED NECESSARY TO DETERMINE THE SUBSURFACE GROUNDWATER CONDITIONS AND UNSTABLE SOIL CONDITIONS TO BE ENCOUNTERED THROUGHOUT THE CONSTRUCTION.

10. IMMEDIATELY PUMP OR BAIL OUT WATER FOUND IN EXCAVATIONS, WHETHER RAIN OR SEEPAGE. EXCAVATIONS MUST BE KEPT FREE FROM WATER AT ALL TIMES. TAKE ALL MEASURES AND FURNISH ALL EQUIPMENT AND LABOR NECESSARY TO CONTROL THE FLOW, DRAINAGE AND ACCUMULATION OF WATER AS REQUIRED TO PERMIT COMPLETION OF THE WORK AND TO AVOID DAMAGE TO THE WORK. CONTRACTOR SHALL COMPLY WITH ALL CDPHE AND OSHA RULES AND REGULATIONS AT ALL TIMES.

11. WHEN FREEZING TEMPERATURES MAY BE EXPECTED, DO NOT EXCAVATE TO THE FULL DEPTH INDICATED UNLESS THE FOOTING OR SLABS ARE TO BE POURED IMMEDIATELY AFTER THE EXCAVATION HAS BEEN COMPLETED. IF PLACING OF CONCRETE IS DELAYED, PROTECT THE BOTTOMS OF EXCAVATIONS FROM FROST UNTIL CONCRETE IS PLACED.

12. NO FILL MATERIAL SHALL BE PLACED, SPREAD OR ROLLED WHILE IT IS FROZEN OR THAWING OR DURING UNFAVORABLE WEATHER CONDITIONS. WHEN THE WORK IN PROGRESS IS INTERRUPTED BY HEAVY RAIN, FILL OPERATIONS SHALL NOT BE RESUMED UNTIL THE GEOTECHNICAL ENGINEER INDICATES THAT THE MOISTURE CONTENT AND DENSITY OF THE PREVIOUSLY PLACED FILL ARE AS SPECIFIED.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISION OF ADEQUATE SHORING AND/OR BRACING NECESSARY TO FACILITATE THE EXCAVATION ASSOCIATED WITH THE CONSTRUCTION OF THE WALLS, PIPELINES AND FOUNDATIONS. THE BRACING AND/OR SHORING OF EXCAVATED WALLS OR TRENCHES SHALL BE IN COMPLIANCE WITH OSHA REGULATIONS AND SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER. THE COST OF SHORING AND/OR BRACING SHALL BE INCLUDED IN THE COST OF THE SPECIFIC CONSTRUCTION ITEM REQUIRING THE SHORING AND/OR BRACING.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND HAULING OF UNSUITABLE FILL MATERIALS TO A SUITABLE SPOIL AREA. EXCESS EXCAVATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE. THE COST OF HAULAGE AND SPOILING OF EXCESS EXCAVATED MATERIALS SHALL BE PAID FOR AS DOCUMENTED IN THE PROJECT SPECIFICATIONS.

15. THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE SITE PRIOR TO BIDDING TO VERIFY SITE CONDITIONS.

16. PROPOSED GRADING CONTOURS SHOWN ON THE PLAN ARE TO FINAL GRADE.

17. ALL VERTICAL SPOT ELEVATIONS SHOWN ON THE GRADING PLAN ARE FLOWLINE OF CURB (FL), UNLESS OTHERWISE NOTED.

18. ALL SLOPES EQUAL TO OR GREATER THAN 4:1 SHALL REQUIRE EROSION CONTROL BLANKET, NORTH AMERICAN GREEN SC150BN DOUBLE NETTED OR EQUAL AS A TEMPORARY STABILIZATION MEASURE.

19. ALL SURFACES NOT RECEIVING PAVEMENT OR OTHER TREATMENT SHALL BE SEEDED AND MULCHED.

20. BUILDING CONTRACTOR(S) WILL BE RESPONSIBLE FOR CONSTRUCTING POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.

21. SIDEWALK SLOPES SHALL NOT EXCEED 2.0% MAXIMUM CROSS SLOPES AND 5.0% MAXIMUM LONGITUDINAL SLOPES, UNLESS OTHERWISE NOTED. THE SLOPE IN THE HANDICAP PARKING SPACES AND ASSOCIATED STRIPED ISLAND SHALL NOT EXCEED 2.0%.

22. APPROXIMATE AREA TO BE DISTURBED = 0.65 ACRES

23. THESE PLANS HAVE BEEN PREPARED BY HCI ENGINEERING IN ACCORDANCE WITH AND IN RELIANCE UPON THE GEOTECHNICAL STUDY AND RECOMMENDATIONS. THE CONTRACTOR SHALL REVIEW THE GEOTECHNICAL REPORT FOR PAVEMENT DESIGN AND RECOMMENDATIONS REGARDING EXCAVATION, COMPACTION, MATERIALS, EMBANKMENT, PAVEMENT SUBEXCAVATION, MOISTURE CONTROL, AND TOPSOIL REMOVAL AND REPLACEMENT. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF DISCREPANCIES BETWEEN THE GEOTECHNICAL REPORT RECOMMENDATIONS AND REQUIREMENTS OF THESE CONSTRUCTION DRAWINGS.

24. CONTRACTOR SHALL PROVIDE A 2-FOOT MINIMUM ASPHALT PATCH AT ALL NEW FLATWORK (SIDEWALK, CURB AND GUTTER, CROSS PANS, ETC..) TO EXISTING PAVEMENT LOCATIONS. THE PATCH SHALL MATCH EXISTING PAVEMENT THICKNESS, RECOMMENDATIONS PER GEOTECHNICAL REPORT OR JURISDICTIONAL STANDARDS WHICHEVER IS MOST CONSERVATIVE. IF REQUIRED, THE PATCH SHALL BE UP-SIZED AS NEED TO ENSURE GRADE SLOPES BETWEEN FLATWORK AND EXISTING PAVEMENT ARE NOT GREATER THAN 5% AND LESS THAN 2.0%. CONTRACTOR SHALL COMPLETE A FIELD INSPECTION TO DETERMINE IS ADDED PAVEMENT PATCH WORK IS NEEDED.

25. GRADING AND FORM CHECK SHALL BE PROVIDED TO ENGINEER PRIOR TO INSTALLATION AND POURING OF ADA RAMPS AND PARKING STALLS.

26. CONTRACTOR SHALL PROVIDE ENGINEER WITH TOPOGRAPHIC AS-BUILT SURVEY OF ALL CRITICAL PEDESTRIAN PATHS, RAMPS AND STRUCTURE THRESHOLDS TO ENSURE CONFORMANCE WITH ADA CRITERIA.

SIGNAGE AND STRIPING NOTES:

1. ALL TRAFFIC CONTROL, TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVISES (MUTCD), THE CURRENT COLORADO SUPPLEMENT AND THE APPROVED PLANS.

2. THE PAVEMENT MARKING PAINT SHALL BE ALKYD-RESIN TYPE, READY MIXED COMPLYING WITH AASHTO M248, TYPE I, COLOR AS NOTED ON PLANS OR CHLORINATED-RUBBER BASE TRAFFIC LANE MARKING PAINT, FACTORY-MIXED, QUICK-DRYING AND NON-BLEEDING.

3. INSTALL THE PAVEMENT MARKING PAINT PER THE MANUFACTURER'S RECOMMENDATIONS.

4. APPLY PAINT WITH MECHANICAL EQUIPMENT TO PRODUCE UNIFORM STRAIGHT EDGES. APPLY IN TWO COATS AT MANUFACTURER'S RECOMMENDED RESULTS. SWEEP AND CLEAN SURFACE PRIOR TO PAINTING TO ELIMINATE LOOSE MATERIAL AND DUST.

5. STRIPING SHALL BE DONE WHEN THE AIR AND PAVEMENT TEMPERATURES ARE AT LEAST 50F OR AS RECOMMENDED BY THE MANUFACTURER. THE PAVEMENT SURFACE AND WEATHER CONDITIONS SHALL BE CONDUCIVE TO SATISFACTORY RESULTS.

6. STOP SIGN PLACEMENT LOCATIONS SHALL BE PER SECTION 2B-9 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION AND CDoT S-614-1.

7. EXISTING PAVEMENT MARKINGS CONFLICTING WITH PROPOSED DESIGN SHALL BE REMOVED BY A WATER OR SAND BLAST METHOD THAT WILL NOT DETERIORATE THE PAVEMENT, AS APPROVED BY THE ENGINEER.

8. HANDICAP PARKING SIGNS SHALL BE LOCATED AT EACH HANDICAP PARKING SPACE.

9. ALL PAVEMENT MARKINGS FOR PARKING SPACES AND PAINTED ISLANDS SHALL BE 4-INCH WIDE WHITE STRIPES, UNLESS OTHERWISE NOTED.

10. STRIPED ISLANDS: 4" WIDE WHITE PAINTED STRIPES @ 36" O.C. TYPICAL, PAINTED AT A 45 DEGREE ANGLE TO PARKING SPACE LINE.

11. CONTRACTOR TO VERIFY FIRE LANE PAINT AND SIGN LOCATIONS WITH FIRE DEPARTMENT PRIOR TO INSTALLATION.

HCI GENERAL UTILITY NOTES:

1. ALL WATER, SANITARY SEWER AND STORM SEWER WORK SHALL COMPLY WITH THE APPROPRIATE GOVERNING AGENCIES' STANDARDS AND SPECIFICATIONS, CURRENT EDITION, PERTINENT TO EACH UTILITY.

2. THE CONTRACTOR AND SURVEY CREW SHALL VERIFY ELEVATIONS OF EXISTING SANITARY SEWER, STORM SEWER, WATER LINES AND MANHOLES TO BE TIED TO PRIOR TO CONSTRUCTION OR STAKING OF PIPE. THE CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCY.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION ON A SET OF RECORD DRAWINGS.

4. THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES AND THE APPROPRIATE GOVERNING AGENCY PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY EXISTING UTILITY (INCLUDING DEPTHS) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.

5. THE LOCATIONS OF EXISTING UTILITIES ARE BASED UPON THE BEST AVAILABLE INFORMATION, ARE SHOWN IN AN APPROXIMATE WAY ONLY, AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES.

6. LOCATION OF ALL EXISTING UTILITIES (PRIVATE OR PUBLIC) SHALL BE IDENTIFIED AND VERIFIED BY CONTRACTOR PRIOR TO MOBILIZATION, CONSTRUCTION, OR ORDERING OF MATERIALS. THE CONTRACTOR SHALL BEAR THE FULL COST OF REMOVAL, REPLACEMENT AND DELAY RELATED TO UNVERIFIED EXISTING CONDITIONS. WHERE THE CONTRACTOR FINDS CONFLICTS OR DISCREPANCIES THEY SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.

7. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS THAT ARE NECESSARY TO PERFORM THE PROPOSED WORK.

8. PIPE BACKFILLING SHALL NOT OCCUR UNTIL PIPE HAS BEEN INSPECTED.

9. BEGIN LAYING PIPE AT THE LOWEST POINT, WITH THE BELLS POINTING UPHILL. LAY THE PIPE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS. LAY PIPE TRUE TO LINE AND GRADE AS SHOWN ON THE DRAWINGS.

10. ALL STORM SEWER AND SANITARY SEWER PIPE LENGTHS AND SLOPES ARE FIGURED FROM CENTER OF MANHOLE, BEND, WYE AND THE INSIDE WALL OF INLETS. PIPE LENGTHS ARE GIVEN AS A HORIZONTAL LENGTH AND ARE APPROXIMATE. PIPE LENGTHS INCLUDE THE FLARED END SECTION.

11. ALL STORM SEWER AND SANITARY SEWER PIPE BEDDING TO BE CLASS B BEDDING ALTERNATE, UNLESS OTHERWISE NOTED.

12. RCP STORM SEWER PIPE SHALL BE CLASS III, UNLESS OTHERWISE NOTED.

13. ALL RCP SECTIONS SHALL BE JOINED IN SUCH A MANNER THAT THE ENDS ARE FULLY ENTERED AND THE INNER SURFACES ARE REASONABLY FLUSH. RUBBER GASKETS SHALL BE USED ON ALL PIPE JOINTS CONFORMING TO ASTM C-433. AVERAGE JOINT GAP THAT EXCEEDS ½ INCH SHALL BE FILLED WITH AN APPROVED FLEXIBLE PLASTIC SEALANT.

14. PVC STORM SEWER PIPES AND SANITARY MAIN / SERVICES SHALL CONFORM TO ASTM D3034 SDR 35 FOR SIZES 4-INCHES TO 15-INCHES IN DIAMETER (SOLID WALL), UNLESS OTHERWISE NOTED. GASKETS SHALL COMPLY WITH ASTM F477, CONSISTING OF A PROPERLY VULCANIZED HIGH GRADE ELASTOMERIC COMPOUND. LUBRICANTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. JOINTS SHALL BE IN CONFORMANCE WITH ASTM D3212. C900 PIPE USED FOR STORM SEWER CONSTRUCTION SHALL BE DR18.

15. CONSTRUCTION AND MATERIALS USED IN ALL STORM SEWER CONSTRUCTION SHALL BE PER THE APPROPRIATE GOVERNING AGENCIES STANDARDS. ALL MANHOLES SHALL HAVE SHAPED INVERTS.

16. CONSTRUCTION AND MATERIALS USED IN ALL SANITARY SEWER OR WATER MAIN CONSTRUCTION SHALL BE PER THE APPROPRIATE GOVERNING AGENCIES STANDARDS AND SPECIFICATIONS. ALL MANHOLES SHALL HAVE SHAPED INVERTS.

17. MANHOLE RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. RING AND COVER SHALL BE SET IN CENTERED CONCRETE RINGS WITH RAM-NECK FOR ADJUSTMENT TO MATCH FINAL PAVEMENT ELEVATIONS.

18. SANITARY AND STORM SEWER PIPE SHALL BE CONSTRUCTED A MINIMUM OF TEN-FEET FROM THE CENTER OF WATER LINES. EXCEPT WHERE THEY CROSS.

19. ALL WATER AND SANITARY SEWER SERVICES MUST BE INSPECTED BY THE APPROPRIATE GOVERNING AGENCIES INSPECTOR.

20. SANITARY SEWER CLEAN OUTS SHALL BE THE SAME SIZE AS THE HOST PIPE. CLEAN OUTS TO HAVE THREADED CAPS. COVERS TO BE TRAFFIC RATED AND FLUSH WITH FINISHED GRADE.

21. WATER SERVICE PIPING SHALL BE TYPE K COPPER, SOFT, UNLESS OTHERWISE NOTED. ALL WATER SERVICE PIPE SHALL BE INSTALLED WITH 5.0-FT COVER TYPICAL (4.5-FT MINIMUM) BELOW FINISHED GRADE. THE MAXIMUM COVER IS 5.5 FEET UNLESS OTHERWISE NOTED IN THE PLANS AND APPROVED BY APPROPRIATE GOVERNING AGENCY.

22. REFER TO LIGHTING PLAN FOR LOCATIONS OF LIGHT POLES.

23. WHERE APPROPRIATE, NEATLY SAW CUT ALL EXISTING CONCRETE AND ASPHALT, THE PLACEMENT OF ADDITIONAL PAVING SHALL BE DONE TO A NEAT WORK LINE, SAW CUTTING A MINIMUM OF ONE (1) FOOT. SAW CUTTING WILL NOT BE PAID FOR SEPARATELY BUT WILL BE CONSIDERED INCIDENTAL TO THE WORK. REPAIR/REPLACE ALL DISTURBED EXISTING ITEMS WITH LIKE MATERIALS AND THICKNESSES. ANY ASPHALT REMOVED IS TO BE REPLACED TO MEET THE SPECIFICATIONS OF THE COLORADO DEPT OF TRANSPORTATION. EXISTING CONCRETE PAVEMENT SHALL BE SCORED THEN BROKEN AT JOINT TO CREATE A ROUGH SURFACE FOR THE CONSTRUCTION JOINT.

24. ALL ASPHALT WORK REQUIRING PATCHING WILL BE PERFORMED TO A NEAT WORK LINE. THE EXISTING ASPHALT SHALL BE SAW CUT. ALL ASPHALT PATCH WORK SHALL BE AT LEAST 2' WIDE AFTER THE COMPLETION OF WORK. NEW CURB CAN BE PLACED FLUSH WITH THE EXISTING ASPHALT IF IT IS TO A NEAT WORK LINE.

25. ALL UTILITIES ARE BASED UPON SURFACE LOCATES AND OR RECORD MAPS. ENGINEER IS NOT RESPONSIBLE FOR INCONSISTENCIES DUE TO INACCURATE LOCATES OR RECORDS. ENGINEER RECOMMENDS ALL UTILITIES BE POTHOLED AND FIELD SURVEYED TO VERIFY THIS INFORMATION.

26. CONTRACTOR SHALL COORDINATE ALL DRY UTILITIES SERVICE AND RELOCATIONS WITH THE PROVIDERS.

27. CONTRACTOR SHALL COORDINATE RIMS OF ALL MANHOLES AND SURFACE STRUCTURES WITH ANY CHANGE IN GRADE. CONTRACTOR SHALL INCLUDE COST TO LOWER OR RAISE ALL RIMS AS NEEDED FOR NEW GRADES.

28. ALL SANITARY SEWER CLEAN OUTS (C.O.) TO BE 2-WAY AND HAVE HS-25 RATED COVERS.

29. ALL WATER INSTALLATION SHALL COMPLY WITH APPROVED PLANS.

30. ALL SANITARY SEWER FITTINGS SHALL BE AS MANUFACTURED AND FURNISHED BY THE PIPE SUPPLIER OR APPROVED EQUAL AND HAVE BELL AND / OR SPIGOT CONFIGURATIONS COMPATIBLE WITH THE PIPE.

31. 4" SANITARY SEWER SERVICE SHALL HAVE A MINIMUM SLOPE OF 2.0% (1/2" PER FOOT). 6" SANITARY SEWER SERVICES SHALL HAVE A MINIMUM SLOPE OF 1.0% (1/4" PER FOOT).

32. CONTRACTOR TO VERIFY EXISTING SEWER SERVICE DEPTH AND SIZE BEFORE STARTING ANY WORK. NOTIFY ENGINEER IF ANY MODIFICATIONS NEED TO BE MADE. ALL CONNECTIONS TO EXISTING SEWER LINES SHALL BE CONFIRMED.

33. WATER LINES, METERS, TAPS AND FIRE HYDRANTS MUST BE IN CONFORMANCE WITH THE APPROPRIATE GOVERNING AGENCIES STANDARDS AND SPECIFICATIONS OR SUPPLEMENTARY STANDARDS AND SPECIFICATIONS.

34. ALL SANITARY SEWER IMPROVEMENTS MUST BE IN CONFORMANCE WITH THE APPROPRIATE GOVERNING AGENCIES STANDARDS AND SPECIFICATIONS OR SUPPLEMENTARY STANDARDS AND SPECIFICATIONS.

35. DRY UTILITY IMPROVEMENTS SHALL BE COORDINATED WITH THE PROVIDER PRIOR TO CONSTRUCTION.

36. CONTRACTOR IS RESPONSIBLE FOR COORDINATION, COMPLETION AND SUBMITTAL OF ALL DRY UTILITY (GAS, ELECTRIC, PHONE, CABLE, AND OTHER) APPLICATIONS.

City of Greeley Colorado

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**.
Call before you dig.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

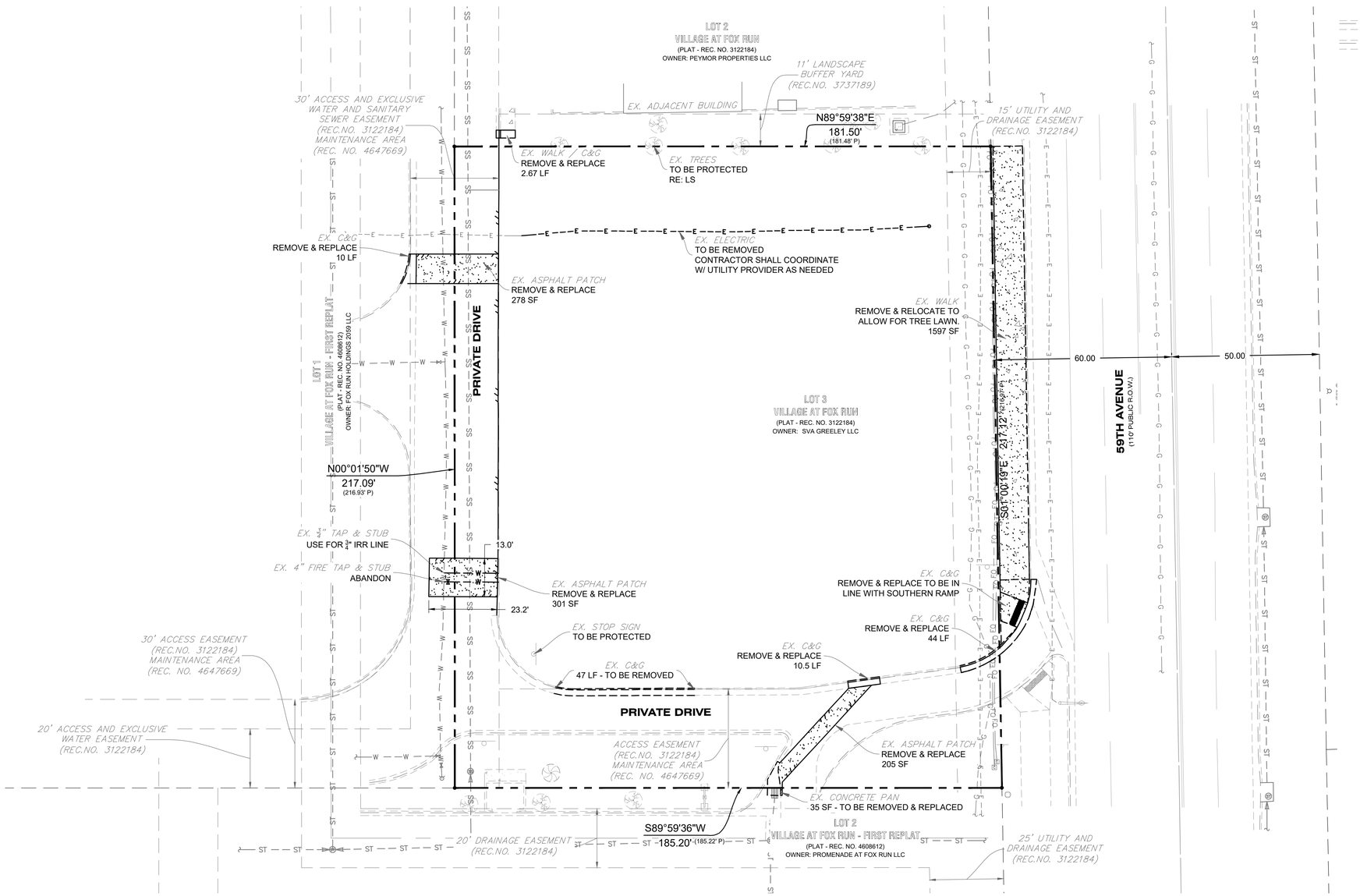
Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name:
HCI NOTES
Sheet Number:
C1.2

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Cover.dwg PLOTDATE: 2025-02-06

SVA GREELEY - DENTAL BUILDING

CONSTRUCTION DOCUMENTS

LOT 3, THE VILLAGE AT FOX RUN,
CITY OF GREELEY, COUNTY OF WELD, STATE OF COLORADO
(1911 59th AVENUE)



LEGEND

EXISTING

- CURB AND GUTTER (SPILL)
- CURB AND GUTTER (CATCH)
- ELECTRICAL BOX
- SITE LIGHT
- SIGN
- MANHOLES
- INLET
- METER PIT
- GATE VALVE
- THRUST BLOCK
- CLEAN OUT
- TREE
- UTILITY POLE
- GAS METER
- FIRE HYDRANT

HATCHING LEGEND

EXISTING

- CONCRETE
- LANDSCAPE
- ASPHALT

N

0' 20' 40' 60'
SCALE: 1" = 20'

City of Greeley Colorado

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**,
Call before you dig.

811

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

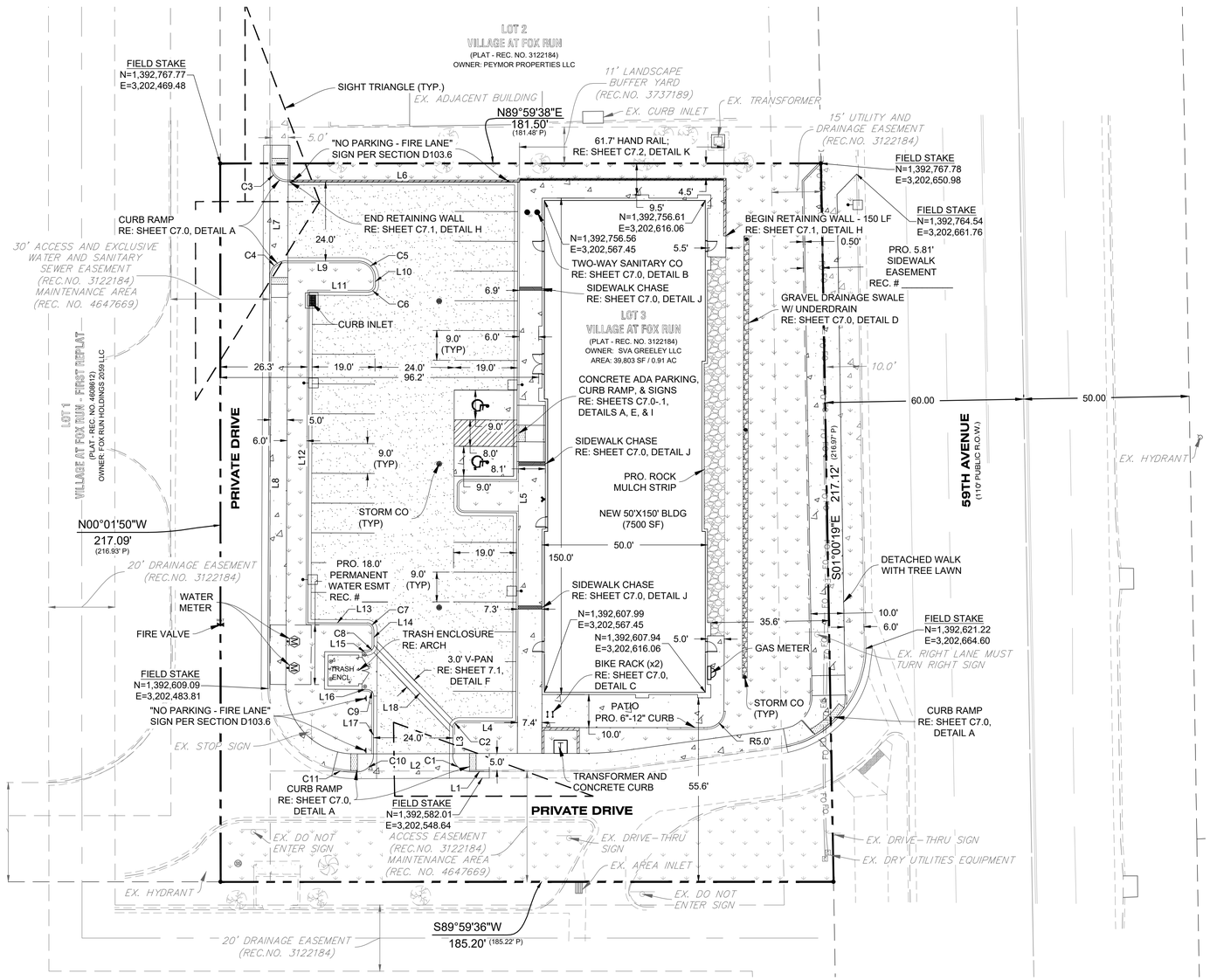
SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name: DEMO PLAN
Sheet Number: C2.0

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Demo Plan.dwg PLOTDATE: 2025-02-06



LEGEND

EXISTING		PROPOSED
	CURB AND GUTTER (SPILL)	
	CURB AND GUTTER (CATCH)	
C E F	ELECTRICAL BOX	E
	SITE LIGHT	
	SIGN	
ST SS	MANHOLES	ST SAN
	INLET	
M	METER PIT	M
WAT	GATE VALVE	WAT
	THRUST BLOCK	
CO	CLEAN OUT	CO
	TREE	
	UTILITY POLE	
G	GAS METER	G
	FIRE HYDRANT	

HATCHING LEGEND

EXISTING		PROPOSED
	CONCRETE	
	LANDSCAPE	
	ASPHALT	

LINE TABLE		
LINE #	BEARING	DISTANCE
L1	N89°47'23"E	5.99
L2	N89°45'11"E	33.83
L3	S00°13'38"W	8.25
L4	N89°46'22"W	17.00
L5	S00°13'38"W	163.08
L6	N89°59'38"E	69.89
L7	S00°16'02"W	34.00
L8	S00°16'02"W	124.20
L9	S89°59'38"W	21.93
L10	N00°13'38"E	2.37
L11	S89°43'58"E	17.99
L12	N00°16'02"E	100.00
L13	N89°43'58"W	18.00
L14	N00°13'38"E	4.70
L15	S89°55'19"E	1.50
L16	N89°45'57"W	1.50
L17	N00°13'38"E	18.02
L18	S43°48'54"E	34.52

CURVE TABLE					
CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	7.89	5.00	90°26'15"	S44°59'29"E	7.10
C2	3.14	2.00	90°00'00"	S45°13'38"W	2.83
C3	7.88	5.00	90°16'23"	S44°52'10"E	7.09
C4	7.83	5.00	89°43'37"	S45°07'50"W	7.05
C5	7.89	5.10	88°37'02"	N45°13'25"W	7.13
C6	3.14	2.00	89°59'56"	N45°13'36"E	2.83
C7	3.14	2.00	90°00'00"	N44°46'22"W	2.83
C8	3.14	2.00	89°51'02"	N45°09'10"E	2.82
C9	3.14	2.00	89°59'35"	N44°46'09"W	2.83
C10	7.65	5.00	87°36'52"	N44°02'05"E	6.92
C11	7.37	26.16	16°09'17"	S84°04'51"E	7.35

NOTES:
1. "FIELD STAKES" SHOWN TO DEFINE ALLOWABLE LIMITS OF DISTURBANCE. SEE THE EROSION CONTROL SHEETS (C8.0-C8.2) FOR THE DEFINING LINE OF ALLOWABLE DISTURBANCE.

N

0' 20' 40' 60'
SCALE: 1" = 20'

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**, Call before you dig.
811
CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

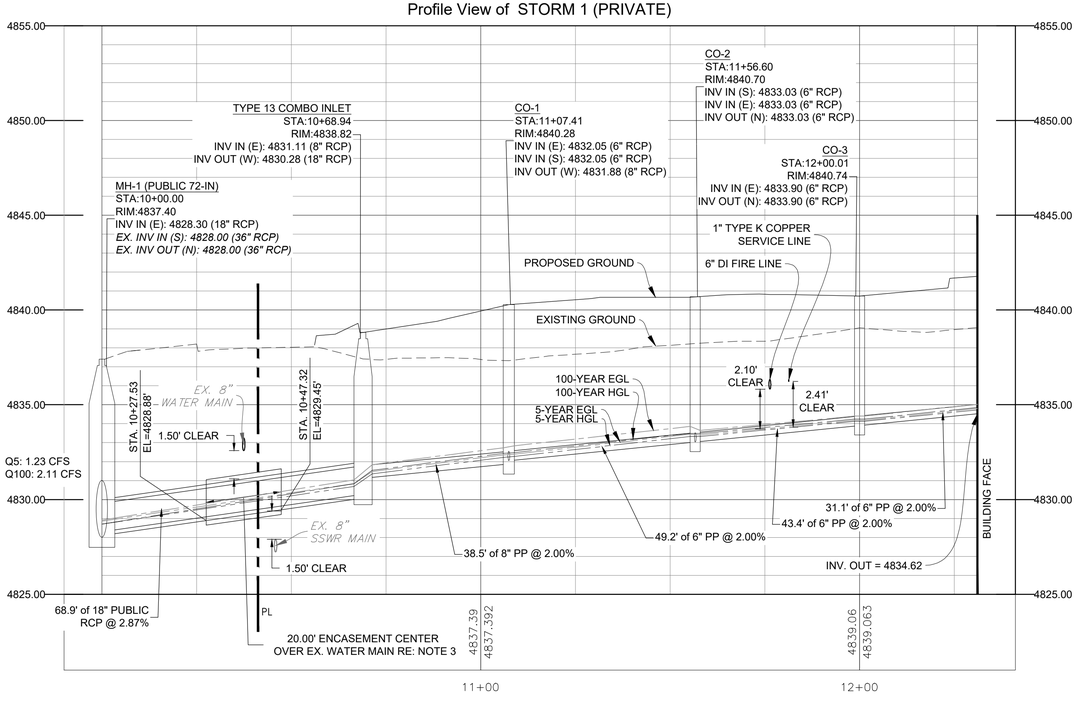
REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name:
SITE & HC PLAN
Sheet Number:
C3.0

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Site Plan.dwg PLOTDATE: 2025-02-06

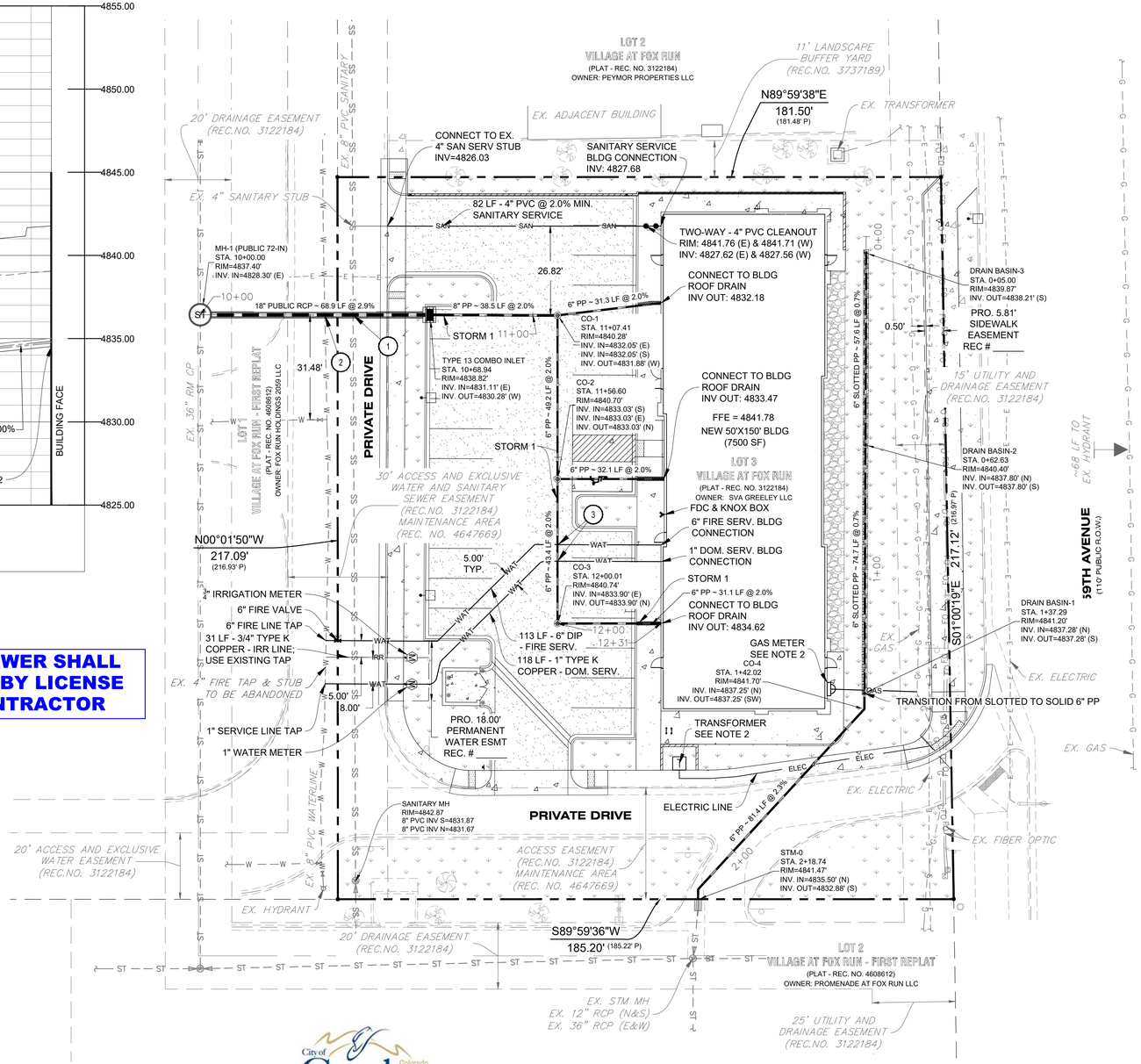
Profile View of STORM 1 (PRIVATE)



LEGEND

EXISTING		PROPOSED
ST	STORM SEWER	
	5-YEAR HGL	
	5-YEAR EGL	
	100-YEAR HGL	
	100-YEAR EGL	
SS	SANITARY SEWER	SAN
W	WATER LINE	WAT — WAT
G	GAS LINE	GAS — GAS
E	ELECTRICAL	ELEC — ELEC
OHE	OVERHEAD POWER LINES	OHE — OHE
FO	FIBER OPTIC LINE	FO — FO
C E F	ELECTRICAL BOX	E
	SITE LIGHT	
	SIGN	
ST SS	MANHOLES	ST SAN
	INLET	
M	METER PIT	M
WAT	GATE VALVE	WAT
	THRUST BLOCK	
CO	CLEAN OUT	CO
	UTILITY POLE	
G	GAS METER	G
	FIRE HYDRANT	

WATER AND SEWER SHALL BE INSTALLED BY LICENSE PLUMBING CONTRACTOR



STORM SEWER UTILITY CROSSINGS (#)

1. STORM OVER SEWER
   18" MIN. CLEAR
2. STORM UNDER WATER
   18" CLEAR
3. STORM OVER WATER
   18" MIN. CLEAR

NOTES:

1. CONTRACTOR SHALL RE-VERIFY SIZE, MATERIAL, INVERT/EVEVATION, AND HORIZONTAL LOCATION FOR ALL WET UTILITY CONNECTIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. CONTRACTOR SHALL COORDINATE FINAL DRY UTILITY CONNECTIONS AND ALIGNMENTS WITH UTILITY PROVIDER AS NEEDED.
3. STORM DRAIN JOINTS SHALL BE COUPLED USING A HIGH PERFORMANCE, EXTERNAL JOINT COUPLER DESIGNED TO PREVENT INFILTRATION AND EXFILTRATION FOR A MINIMUM OF 10' ON EACH SIDE OF THE CROSSING. CENTER A SEGMENT OF STORM DRAIN OVER THE WATER MAIN.
4. FIVE-FOOT HORIZONTAL DISTANCES WILL BE MAINTAINED BETWEEN THE FIRE, IRRIGATION AND POTABLE WATER SERVICE LINES.

N

0' 20' 40' 60'

SCALE: 1" = 20'

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**, Call before you dig.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

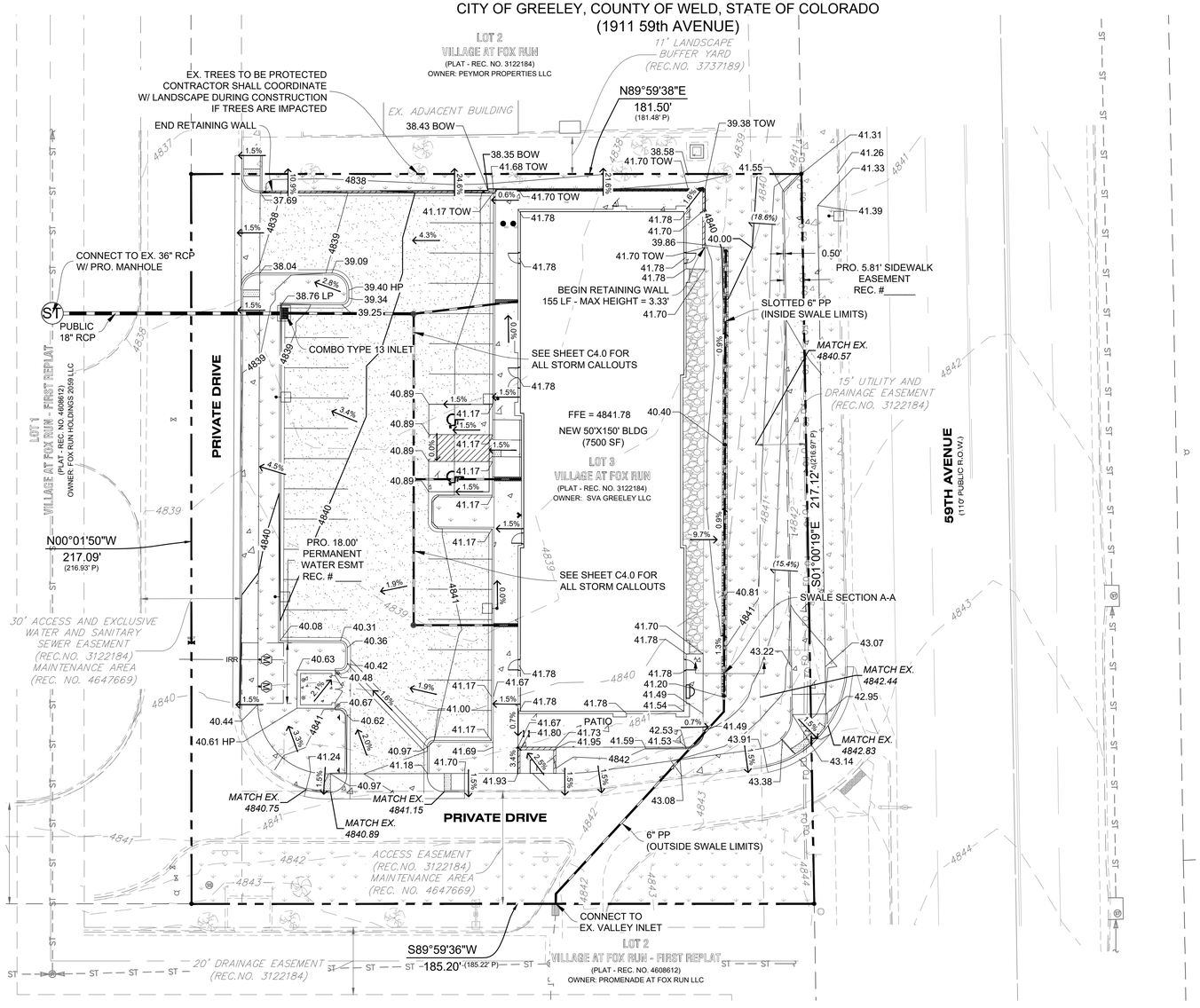
Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name: UTILITY PLAN
Sheet Number: C4.0

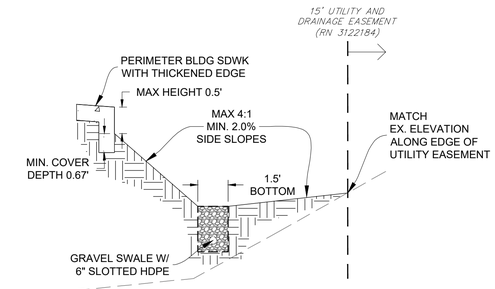
FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Utility Plan.dwg PLOTDATE: 2025-02-06

SVA GREELEY - DENTAL BUILDING

CONSTRUCTION DOCUMENTS

LOT 3, THE VILLAGE AT FOX RUN,
CITY OF GREELEY, COUNTY OF WELD, STATE OF COLORADO
(1911 59th AVENUE)





TYPICAL SWALE SECTION A-A: (N.T.S.)
1. DETAIL CONTAINS VERTICAL EXAGGERATION
3. LINE TRENCH WITH PERMEABLE GEOTEXTILE.

GRADING LEGEND

(XXX)	SLOPE	XXX
5420	MAJOR CONTOUR	5420
5420	MINOR CONTOUR	5421
(XXXX)	SPOT ELEVATION	XXXX

N

0' 20' 40' 60'
SCALE: 1" = 20'

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**,
Call before you dig.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

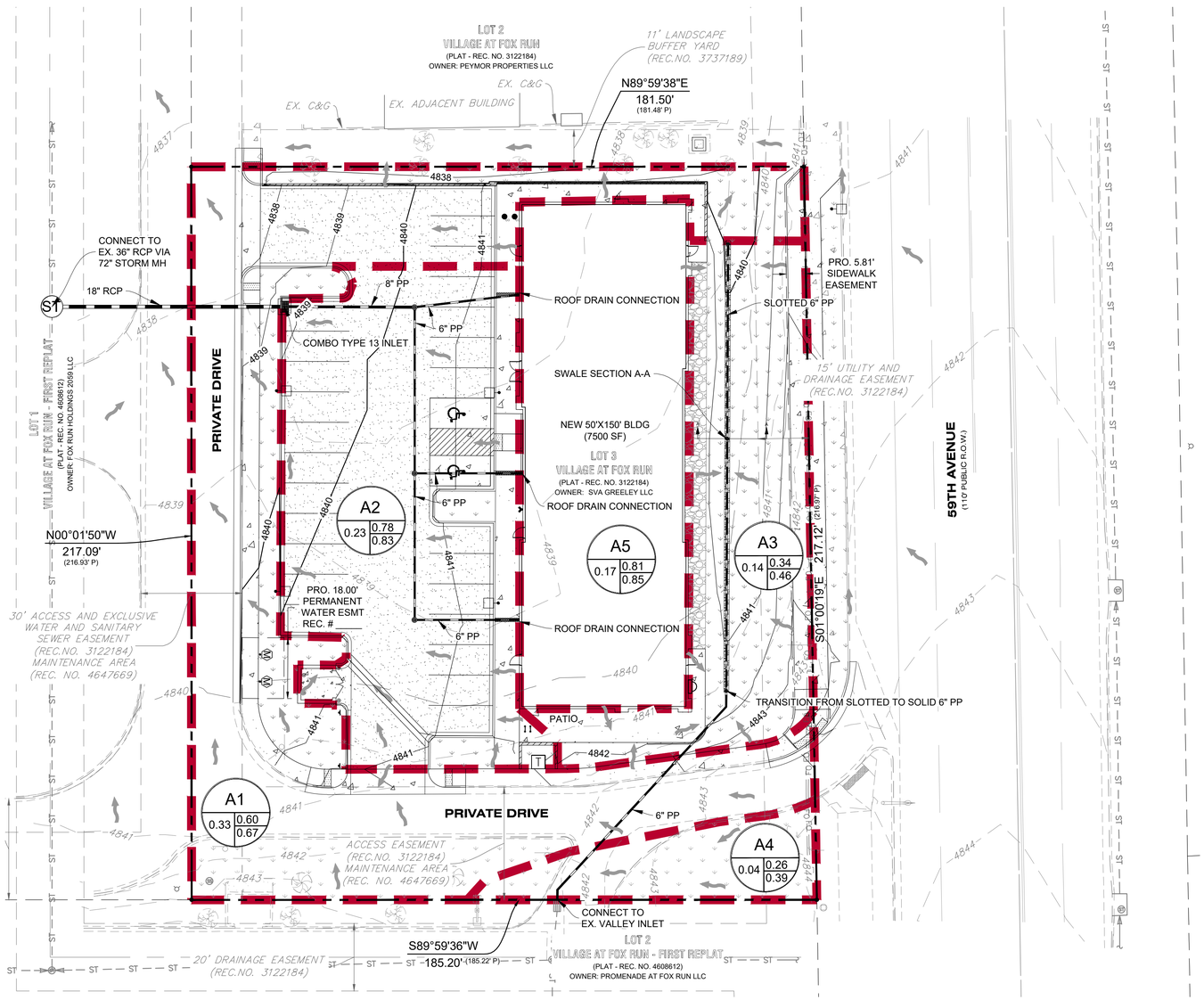
SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

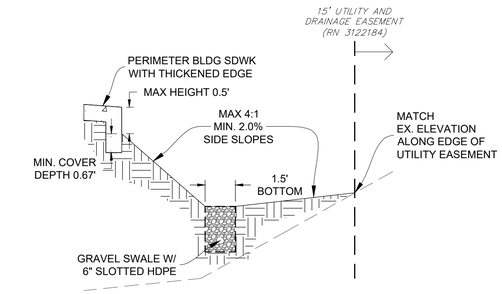
REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name:
GRADING PLAN
Sheet Number:
C5.0

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Grading Plan.dwg PLOTDATE: 2025-02-06





TYPICAL SWALE SECTION A-A: (N.T.S.)
1. DETAIL CONTAINS VERTICAL EXAGGERATION
3. LINE TRENCH WITH PERMEABLE GEOTEXTILE.

GRADING LEGEND

PROPERTY LINE

5420 MAJOR CONTOUR 5420

5420 MINOR CONTOUR 5421

DRAINAGE LEGEND

DRAINAGE BASIN

B3-6 — BASIN ID
2.8 — AREA (AC)
0.47 — C5
0.76 — C100

FLOW ARROW

BASIN BOUNDARY

DIRECT RUNOFF SUMMARY							
Area Design	Area (Acres)	% Imp.	Time of Concentration	Runoff Coefficient C5	Runoff Coefficient C100	Direct Basin Runoff Q5 (cfs)	Direct Basin Runoff Q100 (cfs)
A1	0.33	72.3%	5.00	0.60	0.67	1.02	1.51
A2	0.23	91.8%	5.00	0.78	0.83	0.72	0.76
A3	0.14	44.6%	5.00	0.34	0.46	0.19	0.25
A4	0.04	36.3%	8.66	0.26	0.39	0.04	0.05
A5	0.17	95.0%	5.00	0.81	0.85	0.52	1.34

N

0' 20' 40' 60'

SCALE: 1" = 20'

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**, Call before you dig.

811

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

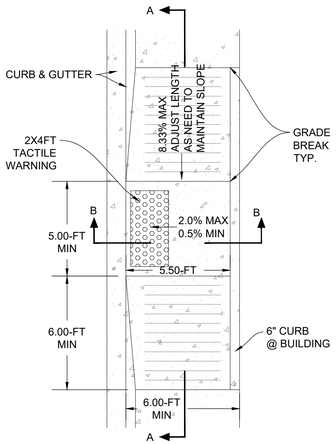
REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name: DRAINAGE PLAN
Sheet Number:

C6.0

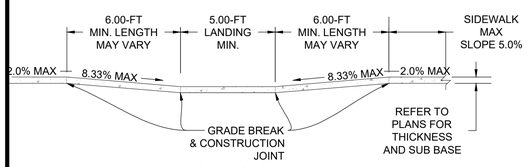
FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Drainage Plan.dwg PLOTDATE: 2025-02-06



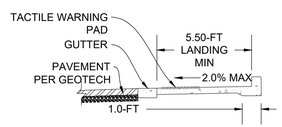
RAMP PLAN VIEW

ICC/ANSI A117.1-2009 RAMP NOTES:

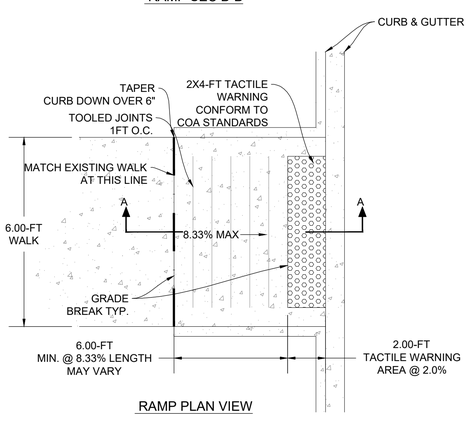
1. 4500 PSI CONCRETE WITH FIBERMESH REINFORCEMENT.
2. BRUSHED FINISH ON ALL EXPOSED CONCRETE.
3. TOOL CONTRACTION JOINT IN EVERY 10FT O.C.
4. COMPACT SUBGRADE PER GEOTECHNICAL RECOMMENDATIONS, COMPACT TO 95% STANDARD PROCTOR MINIMUM.
5. CONCRETE THICKNESS PER GEOTECHNICAL RECOMMENDATIONS - 6" MIN.
6. PROVIDE SUBGRADE BASE COURSE PER GEOTECHNICAL RECOMMENDATIONS.
7. TACTILE WARNING TO BE 2X4' PAD WITH RAISED DOMES. PROVIDE ADHESIVE YELLOW TYPE AS THE MINIMUM. REFER TO GOVERNING JURISDICTION OR ARCHITECT FOR ADDITIONAL REQUIREMENTS.
8. PROVIDE $\frac{1}{4}$" RADIUS ON ALL EDGES.
9. SIDEWALK SLOPE AT THE TOP OF THE RAMP SHALL BE NO MORE THAN 2.0%.
10. ADJUST RAMP LENGTH AS NEEDED TO MAINTAIN A MAX SLOPE OF 8.33%.
11. ANY RAMP LONGER THAN 10FT WILL REQUIRE A HANDRAIL, BUILT TO ADA STANDARDS
12. ADJUST RAMP WIDTH TO MATCH SIDEWALK.



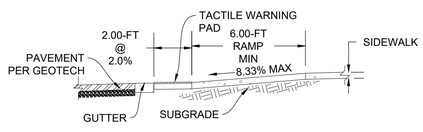
RAMP SEC A-A



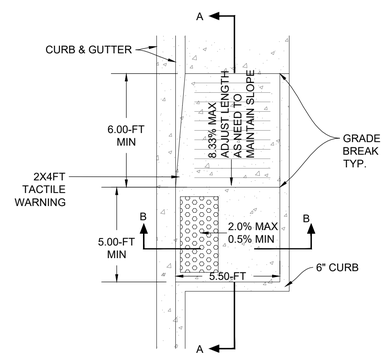
RAMP SEC B-B



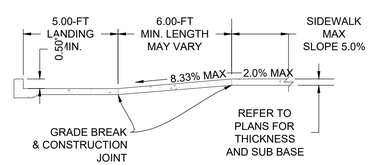
RAMP PLAN VIEW



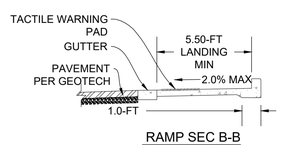
RAMP SEC A-A



RAMP PLAN VIEW



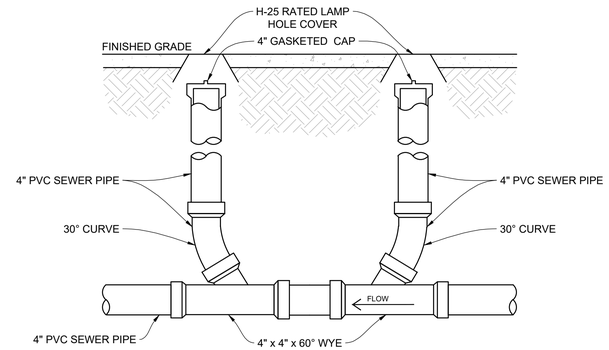
RAMP SEC A-A



RAMP SEC B-B

A PRIVATE ADA CURB RAMPS

Scale: N.T.S.

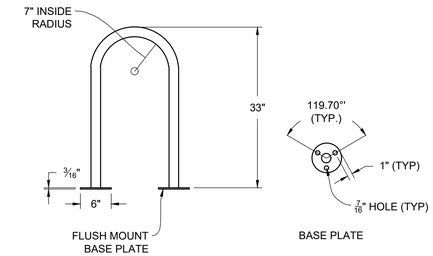


NOTES:

1. CLEANOUT SHALL BE CONSTRUCTED SO THAT SURFACE LOAD WILL NOT BE TRANSFERRED TO MAIN.
2. SERVICE LINE CLEANOUT MAY BE INSTALLED APPROXIMATELY 5 FEET OUTSIDE THE BUILDING FOUNDATION.
3. A CLEANOUT IS REQUIRED ON ALL SERVICE LINES EVERY 100 FEET, AT EVERY 'Y' OR AFTER A COMBINED TOTAL OF 145° OF BEND.
4. USE PRE-FABRICATED WYE FITTINGS TO CONSTRUCT CLEANOUT ASSEMBLIES

B TWO-WAY SEWER C.O.

Scale: N.T.S.



NOTES:

DIMENSIONS:

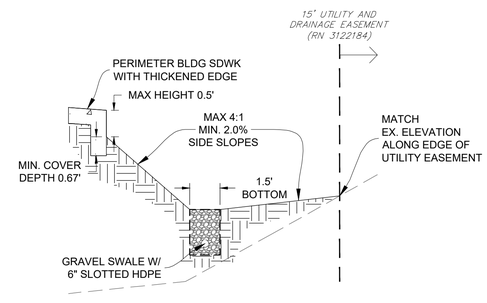
1. HEIGHT - 33" FROM THE GROUND.
2. CONTINUOUS BEND INSIDE RADIUS = 7".

MATERIALS AND CONSTRUCTION:

1. MINIMUM OR 1 ¼" SCHEDULE 40 STEEL PIPE (1 ⅝" OUTSIDE DIAMETER).
2. MAXIMUM 1 ½" SCHEDULE 40 STEEL PIPE (2" OUTSIDE DIAMETER).
3. SOLID ONE-PIECE CONSTRUCTION; CONTINUOUS BEND; LEGS 14" - 18" APART.
4. GALVANIZED WITH BLACK POWDER COAT FINISH.
5. FLUSH MOUNTED WITH WELDED BASE PLATES (6" DIAMETER, $\frac{3}{16}$" THICK BASE PLATE). HIDDEN OR VANDAL-RESISTANT FASTENERS (SCREWS OR EXPANSION BOLTS).

C BIKE RACK

Scale: N.T.S.



TYPICAL SWALE SECTION A-A: (N.T.S.)

1. DETAIL CONTAINS VERTICAL EXAGGERATION
3. LINE TRENCH WITH PERMEABLE GEOTEXTILE.

D GRAVEL SWALE W/ UNDERDRAIN

Scale: N.T.S.

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**, Call before you dig.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

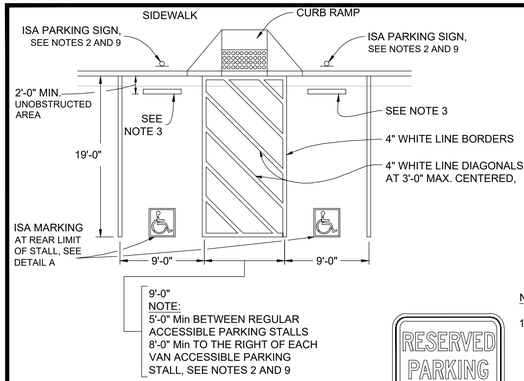
REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

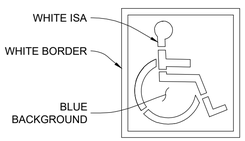
Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name: SITE DETAILS (1)
Sheet Number:

C7.0

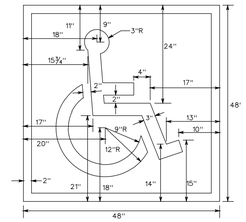
FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Dtls.dwg PLOTDATE: 2025-02-06



DOUBLE PARKING STALL



ISA MARKING



SIGN R7-8
(NO ARROWS)

SIGN R7-8b
See Notes 2 and 6

PLAQUE R7-8P

TABLE A

TOTAL NUMBER OF PARKING SPACES PROVIDED IN PARKING FACILITY	MINIMUM NUMBER OF REQUIRED ACCESSIBLE PARKING SPACES
1-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401-500	9
501-1000	2% OF TOTAL
1001 AND OVER	20 PLUS 1 FOR EACH 100 OR FRACTION THEREOF OVER 1000

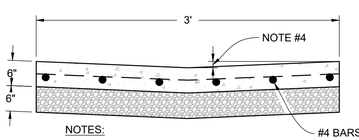
NOTES:

1. ACCESSIBLE PARKING SPACES SERVING A PARTICULAR BUILDING SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE ENTRANCE. IN PARKING FACILITIES THAT DO NOT SERVE A PARTICULAR BUILDING, ACCESSIBLE PARKING SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL TO AN ACCESSIBLE PEDESTRIAN ENTRANCE OF THE PARKING FACILITY.
2. ONE IN EVERY SIX ACCESSIBLE OFF-STREET PARKING STALLS, BUT NOT LESS THAN ONE, SHALL BE SERVED BY AN ACCESSIBLE AISLE OF 8'-0" MINIMUM WIDTH AND SHALL BE SIGNED VAN ACCESSIBLE. THE R7-8B SIGN SHALL BE MOUNTED BELOW THE R7-8P PLAQUE OR THE R7-8 SIGN.
3. IN EACH PARKING STALL, A CURB OR PARKING BUMPER SHALL BE PROVIDED IF REQUIRED TO PREVENT ENCROACHMENT OF VEHICLES OVER THE REQUIRED WIDTH OF WALKWAYS. PARKING STALLS SHALL BE SO LOCATED THAT PERSONS WITH DISABILITIES ARE NOT COMPELLED TO WHEEL OR WALK BEHIND PARKED VEHICLES OTHER THAN THEIR OWN.
4. PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 2.0% IN ALL DIRECTIONS.
5. TABLE A SHALL BE USED TO DETERMINE THE REQUIRED NUMBER OF ACCESSIBLE PARKING STALLS IN EACH PARKING LOT OR GARAGE.
6. WHERE PLAQUE R7-8P, SIGN R7-8 OR SIGN R7-8b ARE INSTALLED, THE BOTTOM OF THE SIGN OR PLAQUE PANEL SHALL BE A MINIMUM OF 7'-0" ABOVE THE SURROUNDING SURFACE.
7. WHERE A SINGLE (NON-VAN) ACCESSIBLE PARKING SPACE IS PROVIDED, THE LOADING AND UNLOADING ACCESS AISLE SHALL BE ON THE PASSENGER SIDE OF THE VEHICLE AS THE VEHICLE IS GOING FORWARD INTO THE PARKING SPACE.
8. WHERE A VAN ACCESSIBLE PARKING SPACE IS PROVIDED, THE LOADING AND UNLOADING ACCESS AISLE SHALL BE 8'-0" WIDE MINIMUM, AND SHALL BE ON THE PASSENGER SIDE OF THE VEHICLE AS THE VEHICLE IS GOING FORWARD INTO THE PARKING SPACE.
9. ACCESSIBLE PARKING ONLY SIGN SHALL BE SIGN R7-8 WITH PLAQUE R7-8P.

LEGEND:
ISA = International Symbol of Accessibility

E A.D.A. RAMP AND PARKING DETAILS

Scale: N.T.S.

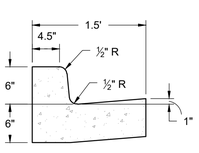


NOTES:

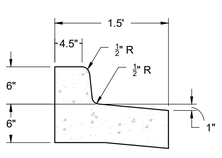
1. ALL CONCRETE TO BE 4500 PSI.
2. SUBGRADE TO BE COMPACTED PER GEOTECH.
3. PROVIDE CONTRACTION JOINT 10FT MAX
4. 3/4":18" DEPRESSION FROM LIP TO FL.
5. 6" OF CLASS 6 BASE PER GEOTECH REPORT.

F CONCRETE V-PAN

Scale: N.T.S.



CATCH



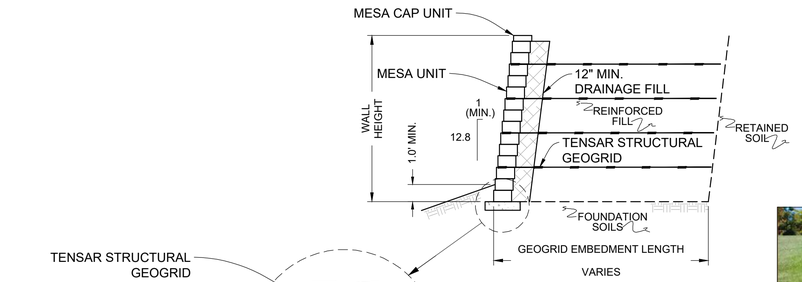
SPILL

NOTES:

1. 4500 PSI CONCRETE WITH FIBERMESH REINFORCEMENT.
2. BRUSHED FINISH ON ALL EXPOSED CONCRETE.

G PRIVATE CURB & GUTTER

Scale: N.T.S.

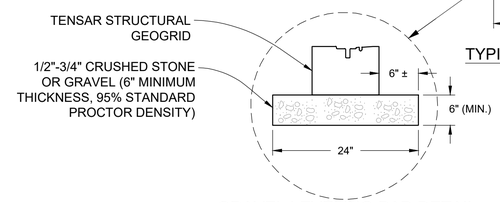


TYPICAL TIERED CROSS-SECTION

NOT TO SCALE

4 FEET AND HIGHER SHALL BE ENGINEERED

COLOR: TERRA COTTA



GRAVEL LEVELING PAD DETAIL

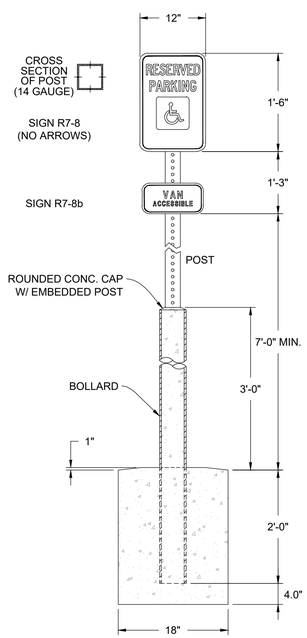
NOT TO SCALE

STRUCTURAL DESIGN NOTE:

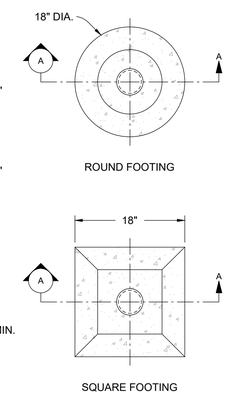
1. WALL DETAIL IS PROVIDED FOR REFERENCE ONLY. FINAL WALL DESIGN INCLUDING WALL DRAINAGE SHALL BE COMPLETED BY STRUCTURAL ENGINEER.

H BLOCK WALL SECTION

Scale: N.T.S.



SECTION A



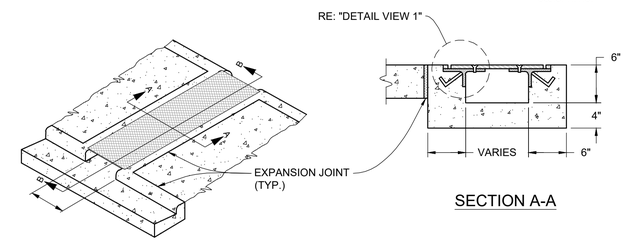
PLAN VIEW

NOTES:

1. CONCRETE SHALL BE 4500 PSI MIN.
2. SUBGRADE SHALL BE PREPARED PER GEOTECH REPORT.
3. BOLLARD TYPE:
   - SIGN POST BOLLARD
4. REFER TO SITE PLAN FOR BOLLARD LOCATION AND SIZE.
5. BOLLARD SHALL BE SCH. 40 GALVANIZED STEEL PIPE PAINTED OSHA YELLOW AND FILLED WITH CONCRETE.
6. USE SIGN POST BOLLARD FOR ANY SIGNAGE ALONG HEAD IN.

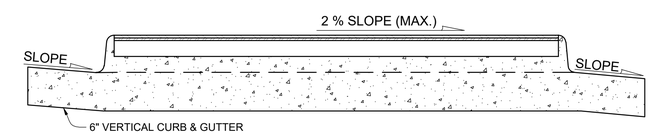
I TYPICAL BOLLARD W/ A.D.A. MOUNTED SIGN DETAIL

Scale: N.T.S.

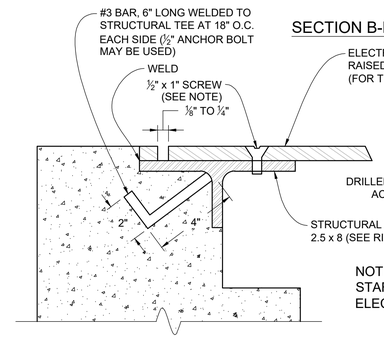


SECTION A-A

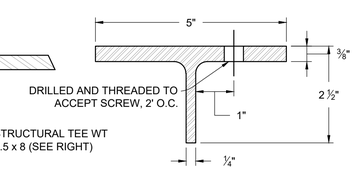
ISOMETRIC VIEW



SECTION B-B



DETAIL VIEW 1



NOTE:
STARHEAD SCREW: BRASS OR ELECTRO-GALVANIZED FINISH (RECESS HEAD).

WIDTH OF OPENING	THREAD PLATE THICKNESS
6"	⅜"
6" - 12"	½"
12" - 18"	⅝"

J TYPICAL SIDEWALK CHASE

Scale: N.T.S.

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**, Call before you dig.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

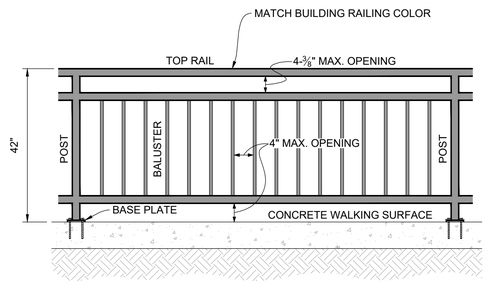
REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name: SITE DETAILS (2)
Sheet Number:

C7.1

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Dtls.dwg PLOTDATE: 2025-02-06



INTERNATIONAL BUILDING CODE (IBC)

STRENGTH REQUIREMENTS:
- 50 LBS/ LINEAR FEET
- 200 LBS CONCENTRATED

K 42" BOLT-DOWN RAILING DETAIL (IBC)

Scale: N.T.S.

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**,
Call before you dig.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

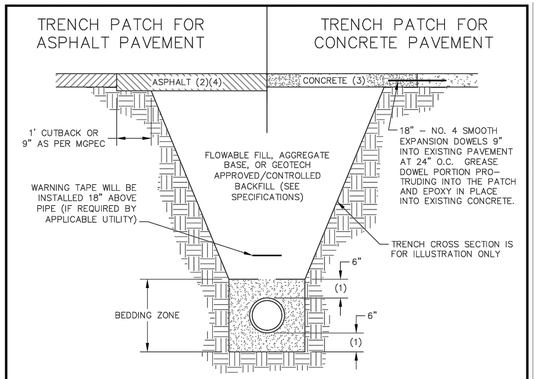
SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name:
SITE DETAILS (3)
Sheet Number:
C7.2

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Dtls.dwg PLOTDATE: 2025-02-06



	LOCAL STANDARD & LOCAL LOW VOLUME			MAJOR LOCAL, COMMERCIAL & INDUSTRIAL	COLLECTOR	ARTERIAL
	ALLEY	EMER.ACCESS	RESIDENTIAL			
FULL DEPTH ASPHALT (4)	5 1/2"	5 1/2"	5 1/2"	7"	7"	7"

NOTES:

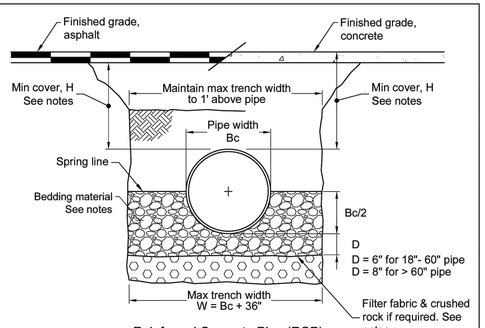
1. USE THE LIMITS OF BEDDING SHOWN IF NOT SPECIFIED BY THE APPLICABLE UTILITY.
2. HOT MIX ASPHALT SHALL BE USED TO PATCH ASPHALT AND SHALL BE GRADE S OR SX. TACK COAT REQUIRED.
3. CONCRETE SHALL BE USED TO PATCH CONCRETE. MATCH EXISTING THICKNESS.
4. FULL DEPTH ASPHALT SHALL BE THICKNESSES AS SHOWN ABOVE OR ONE (1) INCH GREATER THAN THE EXISTING PAVEMENT THICKNESS, WHICHEVER IS GREATER.
5. PATCH MAY NOT END WITHIN THE WHEEL TRACK OF TRAVEL LANES. UP TO THREE (3) FEET OF ADDITIONAL ASPHALT PATCH WILL BE REQUIRED TO KEEP THE JOINT OUT OF THE WHEEL TRACK.
6. MINIMUM SIZE OF PATCH SHALL BE 3' X 3'.

City of Greeley Colorado

EXISTING STREET PAVEMENT PATCH DETAIL FOR ASPHALT & CONCRETE

DETAIL NO. S–31

DATE: JULY, 2015 SCALE: N.T.S.



Reinforced Concrete Pipe (RCP)

Notes

1. Trench backfill above bedding material shall be per Detail No. S-30 in the City of Greeley Design Criteria Construction Specifications Manual Volume 1 - Streets.
2. Minimum cover over pipe, H, shall be 1'-0" measured from bottom of asphalt or top of concrete pavement.
3. Consolidate the bedding w/ shovel slicing & tamping.
4. Backfill the pipe with bedding to the spring line.
5. Consolidate the bedding w/ shovel slicing & tamping evenly on both sides of pipe.
6. Place a 12" min layer of 1-1/2" to 3" crushed rock, or as required to provide a stable subgrade if groundwater is encountered or if required by the Engineer. Place Class 1 non-woven filter fabric over the crushed rock foundation before placing bedding.

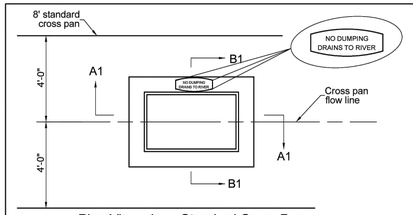
Bedding Material

Bedding shall be CDOT No. 57 or No. 67 coarse aggregate.

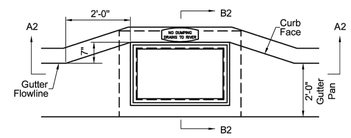
City of Greeley Colorado — Great. From the Ground Up. | 811 Know what's below. Call before you dig.

Issued: ----
Revised: ----
Revised: ----

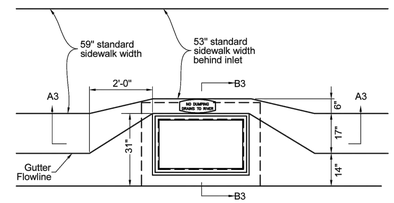
Standard Storm Drain Bedding
Reinforced Concrete Pipe (RCP)
Detail 6-6A



Plan View along Standard Cross Pan



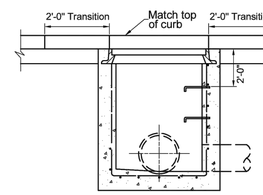
Plan View along Vertical Face Curb



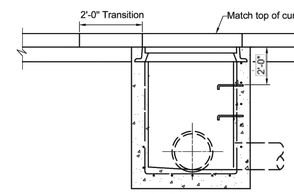
Plan View along Drive Over Curb

Stamp Notes for all Inlet Installations

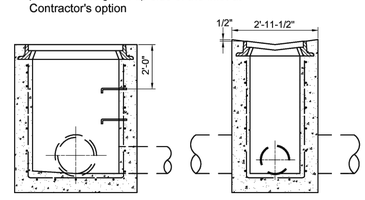
1. Contractor shall imprint the plastic concrete w/stamp as shown on all Type 13 inlets.
2. Final impression shall be clear & legible & free of any aggregate & debris.
3. For inlet installations along curbs, stamp may be placed on the gutter lip side of the inlet at Contractor's option



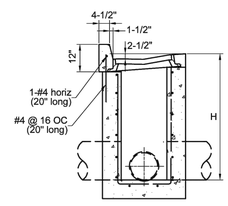
Section A2-A2



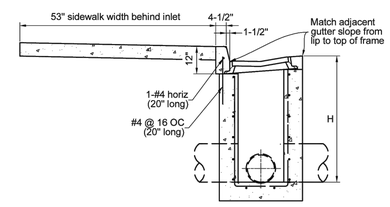
Section A3-A3



Section A1-A1 Section B1-B1



Section B2-B2



Section B3-B3

Notes

1. All Type 13 inlets, regardless of the installation, shall conform to the CDOT standard drawing & notes for Type 13 inlets except as noted herein.
2. All rebar shall be epoxy coated.
3. The notes on this sheet are applicable to all Type 13 City Standard Details, regardless of the location of the installation.
4. Inlet structures shall not be constructed until the curb & gutter has been installed, or contractor stakes the curb & gutter for 100' on each side of inlet. Contractor must also stake inlet box corners.
5. Minimum rebar splice length shall be 10".
6. See City of Greeley Design Criteria and Construction Specifications Volume I, Streets for curb, gutter, and sidewalk details.

Reference: Colorado Department of Transportation Standard M-604-13. Refer to the latest M&S Standards.

City of Greeley Colorado — Great. From the Ground Up. | 811 Know what's below. Call before you dig.

Issued: ----
Revised: ----
Revised: ----

Type 13 Inlet
Detail 7-3

City of Greeley Colorado

HCI ENGINEERING
A DIVISION OF HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**, Call before you dig.

811

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

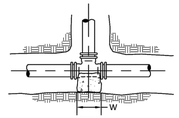
SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

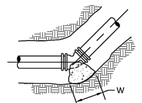
No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name: PUBLIC DETAILS (1)
Sheet Number: C7.3

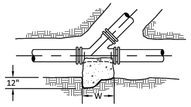
FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Public Dtls.dwg PLOTDATE: 2025-02-06



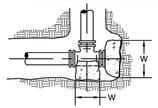
TEE



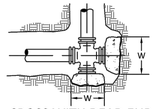
BEND-HORIZONTAL OR BOTTOM OF VERTICAL



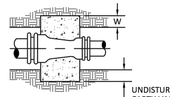
WYE



TEE W/DEAD END ON RUN

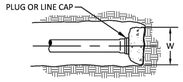


CROSS WITH DEAD END BRANCHES

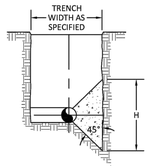


REDUCER

UNDISTURBED EARTH VARIES REFER TO EQUATION ON DETAIL W-4



DEAD END



SECTION (TYPICAL)

NOTES:

1. SEE TABLE ON W-2B OF THRUST BLOCK DETAILS FOR MINIMUM AREA OF CONCRETE TO BEAR ON UNDISTURBED EARTH.
2. POLYETHYLENE BOND BREAKER SHALL BE INSTALLED BETWEEN ALL FITTINGS AND CONCRETE.

City of Greeley Colorado

HORIZONTAL THRUST BLOCKS

DETAIL W-2A

DATE: JANUARY 2023 SCALE: N.T.S.

THRUST BLOCK BEARING AREAS (SQ-FT) FOR INTERNAL STATIC PRESSURE OF 150 PSI, DIP I.D., SOIL BEARING CAPACITY OF 1000 PSF AND 1.5 SAFETY FACTOR (S.F.)

PIPE SIZE	90° BEND	45° BEND	22½° BEND	11¼° BEND	DEAD ENDS, VALVES & TEES, PLUGGED CROSS BRANCHES
4"	3.3	2.5	1.3	0.6	3.3
6"	10.2	5.5	2.8	1.4	7.2
8"	18.3	9.9	5.0	2.5	12.9
12"	39.9	21.6	11.0	5.5	28.2
16"	70.5	38.2	19.5	9.8	49.9
20"	SPECIAL DESIGN REQUIRED				
24"					

UNDISTURBED EARTH [FT^3] = W [FT] X H [FT]

THRUST FORCE FOR REDUCERS [LB] =TEST PRESSURE [PSI] X (A_{LARGE} [IN^2] - A_{SMALL} [IN^2])

∴ GRAVITY BLOCK SIZE FOR REDUCERS [FT^3] =0.225 X (A_{LARGE} [IN^2] - A_{SMALL} [IN^2])

NOTES:

1. POLYETHYLENE BOND BREAKER SHALL BE INSTALLED BETWEEN ALL FITTINGS AND CONCRETE.
2. ALL THRUST BLOCKING SHALL BE CAST-IN-PLACE CONCRETE WITH A MINIMUM YIELD 28 DAY STRENGTH OF 2500 P.S.I.
3. THRUST BLOCKING SHALL BE CAST AGAINST UNDISTURBED SOIL. FORMS SHALL BE USED AS REQUIRED TO OBTAIN ADEQUATE BEARING AREA AND TO CONFINE THE CONCRETE. THRUST BLOCKING SHALL BEAR ON THE FITTING OR END CAP ONLY AND WILL NOT BE ALLOWED TO SPILL OVER THE JOINT OR AGAINST THE PIPE.
4. THE CITY MAY REQUIRE LARGER THRUST BLOCKS THAN SPECIFIED IF SOILS ARE DETERMINED TO PROVIDE LESS THAN 1000 PSF BEARING CAPACITY.
5. IN THE ABSENCE OF SOIL BEARING CAPACITY INFORMATION USE 1000 PSF.
6. NO LESS THAN 150 PSI TEST PRESSURE SHALL BE USED FOR THRUST BLOCK CALCULATIONS.
7. BEARING AREAS FOR ANY PRESSURE AND SOIL BEARING CAPACITY MAY BE OBTAINED BY MULTIPLYING THE TABULATED BEARING AREAS BY A CORRECTION FACTOR "F":

$$F = \frac{\text{(ACTUAL SPECIFIED TEST PRESSURE IN PSI)/(150 PSI)}}{\text{(ACTUAL SOIL BEARING CAPACITY IN PSF)/(1000 PSF)}}$$

8. EXAMPLE: CALCULATE THE BEARING AREA FOR 8"-90° BEND WITH A TEST PRESSURE OF 200 PSI AND SOIL BEARING CAPACITY OF 3000 PSF.

FROM TABLE BEARING AREA = 18.3 SF

$$F = \frac{\text{(200 PSI)/(150 PSI)}}{\text{(3000 PSF)/(1000 PSF)}} = 0.44$$

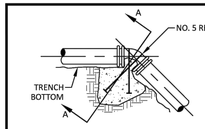
REQUIRED BEARING AREA ON UNDISTURBED SOIL = (0.44){18.3 SF) = 8.1 SF

City of Greeley Colorado

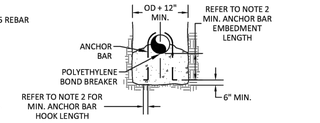
HORIZONTAL THRUST BLOCKS

DETAIL W-2B

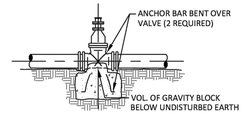
DATE: JANUARY 2023 SCALE: N.T.S.



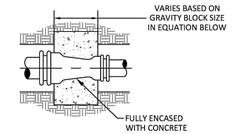
TOP OF VERTICAL BEND



SECTION A-A



VALVE (GATE OR BUTTERFLY)



REDUCER

VOL. OF GRAVITY CONCRETE BLOCK (CU FT)

PIPE SIZE	BENDS		
	45°	22½°	11¼°
4"	16.7	8.5	4.3
6"	36.9	18.8	9.5
8"	65.9	33.6	16.9
12"	144.1	73.4	36.9
16"	254.5	129.7	65.2
20"	SPECIAL DESIGN REQUIRED		
24"			

GRAVITY CONCRETE BLOCK SIZES SHOWN IN TABLE ARE BASED ON 150 LB/FT^3 DENSITY FOR CONCRETE, 150 PSI TEST PRESSURE, AND A SAFETY FACTOR OF 1.5.

$$\text{GRAVITY BLOCK SIZE [FT}^3\text{]} = \frac{\text{SAFETY FACTOR X THRUST FORCE [LB]}}{\text{DENSITY OF BLOCK MATERIAL [LB/FT}^3\text{]}}$$

THRUST FORCE FOR REDUCERS [LB] =TEST PRESSURE [PSI] X (A_{LARGE} [IN^2] - A_{SMALL} [IN^2])

∴ GRAVITY BLOCK SIZE FOR REDUCERS [FT^3] =1.5 X (A_{LARGE} [IN^2] - A_{SMALL} [IN^2])

NOTES:

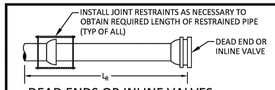
1. POLYETHYLENE BOND BREAKER SHALL BE INSTALLED BETWEEN ALL FITTINGS AND CONCRETE.
2. ALL ANCHOR BARS SHALL BE EPOXY COATED NO. 5 REBAR AND SHALL BE EMBEDDED IN CONCRETE TO WITHIN 6" OF END OF CONCRETE BLOCK AND SHALL HAVE MINIMUM 6" HOOK LENGTH.

City of Greeley Colorado

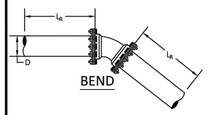
GRAVITY THRUST BLOCKS

DETAIL W-3

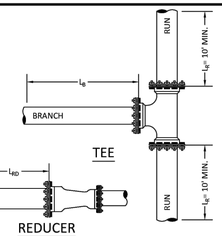
DATE: JANUARY 2023 SCALE: N.T.S.



DEAD ENDS OR INLINE VALVES



BEND



TEE

REDUCER

DI PIPE (POLYETHYLENE-ENCASED): MINIMUM LENGTHS OF RESTRAINED PIPE - IN FEET

PIPE SIZES (D")		BENDS (l_R)				TEE (l_R)	DEAD ENDS/ INLINE VALVES (l_R)	REDUCERS (l_{RD})
RUN	BRANCH	11¼° BEND	22½° BEND	45° BEND	90° BEND			
4"	4"	5	5	10	15	5	50	-
6"	4"	-	-	-	-	5	-	40
	6"	5	5	10	20	5	70	-
8"	4"	-	-	-	-	5	-	65
	6"	-	-	-	-	5	-	40
	8"	5	10	15	30	15	90	-
12"	4"	-	-	-	-	5	-	115
	6"	-	-	-	-	5	-	95
	8"	-	-	-	-	5	-	70
	12"	5	10	20	40	55	130	-
16"	4"	-	-	-	-	5	-	155
	6"	-	-	-	-	5	-	140
	8"	-	-	-	-	5	-	120
	12"	-	-	-	-	24	-	70
	16"	5	10	20	50	90	165	-

NOTES:

1. RESTRAINED LENGTHS SHOWN IN CHARTS ARE MINIMUM LENGTHS.
2. RESTRAINT SYSTEMS ON PIPE LARGER THAN 16-INCH DIAMETER SHALL BE DESIGNED FOR CONDITIONS EXISTING AT INSTALLATION SITE.
3. THE CHARTS ARE BASED ON THE FOLLOWING ASSUMPTIONS:
   A. 150 PSI TEST PRESSURE
   B. 1.5 SAFETY FACTOR
   C. 4-FT BURY DEPTH
   D. SOIL TYPE: ML, AS DEFINED BY AWWA M23 AND M41
   E. TRENCH TYPE: #4, AS DEFINED BY AWWA M23 AND M41.
4. THE DESIGN ENGINEER IS RESPONSIBLE FOR VERIFYING THE ACTUAL SITE CONDITIONS WITH RESPECT TO THE ASSUMPTIONS LISTED ABOVE.
5. IF LENGTHS CANNOT BE MET FOR DEAD ENDS AND/OR TEES, DESIGN ENGINEER SHALL SPECIFY RESTRAINED LENGTHS OR A COMBINATION OF THRUST BLOCKS AND RESTRAINTS.
6. BOTH ENDS OF INLINE VALVES SHALL BE RESTRAINED AT THE SPECIFIED RESTRAINT LENGTH (l_R) SHOWN IN TABLE.

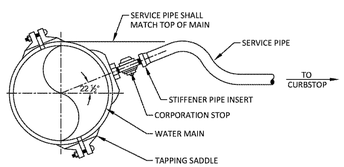
City of Greeley Colorado

HORIZONTAL PIPE RESTRAINT

DETAIL W-4A

DATE: JANUARY 2023 SCALE: N.T.S.

TAPPING SADDLE:



ELEVATION VIEW

TYPE OF PIPE AND SIZE OF TAP

PIPE SIZE	CAST IRON					DUCTILE IRON					PVC C-900	
	3/4"	1"	1 1/2"	2"	3"&4"	3/4"	1"	1 1/2"	2"	3"&4"	< 2"	> 2"
4"	S	S	NO	NO	TSV	S	S	NO	NO	TSV	S	TSV
6"	S	S	S	S	TSV	S	S	S	S	TSV	S	TSV
8"	S	S	S	S	TSV	S	S	S	S	TSV	S	TSV
12"	S	S	S	S	TSV	S	S	S	S	TSV	S	TSV
16"	S	S	S	S	TSV	S	S	S	S	TSV	N/A	N/A

"S" - TAPPING SADDLE REQUIRED, ALL SADDLES SHALL HAVE AWWA TAPER THREADS.
"NO" - NO TAP PERMITTED WITH OR WITHOUT A SADDLE, A TEE CONNECTION MAY BE PERMITTED IF SPECIFICALLY AUTHORIZED BY THE WATER DEPARTMENT.
"TSV" - TAPPING SLEEVE AND VALVE REQUIRED.
"N/A" - NOT APPLICABLE.

NOTES:

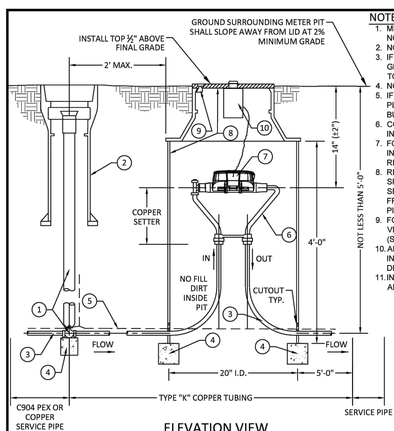
1. REFERENCE CITY OF GREELEY, WATER & SEWER CONSTRUCTION SPECIFICATIONS, LATEST REVISION, FOR TAPPING SADDLE SPECIFICATIONS.
2. EXISTING STEEL MAINS, TWELVE INCHES (12") IN DIAMETER OR LESS, SHALL BE TAPPED USING A CITY ACCEPTED TAPPING SADDLE.
3. ALL BURIED PIPE, FITTINGS, VALVES, AND APPURTENANCES SHALL BE RESTRAINED AND INSTALLED PER CITY OF GREELEY WATER & SEWER SPECIFICATIONS, LATEST REVISION.
4. INSTALL TRACER WIRE ACCORDING TO CITY OF GREELEY WATER & SEWER SPECIFICATIONS AND W&S UTILITY LOCATING ("UL") STANDARD DETAILS, LATEST REVISION OF EACH.
5. REFER TO CITY OF GREELEY WATER AND SEWER SPECIFICATIONS, LATEST REVISION, FOR PRODUCT AND MFR SPECIFICATIONS.
6. THIS DETAIL ALSO APPLIES TO NON-POTABLE IRRIGATION SERVICE CONNECTIONS TO NON-POTABLE IRRIGATION MAINS.
7. SERVICE TAPS ON WATER MAINS LARGER THAN 16" MAY BE CONSIDERED UNDER CERTAIN CIRCUMSTANCES WITH SPECIAL DESIGN ON A CASE-BY-CASE SCENARIO.
8. FOR ANY NEW WATER SERVICES TAPPING INTO EXISTING MAINS THE CONTRACTOR SHALL NOTIFY THE CITY 72 HOURS PRIOR AT 970-350-9320.

City of Greeley Colorado

WATER SERVICE CONNECTION

DETAIL W-6

DATE: JANUARY 2023 SCALE: N.T.S.



ELEVATION VIEW

NOTES:

1. METER MUST BE PURCHASED FROM THE WATER & SEWER (W&S) DEPARTMENT. NO EXCEPTIONS.
2. NOT FOR INSTALLATION IN ROADWAYS, DRIVEWAYS, OR PARKING AREAS.
3. IF SURFACE IS NOT TO FINAL GRADE AT TIME OF INSTALLATION OF METER, OR GRADE CHANGES AFTER INSTALLATION, PROPERTY OWNER MUST ADJUST PIT TO MEET DEPTH AND SPECIFICATIONS.
4. NO CONCRETE FLOOR SHALL BE POURED IN METER PIT.
5. IF PRESSURE REDUCING VALVE AND/OR BACKFLOW DEVICE IS REQUIRED BY PLUMBING CODE, IT SHALL BE INSTALLED DOWNSTREAM OF METER PER BUILDING AND PLUMBING CODE.
6. COPPER SHALL NOT SHOW ANY VISIBLE SIGNS OF CRIMPING AND SHALL BE INSTALLED FROM CURB STOP TO 5 FEET PAST METER PIT.
7. FOR ADDITIONAL METER INSTALLATION REQUIREMENTS, REFER TO METER INSTALLATION NOTES ON CITY OF GREELEY W&S DETAIL W-15, LATEST REVISION.
8. REFER TO CITY OF GREELEY W&S DETAIL W-9A/W-9B AND CONSTRUCTION SPECIFICATIONS, LATEST REVISION OF EACH, FOR CURB STOP, BOX, AND SERVICE PIPE REQUIREMENTS. IF CROSS-LINKED C904 PEX SERVICE LINE USED FROM CORP STOP TO CURB STOP THE PEX LINE MUST BE UPSIZED TO NEXT PIPE SIZE FROM METER SIZE TO REDUCE LOSS OF PRESSURE.
9. FOR PRODUCT AND MANUFACTURER SPECIFICATIONS, REFER TO CURRENT VERSION OF CITY OF GREELEY W&S CONSTRUCTION SPECIFICATIONS (SPECIFICATIONS), LATEST REVISION.
10. ALL BURIED PIPE, FITTINGS, VALVES, AND APPURTENANCES SHALL BE INSTALLED AND RESTRAINED IN ACCORDANCE WITH WATER & SEWER DEPARTMENT SPECIFICATIONS, LATEST REVISION.
11. INSTALL TRACER WIRE ACCORDING TO CITY OF GREELEY W&S SPECIFICATIONS AND STANDARD DETAILS, LATEST REVISION.

LEGEND

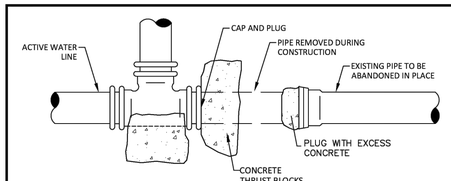
1	CURB STOP VALVE & SERVICE BOX (SEE NOTE 8)
2	UPPER HALF OF STANDARD VALVE BOX (INSTALLED PER SPECIFICATIONS)
3	¾" OR 1" SERVICE PIPE (MATCH SERVICE PIPE I.D.) (SEE NOTE 8)
4	BRICK SUPPORT (PLACE ON UNDISTURBED SOIL)
5	TRACER WIRE (SEE NOTE 11)
6	COPPER METER SETTER (MFR PER SPECIFICATIONS)
7	METER UNIT (ORDER FROM CITY OF GREELEY METER SHOP)
8	COMPOSITE DOUBLE LID CONE OR APPROVED EQUAL (MFR PER SPECIFICATIONS)
9	STANDARD FORGED BRASS WATERWORKS PENTAGON HEAD WITH LOCKING SCREW
10	METER ENDPOINT RADIO TRANSMITTER (RT UNIT)
11	TYPE K COPPER MATCHING METER SIZE

City of Greeley Colorado

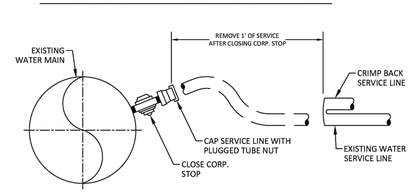
OUTSIDE SETTING FOR ¾" & 1" POTABLE WATER METER

DETAIL W-7

DATE: JANUARY 2023 SCALE: N.T.S.



EXISTING WATER MAIN ABANDONMENT DETAIL



EXISTING WATER SERVICE ABANDONMENT DETAIL

NOTES:

WATER MAIN ABANDONMENT

1. EXISTING WATER MAINS ABANDONED SHALL BE PLUGGED AND CAPPED AT NEAREST VALVE OR TEE OF ACTIVE WATER LINE AND SHALL HAVE CONCRETE THRUST BLOCK SIZED FOR DEAD ENDS REFERENCED IN DETAILS W-2A AND W-2B.
2. WATER MAIN ABANDONMENT MUST BE SCHEDULED WITH THE CITY 72 HOURS IN ADVANCE AT 970-350-9320.

WATER SERVICE ABANDONMENT

1. EXISTING WATER SERVICES THAT ARE TO BE ABANDONED SHALL BE ABANDONED AT THE MAIN.
2. SERVICE SHALL HAVE THE CORPORATION STOP CLOSED.
3. PLUGGED TUBE NUT SHALL BE INSTALLED NEAREST TO THE CORPORATION STOP.
4. THE END FURTHEST FROM THE CORPORATION STOP SHALL BE CRIMPED BACK.
5. REMOVE CURB STOP AT PROPERTY LINE.
6. IF THE SERVICE TO BE ABANDONED WAS DIRECTLY TAPPED ONTO THE MAIN, THE SERVICE MUST BE ABANDONED AT THE MAIN WITH THE SERVICE PIPE REMOVED AND A STAINLESS STEEL ROMAC REPAIR BAND PLACED OVER THE TAP.
7. WATER SERVICE ABANDONMENT MUST BE SCHEDULED WITH THE CITY 72 HOURS IN ADVANCE AT 970-350-9320.

City of Greeley Colorado

EXISTING WATER SERVICE & MAIN ABANDONMENT

DETAIL WS-5

DATE: JANUARY 2023 SCALE: N.T.S.

HCI ENGINEERING
A DIVISION OF HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**, Call before you dig.

811

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

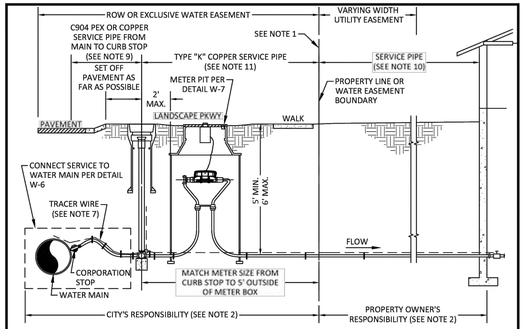
REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name: PUBLIC DETAILS (2)
Sheet Number:

C7.4

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Public Dtls.dwg PLOTDATE: 2025-02-06



ELEVATION VIEW

NOTES:

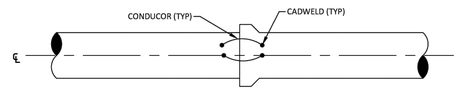
1. PLACEMENT OF CURB STOP SERVICE BOX MAY VARY FROM LANDSCAPE PARKWAY OR A MAXIMUM OF ±1 FOOT OF THE PROPERTY LINE. ANY VARIANCE OF LOCATION OF CURB STOP MUST BE APPROVED PRIOR TO CONSTRUCTION.SEE DESIGN CRITERIA, LATEST REVISION, FOR METER PIT LOCATION.
2. WATER DEPARTMENT'S RESPONSIBILITY SHALL BE THE WATER MAIN, THE METER INSIDE THE METER PIT, THE CORPORATION STOP, AND SERVICE PIPING FROM THE WATER MAIN UP TO DOWNSTREAM OF METER. PROPERTY OWNER'S RESPONSIBILITY SHALL INCLUDE EVERYTHING DOWNSTREAM OF METER STRUCTURE.
3. SHOULD ANY SITUATION ARISE OTHER THAN SHOWN CONCERNING THE DEPTH OR OBSTRUCTION OF SERVICE LINE OR THE PLACEMENT OF THE METER PIT OR STOP BOX, CALL (970) 350-9317 AND ASK FOR METER SERVICES DIVISION.
4. REFER TO WATER & SEWER (W&S) STANDARD DRAWINGS AND CONSTRUCTION SPECIFICATIONS (SPECIFICATIONS) FOR METER INSTALLATION REQUIREMENTS.
5. CURB STOP IS TO BE MINNEAPOLIS PATTERN OR APPROVED EQUAL.
6. CURB STOP MUST BE INSTALLED WITH EITHER PLASTIC OR STAINLESS STEEL PIPE INSERTS TO ENSURE PROPER COMPRESSION FITTING ON C904 CROSS-LINKED PEX PIPE.
7. INSTALL TRACER WIRE ACCORDING TO CITY OF GREELEY W&S SPECIFICATIONS AND STANDARD DETAILS, LATEST REVISION.
8. ALL BURIED PIPE, FITTINGS, VALVES, AND APPURTENANCES SHALL BE INSTALLED AND RESTRAINED IN ACCORDANCE WITH W&S SPECIFICATIONS, LATEST REVISION.
9. COPPER OR C904 CROSS-LINKED PEX SERVICE LINE SHALL BE INSTALLED FROM THE CORPORATION STOP TO CURB STOP. REFER TO W&S CONSTRUCTION SPECIFICATIONS FOR APPROVED SERVICE PIPE PRODUCT AND MFR REQUIREMENTS.
10. FROM 5 FT PAST THE METER PIT ON THE OWNER SIDE UP TO BUILDING STRUCTURE SHALL BE IN ACCORDANCE WITH BUILDING CODE AND DRINKING WATER REQUIREMENTS.
13. TYPE "K" COPPER SHALL BE PLACED FROM THE CURB STOP, THROUGH THE METER PIT, AND UP TO 5 FEET PAST THE METER PIT ON CUSTOMER SIDE.
14. ALL SERVICE PIPE SHALL BE SIZED ACCORDING TO SERVICE TAP INSIDE DIAMETER AND MUST COMPLY WITH AWWA C904. SEE W&S DESIGN CRITERIA, LATEST REVISION.
15. UPPER HALF OF STANDARD VALVE BOX SHALL BE PLACED OVER CURB STOP AND TRACER WIRE TEST STATION LOOP ACCORDING TO W&S SPECIFICATIONS, LATEST REVISION.

City of Greeley Colorado

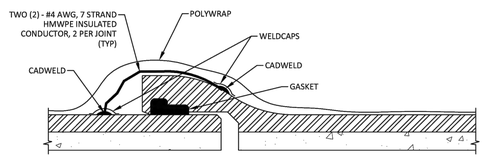
POTABLE WATER SERVICE LINE, STOP BOX & METER INSTALLATION (INSIDE LANDSCAPE PARKWAY)

DETAIL W-9A

DATE: JANUARY 2023 SCALE: N.T.S.



ELEVATION VIEW



CUTAWAY ELEVATION VIEW

NOTES:

1. CONDUCTOR WIRE SHALL BE RATED FOR DIRECT BURIAL, AND HAVE BOTH ENDS CAD WELDED TO THE PIPE OR BONDING STRAP BOLTED TO PIPE. WIRE SHALL HAVE A MINIMUM OF 2" SLACK.
2. JOINT BONDING SHALL ALSO APPLY TO RESTRAINED AND MECHANICAL JOINT PIPE AND FITTINGS.
3. CONSTRUCT CADWELD CONNECTIONS PER WATER & SEWER CONSTRUCTION SPECIFICATIONS AND DETAILS, LATEST REVISION.
4. ACCEPTABLE ALTERNATIVE TO ANODE CATHODIC PROTECTION IS ZINC COATED D.I.P.

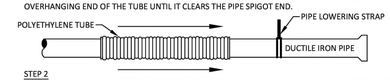
City of Greeley Colorado

DUCTILE IRON PIPE JOINT BONDING

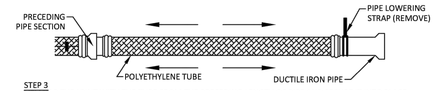
DETAIL W-12

DATE: JANUARY 2023 SCALE: N.T.S.

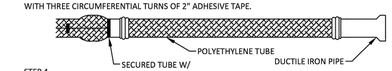
STEP 1
CUT A SECTION OF POLYETHYLENE (PE) TUBE APPROXIMATELY 2' LONGER THAN THE PIPE SECTION. REMOVE ALL DEBRIS FROM THE PIPE SURFACE. SLIP THE TUBE AROUND THE END OF THE PIPE, STARTING AT THE SPIGOT END. BUNCH THE TUBE ACCORDION-FASHION ON THE END OF THE PIPE. PULL BACK THE OVERHANGING END OF THE TUBE UNTIL IT CLEARS THE PIPE SPIGOT END.



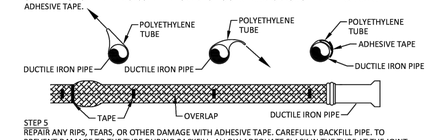
STEP 2
LOWER THE PIPE INTO THE TRENCH AND MAKE UP THE PIPE JOINT WITH THE PRECEDING SECTION OF PIPE. SPREAD THE TUBE OVER THE ENTIRE PIPE BARREL AND REMOVE THE PIPE LOWERING STRAP. MAKE SURE NO DIRT OR BEDDING MATERIAL BECOMES TRAPPED BETWEEN TUBE AND PIPE.



STEP 3
OVERLAP THE JOINT WITH THE TUBE FROM THE PRECEDING LENGTH OF PIPE AND SECURE IT INTO PLACE WITH THREE CIRCUMFERENTIAL TURNS OF 2" ADHESIVE TAPE.



STEP 4
OVERLAP THE SECURED TUBE END WITH THE TUBE END OF THE NEW PIPE SECTION AND SECURE THE NEW TUBE END IN PLACE WITH THE TAPING PROCEDURE IN STEP 3. TAKE UP THE SLACK IN THE TUBE ALONG THE BARREL OF THE PIPE TO MAKE A SNUG, BUT NOT TIGHT, FIT BY FOLDING THE EXCESS TUBE BACK OVER THE TOP OF THE PIPE. SECURE THE TUBE AT 3' TO 5' INTERVALS ALONG THE PIPE BARREL WITH ADHESIVE TAPE.



STEP 5
REPAIR ANY RIPS, TEARS, OR OTHER DAMAGE WITH ADHESIVE TAPE. CAREFULLY BACKFILL PIPE. TO PREVENT DAMAGE TO THE TUBE DURING BACKFILL, ALLOW ADEQUATE SLACK IN THE TUBE AT THE JOINT. AVOID DAMAGING THE TUBE WHEN USING TAMPING DEVICES.

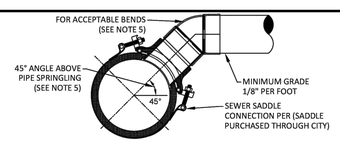
City of Greeley Colorado

POLYETHYLENE WRAP INSTALLATION ON STANDARD DUCTILE IRON PIPE

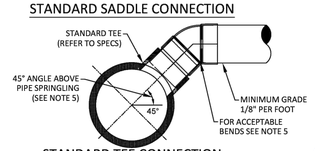
DETAIL W-13B

DATE: JANUARY 2023 SCALE: N.T.S.

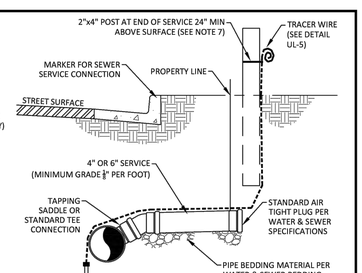
City of Greeley Colorado



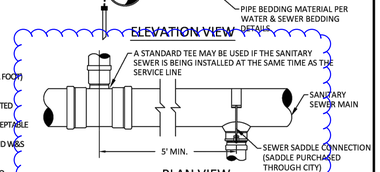
STANDARD SADDLE CONNECTION



STANDARD TEE CONNECTION



ELEVATION VIEW



PLAN VIEW

NOTES:

1. IN NO CASE SHALL THE SERVICE LINE PROTRUDE INTO THE MAIN.
2. SERVICES ARE 4" OR 6" IN DIAMETER AND SHALL HAVE A MINIMUM SLOPE OF 1.0% (1/8" PER FOOT) AND A MAXIMUM SLOPE OF 8.0%.
3. SERVICES 8" DIAMETER AND LARGER SHALL BE CONNECTED TO A MANHOLE.
4. SERVICES SHALL EXTEND TO THE PROPERTY LINE UNLESS OTHERWISE SHOWN ON CITY ACCEPTED CONSTRUCTION DRAWINGS.
5. SERVICE CONNECTIONS SHALL BE INSTALLED AT A POSITION 45° ABOVE PIPE SPRINGLINE. ACCEPTABLE BENDS FOR SERVICE CONNECT ARE 45°, 22.5° & 11.25°.
6. INSTALL TRACER WIRE ACCORDING TO CITY OF GREELEY WATER & SEWER SPECIFICATIONS AND W&S UTILITY LOCATING ("UL") DETAILS, LATEST REVISION OF EACH.
7. 2 X 4 POST SHALL BE EXTERIOR GRADE, PRESSURE TREATED, LUMBER.
8. TAPPING OF EXISTING SEWER LINE TO BE SCHEDULED WITH CITY AT LEAST 72 HOURS PRIOR TO CONSTRUCTION (970) 350 - 9327.

City of Greeley Colorado

SANITARY SEWER SERVICE CONNECTION

DETAIL SS-5

DATE: JANUARY 2023 SCALE: N.T.S.

THESE FITTINGS ARE NOT ALLOWED ON THE PRIVATE SIDE PLEASE REFER TO THE 2021IPC CODE

HCI ENGINEERING
A DIVISION OF HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**. Call before you dig.

811

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

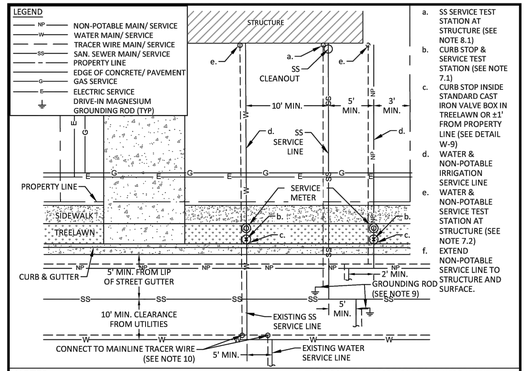
REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name: PUBLIC DETAILS (3)
Sheet Number:

C7.5

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Public Dtls.dwg PLOTDATE: 2025-02-06



a. SS SERVICE TEST STATION AT STRUCTURE (SEE NOTE 8.1)
b. CURB STOP & SERVICE TEST STATION (SEE NOTE 7.1)
c. CURB STOP INSIDE STANDARD CAST IRON VALVE BOX IN TREELAWN OR ±1' FROM PROPERTY LINE (SEE DETAIL W-9)
d. WATER & NON-POTABLE IRRIGATION SERVICE LINE
e. WATER & NON-POTABLE SERVICE TEST STATION AT STRUCTURE (SEE NOTE 7.2)
f. EXTEND NON-POTABLE SERVICE LINE TO STRUCTURE AND SURFACE.

NOTES:

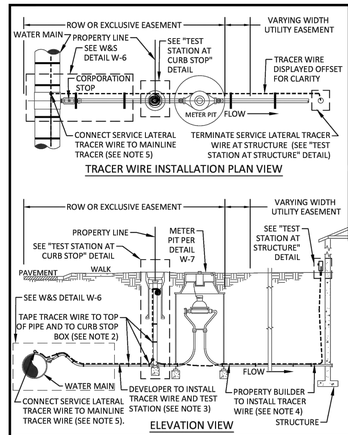
1. ALL BURIED PIPE, VALVES, AND APPURTENANCES SHALL BE INSTALLED ACCORDING TO THE CITY OF GREELEY WATER & SEWER DETAILS AND SPECIFICATIONS LATEST REVISION.
2. TRACER WIRE IS REQUIRED FOR ALL SERVICE PIPES (WATER, SEWER, NON-POTABLE).
3. TRACER WIRE IS ONLY DEPICTED AWAY FROM PIPE IN ABOVE DRAWING FOR CLARITY.
4. REFER TO GENERAL NOTES ON WATER & SEWER DETAIL UL-6, LATEST REVISION, FOR ADDITIONAL TRACER WIRE INSTALLATION, TAPING, CONNECTION, SPLICING, AND GROUNDING REQUIREMENTS.
5. FOR FUTURE CONNECTION SERVICE STUBS, DEVELOPER SHALL PROVIDE A MINIMUM OF 2 FEET OF WIRE WRAPPED AND TAPED TO MARKER POST AT PROPERTY LINE (PROPERTY BUILDER SHALL SPLICE TO THIS TRACER WIRE COIL AT LATER DATE).
6. REFER TO WATER & SEWER CONSTRUCTION SPECIFICATIONS, LATEST REVISION, FOR APPROVED TRACER WIRE, GROUNDING ROD, TEST STATION, AND MISC. PRODUCT MFR.
7. WATER & NON-POTABLE SERVICE TEST STATIONS/TRACER ACCESS:
   7.1. TEST STATION (AT CURB STOP): TAPE TRACER WIRE TO CURB STOP BOX AND RUN TO SURFACE. SECURE A TWO FOOT (LINEAR) COIL OF TRACER WIRE AT THE TOP OF THE CURB STOP BOX, AND PLACE THE UPPER HALF OF A STANDARD VALVE BOX AROUND THE CURB STOP AND TEST STATION.
   7.2. PROPERTY OWNER TEST STATION AT STRUCTURE: TERMINATE TRACER WIRE AT STRUCTURE WITH AN APPROVED TEST STATION ACCESS BOX FROM AN APPROVED MFR, MOUNTED TO STRUCTURE.
   7.3. SEE W&S DETAIL UL-4, LATEST REVISION, FOR ADDITIONAL DETAILS.
8. SANITARY SEWER SERVICE TEST STATIONS/TRACER ACCESS:
   8.1. PROPERTY OWNER TEST STATION AT STRUCTURE: TERMINATE TRACER WIRE AT STRUCTURE WITH AN APPROVED TEST STATION ACCESS BOX FROM AN APPROVED MFR, MOUNTED TO THE STRUCTURE.
   8.2. SEE W&S DETAIL UL-5, LATEST REVISION, FOR ADDITIONAL DETAILS.
9. ALL SANITARY SEWER SERVICE LATERAL TRACER WIRES SHALL TERMINATE WITHIN 2FT OF THE SS MAIN WITH AN APPROVED 1.5 LB DRIVE-IN MAGNESIUM GROUNDING ROD.
10. ALL WATER SERVICE LATERAL TRACER WIRES SHALL BE CONNECTED TO MAINLINE TRACER WITHOUT CUTTING / SPLICING THE MAINLINE TRACER WIRE, ACCORDING TO WATER & SEWER DETAIL UL-6, LATEST REVISION.

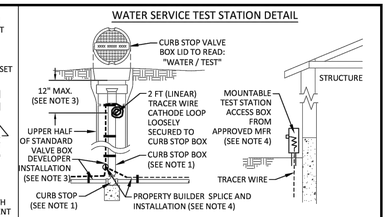
City of Greeley Colorado

(TYP) SERVICE LATERAL
UTILITY LOCATING PLAN

DETAIL UL-3

DATE: JANUARY 2023 SCALE: N.T.S.





NOTES:

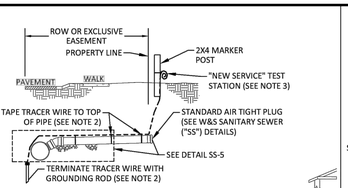
1. REFER TO RELATED WATER & SEWER DETAILS W-6 THROUGH W-11, LATEST REVISION OF EACH, FOR WATER SERVICE LATERAL AND METER INSTALLATION DETAILS.
2. REFER TO RELATED SERVICE LATERAL TRACER WIRE DETAIL UL-3, AND GENERAL TRACER WIRE NOTES ON UL-6, LATEST REVISION OF EACH, FOR ADDITIONAL TRACER WIRE TAPING, SPLICING, CONNECTING, AND GROUNDING DETAILS.
3. UTILITY DEVELOPER TO INSTALL TRACER WIRE ON MAIN AND UP TO TEST STATION AT CURB STOP ON THE EDGE OF ROW. PROVIDE 2 FT (LINEAR) OF EXCESS TRACER WIRE, SECURED AT THE TOP OF THE CURB STOP BOX, AND PLACE THE UPPER HALF OF A STANDARD VALVE BOX AROUND THE CURB STOP AND TEST STATION. FOR NEW DEVELOPMENT, UTILITY DEVELOPER SHALL PROVIDE A MINIMUM 2 FT COIL AT MARKER POST IF PRIOR TO CURB STOP INSTALLATION.
4. PROPERTY BUILDER TO SPLICE SERVICE TRACER WIRE TO TEST STATION TRACER WIRE AND INSTALL UP TO STRUCTURE, TERMINATING DIRECTLY ABOVE THE SERVICE LATERAL AT THE STRUCTURE WITH AN APPROVED ACCESS BOX FROM AN APPROVED MFR AND INSTALLED IN ACCORDANCE WITH MFR SPECIFICATIONS. REFER TO WATER & SEWER SPECIFICATIONS, LATEST REVISION, FOR APPROVED MFR.
5. ALL MAINLINE TRACER WIRE CONNECTIONS SHALL BE INSTALLED PER LATEST REVISION OF WATER & SEWER SPECIFICATIONS. MAINLINE TRACER SHALL NOT BE CUT OR SPLICED IN ANY WAY (SEE NOTE 3).

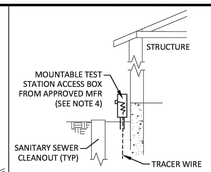
City of Greeley Colorado

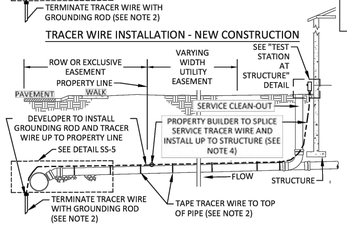
(TYP) WATER SERVICE UTILITY LOCATING DETAIL
SECTION & TEST STATION

DETAIL UL-4

DATE: JANUARY 2023 SCALE: N.T.S.







NOTES:

1. REFER TO RELATED DETAIL SS-5, LATEST REVISION, FOR SANITARY SEWER SERVICE LATERAL STANDARD DRAWING.
2. REFER TO RELATED SERVICE LATERAL TRACER WIRE DETAIL UL-3, AND GENERAL TRACER WIRE NOTES ON UL-6, LATEST REVISION OF EACH, FOR ADDITIONAL TRACER WIRE TAPING, SPLICING, CONNECTING, GROUNDING, AND MISC. INSTALLATION DETAILS.
3. DEVELOPER TO INSTALL TRACER WIRE FROM SS MAIN TO THE TEST STATION BOX ON THE EDGE OF ROW. TEST STATION FOR NEW DEVELOPMENT SHALL BE A COIL OF 2 FT (LINEAR) TRACER WIRE, SECURED TO THE SERVICE STUB MARKER POST.
4. PROPERTY BUILDER TO SPLICE SANITARY SEWER SERVICE TRACER WIRE PROPERTY LINE AND INSTALL UP TO STRUCTURE, TERMINATING AT THE SS SERVICE CLEANOUT WITH AN APPROVED MFR TEST STATION ACCESS BOX FROM AN APPROVED MFR. TEST STATION ACCESS BOX SHALL BE MOUNTED TO THE STRUCTURE WITHIN 18" OF THE SS SERVICE CLEANOUT AND INSTALLED ACCORDING TO THE TEST STATION MFR SPECIFICATIONS. REFER TO WATER & SEWER SPECIFICATIONS, LATEST REVISION, FOR APPROVED MFR.

City of Greeley Colorado

(TYP) SANITARY SEWER SERVICE UTILITY LOCATING
DETAIL SECTION & TEST STATION

DETAIL UL-5

DATE: JANUARY 2023 SCALE: N.T.S.

TRACER WIRE NOTES:

1. LOCATING MUST MEET REQUIREMENTS OF SENATE BILL 18-167 OR ANY UPDATE.
2. TRACER WIRE SHALL BE LOCATED ON TOP OF PIPE, TAPED EVERY 3 TO 4 FEET MAX AND EACH SIDE OF EVERY JOINT, FITTING, AND VALVE.
3. TRACER WIRE IS REQUIRED FOR ALL WATER SERVICE LATERALS, NON-POTABLE IRRIGATION SERVICE LATERALS, ALL SANITARY SEWER LATERALS, ALL WATER MAINS, AND ALL NON-POTABLE IRRIGATION MAINS.
4. TWO UNDERGROUND WIRE SPLICES ARE ALLOWED PER SERVICE, SHALL HAVE LOCKABLE CONNECTIONS SPECIFICALLY DESIGNED FOR DIRECT BURIAL, AND DIELECTRIC SILICONE GEL FILLED OR APPROVED EQUAL.
5. REFER TO WATER & SEWER SPECIFICATIONS, LATEST REVISION, FOR TRACER WIRE GAUGE, MATERIAL, AND COATING REQUIREMENTS.
6. TRACER WIRE SYSTEMS MUST BE INSTALLED AS A SINGLE CONTINUOUS WIRE, EXCEPT WHERE USING APPROVED CONNECTORS. NO LOOPING OR COILING OF WIRE AROUND THE PIPE IS ALLOWED.
7. ALL WATER SERVICE LATERAL TRACER WIRES SHALL BE CONNECTED TO MAINLINE TRACER USING AN APPROVED MAINLINE TO LATERAL LUG CONNECTOR WITHOUT CUTTING / SPLICING THE MAINLINE TRACER WIRE.
8. ALL MAINLINE TRACER WIRE BRANCHES SHALL BE MADE WITH AN APPROVED MAINLINE TO MAINLINE LUG CONNECTOR WITHOUT CUTTING / SPLICING EITHER MAINLINE TRACER WIRE.
9. REFER TO WATER & SEWER CONSTRUCTION SPECIFICATIONS, LATEST REVISION, FOR APPROVED TRACER WIRE MFR AND ADDITIONAL INSTALLATION REQUIREMENTS.

TEST STATIONS:

1. TRACER WIRE SHALL BE ACCESSIBLE AT LEAST ONCE EVERY 1,000 FT MAX.
2. TEST STATION SHALL NOT BE FURTHER THAN 1,000 FT FROM AN APPROVED "FAR-END" GROUNDING ROD. THIS GROUNDING ROD MUST MEET WATER & SEWER CONSTRUCTION SPECIFICATIONS AND DESIGN CRITERIA STATED IN THE GROUNDING NOTES.
3. TEST STATION MAY EITHER BE IN THE FORM OF A CATHODE WIRE LOOP ACCESSIBLE FROM FINAL GRADE SURFACE OR AN APPROVED TEST STATION ACCESS BOX FROM AN APPROVED MFR. EITHER TEST STATION FORM SHALL BE WITHIN THE FAR-END GROUNDING INTERVAL REQUIREMENT, AND MEET WATER & SEWER TRACER WIRE CONSTRUCTION SPECIFICATIONS AND DETAILS, LATEST REVISION OF EACH.
4. GROUND SURROUNDING TEST STATION ACCESS BOXES SHALL SLOPE AWAY FROM LID AT 2% MINIMUM GRADE.

GROUNDING NOTES:

1. ALL SANITARY SEWER SERVICE LATERAL TRACER WIRES SHALL TERMINATE WITHIN 2 FT OF THE SS MAIN WITH AN APPROVED DRIVE-IN MAGNESIUM GROUNDING ROD. SINGLE GROUNDING ROD MAY BE UTILIZED FOR UP TO 3 SEWER SERVICES MAX.
2. MAINLINE TRACER WIRE MUST BE GROUNDED AT EVERY DEAD END/STUB, AND ALONG CONTINUOUS RUNS AT A MAXIMUM OF 2,000 FT INTERVALS WITH A 1.5 LB DRIVE-IN MAGNESIUM GROUNDING ROD PER MFR REQUIREMENTS. PLACEMENT OF GROUNDING ROD SHALL BE INSTALLED IN SUCH A WAY THAT ALLOWS FOR PROPER WIRE LOCATING WITHOUT A LOSS OR DETERIORATION OF LOW FREQUENCY SIGNAL (512 HZ) FOR DISTANCES IN EXCESS OF 1,000 FT.
3. IF GROUNDING ROD IS TOO CLOSE TO A TEST STATION THAT IT INTERFERES WITH PROPER LOCATING, THE GROUNDING ROD MUST BE SWITCH-ABLE IN ORDER TO TEMPORARILY DEACTIVATE THE INTERFERING GROUND SIGNAL IN THE VICINITY. SUCH A TEST STATION SHALL BE IN THE FORM OF A TEST STATION ACCESS BOX FROM A CITY APPROVED MFR.
4. REFER TO WATER & SEWER CONSTRUCTION SPECIFICATIONS, LATEST REVISION, FOR APPROVED GROUNDING ROD MFR AND ADDITIONAL REQUIREMENTS.

City of Greeley Colorado

TRACER WIRE GENERAL NOTES

DETAIL UL-6

DATE: JANUARY 2023 SCALE: N.T.S.

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**,
Call before you dig.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

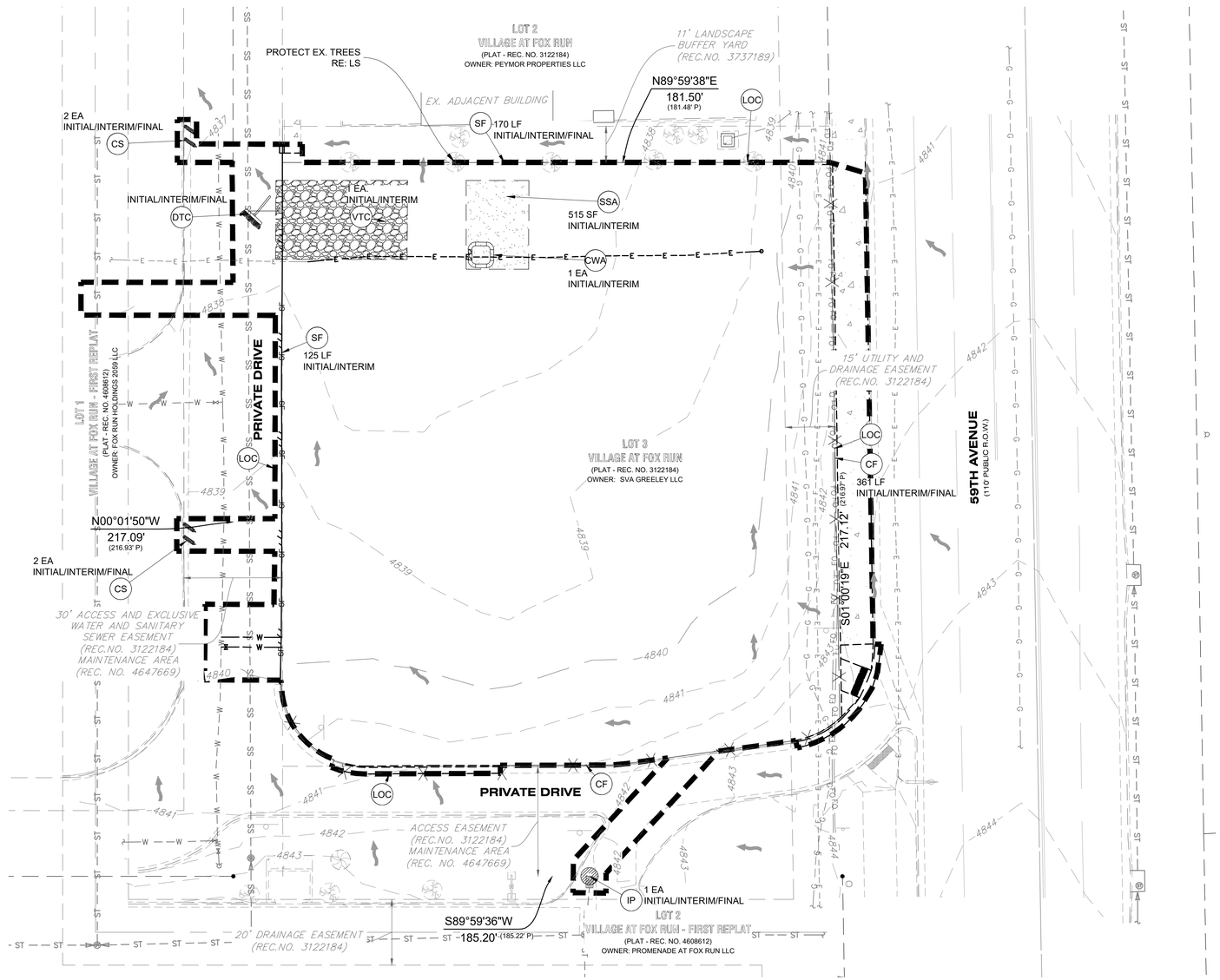
SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name:
PUBLIC DETAILS (4)
Sheet Number:
C7.6

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - Public Dtls.dwg PLOTDATE: 2025-02-06



BMP LEGEND

LABEL	SYMBOL	DESCRIPTION
CWA		CONCRETE WASHOUT AREA
CF		CONSTRUCTION FENCE
SF	SF — SF	SILT FENCE
CS		CURB SOCK-INLET PROTECTION
IP		INLET PROTECTION
SCL		SEDIMENT CONTROL LOG
SSA		STABILIZED STAGING AREA
ECB		EROSION CONTROL BLANKET
SM		SEEDING AND MULCHING
VTC		VEHICLE TRACING CONTROL
LOC		LIMITS OF CONSTRUCTION
DTC		DEBRIS/DUST/TRASH CONTROL

XX

GRADING LEGEND

5280	PROPOSED CONTOURS MAJOR
5279	PROPOSED CONTOURS MINOR
5280	EXISTING CONTOURS MAJOR
5279	EXISTING CONTOURS MINOR
	DRAINAGE FLOW ARROW

HATCHING LEGEND

EXISTING		PROPOSED
	CONCRETE	
	LANDSCAPE	
	ASPHALT	

BMP INSTALLATION SCHEDULE

ORDER	INSTALLATION ORDER / TIME LINE
1	INSTALLATION OF PERIMETER CONTROLS: CONSTRUCTION FENCE (CF), CURB SOCKS (CS), & SILT FENCE (SF) WHERE STORMWATER CAN FLOW OFFSITE.
2	INSTALLATION OF INLET PROTECTION (IP) ON EXISTING ADJACENT INLET.
3	INSTALLATION OF THE SITE VEHICLE TRACKING CONTROL (VTC)
4	INSTALLATION OF THE SITE STABILIZED STAGING AREA (SSA) ONCE THE AREA FOR THE SSA HAS BEEN CLEARED AND GRUBBED, SURFACE ROUGHENING ALL SOILS
5	INSTALLATION OF THE SITE CONCRETE WASHOUT AREA (CWA), THE CWA SHALL BE ACCESSIBLE FROM THE SSA
6	INSTALLATION OF INLET PROTECTION ON NEW INLETS (IP) AND SEDIMENT CONTROL LOG (SCL) ALONG UNDERDRAIN GRAVELS SWALE
7	REMOVE THE SSA, VTC, & SF TO ALLOW FOR PAVING. PAVING SHOULD COMMENCE IMMEDIATELY ALLOWING NO LAG TIME FOR EROSION CONTAMINATION DUE TO THE REMOVAL OF THESE BMP'S.
8	REMOVE CF, SF, SCL, RS, AND IP ONCE THE FINAL STABILIZATION IS COMPLETE AS CONFIRMED BY CITY INSPECTOR AND NO DISTURBED SOILS ARE EXPOSED
9	TEMPORARY STABILIZATION MUST BE IMPLEMENTED FOR EARTH DISTURBING ACTIVITIES ON ANY PORTION OF THE SITE WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED, OR TEMPORARILY CEASED FOR MORE THAN 14 CALENDAR DAYS.

NOTES:
1. FINAL STABILIZATION OF SITE SHALL ESTABLISHED BY BUILDING AND PAVEMENT COVER AND FINAL LANDSCAPING.

SUMMARY TABLE

IMPERVIOUS AREAS ROOFS: 7,500 SF (90%) PAVEMENT: 18,048 SF (100%) TOTAL IMPERVIOUS AREA: 25,548 SF
AREA OF DISTURBANCE: 35,276 SF (0.81 AC)
STEEPEST EXISTING SLOPE: 10%
STEEPEST PROPOSED SLOPE: 33%

CUT/ FILL VOLUMES

CUT (C.Y.)	FILL (C.Y.)	NET (C.Y.)
8	1,985	1,977 (FILL)

TOTAL AREA OF DISTURBANCE = 0.81 AC
CUT/FILL VOLUMES FOR REFERENCE ONLY, CONTRACTOR TO PERFORM OWN EARTH WORK CALCULATIONS.

BMP'S TAKEOFF

BMP	QUANTITY
CF	361 LF
VTC	1 EA
SSA	515 SF
CWA	1 EA
CS	4 EA
IP	2 EA
SCL	278 LF
ECB	3132 SF
LOC	0.81 AC / 35,276 SF

THIS EROSION & SEDIMENT CONTROL PLAN HAS BEEN SUBMITTED TO THE CITY OF GREELEY IN FULFILLMENT OF THE CITY CRITERIA. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE NEEDED IF UNFORESEEN PROBLEMS OCCUR OR IF THE SUBMITTED PLAN DOES NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS PLAN SHALL RUN WITH THE LAND AND BE THE OBLIGATION OF THE LANDOWNER UNTIL SUCH TIME AS THE PLAN IS PROPERLY COMPLETED, MODIFIED, OR VOIDED.

NOTE: THIS EROSION & SEDIMENT CONTROL PLAN IN AND OF ITSELF DOES NOT FULFILL THE REQUIREMENTS OF THE COLORADO DEPARTMENT OF PUBLIC HEALTH: STORMWATER CONSTRUCTION PERMIT FOR A STORMWATER MANAGEMENT PLAN (SWMP).

ACCEPTED BY: _____ _____
LANDOWNER DATE

ACCEPTED BY: _____ _____
CO PROFESSIONAL ENGINEER DATE
COLE C. HABERER, P.E. NO. 43259

N

0' 20' 40' 60'
SCALE: 1" = 20'

City of Greeley Colorado

EROSION CONTROL NOTES - CITY OF GREELEY

1. INSPECTION OF ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL BE REQUIRED AT THE END OF EACH DAY'S WORK, WITH NECESSARY MAINTENANCE AND REPAIRS PROVIDED IMMEDIATELY.
2. STORM DRAIN INLETS SHALL BE PROTECTED FROM THE ENTRY OF SEDIMENT-LADEN WATER UNTIL FINAL STABILIZATION IS COMPLETE.

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**,
Call before you dig.

811

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

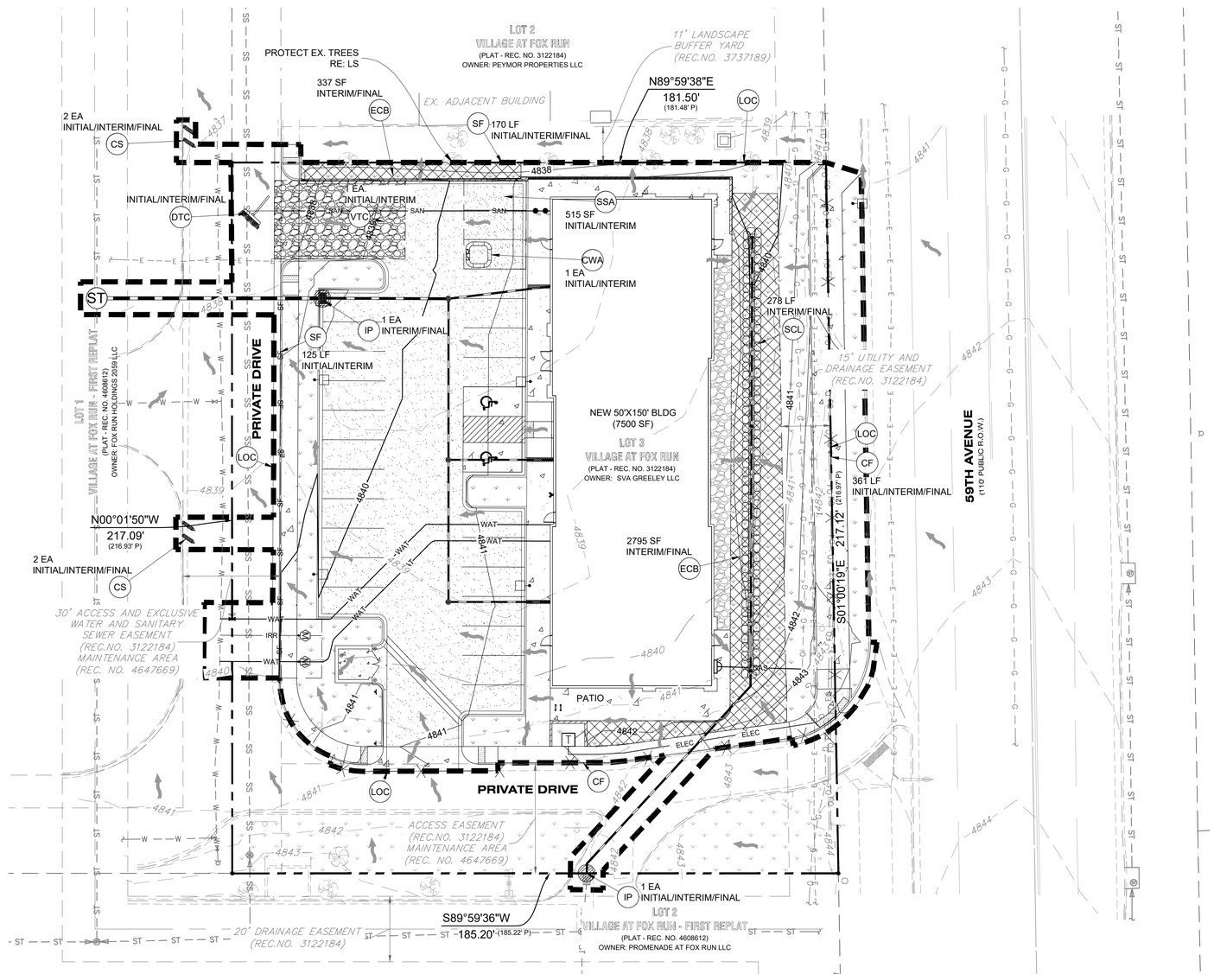
SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name:
EROSION CONTROL PLAN - INITIAL
Sheet Number:
C8.0

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - EC Plan.dwg PLOTDATE: 2025-02-06



BMP LEGEND

LABEL	SYMBOL	DESCRIPTION
CWA		CONCRETE WASHOUT AREA
CF		CONSTRUCTION FENCE
SF	SF — SF	SILT FENCE
CS		CURB SOCK-INLET PROTECTION
IP		INLET PROTECTION
SCL		SEDIMENT CONTROL LOG
SSA		STABILIZED STAGING AREA
ECB		EROSION CONTROL BLANKET
SM		SEEDING AND MULCHING
VTC		VEHICLE TRACING CONTROL
LOC		LIMITS OF CONSTRUCTION
DTC		DEBRIS/DUST/TRASH CONTROL

XX

GRADING LEGEND

5280	PROPOSED CONTOURS MAJOR
5279	PROPOSED CONTOURS MINOR
5280	EXISTING CONTOURS MAJOR
5279	EXISTING CONTOURS MINOR
	DRAINAGE FLOW ARROW

HATCHING LEGEND

EXISTING		PROPOSED
	CONCRETE	
	LANDSCAPE	
	ASPHALT	

BMP INSTALLATION SCHEDULE

ORDER	INSTALLATION ORDER / TIME LINE
1	INSTALLATION OF PERIMETER CONTROLS: CONSTRUCTION FENCE (CF), CURB SOCKS (CS), & SILT FENCE (SF) WHERE STORMWATER CAN FLOW OFFSITE.
2	INSTALLATION OF INLET PROTECTION (IP) ON EXISTING ADJACENT INLET.
3	INSTALLATION OF THE SITE VEHICLE TRACKING CONTROL (VTC)
4	INSTALLATION OF THE SITE STABILIZED STAGING AREA (SSA) ONCE THE AREA FOR THE SSA HAS BEEN CLEARED AND GRUBBED, SURFACE ROUGHENING ALL SOILS
5	INSTALLATION OF THE SITE CONCRETE WASHOUT AREA (CWA), THE CWA SHALL BE ACCESSIBLE FROM THE SSA
6	INSTALLATION OF INLET PROTECTION ON NEW INLETS (IP) AND SEDIMENT CONTROL LOG (SCL) ALONG UNDERDRAIN GRAVELS SWALE
7	REMOVE THE SSA, VTC, & SF TO ALLOW FOR PAVING. PAVING SHOULD COMMENCE IMMEDIATELY ALLOWING NO LAG TIME FOR EROSION CONTAMINATION DUE TO THE REMOVAL OF THESE BMP'S.
8	REMOVE CF, SF, SCL, RS, AND IP ONCE THE FINAL STABILIZATION IS COMPLETE AS CONFIRMED BY CITY INSPECTOR AND NO DISTURBED SOILS ARE EXPOSED
9	TEMPORARY STABILIZATION MUST BE IMPLEMENTED FOR EARTH DISTURBING ACTIVITIES ON ANY PORTION OF THE SITE WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED, OR TEMPORARILY CEASED FOR MORE THAN 14 CALENDAR DAYS.

NOTES:
1. FINAL STABILIZATION OF SITE SHALL ESTABLISHED BY BUILDING AND PAVEMENT COVER AND FINAL LANDSCAPING.

SUMMARY TABLE

IMPERVIOUS AREAS ROOFS: 7,500 SF (90%) PAVEMENT: 18,048 SF (100%) TOTAL IMPERVIOUS AREA: 25,548 SF
AREA OF DISTURBANCE: 35,276 SF (0.81 AC)
STEEPEST EXISTING SLOPE: 10%
STEEPEST PROPOSED SLOPE: 33%

CUT/ FILL VOLUMES

CUT (C.Y.)	FILL (C.Y.)	NET (C.Y.)
8	1,985	1,977 (FILL)

TOTAL AREA OF DISTURBANCE = 0.81 AC
CUT/FILL VOLUMES FOR REFERENCE ONLY, CONTRACTOR TO PERFORM OWN EARTH WORK CALCULATIONS.

BMP'S TAKEOFF

BMP	QUANTITY
CF	361 LF
VTC	1 EA
SSA	515 SF
CWA	1 EA
CS	4 EA
IP	2 EA
SCL	278 LF
ECB	3132 SF
LOC	0.81 AC / 35,276 SF

THIS EROSION & SEDIMENT CONTROL PLAN HAS BEEN SUBMITTED TO THE CITY OF GREELEY IN FULFILLMENT OF THE CITY CRITERIA. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE NEEDED IF UNFORESEEN PROBLEMS OCCUR OR IF THE SUBMITTED PLAN DOES NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS PLAN SHALL RUN WITH THE LAND AND BE THE OBLIGATION OF THE LANDOWNER UNTIL SUCH TIME AS THE PLAN IS PROPERLY COMPLETED, MODIFIED, OR VOIDED.

NOTE: THIS EROSION & SEDIMENT CONTROL PLAN IN AND OF ITSELF DOES NOT FULFILL THE REQUIREMENTS OF THE COLORADO DEPARTMENT OF PUBLIC HEALTH: STORMWATER CONSTRUCTION PERMIT FOR A STORMWATER MANAGEMENT PLAN (SWMP).

ACCEPTED BY: _____ _____
LANDOWNER DATE

ACCEPTED BY: _____ _____
CO PROFESSIONAL ENGINEER DATE
COLE C. HABERER, P.E. NO. 43259

N

0' 20' 40' 60'
SCALE: 1" = 20'

EROSION CONTROL NOTES - CITY OF GREELEY

1. INSPECTION OF ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL BE REQUIRED AT THE END OF EACH DAY'S WORK, WITH NECESSARY MAINTENANCE AND REPAIRS PROVIDED IMMEDIATELY.
2. STORM DRAIN INLETS SHALL BE PROTECTED FROM THE ENTRY OF SEDIMENT-LADEN WATER UNTIL FINAL STABILIZATION IS COMPLETE.

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**,
Call before you dig.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

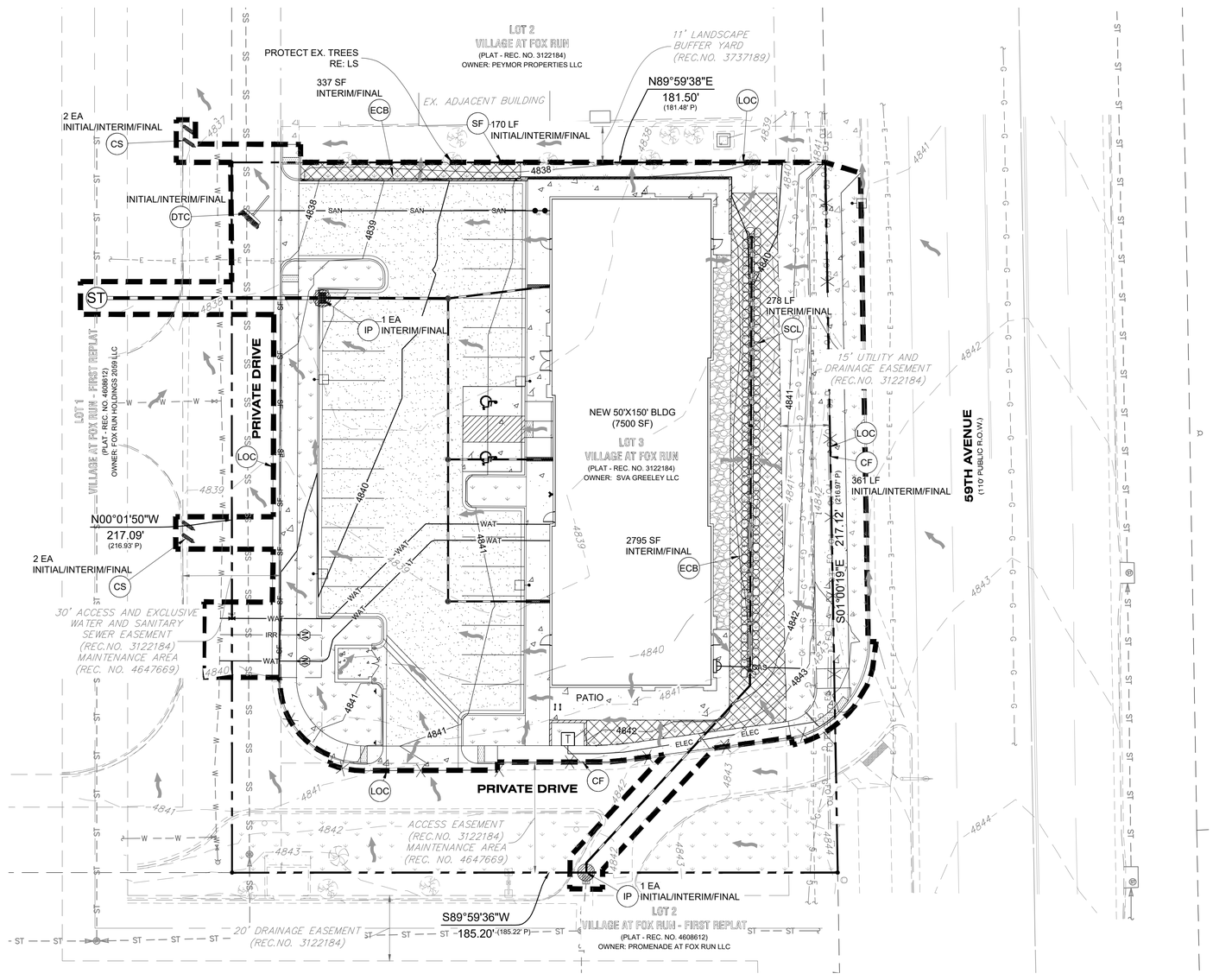
SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name:
EROSION CONTROL PLAN - INTERIM
Sheet Number:
C8.1

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - EC Plan.dwg PLOTDATE: 2025-02-06



BMP LEGEND

LABEL	SYMBOL	DESCRIPTION
CWA		CONCRETE WASHOUT AREA
CF		CONSTRUCTION FENCE
SF	SF — SF	SILT FENCE
CS		CURB SOCK-INLET PROTECTION
IP		INLET PROTECTION
SCL		SEDIMENT CONTROL LOG
SSA		STABILIZED STAGING AREA
ECB		EROSION CONTROL BLANKET
SM		SEEDING AND MULCHING
VTC		VEHICLE TRACING CONTROL
LOC		LIMITS OF CONSTRUCTION
DTC		DEBRIS/DUST/TRASH CONTROL

GRADING LEGEND

5280	PROPOSED CONTOURS MAJOR
5279	PROPOSED CONTOURS MINOR
5280	EXISTING CONTOURS MAJOR
5279	EXISTING CONTOURS MINOR
	DRAINAGE FLOW ARROW

HATCHING LEGEND

	EXISTING	PROPOSED
CONCRETE		
LANDSCAPE		
ASPHALT		

BMP INSTALLATION SCHEDULE

ORDER	INSTALLATION ORDER / TIME LINE
1	INSTALLATION OF PERIMETER CONTROLS: CONSTRUCTION FENCE (CF), CURB SOCKS (CS), & SILT FENCE (SF) WHERE STORMWATER CAN FLOW OFFSITE.
2	INSTALLATION OF INLET PROTECTION (IP) ON EXISTING ADJACENT INLET.
3	INSTALLATION OF THE SITE VEHICLE TRACKING CONTROL (VTC)
4	INSTALLATION OF THE SITE STABILIZED STAGING AREA (SSA) ONCE THE AREA FOR THE SSA HAS BEEN CLEARED AND GRUBBED, SURFACE ROUGHENING ALL SOILS
5	INSTALLATION OF THE SITE CONCRETE WASHOUT AREA (CWA), THE CWA SHALL BE ACCESSIBLE FROM THE SSA
6	INSTALLATION OF INLET PROTECTION ON NEW INLETS (IP) AND SEDIMENT CONTROL LOG (SCL) ALONG UNDERDRAIN GRAVELS SWALE
7	REMOVE THE SSA, VTC, & SF TO ALLOW FOR PAVING. PAVING SHOULD COMMENCE IMMEDIATELY ALLOWING NO LAG TIME FOR EROSION CONTAMINATION DUE TO THE REMOVAL OF THESE BMP'S.
8	REMOVE CF, SF, SCL, RS, AND IP ONCE THE FINAL STABILIZATION IS COMPLETE AS CONFIRMED BY CITY INSPECTOR AND NO DISTURBED SOILS ARE EXPOSED
9	TEMPORARY STABILIZATION MUST BE IMPLEMENTED FOR EARTH DISTURBING ACTIVITIES ON ANY PORTION OF THE SITE WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED, OR TEMPORARILY CEASED FOR MORE THAN 14 CALENDAR DAYS.

NOTES:
1. FINAL STABILIZATION OF SITE SHALL ESTABLISHED BY BUILDING AND PAVEMENT COVER AND FINAL LANDSCAPING.

SUMMARY TABLE

IMPERVIOUS AREAS ROOFS: 7,500 SF (90%) PAVEMENT: 18,048 SF (100%) TOTAL IMPERVIOUS AREA: 25,548 SF
AREA OF DISTURBANCE: 35,276 SF (0.81 AC)
STEEPEST EXISTING SLOPE: 10%
STEEPEST PROPOSED SLOPE: 33%

CUT/ FILL VOLUMES

CUT (C.Y.)	FILL (C.Y.)	NET (C.Y.)
8	1,985	1,977 (FILL)

TOTAL AREA OF DISTURBANCE = 0.81 AC
CUT/FILL VOLUMES FOR REFERENCE ONLY, CONTRACTOR TO PERFORM OWN EARTH WORK CALCULATIONS.

BMP'S TAKEOFF

BMP	QUANTITY
CF	361 LF
VTC	1 EA
SSA	515 SF
CWA	1 EA
CS	4 EA
IP	2 EA
SCL	278 LF
ECB	3132 SF
LOC	0.81 AC / 35,276 SF

THIS EROSION & SEDIMENT CONTROL PLAN HAS BEEN SUBMITTED TO THE CITY OF GREELEY IN FULFILLMENT OF THE CITY CRITERIA. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE NEEDED IF UNFORESEEN PROBLEMS OCCUR OR IF THE SUBMITTED PLAN DOES NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS PLAN SHALL RUN WITH THE LAND AND BE THE OBLIGATION OF THE LANDOWNER UNTIL SUCH TIME AS THE PLAN IS PROPERLY COMPLETED, MODIFIED, OR VOIDED.

NOTE: THIS EROSION & SEDIMENT CONTROL PLAN IN AND OF ITSELF DOES NOT FULFILL THE REQUIREMENTS OF THE COLORADO DEPARTMENT OF PUBLIC HEALTH: STORMWATER CONSTRUCTION PERMIT FOR A STORMWATER MANAGEMENT PLAN (SWMP).

ACCEPTED BY: _____ _____
LANDOWNER DATE

ACCEPTED BY: _____ _____
CO PROFESSIONAL ENGINEER DATE
COLE C. HABERER, P.E. NO. 43259

N

0' 20' 40' 60'
SCALE: 1" = 20'

City of Greeley Colorado

EROSION CONTROL NOTES - CITY OF GREELEY

1. INSPECTION OF ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL BE REQUIRED AT THE END OF EACH DAY'S WORK, WITH NECESSARY MAINTENANCE AND REPAIRS PROVIDED IMMEDIATELY.
2. STORM DRAIN INLETS SHALL BE PROTECTED FROM THE ENTRY OF SEDIMENT-LADEN WATER UNTIL FINAL STABILIZATION IS COMPLETE.

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**,
Call before you dig.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

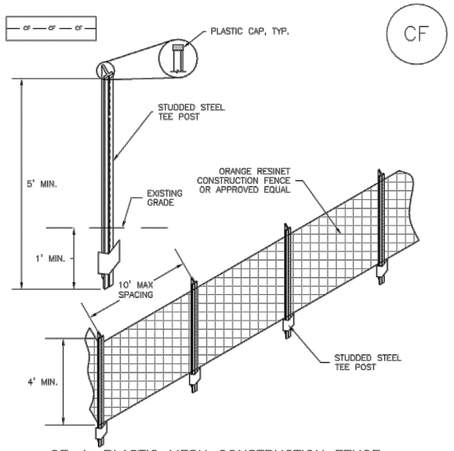
SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name:
EROSION CONTROL PLAN - FINAL
Sheet Number:
C8.2

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - EC Plan.dwg PLOTDATE: 2025-02-06



CF–1. PLASTIC MESH CONSTRUCTION FENCE

CONSTRUCTION FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF CONSTRUCTION FENCE.

2. CONSTRUCTION FENCE SHOWN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

3. CONSTRUCTION FENCE SHALL BE COMPOSED OF ORANGE, CONTRACTOR–GRADE MATERIAL THAT IS AT LEAST 4' HIGH. METAL POSTS SHOULD HAVE A PLASTIC CAP FOR SAFETY.

4. STUDDED STEEL TEE POSTS SHALL BE UTILIZED TO SUPPORT THE CONSTRUCTION FENCE. MAXIMUM SPACING FOR STEEL TEE POSTS SHALL BE 10'.

5. CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO THE TOP, MIDDLE, AND BOTTOM OF EACH POST.

CONSTRUCTION FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

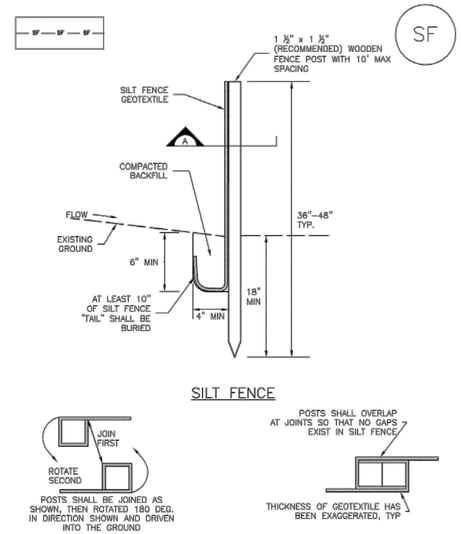
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. CONSTRUCTION FENCE SHALL BE REPAIRED OR REPLACED WHEN THERE ARE SIGNS OF DAMAGE SUCH AS RIPS OR SAGS. CONSTRUCTION FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

5. WHEN CONSTRUCTION FENCES ARE REMOVED, ALL DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE FENCE SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)



SF–1. SILT FENCE

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2–5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.

5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J–HOOK." THE "J–HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' – 20').

7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

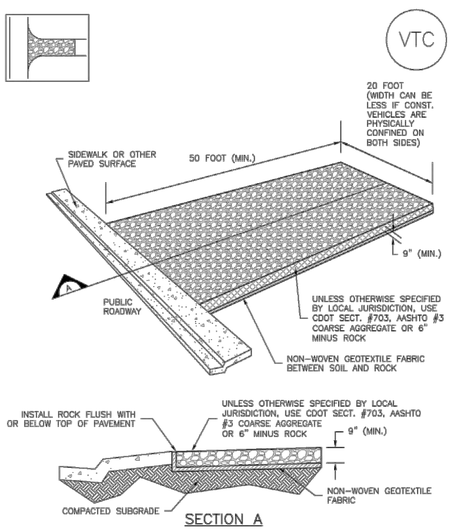
5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



VTC–1. AGGREGATE VEHICLE TRACKING CONTROL

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
   –TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.

3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT–OF–WAYS.

4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

5. A NON–WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

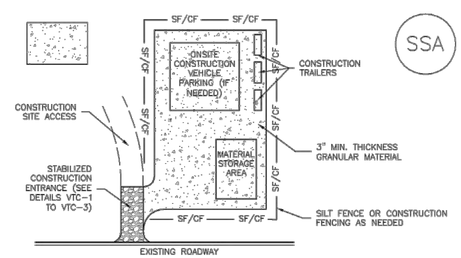
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)



SSA–1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF STAGING AREA(S).
   –CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.

4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.

6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE–ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**.
Call before you dig.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

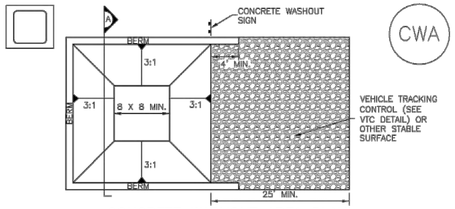
SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

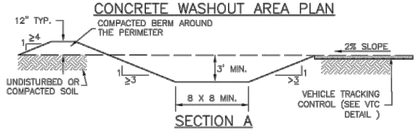
No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name: EC DETAILS (1)
Sheet Number: C8.3

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - EC Dtls.dwg PLOTDATE: 2025-02-06



CONCRETE WASHOUT AREA PLAN



SECTION A

CWA–1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.

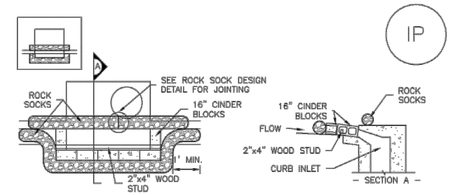
5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER–TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.

7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD).

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



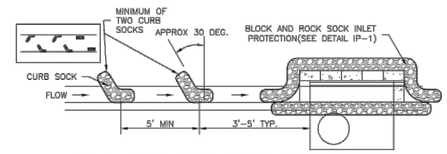
IP–1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.

3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



IP–2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

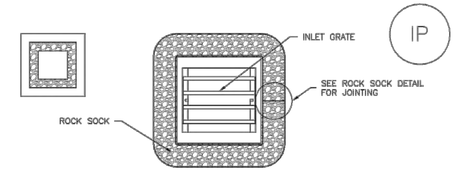
CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.

2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.

3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.

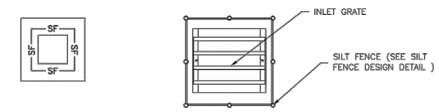
4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON–GRADE INLETS.



IP–3. ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES
1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



IP–4. SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES

1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

GENERAL INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF INLET PROTECTION.
   –TYPE OF INLET PROTECTION (IP.1, IP.2, IP.3, IP.4, IP.5, IP.6)

2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.

3. MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR ¼ OF THE HEIGHT FOR STRAW BALES.

5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.

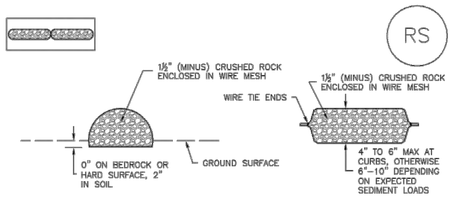
6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

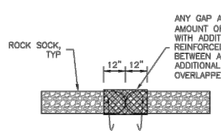
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTION; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.



ROCK SOCK SECTION ROCK SOCK PLAN



ROCK SOCK JOINTING

ANY GAP AT JOINT SHALL BE FILLED WITH AN ADEQUATE AMOUNT OF 1½" (MINUS) CRUSHED ROCK AND WRAPPED WITH ADDITIONAL WIRE MESH SECURED TO ENDS OF ROCK REINFORCED SOCK. AS AN ALTERNATIVE TO FILLING JOINTS BETWEEN ADJOINING ROCK SOCKS WITH CRUSHED ROCK AND ADDITIONAL WIRE WRAPPING, ROCK SOCKS CAN BE OVERLAPPED (TYPICALLY 12–INCH OVERLAP) TO AVOID GAPS.

GRADATION TABLE	
SIEVE SIZE	MASS PERCENT PASSING SQUARE MESH SIEVES
	NO. 4
2"	100
1½"	90 – 100
1"	20 – 55
¾"	0 – 15
⅜"	0 – 5
MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER AASHTO M43. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.	

ROCK SOCK INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION(S) OF ROCK SOCKS.

2. CRUSHED ROCK SHALL BE 1½" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (1½" MINUS).

3. WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH, OR EQUIVALENT, WITH A MAXIMUM OPENING OF ½", RECOMMENDED MINIMUM ROLL WIDTH OF 48"

4. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND AT 2" CENTERS ON ENDS OF SOCKS.

5. SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE.

RS–1. ROCK SOCK PERIMETER CONTROL

ROCK SOCK MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED BEYOND REPAIR.

5. SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE ROCK SOCK.

6. ROCK SOCKS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

7. WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF ROCK SOCK INSTALLATION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY OTHER SIMILAR PROPRIETARY PRODUCTS ON THE MARKET. UDFCD NEITHER NDORSES NOR DISCOURAGES USE OF PROPRIETARY PROTECTION PRODUCTS; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**,
Call before you dig.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

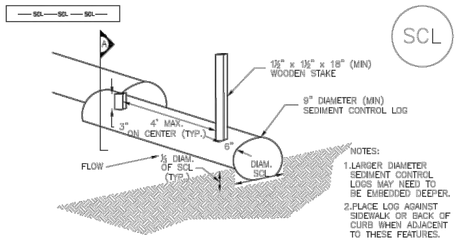
SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

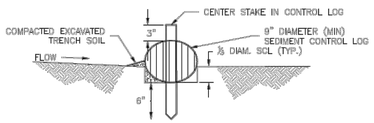
No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name: EC DETAILS (2)
Sheet Number: C8.4

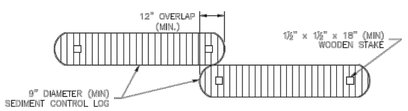
FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - EC Dtls.dwg PLOTDATE: 2025-02-06



TRENCHED SEDIMENT CONTROL LOG

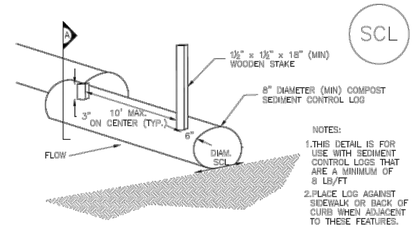


SECTION Ⓐ
TRENCHED SEDIMENT CONTROL LOG

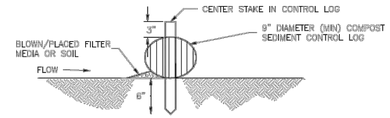


LOG JOINTS

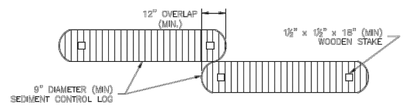
SCL–1. TRENCHED SEDIMENT CONTROL LOG



COMPOST SEDIMENT CONTROL LOG (WEIGHTED)

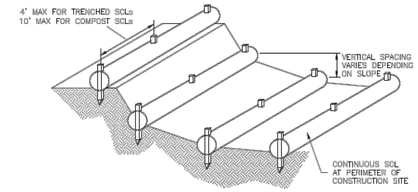


SECTION Ⓐ
COMPOST SEDIMENT CONTROL LOG



LOG JOINTS

SCL–2. COMPOST SEDIMENT CONTROL LOG (WEIGHTED)



SCL–3. SEDIMENT CONTROL LOGS TO CONTROL SLOPE LENGTH

SEDIMENT CONTROL LOG INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.

2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND–DISTURBING ACTIVITIES.

3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.

4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS.

5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY ⅓ OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING. COMPOST LOGS THAT ARE 8 LB/FT DO NOT NEED TO BE TRENCHED.

6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL OR FILTER MATERIAL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER OR BLOWN IN PLACE.

7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED. COMPOST LOGS SHOULD BE STAKED 10' ON CENTER.

SEDIMENT CONTROL LOG MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

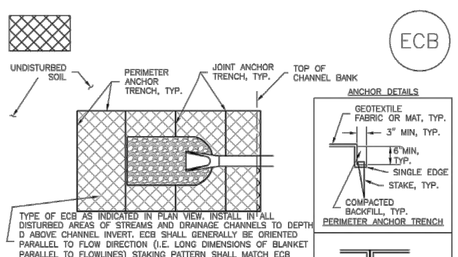
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.

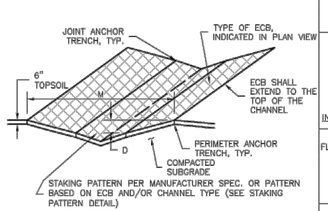
5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION.COMPOST FROM COMPOST LOGS MAY BE LEFT IN PLACE AS LONG AS BAGS ARE REMOVED AND THE AREA SEEDED. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, JEFFERSON COUNTY, COLORADO, DOUGLAS COUNTY, COLORADO, AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

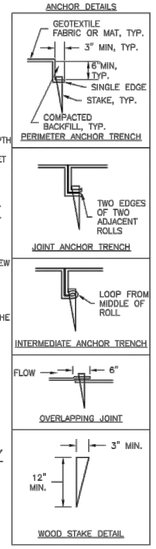


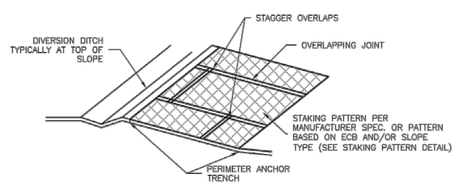
ECB–1. PIPE OUTLET TO DRAINAGEWAY



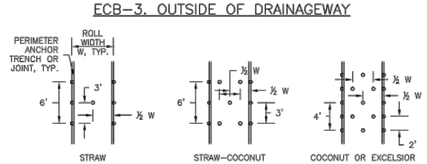
ECB–2. SMALL DITCH OR DRAINAGEWAY

ANCHOR DETAILS

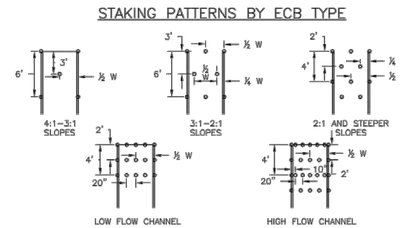




ECB–3. OUTSIDE OF DRAINAGEWAY



STAKING PATTERNS BY ECB TYPE



STAKING PATTERNS BY SLOPE OR CHANNEL TYPE

EROSION CONTROL BLANKET INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF ECB.
   –TYPE OF ECB (STRAW, STRAW–COCONUT, COCONUT, OR EXCELSIOR).
   –AREA, A, IN SQUARE YARDS OF EACH TYPE OF ECB.

2. 100% NATURAL AND BIODEGRADABLE MATERIALS ARE PREFERRED FOR RECPs, ALTHOUGH SOME JURISDICTIONS MAY ALLOW OTHER MATERIALS IN SOME APPLICATIONS.

3. IN AREAS WHERE ECBs ARE SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO ECB INSTALLATION AND THE ECB SHALL BE IN FULL CONTACT WITH SUBGRADE. NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.

4. PERIMETER ANCHOR TRENCH SHALL BE USED ALONG THE OUTSIDE PERIMETER OF ALL BLANKET AREAS.

5. JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL ECBs EXCEPT STRAW WHICH MAY USE AN OVERLAPPING JOINT.

6. INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE–HALF ROLL LENGTH FOR COCONUT AND EXCELSIOR ECBs.

7. OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER FOR ECBs ON SLOPES.

8. MATERIAL SPECIFICATIONS OF ECBs SHALL CONFORM TO TABLE ECB–1.

9. ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING ECBS SHALL BE RESEEDED AND MULCHED.

10. DETAILS ON DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION WILL GOVERN IF DIFFERENT FROM THOSE SHOWN HERE.

TABLE ECB–1. ECB MATERIAL SPECIFICATIONS

TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	RECOMMENDED NETTING**
STRAW*	–	100%	–	DOUBLE/ NATURAL
STRAW–COCONUT	30% MIN	70% MAX	–	DOUBLE/ NATURAL
COCONUT	100%	–	–	DOUBLE/ NATURAL
EXCELSIOR	–	–	100%	DOUBLE/ NATURAL

*STRAW ECBs MAY ONLY BE USED OUTSIDE OF STREAMS AND DRAINAGE CHANNEL.
**ALTERNATE NETTING MAY BE ACCEPTABLE IN SOME JURISDICTIONS

EROSION CONTROL BLANKET MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ECBs SHALL BE LEFT IN PLACE TO EVENTUALLY BIODEGRADE, UNLESS REQUESTED TO BE REMOVED BY THE LOCAL JURISDICTION.

5. ANY ECB PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REINSTALLED. ANY SUBGRADE AREAS BELOW THE GEOTEXTILE THAT HAVE ERODED TO CREATED A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE ECB REINSTALLED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO AND TOWN OF PARKER COLORADO, NOT AVAILABLE IN AUTOCAD)

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below.**
Call before you dig.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

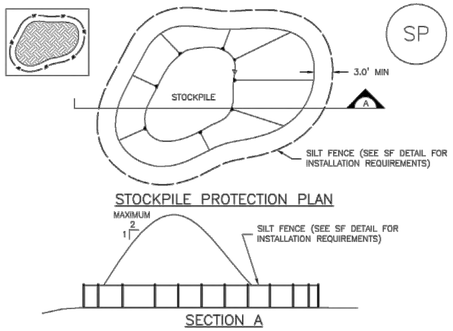
SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name: EC DETAILS (3)
Sheet Number: C8.5

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - EC Dtls.dwg PLOTDATE: 2025-02-06



SP–1. STOCKPILE PROTECTION

STOCKPILE PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF STOCKPILES.
   –TYPE OF STOCKPILE PROTECTION.

2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.

3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30–60 DAYS).

4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

STOCKPILE PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

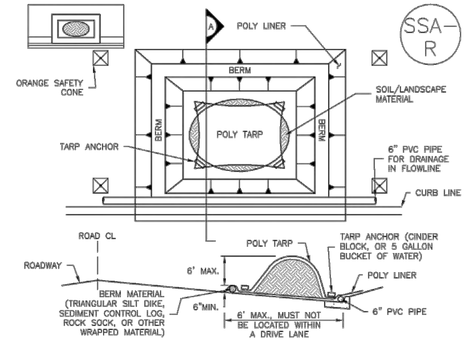
STOCKPILE PROTECTION MAINTENANCE NOTES

4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.

5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

(DETAILS ADAPTED FROM PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



SP–2. MATERIALS STAGING IN ROADWAY

MATERIALS STAGING IN ROADWAYS INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF MATERIAL STAGING AREA(S).
   –CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. FEATURE MUST BE INSTALLED PRIOR TO EXCAVATION, EARTHWORK OR DELIVERY OF MATERIALS.

3. MATERIALS MUST BE STATIONED ON THE POLY LINER. ANY INCIDENTAL MATERIALS DEPOSITED ON PAVED SECTION OR ALONG CURB LINE MUST BE CLEANED UP PROMPTLY.

4. POLY LINER AND TARP COVER SHOULD BE OF SIGNIFICANT THICKNESS TO PREVENT DAMAGE OR LOSS OF INTEGRITY.

5. SAND BAGS MAY BE SUBSTITUTED TO ANCHOR THE COVER TARP OR PROVIDE BERMING UNDER THE BASE LINER.

6. FEATURE IS NOT INTENDED FOR USE WITH WET MATERIAL THAT WILL BE DRAINING AND/OR SPREADING OUT ON THE POLY LINER OR FOR DEMOLITION MATERIALS.

7. THIS FEATURE CAN BE USED FOR:
   –UTILITY REPAIRS.
   –WHEN OTHER STAGING LOCATIONS AND OPTIONS ARE LIMITED.
   –OTHER LIMITED APPLICATION AND SHORT DURATION STAGING.

MATERIALS STAGING IN ROADWAY MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. INSPECT PVC PIPE ALONG CURB LINE FOR CLOGGING AND DEBRIS. REMOVE OBSTRUCTIONS PROMPTLY.

5. CLEAN MATERIAL FROM PAVED SURFACES BY SWEEPING OR VACUUMING.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM AURORA, COLORADO)

SEEDING MIX MATRIX:
SEE SEEDING NOTES ON EROSION CONTROL PLAN FOR APPLICABLE TIMING FOR INSTALLATION.

Loamy or Clayey Soils Mix

Species	Variety	Percent of Mix	PLS lbs/Acre (Drilled Seeding)
Blue grama	Lovington	20	0.6
Sandberg bluegrass	-------	10	0.3
Western wheatgrass	Arriba	25	4.0
Green needlegrass	Lodorm	20	2.0
Buffalograss	Texoka	10	1.7
Sideoats gramma	Vaughn	15	1.0
TOTAL		100%	10.0 lbs/acre

TEMPORARY VEGETATIVE COVER CONSISTING OF THE ATTACHED SEED MIX MUST BE DRILL SEEDED 10LBS PER PURE LIVE SEED PER ACRE. MULCH CONSISTING OF STRAW, APPLIED AT A RATE OF 2.0-2.5 TONS PER ACRE AND CRIMPED MUST BE USED TO STABILIZE THE EXPOSED SURFACE. SOIL AMENDMENTS CONSISTING OF COMPOST MUST BE INCORPORATED INTO THE SOIL TO A DEPTH OF 6 INCHES BELOW GRADE AT 4.0 CUBIC YARDS PER 1,0000 SQUARE FEET. PERMANENT VEGETATIVE COVER CONSISTING OF SAME SEED MIX ABOVE MUST BE DRILL SEEDED AT 10 POUNDS PURE LIVE SEED PER ACRE.

Mulch

Cover seeded areas with mulch or an appropriate rolled erosion control product to promote establishment of vegetation. Anchor mulch by crimping, netting or use of a non-toxic tackifier. See the Mulching BMP Fact Sheet for additional guidance.

Maintenance and Removal

Monitor and observe seeded areas to identify areas of poor growth or areas that fail to germinate. Reseed and mulch these areas, as needed.

An area that has been permanently seeded should have a good stand of vegetation within one growing season if irrigated and within three growing seasons without irrigation in Colorado. Reseed portions of the site that fail to germinate or remain bare after the first growing season.

Seeded areas may require irrigation, particularly during extended dry periods. Targeted weed control may also be necessary.

Protect seeded areas from construction equipment and vehicle access.

HCI ENGINEERING
A DIVISION OF
HABERER CARPENTRY INC.
621 SOUTHPma
PHONE: (MINFO@HABERERGROUP.COM

Know what's **below**,
Call before you dig.

CALL 811 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SVA GREELEY - DENTAL BUILDING
CONSTRUCTION DOCUMENTS
1911 59th AVENUE
GREELEY, CO 80634

REVISIONS:

No.	Date:	Description:
1	08.05.24	Submittal #1
2	10.29.24	Submittal #2
3	12.13.24	Submittal #3
4	01.17.25	Submittal #4
5	02.07.25	Submittal #5

Project No: 24_06
Drawn By: GJB
Checked By: CCH
Date Issued: 06.02.2025
Sheet Name:
EC DETAILS (4)
Sheet Number:
C8.6

FILENAME: U:\HCI Engineering Projects\2024\24_06 - Greeley Ortho\CAD\Plans\CDs\24_06 CD - EC Dtls.dwg PLOTDATE: 2025-02-06