Sampson Construction Co., Inc.
3730 South 14th Street
Lincoln, NE 68502
Phone: (402) 434-5450
FAX: (402) 434-5466

Bid Bulletin #01

PROJECT: Gateway Early Childhood Center
Bid Package #2
Omaha, NE

DATE: September 18, 2014

This Bid Bulletin includes item 1-1 through 1-5. Each item shall be fully incorporated into the Bidding/Contract Documents and have the same force and effect as though originally included. Bidders shall acknowledge receipt of this Bid Bulletin on their bid.

Item 1-1 Anticipated start dates for the scopes of work bidding in bid package #2 are as follows:

- Foundations- 10/27/14
- Steel Erection- 12/15/14
- Building slabs- 2/14/15

Item 1-2 Bidders shall include winter protection/winter conditions as necessary for installation of their specific scope of work. Concrete additives, blankets, and heat for initial curing shall be included by the concrete bidders. If frost is present in soils, Sampson will provide ground thaw units for removal of frost prior to footing installation. Building enclosure and temporary building heat for completion of rough in and slab activities will be provided by Sampson.

Item 1-3 Bidders should review alternates as identified in section 012300 and provide alternate bids accordingly.

Item1-4 Detail 2 on sheet S03.01 notes a contractors option related to revising the reinforcing steel. Bidders shall base their bid upon including and proceeding with this option so that backfill can be completed to full height.

Item 1-5 Attached is Addendum B from RDG Planning & Design dated 9/17/14. Please note Addendum A is applicable to previous bid package and does not apply to Bid Package #2.

END OF BID BULLETIN #01

September 17, 2014

ADDENDUM B

TO DRAWINGS AND SPECIFICATIONS FOR:

Structural Package
Gateway Early Childhood Center
Omaha, Nebraska
RDG Project No. 2014.129.00, File 35.1

RDG Planning & Design
900 Farnam on the Mall, Suite 100
Omaha, NE 68102-5089
(402) 392-0133

NOTICE TO BIDDERS

This Addendum modifies the original Contract Documents and Project Manual dated September 4, 2014. Bidders must acknowledge receipt of the Addendum on the Bid Form.

The following separate packages have been/will be issued:

Site Grading and Demolition Package	July 23, 2104
Structural Package	September 4, 2014
Site Utilities Package	September 11, 2014
Final Construction Documents	To be Determined

Corresponding addenda:

Addendum A	August 7, 2014	Site Grading and Demolition Package
Addendum B	September 17, 2014	Structural Package

Unless otherwise indicated, the work described herein shall comply with, and be equal in all respect to, the original Contract Specifications and Drawings. Include all incidental work required to properly complete the work whether stated herein or not.

Unless otherwise indicated, the work described herein shall comply with, and be equal in all respect to, the original Contract Specifications and Drawings. Include all incidental work required to properly complete the work whether stated herein or not.

ADDENDA TO THE PROJECT MANUAL

Architectural Specification Items

BGS-1 Section 01 23 00 – Alternates, Page 01 23 00-2, Paragraph 3.1: Add new Subparagraph D as follows:

D. Alternate No. 4 – Roof-Top Equipment Screens:

1. Base Bid: Provide and construct tube steel frames for roof-top equipment screens as noted and detailed within the Structural and Architectural Drawings. Refer to Details 13/S03.04, Sheet S02.02 Roof Framing Plan (for column sizes), and Sheet S02.03 – Upper Roof Framing Plan for extent of tube steel frames.

2. Deduct Alternate: Under this alternate, the roof-top screening and associated tube steel frames shall <u>not</u> be provided.

Structural Specification Items

No items this addendum.

ADDENDA TO THE DRAWINGS

Architectural Drawing Items

BGD-1 Sheet A06.01: Sheet has been revised to show structural changes.

BGD-2 Sheet A06.02: Sheet has been revised to show structural changes.

BGD-3 Sheet A07.05: Sheet has been revised to show structural changes.

Structural Drawing Items

BSD-1 Sheet S02.01: Add Plan Note #3 as follows:

3. REFER TO SHEET S01.01 FOR COLUMN SIZES NOT IDENTIFIED ON THIS SHEET.

BSD-2 Sheet S02.02:

A. Add Plan Note #11 as follows:

11. REFER TO SHEETS S01.01 & S02.01 FOR COLUMN SIZES NOT IDENTIFIED ON THIS SHEET.

B. Revise framing near front entry as shown.

BSD-3 Sheet S02.03:

A. Add Plan Note #3 as follows:

9. REFER TO SHEETS S01.01 & S02.01 FOR COLUMN SIZES NOT IDENTIFIED ON THIS SHEET.

B. Revise framing near front entry as shown.

BSD-4 Sheet S03.00: Revise General Structural Note under Design Loads to read, ***"LIVE LOADS = 25 PSF."***

BSD-5 Sheet S03.05:

A. Section 13 – FRONT ATRIUM ROOF SECTION: Revise section as shown.

B. Section 14 – ROOF SECTION AT FRONT ATRIUM: Revise section as shown

Electrical Drawing Items

BED-1 Sheet E2.0 (For Information Only): This sheet has been added for purposes of showing the locations of the electrical and telecommunications conduit sleeves at the north poured-in-place concrete foundation wall.

ALL OTHER REQUIREMENTS OF THE PLANS AND SPECIFICATIONS REMAIN IN EFFECT. THIS ADDENDUM SHALL BE ATTACHED AND MADE A PART OF THE PLANS AND SPECIFICATIONS.

RDG PLANNING & DESIGN

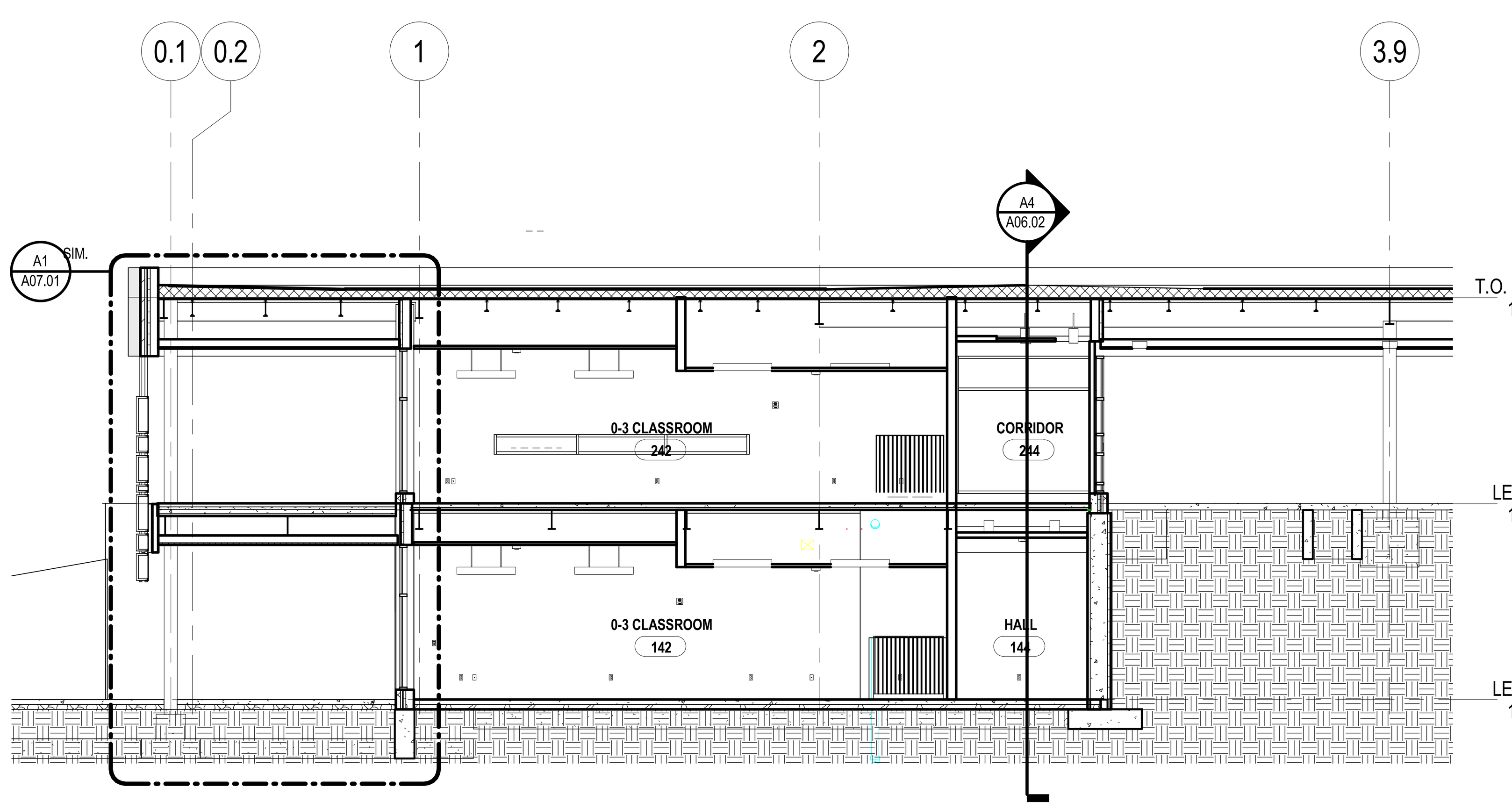
By _____
Edward M. Buglewicz, AIA
for RDG Schutte Wilscam Birge, Inc.

END OF ADDENDUM B

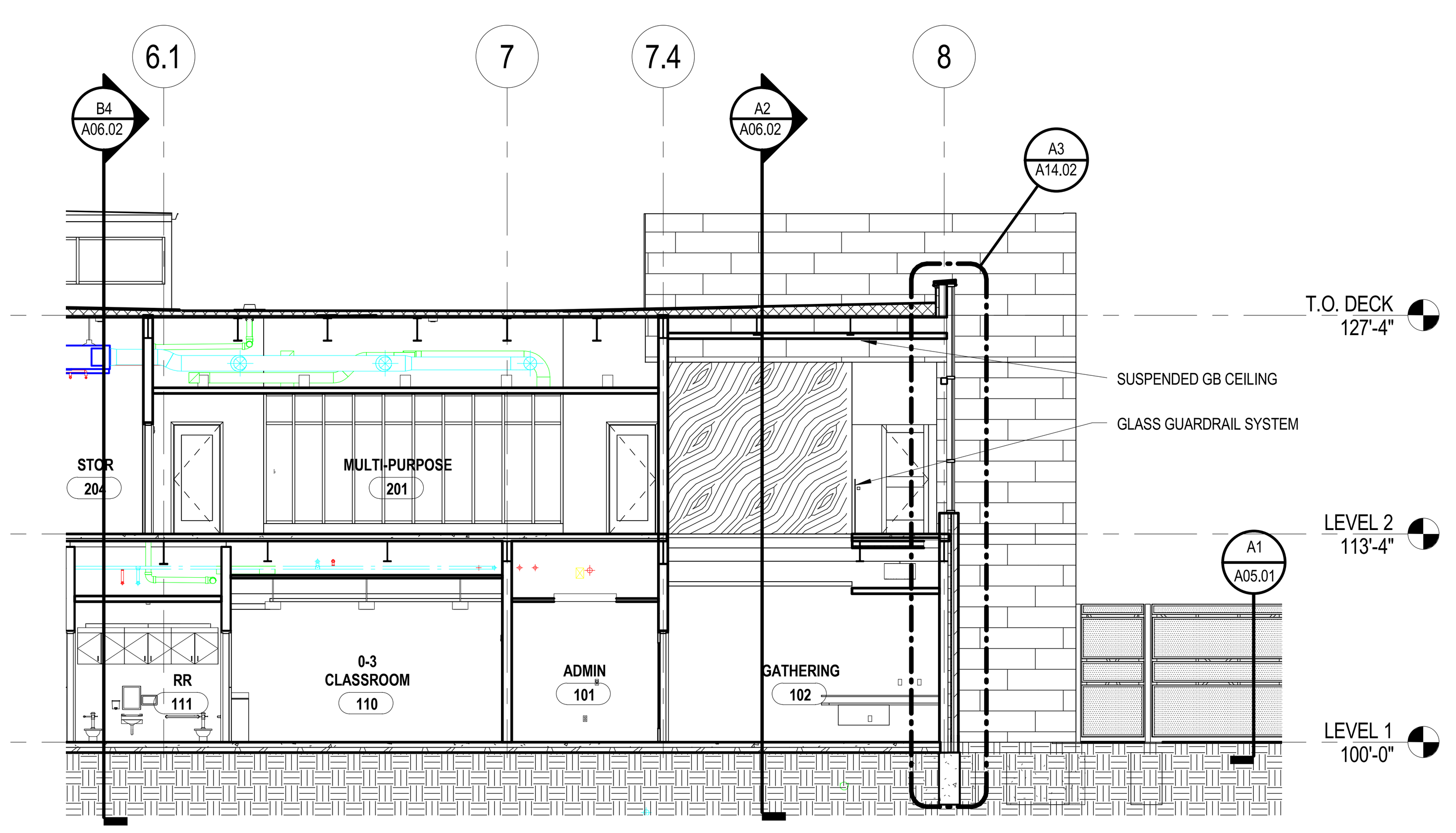
EMB/jm

Enclosure:
Revised Sheets A06.01, A06.02, and A07.05
Revised Sheets S02.02, S02.03, and S03.05
New Sheet E2.00

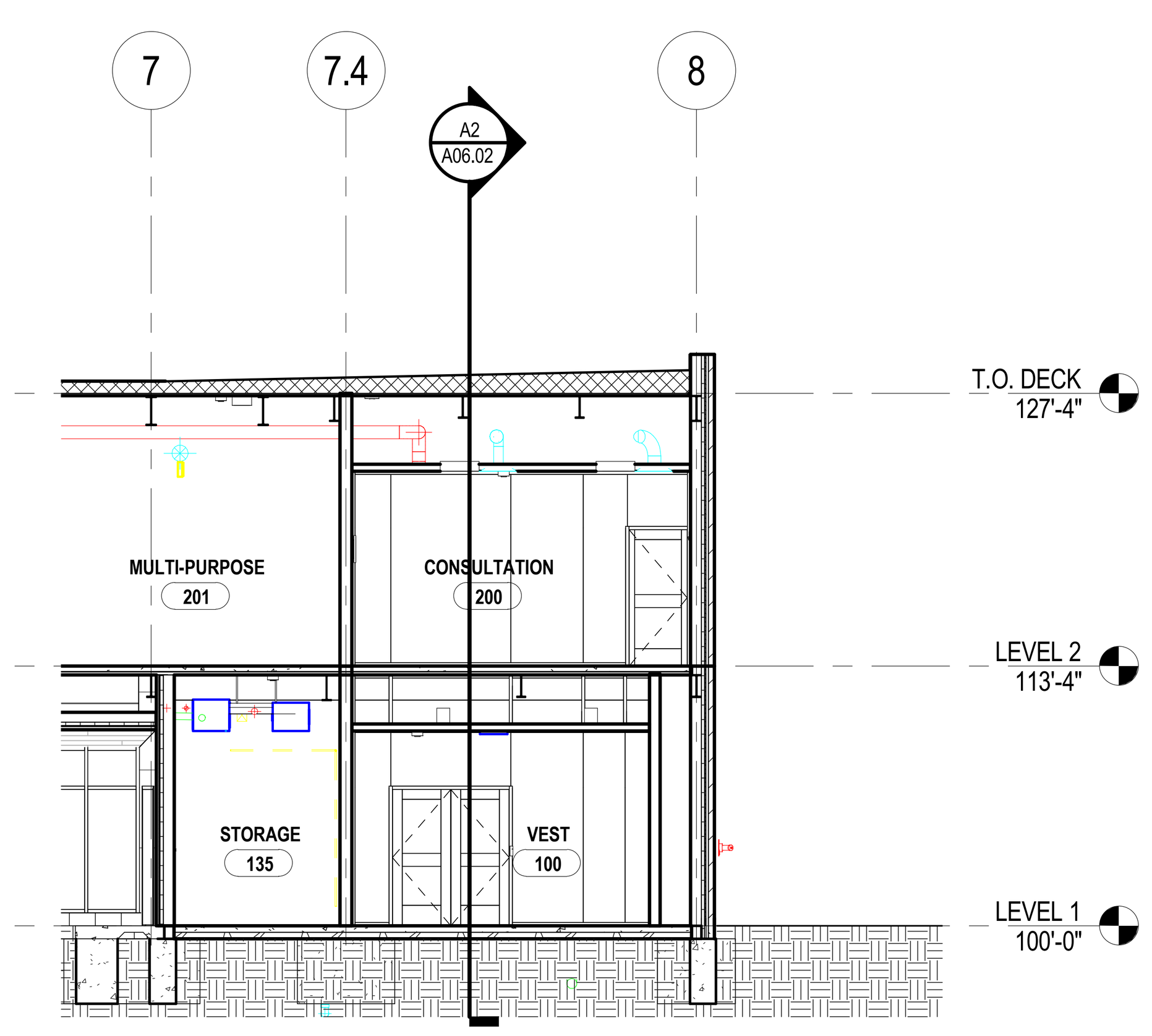
GATEWAY EARLY
CHILDHOOD CENTER
OMAHA, NEBRASKA
2014.129.00



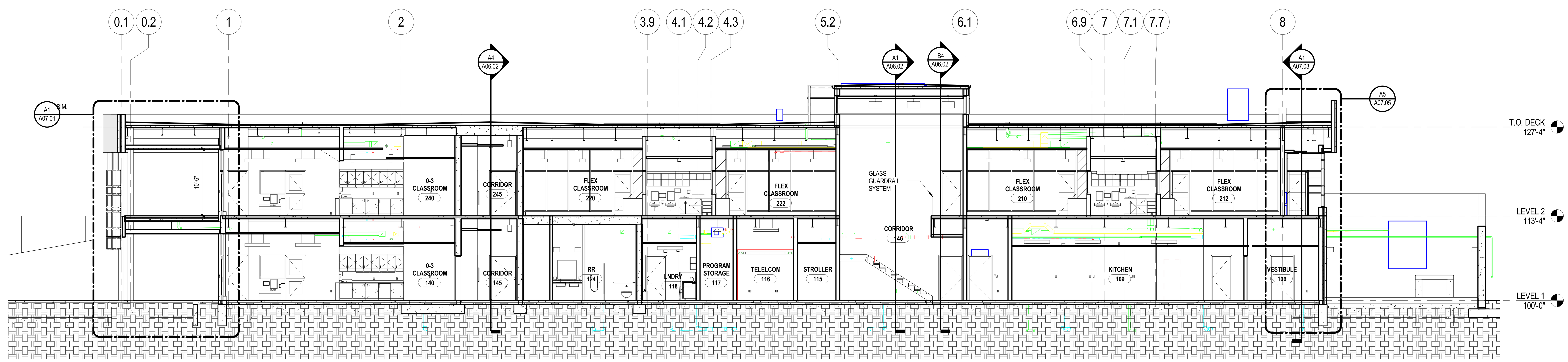
B1 BUILDING SECTION
1/8" = 1'-0"



B3 BUILDING SECTION
1/8" = 1'-0"



B5 BUILDING SECTION
1/8" = 1'-0"



A1 BUILDING SECTION
1/8" = 1'-0"

SITE UTILITIES PACKAGE

RDG PLANNING • DESIGN

ARCHITECT
RDG Planning & Design
900 Farnam St., Suite 100
Omaha, NE. 68102
(402) 392-0133 Phone
(402) 392-0413 Fax

STRUCTURAL
Performance Engineering
4940 118th St. Suite 200
Omaha, NE 6814
(402) 343-3960 Phone
(402) 343-3961 Fax

MECH/PLUMB/ELEC/TELE
Alvine Engineering
1102 Douglas On The Mall
Omaha, NE 61802
(402) 346-7007 Phone
(402) 346-9576 Fax

CIVIL
Ehrhart Griffin & Associates
3552 Farnam Street
Omaha, NE 68131
(402) 551-0631 Phone
(402) 551-6540 Fax

FOOD SERVICE EQUIPMENT
Sturm Consulting, Inc.
5838 South Hudson Place
Tulsa, OK 74135
(918) 260-0667 Phone
(918) 499-3933 Fax

LANDSCAPE ARCHITECT
RDG Planning & Design
900 Farnam St., Suite 100
Omaha, NE. 68102
(402) 392-0133 Phone
(402) 392-0413 Fax

5810 South 42nd Street
Omaha, NE 68107

KEY PLAN

GATEWAY EARLY CHILDHOOD CENTER

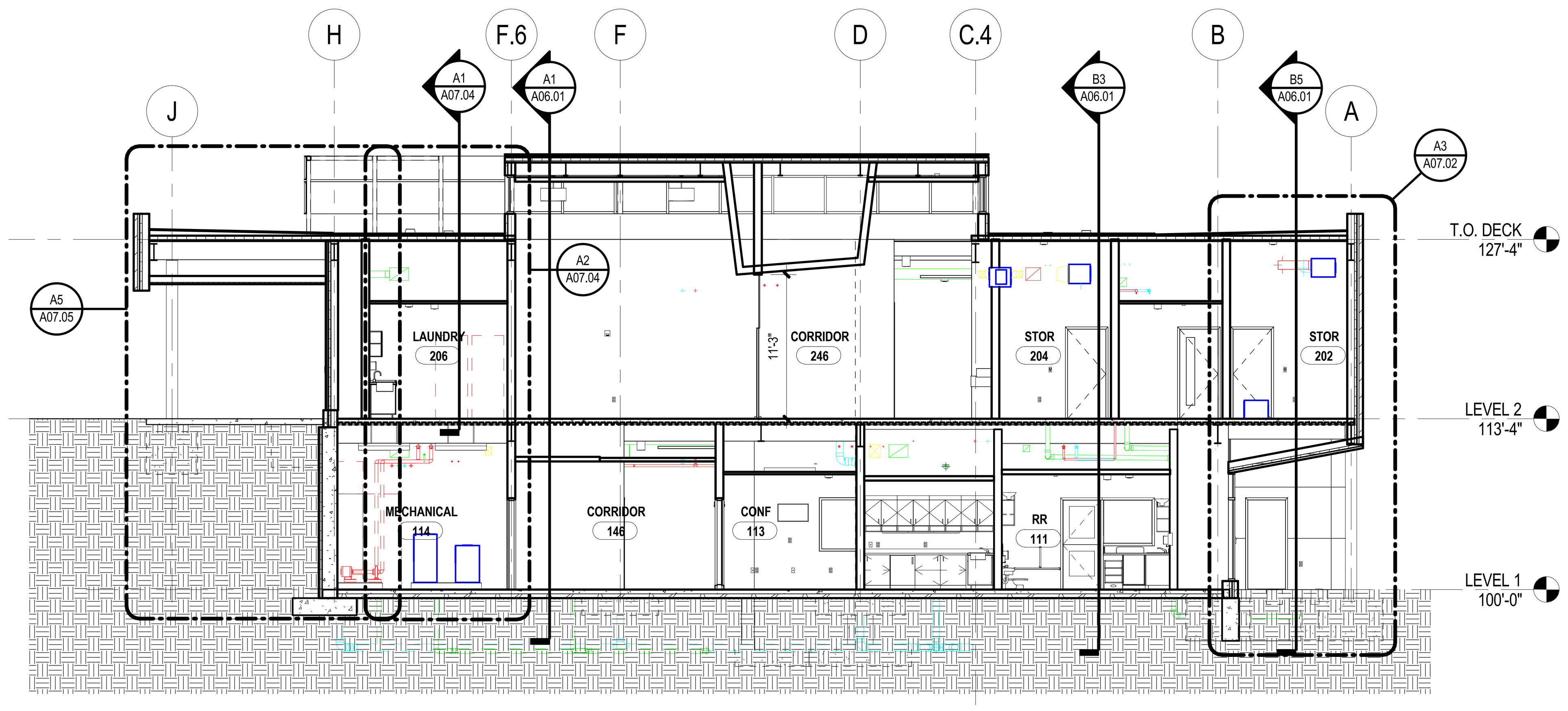
REV	DATE	DESCRIPTION

ISSUED: **9/11/2014**

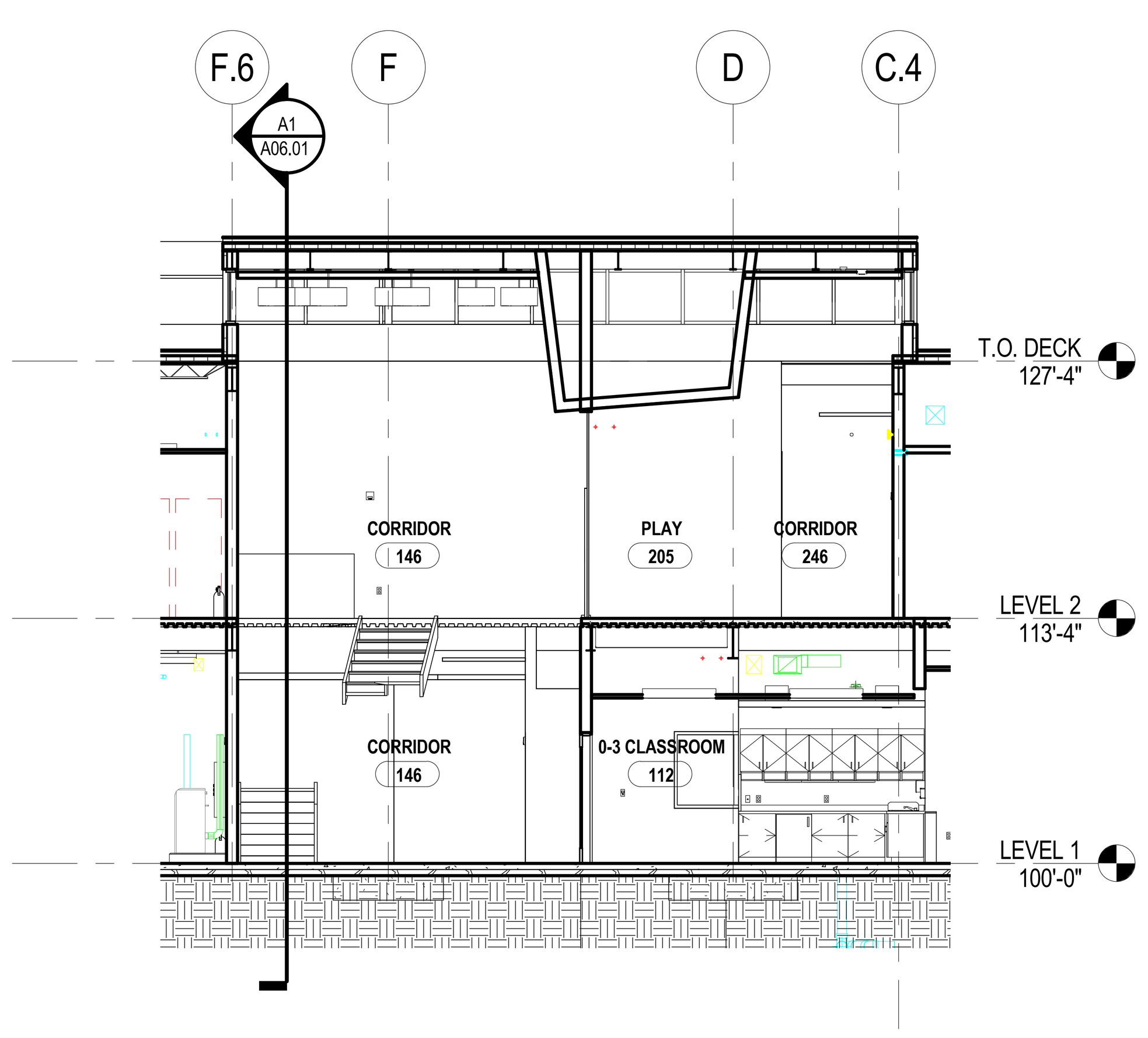
PROJECT NO: **2014.129.00**

BUILDING SECTIONS

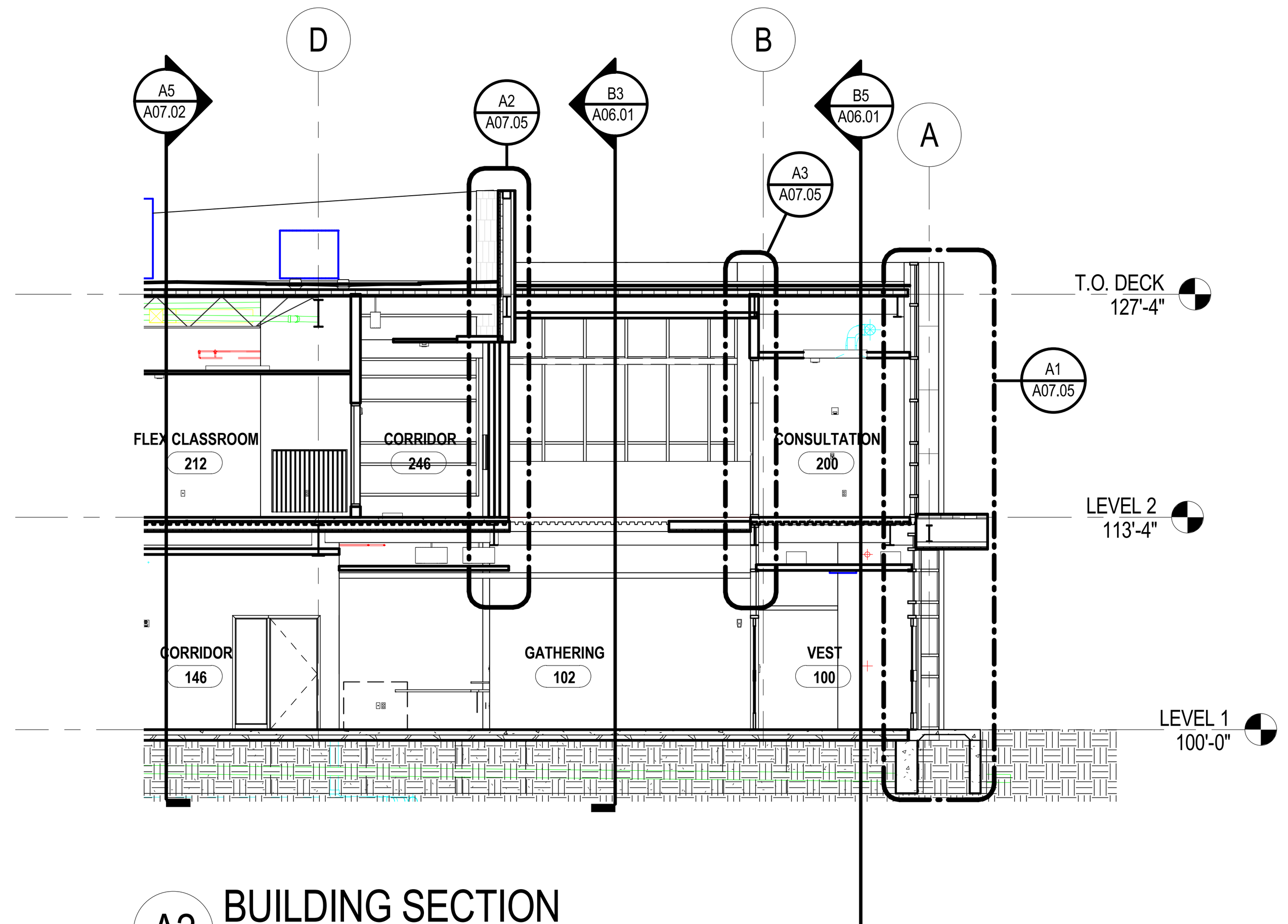
A06.01



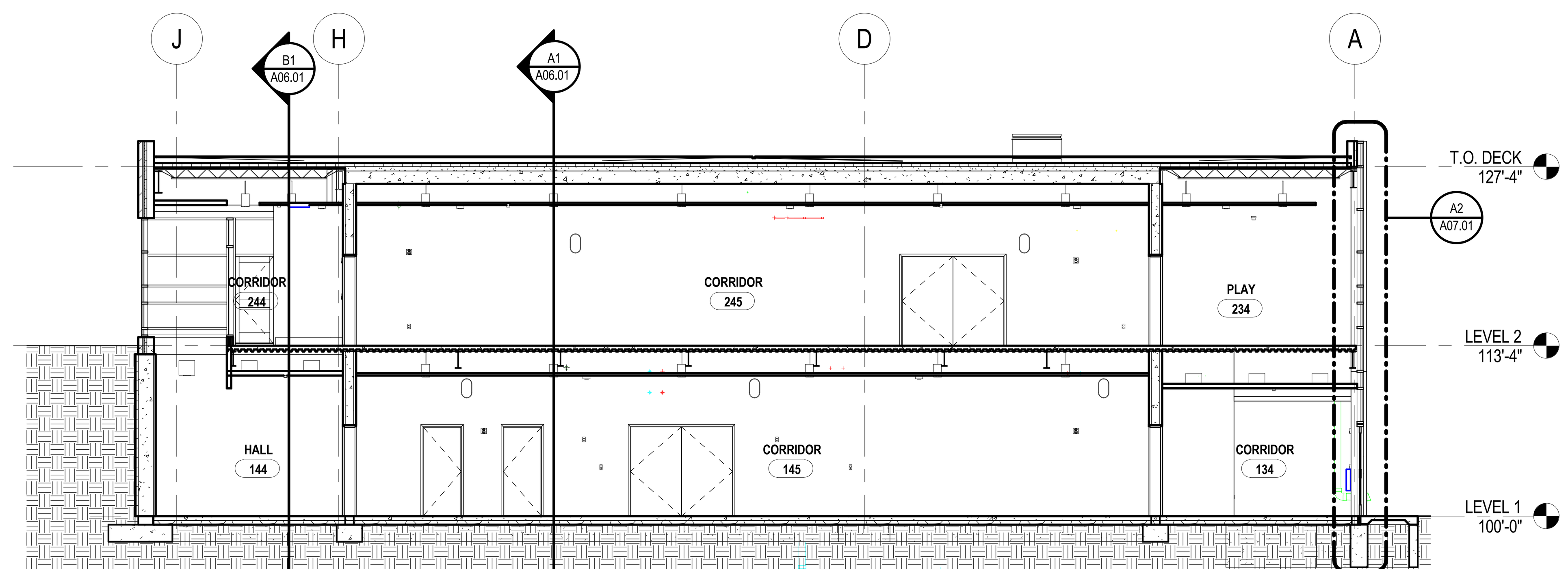
B4 BUILDING SECTION
1/8" = 1'-0"



A1 BUILDING SECTION
1/8" = 1'-0"



A2 BUILDING SECTION
1/8" = 1'-0"



A4 BUILDING SECTION
1/8" = 1'-0"

SITE UTILITIES PACKAGE

RDG PLANNING • DESIGN

ARCHITECT

STRUCTURAL

MECH/PLUMB/ELEC/TELE

CIVIL

FOOD SERVICE EQUIPMENT

LANDSCAPE ARCHITECT

GATEWAY EARLY CHILDHOOD CENTER

5810 South 42nd Street
Omaha, NE 68107

KEY PLAN

REV	DATE	DESCRIPTION

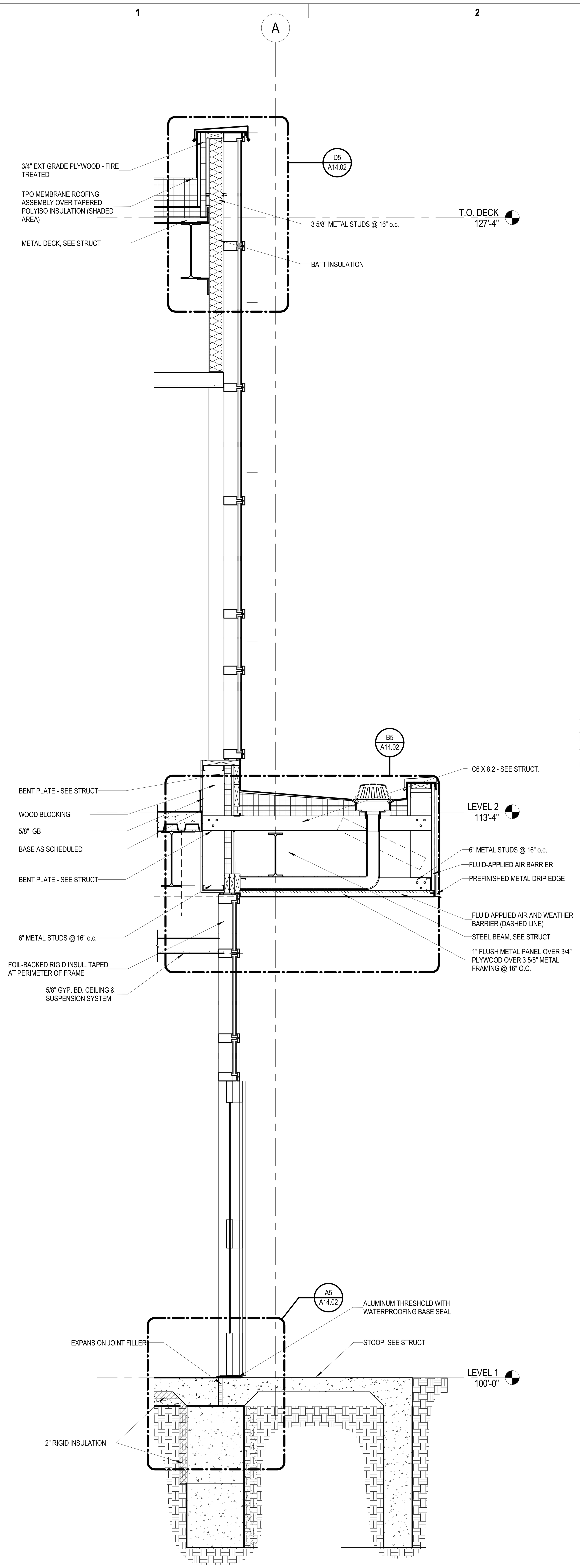
ISSUED: 9/11/2014

PROJECT NO: 2014.129.00

GATEWAY EARLY CHILDHOOD CENTER

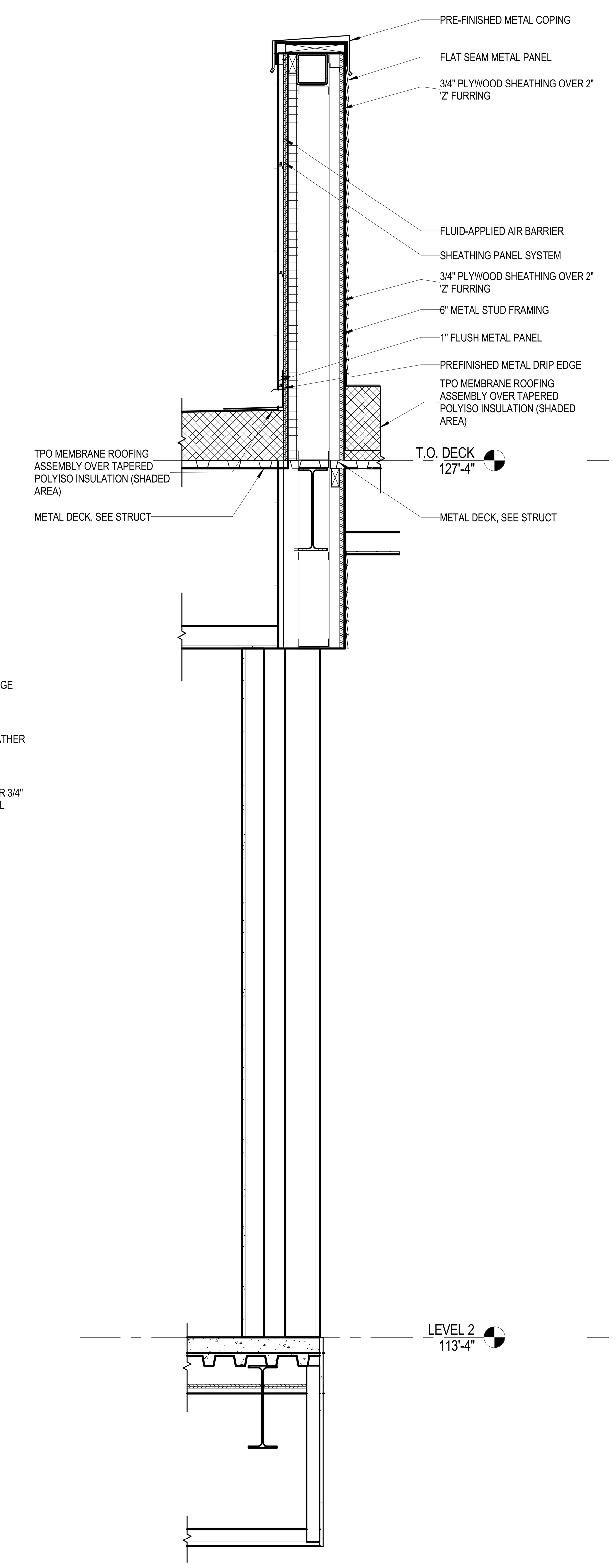
BUILDING SECTIONS

A06.02



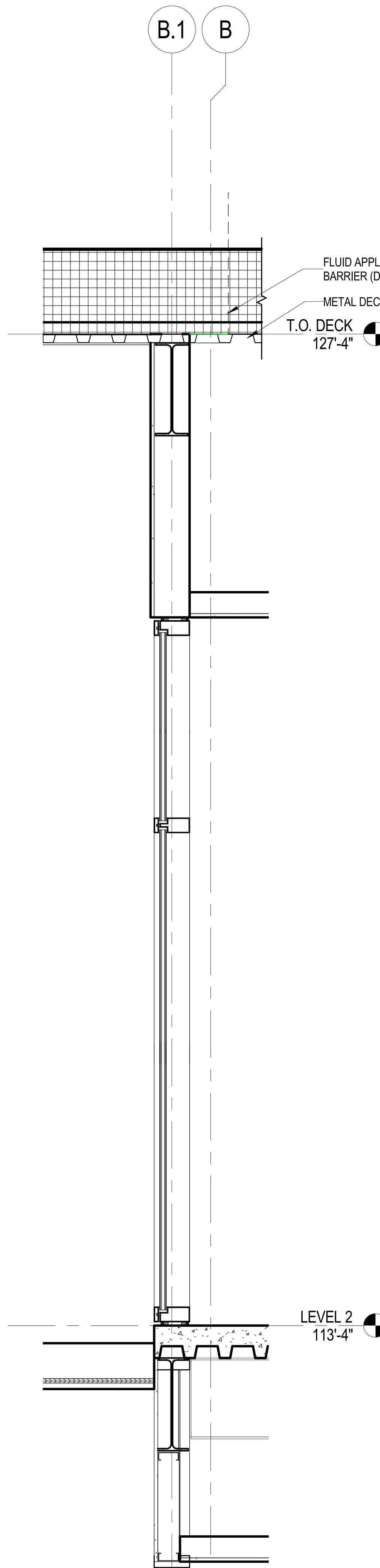
A
3/4" EXT GRADE PLYWOOD - FIRE TREATED
TPO MEMBRANE ROOFING ASSEMBLY OVER TAPERED POLYISO INSULATION (SHADED AREA)
METAL DECK, SEE STRUCT
D5 A14.02
3 5/8" METAL STUDS @ 16" o.c.
BATT INSULATION
T.O. DECK 127'-4"
B5 A14.02
C6 X 8.2 - SEE STRUCT.
BENT PLATE - SEE STRUCT
WOOD BLOCKING
5/8" GB
BASE AS SCHEDULED
BENT PLATE - SEE STRUCT
LEVEL 2 113'-4"
6" METAL STUDS @ 16" o.c.
FLUID-APPLIED AIR BARRIER
PREFINISHED METAL DRIP EDGE
FLUID APPLIED AIR AND WEATHER BARRIER (DASHED LINE)
STEEL BEAM, SEE STRUCT
1" FLUSH METAL PANEL OVER 3/4" PLYWOOD OVER 3 5/8" METAL FRAMING @ 16" O.C.
6" METAL STUDS @ 16" o.c.
FOIL-BACKED RIGID INSUL. TAPED AT PERIMETER OF FRAME
5/8" GYP. BD. CEILING & SUSPENSION SYSTEM
A5 A14.02
ALUMINUM THRESHOLD WITH WATERPROOFING BASE SEAL
EXPANSION JOINT FILLER
STOOP, SEE STRUCT
LEVEL 1 100'-0"
2" RIGID INSULATION

A1 ENTRY SECTION
3/4" = 1'-0"

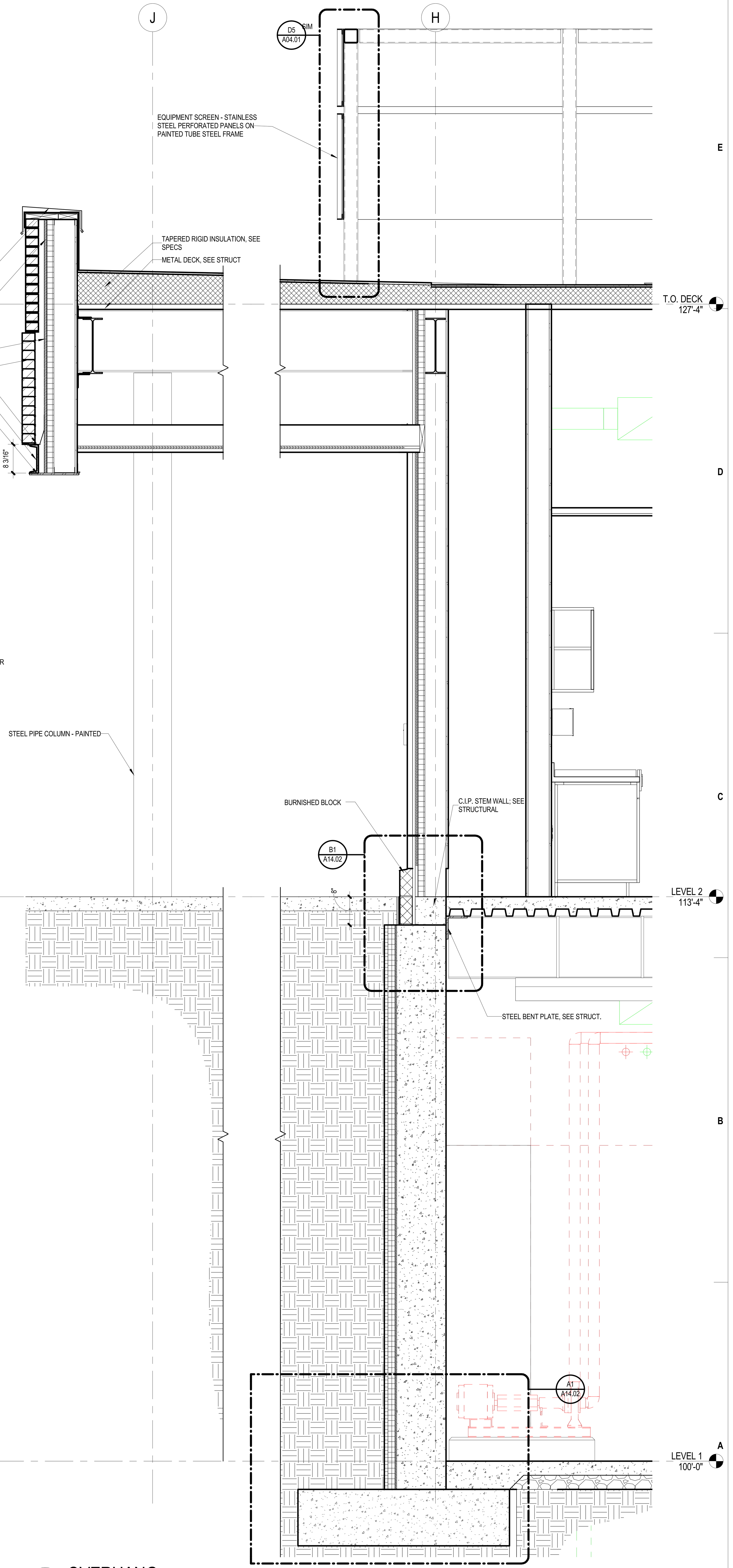


PRE-FINISHED METAL COPING
FLAT SEAM METAL PANEL
3/4" PLYWOOD SHEATHING OVER 2" 'Z' FURRING
FLUID-APPLIED AIR BARRIER
SHEATHING PANEL SYSTEM
3/4" PLYWOOD SHEATHING OVER 2" 'Z' FURRING
6" METAL STUD FRAMING
1" FLUSH METAL PANEL
PREFINISHED METAL DRIP EDGE
TPO MEMBRANE ROOFING ASSEMBLY OVER TAPERED POLYISO INSULATION (SHADED AREA)
T.O. DECK 127'-4"
TPO MEMBRANE ROOFING ASSEMBLY OVER TAPERED POLYISO INSULATION (SHADED AREA)
METAL DECK, SEE STRUCT
METAL DECK, SEE STRUCT
LEVEL 2 113'-4"

A2 CLERESTORY WALL SECTION
3/4" = 1'-0"



A3 CLERESTORY SECTION SOUTH
3/4" = 1'-0"



J
D5 A04.01
H
EQUIPMENT SCREEN - STAINLESS STEEL PERFORATED PANELS ON PAINTED TUBE STEEL FRAME
PRE-FINISHED METAL COPING
TAPERED RIGID INSULATION, SEE SPECS
METAL DECK, SEE STRUCT
FIRE-TREATED PLYWOOD BONDED TO RIGID INSULATION
T.O. DECK 127'-4"
FLUID APPLIED AIR AND WEATHER BARRIER (DASHED LINE)
BRICK
PRE-FINISHED METAL FLASHING
STEEL CHANNEL, SEE STRUCT
STEEL PLATE, SEE STRUCT
STEEL PIPE COLUMN - PAINTED
BURNISHED BLOCK
C.I.P. STEM WALL; SEE STRUCTURAL
B1 A14.02
LEVEL 2 113'-4"
STEEL BENT PLATE, SEE STRUCT.
A1 A14.02
LEVEL 1 100'-0"

A5 OVERHANG
3/4" = 1'-0"

SITE UTILITIES PACKAGE

RDG PLANNING • DESIGN

ARCHITECT

STRUCTURAL

MECH/PLUMB/ELEC/TELE

CIVIL

FOOD SERVICE EQUIPMENT

LANDSCAPE ARCHITECT

GATEWAY EARLY CHILDHOOD CENTER

5810 South 42nd Street
Omaha, NE 68107

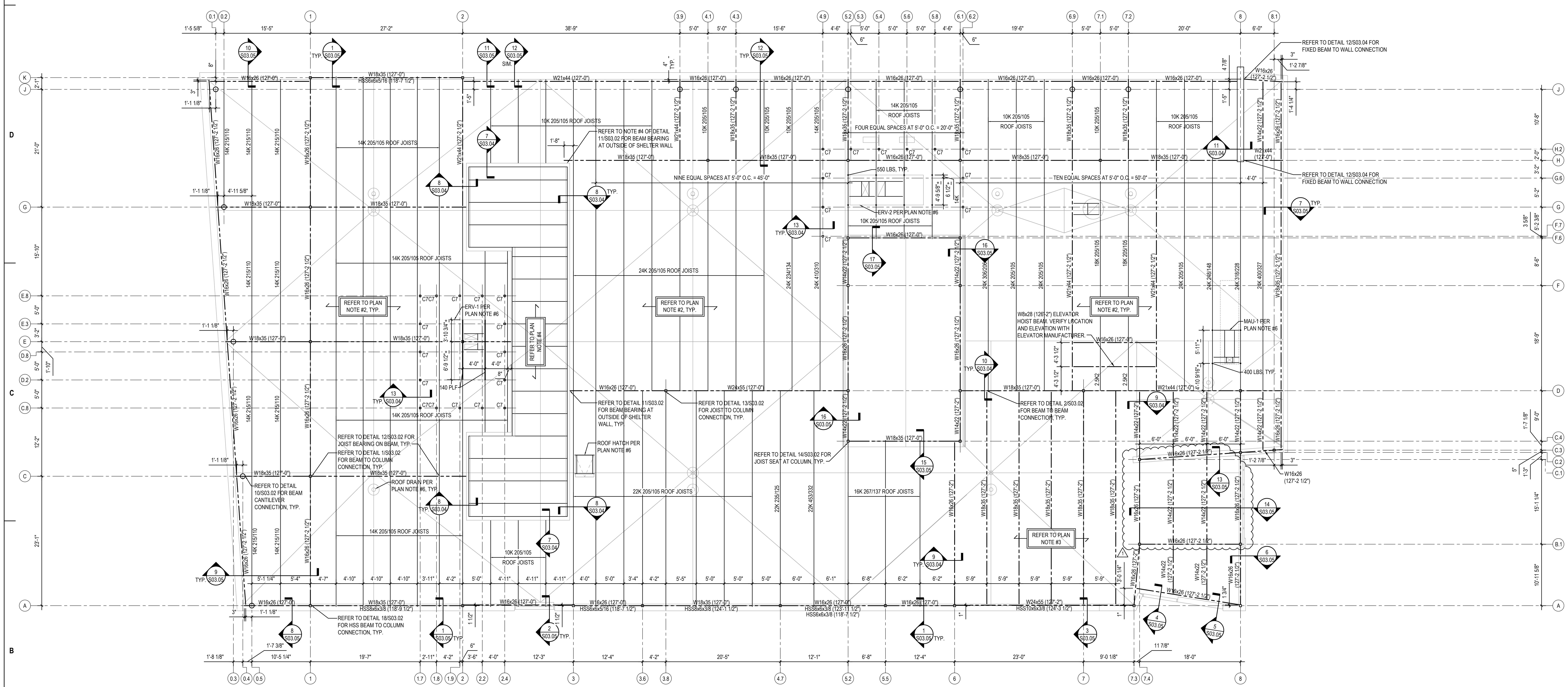
KEY PLAN

REV	DATE	DESCRIPTION

ISSUED: 9/11/2014
PROJECT NO: 2014.129.00

WALL SECTIONS

A07.05



ROOF FRAMING PLAN LEVEL 2

1

1/8" = 1'-0"

PLAN NOTES:

1. (###'-#") DENOTES TOP OF STEEL ELEVATION. FOR SLOPING BEAMS WITH (VARIES) DENOTATION, TOP OF STEEL ELEVATIONS FOR BEAM ENDS AT COLUMN LOCATIONS ARE TO BE DETERMINED BASED UPON DECK BEARING ELEVATION AND JOIST ENDSEAT DEPTH (IF REQUIRED).
2. ROOF DIAPHRAGM SHALL BE 1.5B 20GA. WIDE RIB PAINTED STEEL DECK. FASTEN TO STRUCTURE PER GENERAL STRUCTURAL NOTES.
3. ROOF DIAPHRAGM BETWEEN GRIDS A TO D AND 6 TO 7.3 SHALL BE EPICORE ER2RA-20 PAINTED STEEL CELLULAR ACOUSTICAL DECK. FASTEN TO STRUCTURE PER GENERAL STRUCTURAL NOTES.
4. PROVIDE 12" DEEP PRECAST CONCRETE HOLLOWCORE PANELS WITH A 4" THICK 145 PCF 4,000 PSI NORMAL WEIGHT CONCRETE TOPPING WITH 6x6-W2.9xW2.9 WWF REINFORCING. TOP OF SLAB ELEVATION IS 127'-4" UNLESS NOTED OTHERWISE.
5. PROVIDE LINTEL AND JAMB REINFORCING IN CONCRETE WALL OPENINGS PER DETAIL 4/S03.00. PROVIDE LINTEL AND JAMB FRAMING IN METAL STUD WALL OPENINGS PER DETAIL 5/S03.00.
6. COORDINATE EXACT LOCATIONS AND LOADS OF ROOFTOP EQUIPMENT WITH ARCHITECTURAL AND MECHANICAL SHEETS. LOCATIONS AND TOP CHORD CONCENTRATED LOADS ARE ESTIMATES ONLY. REFER TO DETAIL 16/S03.02 FOR FRAMING AT ROOF OPENINGS.
7. UNIFORM GRAVITY LOADS FOR JOIST MEMBERS ARE DENOTED AS TOTAL LOAD (ROOF DEAD + ROOF SNOW)/ROOF SNOW LOAD. ADDITIONAL DRIFTING LOADS PER SECTIONS 15 AND 17/S03.05 SHALL BE APPLIED TO UNIFORM GRAVITY LOADS AS REQUIRED.
8. DESIGN JOISTS FOR A NET UPLIFT OF 10 PSF.
9. DESIGN JOISTS SHOWN ON PLAN FOR TOP CHORD CONCENTRATED DUE TO ROOFTOP EQUIPMENT.
10. DESIGN JOIST TOP CHORDS AT SCREEN WALL POSTS FOR TOP CHORD CONCENTRATED LOADS AND CHORDS FOR AXIAL LOADS PER DETAIL 14/S03.04.

COLUMN SCHEDULE

MARK	SIZE
C7	HSS4x4x5/16

NOTE:
REFER TO DETAIL 14/S03.04 FOR SCREEN WALL POST TO JOIST CONNECTION.

PERFORMANCE Engineering
4940 N. 118th Street, Suite 200 - Omaha, NE 68164 (402) 343-3960 Fax: (402) 343-3961
7400 E Orchard Rd, Suite 240 - Englewood CO 80111 (303) 721-3322 Fax: (303) 721-9504
PE #: 140438

Structural Package

RDG PLANNING + DESIGN

ARCHITECT
RDG Planning & Design
900 Farnam St., Suite 100
Omaha, NE. 68102
(402) 392-0133 Phone
(402) 392-0413 Fax

STRUCTURAL
Performance Engineering
4940 118th St. Suite 200
Omaha, NE 6814
(402) 343-3960 Phone
(402) 343-3961 Fax

MECH/PLUMB/ELEC/TELE
Alvine Engineering
1102 Douglas On The Mall
Omaha, NE 61802
(402) 346-7007 Phone
(402) 346-9576 Fax

CIVIL
Ehrhart Griffin & Associates
3552 Farnam Street
Omaha, NE 68131
(402) 551-0631 Phone
(402) 551-6540 Fax

FOOD SERVICE EQUIPMENT
Sturm Consulting, Inc.
5838 South Hudson Place
Tulsa, OK 74135
(918) 260-0667 Phone
(918) 499-3933 Fax

LANDSCAPE ARCHITECT
RDG Planning & Design
900 Farnam St., Suite 100
Omaha, NE. 68102
(402) 392-0133 Phone
(402) 392-0413 Fax

PROFESSIONAL STRUCTURAL ENGINEER
RYAN P. PELSTER
E-12430
9/4/14
STATE OF NEBRASKA

GATEWAY EARLY CHILDHOOD CENTER

5810 South 42nd Street
Omaha, NE 68107

KEY PLAN

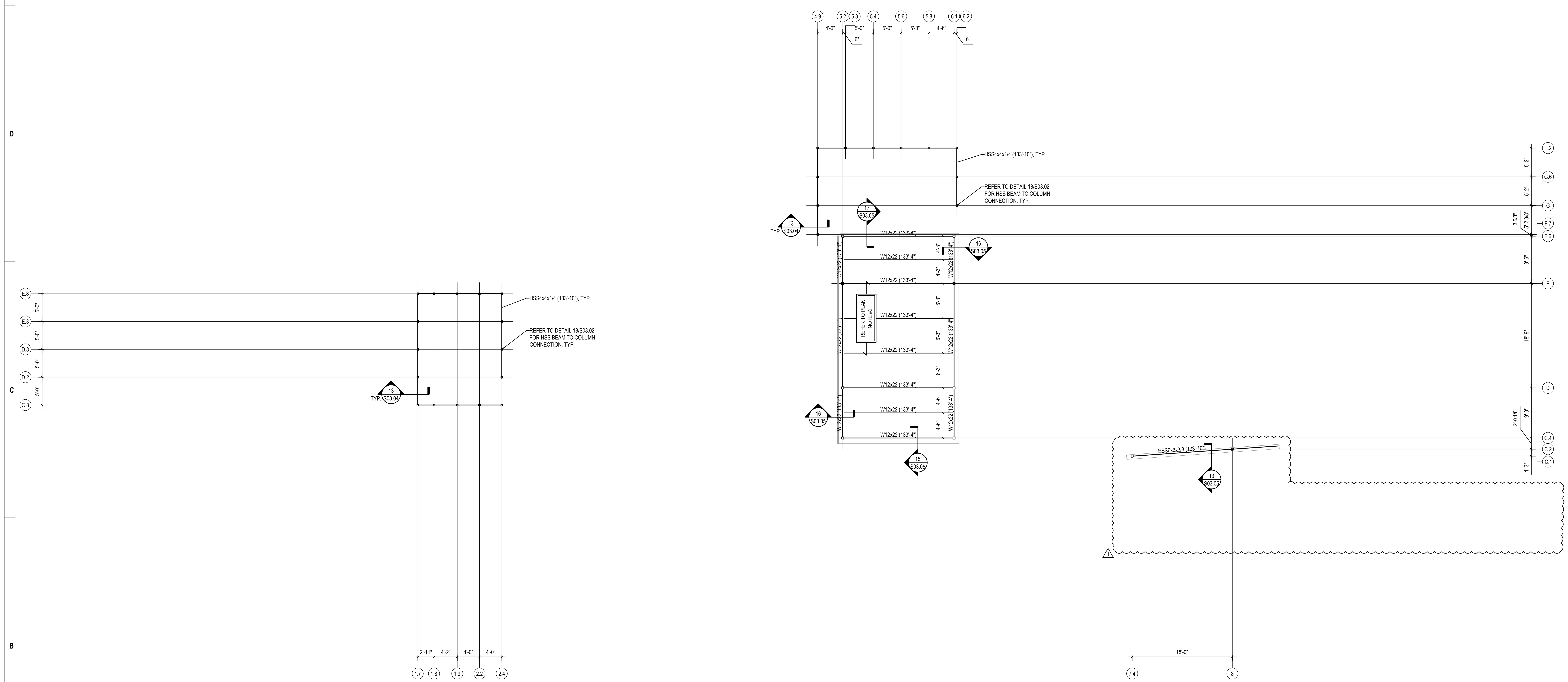
REV	DATE	DESCRIPTION
1	9/16/2014	ADDENDUM #1

ISSUED: SEP 4, 2014

PROJECT NO: 2014.129.00

ROOF FRAMING PLAN LEVEL 2

S02.02



1 UPPER ROOF FRAMING PLAN

1/8" = 1'-0"

PLAN NOTES:

1. (###'-#") DENOTES TOP OF STEEL ELEVATION. FOR SLOPING BEAMS WITH (VARIES) DENOTATION, TOP OF STEEL ELEVATIONS FOR BEAM ENDS AT COLUMN LOCATIONS ARE TO BE DETERMINED BASED UPON DECK BEARING ELEVATION AND JOIST ENDSEAT DEPTH (IF REQUIRED).

2. ROOF DIAPHRAGM SHALL BE 1.5B 20GA. WIDE RIB PAINTED STEEL DECK. FASTEN TO STRUCTURE PER GENERAL STRUCTURAL NOTES.

GATEWAY EARLY CHILDHOOD CENTER

5810 South 42nd Street
Omaha, NE 68107

KEY PLAN

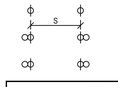
REV	DATE	DESCRIPTION
1	9/16/2014	ADDENDUM #1

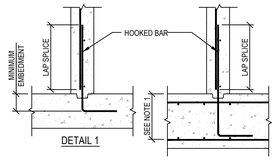
ISSUED: SEP 4, 2014

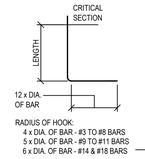
PROJECT NO: 2014.129.00

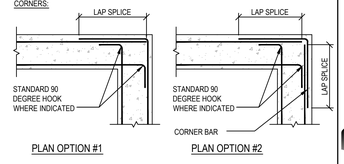
UPPER ROOF FRAMING PLAN

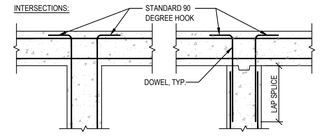
S02.03

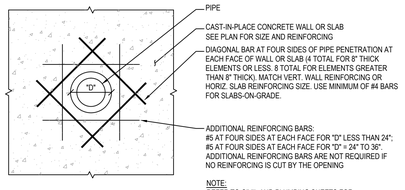


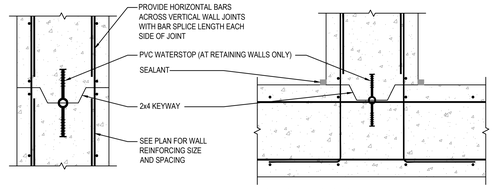


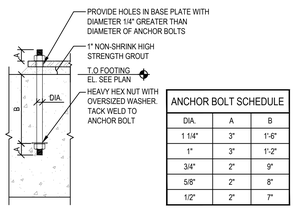


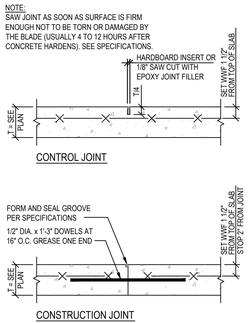


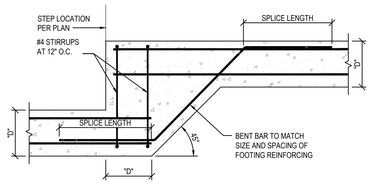


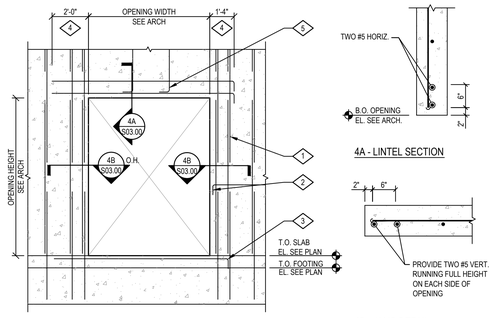


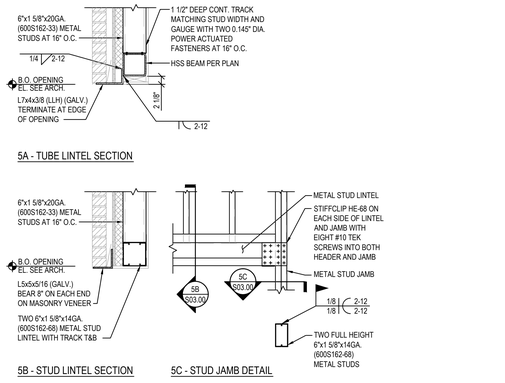












GENERAL STRUCTURAL NOTES:

A. DESIGN DATA

DESIGN CODE:	2006 IBC
CONCRETE 28-DAY STRENGTH:	F'C = 4,000 PSI
STRUCTURAL STEEL (WIDE FLANGE SECTIONS)	ASTM A992
STRUCTURAL TUBES	ASTM A500 GRADE B
STRUCTURAL PIPES	ASTM A53 GRADE B
MISCELLANEOUS ROLLED SECTIONS (ANGLES, CHANNELS, PLATES, ETC.)	ASTM A36
HIGH STRENGTH BOLTS	ASTM A325
PLAIN BOLTS AND ANCHORS	ASTM F1554 GRADE 36
REINFORCING STEEL	ASTM A615 FY = 60,000 PSI
WELDED WIRE FABRIC	ASTM A185
ALLOWABLE SOIL BEARING CAPACITY	2,000 PSF

DESIGN LOADS

GRAVITY LOADS:

ROOF	DEAD LOAD = 20 PSF STORM SHELTER DEAD LOAD = 15 PSF (COLLATERAL) + 12.5 PSF (PER 1" THICKNESS OF TOPPING) + PRECAST MEMBER SELF WEIGHTS 2 LIVE LOAD = 25 PSF FLAT ROOF SNOW LOAD = 21 PSF* (BASED UPON GROUND SNOW LOAD OF 25 PSF, Ce=1.0, Ct=1.0, AND I=1.0) *INCREASE FLAT ROOF SNOW LOAD FOR SNOW DRIFTING AS REQUIRED IN CONFORMANCE WITH THE AMERICAN SOCIETY OF CIVIL ENGINEERS ANSI/ASCE 7-05.
SUSPENDED SLABS	DEAD LOAD = 13 PSF (COLLATERAL) + 57 PSF (DECK AND SLAB) + BEAM SELF WEIGHTS STORM SHELTER DEAD LOAD = 15 PSF (COLLATERAL) + 12.5 PSF (PER 1" THICKNESS OF TOPPING) + PRECAST MEMBER SELF WEIGHTS LIVE LOAD = 100 PSF (BALCONIES AND STAIRS) LIVE LOAD = 80 PSF (CORRIDORS ABOVE FIRST FLOOR) LIVE LOAD = 40 PSF (CLASSROOMS)
SLABS ON GRADE	DEAD LOAD = 30 PSF (SUPERIMPOSED) LIVE LOAD = 100 PSF

LATERAL LOADS:
WIND LOADING CRITERIA
BASE WIND SPEED (3 SECOND GUST) 'V' = 90 MPH
BUILDING CATEGORY = II
IMPORTANCE FACTOR 'Iw' = 1.0
EXPOSURE CATEGORY = C
MEAN ROOF HEIGHT = 27.5 FEET

SEISMIC LOADING CRITERIA
SPECTRAL RESPONSE COEFFICIENT SDS = 0.114g
SPECTRAL RESPONSE COEFFICIENT SD1 = 0.069g
IMPORTANCE FACTOR 'Ie' = 1.0
SEISMIC USE GROUP I
SITE CLASS D
SEISMIC DESIGN CATEGORY A
SEISMIC FORCE RESISTING SYSTEMS = ORDINARY STEEL MOMENT FRAMES, ORDINARY REINFORCED CONCRETE WALLS AND LIGHT-FRAMED WALLS WITH SHEAR PANELS OF ALL OTHER MATERIALS

B. FOUNDATION WORK:

1. THE GEOTECHNICAL REPORT PREPARED BY TERRACON CONSULTANTS, INC. (PROJECT NO. 05145050), DATED JULY 10, 2014 IS AVAILABLE AND SHALL BE REVIEWED BY THE CONTRACTOR. SEE REPORT AND SPECIFICATIONS FOR OVEREXCAVATION AND RECOMPACTION REQUIREMENTS.
2. SUBSOILS SUPPORTING OR IN DIRECT CONTACT WITH FOOTINGS, SLABS-ON-GRADE, OR OTHER FOUNDATION ELEMENTS SHALL BE PROTECTED AGAINST FREEZING CONDITIONS THAT COULD CAUSE MOVEMENT OR OTHER DETRIMENTAL EFFECT TO THE STRUCTURE AS A WHOLE OR TO ANY OF ITS COMPONENT PARTS.
3. WHEN WORKING NEAR EXISTING AND/OR NEW CONSTRUCTION, THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION SO AS NOT TO UNDERMINE, DISTURB, DAMAGE OR, IN ANY WAY, CAUSE UNDESIRABLE MOVEMENT, CRACKING, AND/OR SETTLEMENT OF THE ADJACENT CONSTRUCTION.
4. ALL SLABS ON GRADE SHALL BEAR ON UNDISTURBED VIRGIN SOIL OR PROPERLY COMPACTED BACKFILL/GRANULAR FILL. ANY UNACCEPTABLE UNDISTURBED VIRGIN SOIL OR BACKFILL/GRANULAR FILL, AS DETERMINED BY THE OWNER'S GEOTECHNICAL ENGINEER, SHALL BE REMOVED AND REPLACED AS REQUIRED BY THE GEOTECHNICAL ENGINEER.
5. CONTRACTOR SHALL COORDINATE FOOTING ELEVATIONS WITH FINAL GRADING PLAN TO PROVIDE A MINIMUM OF 42" OF GRADE ABOVE THE BOTTOM OF ALL FOOTINGS FOR FROST PROTECTION.

C. CONCRETE:

1. FOR REINFORCING DEVELOPMENT LENGTH AND SPLICE LENGTH SEE TYPICAL REINFORCING TABLE ON THIS SHEET.
2. PROVIDE CORNER BARS IN WALLS AND FOOTINGS THE SAME SIZE AND NUMBER AS THE CONTINUOUS REINFORCING.
3. REINFORCING IN FOOTINGS SHALL BE ACCURATELY PLACED BEFORE PLACING CONCRETE. DO NOT FLOAT REINFORCING INTO FOOTINGS.
4. CONCRETE SHALL BE REGULAR WEIGHT (144 PCF) WITH TYPE I CEMENT, POTABLE WATER, AND AGGREGATES CONFORMING TO REQUIREMENTS OF ASTM C33. CONCRETE SHALL CONFORM TO ACI 301-99.
5. MECHANICALLY VIBRATE ALL CONCRETE INCLUDING SLABS ON GRADE.
6. DO NOT PLACE PIPES, DUCTS, OR CHASES IN STRUCTURAL CONCRETE WITHOUT APPROVAL OF THE ARCHITECT/ENGINEER. SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR LOCATIONS.
7. CONSTRUCT FORMWORK SO CONCRETE MEMBERS AND STRUCTURES ARE OF SIZE, SHAPE, ALIGNMENT, ELEVATION, AND POSITION INDICATED, WITHIN TOLERANCE LIMITS OF ACI 117.
8. FINISH CONCRETE SUSPENDED SLABS AND SLABS-ON-GRADE PER THE FOLLOWING CRITERIA ACCORDING TO ASTM E 1155. COMPLY WITH ACI 302.1R RECOMMENDATIONS FOR SCREEDING, RESTRAIGHTENING, AND FINISHING OPERATIONS FOR CONCRETE SURFACES. DO NOT WET CONCRETE SURFACES.
   A. SLABS-ON-GRADE - SPECIFIED OVERALL VALUES OF FLATNESS, F(F) 35; AND OF LEVELNESS, F(L) 25; WITH MINIMUM LOCAL VALUES OF FLATNESS, F(F) 24; AND OF LEVELNESS, F(L) 17
   B. SUSPENDED SLABS - SPECIFIED OVERALL VALUES OF FLATNESS, F(F) 30; AND OF LEVELNESS, F(L) 20; WITH MINIMUM LOCAL VALUES OF FLATNESS, F(F) 24; AND OF LEVELNESS, F(L) 15
9. CONTROL JOINTS IN SLAB-ON-GRADE SHALL BE PLACED AT COLUMN-LINE INTERSECTIONS AND AS NECESSARY TO NOT EXCEED A SPACING OF 36 TIMES THE SLAB THICKNESS. MAXIMUM ASPECT RATIO SHALL BE 1.5 TO 1.0 UNLESS NOTED OTHERWISE.
10. ALL CONSTRUCTION JOINTS IN CONCRETE WALLS SHALL HAVE A 2"x4" CONTINUOUS KEYWAY. ALL CONSTRUCTION JOINTS, EXCEPT THOSE DETAILED, SHALL HAVE ARCHITECT/ENGINEER APPROVAL. SEE SPECIFICATIONS FOR OTHER CONSTRUCTION JOINT REQUIREMENTS.
11. ALL REINFORCING STEEL SHALL BE DEFORMED NEW BILLETS BARS (A615, GRADE 60), BENT COLD, AND DETAILED, FABRICATED, AND HELD IN PLACE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315 - LATEST EDITION) EXCEPT AS OTHERWISE DETAILED OR SPECIFIED.
12. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING, UNLESS NOTED OTHERWISE:
    CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
    CONCRETE EXPOSED TO EARTH OR WEATHER: 2"
    CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
    SLABS AND WALLS: 1"
    BEAMS AND COLUMNS: 2"
13. UNLESS NOTED OTHERWISE, SLABS ON GRADE SHALL BE 4" CONCRETE REINFORCED WITH 6x6-W1.4xW1.4 WELDED WIRE FABRIC WITH VAPOR BARRIER. AT THE CONTRACTOR'S OPTION, SLABS MAY BE REINFORCED WITH 1.5 POUNDS PER CUBIC YARD OF SYNTHETIC FIBERMESH REINFORCING.
14. ALL REINFORCING IN SLABS AND WALLS SHALL BE CONTINUOUS UNLESS DETAILED OTHERWISE AND LAP SPLICED ONLY IN REGIONS OF LOW STRESS. ALL BARS SHALL HAVE A STANDARD HOOK WHERE A HOOK IS SHOWN, UNLESS DETAILED OTHERWISE.

D. PRESTRESSED AND PRECAST CONCRETE:

1. DESIGN, FABRICATE, TRANSPORT, AND ERECT PER LATEST A.C.I. AND P.C.I. CODES AND HANDBOOK.
2. DESIGN FOR LOADS, IN ADDITION TO MEMBER WEIGHT, AS GIVEN UNDER (DESIGN LOADS) ABOVE.
3. SUBMIT DESIGN CALCULATIONS AND SHOP DRAWINGS. FABRICATE AFTER THE ARCHITECT/ENGINEER REVIEW.
4. REINFORCE ENDS OF MEMBERS TO PREVENT CRACKING DUE TO VOLUME CHANGES.
5. CAMBER PER MANUFACTURER'S RECOMMENDATIONS, SUBJECT TO APPROVAL BY THE ARCHITECT / ENGINEER.
6. DETAILS SHOWING REINFORCING ARE FOR IN-PLACE CONDITIONS, THE CONTRACTOR IS RESPONSIBLE FOR PICK-UP POINT LOCATIONS AND INSERTS, SPECIAL PICK-UP REINFORCING AND STRONG BACKS, AND ALL PICK-UP AND PLACING OPERATIONS.
7. ALL PRECAST CONNECTIONS AND EMBEDMENTS SHALL BE DESIGNED AND DETAILED BY THE PRECAST MANUFACTURER. VERIFY LOCATION, SIZE, AND WEIGHT OF ALL EQUIPMENT WITH EQUIPMENT MANUFACTURER.

E. STEEL:

1. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST AISC SPECIFICATIONS AND OSHA REGULATION 29 CFR PART 1926.
2. ALL STEEL BEAMS BEARING ON MASONRY SHALL HAVE A MINIMUM OF 8" OF BEARING. PROVIDE THE BEAMS WITH BEARING PLATES AND WALL ANCHORS UNLESS NOTED OTHERWISE. PROVIDE A MINIMUM OF 4 COURSES OF BRICK OR SOLID CONCRETE MASONRY FOR BEAM BEARING.
3. SHOP PAINT STRUCTURAL STEEL WITH FABRICATOR'S STANDARD LEAD- AND CHROMATE-FREE, NONASPHALTIC, RUST-INHIBITING PRIMER, U.N.O.
4. COMPLY WITH AMERICAN WELDING SOCIETY STANDARDS. ALL WELDERS SHALL HAVE VALID CERTIFICATES AND HAVE CURRENT EXPERIENCE IN TYPE OF WELD CALLED FOR.
5. WELDING ELECTRODES SHALL BE E70 FOR ALL STEEL, UNLESS OTHERWISE NOTED.
6. BOLTED CONNECTIONS SHALL BE SUPPLIED AND INSTALLED PER THE REQUIREMENTS OF RCSC'S "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS." SHOP AND FIELD BOLTED CONNECTIONS SHALL BE BEARING CONNECTIONS, U.N.O.
7. ANCHOR BOLTS FOR COLUMN BASE PLATES SHALL BE SECURED IN PLACE WITH A TEMPLATE AND SECURELY TIED TO REINFORCING BARS BEFORE PLACING OF CONCRETE.

F. STEEL JOISTS:

1. DESIGN, FABRICATION, AND ERECTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STEEL JOIST INSTITUTE SPECIFICATION BY A MEMBER OF THE SJI APPROVED FOR THE TYPE OF JOIST BEING USED. IN OF THE ABOVE REQUIREMENTS, THE FABRICATOR MAY PROVIDE AN ICBO RESEARCH RECOMMENDATION APPROVING THE TYPE OF BEING USED. STEEL JOISTS SHALL BE ERECTED IN ACCORDANCE WITH OSHA REGULATION 29 CFR PART 1926. EXCEPT FOR STEEL JOISTS THAT ARE PRE-ASSEMBLED INTO PANELS, CONNECTIONS OF INDIVIDUAL STEEL JOISTS TO STEEL STRUCTURES IN BAYS OF 40 FEET OR MORE SHALL BE FIELD BOLTED.
2. BRIDGING PER SJI SPECIFICATIONS AND DRAWINGS. WHERE BRIDGING INTERFERES WITH MECHANICAL OR OTHER INSTALLATION, REMOVE BRIDGING AFTER THE DECK IS IN PLACE AND REPLACE AS DIRECTED BY THE STRUCTURAL ENGINEER.
3. CONNECTIONS AND BEARING MATERIAL REQUIRED BY SJI SPECIFICATIONS, BUT NOT CALLED OUT, SHALL BE DESIGNED AND FURNISHED BY THE JOIST FABRICATOR.
4. ALL JOIST HEADERS AND ACCESSORIES SHALL BE DESIGNED AND FURNISHED BY THE JOIST MANUFACTURER.
5. BRIDGING FOR THE STANDARD JOISTS SHALL BE DESIGNED IN ACCORDANCE WITH SJI SPECIFICATIONS.
6. CONTRACTOR SHALL COORDINATE LOCATIONS AND MAGNITUDES OF LOADS WITH RESPECTIVE EQUIPMENT SUPPLIER OR AS INDICATED ON FRAMING PLANS. JOIST MANUFACTURER SHALL DESIGN JOIST FOR ADDITIONAL LOADS FROM EQUIPMENT.

G. STEEL DECK:

1. MATERIAL, DESIGN, MANUFACTURE AND INSTALLATION OF METAL DECKING SHALL BE FURNISHED BY A MEMBER OF THE STEEL DECK INSTITUTE.
2. PROVIDE ALL NECESSARY DETAILS SUCH AS RIDGE OR VALLEY SPLICE PLATES.
3. THE DECK MANUFACTURER SHALL FURNISH CLOSURE PLATES, SUMP PANS AND DRAIN PLATES, RIDGE AND VALLEY PLATES, WELDING WASHERS AND OTHER ACCESSORIES REQUIRED TO PROVIDE A FINISHED SURFACE FOR APPLICATION OF INSULATION AND ROOFING.
4. PROVIDE L3x3x1/4 ANGLE FRAMING AROUND ALL ROOF PENETRATIONS AND AS REQUIRED FOR SUPPORT OF ROOF CURBS TO STIFFEN METAL DECK EDGES.
5. WELD STEEL DECK TO STRUCTURAL STEEL MEMBERS WITH MINIMUM 5/8" DIAMETER PUDDLE WELDS AT EVERY DECK RIB AT DECK ENDS AND LAPS; FASTEN AT EVERY OTHER DECK RIB AT INTERMEDIATE LOCATIONS. #12 TEK SCREWS MAY BE USED IN LIEU OF WELDING AT THE CONTRACTOR'S OPTION. FASTEN STEEL DECK SIDELAPS WITH #10 TEK SCREWS, BUTTON PUNCH OR 1 1/2" SEAM WELD AT 24" ON CENTER.
6. ANCHOR CONNECTIONS TO THE UNDERSIDE OF STEEL FLOOR DECKS SHALL BE PLACED ALONG THE CENTER OF DECK RIBS.

H. LIGHT GAUGE METAL:

1. LIGHT GAUGE METAL FRAMING SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH THE LATEST EDITION OF "THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" AND "THE COLD FORMED STEEL FRAMING DESIGN GUIDE" OF THE AMERICAN IRON AND STEEL INSTITUTE.
2. PROVIDE TRACKS, BLOCKING, LINTELS, CLIP ANGLES, STRAP BRACING, SHOES, REINFORCEMENTS, FASTENERS, AND ACCESSORIES TO PROVIDE A COMPLETE METAL FRAME SYSTEM.
3. ISOLATE PARTITIONS FROM STRUCTURAL ELEMENTS WITH SLIP OR CUSHION-TYPE JOINTS BETWEEN STEEL FRAMING AND STRUCTURE AS RECOMMENDED BY STEEL FRAMING MANUFACTURER TO PREVENT TRANSFER OF STRUCTURAL LOADS OR MOVEMENTS TO PARTITIONS.
4. ATTACH SIMILAR MATERIALS BY WELDING. (IE TRACK TO STUD, STUD TO STRUCTURAL STEEL). ATTACH DISSIMILAR MATERIALS BY BOLTING OR SCREW FASTENERS.
5. INSTALL HORIZONTAL STIFFENERS IN STUD SYSTEM, SPACED (VERTICAL DISTANCE) AT NOT MORE THAN 3'-4" O.C. WELD AT EACH INTERSECTION.
6. FASTEN GYPBOARD AND PLYWOOD WITH 1/4 INCH TEK SCREWS AT 6 INCH AT ALL SUPPORTS AND EDGES.
7. BEARING STUDS MUST BE FABRICATED WITH FULL STUD END SEATED AGAINST TRACK WEB. DO NOT USE STUD THAT HAS BEEN CUT.
8. PROVIDE DOUBLE METAL STUD AROUND ALL OPENINGS IN STUD WALL SYSTEM AT JAMBS, HEADS, AND SILLS. WELD AT ALL INTERSECTIONS.

J. INSPECTIONS:

1. IN ACCORDANCE WITH 2006 IBC SECTION 1704, AS NOTED BELOW, TESTING AND INSPECTION SHALL BE BY AN INDEPENDENT TESTING/INSPECTION FIRM UNDER THE SUPERVISION OF A LICENSED ENGINEER EMPLOYED BY THAT FIRM. THIS ENGINEER SHALL BE DEEMED THE DESIGNATED ENGINEER OF RECORD FOR SPECIAL INSPECTIONS PERFORMED BY HIS FIRM OR HIS CONSULTANTS. INSPECTORS SHALL BE ICBO CERTIFIED AND APPROVED BY THE BUILDING OFFICIAL.
2. THE DESIGNATED ENGINEER OF RECORD FOR SPECIAL INSPECTIONS SHALL BE RESPONSIBLE FOR DEFINING THE ACTIVITIES OF THE INSPECTORS, FOR CERTIFYING THE QUALIFICATIONS OF THE INSPECTORS WITH THE BUILDING OFFICIAL AND TO ATTEND THE PRE-CONSTRUCTION MEETING TO DEFINE THEIR SCOPE OF SERVICES AND THE TESTING OR TEST PROCEDURES THAT ARE REQUIRED AS OUTLINED IN THE INTERNATIONAL BUILDING CODE.
3. SPECIAL INSPECTION IS TO BE PROVIDED IN ADDITION TO THE INSPECTIONS CONDUCTED BY THE LOCAL DEPARTMENT OF BUILDING SAFETY AND SHALL NOT BE CONSTRUED TO RELIEVE THE OWNER OR HIS AUTHORIZED AGENT FROM REQUESTING THE PERIODIC AND CALLED INSPECTIONS REQUIRED BY SECTION 104.4 OF THE INTERNATIONAL BUILDING CODE.
4. STEEL PER SECTION 1704.3.
5. CONCRETE PER TABLE 1704.4 AND SECTION 1704.4.
6. ANCHOR BOLTS INSTALLED IN CONCRETE PER TABLE 1704.4.
7. REINFORCING PER TABLE 1704.4 AND EXCEPTION FOR CONCRETE REQUIRING SPECIAL INSPECTION.
8. GRADING, EXCAVATION AND FILLING PER SECTION 1704.7. COORDINATE WITH GEOTECHNICAL REPORT AND SITE GRADING PLAN.
9. EXPANSION BOLT, SCREW ANCHOR AND ADHESIVE ANCHOR INSTALLATION TO VERIFY INSTALLATION IN ACCORDANCE WITH ICBO REPORTS NOTED PREVIOUSLY OR APPROVED EQUAL.

K. OTHER:

1. UNLESS NOTED OTHERWISE, EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT 3 EXPANSION ANCHORS OR APPROVED EQUAL. EPOXY ADHESIVE SHALL BE HILTI HIT-HY 150 MAX OR APPROVED EQUAL.
2. VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO STARTING WORK. NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR INCONSISTENCIES.
3. VERIFY IN FIELD ALL EXISTING CONDITIONS SHOWN ON DRAWINGS.
4. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR MECHANICAL, ELECTRICAL, AND PLUMBING WITH APPROPRIATE TRADES. PROVIDE ALL TEMPORARY BRACING, SHORING, GUYING, OR OTHER MEANS TO AVOID EXCESSIVE STRESSES AND TO HOLD STRUCTURAL ELEMENTS IN PLACE DURING CONSTRUCTION.
5. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE STAMP (AND SIGNATURE) OF AN ENGINEER REGISTERED IN NEBRASKA.

TYPICAL REINFORCING NOTES:

1. REINFORCING BAR DEVELOPMENT AND LAP SPLICE LENGTH SHALL BE AS SHOWN IN THIS TABLE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
2. THE LENGTHS SHOWN IN THE TABLE ARE BASED ON THE FOLLOWING CONCRETE COVERAGE AND REINFORCING C-C SPACING:
   BEAMS OR COLUMNS:
   COVER (EQUAL OR MORE) 1.0bd (BAR DIAMETER)
   CENTER TO CENTER (C-C) SPACING (EQUAL OR MORE) 2.0bd
   ALL OTHERS:
   COVER (EQUAL OR MORE) 1.0bd
   CENTER TO CENTER SPACING (EQUAL OR MORE) 3.0bd.
3. TOP BARS ARE DEFINED AS HORIZONTAL REINFORCEMENT SUCH THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE DEVELOPMENT LENGTH OR SPLICE.
4. DEVELOPMENT AND SPLICE LENGTH SHOWN SHALL NOT APPLY IF ANY OF THE FOLLOWING CONDITIONS OCCUR:
   A) f'c < 4000 PSI
   B) fy > 60,000 PSI
   C) THE COVER OR C-C BAR SPACING IS NOT AS LISTED ABOVE
   D) THE REINFORCING STEEL IS EPOXY COATED
   E) LIGHT WEIGHT CONCRETE IS USED.
5. CENTER ON CENTER SPACING (S) IS DEFINED AS BELOW:

ϕ - MAIN REINF.

○ - LAPPED REINF.

REINFORCING DEVELOPMENT AND SPLICES
f'c = 4,000 PSI

BAR SIZE	DEVELOPMENT LENGTH		SPLICE LENGTH	
	OTHER	TOP	OTHER	TOP
#3	1'-3"	1'-7"	1'-7"	2'-0"
#4	1'-7"	2'-1"	2'-1"	2'-8"
#5	2'-0"	2'-7"	2'-7"	3'-4"
#6	2'-5"	3'-1"	3'-1"	4'-0"
#7	3'-6"	4'-6"	4'-6"	5'-10"
#8	4'-0"	5'-2"	5'-2"	6'-8"
#9	4'-6"	5'-10"	5'-10"	7'-7"
#10	5'-1"	6'-7"	6'-7"	8'-6"
#11	5'-7"	7'-3"	7'-3"	9'-5"

DEVELOPMENT LENGTH NOTES:

1. WHERE DRAWINGS ARE DETAILED SIMILAR TO DETAIL 2, EXTEND THE EMBEDMENT LENGTH SUCH THAT THE HOOKED BAR CONTACTS THE LAYER OF MAIN REINFORCING SHOWN.
2. EMBEDMENT LENGTHS IN CHART ARE TYPICAL EXCEPT AS NOTED IN DETAIL 2, OR AS INDICATED ON DRAWINGS.

DETAIL 1

DETAIL 2

DEVELOPMENT LENGTHS FOR HOOKED BARS (f'c = 4,000 PSI)

BAR SIZE	LENGTH OR MIN. EMBEDMENT
#3	7"
#4	10"
#5	1'-0"
#6	1'-3"
#7	1'-5"
#8	1'-7"
#9	1'-10"
#10	2'-0"
#11	2'-3"

RADIUS OF HOOK:
4 x DIA. OF BAR - #3 TO #8 BARS
5 x DIA. OF BAR - #9 TO #11 BARS
6 x DIA. OF BAR - #14 & #18 BARS

HORIZONTAL WALL AND FOOTING REINFORCING DETAILS:

PLAN OPTION #1

PLAN OPTION #2

PLAN WITHOUT CJ

PLAN WITH CJ

NOTES:
1. UNLESS OTHERWISE INDICATED, THE CONTRACTOR HAS THE OPTION OF REINFORCING CORNERS IN ACCORDANCE WITH OPTION #1 OR OPTION #2.
2. UNLESS OTHERWISE INDICATED, THE CONTRACTOR HAS THE OPTION OF CONSTRUCTING INTERSECTIONS WITH OR WITHOUT CONSTRUCTION JOINTS. REINFORCE PER APPLICABLE DETAIL.
3. VERTICAL REINFORCING NOT SHOWN FOR CLARITY.
4. FOR LOCATIONS WITH ONLY ONE RUN OF HORIZONTAL REINFORCING, PROVIDE LAP SPLICES AS SHOWN FOR OUTSIDE LAYER OF REINFORCING SHOWN ABOVE.
5. FOR LOCATIONS WITH COLUMN SPREAD FOOTINGS, NO HOOKED BARS OR DOWELS ARE REQUIRED AS LONG AS HORIZONTAL WALL AND FOOTING REINFORCING HAS ADEQUATE DEVELOPMENT OR SPLICE LENGTH INTO SPREAD FOOTING.

PIPE PENETRATION DETAIL:

- PIPE
- CAST-IN-PLACE CONCRETE WALL OR SLAB SEE PLAN FOR SIZE AND REINFORCING
- DIAGONAL BAR AT FOUR SIDES OF PIPE PENETRATION AT EACH FACE OF WALL OR SLAB (4 TOTAL FOR 8" THICK ELEMENTS OR LESS. 8 TOTAL FOR ELEMENTS GREATER THAN 8" THICK). MATCH VERT. WALL REINFORCING OR HORIZ. SLAB REINFORCING SIZE. USE MINIMUM OF #4 BARS FOR SLABS-ON-GRADE.
- ADDITIONAL REINFORCING BARS: #5 AT FOUR SIDES AT EACH FACE FOR "D" LESS THAN 24"; #5 AT FOUR SIDES AT EACH FACE FOR "D" = 24" TO 36". ADDITIONAL REINFORCING BARS ARE NOT REQUIRED IF NO REINFORCING IS CUT BY THE OPENING

PLAN OR ELEVATION VIEW

NOTE:
REFER TO CIVIL AND PLUMBING SHEETS FOR LOCATION AND SIZE OF PIPES AND FOR WATER STOP AND WALL FLANGE SURROUNDING PENETRATION.

WALL CONSTRUCTION JOINT DETAILS:

VERTICAL (PLAN VIEW)

HORIZONTAL (SECTION VIEW)

NOTE:
PROVIDE VERTICAL WALL CONSTRUCTION JOINTS AS REQUIRED. PROVIDE VERTICAL WALL CONTROL JOINTS SIMILAR TO DETAIL 2/S03.00 AT A MAXIMUM UNIFORM SPACING OF NO MORE THAN 30'-0". COORDINATE JOINT LOCATIONS WITH ARCHITECTURAL DRAWINGS.

ANCHOR BOLT SCHEDULE		
DIA.	A	B
1 1/4"	3"	1'-6"
1"	3"	1'-2"
3/4"	2"	9"
5/8"	2"	8"
1/2"	2"	7"

COLUMN SIZE	BASE PLATE SIZE (U.N.O.)	ANCHOR BOLTS	LAYOUT (U.N.O.)
PIPE 10	3/4x16x1'-4"	FOUR 3/4" DIA.	1 1/2" TYP. 1 1/2" TYP.
HSS7x7	3/4x13x1'-1"	FOUR 3/4" DIA.	1 1/2" TYP. 1 1/2" TYP.
HSS7x5	3/4x13x0'-11"	FOUR 3/4" DIA.	
HSS6x6	3/4x12x1'-0"	FOUR 3/4" DIA.	
HSS5x5	3/4x11x0'-11"	FOUR 3/4" DIA.	

NOTES:
1. REFER TO SECTION 4/S03.01 FOR BASE PLATE AND ANCHOR BOLTS FOR COLUMN AT PEDESTAL.
2. REFER TO DETAIL 7/S03.02 FOR BASE PLATE AND ANCHOR BOLTS FOR COLUMNS BEARING ON WALLS.

1/S03.00 BASE PLATE AND ANCHOR BOLT SCHEDULE
SCALE: 1 1/2" = 1'-0"

NOTE:
SAW JOINT AS SOON AS SURFACE IS FIRM ENOUGH NOT TO BE TORN OR DAMAGED BY THE BLADE (USUALLY 4 TO 12 HOURS AFTER CONCRETE HARDENS). SEE SPECIFICATIONS.

CONTROL JOINT

CONSTRUCTION JOINT

2/S03.00 FLOOR SLAB CONTROL AND CONSTRUCTION JOINT DETAILS
SCALE: 1 1/2" = 1'-0"

NOTES:
1. SEE PLAN FOR FOOTING DEPTHS AND REINFORCING ALONG WITH TOP OF FOOTING ELEVATION.
2. REFER TO "TYPICAL REINFORCING NOTES" AND "DEVELOPMENT LENGTH NOTES" FOR SPLICE AND DEVELOPMENT LENGTHS.
3. WALL ATOP FOOTING NOT SHOWN FOR CLARITY.

3/S03.00 FOOTING STEP DETAIL
SCALE: 3/4" = 1'-0"

4A - LINTEL SECTION

4B - JAMB DETAIL

NOTES:
1. REFER TO "TYPICAL REINFORCING NOTES" FOR SPLICES IN VERTICAL REINFORCING.
2. WHERE HORIZONTAL REINFORCING IS TERMINATED BY OPENING OR CONTROL JOINT, PROVIDE STANDARD ACI HOOK.
3. PROVIDE ONE #5 CONTINUOUS AT BOTTOM OF ALL OPENINGS ABOVE FINISHED FLOOR. EXTEND A MINIMUM OF 2'-0" BEYOND FACE OF OPENING EACH SIDE FOR STRAIGHT REINFORCEMENT AND 1'-4" FOR HOOKED REINFORCING WITH STANDARD ACI HOOK.
4. EXTEND LINTEL REINFORCING A MINIMUM OF 2'-0" BEYOND THE FACE OF OPENING ON EACH SIDE FOR STRAIGHT REINFORCING AND 1'-4" FOR HOOKED REINFORCING WITH STANDARD ACI HOOK.
5. PROVIDE STANDARD ACI HOOK FOR ALL VERTICAL REINFORCING OVER LINTELS.

4/S03.00 CONCRETE WALL OPENING DIAGRAM AND DETAILS
SCALE: NO SCALE

5A - TUBE LINTEL SECTION

5B - STUD LINTEL SECTION

5C - STUD JAMB DETAIL

NOTES:
1. PROVIDE FRAMING SIMILAR TO THAT SHOWN AT WINDOW SILL LOCATIONS. FOR WINDOW SILL LOCATIONS BENEATH HSS BEAMS, PROVIDE METAL STUD FRAMING PER SECTION 6/S03.03.
2. LEDGER ANGLE SHALL BE OMITTED AT OPENINGS WITHOUT VENEER.

5/S03.00 METAL STUD OPENING DETAIL
SCALE: 3/4" = 1'-0"

PERFORMANCE Engineering
4940 N. 118th Street, Suite 200 - Omaha, NE 68164 (402) 343-3960 Fax: (402) 343-3961
7400 E Orchard Rd, Suite 240 - Englewood CO 80111 (303) 721-3322 Fax: (303) 721-9504
PE #: 140438

RYAN P. PELSTER
E-12430
9/4/14

GATEWAY EARLY CHILDHOOD CENTER

Structural Package

RDG PLANNING · DESIGN

ARCHITECT
RDG Planning & Design
900 Farnam St., Suite 100
Omaha, NE 68102
(402) 392-0133 Phone
(402) 392-0413 Fax

STRUCTURAL
Performance Engineering
4940 118th St. Suite 200
Omaha, NE 6814
(402) 343-3960 Phone
(402) 343-3961 Fax

MECH/PLUMB/ELEC/TELE
Alvine Engineering
1102 Douglas On The Mall
Omaha, NE 61802
(402) 346-7007 Phone
(402) 346-9576 Fax

CIVIL
Ehrhart Griffin & Associates
3552 Farnam Street
Omaha, NE 68131
(402) 551-0631 Phone
(402) 551-6540 Fax

FOOD SERVICE EQUIPMENT
Sturm Consulting, Inc.
5838 South Hudson Place
Tulsa, OK 74135
(918) 260-0667 Phone
(918) 499-3933 Fax

LANDSCAPE ARCHITECT
RDG Planning & Design
900 Farnam St., Suite 100
Omaha, NE 68102
(402) 392-0133 Phone
(402) 392-0413 Fax

5810 South 42nd Street
Omaha, NE 68107

KEY PLAN

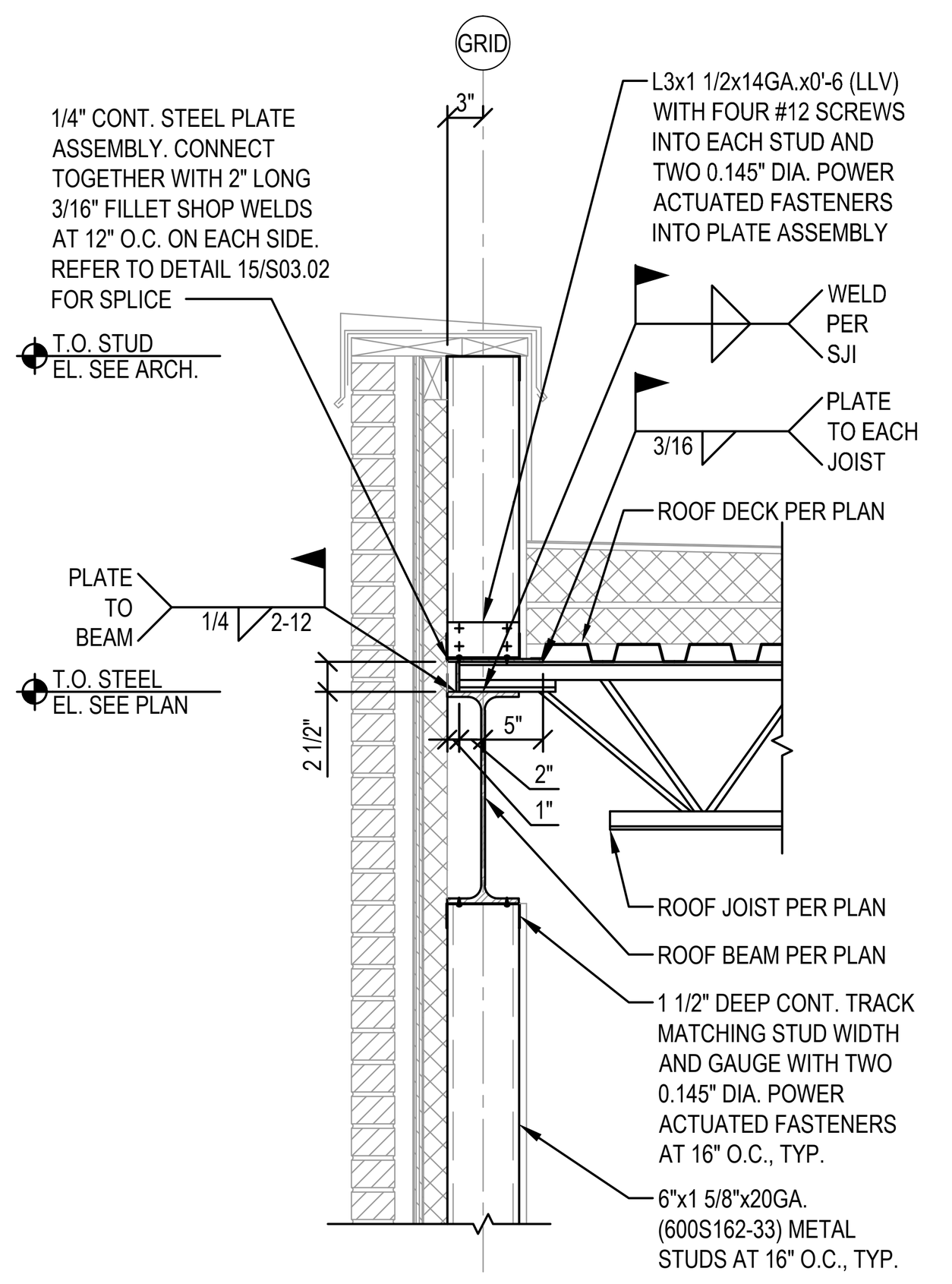
REV	DATE	DESCRIPTION
1	9/9/2014	ADDENDUM #1

ISSUED: SEP 4, 2014
PROJECT NO: 2014.129.00

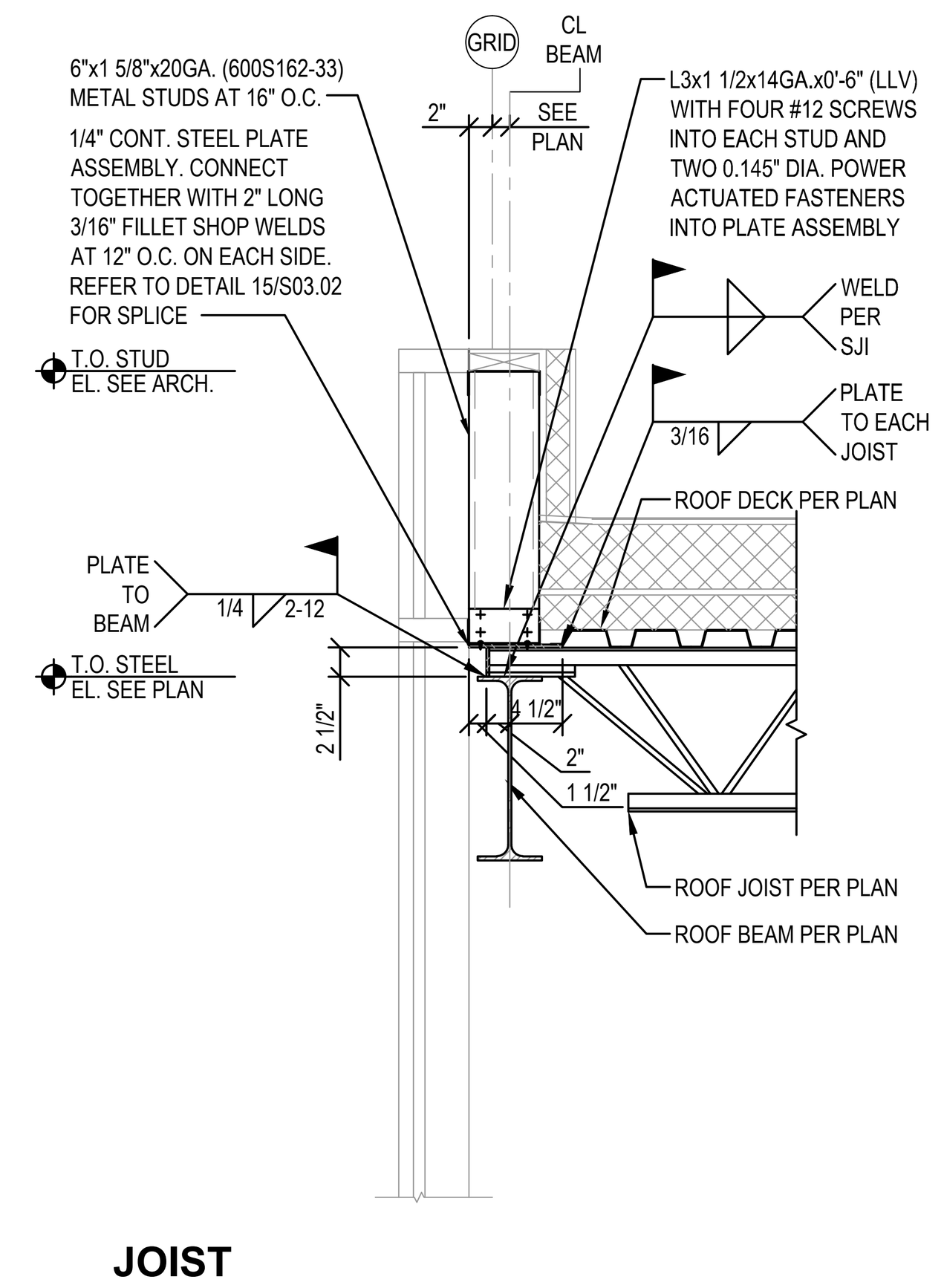
GENERAL STRUCTURAL NOTES AND DETAILS

S03.00

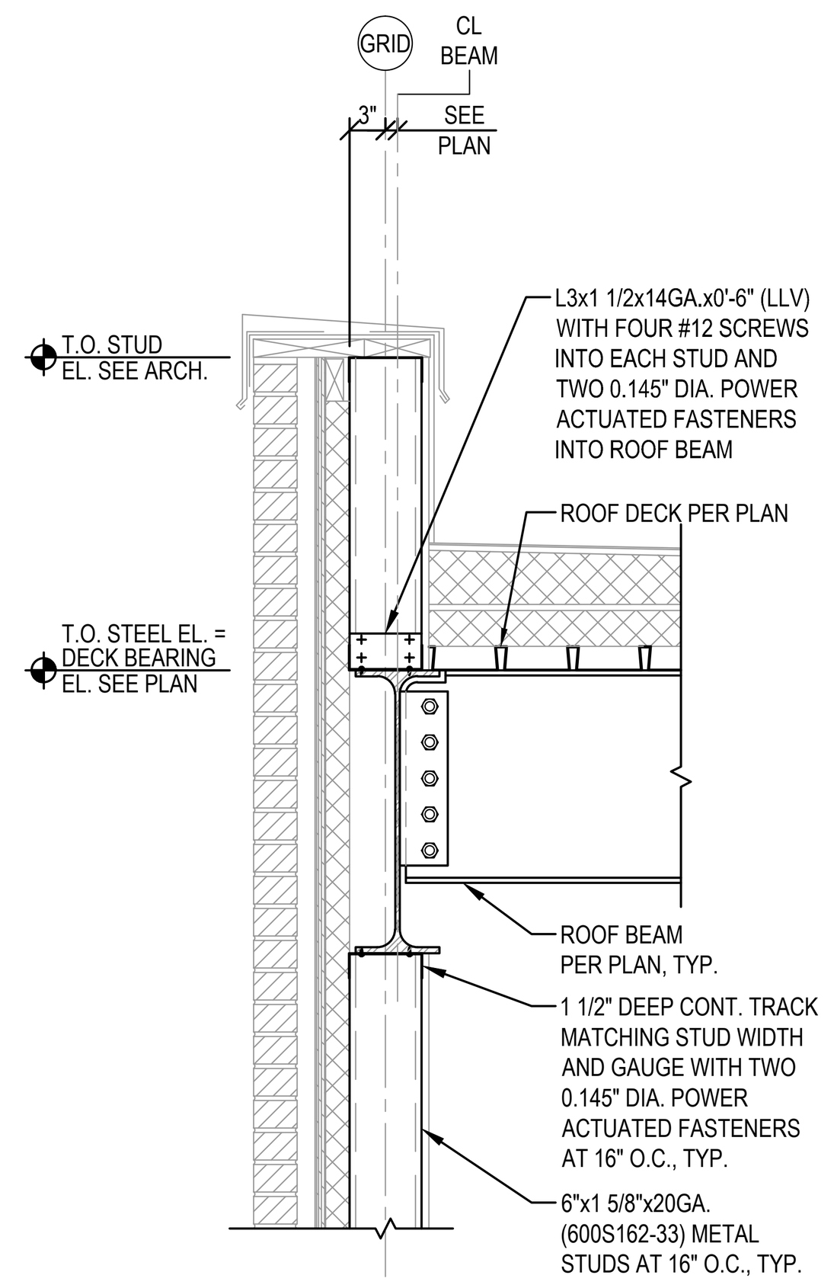
SHEET NOTES:
1. FINISH MATERIALS NOT SHOWN FOR CLARITY. REFER TO ARCHITECTURAL SHEETS FOR INFORMATION ON FINISH MATERIALS.
2. VERIFY ALL DIMENSIONS SHOWN WITH ARCHITECTURAL SHEETS.
3. REFER TO GENERAL NOTES FOR ROOF DIAPHRAGM CONNECTIONS TO STRUCTURE.
4. COORDINATE JOIST BRIDGING REQUIREMENTS AND CONNECTIONS WITH JOIST MANUFACTURER.
5. DETAIL K-SERIES JOISTS WITH STANDARD 2 1/2" DEEP BEARING ENDSEATS, UNLESS NOTED OTHERWISE.
6. CONNECT METAL STUD ELEMENTS TO STRUCTURE WITH TWO 0.145" DIA. POWER ACUTATED FASTENERS. CONNECT METAL STUD ELEMENTS TOGETHER WITH THREE #10 SCREWS.



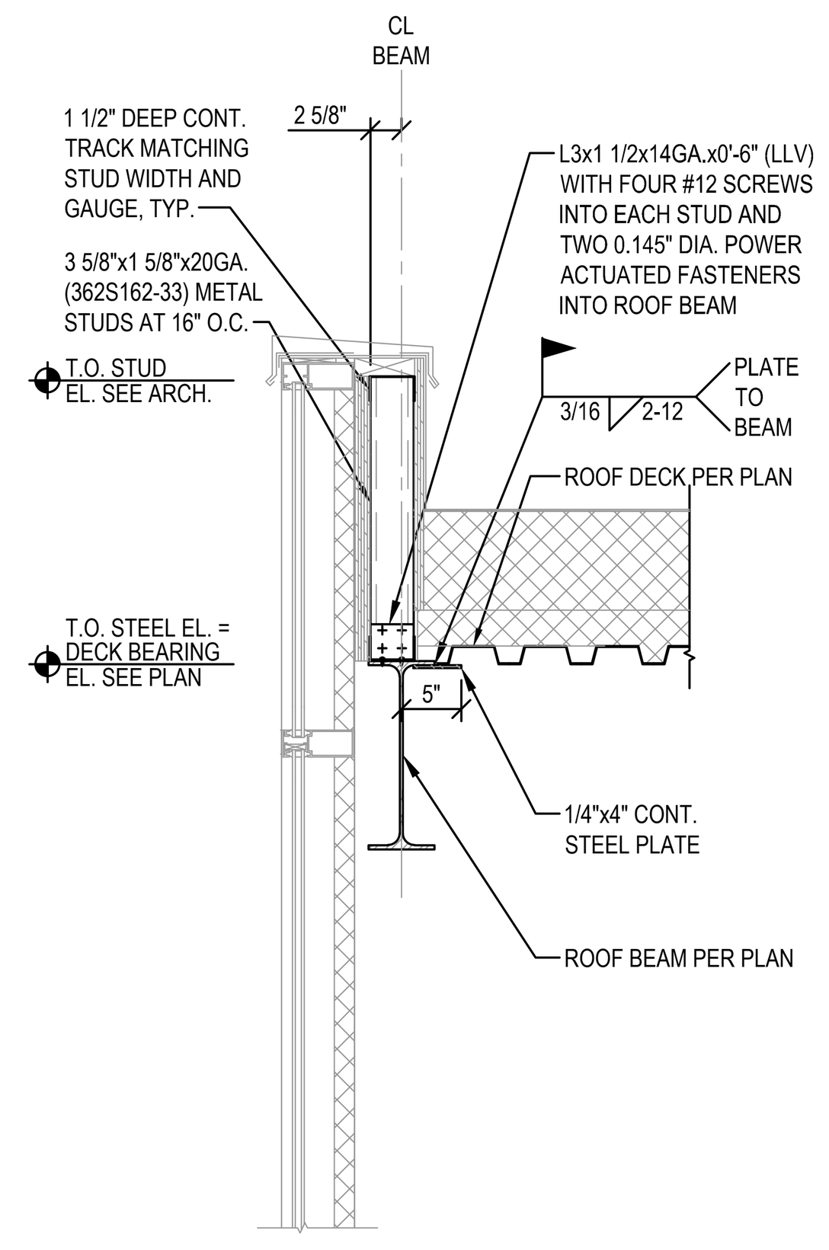
1 S03.05 ROOF SECTION AT JOIST BEARING
SCALE: 3/4" = 1'-0"



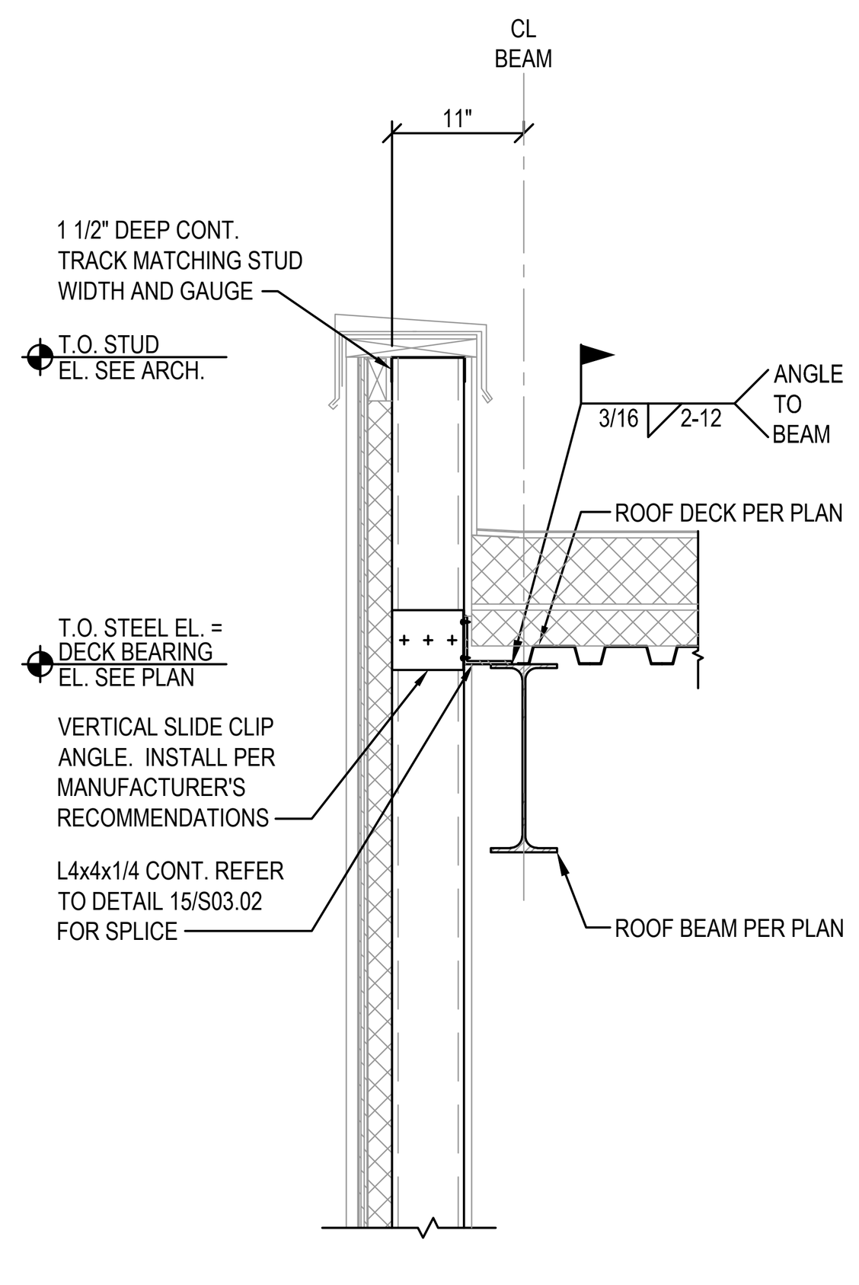
2 S03.05 JOIST BEARING SECTION AT CURTAIN WALL
SCALE: 3/4" = 1'-0"



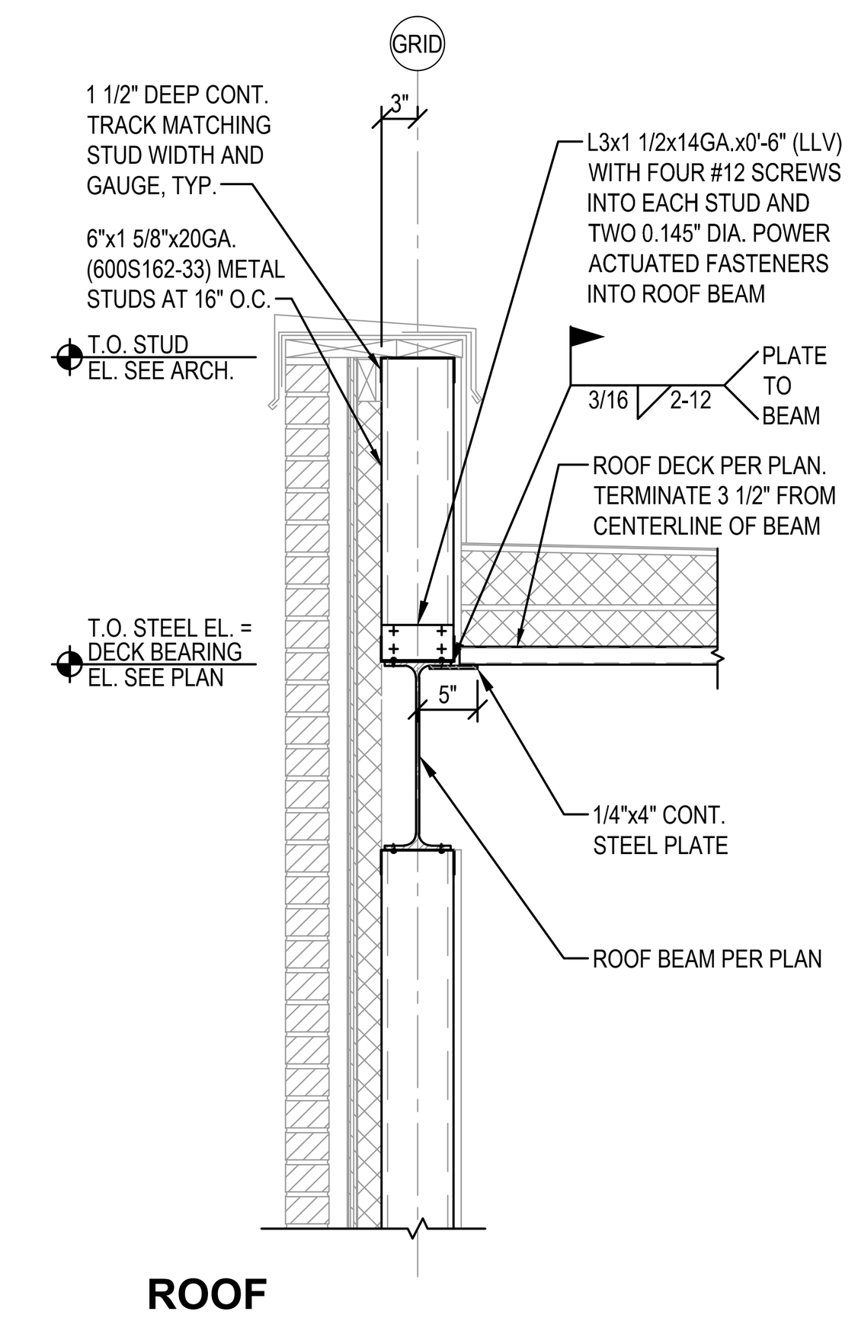
3 S03.05 PERIMETER WALL ROOF SECTION
SCALE: 3/4" = 1'-0"



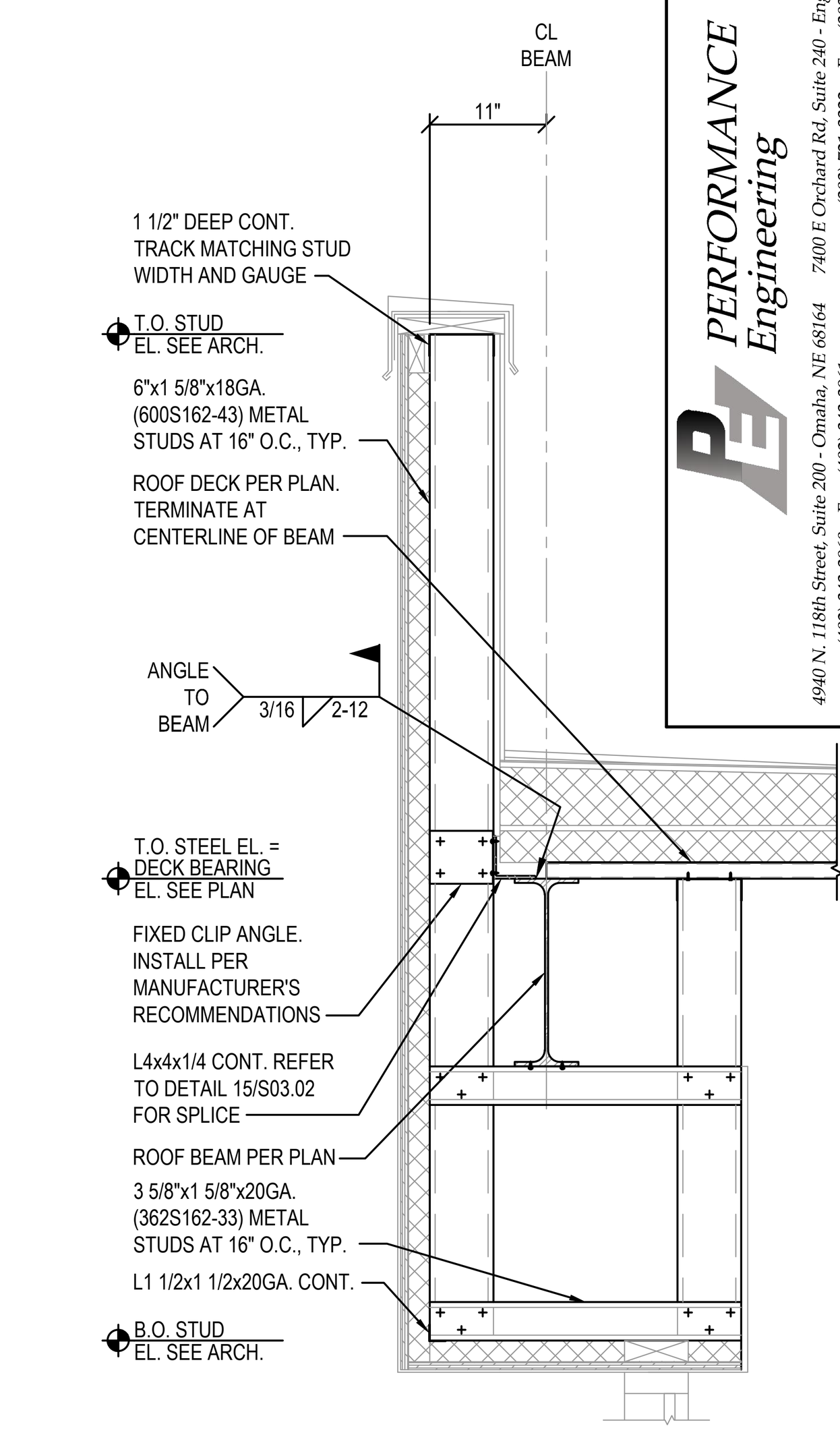
4 S03.05 ROOF SECTION AT ENTRY CURTAIN WALL
SCALE: 3/4" = 1'-0"



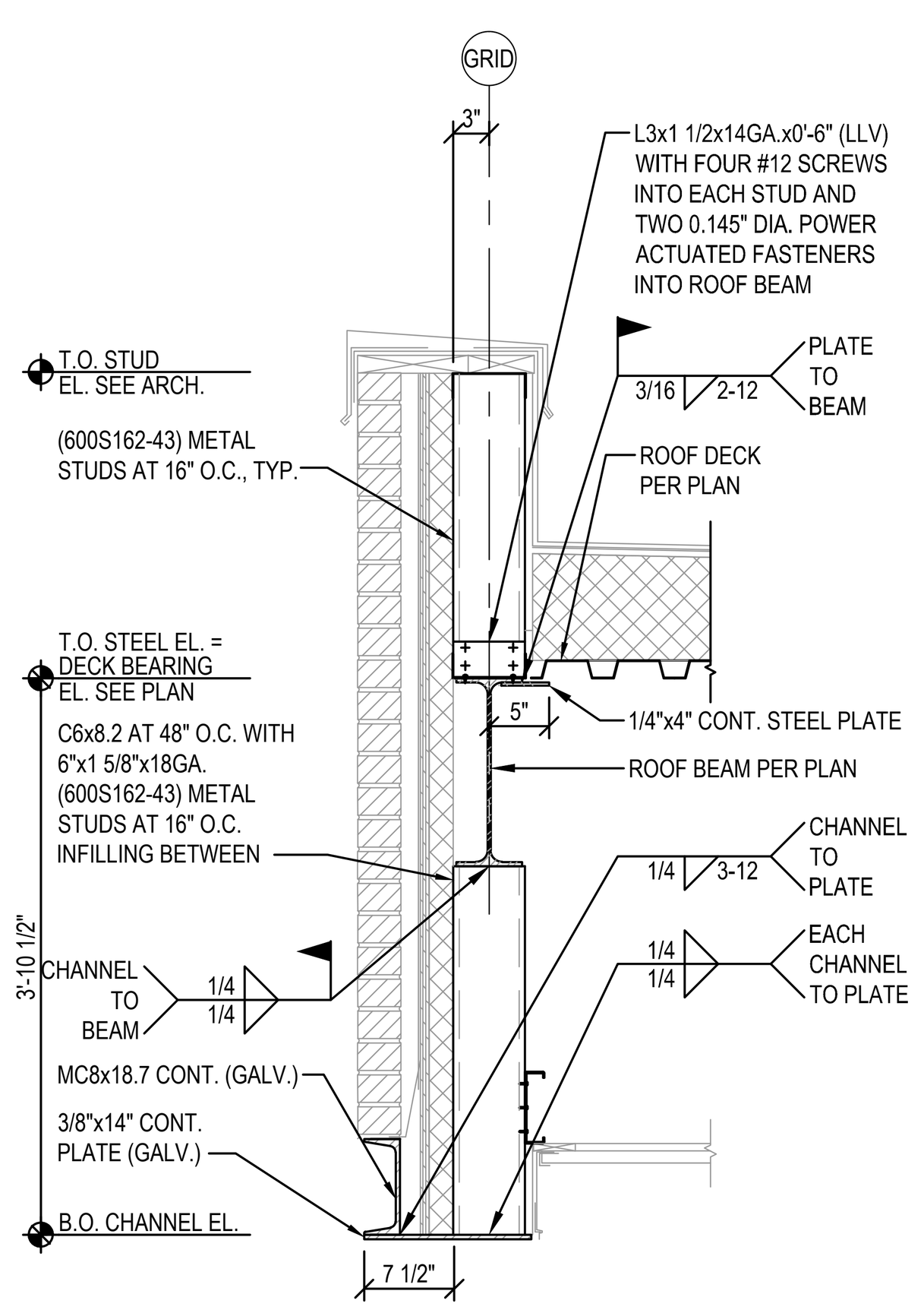
5 S03.05 ROOF SECTION AT ENTRY WALL
SCALE: 3/4" = 1'-0"



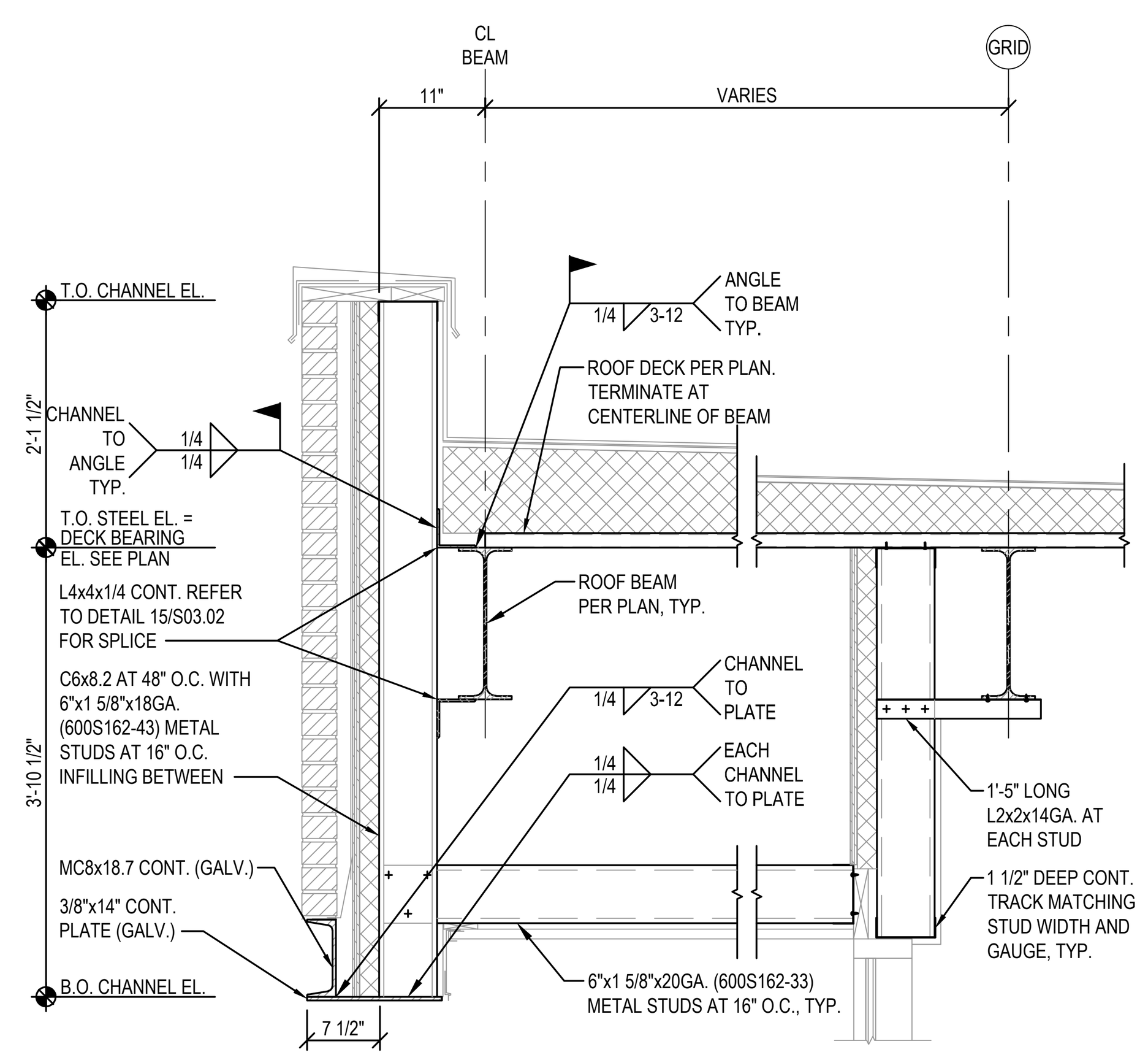
6 S03.05 ROOF SECTION AT ENTRY SIDE WALL
SCALE: 3/4" = 1'-0"



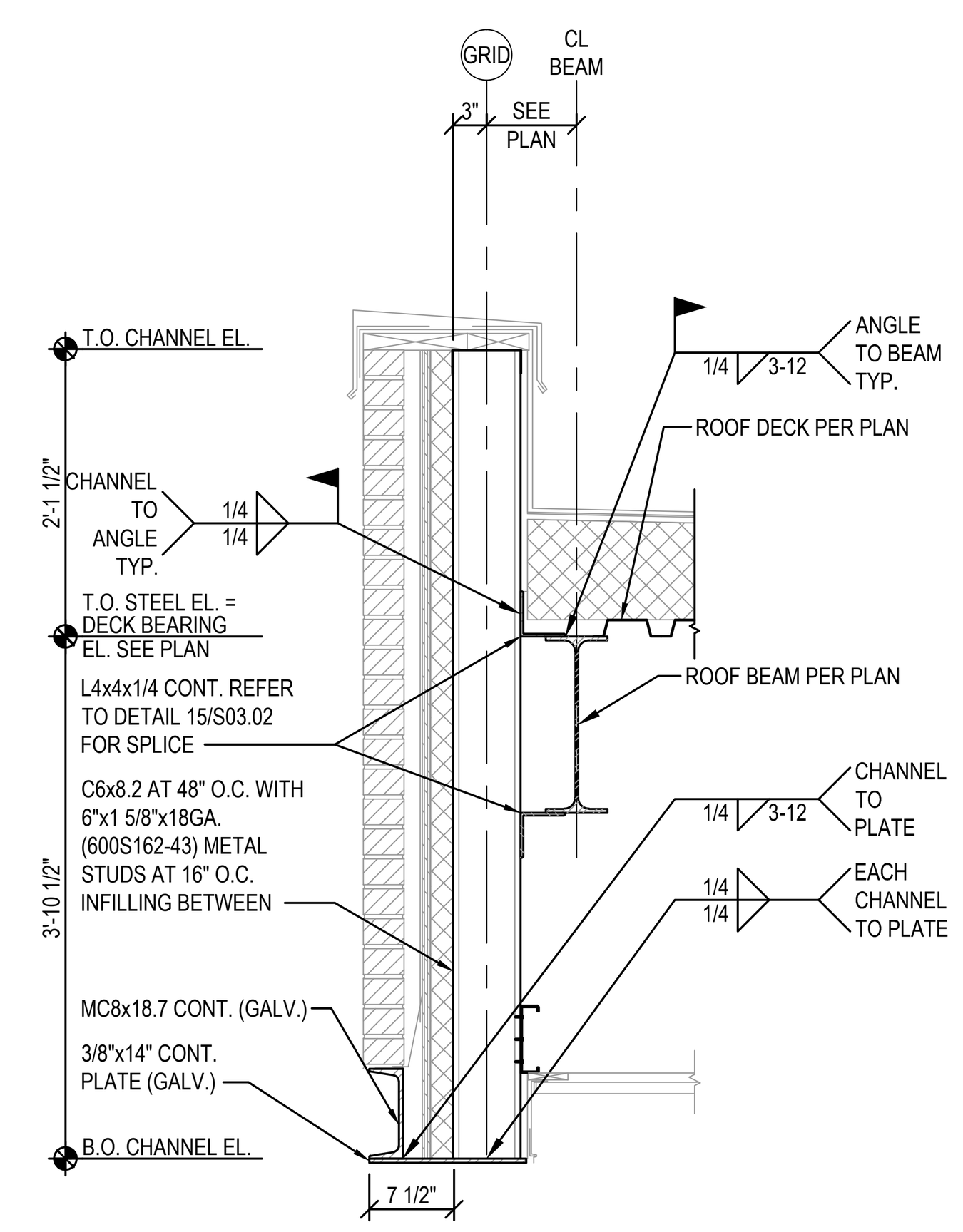
7 S03.05 ROOF SECTION AT SIDE WALL
SCALE: 3/4" = 1'-0"



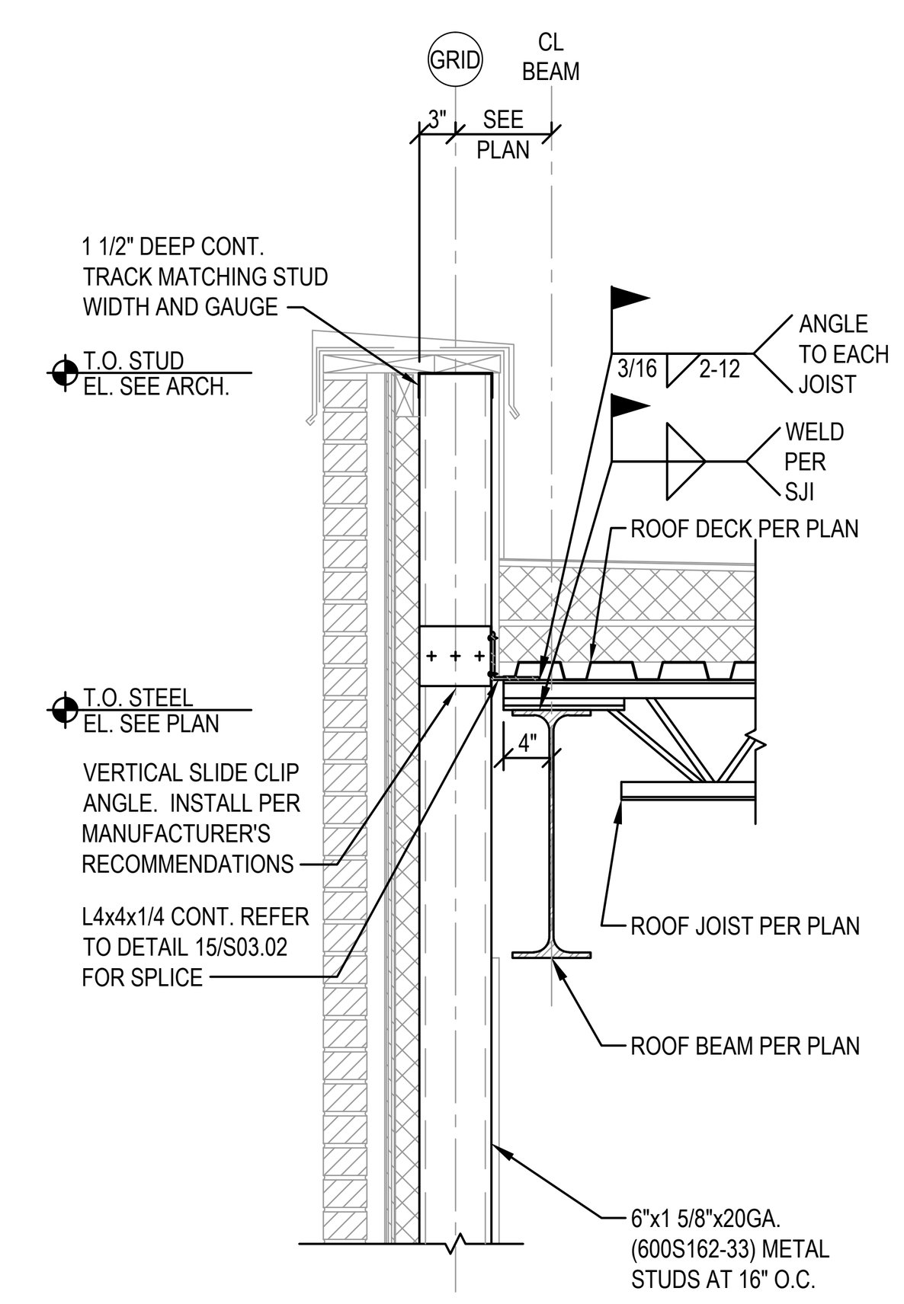
8 S03.05 BALCONY ROOF SECTION
SCALE: 3/4" = 1'-0"



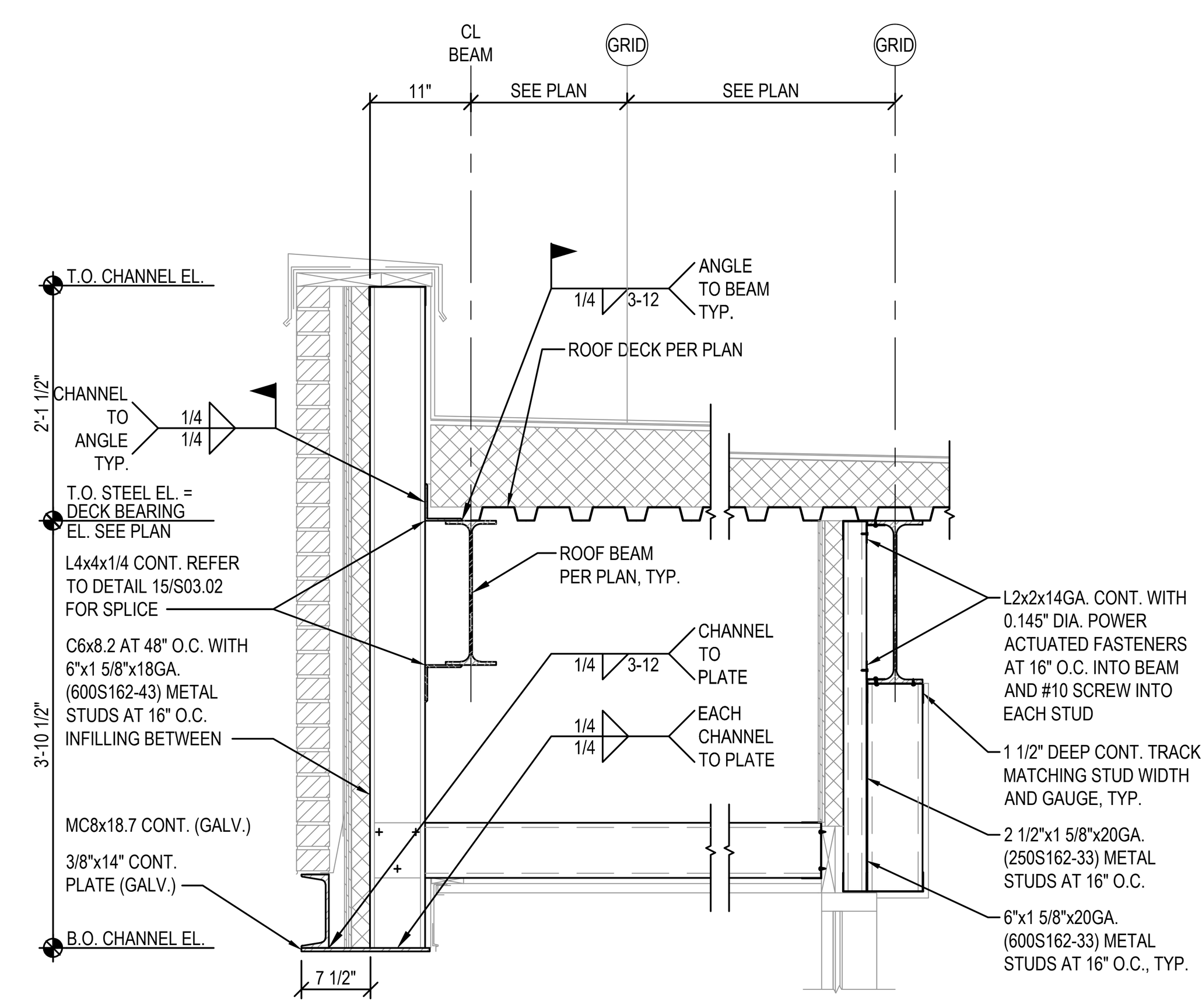
9 S03.05 ROOF SECTION AT BALCONY
SCALE: 3/4" = 1'-0"



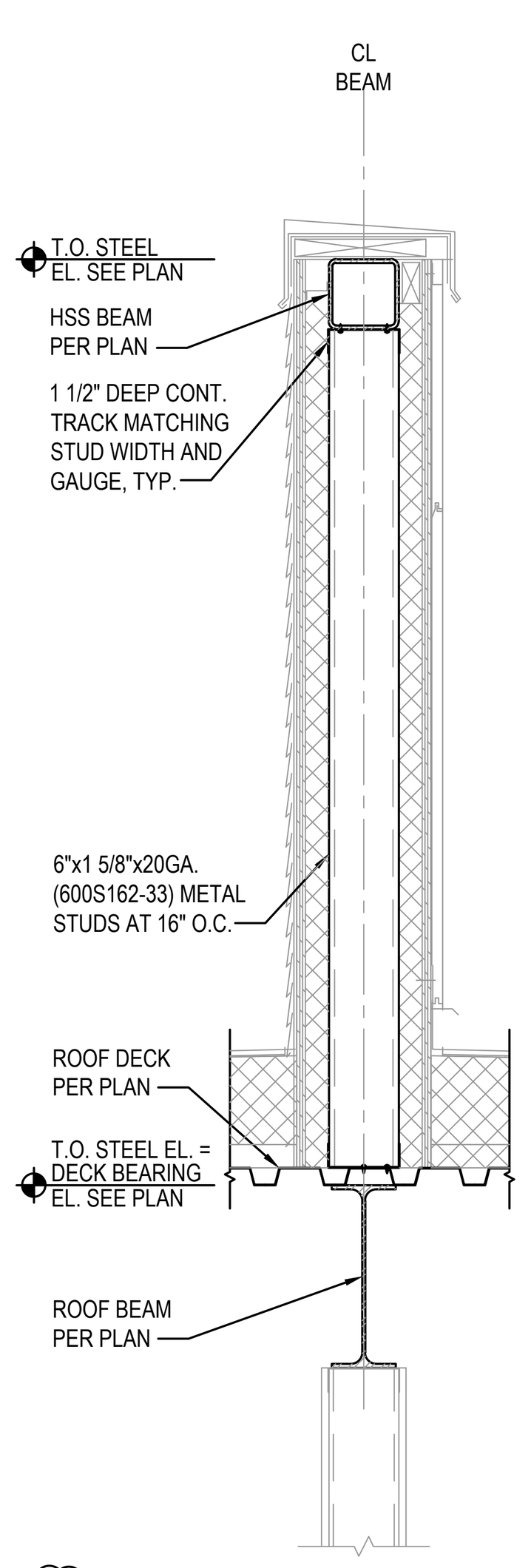
10 S03.05 SIDE BALCONY ROOF SECTION
SCALE: 3/4" = 1'-0"



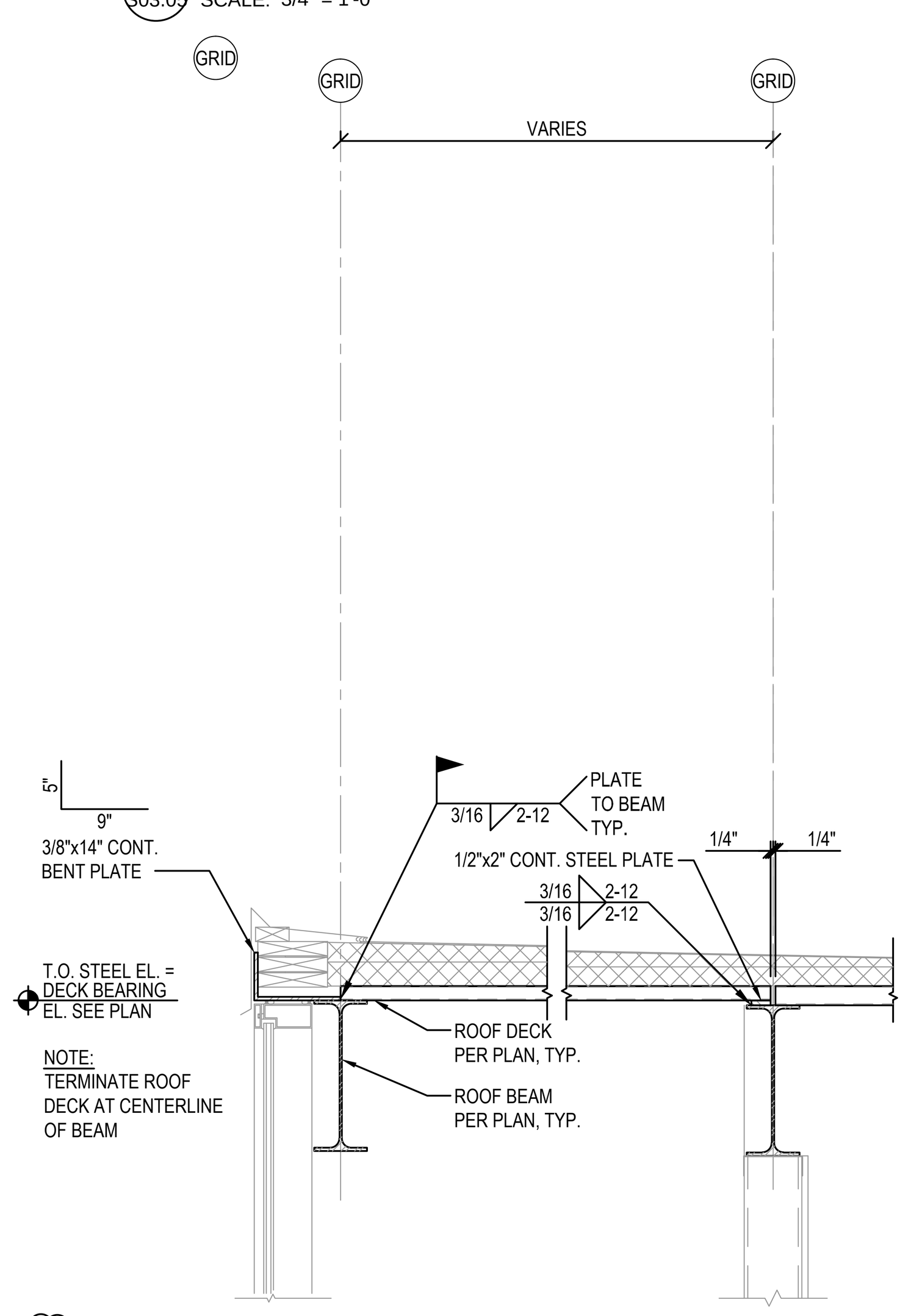
11 S03.05 JOIST BEARING AT ROOF SECTION
SCALE: 3/4" = 1'-0"



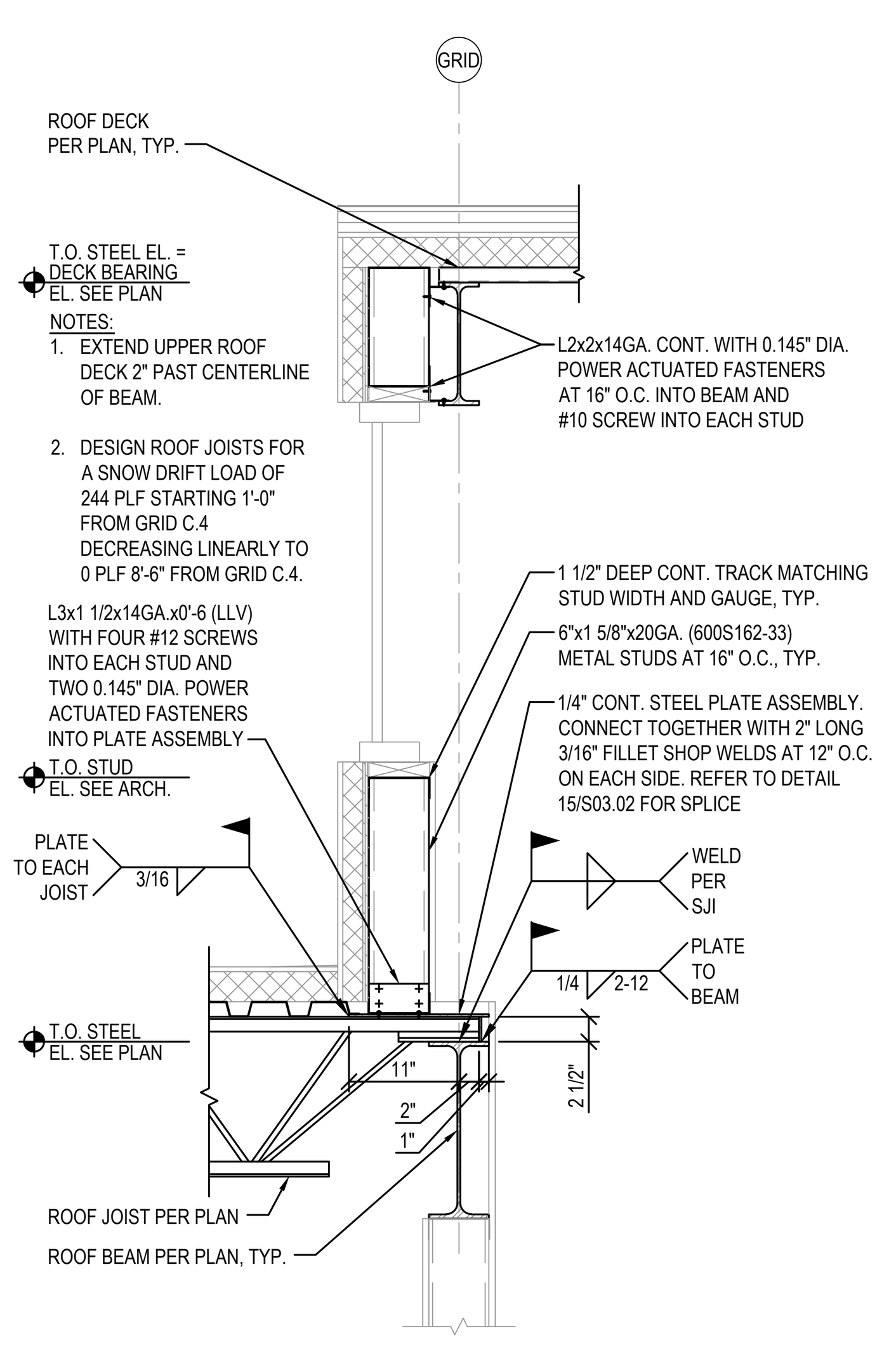
12 S03.05 ROOF SECTION AT OVERHANG
SCALE: 3/4" = 1'-0"



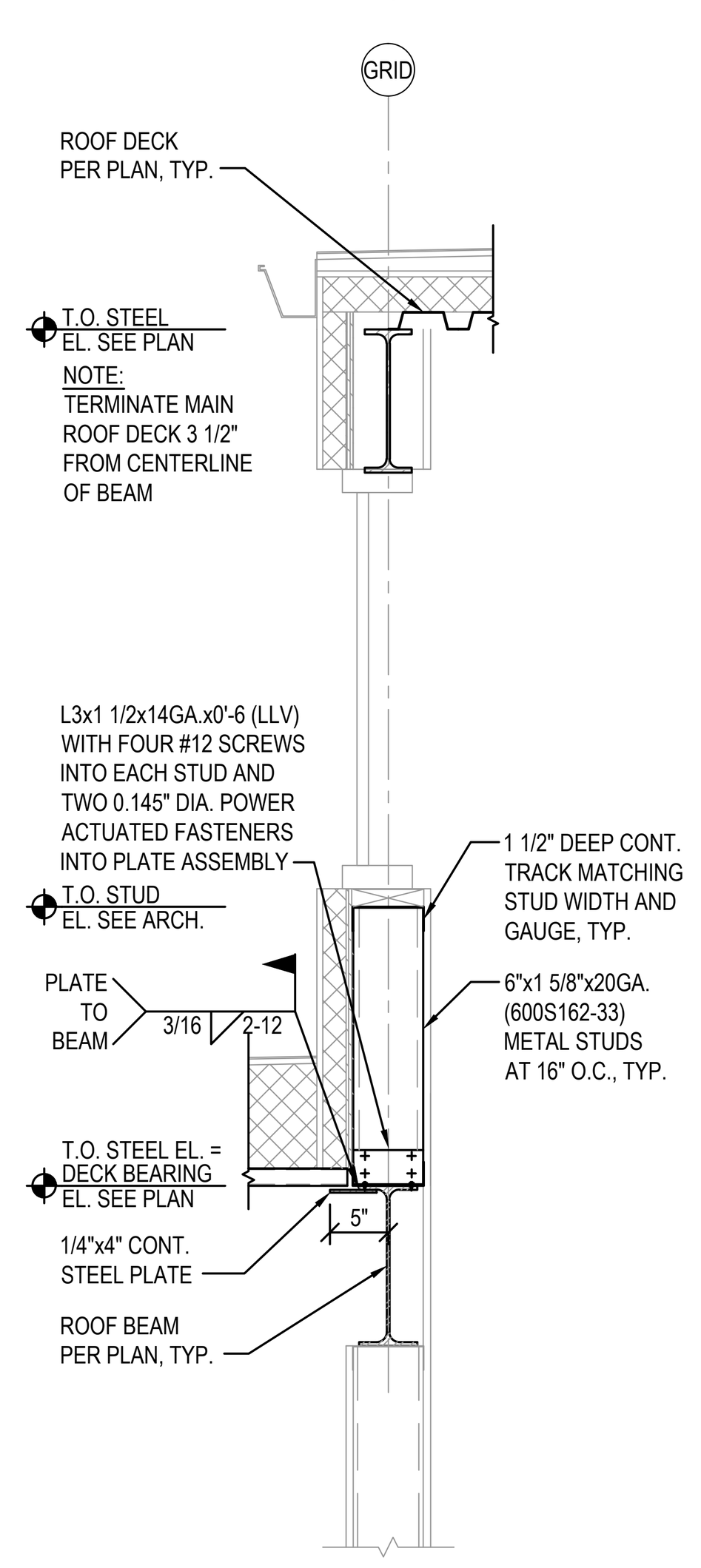
13 S03.05 FRONT ATRIUM ROOF SECTION
SCALE: 3/4" = 1'-0"



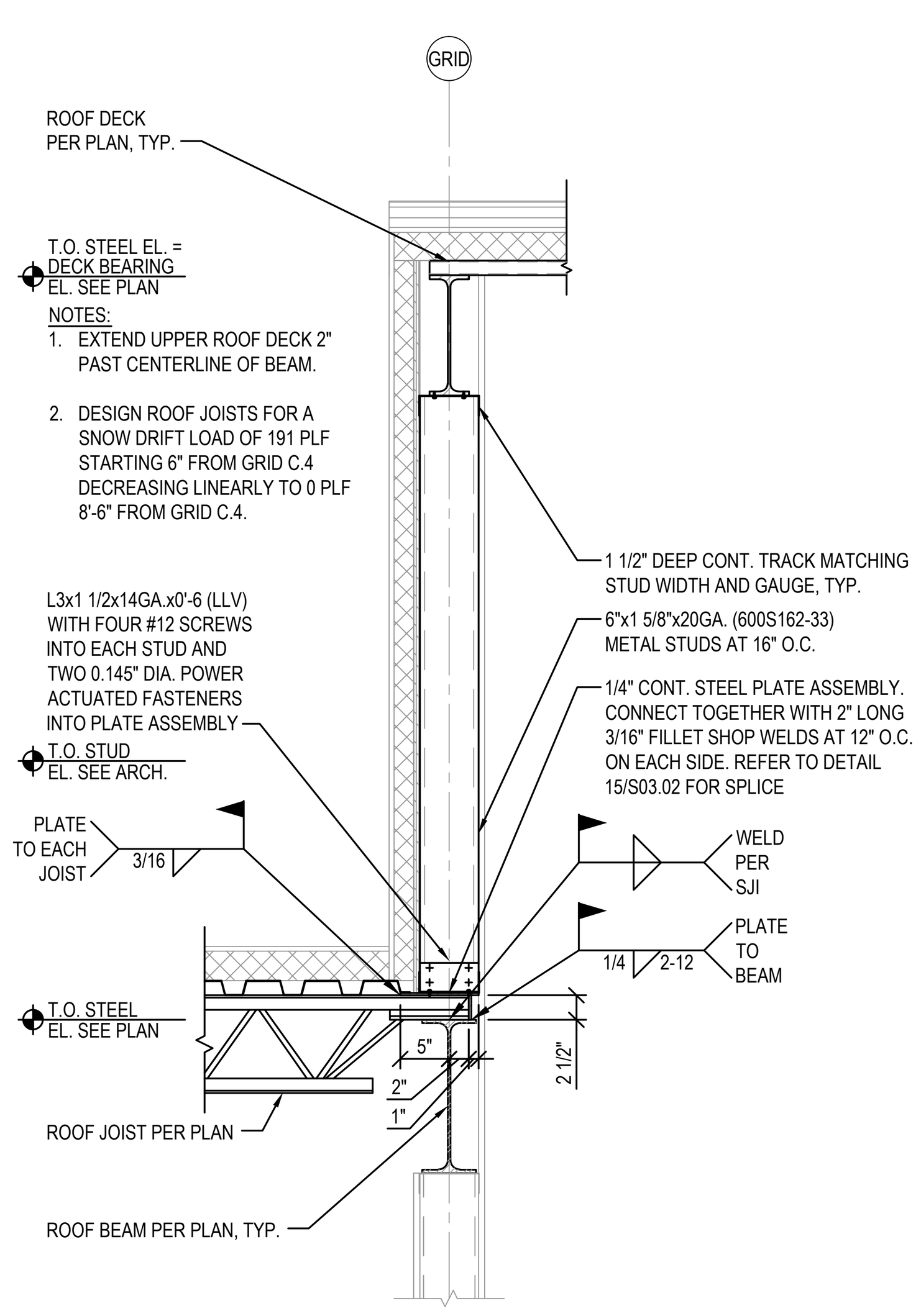
14 S03.05 ROOF SECTION AT FRONT ATRIUM
SCALE:



15 S03.05 MAIN ATRIUM ROOF SECTION
SCALE: 3/4" = 1'-0"



16 S03.05 ROOF SECTION AT MAIN ATRIUM
SCALE: 3/4" = 1'-0"



17 S03.05 ROOF STEP SECTION AT MAIN ATRIUM
SCALE: 3/4" = 1'-0"

PERFORMANCE Engineering
4940 N. 118th Street, Suite 200 - Omaha, NE 68164 (402) 343-3960 Fax: (402) 343-3961
7400 E Orchard Rd, Suite 240 - Englewood CO 80111 (303) 721-3322 Fax: (303) 721-9504
PE #: 140438

Structural Package

RDG PLANNING • DESIGN

ARCHITECT
RDG Planning & Design
900 Farnam St., Suite 100
Omaha, NE. 68102
(402) 392-0133 Phone
(402) 392-0413 Fax

CIVIL
Ehrhart Griffin & Associates
3552 Farnam Street
Omaha, NE 68131
(402) 551-0631 Phone
(402) 551-6540 Fax

STRUCTURAL
Performance Engineering
4940 118th St. Suite 200
Omaha, NE 6814
(402) 343-3960 Phone
(402) 343-3961 Fax

FOOD SERVICE EQUIPMENT
Sturm Consulting, Inc.
5838 South Hudson Place
Tulsa, OK 74135
(918) 260-0667 Phone
(918) 499-3933 Fax

MECH/PLUMB/ELEC/TELE
Alvine Engineering
1102 Douglas On The Mall
Omaha, NE 61802
(402) 346-7007 Phone
(402) 346-9576 Fax

LANDSCAPE ARCHITECT
RDG Planning & Design
900 Farnam St., Suite 100
Omaha, NE. 68102
(402) 392-0133 Phone
(402) 392-0413 Fax

PROFESSIONAL STRUCTURAL ENGINEER RYAN P. PELSTER E-12430 9/4/14 STATE OF NEBRASKA

5810 South 42nd Street
Omaha, NE 68107

KEY PLAN

GATEWAY EARLY CHILDHOOD CENTER

REV	DATE	DESCRIPTION
1	9/16/2014	ADDENDUM #1

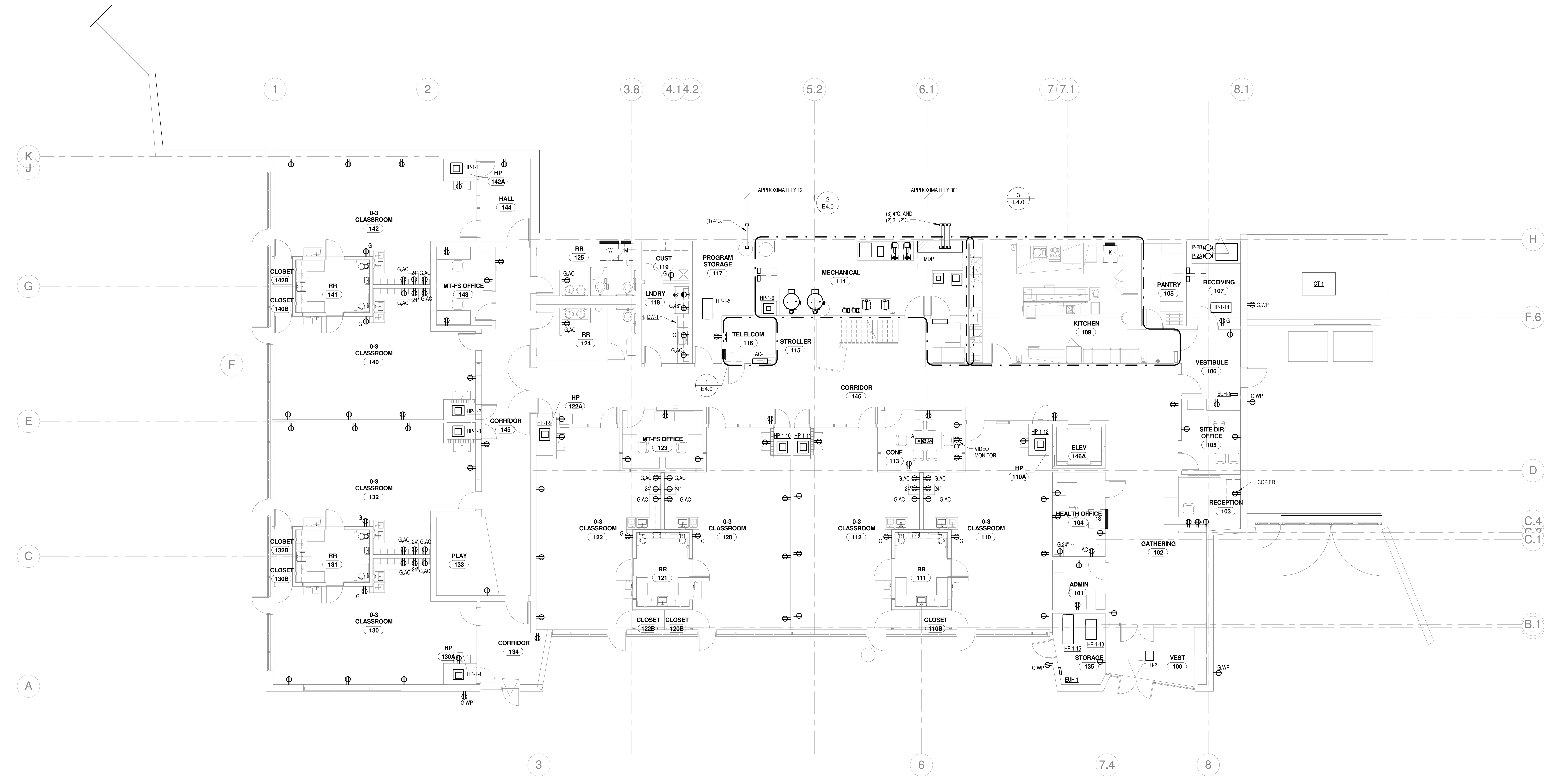
ISSUED: SEP 4, 2014

PROJECT NO: 2014.129.00

ROOF FRAMING SECTIONS

S03.05

THIS PLAN PROVIDED FOR COORDINATION OF CONDUIT SLEEVES FOR ELECTRICAL AND TELECOMMUNICATIONS SYSTEMS ONLY. SLEEVES SHALL BE LOCATED APPROXIMATELY 9'-6" AFF THROUGH FOUNDATION WALL FOR SERVICE ENTRANCE. COORDINATE EXACT SLEEVE LOCATIONS IN FIELD.



1 FLOOR PLAN - LEVEL 1 - POWER
1/8" = 1'-0"

INSTALL GREEN INSULATED GROUND WIRE WITH EACH LIGHTING, RECEPTACLE, AND EQUIPMENT BRANCH CIRCUIT.

PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT REQUIRING A NEUTRAL, UNLESS OTHERWISE NOTED.

NOTE:

DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS and clearances from ARCHITECTURAL, STRUCTURAL, shop and other appropriate drawing or at site. Lay out and coordinate all work prior to installation to provide clearances required for operation, maintenance, and codes and verify non-interference with other work. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCE FOR ALL TRADES. READ SPECIFICATIONS.

Structural Package

RDG PLANNING • DESIGN

GATEWAY EARLY CHILDHOOD CENTER

5810 South 42nd Street
Omaha, NE 68107

KEY PLAN

REV	DATE	DESCRIPTION

ISSUED: SEPT. 04, 2014

PROJECT NO: 2014.129.00

FLOOR PLAN - LEVEL 1 - POWER

E2.0