ADDENDUM NUMBER THREE

To the Drawings and Project Manual Dated:

DEC 15, 2025

Entitled:

Indiana University
Launch Accelerator for Biosciences
1302 Indiana Ave.
Indianapolis, IN 46202

Prepared By:

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Addendum Dated: JAN 19, 2026

IU Project #: 20250072
BSALS Project #: 00360481

CONTRACTOR QUESTIONS

1. See attached list of bidder questions with design team responses.

CHANGES TO THE PROJECT MANUAL

1. **Section 00 0110:**
   a. Replace section in its entirety.
      i. Added Section 07 4213 to Table of Contents.
2. **Section 07 4213.23:**
   a. Replace section in its entirety.
      i. Added 2.01, B, 6.
      ii. Added 2.06, C, 1.
3. **Section 07 5323:**
   a. Replace section in its entirety.
      i. Added 1.10, D.
4. **Section 07 6200:**
   a. Replace section in its entirety.
      i. Removed 3.05, D.
5. **Section 08 4413:**
   a. Replace section in its entirety.
      i. Added 2.01, A, 7.
      ii. Revised text at 2.02, E, 2.
      iii. Added 2.02, E, 2, a.
6. **Section 09 2116:**
   a. Replace section in its entirety.
      i. Removed 1.01, E.
      ii. Added 1.01, J.
      iii. Added 1.02, D and E.
      iv. Added 1.04, 1 through 5.
      v. Added text at 1.05, B, 1.
      vi. Added 1.05, C and D.
      vii. Removed 2.01, C.
      viii. Added 2.01, E, 2.

ix. Added text at 2.02, B, 3.

x. Removed 2.02, B, 4.

xi. Added 2.02, D, 3 and 4.

xii. Added 2.02, E, 2, a.

xiii. Added 2.02, F, 1.

xiv. Added text at 2.03, A, 3.

xv. Added 2.03, A, 3, a.

xvi. Added 2.03, A, 6, c.

xvii. Added 2.03, A, 7, c.

xviii. Added 2.03, A, 8, c.

xix. Revised text at 2.03, B, 1.

xx. Added 2.03, B, 3.

xxi. Added 2.03, B, 8.

xxii. Removed text at 2.03, C, 1.

xxiii. Added 2.03, D and H.

xxiv. Revised text at 2.04, A and B.

xxv. Added 2.04, B, 1.

xxvi. Added 2.04, C, D, and E.

xxvii. Added 2.04, F, 1, 2, and 4.

xxviii. Removed text at 2.04, G, 2.

xxix. Added 2.04, H.

xxx. Removed 2.04, I, 1.

xxxi. Added 2.04, I, 2.

xxxii. Added 2.04, M.

xxxiii. Added text at 3.03, C, 2.

xxxiv. Added 3.04, C.

xxxv. Added 3.05, G.

xxxvi. Removed 3.05, I.

xxxvii. Removed 3.06, A, 2.

xxxviii. Added 3.06, E.

xxxix. Removed text at 3.07, A.

xl. Added text at 3.07, C, 1 and 2.

xli. Removed text at 3.07, C, 4.

xlii. Revised text at 3.07, C, 5.

xliii. Added 3.09.

7. **Section 09 9113:**

a. Replace section in its entirety.

i. Added 1.05, F.

ii. Added 2.01, A.

iii. Removed 2.01, B and E.

iv. Removed 2.01, C, 1.

v. Added 2.02, E, 1.

vi. Revised text at 2.03, A.

vii. Added 2.03, A, 2, 3, and 4.

viii. Added 2.03, B, C, and D.

ix. Added 2.04, A, 1 and 2.

x. Removed 3.01, E.

xi. Removed 3.02, F, G, H, and K.

xii. Added 3.02, I, J, and L.

xiii. Removed 3.03, B.

xiv. Added 3.03, G.

xv. Added 3.04.

xvi. Added 3.07, A, B, and C.

ADDITION TO THE PROJECT MANUAL

1. Section 07 4213 for Metal Wall Panels added.

CHANGES TO THE DRAWINGS

1. Drawing G201:

a. Replace sheet in its entirety.

i. Revised exit tag code information for doors 199D, 199F, and 199J.

ii. Added stair tag code information for Stair A and Stair B.

iii. Added exit tag code information and symbols for door 100.

2. Drawing LA202:

a. Replace sheet in its entirety.

i. Revised site wall elevation details.

3. Drawing S013:

a. Add Detail 08 for Typical Pipe Support Beam in Mechanical Shaft.

4. **Drawing S120A:**

   a. Modify dimensions of the shaft between column lines 4 and 5.

   b. Add shaft openings between column lines 6 and 7. Also add tube steel beams and grating in the base of the shaft as shown on the attached revised drawing. Modify concrete beam layout accordingly.

   c. Modify the mezzanine framing plan and add section cuts for the mezzanine.

   d. Add plan note 10.

5. **Drawing S120B:**

   a. Modify shaft between column lines 11 and 12 by showing slab openings and an 8" slab. Modify beams accordingly.

   b. Modify shaft dimensions between column lines 12 and 13.

   c. Add note to recess slab as required for Terrazzo flooring east of 13 line.

   d. Add plan note 11.

6. **Drawing S130A:**

   a. Modify shaft dimensions between column lines 4 and 5

7. **Drawing S130B:**

   a. Modify shaft dimensions between column lines 12 and 13, and add shaft as shown in plan. Modify beam layout accordingly.

   b. Add note for recessed slab for terrazzo flooring east of 13 line.

   c. Add plan note 10.

8. **Drawing S140A:**

   a. Modify the dimensions of the shaft between column lines 4 and 5.

9. **Drawing S140B:**

   a. Modify the dimensions of the shaft between column lines 12 and 13.

   b. Add note for recessed slab for terrazzo flooring east of 13 line.

   c. Add plan note 9.

10. **Drawing S150A:**

    a. Modify shaft dimensions and associated beams between column lines 4 and 5.

11. **Drawing S150B:**

    a. Modify shaft dimensions between column lines 12 and 13.

    b. Add note for recessed slab for terrazzo flooring east of 13 line.

    c. Add plan note 9.

12. **Drawing S160A:**

a. Modify shaft dimensions between column lines 4 and 5.

b. Modify layout of 2" topping slab and ramps between column lines 4.6 and 6.

c. Modify the framing layout for the dunnage for the mechanical equipment and the support conditions on the concrete structure.

d. Add framing for the removable panels in the penthouse walls.

13. Drawing S160B:

a. Modify shaft dimensions between column lines 11 and 12. Add 8" slab in this area where the shaft size is reduced.

b. Modify the framing layout for the dunnage for the mechanical equipment and the support conditions on the concrete structure.

c. Add framing for the removable panels in the penthouse walls.

14. Drawing S180:

a. Modify the framing layout for the dunnage for the mechanical equipment.

15. Drawing S204:

a. Modify the schedule for beams 2B46, 2B47, 2B48, 2B79, 2B80, 2B81.

16. Drawing S205:

a. Add schedule lines for beams 2B104, 2B105, 2B106.

17. Drawing S206:

a. Modify beam width for 2F38.

18. Drawing S210:

a. Add schedule line for beam 3B113.

19. Drawing S219:

a. Modify schedule lines for beams 5B84, 5B85, and 5B86.

20. Drawing S220:

a. Modify schedule for beam 5B93.

21. Drawing S510:

a. Modify dimensions on detail S510-10.

22. Drawing S511:

a. Add plan note to this section.

23. Drawing S512:

a. Add section cuts S512-8, 9, 10, and 11 to this sheet.

24. Drawing A000:

a. Replace sheet in its entirety.

i. Added sheets to sheet index as listed below under "Addition to the Drawings".

25. **Drawing A101:**
    a. Replace sheet in its entirety.
        i. Revised door size of door 199J.
        ii. Revised layout of modular metal equipment enclosure fence and gate system.
        iii. Plan detail and similar detail callouts added.
26. **Drawing A101.5:**
    a. Plan 2: Plan detail callouts added.
27. **Drawing A102:**
    a. Plan 1: Plan detail and similar detail callouts added.
28. **Drawing A103:**
    a. Plan 1: Plan detail and similar detail callouts added.
29. **Drawing A104:**
    a. Plan 1: Plan detail and similar detail callouts added.
30. **Drawing A105:**
    a. Plan 1: Plan detail and similar detail callouts added.
31. **Drawing A106:**
    a. Replace sheet in its entirety.
        i. Plan 1: Plan detail and similar detail callouts added.
        ii. Add Mechanical equipment to south of Penthouse for reference.
        iii. Add Keynote E25 designating support structure for building signage and associated allowance.
32. **Drawing A107**
    a. Replace sheet in its entirety.
        i. Plan 6: Revise roof assembly and associated notes at elevated plaza roof canopy.
        ii. Remove previously shown mechanical equipment from east roof adjacent to Penthouse. Revise walkway pad layout.
33. **Drawing A107.5:**
    a. Replace sheet in its entirety.
        i. Plan 1: Revise roof assembly and associated notes at solar array location.
        ii. Plan 2: Revise roof assembly and associate notes at solar array location.
34. **Drawing A152:**
    a. Replace sheet in its entirety.
        i. Added Sheet Note Schedule.
35. **Drawing A156:**

a. Replace sheet in its entirety.
    i. Added Sheet Note Schedule.

36. Drawing A200:

a. Replace sheet in its entirety.
    i. Revised glazing type tags in Exterior Elevation Legend.
    ii. Revised curtain wall tag types in North Elevation.

37. Drawing A201:

a. Replace sheet in its entirety.
    i. Revised glazing type tags in Exterior Elevation Legend.
    ii. Revised curtain wall tag types and added keynote E20 in South Elevation.
    iii. Revised door 199J width in West Elevation.
    iv. Added elevation tags for modular metal equipment enclosure in West Elevation.

38. Drawing A202:

a. Replace sheet in its entirety.
    i. Revised glazing type tags in Exterior Elevation Legend.
    ii. Revised text in keynote E20.

39. Drawing A203:

a. Replace sheet in its entirety.
    i. Revised glazing type tags in Exterior Elevation Legend.
    ii. Revised elevations 1, 2, 3, and 4.

40. Drawing A204:

a. Replace sheet in its entirety.
    i. Revised removable panel dimensions and locations in elevations 2 and 3.

41. Drawing A220:

a. Replace sheet in its entirety.
    i. Revised Keynotes, glazing types, mullion types, and dimension strings.

42. Drawing A221:

a. Replace sheet in its entirety.
    i. Revised Keynotes, glazing types, mullion types, and dimension strings.

43. Drawing A222:

a. Replace sheet in its entirety.
    i. Revised Keynotes, glazing types, mullion types, and dimension strings.

44. Drawing A223:

a. Replace sheet in its entirety.

i. Revised Keynotes, glazing types, mullion types, and dimension strings.

45. Drawing A224:

a. Replace sheet in its entirety.

i. Revised Keynotes, glazing types, mullion types, and dimension strings.

46. Drawing A301:

a. Replace sheet in its entirety.

i. Assembly W5.1 added.

47. Drawing A302:

a. Replace sheet in its entirety.

i. Assembly 1.1, 1.2, 1.3, 1.4: Location of leak detection.

ii. Add Mark 1 to Assembly R3.

48. Drawing A332:

a. Replace sheet in its entirety.

i. Detail 4: Adjust canopy fascia / soffit.

49. Drawing A334:

a. Replace sheet in its entirety.

i. Detail 2, 3: Update column downspout.

50. Drawing A335:

a. Replace sheet in its entirety.

i. Detail 5: Adjust soffit.

ii. Detail 8: Add scupper detail.

51. Drawing A336:

a. Replace sheet in its entirety.

i. Detail 6: Add new detail for door sill.

52. Drawing A350:

a. Replace sheet in its entirety.

i. Detail 1 & 3: Text annotations updated. CMU block updated

ii. Detail 10: Revise MCM panel clip location and add mullion extension.

iii. Detail 5: Revise MCM panel clip location. Update door to aluminum frame. Door location revised.

iv. Detail 7: Revise door frame size.

v. Detail 8: Add CMU column wrap. Revise steel plate at jamb.

53. Drawing A351:

a. Replace sheet in its entirety.

i. Detail 3: Revise MCM panel clip location and text annotations.

54. Drawing A352:

a. Replace sheet in its entirety.

i. Detail 4: Update brick ties and add batt insulation. Dimensions added. Text annotations added

ii. Detail 5: Dimensions added.

55. Drawing A353:

a. Replace sheet in its entirety.

i. Detail 1: Revise door frame size. Update mullion to SSG. R**evise** text annotations

ii. Detail 2: Revise MCM panel clip locations.

iii. Detail 3: Update mullions to SSG. Dimensions added.

iv. Detail 4: Update mullions to SSG. Dimensions added.

v. Detail 5: Dimensions added.

56. Drawing A354:

a. Replace sheet in its entirety.

i. Detail 7: View updated to show adjacent elements for spatial clarity. CMU bloack revised. Text annotations added.

ii. Detail 1: Update MCM panel clip. Dimensions added.

iii. Detail 2: View updated to show adjacent elements for spatial clarity. Dimensions added.

iv. Detail 6: Update mullions to SSG. View expanded to show aluminum door.

v. Detail 5: Update mullions to SSG. Curtain wall glass updated.

vi. Detail 3: Update mullions to SSG. View updated to show adjacent elements for spatial clarity.

57. Drawing A355:

a. Replace sheet in its entirety.

i. Detail 1: Update dimensions. Revise MCM panel clip locations.

ii. Detail 8: MCM panel and metal studs updated.

iii. Detail 3: Revise MCM panel clip location. Dimensions added.

58. Drawing A356:

a. Replace sheet in its entirety.

i. Detail 1: Revise MCM panel clip location. Saddle flashing added. Text annotations updated.

ii. Detail 3: Update mullions to SSG.

iii. Detail 2: Update MCM panel clip. View updated to show adjacent elements for spatial clarity. Metal studs updated.

59. Drawing A357:

a. Replace sheet in its entirety.

i. Detail 3: Update dimensions. Revise MCM panel clip locations. Scale changed. Insulation added.

ii. Detail 1: View updated to show adjacent elements for spatial clarity. Dimensions added.

iii. Detail 2 added.

iv. Detail 4 relocated on A359

60. Drawing A390

a. Replace sheet in its entirety.

i. Revise extents and details of exterior envelope mock-up assembly.

61. Drawing A400:

a. Replace sheet in its entirety.

i. Revised stair layout.

ii. Added notes and dimensions.

62. Drawing A401:

a. Replace sheet in its entirety.

i. Revised stair layout.

ii. Added notes and dimensions.

63. Drawing A402:

a. Replace sheet in its entirety.

i. Revised stair layout.

ii. Plan 1: Revised door type and size of door 199D.

iii. Added notes and dimensions.

64. Drawing A403:

a. Replace sheet in its entirety.

i. Revised stair layout.

ii. Added notes and dimensions.

65. Drawing A405:

a. Renumbered Details and referenced on Sheets.

66. Drawing A500:

a. Replace sheet in its entirety.

i. Revised door type and size information for door 199D.

ii. Revised door size information for door 199J.

iii. Revised glazing tag for Detail 1, 2, 3, 4, and 5.

ADDITION TO THE DRAWINGS

1. Drawing A358 added.
2. Drawing A359 added.
3. Drawing A360 added.
4. Drawing A370 added.
5. Drawing A404 added.

END OF ADDENDUM NUMBER THREE

Attachments:

- Section 00 0110, 07 4213, 07 4213.23, 07 5323, 07 6200, 08 4413, 09 2116, 09 9113
- Drawing G201, LA202, S013, S120A, S120B, S130A, S130B, S140A, S140B, S150A, S150B, S160A, S160B, S170A, S170B, S180, S204, S205, S206, S210, S219, S220, S510, S511, S512, A101, A101.5, A102, A103, A104, A105, A106, A107, A107.5, A152, A156, A200, A201, A202, A203, A204, A220, A221, A222, A223, A224, A301, A302, A332, A334, A335, A336, A350, A351, A352, A353, A354, A355, A356, A357, A358, A359, A360, A370, A390, A400, A401, A402, A403, A404, A405, A500

20250072 - IU LAB - BP3 Bidder RFI's

RFI #	Bid Package	Discipline	Sheet/Spec Section	Question	Answer	Response By	Addendum
11	BE3-08A	Architectural	084413 Substitution Request Link	PWS substitution request submitted for their curtainwall system, see attached documentation.	PWS has recent history with Indiana University and local projects at similar scales and complexities. If PWS can assure it can bid comparable products to the Basis of Design, provide detailing meeting the design intent, meet performance and finish criteria, and provide delegated design engineering services for structural performance and attachment methods, PWS will be included as an approved manufacturer on 08 4413.	BSA	ADD-03
21	BE3-05A	Structural	S001	1.Could these unit cost on S001 be changed from a tonnage price to a dollar allowance provided by the CM/Architect/EOR? Tonnage allowances are subjective and difficult to determine as there is not (1) unit price that applies to all the items listed in this note; raw steel wide flange has a different unit cost than channel which has a different unit cost than angle that has a different unit cost than pipe that has a different unit cost than HSS, etc. as well as fabrication costs for all of these products varies widely depending on what the actual requirements are.	Please carry an allowance of $50,000 in base bid to incorporate S001, 7 tons of steel not shown.	FAW	ADD-03
28	BE3-07B	Architectural	S120A RFI Documentation Link	1.S120A – does cantilever tube steel past column lines Z.9 and F require fireproofing? – see red clouded areas	No, cantilever tube steel for small canopies are secondary/projected members that do not require fireproofing.	BSA	ADD-03
29	BE3-07B	Architectural	S120B RFI Documentation Link	2.S120B – does cantilever tube steel past column line F and 13 require fireproofing? – see red clouded areas	No, tube steel past column lines F and 13 do not require any fireproofing as they only support architectural projections from the main building structural frame as secondary/projected members.	BSA	ADD-03
30	BE3-07B	Architectural	S120B RFI Documentation Link	3.S120B – does steel shown in blue clouded area require fireproofing?	See response to RFI #28.	BSA	ADD-03
31	BE3-07B	Architectural	S120B RFI Documentation Link	4.S120B – does tube steel in lobby area require fireproofing – green clouded area	Except for the columns supporting the multi-height roofing assembly above (see response to RFI #43), tube steel and miscellaneous steel supporting curtain wall assemblies and communicating stair in multi-height space do not require any fireproofing.	BSA	ADD-03
32	BE3-07B	Architectural	S120B RFI Documentation Link	5.S120B – does canopy steel shown in 2/S120B require fireproofing?	See response to RFI #28.	BSA	ADD-03
33	BE3-07B	Architectural	S130A RFI Documentation Link	6.S130A – does tube steel shown in detail 2/S130A require fireproofing? – red clouded area	Tube steel supporting 2-hour shaft wall assembly that separates piping shaft and mech shaft above to be fireproofed for 2-hour fire rating. Tube steel supporting catwalk does not require any fireproofing.	BSA	ADD-03
34	BE3-07B	Architectural	S130B RFI Documentation Link	7.S130B – does roof framing shown in red clouded area require fireproofing?	Yes, steel roof framing and supporting columns from column line 12.6 and to the West over the podium below to column line 9 will require 1-hour fire rated fireproofing.	BSA	ADD-03
35	BE3-07B	Architectural	S130B RFI Documentation Link	8.S130B – does tube steel shown in blue clouded area require fireproofing?	See response to RFI #28.	BSA	ADD-03
36	BE3-07B	Architectural	S130B RFI Documentation Link	9.S130B – does tube steel shown in green clouded area in lobby/forum require fireproofing?	See response to RFI #31.	BSA	ADD-03
37	BE3-07B	Architectural	S140A RFI Documentation Link	10.S140A - does tube steel shown in detail 2/S140A require fireproofing? – red clouded area	See response to RFI #33.	BSA	ADD-03
38	BE3-07B	Architectural	S140B RFI Documentation Link	11.S140B - does tube steel shown in green clouded area in lobby/forum require fireproofing?	See response to RFI #31.	BSA	ADD-03
39	BE3-07B	Architectural	S150A RFI Documentation Link	12.S150A - does tube steel shown in detail 2/S150A require fireproofing? – red clouded area	See response to RFI #33.	BSA	ADD-03
40	BE3-07B	Architectural	S150B RFI Documentation Link	13.S150B - does tube steel shown in green clouded area in lobby/forum require fireproofing?	See response to RFI #31.	BSA	ADD-03
41	BE3-07B	Architectural	S160A Documentation Link	14.S160A – does misc tube steel clouded in red require fireproofing?	No, misc tube steel does not require any fireproofing as they only support architectural projections from the main building structural frame as secondary/projected members.	BSA	ADD-03
42	BE3-07B	Architectural	S160B Documentation Link	15.S160B – does roof area clouded in red require fireproofing? Roof is >20' AFF which typically does not require fireproofing?	No, metal deck roofing assembly at top of multi-height space does not require any fireproofing due to being >20' above the 1st floor.	BSA	ADD-03
43	BE3-07B	Architectural	S160B Documentation Link	16. Do Steel Columns starting at ground level and supporting roof area on S160B require fireproofing from ground to roof?	Yes, only 1-hour fire rating is required for steel columns from ground level to roofing assembly above multi-height space.	BSA	ADD-03
46	BE3-07B	Architectural	S120A/B	Second Floor Framing Areas shown on S120A and S120B are slab on deck but per drawings they are roofs classified as either R1.4 or R2. Building Type is 1B which is 2 hour floor decks and 1 hour roof decks. Are these areas to be sprayed as 2 hour floors or as 1 hour roof areas? There is no construction above these areas.	The framing areas designated with Note 8 on S120A & S120B are part of the podium roofing assemblies R1.4 & R2 on A107.5. Therefore, roof structural members are to have spray-applied fireproofing for a 1-hour fire rating with being <20' above the 1st floor based on UL D925 design assembly as noted in Section 05 3600.	BSA	ADD-03
47	BE-09A	Architectural	A135B	Can a description or cut be provided thru 2 on A135B to clear up this condition, also what scope is the walkable ceiling above MTCL3 in?	Refer to Walkable Ceiling (Floor) Requirements description on A135B for system description. System consists of delegated design unistrut framing supporting fiberglass grating system in 4'x4' grid. Below unistrut framing, MTCL3 ceiling assembly will hang from unistrut in 2'x2' grid. Refer to Section 06 7400 for additional information for the fiberglass grating system.	BSA	ADD-03

49	BE-09A	Architectural	A460	-Page A460 shows many ceiling transition details, but almost never referred to on the RCPs. Can some more cuts be provided on the RCP's so it's clear the architects intent on different styles and sizes of edge trim and the locations that they belong.	Details on A460 refer to **typical** ceiling details regarding bulkhead conditions, recessed window shade housing, and ceiling height changes/transitions with appropriate edge trim. Typical ceiling conditions are not typically referred to on RCPs. Additional project-specific ceiling conditions are shown on A461 and are referred to on RCPs. Typical ceiling conditions, with any additional project-specific details, will continue to be vetted and developed into BP4 CDs.	BSA	ADD-03
50	BE-09A	Architectural	A461	-Refer to cut 8 on A461, does this cut belong on all the wood bulk heads on all the floors? Framing Drywall Ceilings scope would own the WDP1 on the face but not the WDC1 on the bottom of bulkhead, please confirm this assumption is correct.	Correct. Refer to A602-A604 interior elevation sheets for noted dimensions on the vertical bulkhead face that differ from the 3'-7" dimension in 8/A461. Also, RFI #51 response clarified that WDC1 should be WDP1.	BSA	ADD-03
52	BE3-08A	Architectural	084413 RFI Documentation Link	Addendum #1 08 4413/2.02E specification calls for an "Overall U-value Including Glazing: 0.24 Btu/(hr. sq ft deg F). Per published information, the basis of design systems composite winter U value (glass & aluminum) for the UT 1600 and UT 2500 systems are 35 and 34 respectively, with insulated glazing that has a winter U Value of .24. See attachments.	Overall U-value for curtain wall systems will be updated to 0.35 & 0.34 respectively based on basis of design systems specified. Updates will be addressed in addendum 03.	BSA	ADD-03
56	BE3-14A	Architectural	142123 Substitution Request Link	Substitution Request - Wright Elevator Solutions	Substitution request is rejected. Proposed finishes and components do not match what is currently specified.	BSA	ADD-03
66	BE3-07B	Architectural	S120A RFI Documentation Link	1.S120A – does canopy clouded in red receive fireproofing? 2.S120A – does mezzanine steel clouded in green receive fireproofing?	1. See response to RFI #28. 2. Yes, steel members supporting mezzanine floor are to receive fireproofing for a 2-hour fire rating.	BSA	ADD-03
67	BE3-07B	Architectural	074213.23 Substitution Request Link	Substitution Request - Alcotex	The substitution will be allowed, permitted the manfacturer can maintain the original design intent and meet the intricacies of the geometry (in plan) of the panels. Mfr required to provide engineering design data in order to provide proper anchorage and stiffeners to support said geometries and meet the performance/loading criteria.	BSA	ADD-03
68		Structural		we are requesting that the tonnage Allowance/Unit Costs requested on this project be converted to a Dollar Allowance, issued by the CM or EOR, to be carried by all steel bidders. a.Drawings S001 calls for inclusion of Unit Costs for a total of 7 tons of steel not shown on drawings with no further explanation of what that steel will look like (referenced also in BE3-05A Scope of Work Items 30 & 31) b.Tonnage allowances are subjective and difficult to determine as there is not (1) unit price that applies to all the items listed in these notes; raw steel wide flange has a different unit cost than channel which has a different unit cost than angle that has a different unit cost than pipe that has a different unit cost than HSS, etc. as well as Unit Fabrication costs for all of these products varies widely depending on what the actual fabrication requirements are. c.We would suggest a Total $40,000 dollar allowance to cover these (2) Allowance Items.	Please carry an allowance of $50,000 in base bid to incorporate S001, 7 tons of steel not shown.	FAW	ADD-03
69		Architectural	05A, 09B	2.Please remove "architectural finish painting" from BE3-05A Scope of Work Item #5. a.Finish painting should be done in the field by a painter, not a steel fabricator.	Yes finish paint should be in painters scope, primer to be compatible with finish paint requirements.	FAW	ADD-03
70		Architectural	09A	Can it be confirmed that unfaced glass batts are acceptable in metal stud partitions?	Unfaced fiberglass batts in interior metal stud partitions is acceptable. This will be updated in Section 09 2116.	BSA	ADD-03
71		Architectural	08A	1.Please advise if architect will review and approve shop drawings and structural calculations prior to the completion of the performance mockup so material procurement and fabrication may run consecutively with testing?	Yes, we will review these concurrently during the performance mock-up testing process. Be advised the risk carried by the fabricator & FAW if fabrication begins before testing is completed and reviewed, if results warrant any modifications to system/project details.	BSA	ADD-03
72		Architectural	08A	1.Please provide a performance mockup drawing or note an area on the elevations what is acceptable to the architect for a testing.	The corner curtain wall condition in the exterior mock-up on A390 can be used as the performance mock-up. Notation will be added to A390 for clarification.	BSA	ADD-03
73		Architectural	08A	We noticed with the issuance of addenda that the overall system U value requirement for the curtain wall systems has changed from .30 to .24. Using thermal value charts provided by Kawneer, the 2500UT Unitwall basis of design will not meet the revised U value requirement. The original U value requirement of .30 is more inline with Kawneer 2500UT Unitwall basis of design. Please advise.	See RFI #52 response.	BSA	ADD-03
74		Architectural	BE3-09A	Per RFI 18, WDP1 and WDP2 is not by bid package BE3-09A. Can Spec section 09 8433 Sound Absorbing Wall Units be removed from the BE3-09A Scope of work document to gain better clarity. WDP1 and WDP2 are the Sound Absorbing Wall units.	Yes, the 09 8433 Sound Absorbing Wall Units are removed from the BE3-09A scope of work.	FAW	ADD-03
75		Architectural	BE3-09A	The partitions schedule and the partition key do not match. Can you please have the architect verify that we are to follow the schedule?	The partition key is meant to explain what each number and/or letter refers to in the construction and materials of the wall type tag from the partition schedule.	BSA	ADD-03

76		Architectural	07 7600 Substitution Request Link	Reading Rock is not included in the standard AIA specification at this time, but we are in the process of being added. Would it be possible to be approved as an equal for the pavers for this project?	Substitution request is rejected. Specification notes porcelain roof pavers, whereas substitution request is for concrete roof pavers.	BSA	ADD-03
77				1.Do we need to submit a prequalification with our bid, even if we are already working with FAW and prequalified?	Yes, on public CMc jobs, we required prequalifications to be submitted with bids on each seperate projects.	FAW	ADD-03
78		Architectural	BE3-07A	2.Sheet A107.5 calls out an R1.4- on sheet A302 . I do not see an R1.4 listed to know that building assembly.	R1.4 is a mark on R1.1. It is same as R1.1 but with drainage board and ballast.	BSA	ADD-03
79		Architectural	BE3-07B	Our scope of work indicates we are to include "metal soffits". Does this also include the steel soffits? Reference architectural elevations keynote "S3" and 2/A330	Steel plate should be provided by the structural steel package BE3-05A.	FAW	
80		Architectural	074213.23 Substitution Request Link	Please see attached substitution request for metal panel sub framing system - Enviro Clip	Substitution request is rejected. Specifications notes a continuous thermal Z-girt support for metal panels, whereas substitution request is for a clip & rail system.	BSA	ADD-03
81		Architectural	Substitution Request	USG emailed a request to be an acceptable manufacturer for Division 09 acoustical ceilings and specialty ceilings. Please confirm if accceptable.	USG can be an approved as a manufacturer of acoustical and specialty ceiling systems. BSA has asked the USG rep to formally submit a substitution request to FAW per formal procedural requirements. For all intents and purposes, USG is hereby approved to bid.	BSA	ADD-03
82		Structural	BE3-05A	Can you remove BE3-05A Scope of Work Item #40 from the Scope?	Line item #40 referencing 2/A135B has been removed from BE3-05A scope of work and will be by others.	FAW	ADD-03
83		Architectural	3/A311	Metalwerks/Atas are pursuing the column covers in spec 057500 for the project and am checking on if the 3 large Interior Atrium columns along Z.5 at Sect 3/A311 are part of the Current Bid Package 07C given they are interior?	BE3-07C needs to include ALL MCM column covers inclusive of the 3 at the Atrium, on the roof, and as shown on 2/A350, A102, etc.	FAW	ADD-03

SECTION 00 0110
TABLE OF CONTENTS

THIS TABLE OF CONTENTS IS CUMULATIVE. SPECIFICATION SECTIONS AND REVISIONS ISSUED SINCE PREVIOUS CUMULATIVE WORK PACKAGE ARE INDICATED WITH BOLD FONT.

SPECIFICATIONS FOR THIS PROJECT ARE BEING BID IN SEPARATE BID PACKAGES BUT BEING ISSUED AS A CUMULATIVE WORK PACKAGE. REQUIREMENTS IN SPECIFICATION SECTIONS MAY BE REVISED AS DESIGN, PRODUCT, AND COORDINATION DECISIONS ARE MADE, AND TO INCLUDE REQUIREMENTS FOR SUBSEQUENT CUMULATIVE WORK PACKAGE REVISIONS THAT WILL BE REISSUED.

SPECIFICATION SECTIONS MAY CONTAIN REQUIREMENTS THAT DO NOT APPLY TO THE SCOPE OF WORK IN THE BID PACKAGES BEING SEPARATED AND ISSUED BY THE CONTRACTOR TO VARIOUS TRADES AND SUBCONTRACTORS, AS WELL AS CROSS REFERENCES TO SPECIFICATION SECTIONS THAT HAVE NOT YET BEEN ISSUED FOR CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING WITH THE ARCHITECT WHETHER A REVISION OF A SPECIFICATION SECTION HAS BEEN ISSUED AND IS CAUTIONED TO DO SO BEFORE PURCHASING PRODUCTS OR STARTING WORK DESCRIBED IN THE SECTION.

CONSTRUCTION CHANGES REQUIRED BECAUSE OF CONTRACTOR'S FAILURE TO USE CORRECT VERSION OF SPECIFICATIONS SECTIONS SHALL BE MADE AT NO ADDITIONAL COST TO OWNER.

PROCUREMENT AND CONTRACTING REQUIREMENTS

DIVISION 00 -- PROCUREMENT AND CONTRACTING REQUIREMENTS

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
00 0105	Certifications Page	12/15/2025	BP3 CD: Core and Shell Package		
00 0110	Table of Contents	12/15/2025	BP3 CD: Core and Shell Package		
00 3100	Available Project Information	12/15/2025	BP3 CD: Core and Shell Package		
00 4325	Substitution Request Form During Procurement	12/15/2025	BP3 CD: Core and Shell Package		

SPECIFICATIONS

DIVISION 01 -- GENERAL REQUIREMENTS

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
01 2000	Price and Payment Procedures	12/15/2025	BP3 CD: Core and Shell Package		

01 2300	Alternates	12/15/2025	BP4 100% DD: Build-Out Package		
01 2500	Substitution Procedures	12/15/2025	BP3 CD: Core and Shell Package		
01 3000	Administrative Requirements	12/15/2025	BP3 CD: Core and Shell Package		
01 3329.02	Sustainable Design Reporting - LEED v4	12/15/2025	BP3 CD: Core and Shell Package		
01 3566.05	Project Sustainability Goal Credit Summary - LEED v4	12/15/2025	BP3 CD: Core and Shell Package		
01 3566.12	Sustainability Certification Project Procedures - LEED v4	12/15/2025	BP3 CD: Core and Shell Package		
01 4000	Quality Requirements	12/15/2025	BP3 CD: Core and Shell Package		
01 4219	Reference Standards	12/15/2025	BP3 CD: Core and Shell Package		
01 6000	Product Requirements	12/15/2025	BP3 CD: Core and Shell Package		
01 6116	Volatile Organic Compound (VOC) Content Restrictions	12/15/2025	BP3 CD: Core and Shell Package		
01 7000	Execution and Closeout Requirements	12/15/2025	BP3 CD: Core and Shell Package		
01 7419	Construction Waste Management and Disposal	12/15/2025	BP3 CD: Core and Shell Package		
01 7800	Closeout Submittals	12/15/2025	BP3 CD: Core and Shell Package		
01 7900	Demonstration and Training	12/15/2025	BP3 CD: Core and Shell Package		
01 8000	Airborne Contaminants Control	12/15/2025	BP3 CD: Core and Shell Package		
01 8001	Contractor Project Procedures	12/15/2025	BP3 CD: Core and Shell Package		
01 9100	Commissioning	12/15/2025	BP4 100% DD: Build-Out Package		
01 9151	Systems Manual	12/15/2025	BP4 100% DD: Build-Out Package		

DIVISION 02 -- EXISTING CONDITIONS

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision

02 0100	Maintenance of Existing Conditions	09/29/2025	BP1 CD: Site and Foundation Package		
02 4113	Selective Site Demolition	11/17/2025	BP2 CD: Early Equipment Package		

DIVISION 03 -- CONCRETE

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
03 1000	Concrete Formwork	09/29/2025	BP1 CD: Site and Foundation Package	12/15/2025	2
03 2000	Concrete Reinforcement	09/29/2025	BP1 CD: Site and Foundation Package	12/15/2025	2
03 3000	Cast-in-Place Concrete	09/29/2025	BP1 CD: Site and Foundation Package	12/15/2025	2
03 4500	Precast Architectural Concrete	12/15/2025	BP3 CD: Core and Shell Package	12/15/2025	
03 5216	Lightweight Insulating Concrete	01/07/2026	BP3 CD: Addendum 01		
03 6000	Epoxy Grout	09/29/2025	BP1 CD: Site and Foundation Package	12/15/2025	2
03 6001	Grouting	09/29/2025	BP1 CD: Site and Foundation Package	12/15/2025	2
03 6200	Non Shrink Grouting	09/29/2025	BP1 CD: Site and Foundation Package	12/15/2025	2

DIVISION 04 -- MASONRY

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
04 2000	Unit Masonry	12/15/2025	BP3 CD: Core and Shell Package		
04 4313	Stone Masonry Veneer	12/15/2025	BP3 CD: Core and Shell Package		

DIVISION 05 -- METALS

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
05 1200	Structural Steel Framing	12/15/2025	BP3 CD: Core and Shell Package		
05 3123	Steel Roof Decking	12/15/2025	BP3 CD: Core and Shell Package		
05 3600	Composite Metal Decking	12/15/2025	BP3 CD: Core and Shell Package		

05 4000	Cold-Formed Metal Framing	12/15/2025	BP3 CD: Core and Shell Package		
05 5000	Metal Fabrications	12/15/2025	BP3 CD: Core and Shell Package		
05 5100	Metal Stairs	12/15/2025	BP3 CD: Core and Shell Package		
05 5133	Metal Ladders	12/15/2025	BP3 CD: Core and Shell Package		
05 5213	Pipe and Tube Railings	12/15/2025	BP3 CD: Core and Shell Package		
05 7100	Decorative Metal Stairs	12/15/2025	BP3 CD: Core and Shell Package		
05 7300	Decorative Metal Railings	12/15/2025	BP4 100% DD: Build-Out Package		
05 7500	Decorative Formed Metal	12/15/2025	BP4 100% DD: Build-Out Package		

DIVISION 06 -- WOOD, PLASTICS, AND COMPOSITES

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06 1053	Miscellaneous Rough Carpentry	12/15/2025	BP3 CD: Core and Shell Package		
06 1600	Sheathing - USG	12/15/2025	BP3 CD: Core and Shell Package		
06 4100	Architectural Wood Casework	12/15/2025	BP4 100% DD: Build-Out Package		
06 6413	Translucent Resin Panel Fabrications	12/15/2025	BP4 100% DD: Build-Out Package		

DIVISION 07 -- THERMAL AND MOISTURE PROTECTION

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
07 1113	Bituminous Dampproofing	09/29/2025	BP1 CD: Site and Foundation Package		
07 1300	Sheet Waterproofing	09/29/2025	BP1 CD: Site and Foundation Package		
07 1616	Crystalline Waterproofing	09/29/2025	BP1 CD: Site and Foundation Package		
07 2100	Thermal Insulation	12/15/2025	BP3 CD: Core and Shell Package		
07 2400	Exterior Insulation and Finish Systems	12/15/2025	BP3 CD: Core and Shell Package		
07 2700	Air Barriers	12/15/2025	BP3 CD: Core and Shell Package		

07 4113	Metal Roof Panels	12/15/2025	BP3 CD: Core and Shell Package		
07 4213	**Metal Wall Panels**	**01/19/2026**	**BP3 CD: Addendum 03**		
07 4213.19	Insulated Metal Wall Panels	12/15/2025	BP3 CD: Core and Shell Package		
07 4213.23	**Metal Composite Material Wall Panels**	**12/15/2025**	**BP3 CD: Core and Shell Package**	**01/19/2026**	**2**
07 5323	**EPDM Thermoset Single-Ply Roofing - Carlisle**	**12/15/2025**	**BP3 CD: Core and Shell Package**	**01/19/2026**	**3**
07 5556	Fluid- Applied Protected Membrane Roofing	12/15/2025	BP3 CD: Core and Shell Package		
07 6200	**Sheet Metal Flashing and Trim**	**12/15/2025**	**BP3 CD: Core and Shell Package**	**01/19/2026**	**2**
07 7100	Roof Specialties	12/15/2025	BP3 CD: Core and Shell Package		
07 7200	Roof Accessories	12/15/2025	BP3 CD: Core and Shell Package		
07 7600	Roof Pavers	12/15/2025	BP3 CD: Core and Shell Package		
07 8100	Applied Fire Protection	12/15/2025	BP3 CD: Core and Shell Package		
07 8400	Firestopping	12/15/2025	BP3 CD: Core and Shell Package		
07 8700	Smoke Containment Barriers	12/15/2025	BP4 100% DD: Build-Out Package		
07 9200	Joint Sealants	12/15/2025	BP3 CD: Core and Shell Package		

DIVISION 08 -- OPENINGS

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
08 1113	Hollow Metal Doors and Frames	12/15/2025	BP3 CD: Core and Shell Package		
08 1116	Aluminum Doors and Frames	12/15/2025	BP3 CD: Core and Shell Package		
08 3100	Access Doors and Panels	12/15/2025	BP4 100% DD: Build-Out Package		
08 3323	Overhead Coiling Doors	12/15/2025	BP3 CD: Core and Shell Package	01/07/2026	2
08 3400	Special Function Doors	12/15/2025	BP4 100% DD: Build-Out Package		
08 4313	Aluminum-Framed Storefronts	12/15/2025	BP4 100% DD: Build-Out Package		

08 4413	**Glazed Aluminum Curtain Walls**	**12/15/2025**	**BP3 CD: Core and Shell Package**	**01/19/2026**	**3**
08 4435	Protective Framed Glazing Assemblies	12/15/2025	BP4 100% DD: Build-Out Package		
08 7100	Door Hardware	12/15/2025	BP4 100% DD: Build-Out Package		
08 8000	Glazing	12/15/2025	BP3 CD: Core and Shell Package	01/07/2026	2
08 8720	Architectural Glazing Film	12/15/2025	BP4 100% DD: Build-Out Package		
08 8813	Fire-Rated Glazing	12/15/2025	BP4 100% DD: Build-Out Package		
08 9100	Louvers	12/15/2025	BP3 CD: Core and Shell Package	01/07/2026	2

DIVISION 09 -- FINISHES

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
09 2116	**Gypsum Board Assemblies**	**12/15/2025**	**BP3 CD: Core and Shell Package**	**01/19/2026**	**2**
09 3013	Ceramic Tiling	12/15/2025	BP4 100% DD: Build-Out Package		
09 5000	Acoustical Panels	12/15/2025	BP4 100% DD: Build-Out Package		
09 5100	Linear Acoustical Panel Ceilings	12/15/2025	BP4 100% DD: Build-Out Package		
09 5123	Acoustical Tile Ceilings	12/15/2025	BP4 100% DD: Build-Out Package		
09 5423	Metal Ceilings	12/15/2025	BP4 100% DD: Build-Out Package		
09 6513	Resilient Base and Accessories	12/15/2025	BP4 100% DD: Build-Out Package		
09 6516	Resilient Sheet Flooring	12/15/2025	BP4 100% DD: Build-Out Package		
09 6519	Resilient Tile Flooring	12/15/2025	BP4 100% DD: Build-Out Package		
09 6536	Static-Control Resilient Flooring	12/15/2025	BP4 100% DD: Build-Out Package		
09 6623	Resinous Matrix Terrazzo Flooring	12/15/2025	BP4 100% DD: Build-Out Package		
09 6723	Resinous Flooring	12/15/2025	BP4 100% DD: Build-Out Package		
09 6813	Tile Carpeting	12/15/2025	BP4 100% DD: Build-Out Package		
09 7200	Wall Coverings	12/15/2025	BP4 100% DD: Build-Out Package		

09 7713	Stretched-Fabric Wall Systems	12/15/2025	BP4 100% DD: Build-Out Package		
09 8433	Sound Absorbing Wall Units	12/15/2025	BP4 100% DD: Build-Out Package		
09 9113	**Exterior Painting**	**12/15/2025**	**BP3 CD: Core and Shell Package**	**01/19/2026**	**2**
09 9123	Interior Painting	12/15/2025	BP4 100% DD: Build-Out Package		

DIVISION 10 -- SPECIALTIES

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
10 1100	Visual Display Boards	12/15/2025	BP4 100% DD: Build-Out Package		
10 1419	Dimensional Letter Signage	12/15/2025	BP4 100% DD: Build-Out Package		
10 2113.13	Metal Toilet Compartments	12/15/2025	BP4 100% DD: Build-Out Package		
10 2213	Wire Mesh Partitions	12/15/2025	BP3 CD: Core and Shell Package		
10 2239	Folding Panel Partitions	12/15/2025	BP4 100% DD: Build-Out Package		
10 2600	Wall and Door Protection	12/15/2025	BP4 100% DD: Build-Out Package		
10 2800	Toilet, Bath, and Laundry Accessories	12/15/2025	BP4 100% DD: Build-Out Package		
10 4300	Emergency Aid Specialties	12/15/2025	BP4 100% DD: Build-Out Package		
10 4400	Fire Protection Specialties	12/15/2025	BP4 100% DD: Build-Out Package		
10 5113	Metal Locker	12/15/2025	BP4 100% DD: Build-Out Package		
10 5129	Phenolic Lockers	12/15/2025	BP4 100% DD: Build-Out Package		
10 5500	Postal Specialties	12/15/2025	BP4 100% DD: Build-Out Package		
10 5617	Wall Mounted Standards and Shelving	12/15/2025	BP4 100% DD: Build-Out Package		
10 7343	Transportation Stop Shelters	09/29/2025	BP1 CD: Site and Foundation Package		
10 7500	Flagpoles	09/29/2025	BP1 CD: Site and Foundation Package		
10 8213	Exterior Grilles and Screens	12/15/2025	BP3 CD: Core and Shell Package		

10 8223	Interior Grilles and Screens	12/15/2025	BP4 100% DD: Build-Out Package		

DIVISION 11 -- EQUIPMENT

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
11 3013	Residential Appliances	12/15/2025	BP4 100% DD: Build-Out Package		
11 5300	Miscellaneous Laboratory Equipment	12/15/2025	BP4 100% DD: Build-Out Package		
11 5313	Laboratory Fume Hoods	12/15/2025	BP4 100% DD: Build-Out Package		
11 5317	Laboratory Glassware Washers	12/15/2025	BP4 100% DD: Build-Out Package		
11 5319	Laboratory Sterilizers with Electric Steam Generators	12/15/2025	BP4 100% DD: Build-Out Package		
11 8129	Facility Fall Protection	12/15/2025	BP3 CD: Core and Shell Package		

DIVISION 12 -- FURNISHINGS

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
12 2413	Roller Window Shades	12/15/2025	BP4 100% DD: Build-Out Package		
12 3553	General Requirements for Laboratory Casework and Fume Hoods	12/15/2025	BP4 100% DD: Build-Out Package		
12 3553.03	Adaptable Laboratory Casework Systems	12/15/2025	BP4 100% DD: Build-Out Package		
12 3553.13	Metal Laboratory Casework	12/15/2025	BP4 100% DD: Build-Out Package		
12 3661	Simulated Stone Countertops	12/15/2025	BP4 100% DD: Build-Out Package		
12 9300	Site Furnishings	09/29/2025	BP1 CD: Site and Foundation Package	10/15/2025	2

DIVISION 13 -- SPECIAL CONSTRUCTION

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision

13 2100	Controlled Environmental Rooms	12/15/2025	BP4 100% DD: Build-Out Package		

DIVISION 14 -- CONVEYING EQUIPMENT

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
14 2123	Machine Room-Less Electric Traction Passenger Elevators	12/15/2025	BP3 CD: Core and Shell Package		

DIVISION 21 -- FIRE SUPPRESSION

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
21 0800	Commissioning of Fire Suppression Systems	12/15/2025	BP4 100% DD: Build-Out Package		
21 1300	Fire Sprinkler and Standpipe Systems	12/15/2025	BP4 100% DD: Build-Out Package		
21 3000	Fire Pumps, Pump Controllers, and Other Appurtenances	12/15/2025	BP4 100% DD: Build-Out Package		

DIVISION 22 -- PLUMBING

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
22 0800	Commissioning of Plumbing Systems	12/15/2025	BP4 100% DD: Build-Out Package		
22 1316	Sanitary Waste and Vent Piping	09/29/2025	BP1 CD: Site and Foundation Package		
22 1413	Facility Storm Drainage Piping	09/29/2025	BP1 CD: Site and Foundation Package		

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Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
23 0500	Common Work Results for HVAC	12/15/2025	BP4 100% DD: Build-Out Package		
23 0513	Common Motor Requirements for HVAC Equipment	11/17/2025	BP2 CD: Early Equipment Package		
23 0517	Sleeves and Sleeve Seals for HVAC Piping	12/15/2025	BP4 100% DD: Build-Out Package		

23 0519	Meters and Gauges for HVAC Piping	12/15/2025	BP4 100% DD: Build-Out Package		
23 0523	General-Duty Valves for HVAC Piping	12/15/2025	BP4 100% DD: Build-Out Package		
23 0529	Hangers and Supports for HVAC Piping and Equipment	12/15/2025	BP4 100% DD: Build-Out Package		
23 0548	Vibration and Noise Control for HVAC, Piping, and Equipment	12/15/2025	BP4 100% DD: Build-Out Package		
23 0553	Identification for HVAC Piping and Equipment	12/15/2025	BP4 100% DD: Build-Out Package		
23 0593	Testing, Adjusting, and Balancing for HVAC	12/15/2025	BP4 100% DD: Build-Out Package		
23 0595	Certification of Fume Hoods and Filter Testing	12/15/2025	BP4 100% DD: Build-Out Package		
23 0713	Duct Insulation	12/15/2025	BP4 100% DD: Build-Out Package		
23 0716	HVAC Equipment Insulation	12/15/2025	BP4 100% DD: Build-Out Package		
23 0719	HVAC Piping Insulation	12/15/2025	BP4 100% DD: Build-Out Package		
23 0800	Commissioning of HVAC Systems	12/15/2025	BP4 100% DD: Build-Out Package		
23 0906	Control Installation Contract	12/15/2025	BP4 100% DD: Build-Out Package		
23 2113	Hydronic Piping	12/15/2025	BP4 100% DD: Build-Out Package		
23 2114	Hydronic Specialties	12/15/2025	BP4 100% DD: Build-Out Package		
23 2123	Hydronic Pumps	12/15/2025	BP4 100% DD: Build-Out Package		
23 2500	HVAC Water Treatment	12/15/2025	BP4 100% DD: Build-Out Package		
23 2501	Glycol Water Treatment	12/15/2025	BP4 100% DD: Build-Out Package		
23 3100	HVAC Ducts and Casings	12/15/2025	BP4 100% DD: Build-Out Package		
23 3300	Air Duct Accessories	12/15/2025	BP4 100% DD: Build-Out Package		
23 3319	Duct Silencers	12/15/2025	BP4 100% DD: Build-Out Package		
23 3420	Induced Dilution Exhaust Fans	12/15/2025	BP4 100% DD: Build-Out Package		

23 3439	High-Volume, Low-Speed Propeller Fans	12/15/2025	BP4 100% DD: Build-Out Package		
23 3600	Air Terminal Units	12/15/2025	BP4 100% DD: Build-Out Package		
23 3700	Air Outlets and Inlets	12/15/2025	BP4 100% DD: Build-Out Package		
23 5100	Breechings, Chimneys, and Stacks	12/15/2025	BP3 CD: Core and Shell Package		
23 5216	Condensing Boilers	12/15/2025	BP4 100% DD: Build-Out Package		
23 5700	Heat Exchangers for HVAC	12/15/2025	BP4 100% DD: Build-Out Package		
23 6416	Centrifugal Water Chillers	11/17/2025	BP2 CD: Early Equipment Package	12/09/2025	2
23 6514	Induced-Draft Cooling Towers	11/17/2025	BP2 CD: Early Equipment Package	12/09/2025	2
23 7200	Air-to-Air Energy Recovery Equipment	11/17/2025	BP2 CD: Early Equipment Package		
23 7213	Custom Air Handling Units	11/17/2025	BP2 CD: Early Equipment Package		
23 8200	Miscellaneous Heating and Cooling Units	12/15/2025	BP4 100% DD: Build-Out Package		
23 8214	Chilled Beams	12/15/2025	BP4 100% DD: Build-Out Package		
23 8216	Air Coils	12/15/2025	BP4 100% DD: Build-Out Package		
23 8241	Water-to-Water Heat Pumps	12/15/2025	BP4 100% DD: Build-Out Package		
23 8413.29	Self-Contained Humidifiers	12/15/2025	BP4 100% DD: Build-Out Package		

DIVISION 25 -- INTEGRATED AUTOMATION (NOT USED)

DIVISION 26 -- ELECTRICAL

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
26 0513	Medium-Voltage Cables	11/17/2025	BP2 CD: Early Equipment Package	12/09/2025	2
26 0519	Low-Voltage Electrical Power Conductors and Cables	12/15/2025	BP4 100% DD: Build-Out Package		
26 0526	Grounding and Bonding for Electrical Systems	12/15/2025	BP4 100% DD: Build-Out Package		

26 0529	Hangers and Supports for Electrical Systems	12/15/2025	BP4 100% DD: Build-Out Package		
26 0533.13	Conduit for Electrical Systems	12/15/2025	BP4 100% DD: Build-Out Package		
26 0533.16	Boxes for Electrical Systems	12/15/2025	BP4 100% DD: Build-Out Package		
26 0533.23	Surface Raceways for Electrical Systems	12/15/2025	BP4 100% DD: Build-Out Package		
26 0536	Cable Trays for Electrical Systems	12/15/2025	BP4 100% DD: Build-Out Package		
26 0543	Electrical Underground Ducts, Ductbanks, and Manholes	11/17/2025	BP2 CD: Early Equipment Package	12/09/2025	2
26 0548	Vibration and Seismic Controls for Electrical Systems	12/15/2025	BP4 100% DD: Build-Out Package		
26 0553	Identification for Electrical Systems	12/15/2025	BP4 100% DD: Build-Out Package		
26 0573	Power System Studies	12/15/2025	BP4 100% DD: Build-Out Package		
26 0800	Commissioning of Electrical Systems	12/15/2025	BP4 100% DD: Build-Out Package		
26 0923	Lighting Control Devices	12/15/2025	BP4 100% DD: Build-Out Package		
26 1116	Secondary Unit Substations	11/17/2025	BP2 CD: Early Equipment Package	12/09/2025	2
26 2200	Low-Voltage Transformers	12/15/2025	BP4 100% DD: Build-Out Package		
26 2413	Switchboards	12/15/2025	BP4 100% DD: Build-Out Package		
26 2416	Panelboards	12/15/2025	BP4 100% DD: Build-Out Package		
26 2726	Wiring Devices	12/15/2025	BP4 100% DD: Build-Out Package		
26 2813	Fuses	12/15/2025	BP4 100% DD: Build-Out Package		
26 2816.13	Enclosed Circuit Breakers	12/15/2025	BP4 100% DD: Build-Out Package		
26 2816.16	Enclosed Switches	12/15/2025	BP4 100% DD: Build-Out Package		
26 2913	Enclosed Controllers	12/15/2025	BP4 100% DD: Build-Out Package		
26 2923	Variable-Frequency Motor Controllers	12/15/2025	BP4 100% DD: Build-Out Package		
26 3213	Engine Generators	11/17/2025	BP2 CD: Early Equipment Package	12/09/2025	2

26 3600	Transfer Switches	11/17/2025	BP2 CD: Early Equipment Package	12/09/2025	2
26 3633	Connection Cabinets for Portable Generators and Load Banks	12/15/2025	BP4 100% DD: Build-Out Package		
26 4100	Facility Lightning Protection	12/15/2025	BP4 100% DD: Build-Out Package		
26 4300	Surge Protective Devices	12/15/2025	BP4 100% DD: Build-Out Package		
26 5100	Interior Lighting	12/15/2025	BP4 100% DD: Build-Out Package		
26 5600	Exterior Lighting	12/15/2025	BP4 100% DD: Build-Out Package		

DIVISION 27 -- COMMUNICATIONS

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
27 0100	Operation and Maintenance	12/15/2025	BP4 100% DD: Build-Out Package		
27 0200	References	12/15/2025	BP4 100% DD: Build-Out Package		
27 0300	Definitions	12/15/2025	BP4 100% DD: Build-Out Package		
27 0410	Quality Assurance	12/15/2025	BP4 100% DD: Build-Out Package		
27 0420	Submittals	12/15/2025	BP4 100% DD: Build-Out Package		
27 0430	Delivery, Storage and Handling	12/15/2025	BP4 100% DD: Build-Out Package		
27 0440	Sequencing and Scheduling	12/15/2025	BP4 100% DD: Build-Out Package		
27 0450	General Installation	12/15/2025	BP4 100% DD: Build-Out Package		
27 0460	Testing and Documentation	12/15/2025	BP4 100% DD: Build-Out Package		
27 0470	Record Drawings	12/15/2025	BP4 100% DD: Build-Out Package		
27 0480	Warranty	12/15/2025	BP4 100% DD: Build-Out Package		
27 0500	Common Work Results	12/15/2025	BP4 100% DD: Build-Out Package		
27 0526	Grounding and Bonding	12/15/2025	BP4 100% DD: Build-Out Package		
27 0528	Pathways	12/15/2025	BP4 100% DD: Build-Out Package		

27 0529	Hangers and Supports	12/15/2025	BP4 100% DD: Build-Out Package		
27 0533	Conduits and Backboxes	12/15/2025	BP4 100% DD: Build-Out Package		
27 0536	Cable Trays	12/15/2025	BP4 100% DD: Build-Out Package		
27 0539	Surface Raceways	12/15/2025	BP4 100% DD: Build-Out Package		
27 0543	Underground Duct Systems and Raceways	12/15/2025	BP4 100% DD: Build-Out Package		
27 0600	Schedules for Communications	12/15/2025	BP4 100% DD: Build-Out Package		
27 1100	Equipment Room Fittings	12/15/2025	BP4 100% DD: Build-Out Package		
27 1113	Entrance Protection	12/15/2025	BP4 100% DD: Build-Out Package		
27 1116	Cabinets, Racks, Frames and Enclosures	12/15/2025	BP4 100% DD: Build-Out Package		
27 1119	Termination Blocks and Patch Panels	12/15/2025	BP4 100% DD: Build-Out Package		
27 1123	Cable Management and Ladder Rack	12/15/2025	BP4 100% DD: Build-Out Package		
27 1136	Equipment Rack Layouts	12/15/2025	BP4 100% DD: Build-Out Package		
27 1146	Equipment Room Layout	12/15/2025	BP4 100% DD: Build-Out Package		
27 1200	Transmission Media	12/15/2025	BP4 100% DD: Build-Out Package		
27 1313	Copper Backbone Cabling	12/15/2025	BP4 100% DD: Build-Out Package		
27 1323	Optical Fiber Backbone Cabling	12/15/2025	BP4 100% DD: Build-Out Package		
27 1333	Backbone Coax	12/15/2025	BP4 100% DD: Build-Out Package		
27 1500	Horizontal Cabling	12/15/2025	BP4 100% DD: Build-Out Package		
27 1513	Horizontal Copper Cabling	12/15/2025	BP4 100% DD: Build-Out Package		
27 1516	Voice Communications Horizontal Cabling	12/15/2025	BP4 100% DD: Build-Out Package		
27 1519	Data Communications Copper Horizontal Cabling	12/15/2025	BP4 100% DD: Build-Out Package		

27 1533	Horizontal Coaxial Cabling	12/15/2025	BP4 100% DD: Build-Out Package		
27 1543	Faceplates and Connectors	12/15/2025	BP4 100% DD: Build-Out Package		
27 4000	Audio-Video Communications	12/15/2025	BP4 100% DD: Build-Out Package		
27 9999	Appendix: Design Guide	12/15/2025	BP4 100% DD: Build-Out Package		

DIVISION 28 -- ELECTRONIC SAFETY AND SECURITY

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
28 0413	Common Submittal Requirements for Electronic Safety and Security	12/15/2025	BP4 100% DD: Build-Out Package		
28 0513	Conductors and Cables for Electronic Safety and Security	12/15/2025	BP4 100% DD: Build-Out Package		
28 0526	Grounding and Bonding for Electronic Safety and Security	12/15/2025	BP4 100% DD: Build-Out Package		
28 0528	Pathways for Electronic Safety and Security	12/15/2025	BP4 100% DD: Build-Out Package		
28 0544	Sleeves and Sleeve Seals for Electronic Safety and Security Pathways and Cabling	12/15/2025	BP4 100% DD: Build-Out Package		
28 1300	Access Control	12/15/2025	BP4 100% DD: Build-Out Package		
28 2300	Video Surveillance	12/15/2025	BP4 100% DD: Build-Out Package		
28 3111	Digital, Addressable Fire-Alarm System	12/15/2025	BP4 100% DD: Build-Out Package		

DIVISION 31 -- EARTHWORK

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
31 1100	Site Clearing	09/29/2025	BP1 CD: Site and Foundation Package		
31 2000	Earthwork	11/17/2025	BP2 CD: Early Equipment Package		
31 2323	Flowable Fill	09/29/2025	BP1 CD: Site and Foundation Package		

31 2330	CU Structural Soil	09/29/2025	BP1 CD: Site and Foundation Package		
31 2500	Erosion Control	09/29/2025	BP1 CD: Site and Foundation Package		
31 3116	Termite Control	09/29/2025	BP1 CD: Site and Foundation Package		
31 6000	Rammed Aggregate Pier	09/29/2025	BP1 CD: Site and Foundation Package		

DIVISION 32 -- EXTERIOR IMPROVEMENTS

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
32 1216	Asphalt Paving	09/29/2025	BP1 CD: Site and Foundation Package		
32 1300	Site Concrete	09/29/2025	BP1 CD: Site and Foundation Package		
32 1723	Pavement Marking	09/29/2025	BP1 CD: Site and Foundation Package		
32 8000	Irrigation System (Design-Build)	09/29/2025	BP1 CD: Site and Foundation Package		
32 9200	Seeding	09/29/2025	BP1 CD: Site and Foundation Package		
32 9223	Sodding	11/26/2025	ASI 003		
32 9300	Planting	09/29/2025	BP1 CD: Site and Foundation Package		
32 9443	Tree Grate	09/29/2025	BP1 CD: Site and Foundation Package		
32 9450	Pavement Support System	09/29/2025	BP1 CD: Site and Foundation Package		

DIVISION 33 -- UTILITIES

Section Number	Section Name	Section Issue Date	Section Issue Description	Current Revision Date	Current Revision
33 0500	Common Work Results for Utilities	11/17/2025	BP2 CD: Early Equipment Package		
33 1000	Site Water Distribution	09/29/2025	BP1 CD: Site and Foundation Package		
33 3000	Sanitary Sewers	11/17/2025	BP2 CD: Early Equipment Package		
33 4000	Storm Drainage	09/29/2025	BP1 CD: Site and Foundation Package		
33 4600	Subdrainage	09/29/2025	BP1 CD: Site and Foundation Package		

END OF SECTION 00 0110

SECTION 07 4213.23
METAL COMPOSITE MATERIAL WALL PANELS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Exterior cladding consisting of formed metal composite material (MCM) sheet, secondary supports, and anchors to structure, attached to solid backup.

B. Matching flashing and trim, including parapet coping.

1.02 RELATED REQUIREMENTS

A. Section 04 2000 - Unit Masonry: Installation of anchors.

B. Section 05 4000 - Cold-Formed Metal Framing: Panel support framing.

C. Section 07 2700 - Air Barriers: Air and water-resistive barrier behind wall panel system.

D. Section 07 6200 - Sheet Metal Flashing and Trim: Metal flashing components integrated with this wall system.

E. Section 07 9200 - Joint Sealants: Sealing joints between siding and adjacent construction and fixtures.

1.03 REFERENCE STANDARDS

A. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix).

B. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.

C. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.

D. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.

E. ASTM A276/A276M - Standard Specification for Stainless Steel Bars and Shapes.

F. ASTM A480/A480M - Standard Specification for General Requirements for Flat-Rolled Stainless and Heat-Resisting Steel Plate, Sheet, and Strip.

G. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

H. ASTM A666/A666M - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.

I. ASTM A792/A792M - Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.

J. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.

K. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.

L. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric).

M. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.

N. ASTM D1781 - Standard Test Method for Climbing Drum Peel for Adhesives.

O. ASTM D1929 - Standard Test Method for Determining Ignition Temperature of Plastics.

P. ASTM D4145 - Standard Test Method for Coating Flexibility of Prepainted Sheet.

Q. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

R. ASTM E283/E283M - Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Skylights, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.

S. ASTM E330/E330M - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.

T. ASTM E331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference.

U. NFPA 285 - Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Pre-Installation Meeting: Convene one week before starting work of this section to verify project requirements, coordinate with installers of other work, establish condition and completeness of building substrate, and review manufacturers' installation instructions and warranty requirements.
   1. Require attendance by the installer and relevant sub-contractors.
   2. Include MCM sheet manufacturer’s representative and wall system manufacturer’s representative to review storage and handling procedures.
   3. Review in detail truck transportation, parking, vertical transportation, schedule, personnel, installation of adjacent materials and substrate.
   4. Review procedures for protection of work and other construction.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data - MCM Sheets: Manufacturer's data sheets on each product to be used, including thickness, physical characteristics, and finish, and:
   1. Finish manufacturer's data sheet showing physical and performance characteristics.
   2. Storage and handling requirements and recommendations.
   3. Fabrication instructions and recommendations.
   4. Specimen warranty for finish, as specified herein.

C. Product Data - Wall System: Manufacturer's data sheets on each product to be used, including:
   1. Physical characteristics of components shown on shop drawings.
   2. Storage and handling requirements and recommendations.
   3. Installation instructions and recommendations.
   4. Specimen warranty for wall system, as specified herein.

D. Shop Drawings: Show layout and elevations, dimensions and thickness of panels, connections, details and location of joints, sealants and gaskets, method of anchorage, support clips, fasteners, number of anchors, supports, reinforcement, trim, flashings, and accessories.
   1. Indicate panel numbering system.
   2. Differentiate between shop and field fabrication.
   3. Indicate substrates and adjacent work with which the wall system must be coordinated.
   4. Include large-scale details of anchorages and connecting elements.

5. Include large-scale details or schematic, exploded or isometric diagrams to fully explain flashing at a scale of not less than 1-1/2 inches per 12 inches.
6. Include design engineer's stamp or seal on shop drawings for attachments and anchors.

E. Selection Samples: For each finish product specified, submit at least three sample color chips representing manufacturer's custom range of available colors and patterns.
1. Sealant Color: Color to match wall panels.

F. Verification Samples: For each finish product specified, submit at least three samples, minimum size 12 inch square, and representing actual product in color and texture.

G. Design Data: Submit structural calculations stamped by design engineer, for Architect's information and project record.

H. Test Report: Submit report of full-size mock-up tests for air infiltration, water penetration, and wind performance.

I. Test Report: Submit test report verifying compliance with NFPA 285 for previously-tested exterior wall assembly.

J. Manufacturer's Field Reports: Provide within 48 hours of field review. State what was observed and what changes, if any, were requested or required.

K. Designer's qualification statement.

L. Manufacturer's qualification statement.

M. Installer's qualification statement.

N. Testing agency's qualification statement.

O. Maintenance Data: Care of finishes and warranty requirements.

P. Executed Warranty: Submit warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

Q. Warranty Documentation for Installation of Building Rainscreen Assembly: Submit installer warranty and ensure that forms have been completed in Owner's name and registered with installer.

1.06 QUALITY ASSURANCE

A. Design Engineer's Qualifications: Design structural supports and anchorages under direct supervision of a Structural Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

B. Manufacturer Qualifications: Company specializing in manufacturing wall panel systems specified in this section.
1. With not less than ten years of documented experience.
2. Approved by MCM sheet manufacturer.

C. Installer Qualifications: Company specializing in performing work of type specified in this section.
1. With minimum five years of documented experience.
2. Approved by wall panel system manufacturer.

D. Testing Agency Qualifications: Independent agency experienced in testing assemblies of the type required for this project and having the necessary facilities for full-size mock-up testing of the type specified.

1.07 MOCK-UPS

A. See Section 01 4000 - Quality Requirements for additional requirements.

B. Provide a mock-up for evaluation of fabrication workmanship.
   1. Build mockup of typical composite metal panel assembly including outside and inside corner conditions, custom panel profiles, interfaced with curtainwall as applicable, supports, stud framing, and all required attachments and accessories.
   2. Demonstrate continuity, air and water-tightness of air and water barrier and installation and attachment of continuous exterior insulation.
   3. Maintenance: Maintain mock-up during construction for workmanship comparison.
   4. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically indicates such deviations in writing.

C. Locate as indicated on drawings.

D. Provide specified finish on panels.

E. Mock-up may not remain as part of work.

1.08 DELIVERY, STORAGE, AND HANDLING

A. See Section 01 7419 - Construction Waste Management and Disposal for packaging waste requirements.

B. Deliver products in manufacturer's original, unopened, undamaged containers with identification labels intact.
   1. Protect finishes by applying heavy-duty removable plastic film during production.
   2. Package for protection against transportation damage.
   3. Provide markings to identify components consistently with drawings.
   4. Exercise care in unloading, storing, and installing panels to prevent bending, warping, twisting, and surface damage.

C. Store products protected from exposure to harmful weather conditions and at temperature conditions recommended by manufacturer.
   1. Store in well-ventilated space out of direct sunlight.
   2. Protect from moisture and condensation with tarpaulins or other suitable weathertight covering installed to provide ventilation.
   3. Store at a slope to ensure positive drainage of accumulated water.
   4. Do not store in enclosed space where ambient temperature can exceed 120 degrees F.
   5. Avoid contact with other materials that might cause staining, denting, or other surface damage.

1.09 FIELD CONDITIONS

A. Do not install panels when air temperature or relative humidity are outside manufacturer's limits.

1.10 WARRANTY

A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

B. Special Warranty: Provide 10-year warranty covering water tightness and integrity of seals of wall panels. Complete forms in Owner's name and register with warrantor.

C. Finish Warranty: Provide 20-year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking. Complete forms in Owner's name and register with warrantor.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Metal Composite Material (MCM) Sheet Manufacturers:
   1. ALUCOBOND by 3A Composites USA; ALUCOBOND PLUS: www.alucobondusa.com/#sle.
   2. ALPOLIC Materials; ALPOLIC/fr (Fire Retardant core): www.alpolic-americas.com/#sle.
   3. Fairview Architectural LLC; VitraBond (Fire Rated): www.fairview-na.com/#sle.

B. Wall Panel System Manufacturers:
   1. Sobotec Ltd; SL-2000: www.sobotec.com/#sle.
   2. Architectural Metals North America (AMNA); AM 2000 (FR Core): www.amna.ca/#sle.
   3. Metal Design Systems; Series 20: www.metaldesignsystems.com/#sle.
   4. Universe Facade Solutions; Universe 2000R; www.www.universecorp.com/#sle.
   5. Division 7 Mtls; D7-Fusion; www.division7mtls.com/#sle.
   6. Alcotex: www.alcotex.com/#sle.

2.02 WALL PANEL SYSTEM

A. Wall Panel System: Metal panels, fasteners, and anchors designed to be supported by framing or other substrate provided by others; provide installed panel system capable of maintaining specified performance without defects, damage, or failure.
   1. Provide structural design by or under direct supervision of a Structural Engineer licensed in the State in which the Project is located.
   2. Provide panel jointing and weatherseal using reveal joints and gaskets but no sealant.
   3. Anchor panels to supporting framing without exposed fasteners.

2.03 PERFORMANCE REQUIREMENTS

A. Thermal Movement: Provide for free and noiseless vertical and horizontal thermal movement due to expansion and contraction under material temperature range of minus 20 degrees F to 180 degrees F without buckling, opening of joints, undue stress on fasteners, or other detrimental effects; allow for ambient temperature at time of fabrication, assembly, and erection procedures.
   1. Wind Performance: Provide system tested in accordance with ASTM E330/E330M without permanent deformation or failures of structural members under the following conditions:
   2. Design Wind Pressure: In accordance with local building code.
   3. Maximum deflection of perimeter framing member of L/175 normal to plane of the wall; maximum deflection of individual panels of L/60.
   4. Maximum anchor deflection in any direction of 1/16 inch at connection points of framing members to anchors.

B. Air Leakage: 0.060 cfm/sq ft maximum leakage when tested at 6.24 psf pressure difference in accordance with ASTM E283/E283M.

C. Water Penetration: No water penetration under static pressure when tested in accordance with ASTM E331 at a differential of 10 percent of inward acting design load, 6.24 psf minimum, after 15 minutes.
   1. Water penetration is defined as the appearance of uncontrolled water on the interior face of the wall.
   2. Design to drain leakage and condensation to the exterior face of the wall.

D. Fire Performance: Use test method complying with NFPA 285.

2.04 PANELS

A. Panels: 2-1/2 to 12-3/8-inch- deep pans formed of metal composite material sheet by routing back edges of sheet, removing corners, and folding edges.
   1. Form custom panel profiles as indicated on drawings.
   2. Reinforce corners with riveted aluminum angles.
   3. Provide concealed attachment to supporting structure by adhering attachment members to back of panel; attachment members may also function as stiffeners.
   4. Maintain maximum panel bow of 0.8 percent of panel dimension in width and length; provide stiffeners of sufficient size and strength to maintain panel flatness without showing local stresses or read-through on panel face.
   5. Secure members to back face of panels using structural silicone sealant approved by MCM sheet manufacturer.
   6. Metallic Finished Panels: Maintain consistent grain of MCM sheet; specifically, do not rotate sheet purely to avoid waste.
   7. Fabricate panels under controlled shop conditions.
   8. Where final dimensions cannot be established by field measurement before commencement of manufacturing, make allowance for field adjustments without requiring field fabrication of panels.
   9. Fabricate as indicated on drawings and as recommended by MCM sheet manufacturer.
      a. Make panel lines, breaks, curves, and angles sharp and true.
      b. Keep plane surfaces free from warp or buckle.
      c. Keep panel surfaces free of scratches or marks caused during fabrication.
   10. Provide joint details providing a watertight and structurally sound wall panel system that allows no uncontrolled water penetration on inside face of panel system.
   11. For "dry" jointing, secure extrusions to returned pan edges with stainless steel rivets; provide means of concealed drainage with baffles and weeps for water that might accumulate in members of system.

2.05 MATERIALS

A. Metal Composite Material (MCM) Sheet: Two sheets of aluminum sandwiching a core of extruded thermoplastic material; no foamed insulation material content.
   1. Overall Sheet Thickness: 0.157 inch, minimum.
   2. Face Sheet Thickness: 0.020 inch, minimum.
   3. Bond and Peel Strength: No adhesive failure of the bond between the core and the skin nor cohesive failure of the core itself below 22.4 inch-pound/inch with no degradation in bond performance, when tested in accordance with ASTM D1781, simulating resistance to panel delamination, after 8 hours of submersion in boiling water and after 21 days of immersion in water at 70 degrees F.
   4. Surface Burning Characteristics: Flame spread index of 25, maximum; smoke developed index of 450, maximum; when tested in accordance with ASTM E84.
   5. Flammability: Self-ignition temperature of 650 degrees F or greater when tested in accordance with ASTM D1929.

B. Metal Framing Members: Include sub-girts, zee-clips, base and sill angles and channels, hat-shaped and rigid channels, and furring channels required for complete installation.
   1. Provide material strength, dimensions, configuration as required to meet applied loads and in compliance with applicable building code.
   2. Sheet Steel Components: ASTM A653/A653M galvanized to G90/Z275 or zinc-iron alloy-coated to A60/ZF180; or ASTM A792/A792M aluminum-zinc coated to AZ60/AZM180.
   3. Aluminum Components: ASTM B209/B209M; or ASTM B221 (ASTM B221M).

2.06 FINISHES

A. Factory Finish: Two coat fluoropolymer resin coating, approved by coating manufacturer for length of warranty specified for project, and applied by coil manufacturing facility that specializes in coil applied finishes.
   1. Coating Flexibility: Pass ASTM D4145 minimum 1T Bend at time of manufacturing.
   2. Long-Term Performance: Not less than that specified under WARRANTY in PART 1.

B. Fluoropolymer Coil Coating System: Polyvinylidene fluoride (PVDF) multi-coat superior performing organic coatings system complying with AAMA 2605, including at least 70 percent PVDF resin, with at least 80 percent of coil coated metal surfaces having minimum total dry film thickness (DFT) of 0.9 mil, 0.0009 inch; color and gloss as selected by Architect from manufacturer's custom range.
   1. Products:
      a. Sherwin-Williams Company; Fluropon: www.coil.sherwin.com/#sle.
      b. Arkema, Inc; Kynar 500: www.arkema.com/#sle.
      c. Substitutions: See Section 01 6000 - Product Requirements.

C. Color/Texture: As selected by Architect from manufacturer's custom range.
   1. Selected custom color to contain a metallic finish.

2.07 ACCESSORIES

A. Flashing: Sheet aluminum; 0.040 inch thick, minimum; finish and color to match MCM sheet; see Section 07 6200 for additional requirements.

B. Support for Cladding and Continuous Insulation: Continuous thermal Z-girts.
   1. Fiberglass reinforced plastic (FRP) girts that provide cladding attachment support for metal wall panels.
   2. Depth: As indicated on drawings.
   3. Length: 6 inches for clips and 96 inches for girts.
   4. Spacing: 16 inches on center, vertically.
   5. Fasteners: As recommended by clip manufacturer.
   6. Products:
      a. Advanced Architectural Products; GreenGirt Max CMH Z-Girts: www.greengirt.com/#sle.
      b. Substitutions: See Section 01 6000 - Product Requirements.

C. Anchors, Clips, and Accessories: Use one of the following:
   1. Stainless steel complying with ASTM A276/A276M, ASTM A480/A480M, or ASTM A666/A666M.
   2. Steel complying with ASTM A36/A36M and hot-dip zinc coating to ASTM A153/A153M.
   3. Steel complying with ASTM A36/A36M and hot-dip galvanized to ASTM A123/A123M, with Coating Thickness Grade of 100.

D. Fasteners:
   1. Screws: Self-drilling or self-tapping Type 410 stainless steel or zinc-alloy steel hex washer head, with EPDM or PVC washer under heads of fasteners bearing on weather side of metal wall panels.
   2. Bolts: Stainless steel.
   3. Fasteners for Flashing and Trim: Blind fasteners of high-strength aluminum or stainless steel.

E. Bituminous Coating: Cold-applied asphalt mastic, noncorrosive compound free of asbestos, sulfur, and other deleterious impurities; 15-mil dry film thickness per coat.

F. Joint Sealer: Provide color to match wall panels silicone sealant of type approved by MCM sheet manufacturer, and in compliance with ASTM C920.
   1. See Section 07 9200 for additional requirements.

G. Provide panel system manufacturer's and installer's standard corrosion resistant accessories, including fasteners, clips, anchorage devices, and attachments.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine dimensions, tolerances, and interfaces with other work.
   1. Verify that air barrier system is properly installed; see Section 07 2700 for requirements.

B. Provide tests on full-size mock-ups, performed specifically for this project, unless otherwise indicated.

C. Examine substrate on-site to determine that conditions are acceptable for product installation in accordance with manufacturer's written instructions.

D. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

E. Notify Architect in writing of conditions detrimental to proper and timely completion of work, and do not proceed with erection until unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Protect adjacent work areas and finish surfaces from damage during installation.

B. Provide anchorage items to be built into masonry to appropriate installer(s) together with setting templates.
   1. See Section 04 2000 for additional unit masonry requirements.

3.03 INSTALLATION

A. Do not install products that are defective, including warped, bowed, dented, and broken members, and members with damaged finishes.

B. Comply with instructions and recommendations of MCM sheet manufacturer and wall system manufacturer, as well as with approved shop drawings.

C. Install wall system securely allowing for necessary thermal and structural movement; comply with wall system manufacturer's instructions for installation of concealed fasteners.

D. Do not handle or tool products during erection in manner that damages finish, decreases strength, or results in visual imperfection or failure in performance. Return component parts that require alteration to shop for refabrication, if possible, or for replacement with new parts.

E. Do not form panels in field unless required by wall system manufacturer and approved by the Architect; comply with MCM sheet manufacturer's instructions and recommendations for field forming.

F. Separate dissimilar metals; use gasket fasteners, isolation shims, or isolation tape where needed to eliminate possibility of electrolytic action between metals.

G. Install flashings as indicated on shop drawings. At flashing butt joints, provide a lap strap under flashing and seal lapped surfaces with a full bed of non-hardening sealant.

H. Install square, plumb, straight, and true, accurately fitted, with tight joints and intersections maintaining the following installation tolerances:

1. Variation From Plane or Location: 1/2 inch in 30 feet of length and up to 3/4 inch in 300 feet, maximum.
2. Deviation of Vertical Member From True Line: 0.1 inch in 25 feet run, maximum.
3. Deviation of Horizontal Member From True Line: 0.1 inch in 25 feet run, maximum.
4. Offset From True Alignment Between Two Adjacent Members Abutting End To End, In Line: 0.03 inch, maximum.

I. Replace damaged products.
1. Exception: Field repairs of minor damage to finishes are permitted only when approved in writing by Architect, panel manufacturer, and fabricator.
2. Field Repairs to Finishes: Using materials and methods sufficient that repairs are not discernible when viewed at distance of 10 feet under all typical light conditions experienced at the project.

3.04 FIELD QUALITY CONTROL

A. See Section 01 4000 - Quality Requirements for additional requirements.

B. Wall System Manufacturer's Field Services: Provide field services consisting of product use recommendations and periodic site visits for inspection of product installation in accordance with instructions.

C. Site Visits: Schedule two site visits during execution of installation.

3.05 CLEANING

A. See Section 01 7000 - Execution and Closeout Requirements for additional requirements.

B. Ensure weep holes and drainage channels are unobstructed and free of dirt and sealants.

C. Remove protective film after installation of joint sealers, after cleaning of adjacent materials, and immediately prior to completion of work.

D. Remove temporary coverings and protection of adjacent work areas.

E. Clean installed products in accordance with manufacturer's instructions.

3.06 PROTECTION

A. Protect installed panel system from damage until Date of Substantial Completion.

END OF SECTION 07 4213.23

SECTION 07 4213
METAL WALL PANELS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Manufactured metal panels for exterior wall panels and subgirt framing assembly, with related flashings and accessory components.
   1. Location: Mechanical air intake enclosures at Penthouse.

1.02 RELATED REQUIREMENTS

A. Section 05 5000 - Metal Fabrications: Wall panel subgirt framing assembly requirements.

B. Section 07 9200 - Joint Sealants: Sealing joints between metal wall panel system and adjacent construction.

1.03 REFERENCE STANDARDS

A. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix).

B. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

C. NFPA 285 - Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components.

1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data - Wall System: Manufacturer's data sheets on each product to be used, including:
   1. Physical characteristics of components shown on shop drawings.
   2. Storage and handling requirements and recommendations.
   3. Installation instructions and recommendations.

C. Shop Drawings: Indicate dimensions, layout, joints, construction details, support clips, subgirt framing assembly, and methods of anchorage.
   1. Include design engineer's stamp or seal on shop drawings for attachments, anchors, and subgirt framing assembly.

D. Design Data: Submit structural calculations

E. Samples: Submit two samples of wall panel, 12 inches by 12 inches in size illustrating finish color, sheen, and texture.

F. Test Reports: Submit test report verifying compliance with NFPA 285 for previously-tested exterior wall assembly.

G. Designer's qualification statement.

H. Installer's qualification statement.

I. Warranty Documentation for Installation of Building Rainscreen Assembly: Submit installer warranty and ensure that forms have been completed in Owner's name and registered with installer.

1.05 QUALITY ASSURANCE

A. Design Engineer's Qualifications: Design structural supports and anchorages under direct supervision of a Structural Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

B. Installer Qualifications: Company specializing in installing products specified in this section with minimum five years of documented experience.

C. Testing Agency Qualifications: Independent firm specializing in performing testing and inspections of the type specified in this section.

1.06 DELIVERY, STORAGE, AND HANDLING

A. See Section 01 7419 - Construction Waste Management and Disposal for packaging waste requirements.

B. Protect panels from accelerated weathering by removing or venting sheet plastic shipping wrap.

C. Store prefinished material off the ground and protected from weather; prevent twisting, bending, or abrasion; provide ventilation; slope metal sheets to ensure proper drainage.

D. Prevent contact with materials that may cause discoloration or staining of products.

1.07 FIELD CONDITIONS

A. Do not install wall panels when air temperature or relative humidity are outside manufacturer's limits.

1.08 WARRANTY

A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

B. Finish Warranty: Provide 20-year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking. Complete forms in Owner's name and register with warrantor.

C. Special Warranty: Provide 10-year warranty covering water tightness and integrity of seals of metal wall panels. Complete forms in Owner's name and register with warrantor.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Metal Wall Panels - Concealed Fasteners:
   1. ATAS International, Inc; Opaline OPF060: www.atas.com/#sle.
   2. Centria, a Nucor Company; IW-14A: www.centria.com/#sle.
   3. MBCI, a Cornerstone Building Brands Company; FW-120-1 Panel: www.mbci.com/#sle.
   4. Morin Corporation; Classic Series F-18-2: www.morincorp.com/#sle.
   5. Petersen Aluminum Corporation; Flush Wall Panels: www.pac-clad.com/#sle.
   6. Substitutions: See Section 01 6000 - Product Requirements.

2.02 METAL WALL PANEL SYSTEM

A. Wall Panel System: Factory fabricated prefinished metal panel system, site assembled.
   1. Provide exterior wall panels and subgirt framing assembly.
   2. Design and size components to support assembly dead loads, and to withstand live loads caused by positive and negative wind pressure acting normal to plane of wall.
   3. Design Pressure: In accordance with applicable codes.
   4. Fire Performance: Tested in accordance with, and complying with acceptance criteria of NFPA 285.

5. Maximum Allowable Deflection of Panel: L/60 for length(L) of span.
6. Movement: Accommodate movement within system without damage to components or deterioration of seals, movement between system and perimeter components when subject to seasonal temperature cycling; dynamic loading and release of loads; and deflection of structural support framing.
7. Drainage: Provide positive drainage to exterior for moisture entering or condensation occurring within panel system.
8. Fabrication: Formed true to shape, accurate in size, square, and free from distortion or defects; pieces of longest practical lengths.
9. Corners: Factory-fabricated in one continuous piece with minimum 2-inch returns.

B. Exterior Wall Panels:
1. Profile: Vertical; flush with pencil rib style.
2. Side Seams: Double-interlocked, tight-fitting, sealed with continuous gaskets.
3. Material: Precoated steel sheet, 22 gauge, 0.0299 inch minimum thickness.
4. Panel Width: 12 inches to receive a single pencil rib, or 18 inches to receive a double pencil rib.
5. Color: As selected by Architect from manufacturer's custom line.

C. Subgirt Framing Assembly:
1. Profile as indicated; to attach panel system to structural frame.

D. Internal and External Corners: Same material, thickness, and finish as exterior sheets; profile to suit system; shop cut and factory mitered to required angles.

E. Expansion Joints: Same material, thickness and finish as exterior sheets; 22 gauge, 0.0299 inch thick; manufacturer's standard brake formed type, of profile to suit system.

F. Trim: Same material, thickness and finish as exterior sheets; brake formed to required profiles.

G. Anchors: Stainless steel.

2.03 MATERIALS

A. Precoated Steel Sheet: Hot-dipped galvanized steel sheet, ASTM A653/A653M, Structural Steel (SS) or Forming Steel (FS), with G90/Z275 coating; continuous coil-coated on exposed surfaces with specified finish coating and on panel back with specified panel back coating.

B. Select materials with surface flatness, smoothness, and lack of surface blemishes where exposed to view in finished system.

2.04 FINISHES

A. Exposed Surface Finish: Panel manufacturer's standard polyvinylidene fluoride (PVDF) coating, top coat over epoxy primer.

B. Panel Backside Finish: Panel manufacturer's standard siliconized polyester wash coat.

C. Fluoropolymer Coil Coating System: Polyvinylidene fluoride (PVDF) multi-coat superior performing organic coatings system complying with AAMA 2605, including at least 70 percent PVDF resin, and at least 80 percent of coil coated metal surfaces having minimum total dry film thickness (DFT) of 0.9 mil, 0.0009 inch; color and gloss as selected by Architect from manufacturer’s standard line.
1. Two-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

2. Three-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in both color coat and clear topcoat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
3. Products:
   a. Arkema, Inc; Kynar 500: www.arkema.com/#sle.
   b. Sherwin-Williams Company; Fluropon: www.coil.sherwin.com/#sle.
   c. Substitutions: See Section 01 6000 - Product Requirements.

2.05 ACCESSORIES

A. Gaskets: Manufacturer's standard type suitable for use with system, permanently resilient; ultraviolet and ozone resistant.

B. Concealed Sealants: Non-curing butyl sealant or tape sealant, see Section 07 9200

C. Exposed Sealant: Elastomeric; silicone, polyurethane, or silyl-terminated polyether/polyurethane.

D. Fasteners: Manufacturer's standard type to suit application; with soft neoprene washers, stainless steel. Concealed fasteners and anchor clips.
   1. Metal-to-Metal Fasteners: Self-drilling, self-tapping screws.

E. Field Touch-up Paint: As recommended by panel manufacturer.

F. Bituminous Paint: Asphalt base.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that building framing members are ready to receive panels.

3.02 PREPARATION

A. Install subgirts perpendicular to panel length, securely fastened to substrates and shimmed and leveled to uniform plane, and spaced at intervals indicated.

3.03 INSTALLATION

A. Install panels on walls in accordance with manufacturer's instructions.

B. Protect surfaces in contact with dissimilar metals with bituminous paint; allow to dry prior to wall panel installation.

C. Fasten panels to structural supports; aligned, level, and plumb.

D. Locate joints over supports.

E. Provide control joints as needed or where indicated.

F. Use concealed fasteners unless otherwise indicated by Architect.

G. Seal and place gaskets to prevent weather penetration. Maintain neat appearance.

3.04 TOLERANCES

A. Offset From True Alignment Between Adjacent Members Abutting or In Line: 1/16 inch, maximum.

B. Variation from Plane or Location As Indicated on Drawings: 1/4 inch, maximum.

3.05 CLEANING

A. See Section 01 7000 - Execution and Closeout Requirements for additional requirements.

B. Remove site cuttings from finish surfaces.

C. Remove protective material from wall panel surfaces.

D. Clean and wash prefinished surfaces with mild soap and water; rinse with clean water.

3.06 PROTECTION

A. Protect metal wall panels until completion of project.

B. Touch-up, repair, or replace damaged wall panels or accessories before Date of Substantial Completion.

END OF SECTION 07 4213

SECTION 07 5323
EPDM THERMOSET SINGLE-PLY ROOFING - CARLISLE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Adhered roof system with ethylene propylene diene monomer (EPDM) roofing membrane and decorative ballast.

B. Insulation, flat and tapered.

C. Vapor retarder.

D. Deck sheathing.

E. Roofing cant strips, stack boots, and walkway pads.

1.02 RELATED REQUIREMENTS

A. Section 05 3123 - Steel Roof Decking.

B. Section 07 5556 - Fluid-Applied Protected Membrane Roofing: Rubberized asphalt fluid-applied membrane roofing, including base flashings and roof insulation, at exterior roof terrace.

C. Section 07 7100 - Roof Specialties: Counterflashing, reglets, and flow-through, interlocking gravel edge trim.

1.03 REFERENCE STANDARDS

A. FM 4470 - Single-Ply, Polymer-Modified Bitumen Sheet, Built-Up Roof (BUR) and Liquid Applied Roof Assemblies for use in Class 1 and Noncombustible Roof Deck Construction.

B. FM DS 1-49 - Perimeter Flashing; 2021, with Editorial Revision (2025).

C. FM DS 1-34 - Hail Damage; 2018, with Editorial Revision (2023).

D. ASTM E108 - Standard Test Methods for Fire Tests of Roof Coverings; 2024.

E. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures.

F. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing.

G. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.

H. ASTM D448 - Standard Classification for Sizes of Aggregate for Road and Bridge Construction.

I. ASTM D4263 - Standard Practice for Indicating Moisture in Concrete by the Plastic Sheet Method.

J. ASTM D4637/D4637M - Standard Specification for EPDM Sheet Used in Single-Ply Roof Membrane.

K. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials.

L. ASTM E1980 - Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces.

M. FM (AG) - FM Approval Guide.

N. FM DS 1-28 - Wind Design.

O. FM DS 1-29 - Roof Deck Securement and Above-Deck Roof Components.

P. SPRI RP-4 - Wind Design Standard for Ballasted Single-Ply Roofing Systems.

Q. UL 790 - Standard for Standard Test Methods for Fire Tests of Roof Coverings.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene one week before starting work of this section.
   1. Review preparation and installation procedures and coordinating and scheduling required with related work.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data: Provide manufacturer's written information listed below.
   1. Product data indicating membrane materials, flashing materials, insulation, vapor retarder, surfacing, fasteners, and decorative ballast.
   2. Preparation instructions and recommendations.
   3. Storage and handling requirements.

C. Shop Drawings: Indicate joint or termination detail conditions, conditions of interface with other materials, setting plan for tapered insulation, paver layout, and decorative ballast locations with perimeter trim conditions.

D. Samples for Selection:
   1. Precast pavers 3 by 3 inches in size illustrating manufacturer's full range.

E. Samples for Verification:
   1. Submit two samples 6 by 6 inches in size illustrating roofing materials, including base sheet, roofing membrane sheet, flashing backer sheet, membrane cap sheet, and flashing sheet, of color specified.
   2. Aggregate surfacing material in gradation and color indicated. One-half pound sealed bag.

F. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

G. Manufacturer's Installation Instructions: Indicate membrane seaming precautions, special procedures, and perimeter conditions requiring special attention.

H. Sustainable Design Submittals:
   1. Test report showing solar reflectance index of membrane
   2. Certification documenting recycled content.
   3. Documentation of distance to manufacturing facilities.
   4. Documentation of adhesive and sealant contents.

I. Specimen Warranty: For approval.

J. Warranty:
   1. Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
   2. Submit installer's certification that installation complies with all warranty conditions for the waterproof membrane.

K. Manufacturer's Qualification Statement.

L. Installer's Qualification Statement.

1.06 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum twenty (20) years of documented experience.

B. Installer Qualifications: Company specializing in performing work of this section:

1. With minimum ten years documented experience.
2. Approved by membrane manufacturer.
3. Extend manufacturer's labor and materials guarantee.
4. Extend manufacturer's No Dollar Limit guarantee.

1.07 MOCK-UPS

A. See Section 01 4000 - Quality Requirements for additional requirements.

B. Provide mock-up for evaluation of surface preparation, installation methods, and workmanship.

C. Locate where directed.

D. Mock-up may remain as part of the Work.

1.08 DELIVERY, STORAGE, AND HANDLING

A. See Section 01 7419 - Construction Waste Management and Disposal for packaging waste requirements.

B. Deliver products in manufacturer's original containers, dry, undamaged, with seals and labels intact.

C. Protect products in weather protected environment, clear of ground and moisture.

D. Protect foam insulation from direct exposure to sunlight.

E. Keep Safety Data Sheets (SDS) at the project site at all times during transportation, storage, and installation of materials.

F. Comply with requirements from Owner to prevent overloading or disturbance of the structure when loading materials onto the roof.

1.09 FIELD CONDITIONS

A. Do not apply roofing membrane during unsuitable weather. Refer to manufacturer's written instructions.

B. Do not apply roofing membrane when ambient temperature is below 40 degrees F or above 90 degrees F.

C. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.

D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

E. Proceed with work so new roofing materials are not subject to construction traffic as work progresses.

F. Do not allow grease, oil, fats, or other contaminants to come into direct contact with membrane.

1.10 WARRANTY

A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

B. Full System Warranty: Provide manufacturer's standard system warranty or customed form, without monetary limitation (No Dollar Limit), agreeing to repair or replace roofing that leaks, fails, or is damaged due to wind or other natural causes or workmanship within specified warranty period.
   1. Warranty Term: 30 years.
   2. For repair and replacement include costs of both material and labor in warranty.

3. Includes membrane roofing, base flashings, roof insulation, fasteners, cover boards, substrate boards, adhesives, roofing accessories, and all other components of membrane roofing system to comply with warranty requirements.

C. Special Project Warranty: Submit roofing Installer's warranty, on warranty form at end of this Section, signed by Installer, covering the Work of this Section including all components of membrane roofing system such as membrane roofing, base flashing, roof insulation, fasteners, cover boards, substrate boards, vapor retarders, and walkway products, for the following warranty period:
   1. Warranty Period: Two years from date of Substantial Completion.

D. Accidental Puncture Coverage: Provide the manufacturer's standard roofing membrane warranty, modified to include accidental puncture coverage as specified herein. Warranty shall cover leaks resulting from accidental punctures or incidental physical damage caused by normal roof maintenance activities, service trades, or non-abusive foot traffic.
   1. Warranty shall include an allowance of up to thirty-two (32) labor hours per warranty year, at no cost to the Owner, for investigation and repair of accidental punctures.
      a. Labor hours shall reset annually and shall not be cumulative.
      b. Unused hours shall expire at the end of each warranty year.
      c. Allowance may be applied to multiple repair events within a warranty year.
   2. Coverage shall include labor and materials necessary to restore the roofing membrane and affected components to a watertight condition.
   3. Accidental puncture coverage shall not apply to damage resulting from abuse, vandalism, fire, chemical exposure, acts of God, structural movement, or unauthorized alterations or repairs.
   4. Warranty shall be issued to the Owner and be enforceable for the full term of the roofing membrane warranty.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Carlisle SynTec Systems: www.carlisle-syntec.com/#sle.

B. Substitutions: See Section 01 6000 - Product Requirements.
   1. Other Acceptable Manufacturers:
      a. Holcim Elevate: www.elevatecommercialbp.com/#sle.
      b. Johns Manville: www.jm.com/#sle.

2.02 ROOFING APPLICATIONS

A. EPDM Membrane Roofing: One ply membrane, fully adhered with decorative ballast, over vapor retarder and insulation.

B. Roofing Assembly Performance Requirements and Design Criteria:
   1. Solar Reflectance Index (SRI): Minimum of 64 based on three-year aged value; if three-year aged data is not available, minimum of 82 initial value.
      a. Calculate SRI in accordance with ASTM E1980.
      b. Field applied coating may not be used to achieve specified SRI.
   2. Roof Covering External Fire Resistance Classification: Class A when tested per UL 790or ASTM E108.
   3. Wind Uplift:
      a. Designed to withstand wind uplift forces calculated with ASCE 7.
      b. Design Wind Speed: As indicated on drawings.

4. Factory Mutual Classification: Class 1 and windstorm resistance of 1-90, in accordance with FM DS 1-28 or FMG 4470.
   a. Design fastener quantity and pattern to prevent uplift in corners, perimeters and field of roof, in accordance with FMG 1-28 and 1-29.
   b. Design perimeter flashing and accessory attachment in compliance with FMG 1-49.
5. Hail Resistance Rating: FM Global Property Loss Prevention Data Sheet 1-34, Severe Hail (SH) hazard area.
6. Insulation Thermal Resistance (R-Value): Provide R-20, minimum, over entire roof deck. R-33 (aged), average minimum, over entire roof deck with crickets and tapered insulation in compliance with ASTM C1289-13e1.
7. Drainage: No standing water within 48 hours after precipitation.

C. Ballast: See drawings for ballast layout.
   1. Field: Use No.2 decorative aggregate ballast of 1,300 lb/100 sq ft over remaining area of roof as indicated on drawings.
      a. Large Format Meramec Stone.
      b. Crushed Blue-Grey Slate Stone.

2.03 ROOFING MEMBRANE AND ASSOCIATED MATERIALS

A. Single Source Responsibility: Provide and install products from single source.

B. Base Sheet: Self-adhering, rubberized asphalt membrane laminated to spun-bonded polyester fabric; 40 mil, 0.040 inch thick, minimum.
   1. Product: Carlisle 725TR.

C. Membrane:
   1. Material: Ethylene propylene diene monomer (EPDM); ASTM D4637/D4637M, Type I (non-reinforced).
   2. Thickness: 90 mil, 0.090 inch, minimum.
   3. Sheet Width: Factory fabricated into largest sheets possible.
   4. Color: White on Black.
   5. Products:
      a. Carlisle SynTec Systems; Sure-White.

D. Seaming Materials: As recommended by membrane manufacturer.

E. Vapor Retarder: Material approved by roof manufacturer complying with requirements of fire rating classification; compatible with roofing and insulation materials.
   1. Fire-retardant adhesive.
   2. Vapor Permeability: 0.1 perm inchor less, measured in accordance with ASTM E96/E96M.

F. Flexible Flashing Material: Same material as membrane.

G. Base Flashing: Provide waterproof, fully adhered base flashing system at all penetrations, plane transitions, and terminations.

2.04 DECK SHEATHING AND COVER BOARDS

A. Deck Sheathing and Cover Board: Glass mat faced gypsum panels, ASTM C1177/C1177M, fire resistant type, 5/8 inch thick.
   1. Deck Sheathing Size: 48 by 96 inches.
   2. Cover Board Size: 48 by 48 inches.
   3. Product:
      a. GP Dens-Deck Prime, distributed by Carlisle SynTec Systems.

2.05 INSULATION

A. Polyisocyanurate (ISO) Board Insulation: ASTM C1289, Type II, Class 1 - Faced with glass fiber reinforced cellulosic felt facers on both major surfaces of the core foam; Grade 3.
   1. Compressive Strength: 25 psi.
   2. Board Size: 48 by 48 inches.
   3. Product:
      a. Carlisle InsulBase.

2.06 BALLAST MATERIALS

A. Rounded, Water-Worn Gravel:
   1. No. 2 Aggregate: 2-1/2-inch nominal diameter, sound, hard, washed, water-worn gravel; ASTM D448, with size classification of 2.
      a. Build up to a depth of 3 inches.

B. Crushed Stone: Install only over Sure-Seal HP Protection Mat.
   1. No. 2 Aggregate: 2-1/2-inch nominal diameter; ASTM D448, with size classification of 2.
      a. Build up to a depth of 3 inches.

C. Pavers: Precast concrete units, 7,500 psi air entrained mix.
   1. Size: 24 by 24 by 3 inches, maximum.
   2. Weight: 22 lb per sq ft
   3. Finish: Smooth (steel trowel).
   4. Color: As selected.
   5. Install only over Sure-Seal HP Protection Mat.
   6. Acceptable Manufacturers:
      a. Hanover Architectural Products: www.hanoverpavers.com/#sle.
      b. Rapid Building Systems: www.rapidbuilding.com/#sle.
      c. Roofblok, Ltd.: www.https://www.roofblok.com/#sle.
      d. Sunny Brook Pressed Concrete Co.: www.https://sunnybrookpressedconcrete.com/#sle.
      e. Wausau Tile, Inc. Terra-Paving Div.: www.wausautile.com/#sle.
      f. Westile Roofing Products.

2.07 ACCESSORIES

A. Prefabricated Flashing Accessories:
   1. Corners and Seams: Same material as membrane, in manufacturer's standard thicknesses.
   2. Penetrations: Same material as membrane, with manufacturer's standard cut-outs, rigid inserts, clamping rings, and flanges.
   3. Sealant Pockets: Same material as membrane, with manufacturer's standard accessories, in manufacturer's standard configuration.
   4. Sure-White Pressure-Sensitive Reinforced Universal Securement Strip (RUSS): 6 inches wide, 45 mil, 0.045 inch thick, reinforced EPDM membrane with 3 inches wide, 30 mil, 0.030 inch thick cured synthetic rubber with pressure-sensitive adhesive laminated to one edge.

B. Insulation Adhesive: Two-part, low-rise urethane foam adhesive or water-based adhesives compatible with roof systems and approved by roofing manufacturer.

C. Insulation Fasteners: Appropriate for purpose intended and approved by Factory Mutual FM (AG) and roofing manufacturer.

1. Length as required for thickness of insulation material and penetration of deck substrate , with metal or plastic plates.
2. Insulation Fastening Plate: 3-inch nominal diameter metal or plastic plate, for use with the appropriate fastener to attach insulation.

D. Membrane Adhesive: As recommended by membrane manufacturer.

E. Surface Conditioner for Adhesives: Compatible with membrane and adhesives.

F. Sealants: As recommended by membrane manufacturer.

G. Cleaner: Manufacturer's standard, clear, solvent-based cleaner.

H. Primer: Manufacturer's recommended product.

I. Edgings and Terminations: Manufacturer's standard edge and termination accessories.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that surfaces and site conditions are ready to receive work.

B. Verify deck is supported and secure.

C. Verify deck is clean and smooth, flat, free of depressions, waves, or projections, properly sloped and suitable for installation of roof system.

D. Verify deck surfaces are dry and free of snow or ice.

E. Verify that roof openings, curbs, and penetrations through roof are solidly set, and cant strips are in place.

3.02 PREPARATION, GENERAL

A. Clean substrate thoroughly prior to roof application.

B. Apply manufacturer's recommended vapor retarder or temporary roof before roof installation.

3.03 CONCRETE DECK PREPARATION

A. Fill surface honeycomb and variations with latex filler.

B. Confirm dry deck by moisture meter with 12 percent moisture maximum when tested per ASTM D4263.

3.04 METAL DECK PREPARATION

A. Install deck sheathing on metal deck:
1. Lay with long side at right angle to flutes; stagger end joints; provide support at ends.
2. Cut sheathing cleanly and accurately at roof breaks and protrusions to provide smooth surface.
3. Tape joints.

B. Mechanically fasten sheathing to roof deck, in accordance with Factory Mutual FM DS 1-28 recommendations and roofing manufacturer's instructions.

3.05 INSTALLATION - GENERAL

A. Perform work in accordance with manufacturer's instructions.

B. Do not apply roofing membrane during unsuitable weather.

C. Do not apply roofing membrane when ambient temperature is outside the temperature range recommended by manufacturer.

D. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.

E. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

F. Coordinate the work with installation of associated counterflashings installed by other sections as the work of this section proceeds.

G. When substrate preparation is responsibility of another installer, notify Architect of unsatisfactory conditions before proceeding.

3.06 VAPOR RETARDER INSTALLATION

A. Apply vapor retarder to deck surface with adhesive in accordance with manufacturer's instructions.
   1. Extend vapor retarder under cant strips and blocking to deck edge.
   2. Install flexible flashing from vapor retarder to air seal material of wall construction, lap and seal to provide continuity of the air barrier plane.

B. Ensure vapor retarder is clean and dry, continuous, and ready for application of insulation.

3.07 INSULATION APPLICATION

A. Attachment of Insulation on Metal Decks:
   1. Mechanically fasten first layer of insulation to metal deck in accordance with roofing manufacturer's instructions and Factory Mutual FM DS 1-29 requirements.
   2. Embed second layer of insulation into full bed of adhesive in accordance with roofing and insulation manufacturer's instructions.

B. Attachment of Insulation on Concrete Decks: Embed each layer of insulation in adhesive in full contact, in accordance with roofing and insulation manufacturer's instructions.

C. Do not install wet, damaged, or warped insulation boards.

D. Lay subsequent layers of insulation with joints staggered minimum 6 inches from joints of preceding layer.

E. Place tapered insulation to the required slope pattern in accordance with manufacturer's instructions.

F. On metal deck, place boards parallel to flutes with insulation board edges bearing on deck flutes.

G. Lay boards with edges in moderate contact without forcing, and gap between boards no greater than 1/4 inch. Cut insulation to fit neatly to perimeter blocking and around penetrations through roof.

H. At roof drains, use factory-tapered boards to slope down to roof drains over 24 inches.
   1. Provide sumps at all roof drains, minimum size of 48 by 48 inches.
   2. Install ballast guard over roof drains.

I. Do not apply more insulation than can be completely waterproofed in the same day.

3.08 MEMBRANE APPLICATION

A. Roll out membrane, free from wrinkles or tears. Place sheet into place without stretching.

B. Shingle joints on sloped substrate in direction of drainage.

C. Fully Adhered Application: Apply adhesive at manufacturer's recommended rate. Fully embed membrane in adhesive except in areas directly over or within 3 inches of expansion joints. Fully adhere one roll before proceeding to adjacent rolls.

D. Overlap edges and ends and seal seams by contact adhesive, minimum 3 inches. Seal permanently waterproof.

E. At intersections with vertical surfaces:
   1. Extend membrane over cant strips and up a minimum of 8 inches onto vertical surfaces.
   2. Fully adhere flexible flashing over membrane and up to nailing strips.

F. At gravel stops, extend membrane under gravel stop and to the outside face of the wall.

G. Coordinate installation of roof drains and sumps and related flashings, locate field splices away from low areas and roof drains, and lap upslope sheet over downslope sheet.

H. Lay concrete pavers loose over manufacturer approved protection sheet and according to manufacturer's instructions.

I. Daily Seal: Install daily seal per manufacturer's instructions at the end of each workday. Prevent infiltration of water at incomplete flashings, terminations, and at unfinished membrane edges.

3.09 BALLAST INSTALLATION

A. Install ballast in accordance with manufacturer's instructions.

B. Aggregate Ballast:
   1. Install protective mat over membrane.
   2. Install ballast-anchored flow-thru metal edge trim at locations as indicated on drawings.
   3. Apply ballast per SPRI RP-4 guidelines.
   4. Evenly distribute aggregate ballast.

3.10 FIELD QUALITY CONTROL

A. See Section 01 4000 - Quality Requirements for general requirements for field quality control and inspection.

B. Require site attendance of roofing and insulation material manufacturers daily during installation of this work.

C. Electronic Leak Detection (ELD) Testing: Test waterproofed and roofing membrane areas for leaks using ELD method that locates discontinuities in fluid-applied waterproofing and roofing membranes in accordance with ASTM D7877 or ASTM D8231.
   1. Testing agency to submit Daily Field Report (DFR) in accordance with ASTM D8231 indicating daily details of work performed.
   2. Testing agency to submit training certification to ensure technician performing ELD testing is currently certified in accordance with relevant training program.
   3. Point-of-use operation testing system monitoring for real-time anomalies and incorporated into roof system; comprised of physical sensors and conductive media.
   4. Components:
      a. Moisture Detection Sensors: 2-inch stainless steel sensor pucks, attached together with 1/16-inch 316 stainless steel cable. Install sensors 120 inches apart in grid pattern for effective sensor range.
      b. Conduction Media: Install conductive fabric to moisture-detection sensors, and connect to monitoring grid; connect monitoring grid to connection plates to electrically energize the system; conform to manufacturer's written instructions and approved shop drawings.
   5. Products:
      a. Sentinel Roof Technologies; Leak Sentry: www.sentinelrooftechnologies.com/#sle.
      b. International Leak Detection; Vector Mapping Grid (VMG): www.leak-detection.com/#sle.

c. Substitutions: See Section 01 6000-Product Requirements.

3.11 CLEANING

A. See Section 01 7000 - Execution and Closeout Requirements for additional requirements.

B. Remove wrappings, empty containers, paper, and other debris from the roof daily. Dispose of debris in compliance with local, State, and Federal regulations.

C. Remove bituminous markings from finished surfaces.

D. In areas where finished surfaces are soiled by work of this section, consult manufacturer of surfaces for cleaning advice and conform to their documented instructions.

E. Repair or replace defaced or damaged finishes caused by work of this section.

3.12 PROTECTION

A. Protect installed roofing and flashings from construction operations.

B. Where traffic must continue over finished roof membrane, protect surfaces using durable materials.

3.13 ROOFING INSTALLER'S SAMPLE WARRANTY

A. WHEREAS _____ of _____, herein called the "Roofing Installer," has performed roofing and associated work ("work") on the following project:
   1. Owner: Indiana University.
   2. Building Name: LAUNCH ACCELERATOR FOR BIOSCIENCES
   3. Project/Building Address: 1302 Indiana Ave., Indianapolis, IN 46202.
   4. Area of Work: Roofing Systems.
   5. Date of Substantial Completion of the Project (not the date of final roofing Work): MONTH xx, 202x
   6. Warranty Period: 2 Years.

B. AND WHEREAS Roofing Installer has contracted (either directly with Owner or indirectly as a subcontractor) to warrant said work against leaks and faulty or defective materials and workmanship for designated Warranty Period,

C. NOW THEREFORE Roofing Installer hereby warrants, subject to terms and conditions herein set forth, that during Warranty Period Roofing Installer will, at Roofing Installer's own cost and expense, make or cause to be made such repairs to or replacements of said work as are necessary to correct faulty and defective work and as are necessary to maintain said work in a watertight condition.

D. This Warranty is made subject to the following terms and conditions:
   1. Specifically excluded from this Warranty are damages to work and other parts of the building, and to building contents, caused by:
      a. lightning;
      b. peak gust wind speed exceeding 100 mph;
      c. fire;
      d. failure of roofing system substrate (i.e. the support structure on which the roofing system has been installed), including cracking, settlement, excessive deflection, deterioration, and decomposition;
      e. faulty construction of parapet walls, copings, chimneys, skylights, vents, equipment supports, and other edge conditions and penetrations of the work;
      f. vapor condensation on bottom of roofing; and

g. activity on roofing by others, including construction contractors, maintenance personnel, other persons, and animals, whether authorized or unauthorized by Owner.

2. When work has been damaged by any of foregoing causes, Warranty shall be null and void until such damage has been repaired by Roofing Installer and until cost and expense thereof have been paid by Owner or by another responsible party so designated.
3. Roofing Installer is responsible for damage to work covered by this Warranty but is not liable for consequential damages to building or building contents resulting from faults or defects of the support structure on which the roofing system has been installed.
4. During Warranty Period, if Owner allows alteration of work by anyone other than Roofing Installer, including cutting, patching, and maintenance in connection with penetrations, attachment of other work, and positioning of anything on roof, this Warranty shall become null and void on date of said alterations, but only to the extent said alterations affect work covered by this Warranty. If Owner engages Roofing Installer to perform said alterations, Warranty shall not become null and void unless Roofing Installer, before starting said work, shall have notified Owner in writing, showing reasonable cause for claim, that said alterations would likely damage or deteriorate work, thereby reasonably justifying a limitation or termination of this Warranty.
5. During Warranty Period, if original use of roof is changed and it becomes used for, but was not originally specified for, a promenade, work deck, spray-cooled surface, flooded basin, or other use or service more severe than originally specified, this Warranty shall become null and void on date of said change, but only to the extent said change affects work covered by this Warranty.
6. Owner shall promptly notify Roofing Installer of observed, known, or suspected leaks, defects, or deterioration and shall afford reasonable opportunity for Roofing Installer to inspect work and to examine evidence of such leaks, defects, or deterioration.
7. This Warranty is recognized to be the only warranty of Roofing Installer on said work and shall not operate to restrict or deter Owner from other remedies and resources lawfully available to Owner in cases of roofing failure. Specifically, this Warranty shall not operate to relieve Roofing Installer of responsibility for performance of original work according to requirements of the Contract Documents, regardless of whether Contract was a contract directly with Owner or a subcontract with Owner's General Contractor.

E. IN WITNESS THEREOF, this instrument has been duly executed this _____ day of _____, _____.

1. Authorized Signature: _____.
2. Name: _____.
3. Title: _____.

END OF SECTION 07 5323

SECTION 07 6200
SHEET METAL FLASHING AND TRIM

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Fabricated sheet metal items, including flashings, downspouts, exterior penetrations, trim, and other items indicated in Schedule.

B. Sealants for joints within sheet metal fabrications.

C. Precast concrete splash pads.

1.02 RELATED REQUIREMENTS

A. Section 04 2000 - Unit Masonry: Through-wall masonry flashing for face brick.

B. Section 04 4313 - Stone Masonry Veneer: Through-wall masonry flashing for stone veneer.

C. Section 07 7100 - Roof Specialties: Manufactured sheet metal items, including copings, fascias, and counterflashings.

1.03 REFERENCE STANDARDS

A. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix).

B. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

C. ASTM A666/A666M - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.

D. ASTM A755/A755M - Standard Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil-Coating Process for Exterior Exposed Building Products.

E. ASTM B32 - Standard Specification for Solder Metal.

F. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.

G. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.

H. ASTM D4479/D4479M - Standard Specification for Asphalt Roof Coatings - Asbestos-Free.

I. ASTM D4586/D4586M - Standard Specification for Asphalt Roof Cement, Asbestos-Free.

J. CDA A4050 - Copper in Architecture - Handbook.

K. SMACNA (ASMM) - Architectural Sheet Metal Manual.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene one week before starting work of this section.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.

C. Samples: Submit two samples, 6 by 6 inches in size, illustrating metal finish color.

1.06 QUALITY ASSURANCE

A. Perform work in accordance with SMACNA (ASMM) and CDA A4050 requirements and standard details, except as otherwise indicated.

B. Fabricator and Installer Qualifications: Company specializing in sheet metal work with ten years of documented experience.

1.07 MOCK-UPS

A. See Section 01 4000 - Quality Requirements for additional requirements.

B. Provide one full size mock-up of the following:
   1. Downspout (12 inches long).
   2. Complete conductor head.
   3. Downspout recessed into column cover.

1.08 DELIVERY, STORAGE, AND HANDLING

A. See Section 01 7419 - Construction Waste Management and Disposal for packaging waste requirements.

B. Stack material to prevent twisting, bending, and abrasion, and to provide ventilation. Slope metal sheets to ensure drainage.

C. Prevent contact with materials that could cause discoloration or staining.

1.09 WARRANTY

A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

B. Provide warranty on materials and workmanship for two years from date of substantial completion.

C. Special Warranty on Finishes: Fabricator agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.
   1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:
      a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
      b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
      c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
   2. Finish Warranty Period: 20 years from date of Substantial Completion.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Sheet Metal Flashing and Trim:
   1. ALUCOBOND by 3A Composites USA; ALUCOBOND AXCENT: www.alucobondusa.com/#sle.
   2. Fairview Architectural LLC; edgeline 3000: www.fairview-na.com/#sle.
   3. Petersen Aluminum Corporation: www.pac-clad.com/#sle.
   4. ALPOLIC Materials; ALPOLIC Brake Metal: www.alpolic-americas.com/#sle..

2.02 SHEET MATERIALS

A. Stainless Steel: ASTM A666/A666M, Type 304 alloy, soft temper, 28 gauge, 0.0156 inch thick; smooth No. 4 - Brushed finish.

2.03 PREFINISHED ALUMINUM SHEETS

A. Description: Factory-applied topcoat systems applied to aluminum flat sheet substrates prior to fabrication by coil coating; topcoat systems consist of primers and organic topcoats on exposed side and backing coats on unexposed side.

B. Aluminum Sheet Substrates: ASTM B209/B209M, alloy and temper as recommended by manufacturer for application.

C. Superior Performance Organic Coating System: Comply with AAMA 2605 for aluminum preparation, pretreatment, primer and finish coat system; provide thermally cured 70-percent PVDF fluoropolymer systems; tested for weathering for 10 years with 5 delta units color change maximum.

D. Applications: Downspouts, Scuppers, and Conductor Heads.
   1. Drawing Detail: As indicated on drawings.
   2. Base Metal Thickness: 0.063 inch, minimum.
   3. Coating System: Superior-performance organic coating system.
   4. Color: As selected by Architect from manufacturer's custom colors.

E. Applications: Eave Flashing and Downspout Brackets.
   1. Drawing Detail: SMACNA (ASMM), 1-18A.
   2. Base Metal Thickness: 0.128 inch, minimum.
   3. Coating System: Superior-performance organic coating system.
   4. Color: As selected by Architect from manufacturer's custom colors.

F. Application: Flashing and Trim for MCM Wall Panels.
   1. Drawing Detail: As indicated on drawings.
   2. Base Metal Thickness: 0.040 inch, minimum.
   3. Coating System: Superior-performance organic coating system.
   4. Color: As selected by Architect from manufacturer's custom colors.

2.04 PREPAINTED, METALLIC-COATED STEEL SHEETS

A. Description: Factory-applied coatings applied to metallic-coated steel sheet substrates prior to fabrication by coil coating; topcoat systems consist of primers and organic topcoats on exposed, top side of sheet; washcoats on bottom, unexposed sheet side.

B. Comply with ASTM A755/A755M.

C. Metallic-Coated Steel Sheet Substrates:
   1. Zinc-Coated, Galvanized, Steel Sheets: Commercial steel sheets, galvanized by hot-dip process; comply with ASTM A653/A653M; coating designation G90.

D. Substrate Preparation for Prefinishing: Clean and prepare substrate surfaces in accordance with coating manufacturer's recommendations for substrate type and application.

E. Washcoats or Backercoats: Provide washcoats or backercoats in accordance with organic coating manufacturer's recommendations.

F. Primer Coats: Provide basecoat primers in accordance with coating manufacturer's recommendations for substrate type, topcoat, and application.

G. Superior Performance Organic Coating System: Provide thermally cured 70-percent PVDF fluoropolymer systems in accordance with AAMA 2605, tested for weathering for 10 years with 5 delta units maximum of color change.

H. Application: Flashing and Trim for Metal Roof Panels.
   1. Drawing Detail: As indicated on drawings.

2. Base Metal Thickness: 24 gauge, 0.024 inch, minimum.
3. Coating System: Superior-performance organic coating system.
4. Color: As selected by Architect from manufacturer's custom colors.

2.05 FABRICATION

A. Form sections true to shape, accurate in size, square, and free from distortion or defects.

B. Fabricate cleats of same material as sheet, minimum 4 inches wide, interlocking with sheet in accordance with SMACNA 1-6.

C. Form pieces in longest possible lengths.

D. Hem exposed edges on underside 1/2 inch; miter and seam corners.

E. Form material with flat lock seams, except where otherwise indicated; at moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.

2.06 SCUPPERS

A. Fabrication: Factory fabricated to sizes required; corners welded; concealed fasteners.

2.07 GUTTERS AND DOWNSPOUTS

A. Downspouts: Rectangular profile.

B. Gutters and Downspouts: Size indicated on drawings.

C. Accessories: Profiled to suit gutters and downspouts.
1. Anchorage Devices: In accordance with SMACNA (ASMM) requirements.
2. Downspout Supports: Brackets.

D. Splash Pads: Precast concrete type, of size and profiles indicated; minimum 3,000 psi at 28 days, with minimum 5 percent air entrainment.

E. Seal metal joints.

2.08 FLASHING

A. Flashing Panels for Exterior Wall Penetrations: Premanufactured components and accessories as required to preserve integrity of building envelope; suitable for conduits and facade materials to be installed.

2.09 ACCESSORIES

A. Fasteners: Same material and finish as flashing metal, with soft neoprene washers.
1. For blind fastening applications, use high-strength aluminum or stainless steel fasteners suitable for metal being fastened.
2. Only mechanical screw-type fasteners (Tap-Con) shall be used for securing metals to wood or masonry.

B. Primer Type: Suitable for top coat finish specified as recommended by manufacturer.

C. Protective Backing Paint: Asphaltic mastic, ASTM D4479 Type I.

D. Concealed Sealants: Non-curing butyl sealant.

E. Exposed Sealants: ASTM C920; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material.

F. Fenestration Perimeter Flashing Attachments: Two-piece flashing receiver and clip of extruded aluminum, at least 0.045 inch thick, for attaching flashing at perimeter of exterior wall fenestration openings.
1. Provide flashing receiver profile appropriate for flashing applications.

G. Asphalt Roof Cement: ASTM D4586/D4586M, Type I, asbestos-free.

H. Solder: ASTM B32, Alloy Grade - Sn50 (50/50) for zinc-coated (galvanized) steel. Grade - Sn96 or other approved alloy composition for stainless steel as recommended by fabricator.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify roof openings, curbs, pipes, sleeves, ducts, and vents through roof are solidly set, reglets in place, and nailing strips located.

B. Verify roofing termination and base flashings are in place, sealed, and secure.

3.02 PREPARATION

A. Install starter and edge strips, and cleats before starting installation.

B. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mil, 0.015 inch.

3.03 INSTALLATION

A. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted.

B. Apply plastic cement compound between metal flashings and felt flashings.

C. Fit flashings tight in place; make corners square, surfaces true and straight in planes, and lines accurate to profiles.

D. Exterior Flashing Receivers: Install in accordance with manufacturer's recommendations, and in proper relationship with adjacent construction, and as follows:
   1. Secure receiver at perimeter of wall opening with adhesives or fasteners.
   2. Place flashing into receiver channel.
   3. Secure flashing with receiver clip.

E. Solder metal joints for full metal surface contact, and after soldering wash metal clean with neutralizing solution and rinse with water.

F. Secure gutters and downspouts in place with concealed fasteners.

G. Set splash pads under downspouts.

3.04 FIELD QUALITY CONTROL

A. See Section 01 4000 - Quality Requirements for field inspection requirements.

B. Inspection will involve surveillance of work during installation to ascertain compliance with specified requirements.

3.05 SCHEDULE

A. Gutters and Downspouts: Pre-Finished Aluminum.

B. Scuppers: Pre-Finished Aluminum,0.063 inch thick, minimum.

C. Roofing Penetration Flashings, for Pipes, Structural Steel, and Equipment Supports: Stainless Steel, 0.019 inch thick, minimum.

D. ~~Mechanical Air Intake Enclosure at Penthouse (Roofing and Walls): Pre-Finished Aluminum, 0.063 inch thick, minimum.~~

END OF SECTION 07 6200

SECTION 08 4413
GLAZED ALUMINUM CURTAIN WALLS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Aluminum-framed curtain wall, with vision glazing and infill panels.

B. Delegated design engineering (DDE) by a licensed professional engineer for all glazed aluminum curtain wall and curtain wall door systems.

1.02 RELATED REQUIREMENTS

A. Section 03 3000 - Cast-in-Place Concrete: Weld plates embedded in concrete for attachment of anchors.

B. Section 05 1200 - Structural Steel Framing: Steel attachment members.

C. Section 05 5000 - Metal Fabrications: Steel attachment devices.

D. Section 07 8400 - Firestopping: Firestop at system junction with structure.

E. Section 07 9200 - Joint Sealants: Sealing joints between frames and adjacent construction.

F. Section 08 8000 - Glazing.

G. Section 09 2116 - Gypsum Board Assemblies: Metal stud and gypsum board wall at interior of curtain wall.

1.03 REFERENCE STANDARDS

A. AAMA CW-10 - Care and Handling of Architectural Aluminum from Shop to Site.

B. AAMA 501.1 - Standard Test Method for Water Penetration of Windows, Curtain Walls and Doors Using Dynamic Pressure.

C. AAMA 501.2 - Quality Assurance and Diagnostic Water Leakage Field Check of Installed Storefronts, Curtain Walls, and Sloped Glazing Systems.

D. AAMA 501.4 - Recommended Static Test Method for Evaluating Window Wall, Curtain Wall and Storefront Systems Subjected to Seismic and Wind-Induced Inter-Story Drift.

E. AAMA 503 - Voluntary Specification for Field Testing of Newly Installed Storefronts, Curtain Walls and Sloped Glazing Systems.

F. AAMA 609 & 610 - Cleaning and Maintenance Guide for Architecturally Finished Aluminum.

G. AAMA 1503 - Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections.

H. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix).

I. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures.

J. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.

K. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.

L. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.

M. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.

N. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric).

O. ASTM C661 - Standard Test Method for Indentation Hardness of Elastomeric-Type Sealants by Means of a Durometer.

P. ASTM C793 - Standard Test Method for Effects of Laboratory Accelerated Weathering on Elastomeric Joint Sealants.

Q. ASTM C794 - Standard Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants.

R. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.

S. ASTM C1087 - Standard Test Method for Determining Compatibility of Liquid-Applied Sealants with Accessories Used in Structural Glazing Systems.

T. ASTM C1135 - Standard Test Method for Determining Tensile Adhesion Properties of Structural Sealants.

U. ASTM C1184 - Standard Specification for Structural Silicone Sealants.

V. ASTM C1249 - Standard Guide for Secondary Seal for Sealed Insulating Glass Units for Structural Sealant Glazing Applications.

W. ASTM C1401 - Standard Guide for Structural Sealant Glazing.

X. ASTM E283/E283M - Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Skylights, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.

Y. ASTM E783 - Standard Test Method for Field Measurement of Air Leakage Through Installed Exterior Windows and Doors.

Z. ASTM E1105 - Standard Test Method for Field Determination of Water Penetration of Installed Exterior Windows, Skylights, Doors, and Curtain Walls, by Uniform or Cyclic Static Air Pressure Difference.

AA. SSPC-Paint 20 - Zinc-Rich Coating (Type I - Inorganic, and Type II - Organic).

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordinate with installation of other components that comprise the exterior enclosure.

B. Preinstallation Meeting: Conduct a preinstallation meeting one week before starting work of this section; require attendance by all affected installers.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data: Provide component dimensions, describe components within assembly, anchorage and fasteners, internal drainage details, glazing, and infill.

C. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related Work, expansion and contraction joint location and details, joinery including concealed welds, anchorage, expansion provisions, glazing, flashing and drainage, and field welding required.

1. Include design engineer's (DDE) stamp or seal on shop drawings for attachments and anchors.
2. Shop drawings and all product data shall also be analyzed by the DDE, in concert with his engineering.

3. Manufacturer's generic details only will be rejected.

D. Shop Drawings: Provide details of proposed structural sealant glazing (SSG) and weather sealant joints indicating dimensions, materials, bite, thicknesses, profile, and support framing.
   1. Include design engineer's (DDE) stamp or seal on shop drawings for attachments and anchors.
   2. Shop drawings and all product data shall also be analyzed by the DDE, in concert with his engineering.
   3. Manufacturer's generic details only will be rejected.

E. Samples: Submit two samples 12 by 12 inches in size illustrating finished aluminum surface, glazing, infill panels, and glazing materials.

F. Manufacturer's Certificate: Certify that the products supplied meet or exceed the specified requirements.

G. Design Data: Provide framing member structural and physical characteristics and engineering calculations, and identify dimensional limitations; include load calculations at points of attachment to building structure.
   1. Include design engineer's (DDE) stamp or seal on engineering calculations.
   2. All product data shall also be analyzed by the DDE, in concert with his engineering.

H. Structural Sealant Glazing (SSG): Submit product data and calculations showing compliance with performance requirements.
   1. Include design engineer's (DDE) stamp or seal on engineering calculations.
   2. All product data shall also be analyzed by the DDE, in concert with his engineering.

I. Test Reports: Submit results of full-size mock-up testing.

J. Field Quality Control Submittals: Report of field testing for water penetration and air leakage.

K. Designer's Qualification Statement.

L. Installer's Qualification Statement.

M. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.06 QUALITY ASSURANCE

A. Designer Qualifications: Design curtain wall and its structural support framing components under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed at the State in which the Project is located.

B. Full-Size Mock-Up Testing: Have a specimen representative of project conditions tested by an independent testing agency for compliance with specified thermal, structural, air infiltration, water penetration, sound attenuation, and sealant adhesion criteria.

C. Verify that each component is appropriate for use in structural sealant glazing (SSG) application in regards to at least the following properties: size, shape, dimensions, material, durability, storage conditions, and color.

D. Installer Qualifications: Company specializing in performing work of type specified and with at least ten years of documented experience and approved by manufacturer.

1.07 MOCK-UPS

A. See Section 01 4000 - Quality Requirements for additional requirements.

B. Construct mock-up as part of composite wall assembly mock-up as indicated on drawings. Assemble to illustrate component assembly including glazing materials, weep drainage system, attachments, anchors, and perimeter sealant.

C. Locate where directed.

D. Mock-up may not remain as part of work.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Handle products of this section in accordance with AAMA CW-10.

B. Protect finished aluminum surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond to aluminum when exposed to sunlight or weather.

1.09 FIELD CONDITIONS

A. Do not install sealants when ambient temperature is less than 40 degrees F. Maintain this minimum temperature during and 48 hours after installation.

1.10 WARRANTY

A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

B. Special Assembly Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of glazed aluminum curtain wall that do not comply with requirements or that fail in materials or workmanship within specified warranty period.
   1. Failures include, but are not limited to, the following:
      a. Structural failures including, but not limited to, excessive deflection.
      b. Deterioration of metals.
      c. Noise or vibration created by wind and thermal and structural movements.
      d. Water penetration through fixed glazing and framing areas.
      e. Failure of operating components.
   2. Warranty Period: Five (5) years from date of Substantial Completion.

C. Special Finish Warranty, Factory-Applied Finishes: Standard form in which manufacturer agrees to repair finishes or replace aluminum that shows evidence of deterioration of baked enamel, powder coat, or organic finishes within this specified warranty period.
   1. Deterioration includes, but is not limited to, the following:
      a. Color fading more than 5 Delta E units when tested according to ASTM D2244.
      b. Chalking in excess of a No. 8 rating when tested according to ASTM D4214.
      c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
   2. Warranty Period: 20 years from date of Substantial Completion.

D. Extended Correction Period: Correct defective work within 5-year period commencing on Date of Substantial Completion.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Glazed Aluminum Curtain Walls Manufacturers:
   1. EFCO: www.efco.com/#sle.
   2. Kawneer North America; (Basis of Design): www.kawneer.com/#sle.
      a. Field Fabricated Stick System: 1600UT System 2.
      b. Shop/Factory Unitized system: 2500UT SGT Unitwall.
   3. Tubelite, Inc: www.tubeliteinc.com/#sle.
   4. YKK AP America, Inc: www.ykkap.com/commercial/#sle.
   5. C.R. Laurence Co.; U.S. Aluminum: www.crlaurence.com/#sle.
   6. WALTEK Company Ltd.: www.https://walteltd.com/#sle.
      a. Field Fabricated Stick System: 7000 Series Umax Wall.

b. Shop/Factory Unitized system: 7000 Series CHS Unitized Wall.

7. Precision Wall Systems, Inc.: www.precisionwallinc.com/#sle.
   a. Shop/Factory Unitized system: PWS 7525 UW - Unitized Curtain Wall System.

2.02 CURTAIN WALL

A. Aluminum-Framed Curtain Wall: Factory fabricated, factory finished aluminum framing members with infill, and related flashings, anchorage and attachment devices.
   1. Outside glazed, with pressure plate and mullion cover, where indicated on drawings.
   2. Structural sealant glazing (SSG) adhesive on two (2)-sides, with temporary glazing stops, and pressure plate and mullion cover on 2-sides, where indicated on drawings.
   3. Fabrication Method: Either shop/factory or field fabricated system.
      a. Appropriate fabrication method to be reviewed by manufacturer, DDE, and General Contractor at parapet conditions to maintain specified thermal performance and thermal construction.
   4. Glazing Method: Either shop/factory or field glazed system.
   5. Vertical Mullion Dimensions: As indicated in drawings.
   6. Finish: Superior performing organic coatings.
      a. Factory finish surfaces that will be exposed in completed assemblies.
      b. Touch-up surfaces cut during fabrication so that no natural aluminum is visible in completed assemblies, including joint edges.
      c. Coat concealed metal surfaces that will be in contact with cementitious materials or dissimilar metals with bituminous paint.
   7. Provide flush joints and corners, weathersealed, accurately fitted and secured; prepared to receive anchors; fasteners and attachments concealed from view; reinforced as required for imposed loads.
   8. Construction: Eliminate noises caused by wind and thermal movement, prevent vibration harmonics, and prevent "stack effect" in internal spaces.
   9. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.
   10. Maintain continuous air barrier and/or vapor retarder seal throughout assembly, primarily in line with inside pane of glazing and inner sheet of infill panel and heel bead of glazing compound.

B. Structural Performance Requirements: Design and size components to withstand the following load requirements without damage or permanent set.
   1. Design Wind Loads: Comply with the requirements of ASCE 7 and requirements of Chapter 16 of the International Building Code (IBC) 2012 edition, as amended by the State of Indiana.
      a. Member Deflection: For spans less than 13 feet 6 inches, limit member deflection to flexure limit of glass in any direction, and maximum of 1/175 of span or 3/4 inch, whichever is less and with full recovery of glazing materials.
      b. Member Deflection: For spans over 13 feet 6 inches and less than 40 feet, limit member deflection to flexure limit of glass in any direction, and maximum of 1/240 of span plus 1/4 inch, with full recovery of glazing materials.
   2. Seismic Loads: Design and size components to withstand seismic loads and sway displacement in accordance with requirements of ASCE 7.
   3. Interstory Differential Lateral Movement: Meeting pass/fail criteria of AAMA 501.4 for Use Group I, Standard Occupancy, when tested at design displacement of 0.010 times greater adjacent story height, maximum, and 1.5 times design displacement, through three complete cycles.

4. Movement: Accommodate the following movement without damage to components or deterioration of seals:
   a. Expansion and contraction caused by 180 degrees F surface temperature.
   b. Expansion and contraction caused by cycling temperature range of 170 degrees F over a 12 hour period.
   c. Movement of curtain wall relative to perimeter framing.
   d. Deflection of structural support framing, under permanent and dynamic loads.
   e. Shortening of structural concrete columns.
   f. Creep of structural concrete members.
5. Structural Sealant Glazing (SSG) System: For individual glass lites, design framing members to not exceed a deflection normal to the wall of L/175 between supports with 3/4 inch maximum, and a deflection parallel to the wall of L/360 with 1/8 inch maximum, whichever is less.

C. Water Penetration Resistance on Manufactured Assembly: No water on indoor face when tested as follows:
   1. Test Pressure Differential: 12 psf.
   2. Test Method: AAMA 501.1.

D. Air Leakage: 0.06 cfm/sq ft maximum leakage of wall area when tested in accordance with ASTM E283/E283M at 6.24 psf pressure difference across assembly.

E. Thermal Performance Requirements:
   1. Condensation Resistance Factor of Framing: 65, minimum, measured in accordance with AAMA 1503.
   2. Overall U-value Including Glazing: 0.35 Btu/(hr sq ft deg F), maximum for field fabricated systems; 0.34 Btu/(hr sq ft deg F), maximum for shop/factory fabricated systems.
      a. Overall respectiveU-values based on Basis of Design systems.

F. Structural designs shall be prepared by a qualified Professional Engineer registered in the State of Indiana.

2.03 ENTRANCE DOOR SYSTEMS

A. Entrance Doors: Manufacturer's standard glazed, wide stile, entrance doors for manual-swing and automated-swing operation.
   1. Door Construction:
      a. Manufacturer’s internally rigid and reinforced, mechanically joined and welded.
         1) Engineered to resist same wind-loading requirements as curtainwall specified herein before.
         2) Additional Loads: Incorporate push/pull, open/close cycling, and abuse impact operation loads per DDE.
      b. Door Overall Thickness: 2-1/4-inch, with minimum 0.125-inch thick, extruded-aluminum tubular rail and stile members.
      c. Thermal Construction: Manufacturer’s thermally-engineered thermal break construction of exterior aluminum members from members exposed to the interior.
      d. All doors are to be factory-prepared for all door hardware, specified elsewhere in the Project Manual.
         1) Coordinate with door schedule for door hardware requirements.
   2. Door Design: Wide stile; 5-inch nominal width; 10-inch high bottom rail, 5-inch top rail.
   3. Glazing Stops and Gaskets: Square, snap-on, extruded-aluminum stops and preformed gaskets.
      a. Provide non-removable glazing stops on outside of door.

b. Accommodate 3/4-inch insulating glass at all exterior entrance and interior vestibule doors.

2.04 COMPONENTS

A. Aluminum Framing Members: Tubular aluminum sections, thermally broken with interior section insulated from exterior, drainage holes and internal weep drainage system.
   1. Framing members for interior applications need not be thermally broken.
   2. Cross-Section: As indicated on drawings.
   3. Structurally Reinforced Members: Extruded aluminum with internal reinforcement of structural steel member.

B. Glazing: See Section 08 8000.

C. Insulated Spandrel Panels: Insulated, aluminum sheet back, with edges formed to mechanically fasten to curtain wall framing and sealed set behind insulated spandrel glazing.
   1. Core: Unfaced semi-rigid mineral wool board insulation core with R-value of 4 per inch.
   2. Back Sheet at Exposed Locations: 0.040 inch thick.
   3. Backpan Metal: 0.040 inch thick.
   4. Interior Finish: Factory enameled, color as selected.

2.05 MATERIALS

A. Extruded Aluminum: ASTM B221 (ASTM B221M).

B. Sheet Aluminum: ASTM B209/B209M.

C. Structural Steel Sections: ASTM A36/A36M; galvanized in accordance with requirements of ASTM A123/A123Mfor connections and inserts in concrete and masonry.

D. Structural Steel Sections: ASTM A36/A36M; shop primed for connections to structural steel that are exposed to view.

E. Structural Supporting Anchors: See Section 05 1200.

F. Structural Supporting Anchors Attached to Structural Steel: Design for bolted attachment.

G. Structural Supporting Anchors Attached to Reinforced Concrete Members: Design for welded attachment to weld plates embedded in concrete.

H. Fasteners: Stainless steel; type as required or recommended by curtain wall manufacturer.

I. Exposed Flashings: Aluminum sheet, 20-gauge, 0.032-inch minimum thickness; finish to match framing members.

J. Concealed Flashings: Sheet aluminum, 26-gauge, 0.017-inch minimum thickness.

K. Firestopping: See Section 07 8400.

L. Structural Sealant Glazing (SSG) Adhesive: Neutral curing, silicone sealant formulated for SSG applications in compliance with ASTM C1184 and structural glazing industry guidelines, ASTM C1401.
   1. SSG adhesive in compliance with ASTM C920; Type S - Single-component, Grade NS, Class 50, Use NT, G, and A.
   2. Ultimate Tensile Strength: Minimum of 50 psi as determined by test method ASTM C1135 under the following conditions.
      a. Exposure to air temperatures of 190 degrees F and minus 20 degrees F.
      b. Water immersion for seven (7) days, minimum.
      c. Exposure to weathering for 5,000 hours, minimum.
   3. Sealant Design Tensile Strength: 20 psi, maximum.
   4. Hardness: 20 to 60 with Type A-2 durometer in compliance with test method ASTM C661.

5. Color: As selected by Architect from manufacturer's custom range.
6. SSG sealant tested for compatibility with glazing accessories in compliance with ASTM C1087, tested for accelerated weathering in compliance with ASTM C793, and in compliance with insulating glass secondary sealant design standards of ASTM C1249.

M. Weatherseal Sealant: Silicone, with adhesion in compliance with ASTM C794; compatible with glazing accessories.

N. Sill Flashing Sealant: Elastomeric, silicone or polyurethane, and compatible with flashing material.

O. Glazing Gaskets: Type to suit application to achieve weather, moisture, and air infiltration requirements.

P. Glazing Accessories: See Section 08 8000.

Q. Shop and Touch-Up Primer for Steel Components: Zinc oxide, alkyd, linseed oil primer appropriate for use over hand cleaned steel.

R. Touch-Up Primer for Galvanized Steel Surfaces: SSPC-Paint 20, zinc rich.

2.06 FINISHES

A. Superior Performing Organic Coatings System: Manufacturer's standard multi-coat superior performing organic coatings system complying with AAMA 2605, including at least 70 percent polyvinylidene fluoride (PVDF) resin, and at least 80 percent of aluminum extrusion and panels surfaces having minimum total dry film thickness (DFT) of 1.2 mils, 0.0012 inch.

B. Color: To be selected by Architect from manufacturer's custom range.
1. Exterior-side and interior-side of curtain wall mullions from glazing and insulated spandrel panel locations to be different colors, as selected by Architect.

C. Touch-Up Materials: As recommended by coating manufacturer for field application.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify dimensions, tolerances, and method of attachment with other related work.

B. Verify that curtain wall openings and adjoining water-resistive and air barrier seal materials are ready to receive work of this section.

C. Verify that anchorage devices have been properly installed and located.

3.02 INSTALLATION

A. Install curtain wall system in accordance with manufacturer's instructions.

B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.

C. Provide alignment attachments and shims to permanently fasten system to building structure.

D. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances.

E. Provide thermal isolation where components penetrate or disrupt building insulation.

F. Install sill and head flashings. Turn up ends and edges; seal to adjacent work to form water tight dam.

G. Coordinate installation of firestopping at each floor slab edge.

H. Fill voids in shim spaces at perimeter of assembly to maintain continuity of thermal barrier with non-expanding insulating foam similar to Hilti CF812.

I. Pressure Plate Framing: Install glazing and infill panels using exterior wet/dry glazing method; see Section 08 8000.

J. Structural Sealant Glazing (SSG) Adhesive: Install structural sealant glazing adhesive and weatherseal sealant in accordance with manufacturer's instructions.

K. Touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired.

3.03 TOLERANCES

A. Maximum Variation from Plumb: 0.06 inch per 3 feet noncumulative or 0.5 inches per 100 feet, whichever is less.

B. Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch.

C. Sealant Space Between Curtain Wall Mullions and Adjacent Construction: Maximum of 3/4 inch and minimum of 1/4 inch.

3.04 FIELD QUALITY CONTROL

A. Provide services of curtain wall manufacturer's field representative to observe for proper installation of system and submit report.

B. See Section 01 4000 - Quality Requirements for independent field testing and inspection requirements, and requirements for monitoring quality of specified product installations.

C. Water-Spray Test: Provide water spray quality test of installed curtain wall components in accordance with AAMA 501.2 during construction process and before installation of interior finishes.
   1. Perform a minimum of three tests in each designated area as directed by Architect.
   2. Conduct tests in each area prior to 10 percent, 35 percent, and 70 percent completion of this work.

D. Provide field testing of installed curtain wall system by independent laboratory in accordance with AAMA 503 during construction process and before installation of interior finishes.
   1. Perform a minimum of three tests in each designated area as directed by Architect.
   2. Conduct tests in each area prior to 10 percent, 35 percent, and 70 percent completion of this work.
   3. Field test for water penetration in accordance with ASTM E1105 with uniform static air pressure difference (Procedure A) not less than 6.24 psf.
      a. Do not use the AAMA definition of water penetration. Water penetration is to be defined as any water penetration past the interior face of glazing, including any accumulation of water on the interior face of glass or frame.
   4. Field test for air leakage in accordance with ASTM E783 with uniform static air pressure difference of 1.57 psf.
      a. Maximum allowable rate of air leakage is 0.09 cfm/sq ft.

E. Repair or replace curtain wall components that have failed designated field testing, and retest to verify performance complies with specified requirements.

3.05 CLEANING

A. See Section 01 7000 - Execution and Closeout Requirements for additional requirements.

B. Remove protective material from pre-finished aluminum surfaces.

C. Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths, take care to remove dirt from corners, and wipe surfaces clean.

D. Upon completion of installation, thoroughly clean aluminum surfaces in accordance with AAMA 609 & 610.

3.06 PROTECTION

A. Protect installed products from damage until Date of Substantial Completion.

B. Wherever aluminum is in contact with steel, concrete, or other material potentially creative of electrolytic action, provide permanent isolation of the aluminum by backpainting with first quality bituminous paint or by such other isolation as is approved in advance.

END OF SECTION 08 4413

SECTION 09 2116
GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Performance criteria for gypsum board assemblies.
B. Metal stud wall framing.
C. Metal channel ceiling framing.
D. Acoustic insulation.
E. ~~Gypsum sheathing.~~
F. Cementitious backing board.
G. Gypsum wallboard.
H. Joint treatment and accessories.
I. Acoustic (sound-dampening) wall and ceiling board.
J. Vapor retarder.

1.02 RELATED REQUIREMENTS

A. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions.
B. Section 05 4000 - Cold-Formed Metal Framing: Structural steel stud framing.
C. Section 06 1053 - Miscellaneous Rough Carpentry: Wood blocking product and execution requirements.
D. Section 06 1600 - Sheathing - USG: Building sheathing at exterior.
E. Section 07 2700 - Air Barriers: Air- and water-resistive barrier over sheathing.
F. Section 07 8400 - Firestopping: Top-of-wall assemblies at fire-resistance-rated walls.
G. Section 07 9200 - Joint Sealants: Sealing acoustical gaps in construction other than gypsum board or plaster work.

1.03 REFERENCE STANDARDS

A. AISI S100 - North American Specification for the Design of Cold-Formed Steel Structural Members.
B. AISI S220 - North American Standard for Cold-Formed Steel Nonstructural Framing.
C. AISI S240 - North American Standard for Cold-Formed Steel Structural Framing.
D. ANSI A108.11 - American National Standard Specifications for Interior Installation of Cementitious Backer Units.
E. ANSI A118.9 - American National Standard Specifications for Test Methods and Specifications for Cementitious Backer Units.
F. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.
G. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
H. ASTM A1003/A1003M - Standard Specification for Steel Sheet, Carbon, Metallic- and Nonmetallic-Coated for Cold-Formed Framing Members.

I. ASTM C1007 - Standard Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories.

J. ASTM C475/C475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board.

K. ASTM C665 - Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.

L. ASTM C754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.

M. ASTM C840 - Standard Specification for Application and Finishing of Gypsum Board.

N. ASTM C1002 - Standard Specification for Steel Self-Piercing Tapping Screws for Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs.

O. ASTM C1047 - Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base.

P. ASTM C1178/C1178M - Standard Specification for Coated Glass Mat Water-Resistant Gypsum Backing Panel.

Q. ASTM C1325 - Standard Specification for Fiber-Mat Reinforced Cementitious Backer Units.

R. ASTM C1396/C1396M - Standard Specification for Gypsum Board.

S. ASTM C1629/C1629M - Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels.

T. ASTM C1658/C1658M - Standard Specification for Glass Mat Gypsum Panels.

U. ASTM D3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.

V. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.

W. ASTM E413 - Classification for Rating Sound Insulation.

X. GA-216 - Application and Finishing of Gypsum Panel Products.

Y. GA-226 - Application of Gypsum Board to Form Curved Surfaces.

Z. GA-600 - Fire Resistance and Sound Control Design Manual.

AA. ICC (IBC) - International Building Code.

BB. UL (FRD) - Fire Resistance Directory.

CC. UL 2079 - Standard for Tests for Fire Resistance of Building Joint Systems.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordination: Coordinate the installation of gypsum board assemblies with size, location, and installation of service utilities.
   1. Consult with other trades to ascertain if they require “extra” metal studs or blocking for attachment of their Work or framed openings and coordinate locations of such.
   2. All wall mounted equipment or accessories typically require additional bracing or straps. The specific type and size of the proposed straps or bracing must be reviewed with the Architect/Engineer prior to fabrication or installation.
   3. Allow reasonable time for those other trades who have Work occurring within the gypsum drywall Work to perform their Work.
   4. Coordinate locations and types of blocking and supports provided under other Sections of this Specification.

5. Contractor shall provide any and all other miscellaneous framing accessories, fasteners and non-combustible and fire-retardant materials as standard used in the stud framing industry not specified hereinafter but as necessary and required to meet and comply with Referenced Standards and Quality Assurance articles specified hereinbefore.

B. Preinstallation Meeting: Conduct a preinstallation meeting at least one week prior to the start of the work of this section; require attendance by all affected installers.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data:
1. Provide data on metal framing, gypsum board, glass mat faced gypsum board, accessories, and joint finishing system, and sound transmission characteristics for assemblies with STC ratings.
2. Provide manufacturer's data on partition head to structure connectors, showing compliance with requirements.

C. Shop Drawings: Indicate special details associated with fireproofing and acoustic seals.

D. Delegated Design: Engage a qualified professional engineer, as defined in Section 01 4000 - Quality Requirements to provide certified engineering confirmation of non-structural metal framing specified hereinafter and of framing indicated on the Drawings.
1. Changes pursuant to delegated design engineer’s confirmation analysis shall be recorded in manufacturer’s submittal of technical data and design loading information specified hereinbefore.

E. Steel Framing Industry Association (SFIA) Certification:
1. Submit documentation that metal studs and connectors used on project meet or exceed requirements of International Building Code.

F. Evaluation Service Reports: Show compliance of grid suspension systems with specified requirements.

1.06 QUALITY ASSURANCE

A. Designer Qualifications: Perform design under direct supervision of a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.

B. SFIA Code Compliance Certification Program: www.CFSteel.org/#sle: Use metal studs and connectors certified for compliance with International Building Code.

C. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of documented experience.

1.07 DELIVERY, STORAGE, AND HANDLING

A. See Section 01 7419 - Construction Waste Management and Disposal for packaging waste requirements.

B. Store gypsum products and accessories indoors and keep above freezing. Elevate boards above floor, on nonwicking supports, in accordance with manufacturer's recommendations.

C. Store metal products to prevent corrosion.

PART 2 PRODUCTS

2.01 GYPSUM BOARD ASSEMBLIES

A. Provide completed assemblies complying with ASTM C840 and GA-216.
   1. See PART 3 for finishing requirements.

B. Interior Partitions, Indicated as Acoustic: Provide completed assemblies with the following characteristics:
   1. Acoustic Attenuation: STC as indicated calculated in accordance with ASTM E413, based on tests conducted in accordance with ASTM E90.

C. ~~Shaft Walls at Elevator Shafts: Provide completed assemblies with the following characteristics:~~
   1. ~~Air Pressure Within Shaft: Intermittent loads of 7.5 lbf/sq ft with maximum mid-span deflection of L/240.~~
   2. ~~Acoustic Attenuation: STC of 50-54 calculated in accordance with ASTM E413, based on tests conducted in accordance with ASTM E90.~~

D. Grid Suspension Systems: Provide grid suspension systems in accordance with ASTM C840 and GA-216 complying with the following:
   1. ICC-ES Evaluation Report No. ESR-1222 or similar.

E. Fire-Resistance-Rated Assemblies: Provide completed assemblies complying with applicable code.
   1. Fire-Resistance-Rated Partitions: UL listed assembly No. U419; 1-2 hour rating.
   2. Fire-Resistance-Rated Ceilings and Soffits: Two (2) hour fire rating.
   3. Fire-Resistance-Rated Shaft Walls: UL listed assembly No. U415; 1-2 hour rating.
   4. ICC IBC Item Numbers: Comply with applicable requirements of ICC IBC for the particular assembly.
   5. UL Assembly Numbers: Provide construction equivalent to that listed for the particular assembly in the current UL (FRD).
   6. ICC-ES Evaluation Report No. AER-09038.

2.02 METAL FRAMING MATERIALS

A. Steel Sheet: ASTM A1003/A1003M, subject to the ductility limitations indicated in AISI S220 or equivalent.
   1. Structural Grade: As required to meet design criteria.
   2. Corrosion Protection Coating Designation: G40, or equivalent in accordance with AISI S220.

B. Nonstructural Framing System Components: AISI S220; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 for the spacing indicated, with maximum deflection of wall framing of L/360 at 5 psf.
   1. Studs: C-shaped with ribbed webs, and flanges with rolled edge stiffeners.
      a. Thickness:18 mils, 0.0181 inch (20 GA EQ), minimum.
   2. Runners: U shaped, sized to match studs.
   3. Furring Members: Hat-shaped sections, minimum depth of 7/8 inch and 1-1/2 inch.
   4. ~~Furring Members: Zee-shaped sections, minimum depth of 1 inch.~~

C. Shaft Wall Studs and Accessories: AISI S220; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 and specified performance requirements.
   1. Products:
      a. Same manufacturer as other framing materials.

D. Partition Head to Structure Connections: Provide mechanical anchorage devices that accommodate deflection and prevent rotation of studs while maintaining structural performance of partition.
   1. Structural Performance: Maintain lateral load resistance and vertical movement capacity required by applicable code, when evaluated in accordance with AISI S100.
   2. Material: ASTM A653/A653M steel sheet, SS Grade 50/340, with G60/Z180 hot-dipped galvanized coating.
   3. Provide components UL-listed for use in UL-listed fire-resistance-rated head of partition joint systems indicated on drawings.
   4. Provide mechanical anchorage devices as described above that accommodate deflection while maintaining the fire-resistance rating of the wall assembly.
      a. Products:
         1) ClarkDietrich; BlazeFrame DSL 2: www.clarkdietrich.com/#sle.
         2) MARINO\Ware; Slotted Track: www.marinoware.com/#sle.

E. Non-structural Framing Accessories:
   1. Ceiling Hangers: Type and size as specified in ASTM C754 for spacing required.
   2. Partial Height Wall Framing Support: Provides stud reinforcement and anchored connection to floor.
      a. Materials: ASTM A36/A36M formed sheet steel support member with factory-welded ASTM A1003/A1003M steel plate base.
      b. Height: Provide tallest standard height that will fit within partial height wall framing.
      c. Location: Provide at all floor supported partial height walls and where indicated on the drawings.
      d. Products:
         1) ClarkDietrich; Pony Wall (PW): www.clarkdietrich.com/#sle.
         2) SCAFCO Corporation; Ponywall Support: www.scafco.com/#sle.

F. Grid Suspension Systems: Steel grid system of main tees and support bars connected to structure using hanging wire.
   1. Products:
      a. USG Corporation; Drywall Suspension System: www.usg.com/#sle.
      b. Armstrong World Industries, Inc.; Drywall Grid System: www.armstrongceilings.com/#sle.
      c. Rockfon North America; Chicago Metallic Drywall Grid: www.rockfon.com/#sle.

2.03 BOARD MATERIALS

A. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.
   1. Application: Use for vertical surfaces and ceilings, unless otherwise indicated.
   2. Glass mat faced gypsum panels, as defined in ASTM C1658/C1658M, suitable for paint finish, of the same core type and thickness may be substituted for paper-faced board.
   3. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273; or, score of 0, when tested in accordance with ASTM G21.
      a. Less than 5% water absorption per ASTM C473.
      b. Mold-resistant board is required whenever board is being installed before the building is enclosed and conditioned.
      c. Mold resistant board is required in the following locations:
         1) Areas exposed to high moisture levels (toilet rooms, shower rooms, behind counters with sinks, janitors closets).

4. At Assemblies Indicated with Fire-Resistance Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X board, UL or WH listed.
5. Thickness:
   a. Vertical Surfaces: 5/8 inch.
   b. Ceilings: 5/8 inch.
   c. Multi-Layer Assemblies: Thicknesses as indicated on drawings.
6. Paper-Faced Products:
   a. CertainTeed Corporation; Type X Drywall: www.certainteed.com/#sle.
   b. Georgia-Pacific Gypsum; ToughRock Fireguard X: www.gpgypsum.com/#sle.
   c. Gold Bond Building Products, LLC provided by National Gypsum Company; Gold Bond Fire-Shield Gypsum Board: www.goldbondbuilding.com/#sle.
   d. USG Corporation; Sheetrock Brand Firecode X Panels 5/8 in. (15.9 mm): www.usg.com/#sle.
7. Mold-Resistant, Paper-Faced Products:
   a. CertainTeed Corporation; M2Tech 5/8" Type X Moisture & Mold Resistant Drywall: www.certainteed.com/#sle.
   b. Georgia-Pacific Gypsum; ToughRock Fireguard X Mold-Guard: www.gpgypsum.com/#sle.
   c. Gold Bond Building Products, LLC provided by National Gypsum Company; Gold Bond XP Fire-Shield Gypsum Board: www.goldbondbuilding.com/#sle.
   d. USG Corporation; Sheetrock Brand Mold Tough Panels Firecode X 5/8 in. (15.9 mm): www.usg.com/#sle.
8. Glass Mat Faced Products:
   a. CertainTeed Corporation; 5/8" GlasRoc Interior Type X: www.certainteed.com/#sle.
   b. Georgia-Pacific Gypsum; DensArmor Plus: www.gpgypsum.com/#sle.
   c. Gold Bond Building Products, LLC provided by National Gypsum Company; Gold Bond eXP Interior Extreme Fire-Shield Gypsum Panel: www.goldbondbuilding.com/#sle.
   d. USG Corporation; Sheetrock Brand Glass-Mat Panels Mold Tough Regular 5/8 in. (15.9 mm): www.usg.com/#sle.

B. Abuse Resistant Wallboard:
1. Application: High-traffic areas indicated, including corridor walls (corridor side) and storage room walls.
2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
3. Paper-Faced Type: Gypsum wallboard, as defined in ASTM C1396/C1396M.
4. Glass Mat-Faced Type: Gypsum wallboard, as defined in ASTM C1658/C1658M.
5. Type: Fire-resistance-rated Type X, UL or WH listed.
6. Thickness: 5/8 inch.
7. Edges: Tapered.
8. Paper-Faced Products:
   a. CertainTeed Corporation; Extreme Abuse Resistant Drywall with M2Tech: www.certainteed.com/#sle.
   b. Georgia-Pacific Gypsum; ToughRock Fireguard X Mold Guard Abuse-Resistant: www.gpgypsum.com/#sle.
   c. Gold Bond Building Products, LLC provided by National Gypsum Company; Gold Bond XP Hi-Abuse Gypsum Board: www.goldbondbuilding.com/#sle.
   d. USG Corporation; Sheetrock Brand AR Firecode X Panels 5/8 in.. (15.9 mm): www.usg.com/#sle.

9. Glass Mat Faced Products: Provide minimum 20-gauge (0.0296 inch) (0.752 mm) steel studs, as defined by the Steel Stud Manufacturers Association (SSMA).
    a. Gold Bond Building Products, LLC provided by National Gypsum Company; Gold Bond eXP Interior Extreme AR Gypsum Panel: www.goldbondbuilding.com/#sle.
    b. USG Corporation; Sheetrock Brand Glass-Mat Panels Mold Tough AR Firecode X 5/8 in. (15.9 mm): www.usg.com/#sle.

C. Impact Resistant Wallboard:
1. Application: Base layer of stairways ~~and elevator enclosures for highrise buildings~~.
2. Soft Body Impact: Level 3, minimum, when tested in accordance with ASTM C1629/C1629M.
3. Hard Body Impact: Level 3, minimum, when tested in accordance with ASTM C1629/C1629M.
4. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
5. Glass Mat-Faced Type: Gypsum wallboard, as defined in ASTM C1658/C1658M.
6. Type: Fire-resistance-rated Type X, UL or WH listed.
7. Thickness: 5/8 inch.
8. Edges: Tapered.
9. Glass Mat Faced Products: Noncombustible, moisture-resistant gypsum core encased in a fiberglass face and back that shed water. Provide minimum 20-gauge (0.0296 inch) (0.752 mm) steel studs, as defined by the Steel Stud Manufacturers Association (SSMA). Non intended for exterior applications or constant exposure to water. Protect from immersion in water and the eroding effects of cascading water. Product is not suitable for use as a substrate for tile in wet areas such as tubs, showers, multi-stall shower and other areas subject to direct water exposure. Refer to Gypsum Association's GA-216 reference guide, or ASTM C840 reference standard for additional installation requirements.
    a. Gold Bond Building Products, LLC provided by National Gypsum Company; Gold Bond eXP Interior Extreme IR Gypsum Panel: www.goldbondbuilding.com/#sle.
    b. USG Corporation; Sheetrock Brand Glass-Mat Panels Mold Tough VHI Firecode X 5/8 in. (15.9 mm): www.usg.com/#sle.

D. Backing Board For Wet Areas: One of the following products:
1. Application: Surfaces behind tile in wet areas, including tub and shower surrounds, shower ceilings, and wet walls in toilet rooms.
2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
3. ANSI Cement-Based Board: Non-gypsum-based; aggregated Portland cement panels with glass fiber mesh embedded in front and back surfaces complying with ANSI A118.9 or ASTM C1325.
    a. Thickness: 5/8 inch.
    b. Products:
        1) Custom Building Products; Wonderboard: www.custombuildingproducts.com/#sle.
        2) PermaBASE Building Products, LLC provided by National Gypsum Company; PermaBase Cement Board: www.goldbondbuilding.com/#sle.
        3) USG Corporation; Fiberock Brand Tile Backerboard FRX-G 5/8 in. (15.9 mm): www.usg.com/#sle.
4. Glass Mat Faced Board: Coated glass mat water-resistant gypsum backing panel as defined in ASTM C1178/C1178M.
    a. Regular Type: Thickness 5/8 inch.
    b. Fire-Resistance-Rated Type: Type X core, thickness 5/8 inch.
    c. Products:

1) CertainTeed Corporation; 5/8" GlasRoc Tile Backer Type X: www.certainteed.com/#sle.
2) Georgia-Pacific Gypsum; DensShield Tile Backer: www.gpgypsum.com/#sle.
3) USG Corporation; Durock Brand Glass-Mat Tile Backerboard SGX 5/8 in. (15.9 mm): www.usg.com/#sle.

E. Backing Board For Non-Wet Areas: Water-resistant gypsum backing board as defined in ASTM C1396/C1396M; sizes to minimum joints in place; ends square cut.
1. Application: Vertical surfaces behind thinset tile, except in wet areas.
2. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
3. At Assemblies Indicated with Fire-Resistance Rating: Use type required by indicated tested assembly; if no tested assembly is indicated, use Type X board, UL or WH listed.
4. Type X Thickness: 5/8 inch.
5. Regular Board Thickness: 5/8 inch.
6. Edges: Tapered.
7. Products:
   a. American Gypsum Company; M-Bloc Type X: www.americangypsum.com/#sle.
   b. Georgia-Pacific Gypsum; DensArmor Plus: www.gpgypsum.com/#sle.
   c. Gold Bond Building Products, LLC provided by National Gypsum Company; Gold Bond XP Fire-Shield Gypsum Board: www.goldbondbuilding.com/#sle.

F. Acoustical Sound Dampening Wall and Ceiling Board: Two layers of heavy paper-faced, high-density gypsum board separated by a viscoelastic polymer layer and capable of achieving STC rating of 50 or more in typical stud wall assemblies as calculated in accordance with ASTM E413 and when tested in accordance with ASTM E90.
1. Thickness: 5/8 inch.
2. Long Edges: Tapered.
3. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
4. Products:
   a. CertainTeed Corporation; SilentFX Quick Cut Type X Gypsum Board: www.certainteed.com/#sle.
   b. Gold Bond Building Products, LLC provided by National Gypsum Company; Gold Bond SoundBreak XP Wall Board: www.goldbondbuilding.com/#sle.
   c. Substitutions: See Section 01 6000 - Product Requirements.

G. Exterior Sheathing Board: See Section 06 1600.

H. Shaftwall and Coreboard: Type X; 1 inch thick by 24 inches wide, beveled long edges, ends square cut.
1. Paper-Faced Type: Gypsum shaftliner board or gypsum coreboard as defined ASTM C1396/C1396M; water-resistant faces.
2. Glass Mat Faced Type: Glass mat shaftliner gypsum panel or glass mat coreboard gypsum panel as defined in ASTM C1658/C1658M.
3. Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
4. Paper-Faced Products:
   a. CertainTeed Corporation; M2Tech Type X Shaftliner: www.certainteed.com/#sle.
   b. Gold Bond Building Products, LLC provided by National Gypsum Company; Gold Bond Shaftliner XP: www.goldbondbuilding.com/#sle.
   c. USG Corporation; Sheetrock Brand Enhanced (e+) Gypsum Liner Panels 1 in. (25.4 mm) SLX: www.usg.com/#sle.
5. Glass Mat Faced Products:
   a. CertainTeed Corporation; GlasRoc Shaftliner Type X: www.certainteed.com/#sle.

b. Georgia-Pacific Gypsum; DensGlass Shaftliner (mold-resistant): www.gpgypsum.com/#sle.
c. Gold Bond Building Products, LLC provided by National Gypsum Company; Gold Bond eXP Shaftliner: www.goldbondbuilding.com/#sle.
d. USG Corporation; Sheetrock Brand Glass-Mat Liner Panels Mold Tough 1 in. (25.4 mm): www.usg.com/#sle.

6. Framing: Gypsum Liner Panels attach to metal framing; CH studs. Refer to product data sheet for additional information.

2.04 GYPSUM BOARD ACCESSORIES

A. Acoustic Insulation: ASTM C665; preformed ~~mineral fiber~~flexible glass fiber, friction fit type, unfaced; thickness ~~3 inches- 3 -1/2 inches~~as required for STC, full depth of stud cavities.

B. Acoustic Sealant: ~~Acrylic emulsion latex or water-based elastomeric sealant; do not use solvent-based non-curing butyl sealant~~ Non-drying, non-hardening, non-skinning, gunnable, synthetic-rubber sealant recommended for sealing interior concealed joints to reduce transmission of airborne sound.
1. Products:
a. USG Corporation; Sheetrock Acoustical Sealant: www.usg.com/#sle.
b. Pecora Corporation; BA-98: www.pecora.com/#sle.
c. Tremco, Inc.; Tremco Acoustical Sealant: www.tremcosealants.com/#sle.

C. Sound Barrier Mullion Trim Cap: Extruded aluminum trim for maintaining sound barriers at intersections between gypsum walls and glazing assemblies.
1. STC: 55.
2. Gasket Thickness: 1/2 inch.
3. Finish: Match glazing assembly framing finish.
4. Products:
a. Gordon, Inc.; Mullion Mate Series 40 Partition Closures
b. Mull-It-Over Products, Inc; Mull-It-Over 55 - Classic: mullitoverproducts.com/#sle.

D. Vapor Retarder Sheet: Polyamide nylon sheet intended for use with unfaced, vapor-permeable insulation such as fiberglass and mineral wool in wall and ceiling cavities.
1. Thickness: 2 mil, 0.002 inch.
2. Water Vapor Permeance: 1.0 perm, maximum, when tested in accordance with ASTM E96/E96M using Desiccant Method.
3. Surface Burning Characteristics: Smoke developed index of 450 or less, and flame spread index of 25 or less, Class A, when tested in accordance with ASTM E84.
4. Seam Lap and Perimeter Adhesive: Provide manufacturer's recommended method using either tape or sealants.
5. Products:
a. CertainTeed Corporation; MemBrain Continuous Air Barrier and Smart Vapor Retarder: www.certainteed.com/#sle.
b. Substitutions: See Section 01 6000 - Product Requirements.
6. Sealants, Tapes, and Accessories for Sealing Vapor Retarder and Adjacent Substrates: As indicated, complying with vapor retarder manufacturer's installation instructions.

E. Air Barrier: See Section 07 2700.

F. Beads, Joint Accessories, and Other Trim: ASTM C1047, aluminum, rigid plastic, and galvanized steel, unless noted otherwise.
1. Corner Beads: Low profile, for 90 degree outside corners.
a. Products:

1) USG Corporation; Dur-A-Bead No. 103, Galvanized: www.usg.com/#sle.
2) Substitutions: See Section 01 6000 - Product Requirements.

2. Splayed Corner Beads with Paper Face: Outside and inside corner angles as indicated on drawings.
   a. Products:
      1) USG Corporation; Paper Face Bead B1 Beaded Flex (Outside Corners): www.usg.com/#sle.
      2) USG Corporation; Paper Face Bead B2 Flex (Inside Corners): www.usg.com/#sle.
      3) Substitutions: See Section 01 6000 - Product Requirements.
3. Partition End Cap: Rigid plastic end cap with 1-1/8 inch flange; sized for partition width.
4. Expansion Joints:
   a. Fire-Resistance Rated: 1-2 hours when joint system tested in accordance with UL 2079.
   b. Type: V-shaped metal with factory-installed protective tape.
   c. Products:
      1) USG Corporation; No. 093 ZNCJ (Non-Fire Rated): www.usg.com/#sle.
      2) USG Corporation; FAS-093X (Fire Rated): www.usg.com/#sle.
      3) Substitutions: See Section 01 6000 - Product Requirements.

G. Decorative Metal Trim:
   1. Material: Extruded aluminum alloy 6063-T5 temper.
   2. Finish: ~~Anodized, clear~~ As selected by Architect from manufacturer's custom range.
   3. Type: Profile as selected from manufacturer's standard range.
      a. Products:
         1) Fry Reglet; Drywall Profiles: wwwfryreglet.com/#sle.
         2) Gordon Inc; Truform Profiles: www.gordon-inc.com/#sle.
         3) Pittcon Industries; Softforms: www.pittconindustries.com/#sle.
      b. Profiles to be selected from single manufacturer.

H. Moisture Guard Trim: Provide 4-inch high, 20-gauge metal plate at base of walls in corridors and hallways.

I. Joint Materials: ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions.
   1. ~~Fiberglass Tape: 2 inch wide, coated glass fiber tape for joints and corners, except as otherwise indicated.~~
   2. Paper Tape: 2 inch wide, creased paper tape for joints and corners, except as otherwise indicated.
   3. Joint Compound: Drying type, vinyl-based, ready-mixed.
   4. Joint Compound: Setting type, field-mixed.

J. High Build Drywall Surfacer: Vinyl acrylic latex-based coating for spray application, designed to take the place of skim coating and separate paint primer in achieving Level 5 finish.
   1. Products:
      a. Sherwin-Williams; Tuff Surface Premium Texture Finish: www.sherwin-williams.com/#sle.
      b. CertainTeed Corporation; Level V Wall and Ceiling Primer/Surfacer with M2Tech: www.certainteed.com/#sle.
      c. USG Corporation; USG Sheetrock Brand Tuff-Hide Primer-Surfacer: www.usg.com/#sle.

K. Screws for Fastening of Gypsum Panel Products to Cold-Formed Steel Studs Less than 0.033 inches in Thickness and Wood Members: ASTM C1002; self-piercing tapping screws, corrosion-resistant.

L. Flat Strap Backing: 0.0566 inch minimum thickness or as required to support load. Span 3 studs minimum.

M. Anchorage to Substrate: Tie wire, nails, screws, and other metal supports, of type and size to suit application; to rigidly secure materials in place.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that project conditions are appropriate for work of this section to commence.

3.02 SHAFT WALL INSTALLATION

A. Shaft Wall Framing: Install in accordance with manufacturer's installation instructions.
   1. Fasten runners to structure with short leg to finished side, using appropriate power-driven fasteners at not more than 24 inches on center.
   2. Install studs at spacing required to meet performance requirements.

B. Shaft Wall Liner: Cut panels to accurate dimensions and install sequentially between special friction studs.
   1. On walls over sixteen feet high, screw-attach studs to runners top and bottom.
   2. Seal perimeter of shaft wall and penetrations with acoustical sealant.

3.03 FRAMING INSTALLATION

A. Metal Framing: Install in accordance with ASTM C1007, AISI S220 and manufacturer's instructions.

B. Suspended Ceilings and Soffits: Space framing and furring members at 16 inches on center.
   1. Level ceiling system to a tolerance of 1/1200.
   2. Laterally brace entire suspension system.

C. Studs: Space studs at 16 inches on center.
   1. Extend partition framing to structure in all locations, unless otherwise indicated.
   2. Partitions Terminating above ceiling: Laterally brace framing. Extend 6 inches above finished ceiling assembly height, unless otherwise indicated.
   3. Partitions Terminating at Structure: Attach top runner to structure, maintain clearance between top of studs and structure, and connect studs to track using specified mechanical devices in accordance with manufacturer's instructions; verify free movement of top of stud connections; do not leave studs unattached to track.

D. Openings: Reinforce openings as required for weight of doors or operable panels, using not less than double studs at jambs.

E. Standard Wall Furring: Install at concrete and masonry walls scheduled to receive gypsum board, not more than 4 inches from floor and ceiling lines and abutting walls. Secure in place on alternate channel flanges at maximum 24 inches on center.
   1. Orientation: Horizontal.
   2. Spacing: At 24 inches on center.

F. Blocking: Install mechanically fastened steel sheet blocking for support of:
   1. Framed openings.
   2. Wall-mounted cabinets.

3. Plumbing fixtures.
4. Toilet partitions.
5. Toilet accessories.
6. Wall-mounted door hardware.
7. Other locations as required.

3.04 ACOUSTIC ACCESSORIES INSTALLATION

A. Acoustic Insulation: Place tightly within spaces, around cut openings, behind and around electrical and mechanical items within partitions, and tight to items passing through partitions.

B. Acoustic Sealant: Install in accordance with manufacturer's instructions.
   1. Place continuous bead at perimeter of base layer of gypsum board on each side of partition.
   2. Seal around all penetrations by conduit, pipe, ducts, and rough-in boxes, except where firestopping is provided.

C. Sound Barrier Mullion Trim Cap Installation: Install in accordance with manufacturer's instructions.

3.05 BOARD INSTALLATION

A. Comply with ASTM C840, GA-216, and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.

B. Install gypsum board with 1/2 inch clearance above floor.

C. Single-Layer Nonrated: Install gypsum board in most economical direction, with ends and edges occurring over firm bearing.
   1. Exception: Tapered edges to receive joint treatment at right angles to framing.

D. Double-Layer, Nonrated: Use gypsum board for first layer, placed parallel to framing or furring members, with ends and edges occurring over firm bearing. Place second layer perpendicular to framing or furring members. Offset joints of second layer from joints of first layer.

E. Fire-Resistance-Rated Construction: Install gypsum board in strict compliance with requirements of assembly listing.

F. Exposed Gypsum Board in Interior Wet Areas: Seal joints, cut edges, and holes with water-resistant sealant.

G. Cementitious Backing Board: Install over steel framing members where indicated, in accordance with ANSI A108.11 and manufacturer's instructions.

H. Installation on Metal Framing: Use screws for attachment of gypsum board except face layer of nonrated double-layer assemblies, which may be installed by means of adhesive lamination.

I. ~~Curved Surfaces: Apply gypsum board to curved substrates in accordance with GA-226.~~

3.06 INSTALLATION OF TRIM AND ACCESSORIES

A. Control Joints: Place control joints consistent with lines of building spaces and as indicated.
   1. Not more than 30 feet apart on walls and ceilings over 50 feet long.
   2. ~~At exterior soffits, not more than 30 feet apart in both directions.~~
   3. Align interior control joints to edge of nearest door frame, unless indicated otherwise.

B. Corner Beads: Install at external corners, using longest practical lengths.

C. Edge Trim: Install at locations where gypsum board abuts dissimilar materials and as indicated.

D. Decorative Trim: Install at locations shown on drawings and in accordance with manufacturer's instructions.

E. Moisture Guard Trim: Install on bottom edge of gypsum board throughout building at corridors and hallways only.

3.07 JOINT TREATMENT

A. Glass Mat Faced Gypsum Board ~~and Exterior Glass Mat Faced Sheathing~~: Use fiberglass joint tape, embed and finish with setting type joint compound.

B. Paper Faced Gypsum Board: Use paper joint tape, embed with drying type joint compound and finish with setting type joint compound.

C. Finish gypsum board in accordance with levels defined in ASTM C840, as follows:
   1. Level 5: Walls and ceilings to receive semi-gloss or gloss paint finish, dark painted finish, and where substrate is glass mat faced gypsum board, and other areas specifically indicated or required by paint or substrate manufacturer.
   2. Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated, including mechanical rooms.
   3. Level 3: Walls to receive textured wall finish.
   4. Level 2: In ~~utility areas~~ unexposed areas (above suspended ceilings), behind cabinetry, and on backing board to receive tile finish.
   5. Level 1: ~~Fire-resistance-rated wall~~Wall and plenum areas above finished ceilings, whether or not accessible in the completed construction.

D. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
   1. Feather coats of joint compound so that camber is maximum 1/32 inch.
   2. Taping, filling, and sanding are not required at base layer of double-layer applications.

E. Where Level 5 finish is indicated, spray apply high build drywall surfacer over entire surface after joints have been properly treated; achieve a flat and tool mark-free finish.

F. Fill and finish joints and corners of cementitious backing board as recommended by manufacturer.

3.08 TOLERANCES

A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.

3.09 CLEANING

A. See Section 01 7000 - Execution and Closeout Requirements for additional requirements.

B. Clean drywall and adjacent surfaces of dust from sanding.

C. When face paper is punctured, drive new screw approximately 1-1/2” from defective fastener and remove defective fastener. Fill damaged surface with joint compound.

D. Do not allow the accumulation of scraps and debris arising from the Work of this Section but maintain the premises in a neat and orderly condition at all times. In the event of spilling, splashing, or damage to adjacent surfaces, immediately repair or clean.

3.10 PROTECTION

A. Protect installed gypsum board assemblies from subsequent construction operations.

END OF SECTION 09 2116

SECTION 09 9113
EXTERIOR PAINTING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Surface preparation.

B. Field application of paints.

C. Scope: Finish exterior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated, including the following:
   1. Exposed surfaces of steel lintels and ledge angles.
   2. Exposed bare, primed, or painted steel and metal work.
   3. Bare pipes, ducts, and hangers.
   4. Wireways and conduit.
   5. Hollow metal doors and frames.
   6. Any and all other exposed exterior surfaces that are to be finished and are not specifically indicated to be factory finished, finished by others and/or not painted/finished.

D. Do Not Paint or Finish the Following Items:
   1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
   2. Items indicated to receive other finishes.
   3. Items indicated to remain unfinished.
   4. Fire rating labels, equipment serial number and capacity labels, and operating parts of equipment.
   5. Non-metallic roofing and flashing.
   6. Stainless steel, anodized aluminum, bronze, terne-coated stainless steel, zinc, and lead.
   7. Marble, granite, slate, and other natural stones.
   8. Floors, unless specifically indicated.
   9. Brick, glass unit masonry, architectural concrete, cast stone, integrally colored plaster and stucco.
   10. Exterior insulation and finish system (EIFS).
   11. Glass.
   12. Concealed pipes, ducts, and conduits.

1.02 RELATED REQUIREMENTS

A. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions.

B. Section 05 5000 - Metal Fabrications: Shop-primed items.

1.03 DEFINITIONS

A. Comply with ASTM D16 for interpretation of terms used in this section.

1.04 REFERENCE STANDARDS

A. ASTM D16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications.

B. ASTM D4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Based Materials.

C. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual.

D. SSPC-SP 1 - Solvent Cleaning.

E. SSPC-SP 6/NACE No.3 - Commercial Blast Cleaning.

F. SSPC-SP 13/NACE No.6 - Surface Preparation of Concrete.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide complete list of products to be used, with the following information for each:
   1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
   2. MPI product number (e.g. MPI #47).
   3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.

C. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.
   1. Where sheen is specified, submit samples in only that sheen.
   2. Where sheen is not specified, submit each color in each sheen available.
   3. Paint color submittals will not be considered until color submittals for major materials not to be painted, such as masonry and factory finished metals, have been approved.

D. Certification: By manufacturer that paints and finishes comply with VOC limits specified.

E. Manufacturer's Instructions: Indicate special surface preparation procedures and substrate conditions requiring special attention.

F. Maintenance Data: Submit data including finish schedule showing where each product/color/finish was used, product technical data sheets, care and cleaning instructions, touch-up procedures, repair of painted and finished surfaces, and color samples of each color and finish used.

1.06 QUALITY ASSURANCE

A. Applicator Qualifications: Company specializing in performing the type of work specified with minimum ten years documented experience and approved by manufacturer.

1.07 MOCK-UPS

A. See Section 01 4000 - Quality Requirements, for general requirements for mock-up.

B. Provide exterior painting on components in mock-up as indicated on drawings.

C. Locate where directed by Architect.

D. Mock-up may not remain as part of the work.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.

B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.09 FIELD CONDITIONS

A. Do not apply materials when surface and ambient temperatures are outside the paint product manufacturer's temperature ranges.

B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

C. Do not apply exterior paint and finishes during rain or snow, or when relative humidity is outside the humidity ranges required by the paint product manufacturer.

D. Provide lighting level of 80 ft candles measured mid-height at substrate surface.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide paints and finishes used in any individual system from the same manufacturer; no exceptions.

B. ~~Provide paints and finishes from the same manufacturer to the greatest extent possible.~~

C. Paints:
   1. ~~PPG Paints: www.ppgpaints.com/#sle.~~
   2. Sherwin-Williams Company: www.sherwin-williams.com/#sle.

D. Primer Sealers: Same manufacturer as top coats.

E. ~~Substitutions: See Section 01 6000 - Product Requirements.~~

2.02 PAINTS AND FINISHES - GENERAL

A. Paints and Finishes: Ready-mixed, unless required to be a field-catalyzed paint.
   1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
   2. Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
   3. Supply each paint material in quantity required to complete entire project's work from a single production run.
   4. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is described explicitly in manufacturer's product instructions.

B. Volatile Organic Compound (VOC) Content: Comply with Section 01 6116.

C. Flammability: Comply with applicable code for surface burning characteristics.

D. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Architect from the manufacturer's full line.

E. Colors: As indicated on drawings.
   1. If no color is indicated on drawings, selection to be made by Architect after award of contract.
   2. Extend colors to surface edges; colors to only change at inside corners unless otherwise directed by Architect.

2.03 PAINT SYSTEMS - EXTERIOR

A. Paint E-OP - Exterior Surfaces to be Painted, Unless Otherwise Indicated: Including ~~concrete, concrete masonry units, brick, fiber cement siding, primed wood,~~ferrous, galvanized, and shop-primed metals.
   1. Two top coats and one coat primer.
   2. Top Coat(s): Exterior Alkyd Enamel; MPI #9, 81, 94, or 96.
      a. Products:

1) Sherwin-Williams Industrial Enamel HS Alkyd B54-Z1400 Series.

3. Top Coat Sheen:
   a. Flat: MPI gloss level 1; use this sheen for overhead surfaces.
   b. Eggshell: MPI gloss level 3; use this sheen at all locations, unless noted otherwise.
4. Primer: As specified under "PRIMERS" below.

B. Paint ME-OP-3A - Ferrous Metals, Unprimed, Alkyd, 3 Coat:
   1. One coat of alkyd primer.
   2. Egg-shell: Two coats of alkyd enamel; Sherwin-Williams Industrial Enamel HS Alkyd B54-Z1400 Series.

C. Paint ME-OP-2A - Ferrous Metals, Primed, Alkyd, 2 Coat:
   1. Touch-up with rust-inhibitive primer recommended by top coat manufacturer.
   2. Egg-shell: Two coats of alkyd enamel; Sherwin-Williams Industrial Enamel HS Alkyd B54-Z1400 Series.

D. Paint MgE-OP-3A - Galvanized Metals, Alkyd, 3 Coat:
   1. One coat galvanize primer.
   2. Egg-shell: Two coats of alkyd enamel; Sherwin-Williams Industrial Enamel HS Alkyd B54-Z1400 Series.

2.04 PRIMERS

A. Primers: Provide the following unless other primer is required or recommended by manufacturer of top coats.
   1. Anti-Corrosive Alkyd Primer for Metal; MPI #79.
      a. Products:
         1) Sherwin Williams Kem Bond HS Universal Metal Primer.
            (a) Provide base color compatible with finish coats: B50NZ3 Red Oxide, B50WZ4 Off-White, B50AZ8 Gray.
   2. Alkyd Primer for Galvanized Metal.
      a. Products:
         1) Sherwin Williams Galvite HS Alkyd Modified Acrylic Coating B50WZ30.

2.05 ACCESSORY MATERIALS

A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.

B. Patching Material: Latex filler.

C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin application of paints and finishes until substrates have been properly prepared.

B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.

D. Test shop-applied primer for compatibility with subsequent cover materials.

E. ~~Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:~~
   1. ~~Fiber Cement Siding: 12 percent.~~

2. ~~Exterior Wood: 15 percent, measured in accordance with ASTM D4442.~~

3.02 PREPARATION

A. Clean surfaces thoroughly and correct defects prior to application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces for finishing.

D. Seal surfaces that might cause bleed through or staining of topcoat.

E. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.

F. ~~Concrete:~~
   1. ~~Remove release agents, curing compounds, efflorescence, and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.~~
   2. ~~Prepare surface as recommended by top coat manufacturer and in accordance with SSPC-SP 13/NACE No.6.~~

G. ~~Masonry:~~
   1. ~~Remove efflorescence and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces or if alkalinity of mortar joints exceed that permitted in manufacturer's written instructions. Allow to dry.~~
   2. ~~Prepare surface as recommended by top coat manufacturer.~~

H. ~~Fiber Cement Siding: Remove dirt, dust and other foreign matter with a stiff fiber brush. Do not coat surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.~~

I. Galvanized Surfaces:
   1. Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.

J. Ferrous Metal:
   1. Solvent clean according to SSPC-SP 1.
   2. Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.
   3. Remove rust, loose mill scale, and other foreign substances using methods recommended in writing by paint manufacturer and blast cleaning in accordance with SSPC-SP 6/NACE No.3. Protect from corrosion until coated.

K. ~~Exterior Wood Surfaces to Receive Opaque Finish: Remove dust, grit, and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior calking compound after prime coat has been applied. Back prime concealed surfaces before installation.~~

L. Metal Doors to be Painted: Prime metal door top and bottom edge surfaces.

3.03 APPLICATION

A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.

B. ~~Exterior Wood to Receive Opaque Finish: If final painting must be delayed more than 2 weeks after installation of woodwork, apply primer within 2 weeks and final coating within 4 weeks.~~

C. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".

D. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

E. Apply each coat to uniform appearance.

F. Dark Colors and Deep Clear Colors: Regardless of number of coats specified, apply additional coats until complete hide is achieved.

G. Sand metal surfaces lightly between coats to achieve required finish.

H. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

I. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.04 FIELD QUALITY CONTROL

A. See Section 01 4000 - Quality Requirements, for general requirements for field inspection and testing.

B. General Contractor will provide field inspection and testing.

C. Pre-Application Testing:
   1. Moisture Content: Periodically, minimum 1 time per week, test new substrates for acceptable moisture content levels before application of first coat.
      a. Test areas that have been wetted or show evidence of excessive moisture or condensation.
         1) Perform a minimum of one test for every 10 lineal feet of wall.
         2) Do not apply paints to surfaces whose moisture content exceeds paint manufacturers recommendations.
   2. Periodically, minimum once daily for each painter, measure wet film thickness during application to verify required coating thickness, allowing a thickness reduction percentage equal to the non-solid percentage of the paint material being applied.
   3. Verification testing: provide dry film thickness verification testing, when directed by the Architect, using one of the following methods:
      a. Non-destructive: test meter capable of measuring the thickness of coatings on the substrate to be tested.
         1) Calibrate meter in the presence of the Architect prior to conducting tests.
      b. Destructive: “Tooke Dry Film Thickness Gauge".
         1) After testing, repair and touch up paint at test location to match surrounding surface.
   4. Provide a log of all measurements taken; include the following information. Maintain log on-site and available for periodic review by the Architect.
      a. Test date
      b. Test location
      c. Manufacturer and type(s) of material being tested
      d. Moisture content
      e. Scheduled dry film thickness
      f. Measured wet or dry film thickness
      g. Test method
      h. Name of person conducting test

3.05 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.06 PROTECTION

A. Protect finishes until completion of project.

B. Touch-up damaged finishes after Substantial Completion.

3.07 SCHEDULE - PAINT SYSTEMS

A. Steel Fabrications: Finish surfaces exposed to view and concealed surfaces where required to conform to performance requirements and resist corrosion.
   1. Exterior: ME-OP-3A, egg-shell; apply finish to exposed and concealed surfaces before installation.

B. Galvanized Steel: Finish surfaces exposed to view.
   1. Exterior: MgE-OP-3A, egg-shell.

C. Shop-Primed Metal Items: Finish surfaces exposed to view.
   1. Finish the following items:
      a. Exposed surfaces of lintels.
   2. Exterior: ME-OP-2A, egg-shell.

3.08 COLOR SCHEDULE

A. As indicated in drawings.

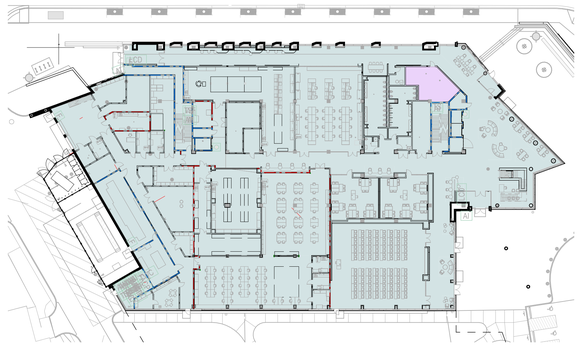
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3 G201 LEVEL 1 - FUNCTION OF SPACE - LIFE SAFETY PLAN
1" = 40'-0"

FUNCTION OF SPACE

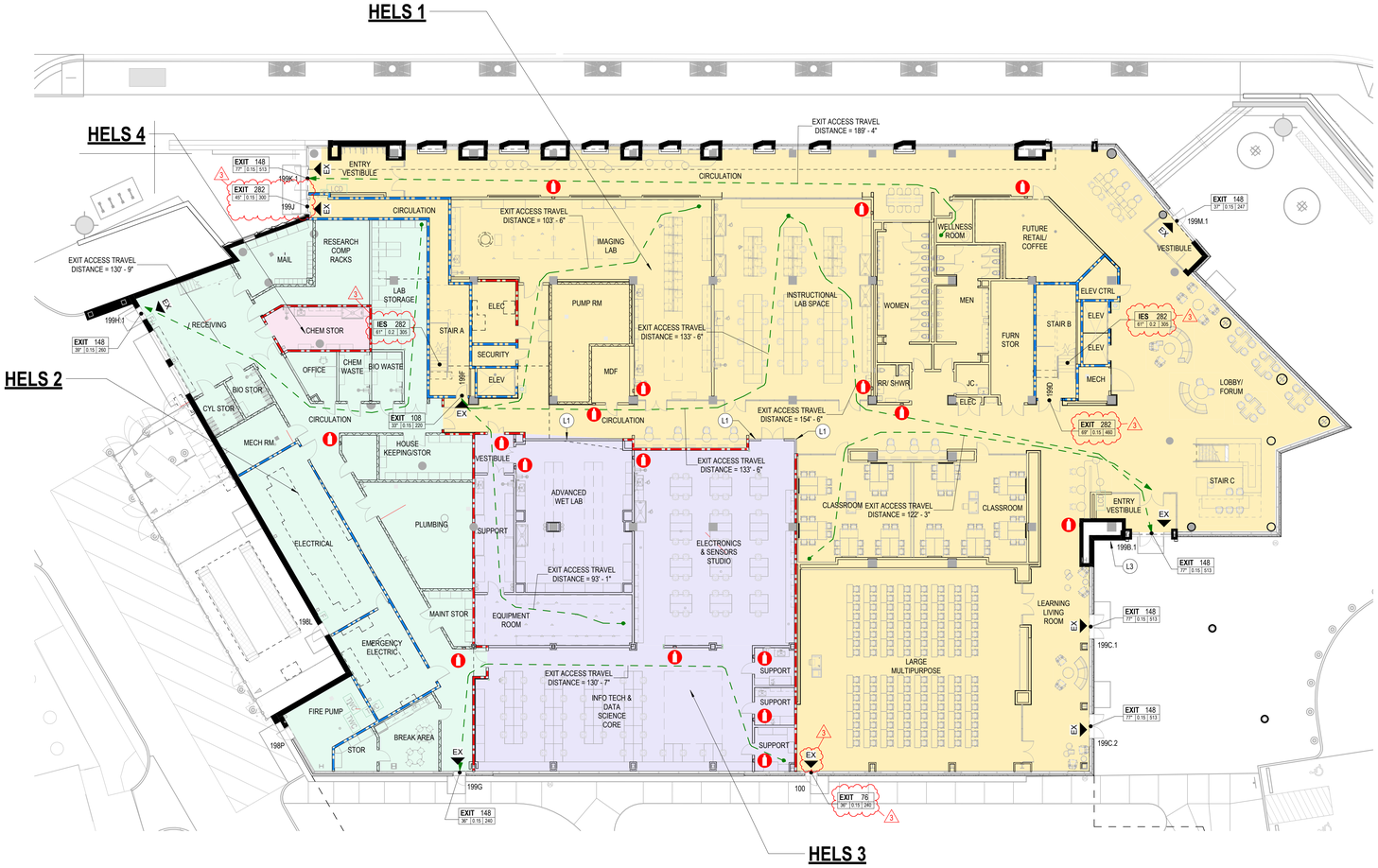
- Accessory storage areas, mechanical equipment room
- Assembly without fixed seats: Unconcentrated (tables and chairs)
- Business areas
- Educational: Shops and vocational room areas



2 G201 LEVEL 1 - OCCUPANCY GROUP - LIFE SAFETY PLAN
1" = 40'-0"

OCCUPANCY GROUP

- A-2
- B



1 G201 LEVEL 1 - EGRESS & HIGHER EDUCATION LABORATORY SUITES (HELS) - LIFE SAFETY PLAN
1/16" = 1'-0"

CONTROL AREA LEGEND

GRAPHIC	CONTROL AREA	AREA
LEVEL 1		
	HELS 1	26,640 SF
	HELS 2	8,289 SF
	HELS 3	8,089 SF
	HELS 4	339 SF
		43,357 SF

OCCUPANCY LOAD SCHEDULE

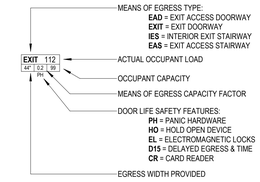
FUNCTION OF SPACE	AREA (PER PLAN)	OCCUPANT LOAD FACTOR	NET/GROSS	# OF OCCUPANTS
LEVEL 1				
Accessory storage areas, mechanical equipment room	9,799 SF	300 SF	GROSS	37
Assembly without fixed seats: Unconcentrated (tables and chairs)	8,471 SF	15 SF	NET	556
Business areas	20,299 SF	100 SF	GROSS	208
Educational: Shops and vocational room areas	4,788 SF	50 SF	NET	97
TOTAL	43,357 SF			898

LIFE SAFETY PLAN LEGEND

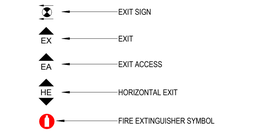
LIFE SAFETY PLAN NOTES

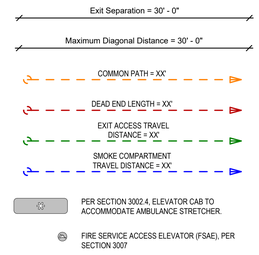
L1. 2-HOUR, CLOSELY SPACED FIRE SPRINKLER HEAD COVERAGE FOR NON-RATED GLAZING ASSEMBLIES BELOW, BOTH SIDES.
L2. UL 10D FIRE CURTAIN.
L3. RECESSED KNOX BOX. CONFIRM FINAL LOCATION WITH OWNER AND FIRE MARSHAL

DOOR/STAIR EGRESS SYMBOL

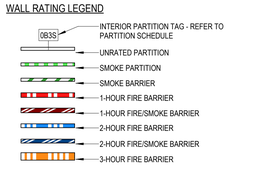


ADDITIONAL LIFE SAFETY SYMBOLS





WALL RATING LEGEND



BSA LifeStructures
175 S. Rangeline Rd, Suite 200
Carmel, IN 46032
ph 317.819.7878 fx 317.819.7288

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500 GRISWOLD
SUITE 1700
DETROIT, MI 48226
313.983.3600
smithgroup.com

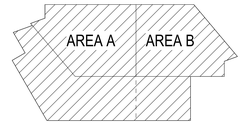
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH
TRUE NORTH

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
3	01/19/2026	BP3-CD: ADDENDUM 03
2	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
1	09/29/2025	BP1-CD: SITE AND FOUNDATION PACKAGE

ANDREW JOHN CULLISON
REGISTERED
No. AR10400213
STATE OF
INDIANA
ARCHITECT

LIFE SAFETY PLAN - LEVEL 1

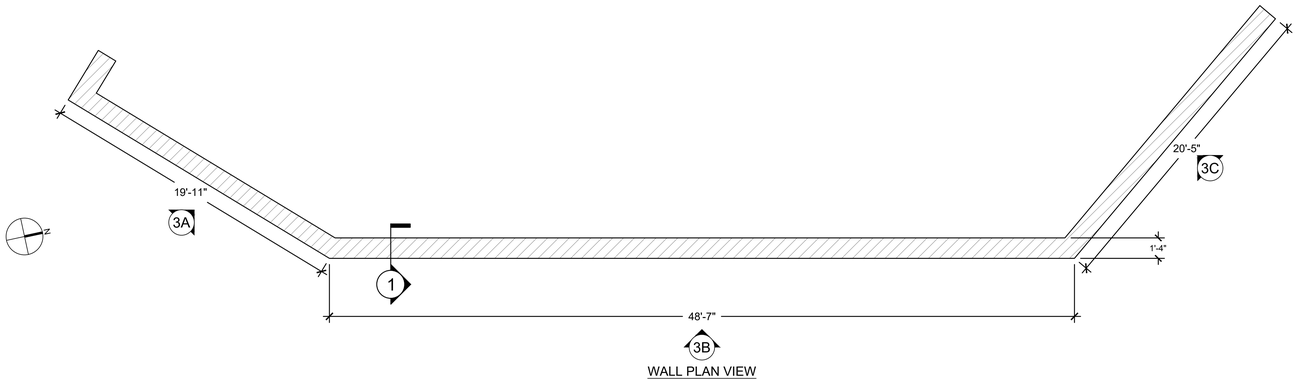
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BSA PROJECT NO. 00360481

REF: SHEET INDEX

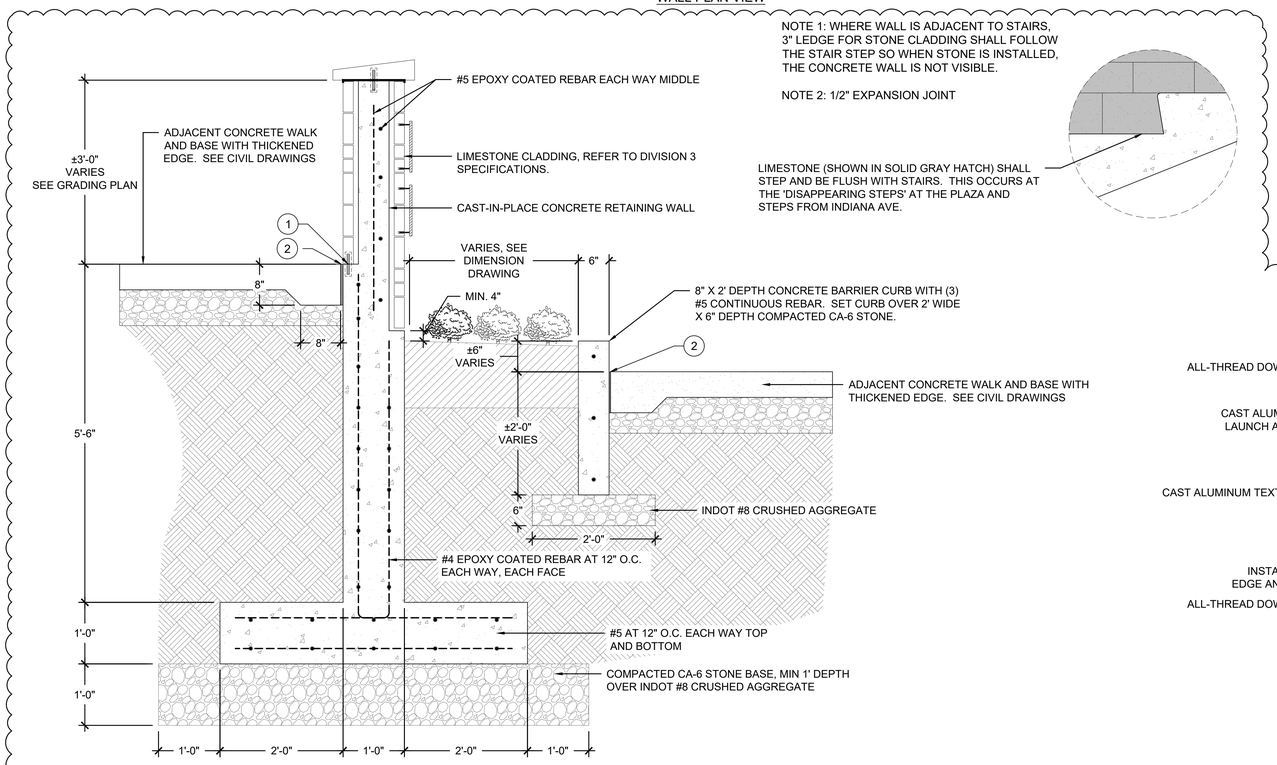
G201

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WALL PLAN VIEW



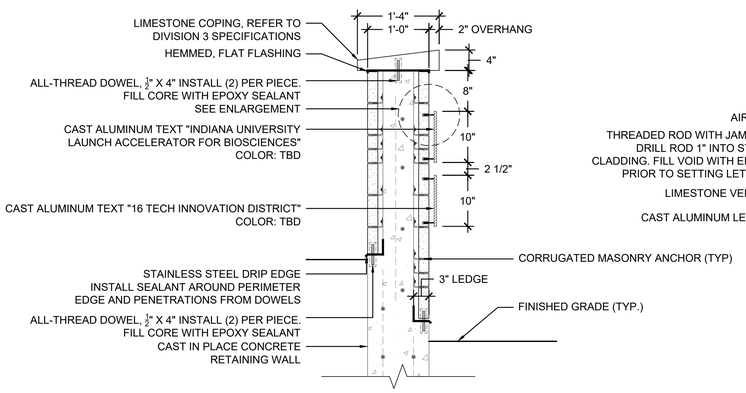
1 CAST-IN-PLACE WALL DETAIL
SCALE: NTS

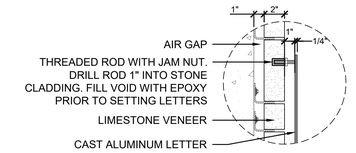
NOTE 1: WHERE WALL IS ADJACENT TO STAIRS, 3" LEDGE FOR STONE CLADDING SHALL FOLLOW THE STAIR STEP SO WHEN STONE IS INSTALLED, THE CONCRETE WALL IS NOT VISIBLE.

NOTE 2: 1/2" EXPANSION JOINT

LIMESTONE (SHOWN IN SOLID GRAY HATCH) SHALL STEP AND BE FLUSH WITH STAIRS. THIS OCCURS AT THE 'DISAPPEARING STEPS' AT THE PLAZA AND STEPS FROM INDIANA AVE.

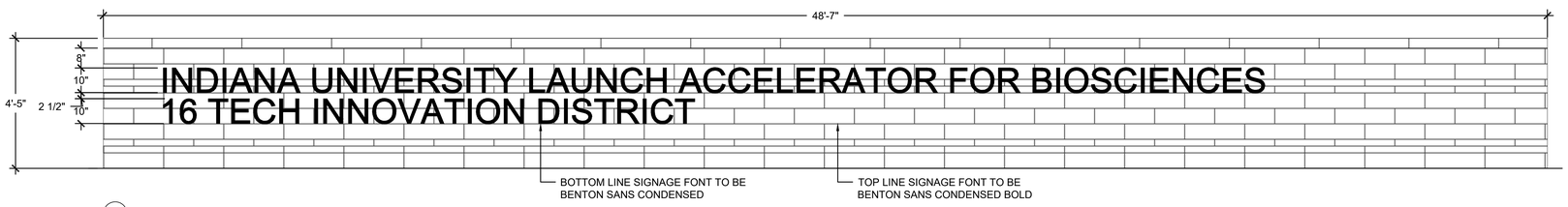
5 1/19/2026 AKH

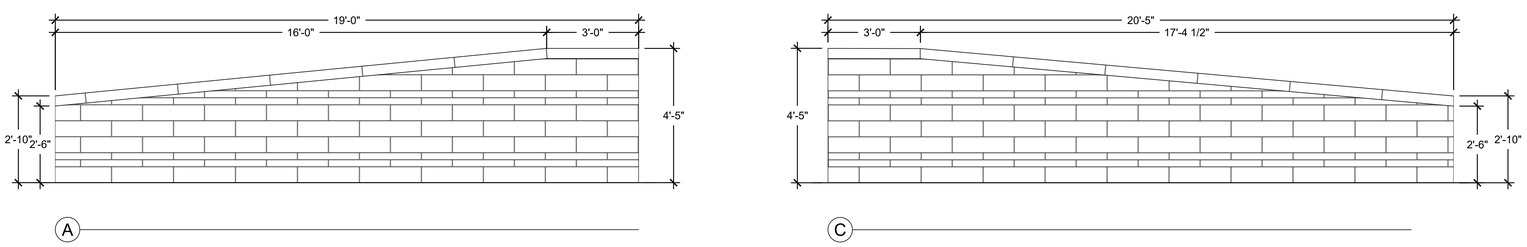




ENLARGEMENT VIEW

2 WALL SECTION DETAIL
SCALE: NTS





3 WALL ELEVATION DETAILS
SCALE: NTS

BSA

SWITCH PLACEHOLDER FAMILY
TYPE FOR CORRECT BSA OFFICE

SMITHGROUP

500 GRISWOLD
SUITE 1700
DETROIT, MI 48226
313.983.3600
smithgroup.com

LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
5	1/19/2026	BP3-ADDENDUM 03
4	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
3	10/21/2025	BP1-ADDENDUM 02
2	10/15/2025	BP1-ADDENDUM 01
1	09/29/2025	BP1-CD: SITE AND FOUNDATION PACKAGE

STEPHEN J. LEKAN REGISTERED No. LA22100005 STATE OF INDIANA LANDSCAPE ARCHITECT EXP: 12/31/25

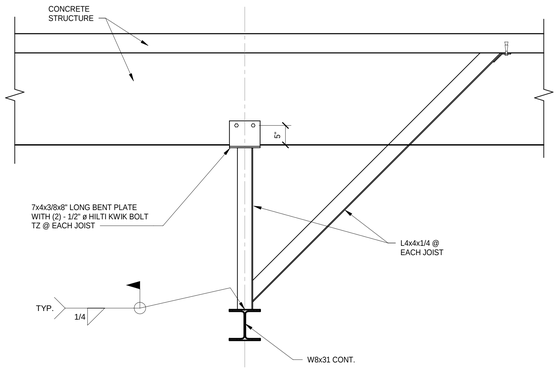
WALL DETAILS

DATE — REF: SHEET INDEX
BSA PROJECT NO. — 00360481

LA202

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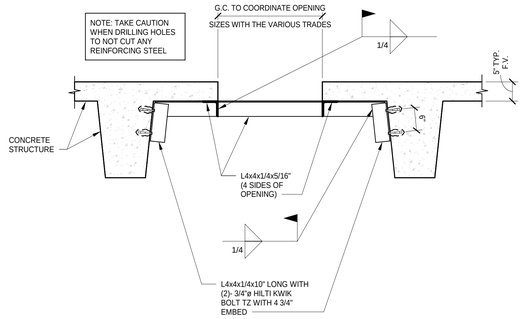
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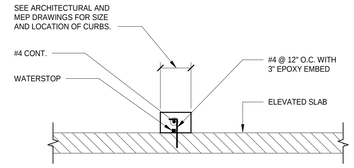
NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR MOVEABLE PARTITION WALL LOCATIONS.
2. COORDINATE TOP OF STEEL ELEVATION WITH EQUIPMENT MANUFACTURER.
3. PROVIDE ONE L4x4x1/4 KICKER AT EACH END PARALLEL TO THE W8x31 UP TO THE STRUCTURE ABOVE.

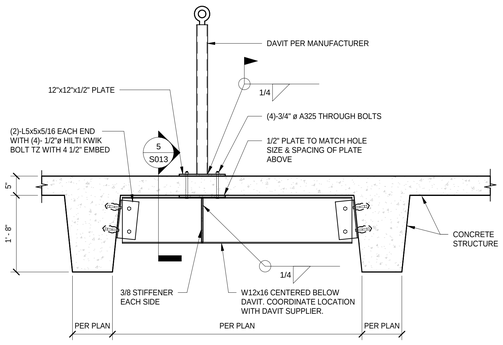
1 S013 TYPICAL MOVEABLE PARTITION WALL DETAIL
3/4" = 1'-0"



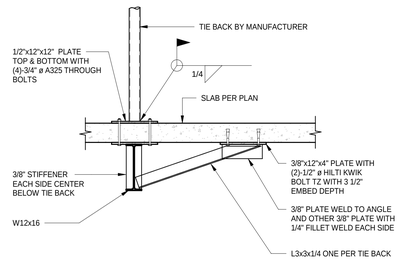
2 S013 TYPICAL SLAB PENETRATION DETAIL FOR OPENING CUT AFTER SLAB IS POURED
3/4" = 1'-0"



3 S013 TYPICAL CURB DETAIL ON ELEVATED SLAB
1" = 1'-0"

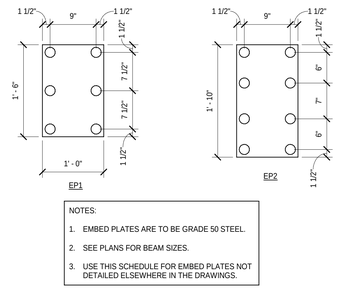


4 S013 TYPICAL TIE BACK DETAIL
3/4" = 1'-0"



5 S013 SECTION
3/4" = 1'-0"

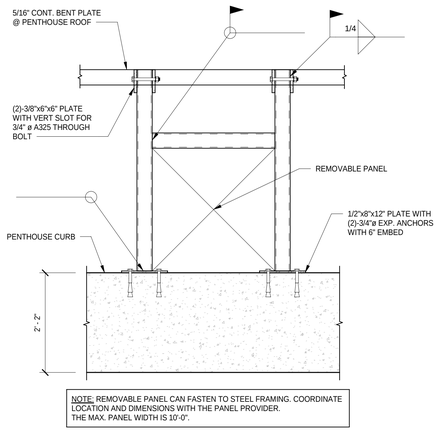
EMBED PLATE SCHEDULE			
MARK	BEAM SIZE	PLATE SIZE	HEADED STUD
EP1	W12, W14, W16	18"x12"x5/8"	(6)-1"øX10" LONG
EP2	W18, W21, W24	22"x12"x5/8"	(8)-1"øX10" LONG



NOTES:

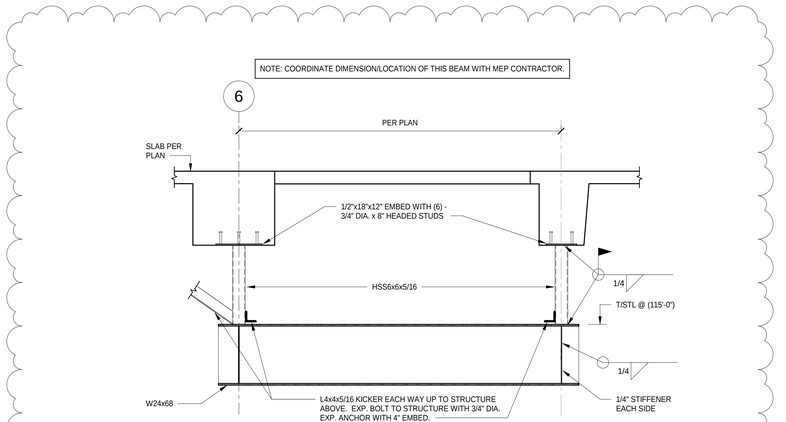
1. EMBED PLATES ARE TO BE GRADE 50 STEEL.
2. SEE PLANS FOR BEAM SIZES.
3. USE THIS SCHEDULE FOR EMBED PLATES NOT DETAILED ELSEWHERE IN THE DRAWINGS.

6 S013 EMBED PLATE SCHEDULE
1" = 1'-0"



NOTE: REMOVABLE PANEL CAN FASTEN TO STEEL FRAMING. COORDINATE LOCATION AND DIMENSIONS WITH THE PANEL PROVIDER. THE MAX. PANEL WIDTH IS 10'-0".

7 S013 TYPICAL FRAMING AROUND A REMOVABLE PANEL THROUGH THE PENTHOUSE WALL
3/4" = 1'-0"



8 S013 TYPICAL PIPE SUPPORT BEAM
1/2" = 1'-0"

BSA LifeStructures
175 S. Rangeline Rd, Suite 200
Carmel, IN 46032
ph 317.819.7878 fx 317.819.7288

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9365 Counselors Row, Suite 116
Indianapolis, IN 46240
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INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

REFER TO CIVIL DRAWINGS FOR TRUE NORTH

ISSUED/REVISION SCHEDULE		
MARK	DATE	DESCRIPTION
2	01/19/2026	BP3-ADDENDUM 03
1	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE



TYPICAL DETAILS

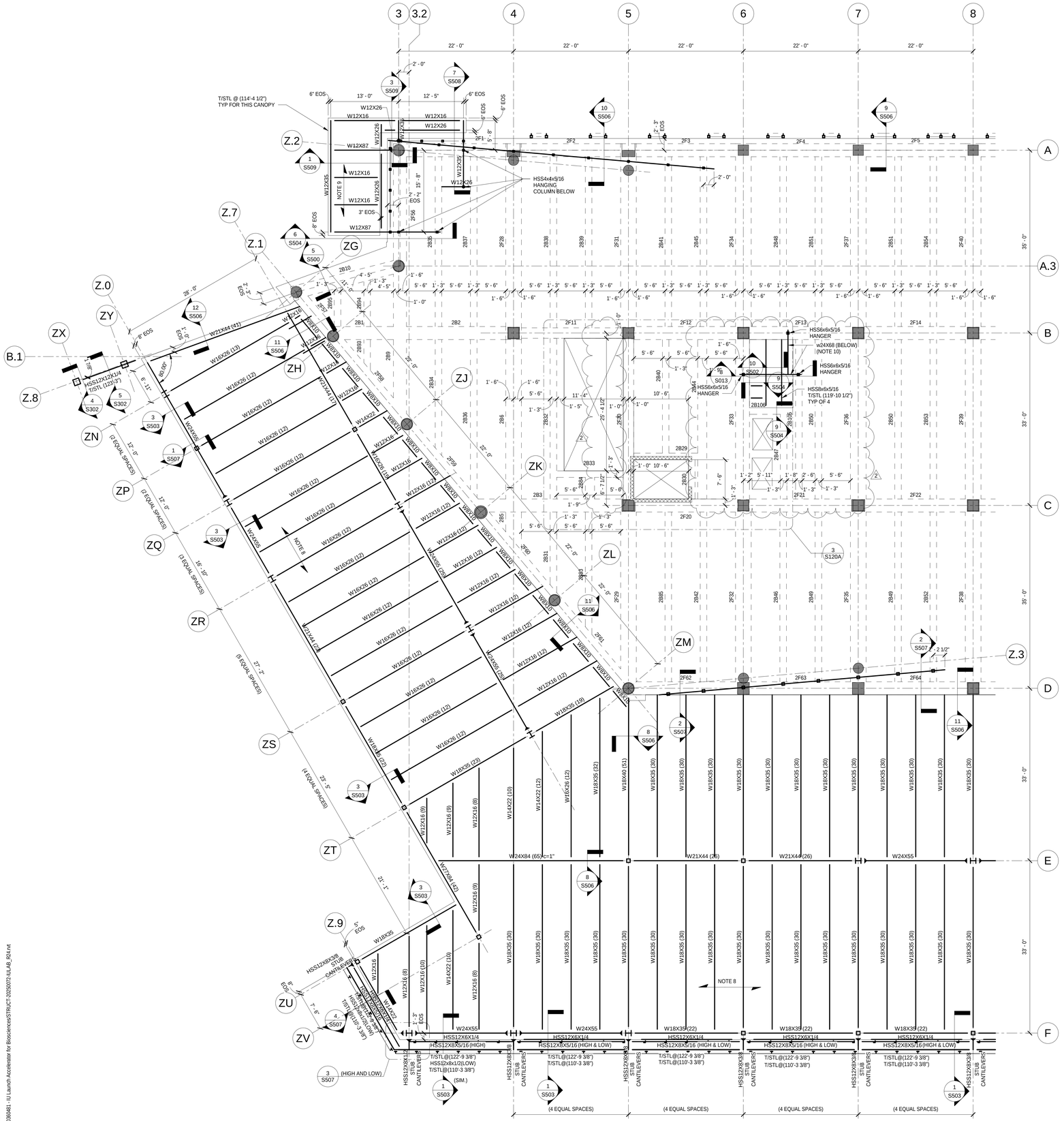
DATE REF: SHEET INDEX

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S013

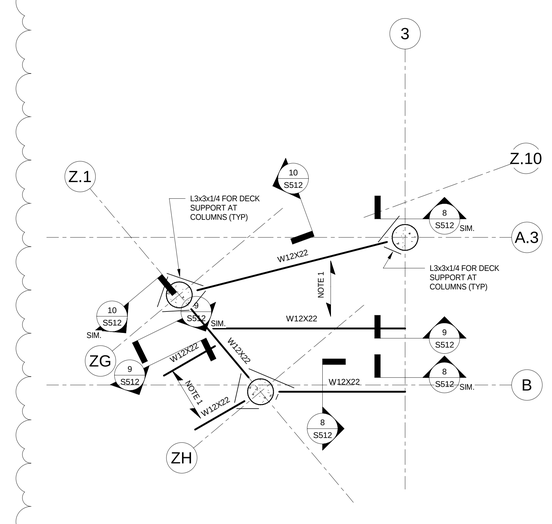
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1 S120A SECOND FLOOR FRAMING PLAN - AREA A

1/8" = 1'-0"

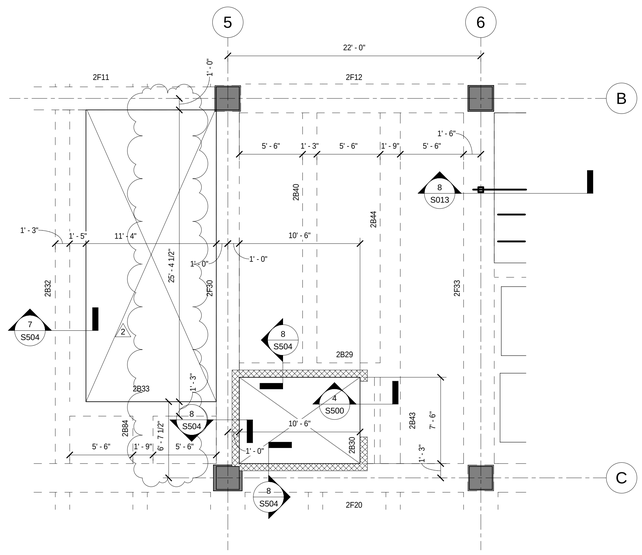


2 S120A MEZZANINE FRAMING PLAN

3/16" = 1'-0"

NOTES:

1. THE SLAB SHALL BE A 6 1/2" NORMAL WEIGHT SLAB OVER A 2" 20 GAGE COMPOSITE METAL DECK WITH 6x6 W2.1xW2.1 WWF. THE TOP OF SLAB SHALL BE AT ELEVATION (110'-0")



3 S120A SECOND FLOOR - AREA A PARTIAL FRAMING PLAN

3/16" = 1'-0"

PLAN NOTES:

1. REFER TO SHEETS S001 - S013 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. THE G.C. SHALL COORDINATE THE SIZE AND LOCATION OF ALL SLAB PENETRATIONS WITH THE VARIOUS TRADES PRIOR TO POURING CONCRETE.
3. THE TOP OF SLAB ELEVATION SHALL BE AT ELEVATION (120'-0").
4. UNLESS NOTED OTHERWISE, THE CONCRETE FLOOR SLAB CONSTRUCTION SHALL BE 29" DEEP INCLUDING 5" SLAB AND BEAMS. THE WIDTH OF THE BEAMS AT BOTTOM SHALL BE AS NOTED IN THE PLAN. TOP OF SLAB SHALL BE AT ELEVATION (120'-0"). FOR SLAB REINFORCING, REFER TO SHEET S012. AT ALL LOCATIONS WHERE SLAB OVERHANGS BEYOND FACE OF THE BEAM, THE SLAB THICKNESS SHALL BE 8". IN 8" SLAB CONTINUE REINFORCING FROM ADJACENT 5" SLAB AND PROVIDE WITH HOOK AT EDGE AND #4@12" O.C. CONTINUOUS CROSS BARS.
5. ALL PIPE PENETRATIONS THROUGH THE SLAB SHALL BE SLEEVED. SEE MECH./ELECT./PLUMBING DRAWINGS FOR REQUIREMENTS. DO NOT CUT REINFORCING BARS. MAINTAIN MINIMUM 6" CLEAR SPACE BETWEEN SLEEVES.
6. VERIFY SIZE AND LOCATION OF ELEVATOR SHAFT WITH ELEVATOR SUPPLIER PRIOR TO ANY FABRICATION AND CONSTRUCTION.
7. SLEEVES UPTO 8" DIAMETER ARE PERMITTED AT INTERIOR COLUMNS ON COLUMN CENTERLINES. LOCATIONS ARE SHOWN FOR REFERENCE. THE G.C. SHALL COORDINATE ALL SLEEVE SIZES AND LOCATIONS WITH THE VARIOUS TRADES. SEE S/S202.
8. THE SLAB ON DECK SHALL BE A 4 1/2" NORMAL WEIGHT SLAB OVER 2" 20 GAGE GALVANIZED COMPOSITE METAL DECK WITH 6x6 W2.9xW2.9 WWF. THE TOP OF SLAB SHALL BE AT ELEVATION (120'-0").
9. ROOF DECK SHALL BE 1 1/2" GALVANIZED 20 GAGE WIDE RIBBED METAL ROOF DECK.
10. PROVIDE A PIPE SUPPORT BEAM IN THE MECHANICAL SHAFT WHERE NOTED ON PLAN. COORDINATE LOCATION WITH THE MEP CONTRACTOR. SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

KEYPLAN

PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH

ISSUED/REVISION SCHEDULE		
MARK	DATE	DESCRIPTION
2	01/19/2026	BP3-ADDENDUM 03
1	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

CLAYTON E. SPRINGER REGISTERED NO. 10302023 STATE OF INDIANA PROFESSIONAL ENGINEER

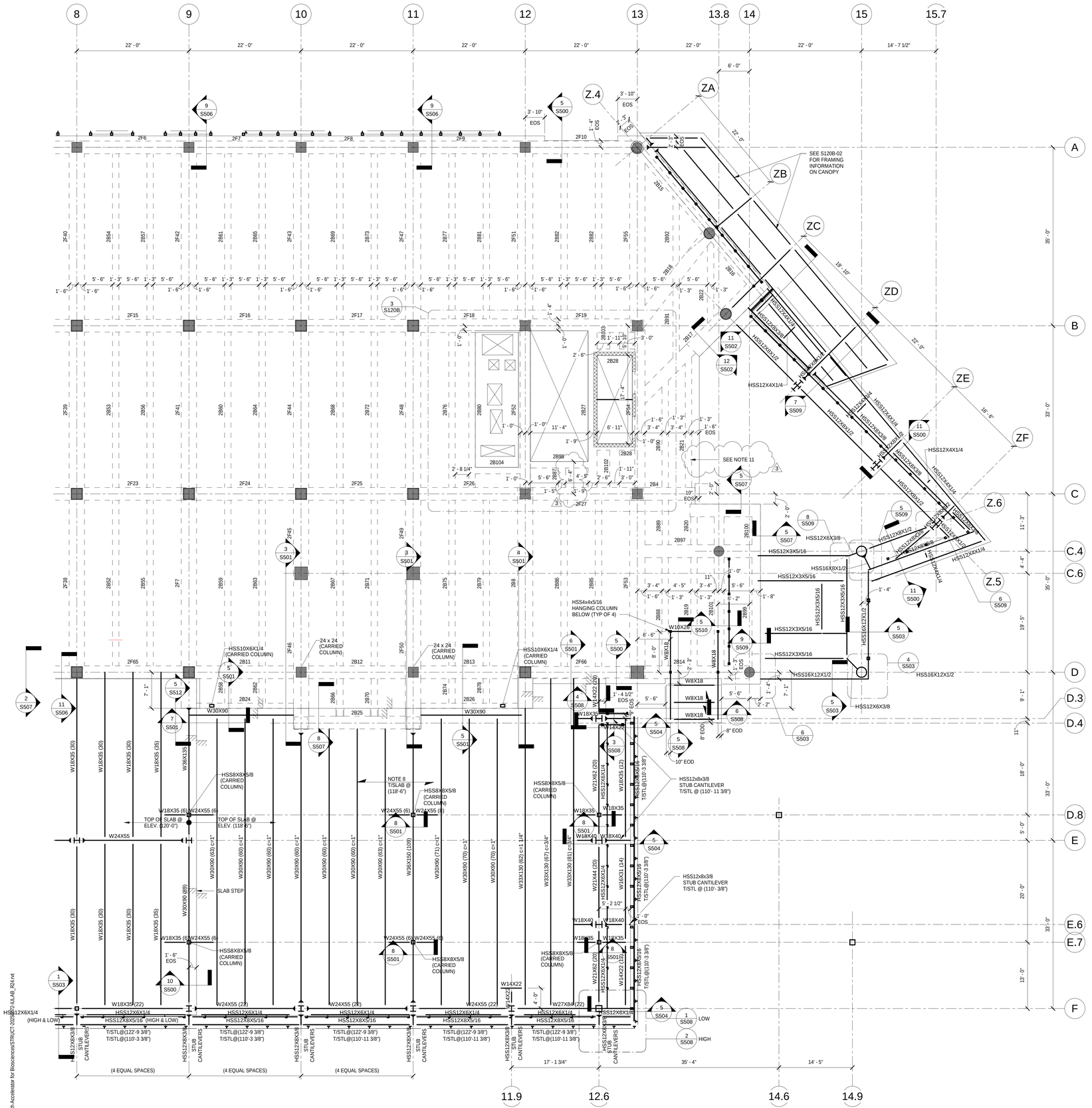
SECOND LEVEL FRAMING PLAN - AREA A

DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

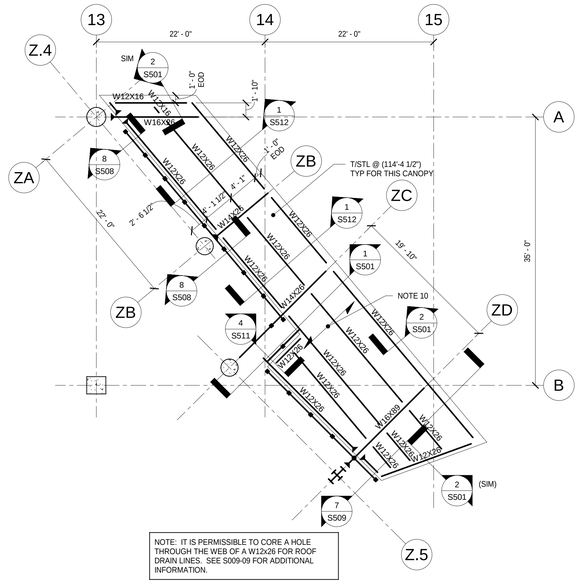
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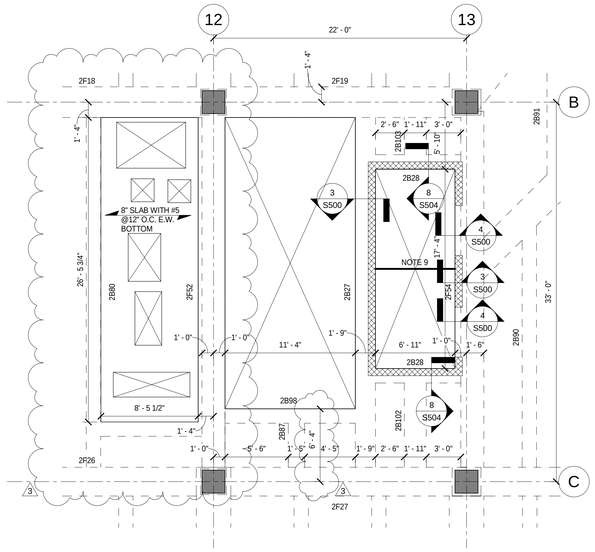


1 S120B — SECOND FLOOR FRAMING PLAN - AREA B
1/8" = 1'-0"



NOTE: IT IS PERMISSIBLE TO CORE A HOLE THROUGH THE WEB OF A W12x26 FOR ROOF DRAIN LINES. SEE S009-09 FOR ADDITIONAL INFORMATION.

2 S120B — CANOPY FRAMING PLAN - AREA B
1/8" = 1'-0"



3 S120B — SECOND FLOOR - AREA B PARTIAL FRAMING PLAN
3/16" = 1'-0"

PLAN NOTES:

1. REFER TO SHEETS S001 - S013 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. THE G.C. SHALL COORDINATE THE SIZE AND LOCATION OF ALL SLAB PENETRATIONS WITH THE VARIOUS TRADES PRIOR TO POURING CONCRETE.
3. THE TOP OF SLAB ELEVATION SHALL BE AT ELEVATION (120'-0").
4. UNLESS NOTED OTHERWISE, THE CONCRETE FLOOR SLAB CONSTRUCTION SHALL BE 29" DEEP INCLUDING 5" SLAB AND BEAMS. THE WIDTH OF THE BEAMS AT BOTTOM SHALL BE AS NOTED IN THE PLAN. TOP OF SLAB SHALL BE AT ELEVATION (120'-0"). FOR SLAB REINFORCING, REFER TO SHEET S012. AT ALL LOCATIONS WHERE SLAB OVERHANGS BEYOND FACE OF THE BEAM, THE SLAB THICKNESS SHALL BE 8". IN 8" SLAB CONTINUE REINFORCING FROM ADJACENT 5" SLAB AND PROVIDE WITH HOOK AT EDGE AND #4@12" O.C. CONTINUOUS CROSS BARS.
5. ALL PIPE PENETRATIONS THROUGH THE SLAB SHALL BE SLEEVED. SEE MECH./ELECT./PLUMBING DRAWINGS FOR REQUIREMENTS. DO NOT CUT REINFORCING BARS. MAINTAIN MINIMUM 6" CLEAR SPACE BETWEEN SLEEVES.
6. VERIFY SIZE AND LOCATION OF ELEVATOR SHAFT WITH ELEVATOR SUPPLIER PRIOR TO ANY FABRICATION AND CONSTRUCTION.
7. SLEEVES UPTO 8" DIAMETER ARE PERMITTED AT INTERIOR COLUMNS ON COLUMN CENTERLINES. LOCATIONS ARE SHOWN FOR REFERENCE. THE G.C. SHALL COORDINATE ALL SLEEVE SIZES AND LOCATIONS WITH THE VARIOUS TRADES. SEE S/S202.
8. THE SLAB ON DECK SHALL BE A 4 1/2" NORMAL WEIGHT SLAB OVER 2" 20 GAGE GALVANIZED COMPOSITE METAL DECK REINFORCED WITH 6x6 W2.9xW2.9 WWF. THE TOP OF SLAB SHALL BE AT ELEVATION (120'-0") UNLESS NOTED OTHERWISE.
9. WHERE INDICATED IN PLAN, PROVIDE AN HSS 12x6x3/8" DIVIDER BEAM. THERE SHALL BE TWO DIVIDER BEAMS PER FLOOR. PLACE ONE NEAR THE FLOORLINE AND ONE MIDWAY BETWEEN FLOORS. COORDINATE EXACT LOCATIONS WITH THE ELEVATOR MANUFACTURER. SEE DETAILS FOR HOW TO ATTACH DIVIDER BEAMS TO THE STRUCTURE AND TO THE CMU WALLS.
10. ROOF DECK SHALL BE 1 1/2" GALVANIZED 20 GAGE WIDE RIBBED METAL ROOF DECK.
11. RECESS THE SLAB BY 1/2" MAX FOR TERAZZO FLOOR WHERE NOTED. COORDINATE DIMENSIONS OF SLAB RECESS WITH THE ARCHITECTURAL DRAWINGS.

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH

ISSUED/REVISION SCHEDULE

MARK	DATE	DESCRIPTION
3	01/19/2026	BP3-ADDENDUM 03
2	01/07/2026	BP3-ADDENDUM 01
1	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE



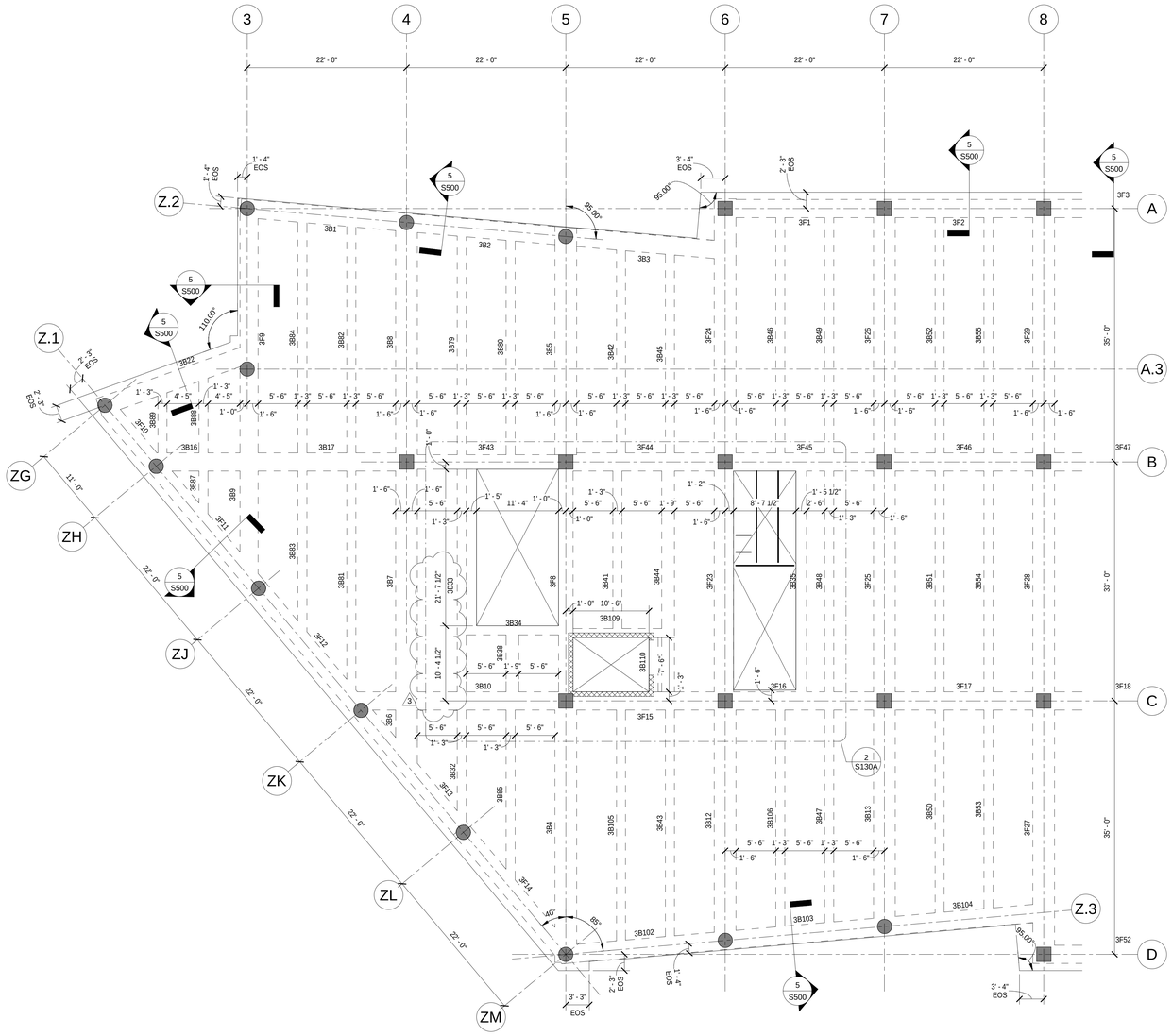
SECOND LEVEL FRAMING PLAN - AREA B

DATE
BSA PROJECT NO. 00360481

S120B

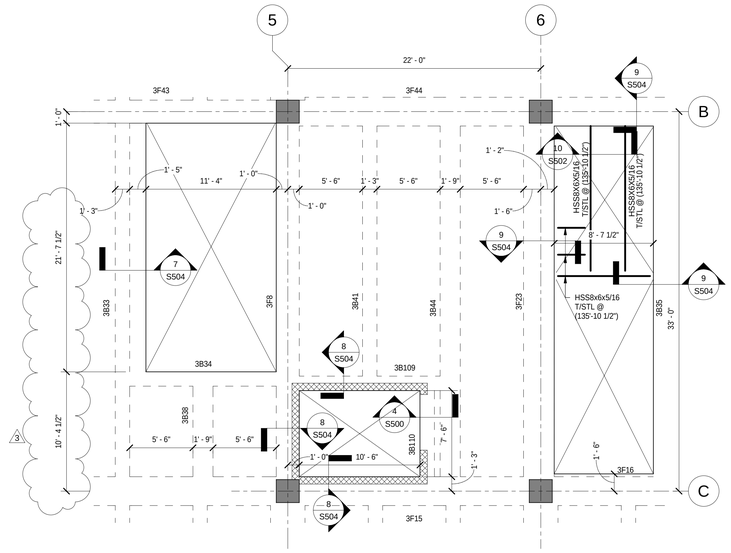
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1 S130A THIRD FLOOR FRAMING PLAN - AREA A

1/8" = 1'-0"



2 S130A THIRD FLOOR - AREA A PARTIAL FRAMING PLAN

3/16" = 1'-0"

PLAN NOTES:

1. REFER TO SHEETS S001 - S013 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. THE G.C. SHALL COORDINATE THE SIZE AND LOCATION OF ALL SLAB PENETRATIONS WITH THE VARIOUS TRADES PRIOR TO POURING CONCRETE.
3. THE TOP OF SLAB ELEVATION SHALL BE AT ELEVATION (136'-0").
4. UNLESS NOTED OTHERWISE, THE CONCRETE FLOOR SLAB CONSTRUCTION SHALL BE 29" DEEP INCLUDING 5" SLAB AND BEAMS. THE WIDTH OF THE BEAMS AT BOTTOM SHALL BE AS NOTED IN THE PLAN. TOP OF SLAB SHALL BE AT ELEVATION (136'-0"). FOR SLAB REINFORCING, REFER TO SHEET S012. AT ALL LOCATIONS WHERE SLAB OVERHANGS BEYOND FACE OF THE BEAM, THE SLAB THICKNESS SHALL BE 8". IN 8" SLAB CONTINUE REINFORCING FROM ADJACENT 5" SLAB AND PROVIDE WITH HOOK AT EDGE AND #4@12" O.C. CONTINUOUS CROSS BARS.
5. ALL PIPE PENETRATIONS THROUGH THE SLAB SHALL BE SLEEVED. SEE MECH./ELECT./PLUMBING DRAWINGS FOR REQUIREMENTS. DO NOT CUT REINFORCING BARS. MAINTAIN MINIMUM 6" CLEAR SPACE BETWEEN SLEEVES.
6. VERIFY SIZE AND LOCATION OF ELEVATOR SHAFT WITH ELEVATOR SUPPLIER PRIOR TO ANY FABRICATION AND CONSTRUCTION.
7. SLEEVES UPTO 8" DIAMETER ARE PERMITTED AT INTERIOR COLUMNS ON COLUMN CENTERLINES. LOCATIONS ARE SHOWN FOR REFERENCE. THE G.C. SHALL COORDINATE ALL SLEEVE SIZES AND LOCATIONS WITH THE VARIOUS TRADES. SEE S/S202.

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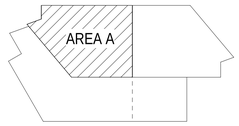
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN

PROJECT NORTH

PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH

ISSUED/REVISION SCHEDULE

MARK	DATE	DESCRIPTION
3	01/19/2026	BP3-ADDENDUM 03
2	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
1	10/31/2025	ASI #1

CLAYTON E. STRANGE REGISTERED No. 10302023 STATE OF INDIANA PROFESSIONAL ENGINEER

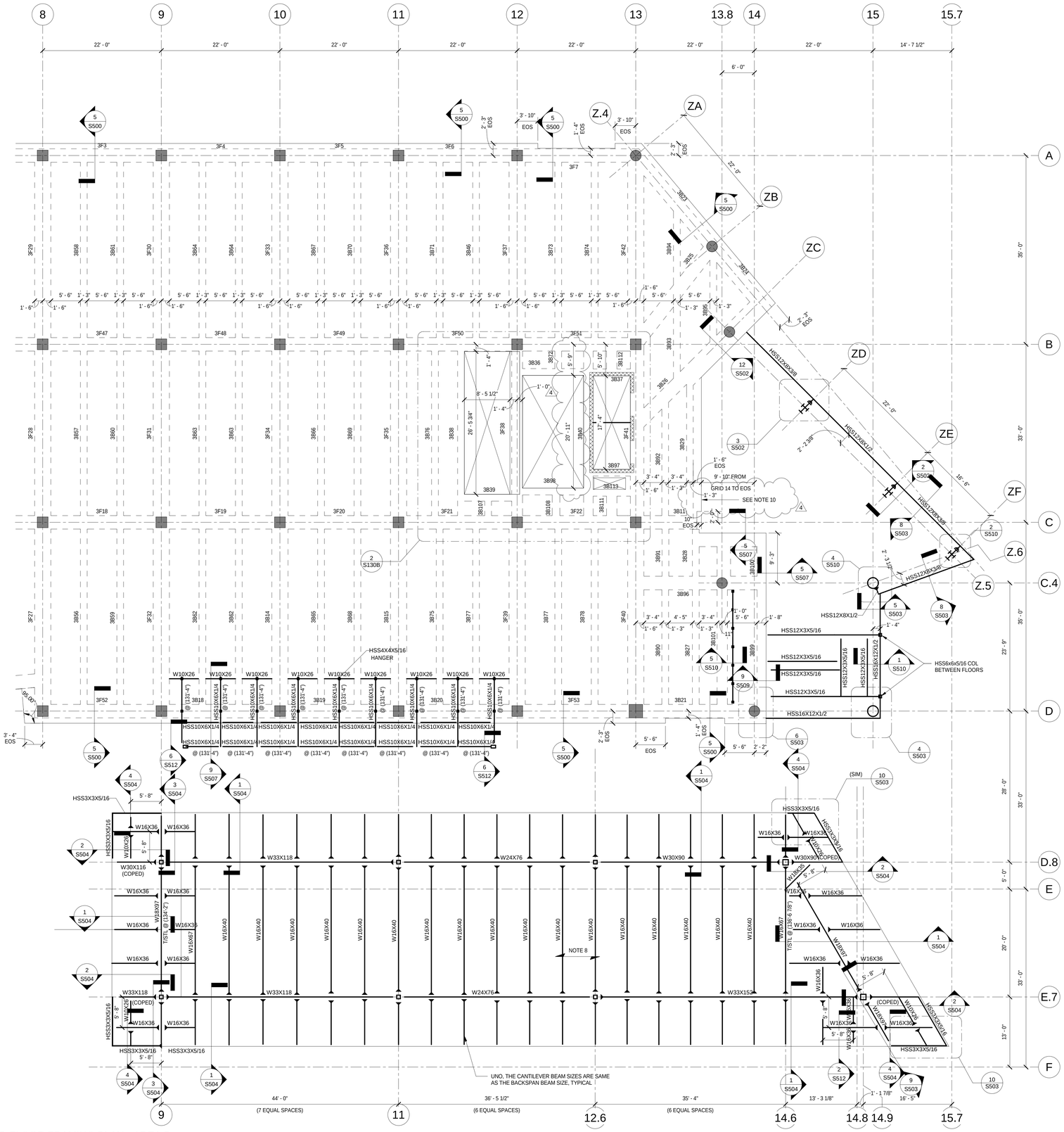
THIRD LEVEL FRAMING PLAN - AREA A

DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

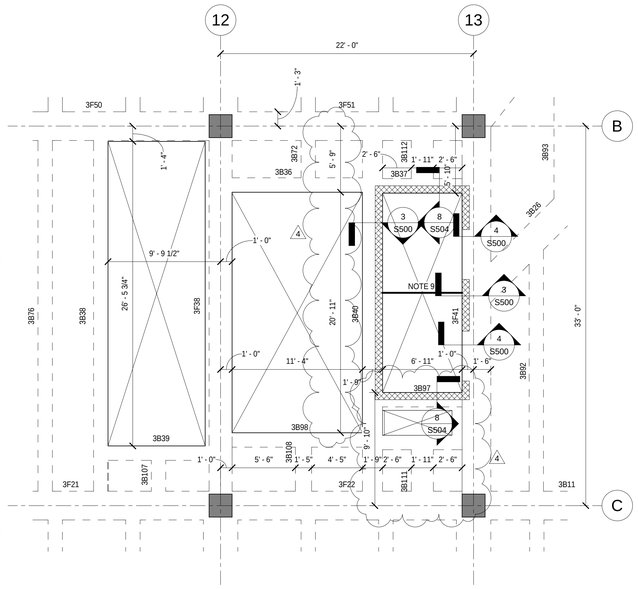
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1 S130B THIRD FLOOR FRAMING PLAN - AREA B
1/8" = 1'-0"



2 S130B THIRD FLOOR - AREA B PARTIAL FRAMING PLAN
3/16" = 1'-0"

PLAN NOTES:

1. REFER TO SHEETS S001 - S013 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. THE G.C. SHALL COORDINATE THE SIZE AND LOCATION OF ALL SLAB PENETRATIONS WITH THE VARIOUS TRADES PRIOR TO POURING CONCRETE.
3. THE TOP OF SLAB ELEVATION SHALL BE AT ELEVATION (136'-0").
4. UNLESS NOTED OTHERWISE, THE CONCRETE FLOOR SLAB CONSTRUCTION SHALL BE 29" DEEP INCLUDING 5" SLAB AND BEAMS. THE WIDTH OF THE BEAMS AT BOTTOM SHALL BE AS NOTED IN THE PLAN. TOP OF SLAB SHALL BE AT ELEVATION (136'-0"). FOR SLAB REINFORCING, REFER TO SHEET S012. AT ALL LOCATIONS WHERE SLAB OVERHANGS BEYOND FACE OF THE BEAM, THE SLAB THICKNESS SHALL BE 8". IN 8" SLAB CONTINUE REINFORCING FROM ADJACENT 5" SLAB AND PROVIDE WITH HOOK AT EDGE AND #4@12" O.C. CONTINUOUS CROSS BARS.
5. ALL PIPE PENETRATIONS THROUGH THE SLAB SHALL BE SLEEVED. SEE MECH./ELECT./PLUMBING DRAWINGS FOR REQUIREMENTS. DO NOT CUT REINFORCING BARS. MAINTAIN MINIMUM 6" CLEAR SPACE BETWEEN SLEEVES.
6. VERIFY SIZE AND LOCATION OF ELEVATOR SHAFT WITH ELEVATOR SUPPLIER PRIOR TO ANY FABRICATION AND CONSTRUCTION.
7. SLEEVES UPTO 8" DIAMETER ARE PERMITTED AT INTERIOR COLUMNS ON COLUMN CENTERLINES. LOCATIONS ARE SHOWN FOR REFERENCE. THE G.C. SHALL COORDINATE ALL SLEEVE SIZES AND LOCATIONS WITH THE VARIOUS TRADES. SEE S/S202.
8. THE ROOF DECK SHALL BE 3" 20 GAGE WIDE RIBBED GALVANIZED METAL ROOF DECK.
9. WHERE INDICATED IN PLAN, PROVIDE AN HSS 12x6x3/8" DIVIDER BEAM. THERE SHALL BE TWO DIVIDER BEAMS PER FLOOR. PLACE ONE NEAR THE FLOORLINE AND ONE MIDWAY BETWEEN FLOORS. COORDINATE EXACT LOCATIONS WITH THE ELEVATOR MANUFACTURER. SEE DETAILS FOR HOW TO ATTACH DIVIDER BEAMS TO THE STRUCTURE AND TO THE CMU WALLS.
10. RECESS THE SLAB BY 1/2" MAX FOR TERAZZO FLOOR WHERE NOTED. COORDINATE DIMENSIONS OF SLAB RECESS WITH THE ARCHITECTURAL DRAWINGS.

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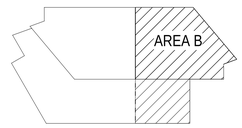
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH

ISSUED/REVISION SCHEDULE

MARK	DATE	DESCRIPTION
4	01/19/2026	BP3-ADDENDUM 03
3	01/07/2026	BP3-ADDENDUM 01
2	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
1	10/31/2025	ASI #1

CLAYTON E. SPENCER REGISTERED NO. 10302023 STATE OF INDIANA PROFESSIONAL ENGINEER

THIRD LEVEL FRAMING PLAN - AREA B

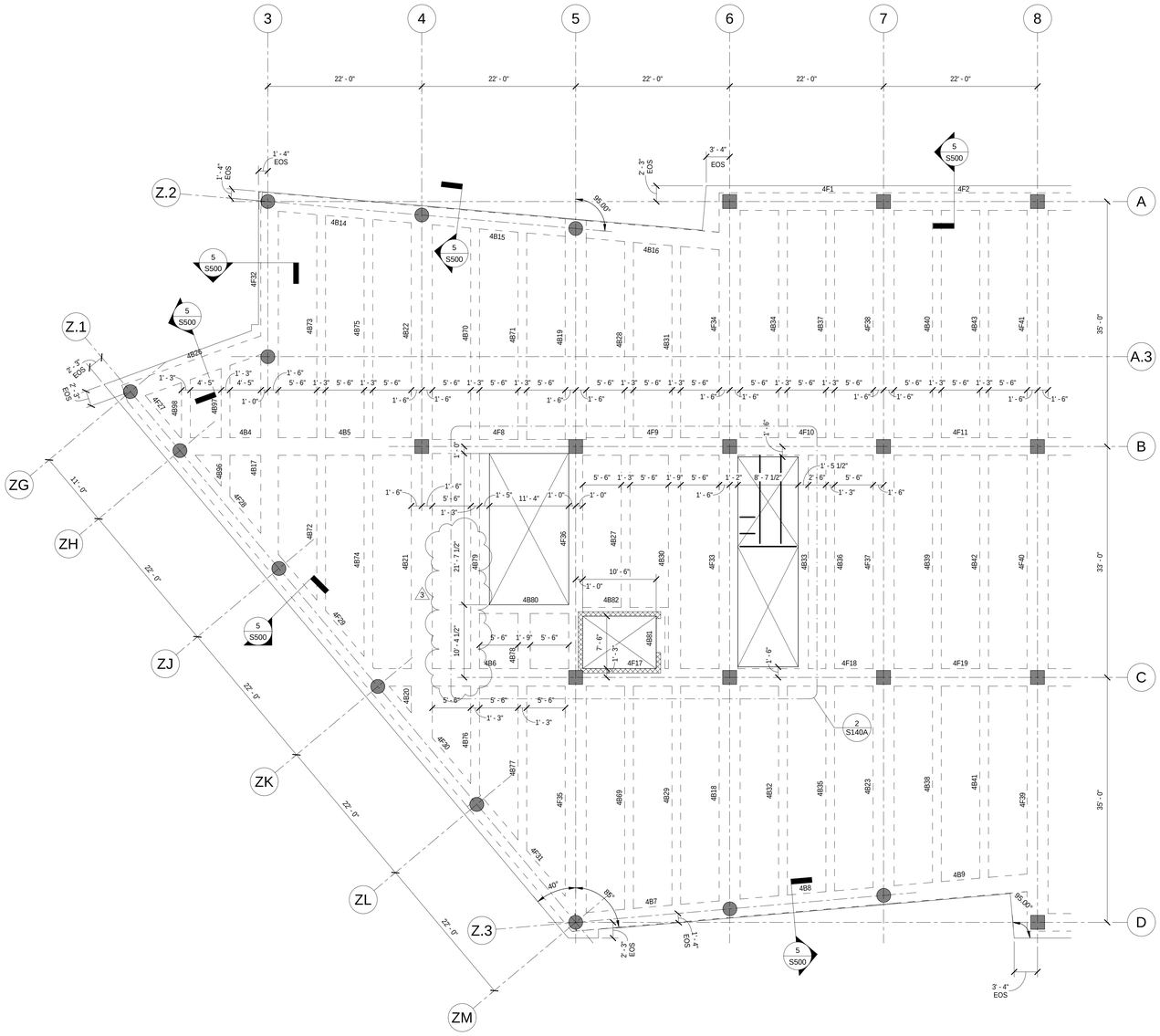
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REF: SHEET INDEX

S130B

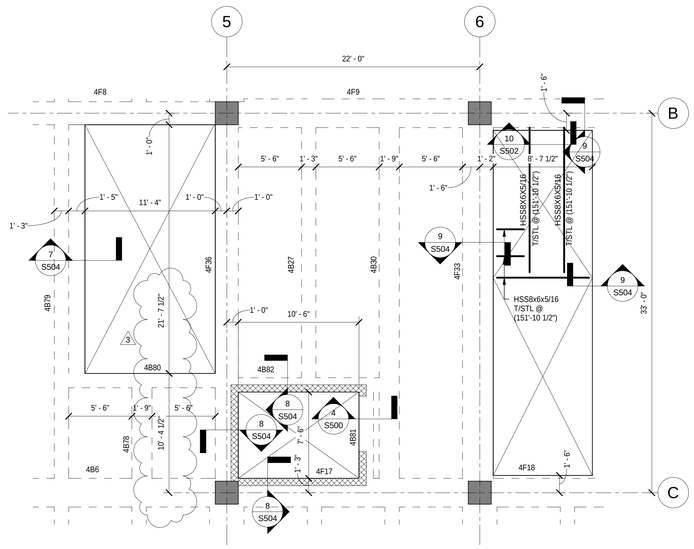
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1 S140A FOURTH FLOOR FRAMING PLAN - AREA A

1/8" = 1'-0"



2 S140A FOURTH FLOOR - AREA A PARTIAL FRAMING PLAN

3/16" = 1'-0"

PLAN NOTES:

1. REFER TO SHEETS S001 - S013 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. THE G.C. SHALL COORDINATE THE SIZE AND LOCATION OF ALL SLAB PENETRATIONS WITH THE VARIOUS TRADES PRIOR TO POURING CONCRETE.
3. THE TOP OF SLAB ELEVATION SHALL BE AT ELEVATION (152'-0").
4. UNLESS NOTED OTHERWISE, THE CONCRETE FLOOR SLAB CONSTRUCTION SHALL BE 29" DEEP INCLUDING 5" SLAB AND BEAMS. THE WIDTH OF THE BEAMS AT BOTTOM SHALL BE AS NOTED IN THE PLAN. TOP OF SLAB SHALL BE AT ELEVATION (152'-0"). FOR SLAB REINFORCING, REFER TO SHEET S012. AT ALL LOCATIONS WHERE SLAB OVERHANGS BEYOND FACE OF THE BEAM, THE SLAB THICKNESS SHALL BE 8". IN 8" SLAB CONTINUE REINFORCING FROM ADJACENT 5" SLAB AND PROVIDE WITH HOOK AT EDGE AND #4@12" O.C. CONTINUOUS CROSS BARS.
5. ALL PIPE PENETRATIONS THROUGH THE SLAB SHALL BE SLEEVED. SEE MECH./ELECT./PLUMBING DRAWINGS FOR REQUIREMENTS. DO NOT CUT REINFORCING BARS. MAINTAIN MINIMUM 6" CLEAR SPACE BETWEEN SLEEVES.
6. VERIFY SIZE AND LOCATION OF ELEVATOR SHAFT WITH ELEVATOR SUPPLIER PRIOR TO ANY FABRICATION AND CONSTRUCTION.
7. SLEEVES UPTO 8" DIAMETER ARE PERMITTED AT INTERIOR COLUMNS ON COLUMN CENTERLINES. LOCATIONS ARE SHOWN FOR REFERENCE. THE G.C. SHALL COORDINATE ALL SLEEVE SIZES AND LOCATIONS WITH THE VARIOUS TRADES. SEE S/S202.

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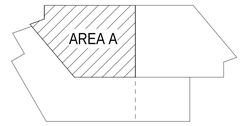
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

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BP3-CD: CORE AND SHELL PACKAGE



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2	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
1	10/31/2025	ASI #1

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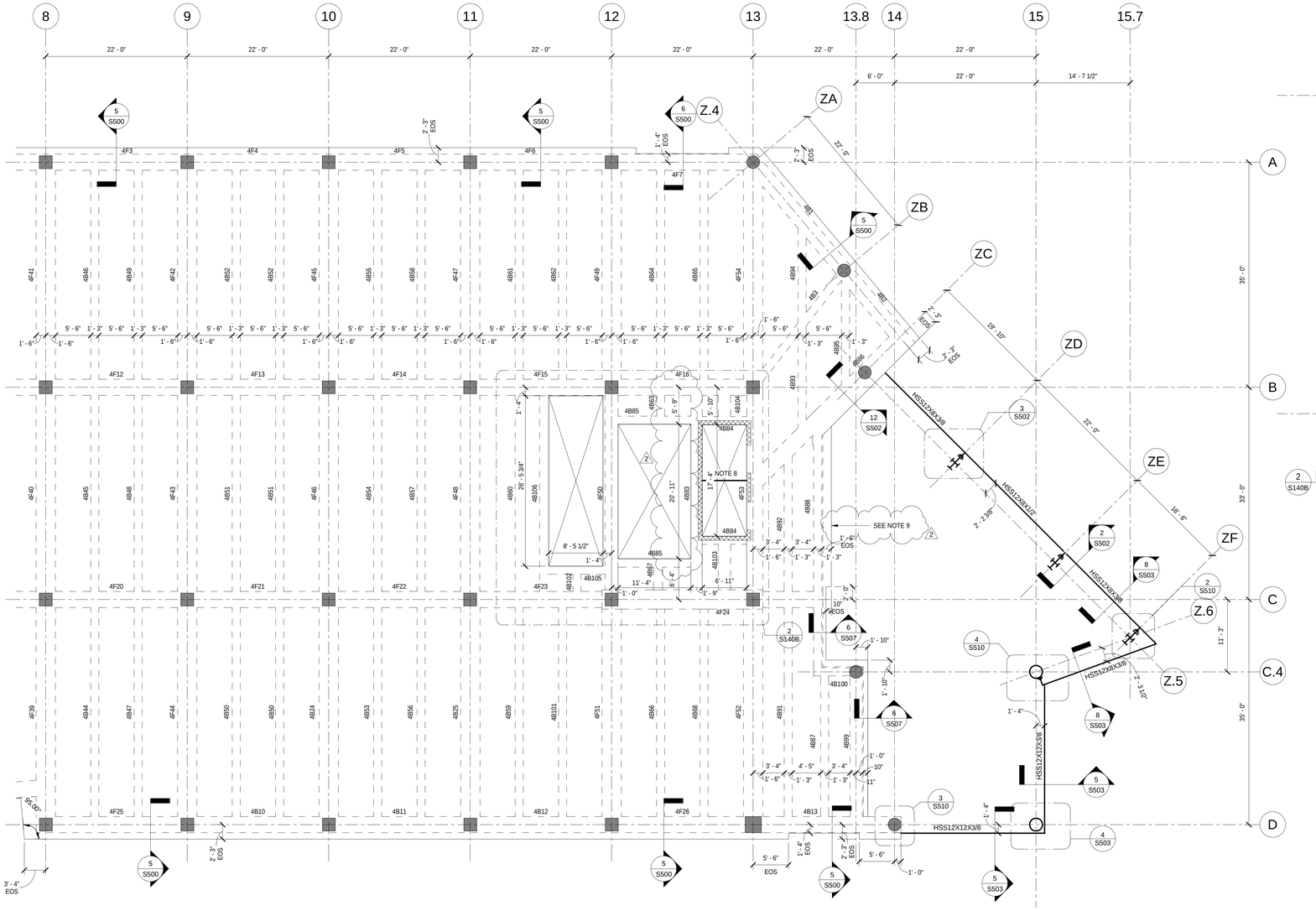
FOURTH FLOOR FRAMING PLAN - AREA A

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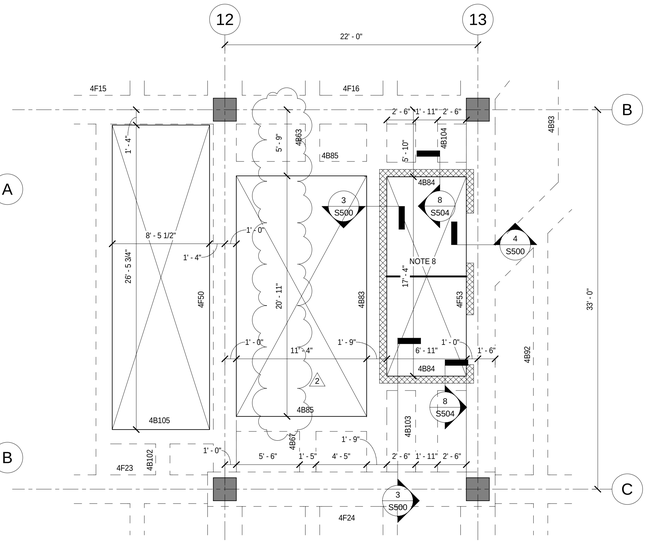
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1 FOURTH FLOOR FRAMING PLAN - AREA B
S140B 1/8" = 1'-0"



2 FOURTH FLOOR FRAMING PLAN - AREA B PARTIAL FRAMING PLAN
S140B 3/16" = 1'-0"

PLAN NOTES:

1. REFER TO SHEETS S001 - S013 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. THE G.C. SHALL COORDINATE THE SIZE AND LOCATION OF ALL SLAB PENETRATIONS WITH THE VARIOUS TRADES PRIOR TO POURING CONCRETE.
3. THE TOP OF SLAB ELEVATION SHALL BE AT ELEVATION (152'-0").
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9. RECESS THE SLAB BY 1/2" MAX FOR TERAZZO FLOOR WHERE NOTED. COORDINATE DIMENSIONS OF SLAB RECESS WITH THE ARCHITECTURAL DRAWINGS.

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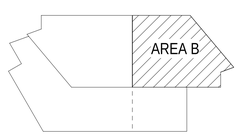
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH

ISSUED/REVISION SCHEDULE

MARK	DATE	DESCRIPTION
2	01/19/2026	BP3-ADDENDUM 03
1	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE



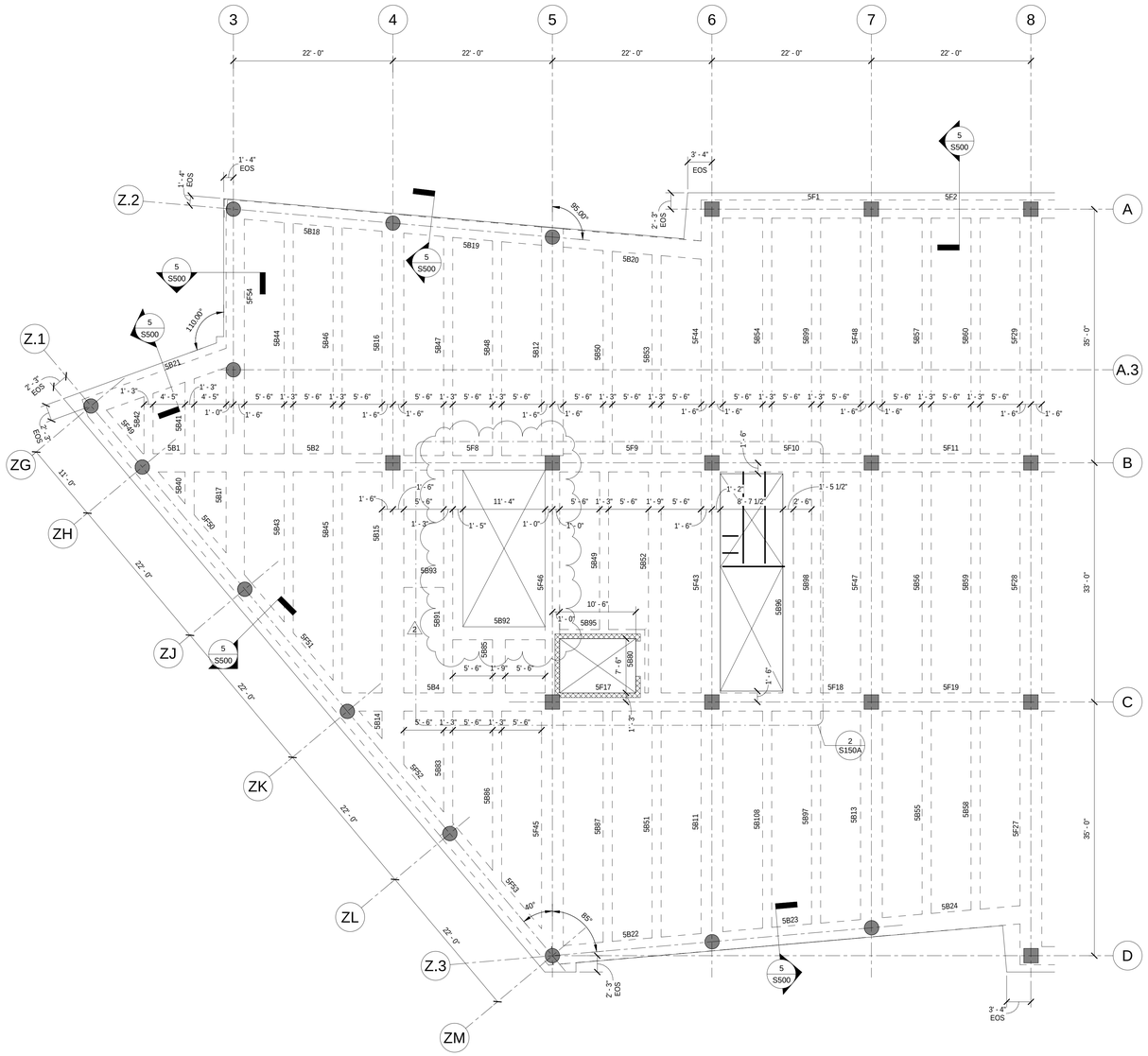
FOURTH FLOOR FRAMING PLAN - AREA B

DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

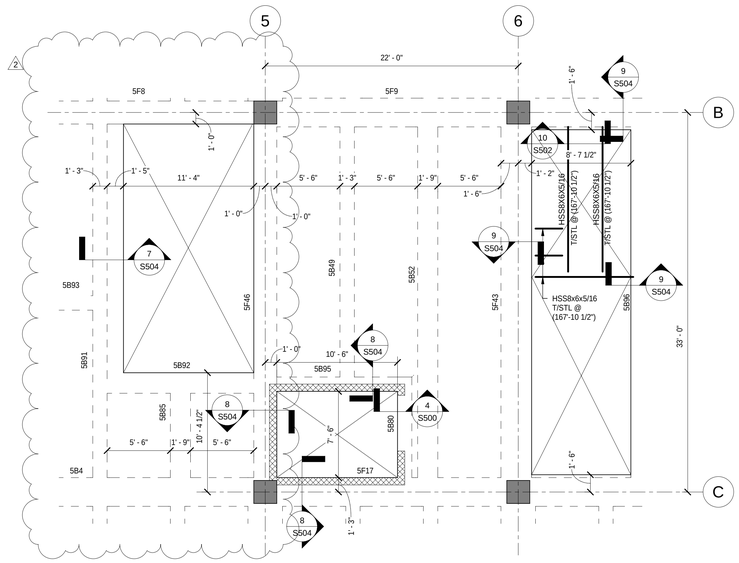
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1 S150A FIFTH FLOOR FRAMING PLAN - AREA A
1/8" = 1'-0"



2 S150A FIFTH FLOOR - AREA A PARTIAL FRAMING PLAN
3/16" = 1'-0"

PLAN NOTES:

1. REFER TO SHEETS S001 - S013 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. THE G.C. SHALL COORDINATE THE SIZE AND LOCATION OF ALL SLAB PENETRATIONS WITH THE VARIOUS TRADES PRIOR TO POURING CONCRETE.
3. THE TOP OF SLAB ELEVATION SHALL BE AT ELEVATION (168'-0").
4. UNLESS NOTED OTHERWISE, THE CONCRETE FLOOR SLAB CONSTRUCTION SHALL BE 29" DEEP INCLUDING 5" SLAB AND BEAMS. THE WIDTH OF THE BEAMS AT BOTTOM SHALL BE AS NOTED IN THE PLAN. TOP OF SLAB SHALL BE AT ELEVATION (168'-0"). FOR SLAB REINFORCING, REFER TO SHEET S012. AT ALL LOCATIONS WHERE SLAB OVERHANGS BEYOND FACE OF THE BEAM, THE SLAB THICKNESS SHALL BE 8". IN 8" SLAB CONTINUE REINFORCING FROM ADJACENT 5" SLAB AND PROVIDE WITH HOOK AT EDGE AND #4@12" O.C. CONTINUOUS CROSS BARS
5. ALL PIPE PENETRATIONS THROUGH THE SLAB SHALL BE SLEEVED. SEE MECH./ELECT./PLUMBING DRAWINGS FOR REQUIREMENTS. DO NOT CUT REINFORCING BARS. MAINTAIN MINIMUM 6" CLEAR SPACE BETWEEN SLEEVES.
6. VERIFY SIZE AND LOCATION OF ELEVATOR SHAFT WITH ELEVATOR SUPPLIER PRIOR TO ANY FABRICATION AND CONSTRUCTION.
7. SLEEVES UPTO 8" DIAMETER ARE PERMITTED AT INTERIOR COLUMNS ON COLUMN CENTERLINES. LOCATIONS ARE SHOWN FOR REFERENCE. THE G.C. SHALL COORDINATE ALL SLEEVE SIZES AND LOCATIONS WITH THE VARIOUS TRADES. SEE 5/S202.

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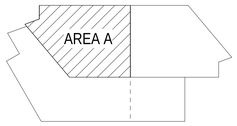
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH

ISSUED/REVISION SCHEDULE

MARK	DATE	DESCRIPTION
2	01/19/2026	BP3-ADDENDUM 03
1	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE



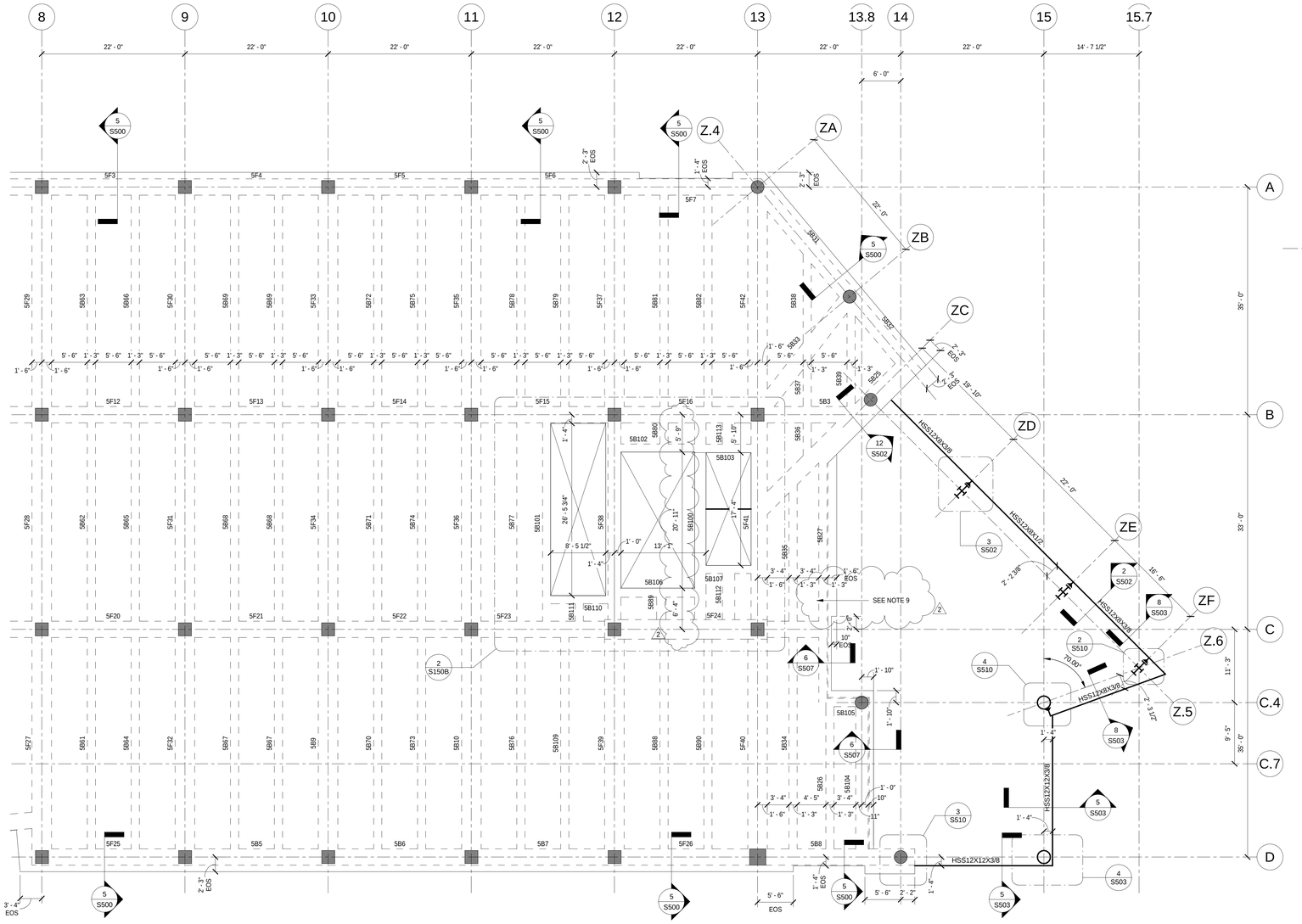
FIFTH FLOOR FRAMING PLAN - AREA A

DATE	REF: SHEET INDEX
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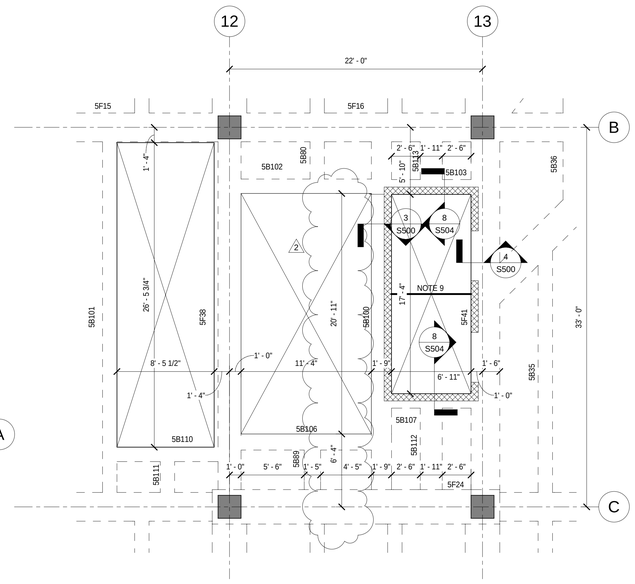
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1 S150B FIFTH FLOOR FRAMING PLAN - AREA B
1/8" = 1'-0"



2 S150B FIFTH FLOOR - AREA B PARTIAL FRAMING PLAN
3/16" = 1'-0"

PLAN NOTES:

1. REFER TO SHEETS S001 - S013 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. THE G.C. SHALL COORDINATE THE SIZE AND LOCATION OF ALL SLAB PENETRATIONS WITH THE VARIOUS TRADES PRIOR TO POURING CONCRETE.
3. THE TOP OF SLAB ELEVATION SHALL BE AT ELEVATION (168'-0").
4. UNLESS NOTED OTHERWISE, THE CONCRETE FLOOR SLAB CONSTRUCTION SHALL BE 29" DEEP INCLUDING 5" SLAB AND BEAMS. THE WIDTH OF THE BEAMS AT BOTTOM SHALL BE AS NOTED IN THE PLAN. TOP OF SLAB SHALL BE AT ELEVATION (168'-0"). FOR SLAB REINFORCING, REFER TO SHEET S012. AT ALL LOCATIONS WHERE SLAB OVERHANGS BEYOND FACE OF THE BEAM, THE SLAB THICKNESS SHALL BE 8". IN 8" SLAB CONTINUE REINFORCING FROM ADJACENT 5" SLAB AND PROVIDE WITH HOOK AT EDGE AND #4@12" O.C. CONTINUOUS CROSS BARS.
5. ALL PIPE PENETRATIONS THROUGH THE SLAB SHALL BE SLEEVED. SEE MECH./ELECT./PLUMBING DRAWINGS FOR REQUIREMENTS. DO NOT CUT REINFORCING BARS. MAINTAIN MINIMUM 6" CLEAR SPACE BETWEEN SLEEVES.
6. VERIFY SIZE AND LOCATION OF ELEVATOR SHAFT WITH ELEVATOR SUPPLIER PRIOR TO ANY FABRICATION AND CONSTRUCTION.
7. SLEEVES UPTO 8" DIAMETER ARE PERMITTED AT INTERIOR COLUMNS ON COLUMN CENTERLINES. LOCATIONS ARE SHOWN FOR REFERENCE. THE G.C. SHALL COORDINATE ALL SLEEVE SIZES AND LOCATIONS WITH THE VARIOUS TRADES. SEE S/S202.
8. WHERE INDICATED IN PLAN, PROVIDE AN HSS 12x6x3/8" DIVIDER BEAM. THERE SHALL BE TWO DIVIDER BEAMS PER FLOOR. PLACE ONE NEAR THE FLOORLINE AND ONE MIDWAY BETWEEN FLOORS. COORDINATE EXACT LOCATIONS WITH THE ELEVATOR MANUFACTURER. SEE DETAILS FOR HOW TO ATTACH DIVIDER BEAMS TO THE STRUCTURE AND TO THE CMU WALLS.
9. RECESS THE SLAB BY 1/2" MAX FOR TERAZZO FLOOR WHERE NOTED. COORDINATE DIMENSIONS OF SLAB RECESS WITH THE ARCHITECTURAL DRAWINGS.

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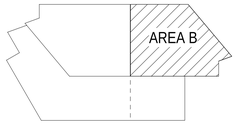
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH

ISSUED/REVISION SCHEDULE

MARK	DATE	DESCRIPTION
2	01/19/2026	BP3-ADDENDUM 03
1	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

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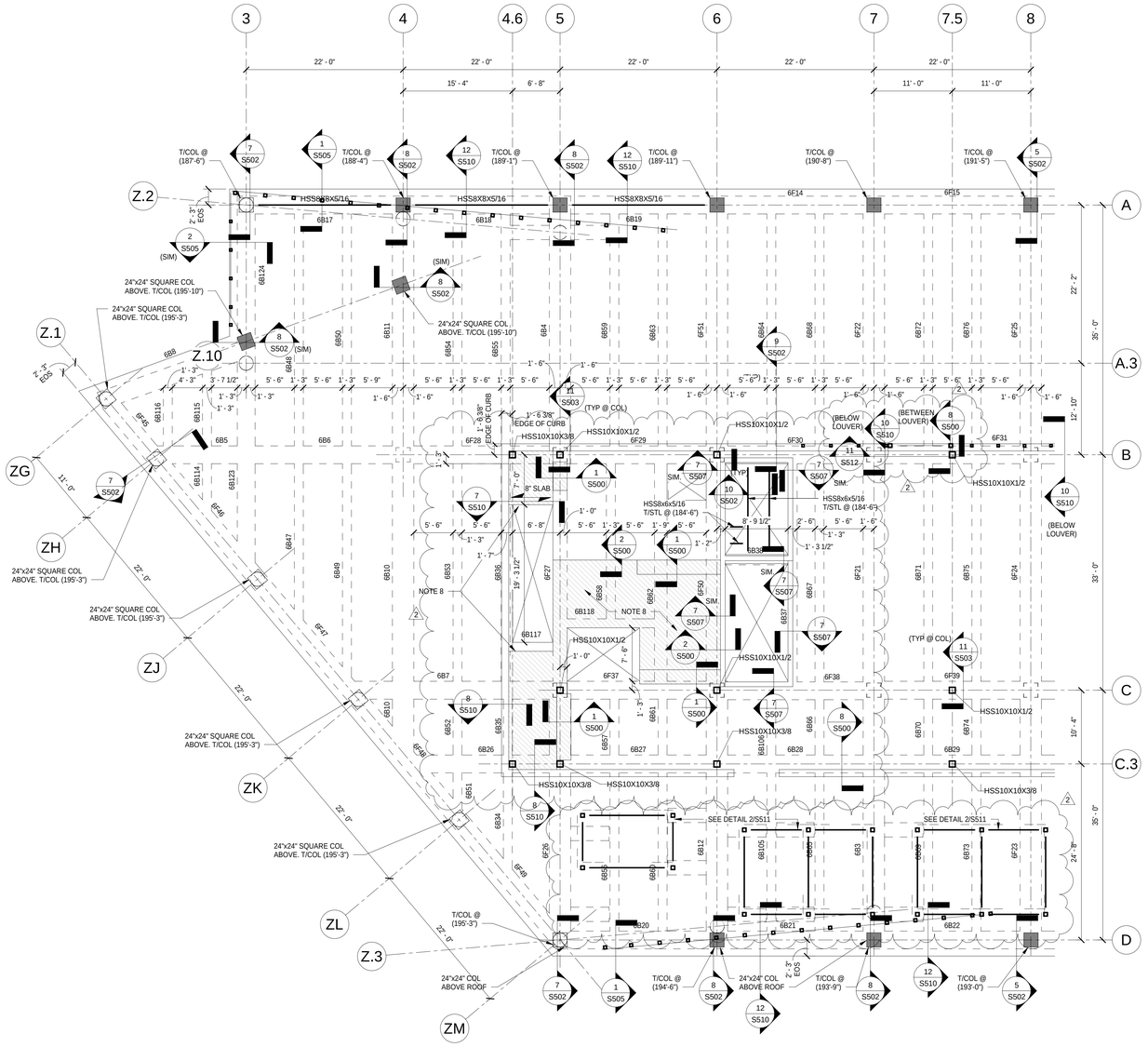
FIFTH FLOOR FRAMING PLAN - AREA B

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BSA PROJECT NO. 00360481

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1 S160A PENTHOUSE FLOOR FRAMING PLAN - AREA A

1/8" = 1'-0"

PLAN NOTES:

1. REFER TO SHEETS S001 - S013 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. THE G.C. SHALL COORDINATE THE SIZE AND LOCATION OF ALL SLAB PENETRATIONS WITH THE VARIOUS TRADES PRIOR TO POURING CONCRETE.
3. THE TOP OF SLAB ELEVATION SHALL BE AT ELEVATION (184'-0").
4. UNLESS NOTED OTHERWISE, THE CONCRETE FLOOR SLAB CONSTRUCTION SHALL BE 29" DEEP INCLUDING 5" SLAB AND BEAMS. THE WIDTH OF THE BEAMS AT BOTTOM SHALL BE AS NOTED IN THE PLAN. TOP OF SLAB SHALL BE AT ELEVATION (184'-0"). FOR SLAB REINFORCING, REFER TO SHEET S012. AT ALL LOCATIONS WHERE SLAB OVERHANGS BEYOND FACE OF THE BEAM, THE SLAB THICKNESS SHALL BE 8". IN 8" SLAB CONTINUE REINFORCING FROM ADJACENT 5" SLAB AND PROVIDE WITH HOOK AT EDGE AND #4@12" O.C. CONTINUOUS CROSS BARS.
5. ALL PIPE PENETRATIONS THROUGH THE SLAB SHALL BE SLEEVED. SEE MECH./ELECT./PLUMBING DRAWINGS FOR REQUIREMENTS. DO NOT CUT REINFORCING BARS. MAINTAIN MINIMUM 6" CLEAR SPACE BETWEEN SLEEVES.
6. VERIFY SIZE AND LOCATION OF ELEVATOR SHAFT WITH ELEVATOR SUPPLIER PRIOR TO ANY FABRICATION AND CONSTRUCTION.
7. SLEEVES UPTO 8" DIAMETER ARE PERMITTED AT INTERIOR COLUMNS ON COLUMN CENTERLINES. LOCATIONS ARE SHOWN FOR REFERENCE. THE G.C. SHALL COORDINATE ALL SLEEVE SIZES AND LOCATIONS WITH THE VARIOUS TRADES. SEE 5/S202.
8. TOPPING SLAB SHALL BE 2" NORMAL WEIGHT CONCRETE WITH 6x6 W2.1xW2.1 WWF. SEE ARCHITECTURAL DRAWINGS FOR EXTENTS OF TOPPING SLAB.

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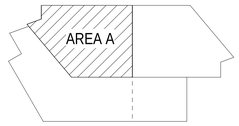
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN

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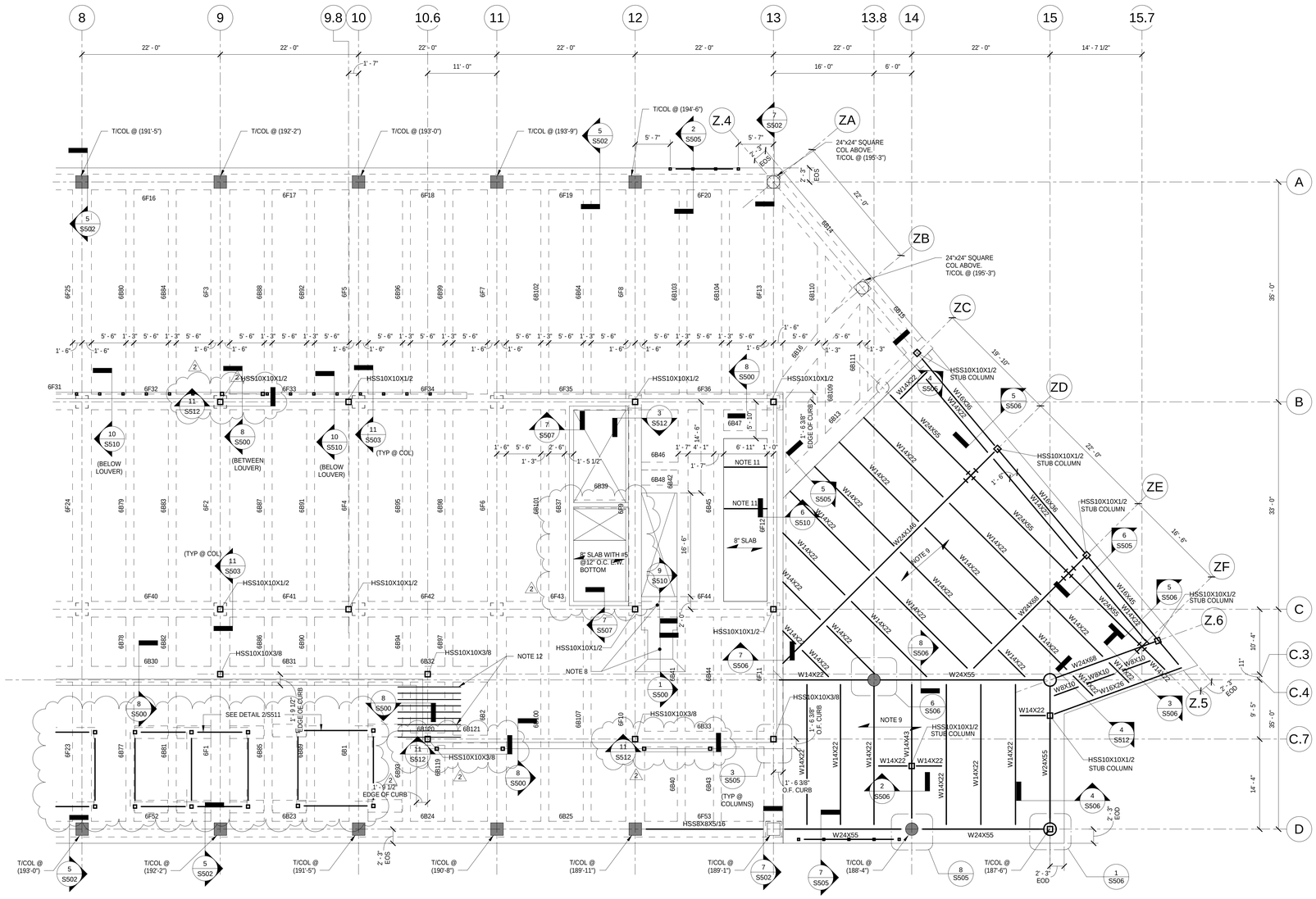
PENTHOUSE FLOOR FRAMING PLAN - AREA A

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1 S160B PENTHOUSE FLOOR FRAMING PLAN -AREA B

1/8" = 1'-0"

PLAN NOTES:

1. REFER TO SHEETS S001 - S013 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. THE G.C. SHALL COORDINATE THE SIZE AND LOCATION OF ALL SLAB PENETRATIONS WITH THE VARIOUS TRADES PRIOR TO POURING CONCRETE.
3. THE TOP OF SLAB ELEVATION SHALL BE AT ELEVATION (184'-0").
4. UNLESS NOTED OTHERWISE, THE CONCRETE FLOOR SLAB CONSTRUCTION SHALL BE 29" DEEP INCLUDING 5" SLAB AND BEAMS. THE WIDTH OF THE BEAMS AT BOTTOM SHALL BE AS NOTED IN THE PLAN. TOP OF SLAB SHALL BE AT ELEVATION (184'-0"). FOR SLAB REINFORCING, REFER TO SHEET S012. AT ALL LOCATIONS WHERE SLAB OVERHANGS BEYOND FACE OF THE BEAM, THE SLAB THICKNESS SHALL BE 9". IN 8" SLAB CONTINUE REINFORCING FROM ADJACENT 5" SLAB AND PROVIDE WITH HOOK AT EDGE AND #4@12" O.C. CONTINUOUS CROSS BARS.
5. ALL PIPE PENETRATIONS THROUGH THE SLAB SHALL BE SLEEVED. SEE MECH./ELECT./PLUMBING DRAWINGS FOR REQUIREMENTS. DO NOT CUT REINFORCING BARS. MAINTAIN MINIMUM 6" CLEAR SPACE BETWEEN SLEEVES.
6. VERIFY SIZE AND LOCATION OF ELEVATOR SHAFT WITH ELEVATOR SUPPLIER PRIOR TO ANY FABRICATION AND CONSTRUCTION.
7. SLEEVES UPTO 8" DIAMETER ARE PERMITTED AT INTERIOR COLUMNS ON COLUMN CENTERLINES. LOCATIONS ARE SHOWN FOR REFERENCE. THE G.C. SHALL COORDINATE ALL SLEEVE SIZES AND LOCATIONS WITH THE VARIOUS TRADES. SEE S/S202.
8. TOPPING SLAB SHALL BE 2" NORMAL WEIGHT CONCRETE WITH 6x6 W2.1xW2.1 WWF. SEE ARCHITECTURAL DRAWINGS FOR EXTENTS OF TOPPING SLAB.
9. ROOF DECK SHALL BE 1 1/2" WIDE RIBBED GALVANIZED 20 GAGE METAL ROOF DECK.
10. TOP OF STEEL EAST OF COLUMN LINE 13 IS AT (183'-10 1/2") U.N.O.
11. ABOVE THE ELEVATOR SHAFT, PROVIDE A W8x28 HOIST BEAM WITH THE TOP OF STEEL BEING 3" BELOW THE BOTTOM OF THE SLAB. GC TO COORDINATE LOCATION AND ORIENTATION WITH THE ELEVATOR MANUFACTURER.
12. PROVIDE #5@12" O.C. IN THE BOTTOM OF THE SLAB x10'-0" LONG CENTERED BETWEEN THE TWO ADJACENT JOISTS.

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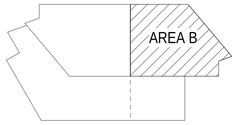
LAUNCH ACCELERATOR FOR BIOSCIENCES

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CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN

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2	01/19/2026	BP3-ADDENDUM 03
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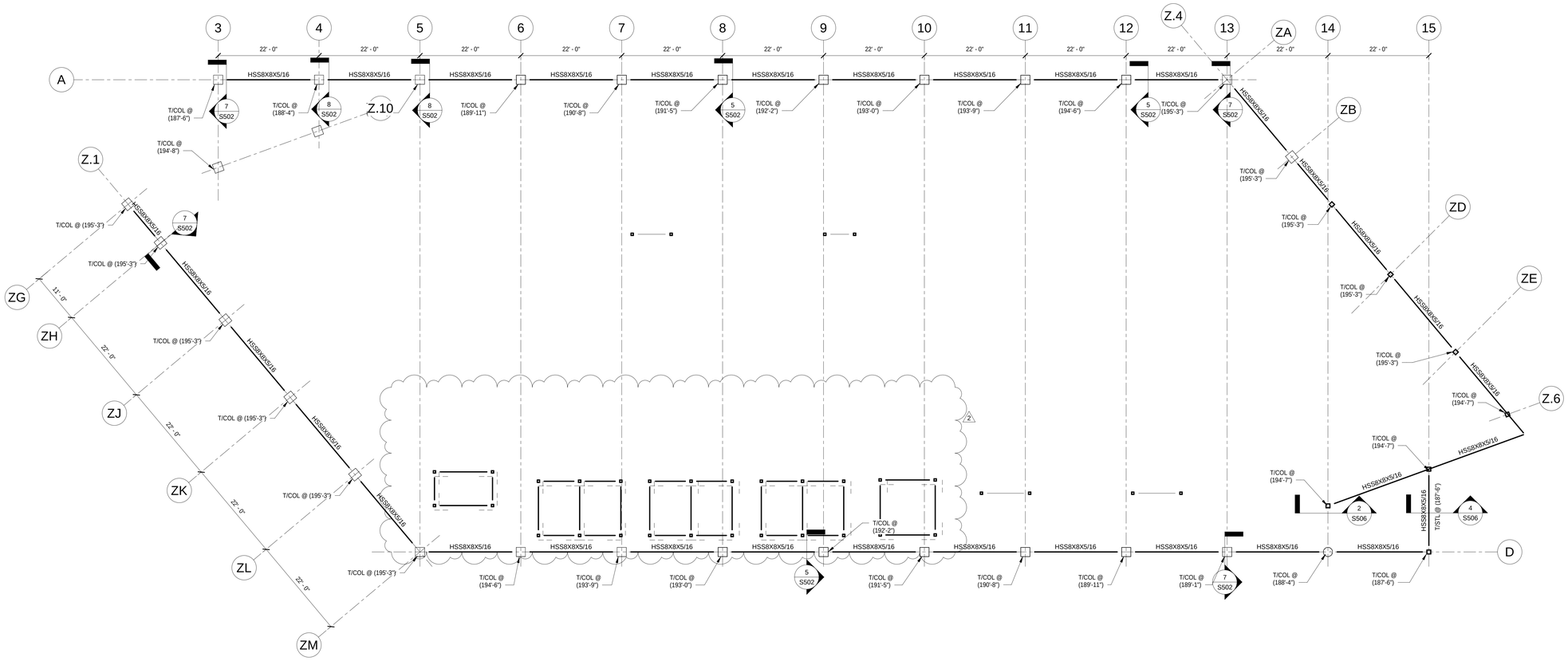
PENTHOUSE FLOOR FRAMING PLAN - AREA B

DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

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1 S180 ROOF PARAPET FRAMING PLAN

3/32" = 1'-0"

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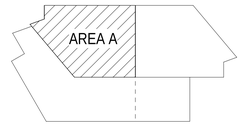
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ROOF PARAPET FRAMING PLAN

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BEAM SCHEDULE

MARK	SIZE B (in)	SIZE D (in)	QTY	SIZE	LOC	REINFORCEMENT LEFT SUPPORT C/L ADJ. SPAN	L/4	C/L	3L/4	REINFORCEMENT RIGHT SUPPORT C/L ADJ. SPAN	STIRRUPS SIZE	STIRRUPS TYPE	STIRRUPS SPACING	REMARKS
2B42	15	29	4 5 3	#6 #7 #8	T T B			13'-4"		8'-0" 35'-0"	#3	2 LEG CLS	6@12" (LE) 14@12" (RE) BAL@18"	
2B44	21	29	5 3	#7 #8	T B			13'-4"		15'-2" 32'-9" 0'-2"	#3	2 LEG CLS	15@9" (LE) 12@9" (RE) BAL@18"	
2B45	15	29	4 3	#6 #8	T B					35'-0"	#3	2 LEG CLS	13@12" (LE) 6@12" (RE) BAL@18"	
2B46	15	29	4 5 3	#6 #6 #8	T T B					35'-0"	#3	2 LEG CLS	6@12" (LE) 13@12" (RE) BAL@18"	
2B47	15	29	3	#6	B						#3	2 LEG CLS	10@12" (LE) 10@12" (RE) BAL@18"	
2B48	15	29	4 3	#6 #8	T B					35'-0"	#3	2 LEG CLS	13@12" (LE) 6@12" (RE) BAL@18"	
2B49	15	29	4 5 3	#6 #6 #8	T T B					17'-0" 35'-0"	#3	2 LEG CLS	6@12" (LE) 13@12" (RE) BAL@18"	
2B50	15	29	5 3	#6 #6	T B					16'-0" 33'-0"	#3	2 LEG CLS	9@12" (LE) 9@12" (RE) BAL@18"	
2B51	15	29	4 3	#6 #8	T B					35'-0"	#3	2 LEG CLS	13@12" (LE) 6@12" (RE) BAL@18"	
2B52	15	29	4 5 3	#6 #6 #8	T T B					17'-0" 35'-0"	#3	2 LEG CLS	6@12" (LE) 13@12" (RE) BAL@18"	
2B53	15	29	5 3	#6 #7	T B					16'-0" 33'-0"	#3	2 LEG CLS	9@12" (LE) 9@12" (RE) BAL@18"	
2B54	15	29	4 3	#6 #8	T B					35'-0"	#3	2 LEG CLS	13@12" (LE) 6@12" (RE) BAL@18"	
2B55	15	29	4 5 3	#6 #6 #8	T T B					16'-0" 35'-0"	#3	2 LEG CLS	6@12" (LE) 13@12" (RE) BAL@18"	
2B56	15	29	5 3	#6 #7	T B					17'-0" 33'-0"	#3	2 LEG CLS	9@12" (LE) 9@12" (RE) BAL@18"	
2B57	15	29	5 3	#6 #8	T B					35'-0"	#3	2 LEG CLS	13@12" (LE) 6@12" (RE) BAL@18"	
2B58	15	29	4 3	#6 #5	T B					10'-0"	#3	2 LEG CLS	BAL@12"	
2B59	15	29	5 3	#6 #7	T B			13'-4"		16'-0" 35'-0"	#3	2 LEG CLS	10@12" (LE) 11@12" (RE) BAL@18"	
2B60	15	29	5 3	#6 #7	T B					17'-0" 33'-0"	#3	2 LEG CLS	9@12" (LE) 10@12" (RE) BAL@18"	
2B61	15	29	4 3	#6 #8	T B					35'-0"	#3	2 LEG CLS	13@12" (LE) 6@12" (RE) BAL@18"	
2B62	15	29	4 3	#6 #7	T B					10'-0"	#3	2 LEG CLS	BAL@18"	

BEAM SCHEDULE

MARK	SIZE B (in)	SIZE D (in)	QTY	SIZE	LOC	REINFORCEMENT LEFT SUPPORT C/L ADJ. SPAN	L/4	C/L	3L/4	REINFORCEMENT RIGHT SUPPORT C/L ADJ. SPAN	STIRRUPS SIZE	STIRRUPS TYPE	STIRRUPS SPACING	REMARKS
2B63	15	29	5 3	#7 #8	T B			13'-4"		18'-0" 35'-0"	#3	2 LEG CLS	6@12" (LE) 16@12" (RE) BAL@18"	
2B64	15	29	5 3	#7 #6	T B			15'-0"		33'-0"	#3	2 LEG CLS	10@12" (LE) 9@12" (RE) BAL@18"	
2B65	15	29	4 3	#6 #8	T B					35'-0"	#3	2 LEG CLS	13@12" (LE) 6@12" (RE) BAL@18"	
2B66	15	29	5	#7	B					10'-0"	#3	2 LEG CLS	BAL@12"	
2B67	15	29	6 5	#7 #7	T B			13'-4"		18'-0" 35'-0"	#3	2 LEG CLS	4@12" (LE) 18@12" (RE) BAL@18"	
2B68	15	29	5 3	#6 #6	T B			15'-0"		33'-0"	#3	2 LEG CLS	11@12" (LE) 8@12" (RE) BAL@18"	
2B69	15	29	4 3	#6 #8	T B					35'-0"	#3	2 LEG CLS	12@12" (LE) 6@12" (RE) BAL@18"	
2B70	15	29	4 4	#6 #8	T B					10'-0"	#3	2 LEG CLS	BAL@12"	
2B71	15	29	5 5	#8 #8	T B			13'-4"		18'-0" 35'-0"	#3	2 LEG CLS	4@12" (LE) 20@12" (RE) BAL@18"	
2B72	15	29	5 3	#7 #6	T B			15'-0"		33'-0"	#3	2 LEG CLS	11@12" (LE) 8@12" (RE) BAL@18"	
2B73	15	29	4 3	#6 #8	T B					35'-0"	#3	2 LEG CLS	12@12" (LE) 6@12" (RE) BAL@18"	
2B74	15	29	4 3	#6 #7	T B					10'-0"	#3	2 LEG CLS	BAL@12"	
2B75	15	29	5 3	#7 #8	T B			13'-4"		18'-0" 35'-0"	#3	2 LEG CLS	6@12" (LE) 16@12" (RE) BAL@18"	
2B76	15	29	5 3	#7 #6	T B			15'-0"		33'-0"	#3	2 LEG CLS	10@12" (LE) 9@12" (RE) BAL@18"	
2B77	15	29	4 3	#6 #8	T B					35'-0"	#3	2 LEG CLS	13@12" (LE) 6@12" (RE) BAL@18"	
2B78	15	29	4 3	#6 #5	T B					10'-0"	#3	2 LEG CLS	BAL@12"	
2B79	15	29	5 3	#7 #7	T B						#3	2 LEG CLS	10@12" (LE) 11@12" (RE) BAL@18"	
2B80	15	29	5 3	#7 #7	T B					33'-0"	#3	2 LEG CLS	9@12" (LE) 10@12" (RE) BAL@18"	
2B81	15	29	4 3	#6 #8	T B					35'-0"	#3	2 LEG CLS	13@12" (LE) 6@12" (RE) BAL@18"	
2B82	15	29	4 4 4	#6 #6 #8	T T B			12'-0"		35'-0"	#3	2 LEG CLS	9@12" (LE) 9@12" (RE) BAL@18"	
2B83	15	29	4 4	#6 #6	T T					11'-3" 25'-7"	#3	2 LEG CLS	12@18" (LE) 7@12" (RE)	

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

REFER TO CIVIL DRAWINGS FOR TRUE NORTH

ISSUED/REVISION SCHEDULE

MARK	DATE	DESCRIPTION
2	01/19/2026	BP3-ADDENDUM 03
1	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

CLAYTON E. SEAGER REGISTERED No. 10302023 STATE OF INDIANA PROFESSIONAL ENGINEER

SECOND FLOOR GRAVITY BEAM SCHEDULE

DATE: REF: SHEET INDEX
BSA PROJECT NO.: 00360481

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BEAM SCHEDULE

MARK	SIZE		REINFORCEMENT										STIRRUPS			REMARKS
			LEFT SUPPORT					RIGHT SUPPORT								
	B (in)	D (in)	QTY	SIZE	LOC	C/L ADJ. SPAN	L/4	C/L	3L/4	C/L ADJ. SPAN	SIZE	TYPE	SPACING	
2B84	21	29	3	#5	B						#3	2 LEG CLS	BAL@18"	
2B85	15	29	4	#6	T		12'-0"				#3	2 LEG	9@12" (LE) 9@12" (RE)	
			4	#6	T									
			4	#8	B		35'-0"					CLS	BAL@18"	
2B86	15	29	4	#6	T				13'-4"	6'-0"	#3	2 LEG	6@12" (LE) 16@12" (RE)	
			5	#7	T									
			2	#9	B		35'-0"					CLS	BAL@18"	
2B87	17	29	3	#7	B		6'-0"				#3	2 LEG CLS	BAL@12"	
2B88	15	29	4	#5	T					2'-6"	#3	2 LEG	BAL@18"	
			4	#5	T									
			3	#6	B		22'-0"			0'-6"		CLS		
2B89	15	29	4	#6	T		10'-0"			9'-5"	#3	2 LEG	BAL@18"	
			3	#5	B		12'-0"					CLS		
2B90	15	29	4	#5	T					2'-7"	#3	2 LEG	6@12" (LE) 11@18" (RE)	
			3	#7	B		23'-0"					CLS		
2B91	15	29	4	#6	T		14'-1"			11'-3"	#3	2 LEG	4@18" (LE) 9@12" (RE)	
			3	#5	B	0'-5"	16'-7"					CLS		
2B92	15	29	4	#5	T						#3	2 LEG	BAL@18"	
			3	#5	B		21'-3"					CLS		
2B93	15	29	3	#5	T		5'-0"				#3	2 LEG	BAL@18"	
			3	#5	T									
			3	#7	B		9'-0"					CLS		
2B94	15	29	3	#5	T						#3	2 LEG	BAL@18"	
			3	#7	B		11'-5"					CLS		
2B95	15	29	3	#5	T		4'-4"				#3	2 LEG	BAL@18"	
			3	#5	T									
			3	#5	B		10'-0"					CLS		
2B96	15	29	3	#6	T		12'-0"				#3	2 LEG	BAL@18"	
			3	#5	B		12'-0"					CLS		
2B97	30	29	4	#5	T	6'-0"					#4	2 LEG	4@18" TO C/L 6@12" (RE) (CNT) 8@12" (RE) 1@18" TO C/L	
			7	#7	T			11'-0"		6'-0"				
			4	#7	B		17'-0"					CLS		
			4	#7	B					6'-0"				
2B98	15	29	3	#7	T		13'-1"				#3	2 LEG	3@18" (LE) 8@12" (RE)	
			3	#5	B		13'-1"					CLS		
2B99	20	29	4	#7	T		10'-0"			12'-6"	#3	2 LEG	BAL@12"	
			3	#7	B		22'-0"			0'-6"		CLS		
2B100	20	29	3	#5	B		12'-0"				#3	2 LEG CLS	BAL@12"	
2B101	23	29	6	#8	T		10'-0"			12'-6"	#3	2 LEG	BAL@18" 3@18" (RE) (CNT)	
			4	#5	B		22'-0"			0'-6"		CLS	17@6" (RE) (CNT)	
			4	#5	B					0'-6" 12'-6"				
2B102	23	29	3	#6	T		8'-0"				#3	2 LEG	BAL@18"	
			3	#5	B		8'-0"					CLS		
2B103	23	29	3	#6	T		4'-10"				#3	2 LEG	BAL@18"	
			3	#5	B		4'-10"					CLS		
2B104	15	29	3	#5	T						#3	2 LEG	BAL@18"	
			3	#5	B							CLS		
2B105	15	29	4	#6	T		33'-0"				#3	2 LEG	BAL@18"	
			3	#7	B		33'-0"					CLS		
2B106	15	29	3	#5	T						#3	2 LEG	BAL@18"	
			3	#5	B							CLS		

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

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CLAYTON E. FRANCE REGISTERED No. 10302023 STATE OF INDIANA PROFESSIONAL ENGINEER

SECOND FLOOR GRAVITY BEAM SCHEDULE

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BEAM SCHEDULE

MARK	SIZE		REINFORCEMENT											STIRRUPS			REMARKS
						LEFT SUPPORT			RIGHT SUPPORT								
	B (in)	D (in)	QTY	SIZE	LOC	C/L ADJ. SPAN	L/4	C/L	3L/4	C/L ADJ. SPAN	SIZE	TYPE	SPACING	
2F1	30	29	6	#7	T			11'-0"			#3	4 LEG	BAL@12"	
			4	#8	T				11'-0"	11'-0"				
			6	#6	B			22'-0"				CLS		
2F2	30	29	6	#7	T				11'-0"	11'-0"	#3	4 LEG	BAL@12"	
			4	#7	B			22'-0"				CLS		
2F3	30	29	6	#7	T				11'-0"	11'-0"	#3	4 LEG	BAL@12"	
			6	#5	B			22'-0"				CLS		
2F4	30	29	4	#8	T				11'-0"	11'-0"	#3	4 LEG	BAL@12"	
			4	#7	B			22'-0"				CLS		
2F5	30	29	4	#8	T				11'-0"	11'-0"	#3	4 LEG	BAL@12"	
			4	#7	B			22'-0"				CLS		
2F6	30	29	4	#8	T				11'-0"	11'-0"	#3	4 LEG	BAL@12"	
			6	#5	B			22'-0"				CLS		
2F7	30	SEE 7/S501 FOR CANTILEVER BEAM DEPTH & DETAILS	4	#8	T				11'-0"	11'-0"	#3	4 LEG	BAL@12"	
			6	#5	B			22'-0"				CLS		
2F8	30	29	4	#8	T				11'-0"	11'-0"	#3	4 LEG	BAL@12"	
			6	#5	B			22'-0"				CLS		
2F9	30	29	6	#7	T				11'-0"	11'-0"	#3	4 LEG	BAL@12"	
			6	#5	B			22'-0"				CLS		
2F10	30	29	4	#8	T				11'-0"		#3	4 LEG	BAL@12"	
			6	#6	B			22'-0"				CLS		
2F11	24	29	6	#8	T				11'-1"	9'-2"	#3	4 LEG	BAL@12"	
			6	#6	B			21'-11"				CLS		
2F12	30	29	7	#7	T				9'-3"	9'-2"	#3	4 LEG	8@12" (LE) 8@12" (RE)	
			6	#7	B			21'-11"				CLS	BAL@18"	
2F13	30	29	4	#9	T				9'-3"	9'-2"	#3	4 LEG	8@12" (LE) 8@12" (RE)	
			5	#7	B			21'-11"				CLS	BAL@18"	
2F14	30	29	4	#9	T				9'-3"	9'-2"	#3	4 LEG	8@12" (LE) 8@12" (RE)	
			5	#7	B			21'-11"				CLS	BAL@18"	
2F15	30	29	4	#9	T				9'-3"	9'-2"	#3	4 LEG	8@12" (LE) 8@12" (RE)	
			5	#7	B			21'-11"				CLS	BAL@18"	
2F16	30	29	5	#8	T				9'-3"	9'-2"	#3	4 LEG	8@12" (LE) 8@12" (RE)	
			5	#7	B			21'-11"				CLS	BAL@18"	
2F17	30	29	5	#8	T				9'-10"	9'-2"	#3	4 LEG	8@12" (LE) 8@12" (RE)	
			5	#7	B			21'-11"				CLS	BAL@18"	
2F18	30	29	5	#8	T				9'-3"	10'-11"	#3	4 LEG	8@12" (LE) 8@12" (RE)	
			5	#7	B			21'-11"				CLS	BAL@18"	
2F19	30	29	5	#8	T				11'-1"		#3	4 LEG	BAL@12"	
			5	#7	B			21'-11"				CLS		
2F20	30	29	7	#7	T				11'-4"	9'-3"	#3	4 LEG	BAL@12"	
			6	#7	B	0'-3"		21'-8"				CLS		

BEAM SCHEDULE

MARK	SIZE		REINFORCEMENT											STIRRUPS			REMARKS
						LEFT SUPPORT			RIGHT SUPPORT								
	B (in)	D (in)	QTY	SIZE	LOC	C/L ADJ. SPAN	L/4	C/L	3L/4	C/L ADJ. SPAN	SIZE	TYPE	SPACING	
2F21	30	29	5	#8	T				9'-2"	9'-3"	#3	4 LEG	8@12" (LE) 8@12" (RE)	
			5	#7	B	0'-3"		21'-8"				CLS	BAL@18"	
2F22	30	29	5	#8	T				9'-2"	9'-3"	#3	4 LEG	8@12" (LE) 8@12" (RE)	
			5	#7	B	0'-3"		21'-8"				CLS	BAL@18"	
2F23	30	29	6	#8	T				9'-2"	9'-3"	#3	4 LEG	8@12" (LE) 8@12" (RE)	
			5	#7	B	0'-3"		21'-8"				CLS	BAL@18"	
2F24	30	29	6	#8	T				9'-2"	9'-3"	#3	4 LEG	8@12" (LE) 8@12" (RE)	
			6	#7	B	0'-3"		21'-8"				CLS	BAL@18"	
2F25	30	29	6	#8	T				9'-2"	9'-3"	#3	4 LEG	8@12" (LE) 8@12" (RE)	
			6	#7	B	0'-3"		21'-8"				CLS	BAL@18"	
2F26	30	29	6	#8	T				9'-2"	10'-8"	#3	4 LEG	8@12" (LE) 8@12" (RE)	
			6	#7	B	0'-3"		21'-8"				CLS	BAL@18"	
2F27	30	29									#3	4 LEG	BAL@12"	
			6	#7	B	0'-3"		21'-8"				CLS		
2F28	36	36	6	#5	T						#3	4 LEG	BAL@12"	
			8	#7	B							CLS		
2F29	36	29	5	#8	T			12'-3"			#3	4 LEG	10@18" (LE)	
			5	#8	T				15'-2"			CLS	19@12" (RE)	
			5	#7	B			35'-0"						
2F30	24	29	8	#8	T				15'-2"	14'-3"	#3	4 LEG	11@12" (LE) 9@12" (RE)	
			6	#6	B			33'-0"				CLS	BAL@18"	
2F31	36	42	8	#7	T						#3	4 LEG	18@12" (LE)	
			5	#9	B			35'-0"				CLS	11@18" (RE)	
			6	#9	B			30'-7"						
2F32	36	29	5	#7	T			18'-0"			#3	4 LEG	19@18" (LE)	
			6	#8	T				17'-0"	17'-0"		CLS	6@12" (RE)	
			9	#9	B			35'-0"						
2F33	36	29	6	#8	T				16'-0"	14'-3"	#3	4 LEG	6@12" (LE)	
			6	#7	B			33'-0"				CLS	17@18" (RE)	
2F34	36	29	6	#7	T				14'-1"		#3	4 LEG	5@12" (LE)	
			6	#7	B			35'-0"				CLS	19@18" (RE)	
2F35	36	36	6	#7	T						#3	4 LEG	11@18" (LE)	
			10	#7	T				13'-10"	17'-0"		CLS	18@12" (RE)	
			14	#9	BL			35'-0"						
			4	#9	BU			35'-0"						
2F36	36	29	6	#8	T				16'-0"	14'-3"	#3	4 LEG	BAL@18"	
			6	#6	B			33'-0"				CLS		
2F37	36	29	6	#7	T				14'-1"		#3	4 LEG	4@12" (LE)	
			6	#6	B			35'-0"				CLS	20@18" (RE)	
2F38	32	29	6	#7	T			15'-2"			#3	4 LEG	20@18" (LE)	
			6	#8	T				14'-2"	17'-0"		CLS	4@12" (RE)	
			6	#6	B			35'-0"						
2F39	36	29	6	#8	T				16'-0"	14'-3"	#3	4 LEG	BAL@18"	
			6	#5	B			33'-0"				CLS		
2F40	36	29	6	#7	T				14'-1"		#3	4 LEG	4@12" (LE)	
			6	#6	B			35'-0"				CLS	20@18" (RE)	

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SECOND FLOOR LATERAL BEAM SCHEDULE

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BEAM SCHEDULE

MARK	SIZE B (in)	SIZE D (in)	QTY	SIZE	LOC	REINFORCEMENT (LEFT SUPPORT C/L ADJ. SPAN … L/4 … C/L … 3L/4 … RIGHT SUPPORT C/L ADJ. SPAN)	STIRRUPS SIZE	STIRRUPS TYPE	STIRRUPS SPACING	REMARKS
3B84	15	29	4	#6	T		#3	2 LEG	11@12" (LE)	
									6@12" (RE)	
			3	#8	B	34'-0"		CLS	BAL@18"	
3B85	15	29	4	#6	T		#3	2 LEG	12@18" (LE)	
			4	#6	T	11'-3"				
			3	#7	B	25'-7"		CLS	7@12" (RE)	
3B86	21	29					#3	2 LEG	BAL@18"	
			3	#5	B			CLS		
3B87	15	29	3	#5	T	5'-0"	#3	2 LEG	BAL@18"	
			3	#5	T	4'-0"				
			3	#6	B	9'-0"		CLS		
3B88	15	29	3	#5	T		#3	2 LEG	BAL@18"	
			3	#6	B	12'-10"		CLS		
3B89	15	29	3	#5	T	4'-5"	#3	2 LEG	BAL@18"	
			3	#5	T					
			3	#5	B	10'-11"		CLS		
3B90	15	29	4	#5	T		#3	2 LEG	BAL@18"	
			4	#5	T	2'-6"				
			3	#6	B	22'-0" 0'-6"		CLS		
3B91	15	29	4	#6	T	10'-0" 10'-5"	#3	2 LEG	BAL@18"	
			3	#5	B	12'-0"		CLS		
3B92	15	29	4	#5	T	2'-7"	#3	2 LEG	6@12" (LE)	
			3	#7	B	23'-0"		CLS	11@18" (RE)	
3B93	15	29	4	#6	T	14'-1" 11'-5"	#3	2 LEG	4@18" (LE)	
			3	#5	B	0'-6" 16'-7"		CLS	9@12" (RE)	
3B94	15	29	4	#5	T		#3	2 LEG	BAL@18"	
			3	#5	B	21'-4"		CLS		
3B95	15	29	3	#5	T	5'-0"	#3	2 LEG	BAL@18"	
			3	#5	T					
			3	#5	B	13'-11"		CLS		
3B96	30	29	4	#6	T	8'-0"	#4	2 LEG	4@18" TO C/L	
			4	#8	T	9'-0" 6'-0"			6@12" (RE) (CNT)	
			4	#6	B	17'-0"		CLS	8@12" (RE)	
			4	#5	B	6'-0"			1@18" TO C/L	
3B97	15	29	3	#5	T	4'-0"	#3	2 LEG	BAL@18"	
			3	#5	T	4'-11"				
			3	#5	B	8'-11"		CLS		
3B98	15	29	3	#5	T	4'-8"	#3	2 LEG	BAL@18"	
			3	#5	T					
			3	#5	B	13'-1"		CLS		
3B99	20	29	4	#6	T	10'-0" 12'-6"	#3	2 LEG	BAL@12"	
			3	#6	B	22'-0" 0'-6"		CLS		
3B100	20	29					#3	2 LEG	BAL@12"	
			3	#5	B	12'-0"		CLS		
3B101	23	29	5	#8	T	10'-0" 12'-6"	#3	2 LEG	BAL@18"	
			4	#5	B	22'-0" 0'-6"		CLS	9@18" (RE) (CNT)	
			4	#5	B	0'-6" 12'-6"				
3B102	30	29	4	#6	T	11'-0"	#4	2 LEG	BAL@12"	
			5	#7	T	11'-1" 10'-11"				
			4	#7	B	22'-0"		CLS		
3B103	30	29	5	#7	T	11'-2" 10'-10"	#4	2 LEG	BAL@9"	
			4	#8	B	21'-11"		CLS		
3B104	30	29	4	#6	T	11'-3"	#4	2 LEG	BAL@12"	
			4	#8	B	21'-11"		CLS		

BEAM SCHEDULE

MARK	SIZE B (in)	SIZE D (in)	QTY	SIZE	LOC	REINFORCEMENT (LEFT SUPPORT C/L ADJ. SPAN … L/4 … C/L … 3L/4 … RIGHT SUPPORT C/L ADJ. SPAN)	STIRRUPS SIZE	STIRRUPS TYPE	STIRRUPS SPACING	REMARKS
3B105	15	29	4	#6	T	11'-9"	#3	2 LEG	9@12" (LE)	
			4	#6	T				9@12" (RE)	
			4	#8	B	34'-4"		CLS	BAL@18"	
3B106	15	29	4	#6	T	11'-1"	#3	2 LEG	8@12" (LE)	
			4	#6	T				8@12" (RE)	
			4	#8	B	32'-5"		CLS	BAL@18"	
3B107	15	29	3	#5	T	9'-0"	#3	2 LEG	BAL@18"	
			3	#5	B	9'-0"		CLS		
3B108	17	29	3	#5	T	3'-0"	#3	2 LEG	BAL@18"	
			3	#5	T	3'-0"				
			3	#5	B	6'-0"		CLS		
3B109	15	29	3	#5	T	5'-2"	#3	2 LEG	BAL@18"	
			3	#5	T					
			3	#7	B	14'-4"		CLS		
3B110	15	29	3	#5	T	4'-4"	#3	2 LEG	BAL@18"	
			3	#5	T					
			3	#5	B	10'-0"		CLS		
3B111	23	29	3	#6	T	8'-0"	#3	2 LEG	BAL@18"	
			3	#5	B	8'-0"		CLS		
3B112	23	29	3	#6	T	4'-10"	#3	2 LEG	BAL@18"	
			3	#5	B	4'-10"		CLS		
3B113	15	29	3	#5	T	4'-0"	#3	2 LEG	BAL@18"	
			3	#5	T	4'-11"				
			3	#5	B	8'-11"		CLS		

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

REFER TO CIVIL DRAWINGS FOR TRUE NORTH

ISSUED/REVISION SCHEDULE

MARK	DATE	DESCRIPTION
2	01/19/2026	BP3-ADDENDUM 03
1	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

CLAYTON E. SPRINGER
REGISTERED
No. 10302023
STATE OF INDIANA
PROFESSIONAL ENGINEER

THIRD FLOOR GRAVITY BEAM SCHEDULE

DATE — REF: SHEET INDEX
BSA PROJECT NO. 00360481

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BEAM SCHEDULE

MARK	SIZE					REINFORCEMENT						STIRRUPS			REMARKS
	B (in)	D (in)	QTY	SIZE	LOC	LEFT SUPPORT C/L ADJ. SPAN	LEFT SUPPORT L/4	LEFT SUPPORT C/L	RIGHT SUPPORT 3L/4	RIGHT SUPPORT C/L	RIGHT SUPPORT C/L ADJ. SPAN	SIZE	TYPE	SPACING	
5B45	15	29	4	#7	T					14'-0"	14'-0"	#3	2 LEG	5@12" (LE)	
			5	#7	T									12@12" (RE)	
			3	#7	B			32'-0"					CLS	BAL@18"	
5B46	15	29	4	#7	T							#3	2 LEG	12@12" (LE)	
														6@12" (RE)	
			2	#9	B	0'-6"		33'-4"					CLS	BAL@18"	
5B47	15	29	5	#6	T		12'-5"					#3	2 LEG	11@12" (LE)	
			5	#6	T									5@12" (RE)	
			3	#7	B			32'-5"					CLS	BAL@18"	
5B48	15	29	4	#6	T		10'-11"					#3	2 LEG	7@12" (LE)	
			4	#6	T									8@12" (RE)	
			4	#8	B			31'-10"					CLS	BAL@18"	
5B49	15	29	4	#7	T			9'-7"			13'-5"	#3	2 LEG	10@18" (LE)	
			3	#5	B			23'-0"					CLS	8@12" (RE)	
5B50	15	29	4	#6	T							#3	2 LEG	11@12" (LE)	
			3	#7	B			30'-6"					CLS	12@18" (RE)	
5B51	15	29	5	#6	T							#3	2 LEG	6@12" (LE)	
			5	#6	T						17'-3"			12@12" (RE)	
			3	#8	B			33'-6"			0'-3"		CLS	BAL@18"	
5B52	21	29	5	#6	T					15'-9"		#3	2 LEG	7@12" (LE)	
														6@12" (RE)	
			3	#6	B			32'-9"			0'-3"		CLS	BAL@18"	
5B53	15	29	4	#6	T							#3	2 LEG	10@12" (LE)	
														4@12" (RE)	
			3	#7	B			29'-8"					CLS	BAL@18"	
5B54	15	29	5	#6	T		12'-0"					#3	2 LEG	9@12" (LE)	
			5	#6	T									9@12" (RE)	
			4	#8	B			35'-0"					CLS	BAL@18"	
5B55	15	29	4	#6	T							#3	2 LEG	4@12" (LE)	
			5	#6	T					12'-6"	15'-6"			10@12" (RE)	
			3	#7	B			30'-0"					CLS	BAL@18"	
5B56	15	29	5	#6	T					17'-6"		#3	2 LEG	9@12" (LE)	
														10@12" (RE)	
			3	#7	B	0'-6"		32'-6"					CLS	BAL@18"	
5B57	15	29	4	#6	T							#3	2 LEG	13@12" (LE)	
														6@12" (RE)	
			3	#8	B	0'-6"		34'-6"					CLS	BAL@18"	
5B58	15	29	4	#6	T							#3	2 LEG	4@12" (LE)	
			5	#6	T					12'-3"	15'-1"			10@12" (RE)	
			3	#7	B			29'-9"					CLS	BAL@18"	
5B59	15	29	5	#6	T					17'-11"		#3	2 LEG	9@12" (LE)	
														9@12" (RE)	
			3	#7	B			32'-11"					CLS	BAL@18"	
5B60	15	29										#3	2 LEG	13@12" (LE)	
			4	#6	T									6@12" (RE)	
			3	#8	B			34'-11"					CLS	BAL@18"	
5B61	15	29	4	#6	T							#3	2 LEG	6@12" (LE)	
			5	#6	T						17'-0"			13@12" (RE)	
			3	#8	B			35'-0"					CLS	BAL@18"	
5B62	15	29	5	#6	T					16'-0"		#3	2 LEG	9@12" (LE)	
														9@12" (RE)	
			3	#7	B			33'-0"					CLS	BAL@18"	
5B63	15	29	4	#6	T							#3	2 LEG	13@12" (LE)	
														6@12" (RE)	
			3	#8	B			35'-0"					CLS	BAL@18"	
5B64	15	29	4	#6	T							#3	2 LEG	6@12" (LE)	
			5	#6	T						16'-0"			13@12" (RE)	
			3	#8	B			35'-0"					CLS	BAL@18"	
5B65	15	29	5	#6	T					17'-0"		#3	2 LEG	9@12" (LE)	
														9@12" (RE)	
			3	#7	B			33'-0"					CLS	BAL@18"	
5B66	15	29	5	#6	T							#3	2 LEG	13@12" (LE)	
														6@12" (RE)	
			3	#8	B			35'-0"					CLS	BAL@18"	

BEAM SCHEDULE

MARK	SIZE					REINFORCEMENT						STIRRUPS			REMARKS
	B (in)	D (in)	QTY	SIZE	LOC	LEFT SUPPORT C/L ADJ. SPAN	LEFT SUPPORT L/4	LEFT SUPPORT C/L	RIGHT SUPPORT 3L/4	RIGHT SUPPORT C/L	RIGHT SUPPORT C/L ADJ. SPAN	SIZE	TYPE	SPACING	
5B67	15	29	4	#6	T							#3	2 LEG	6@12" (LE)	
			5	#6	T					16'-0"				13@12" (RE)	
			3	#8	B			35'-0"					CLS	BAL@18"	
5B68	15	29										#3	2 LEG	9@12" (LE)	
			5	#6	T					17'-0"				9@12" (RE)	
			3	#7	B			33'-0"					CLS	BAL@18"	
5B69	15	29										#3	2 LEG	13@12" (LE)	
			4	#6	T									6@12" (RE)	
			3	#8	B			35'-0"					CLS	BAL@18"	
5B70	15	29	4	#6	T							#3	2 LEG	6@12" (LE)	
			5	#6	T					17'-0"				13@12" (RE)	
			3	#8	B			35'-0"					CLS	BAL@18"	
5B71	15	29										#3	2 LEG	9@12" (LE)	
			5	#6	T					16'-0"				9@12" (RE)	
			3	#7	B			33'-0"					CLS	BAL@18"	
5B72	15	29										#3	2 LEG	13@12" (LE)	
			4	#6	T									6@12" (RE)	
			3	#8	B			35'-0"					CLS	BAL@18"	
5B73	15	29	4	#6	T							#3	2 LEG	6@12" (LE)	
			5	#7	T					17'-0"				13@12" (RE)	
			3	#8	B			35'-0"					CLS	BAL@18"	
5B74	15	29										#3	2 LEG	9@12" (LE)	
			5	#7	T					16'-0"				9@12" (RE)	
			3	#7	B			33'-0"					CLS	BAL@18"	
5B75	15	29	4	#6	T							#3	2 LEG	13@12" (LE)	
														6@12" (RE)	
			3	#8	B			35'-0"					CLS	BAL@18"	
5B76	15	29	4	#6	T							#3	2 LEG	6@12" (LE)	
			5	#6	T						16'-0"			12@12" (RE)	
			3	#8	B			35'-0"					CLS	BAL@18"	
5B77	15	29										#3	2 LEG	8@12" (LE)	
			5	#6	T					17'-0"				8@12" (RE)	
			3	#6	B			33'-0"					CLS	BAL@18"	
5B78	15	29										#3	2 LEG	12@12" (LE)	
			4	#6	T									6@12" (RE)	
			3	#8	B			35'-0"					CLS	BAL@18"	
5B79	15	29	4	#6	T							#3	2 LEG	9@12" (LE)	
			4	#6	T	12'-0"								9@12" (RE)	
			4	#8	B			35'-0"					CLS	BAL@18"	
5B80	17	29	3	#5	T	2'-0"						#3	2 LEG		
			6	#5	T		2'-10"							BAL@18"	
			4	#8	B						35'-0"		CLS		
5B81	15	29										#3	2 LEG	9@12" (LE)	
			6	#5	T									9@12" (RE)	
													CLS	BAL@18"	
5B82	15	29	5	#6	T	12'-0"						#3	2 LEG	12@12" (LE)	
			5	#6	T									6@12" (RE)	
			3	#8	B			35'-0"					CLS	BAL@18"	
5B83	15	29	4	#6	T	17'-10"						#3	2 LEG	8@12" (LE)	
			3	#5	B			17'-10"					CLS	6@18" (RE)	
NOT USED															
5B85	21	29										#3	2 LEG	BAL@18"	
			3	#5	B						0'-5"		CLS		
5B86	15	29	4	#6	T							#3	2 LEG	8@12" (LE)	
			3	#7	B			25'-6"					CLS	11@18" (RE)	
5B87	15	29	4	#6	T	11'-9"						#3	2 LEG	9@12" (LE)	
			4	#6	T									9@12" (RE)	
			5	#7	B			34'-4"					CLS	BAL@18"	
5B88	15	29	4	#6	T							#3	2 LEG	9@12" (LE)	
			4	#6	T						6'-0"			8@12" (RE)	
			4	#8	B			35'-0"					CLS	BAL@18"	

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

REFER TO CIVIL DRAWINGS FOR TRUE NORTH

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MARK	DATE	DESCRIPTION
2	01/19/2026	BP3-ADDENDUM 03
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CLAYTON E. BEAGLE REGISTERED No. 10302023 STATE OF INDIANA PROFESSIONAL ENGINEER

FIFTH FLOOR GRAVITY BEAM SCHEDULE

DATE
BSA PROJECT NO. 00360481

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BEAM SCHEDULE

MARK	SIZE		REINFORCEMENT										STIRRUPS			REMARKS
			LEFT SUPPORT					RIGHT SUPPORT								
	B (in)	D (in)	QTY	SIZE	LOC	C/L ADJ. SPAN	L/4	C/L	3L/4	C/L ADJ. SPAN	SIZE	TYPE	SPACING	
5B89	17	29	3	#5	B	6'-0"					#3	2 LEG CLS	BAL@18"	
5B90	15	29	4 5 2	#6 #7 #9	T T B	11'-11" 35'-0"		13'-6"			#3	2 LEG CLS	6@12" (LE) 16@12" (RE) BAL@18"	
5B91	15	29	5 5 2	#6 #6 #9	T T B	11'-4" 33'-0"		11'-4"			#3	2 LEG CLS	9@12" (LE) 14@12" (RE) BAL@18"	
5B92	15	29	3 3	#5 #6	T B	13'-0"					#3	2 LEG CLS	BAL@18"	
5B93	15	29	3 3	#6 #6	T B	3'-9" 3'-9"					#3	2 LEG CLS	BAL@18"	
5B94	21	29	3 3 4	#6 #6 #8	T T B	11'-4" 33'-0"					#3	2 LEG CLS	11@9" (LE) 16@18" (RE)	
5B95	15	29	3 3 3	#5 #5 #5	T T B	4'-5" 12'-2"					#3	2 LEG CLS	BAL@18"	
5B96	17.50	29	4 4 3	#6 #6 #7	T T B	11'-4" 33'-0"					#3	2 LEG CLS	BAL@18"	
5B97	15	29	4 5 3	#6 #7 #7	T T B	31'-8"		13'-3"	16'-2"		#3	2 LEG CLS	5@12" (LE) 11@12" (RE) BAL@18"	
5B98	15	29	5 3	#7 #7	T B	32'-10"		16'-10"	13'-3"		#3	2 LEG CLS	9@12" (LE) 10@12" (RE) BAL@18"	
5B99	15	29	4 3	#6 #8	T B	34'-10"					#3	2 LEG CLS	13@12" (LE) 6@12" (RE) BAL@18"	
5B100	21	29	5 5 3	#7 #7 #7	T T B	13'-0" 33'-0"		11'-0"			#3	2 LEG CLS	11@9" (LE) 7@9" (RE) BAL@18"	
5B101	15	29	4 4 3	#6 #6 #7	T T B	11'-4" 33'-0"					#3	2 LEG CLS	15@12" (LE) 11@18" (RE)	
5B102	15	29	3 3 3	#5 #5 #5	T T B			8'-11"			#3	2 LEG CLS	BAL@18"	
5B103	15	29	3	#5	B	8'-10"					#3	2 LEG CLS	BAL@18"	
5B104	23	29	4 4 3	#5 #5 #5	T T B	11'-0" 22'-6"		11'-6"			#3	2 LEG CLS	BAL@12"	
5B105	15	29	3 3	#5 #5	T B	6'-0" 6'-0"					#3	2 LEG CLS	BAL@12"	
5B106	15	29	3 3 3	#5 #5 #5	T T B	4'-8" 13'-1"					#3	2 LEG CLS	BAL@18"	
5B107	15	29	3 3	#5 #5	T B	8'-11" 8'-11"					#3	2 LEG CLS	BAL@18"	
5B108	15	29	4 4 4	#6 #6 #8	T T B	11'-1" 32'-5"					#3	2 LEG CLS	8@12" (LE) 8@12" (RE) BAL@18"	
5B109	15	29	4 4 4	#6 #6 #8	T T B	12'-0" 35'-0"					#3	2 LEG CLS	9@12" (LE) 9@12" (RE) BAL@18"	
5B110	15	29	3 3	#5 #5	T B	10'-9" 10'-9"					#3	2 LEG CLS	BAL@18"	
5B111	15	29	3 3	#5 #5	T B	5'-0" 5'-0"					#3	2 LEG CLS	BAL@18"	
5B112	23	29	3 3	#6 #5	T B	8'-0" 8'-0"					#3	2 LEG CLS	BAL@18"	
5B113	23	29	3 3	#6 #5	T B	4'-10" 4'-10"					#3	2 LEG CLS	BAL@18"	

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CLAYTON E. CLARK REGISTERED No. 10302023 STATE OF INDIANA PROFESSIONAL ENGINEER

FIFTH FLOOR GRAVITY BEAM SCHEDULE

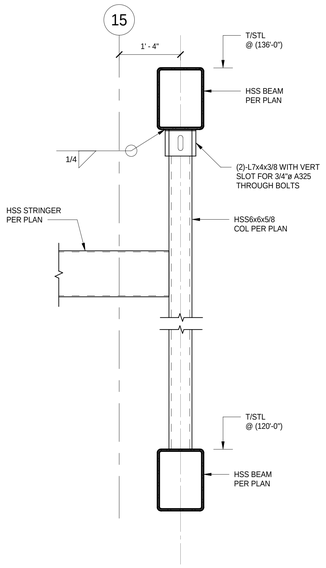
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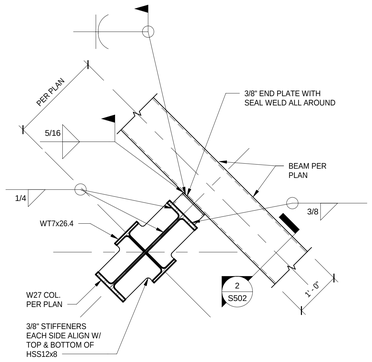
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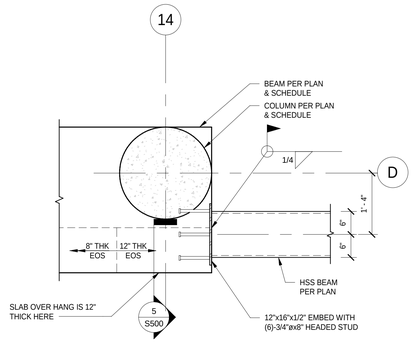
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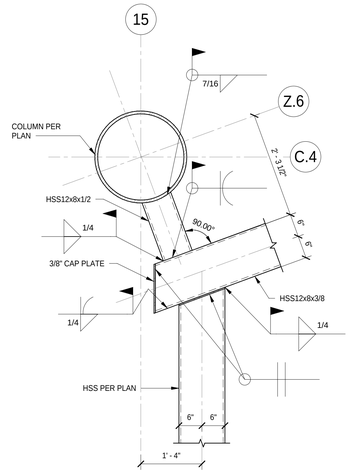
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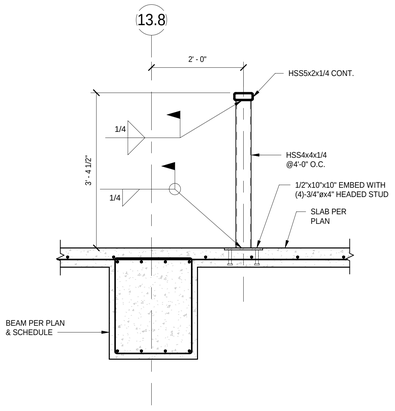
2 S510 DETAIL 3/4" = 1'-0"



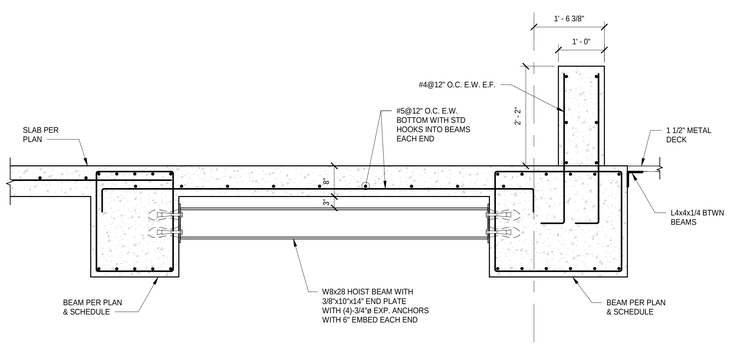
3 S510 DETAIL 3/4" = 1'-0"



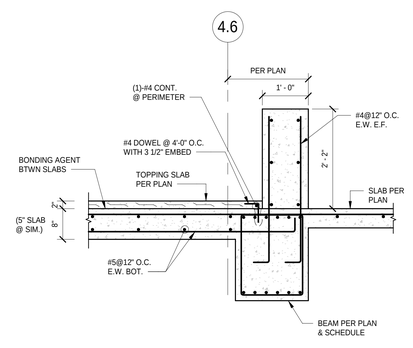
4 S510 DETAIL 3/4" = 1'-0"



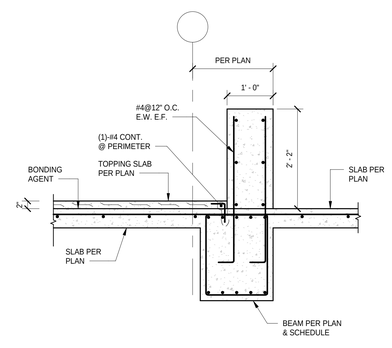
5 S510 SECTION 3/4" = 1'-0"



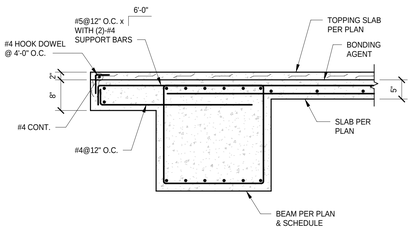
6 S510 SECTION 3/4" = 1'-0"



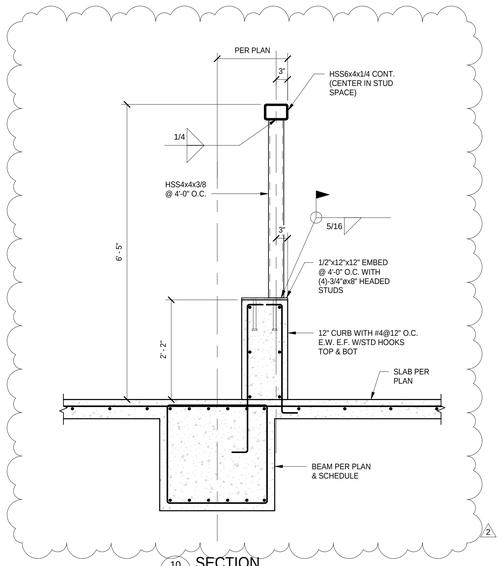
7 S510 SECTION 3/4" = 1'-0"



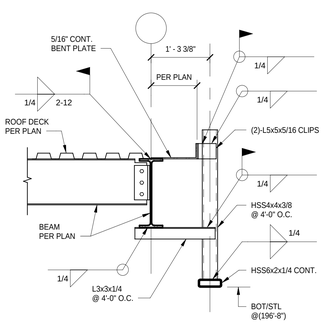
8 S510 SECTION 3/4" = 1'-0"



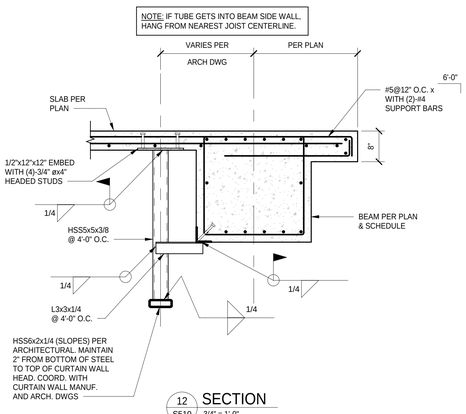
9 S510 SECTION 3/4" = 1'-0"



10 S510 SECTION 3/4" = 1'-0"



11 S510 SECTION 3/4" = 1'-0"



12 S510 SECTION 3/4" = 1'-0"

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

REFER TO CIVIL DRAWINGS FOR TRUE NORTH

ISSUED/REVISION SCHEDULE		
MARK	DATE	DESCRIPTION
2	01/19/2026	BP3-ADDENDUM 03
1	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

CLAYTON E. PEARCE
REGISTERED
No. 10302023
STATE OF INDIANA
PROFESSIONAL ENGINEER

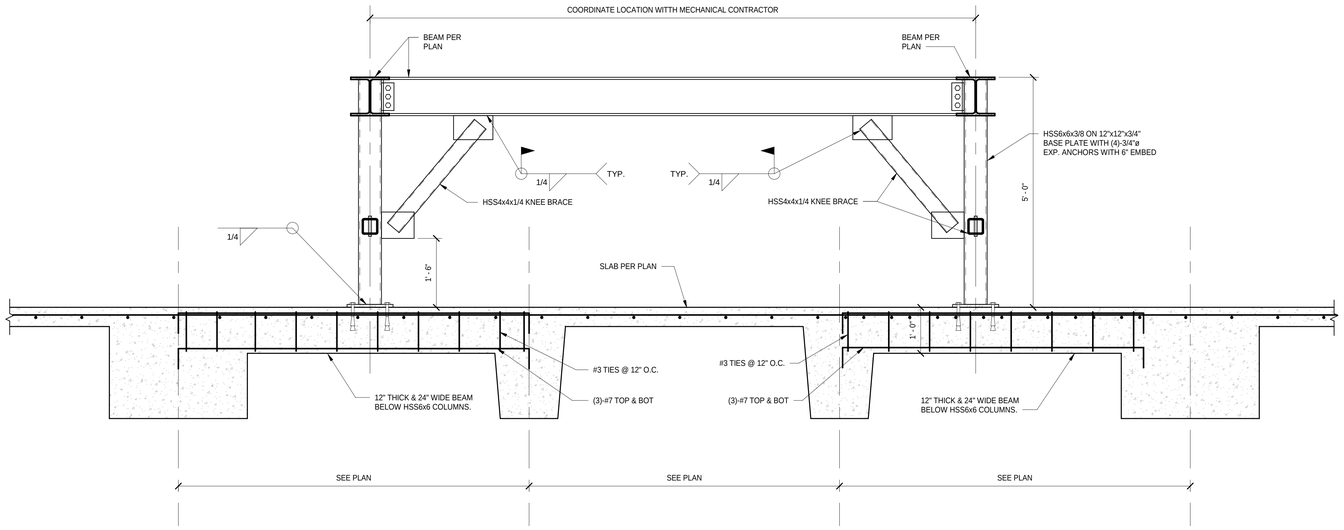
FRAMING DETAILS

DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

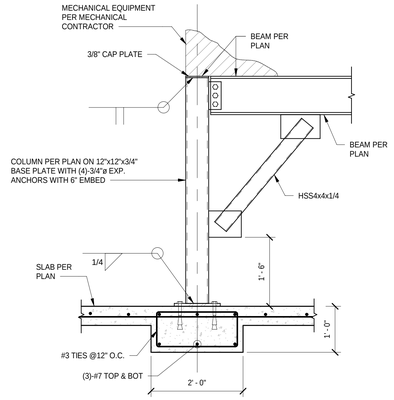
S510

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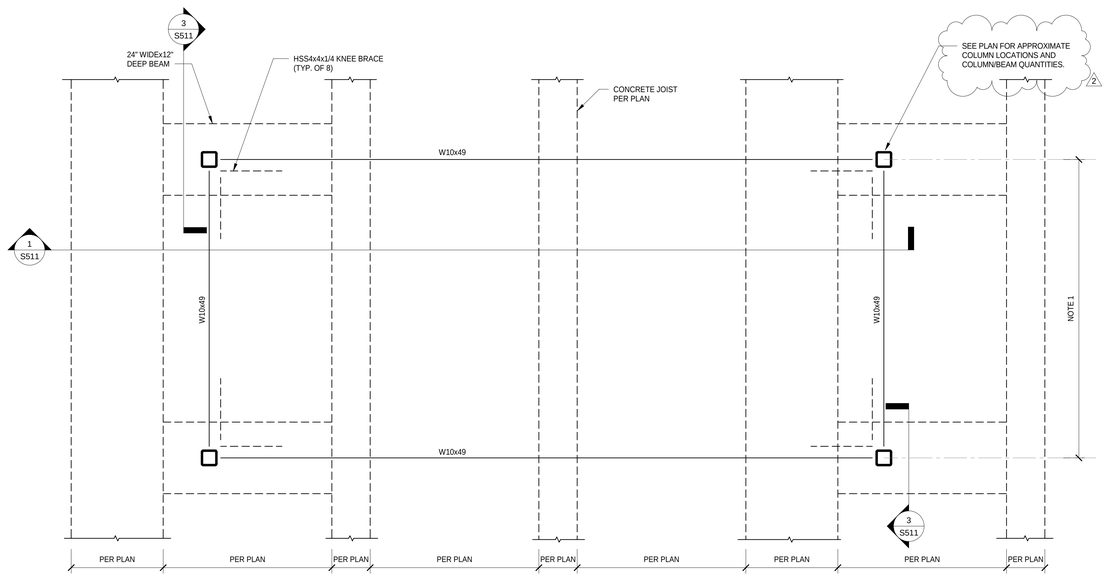
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1 S511 SECTION
3/4" = 1'-0"



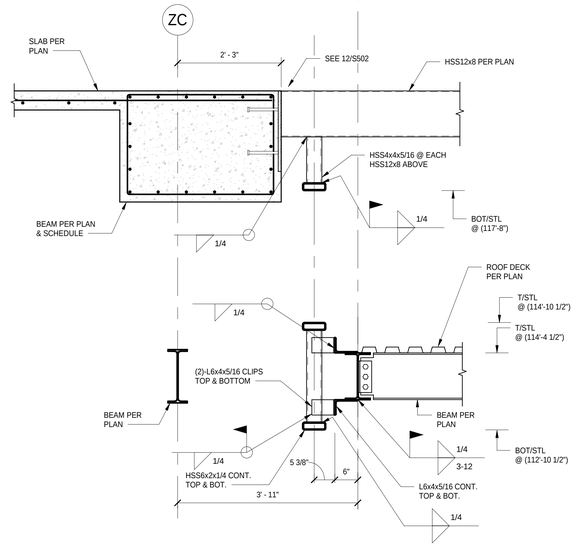
3 S511 SECTION
3/4" = 1'-0"



NOTE:

1. LOCATE STEEL BEAMS & COLUMNS TO BE BELOW SUPPORT POINTS FOR THE MECHANICAL UNIT. G.C. TO COORDINATE THESE DIMENSIONS WITH THE M.C.
2. ALL STEEL SHALL BE HOT DIPPED GALVANIZED. WELDS AND SCRATCHES SHALL BE TOUCHED UP WITH A GALVANIC PAINT.
3. PROVIDE SUPPORTS FOR 3 COOLING TOWERS AND 1 AIR COOLED CONDENSER SEE MEP DRAWINGS FOR LOCATIONS (ON MAIN ROOF).
4. IF HSS6x6 SITS OVER A CONCRETE JOIST OR BEAM, THE 12"x24" BEAM IS NOT REQ'D.
5. IF SHIPPING SPLITS ARE REQUIRED, PROVIDE W8x28. COORD. LOCATION WITH MECHANICAL CONTRACTOR.

2 S511 TYPICAL COOLING TOWER AND ACC EQUIPMENT SUPPORT
1/2" = 1'-0"



4 S511 SECTION
3/4" = 1'-0"

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

REFER TO CIVIL DRAWINGS FOR TRUE NORTH

ISSUED/REVISION SCHEDULE

MARK	DATE	DESCRIPTION
2	01/19/2026	BP3-ADDENDUM 03
1	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

CLAYTON E. STRANGE REGISTERED No. 10302023 STATE OF INDIANA PROFESSIONAL ENGINEER

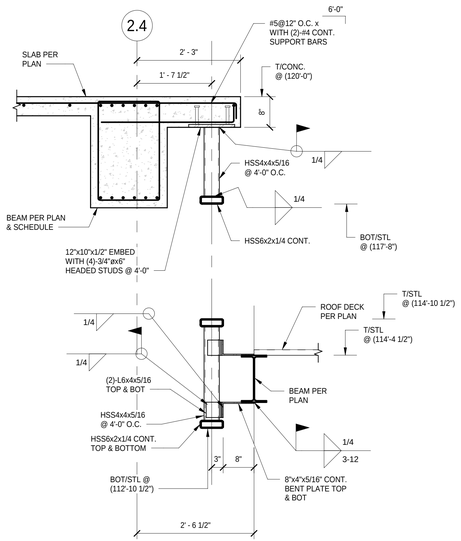
FRAMING DETAILS

DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

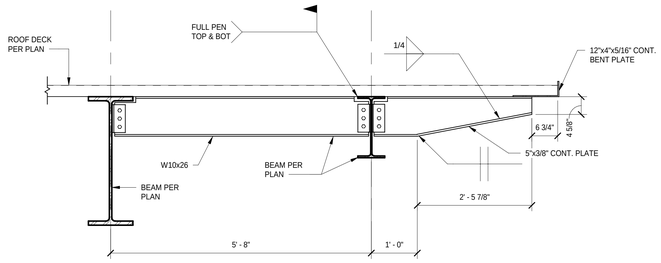
S511

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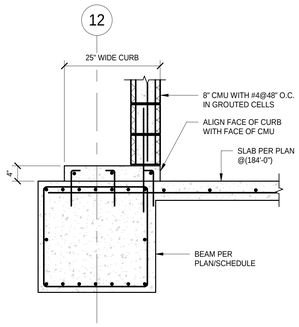
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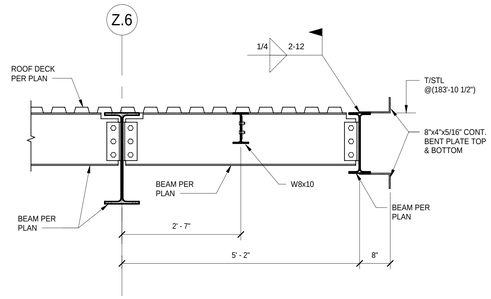
1 SECTION
S512 3/4" = 1'-0"



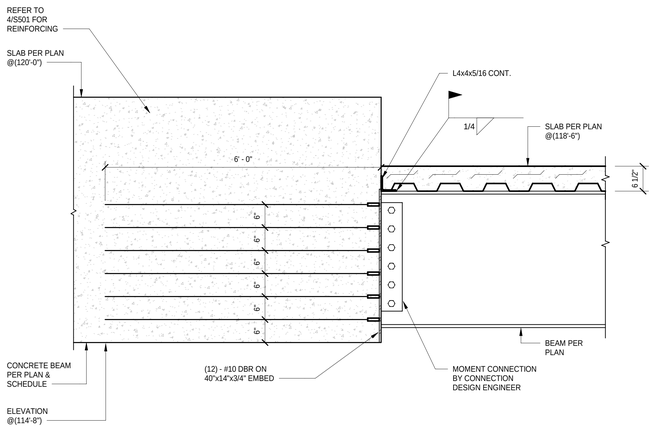
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S512 3/4" = 1'-0"



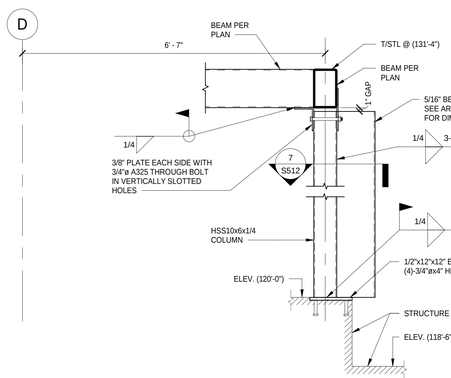
3 SECTION
S512 3/4" = 1'-0"



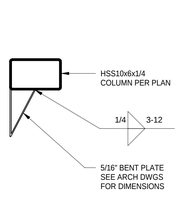
4 SECTION
S512 3/4" = 1'-0"



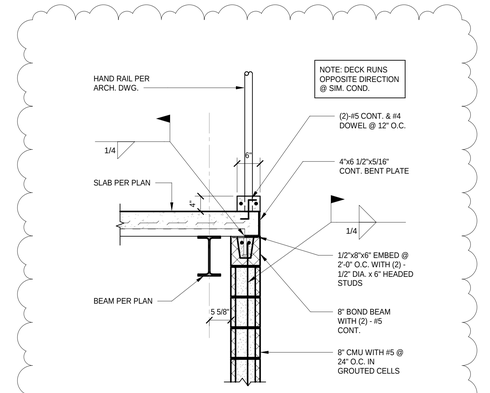
5 SECTION
S512 3/4" = 1'-0"



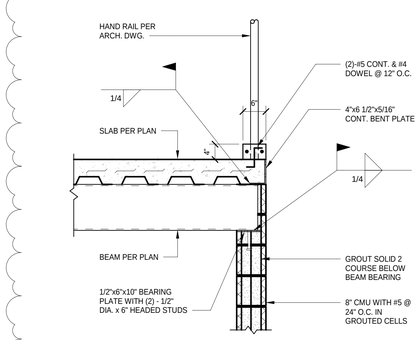
6 SECTION
S512 3/4" = 1'-0"



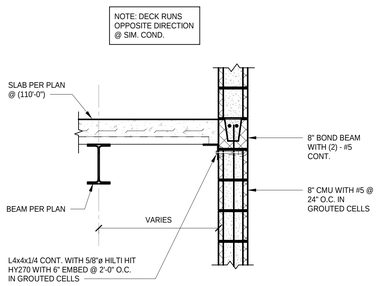
7 SECTION
S512 1" = 1'-0"



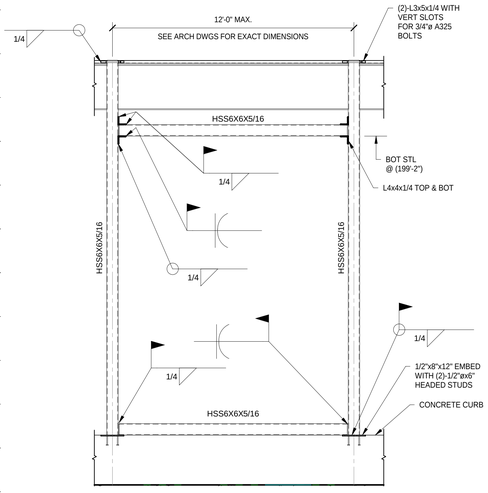
8 SECTION
S512 3/4" = 1'-0"



9 SECTION
S512 3/4" = 1'-0"



10 SECTION
S512 3/4" = 1'-0"



11 SECTION
S512 3/8" = 1'-0"

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

REFER TO CIVIL DRAWINGS FOR TRUE NORTH

ISSUED/REVISION SCHEDULE		
MARK	DATE	DESCRIPTION
4	01/19/2026	BP3-ADDENDUM 03
3	01/07/2026	BP3-ADDENDUM 01
2	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
1	10/15/2025	BP1 Addendum 01

CLAYTON E. SPRINGER REGISTERED No. 10302023 STATE OF INDIANA PROFESSIONAL ENGINEER

FRAMING DETAILS

DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

S512

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SHEET INDEX - ARCHITECTURAL / INTERIOR FINISH

SHEET NUMBER	SHEET NAME	SHEET ISSUE DATE	SHEET ISSUE DESCRIPTION	CURRENT REVISION DATE	CURRENT REVISION
05-ARCHITECTURAL					
A000	SHEET INDEX	09/29/2025	BP3-CD: ADDENDUM 03	01/19/2025	3
A001	GENERAL NOTES AND SYMBOLS	09/29/2025	BP1-CD: SITE AND FOUNDATION PACKAGE	09/29/2025	1
A002	INTERIOR PARTITION SCHEDULE - CORE	09/29/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A003	INTERIOR PARTITION SCHEDULE - INTERIOR	09/29/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A004	INTERIOR PARTITION DETAILS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	1
A100	COMPOSITE PLAN - SUB-GRADE	09/29/2025	BP1-CD: SITE AND FOUNDATION PACKAGE	09/29/2025	2
A101	COMPOSITE PLAN - LEVEL 1	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A101.5	COMPOSITE PLAN - LEVEL 1 AT CLERESTORY	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A102	COMPOSITE PLAN - LEVEL 2	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A103	COMPOSITE PLAN - LEVEL 3	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A104	COMPOSITE PLAN - LEVEL 4	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A105	COMPOSITE PLAN - LEVEL 5	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A106	COMPOSITE PLAN - PENTHOUSE	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A107	COMPOSITE ROOF PLAN	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A107.5	PLAZA LEVEL ROOF PLANS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A111A	DIMENSION PLAN - LEVEL 1 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A111B	DIMENSION PLAN - LEVEL 1 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A112A	DIMENSION PLAN - LEVEL 2 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A112B	DIMENSION PLAN - LEVEL 2 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A113A	DIMENSION PLAN - LEVEL 3 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A113B	DIMENSION PLAN - LEVEL 3 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A114A	DIMENSION PLAN - LEVEL 4 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A114B	DIMENSION PLAN - LEVEL 4 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A115A	DIMENSION PLAN - LEVEL 5 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A115B	DIMENSION PLAN - LEVEL 5 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A116A	DIMENSION PLAN - PENTHOUSE - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A116B	DIMENSION PLAN - PENTHOUSE - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A121A	ARCHITECTURAL PLAN - LEVEL 1 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A121B	ARCHITECTURAL PLAN - LEVEL 1 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A122A	ARCHITECTURAL PLAN - LEVEL 2 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A122B	ARCHITECTURAL PLAN - LEVEL 2 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A123A	ARCHITECTURAL PLAN - LEVEL 3 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A123B	ARCHITECTURAL PLAN - LEVEL 3 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A124A	ARCHITECTURAL PLAN - LEVEL 4 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A124B	ARCHITECTURAL PLAN - LEVEL 4 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A125A	ARCHITECTURAL PLAN - LEVEL 5 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A125B	ARCHITECTURAL PLAN - LEVEL 5 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A126A	ARCHITECTURAL PLAN - PENTHOUSE - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A126B	ARCHITECTURAL PLAN - PENTHOUSE - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A130	REFLECTED CEILING PLAN - EXTERIOR SOFFITS	12/15/2025	BP3-CD: ADDENDUM 01	01/07/2025	10
A131	REFLECTED CEILING PLAN - LEVEL 1 - COMPOSITE	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A131A	REFLECTED CEILING PLAN - LEVEL 1 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A131B	REFLECTED CEILING PLAN - LEVEL 1 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A132	REFLECTED CEILING PLAN - LEVEL 2 - COMPOSITE	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A132A	REFLECTED CEILING PLAN - LEVEL 2 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A132B	REFLECTED CEILING PLAN - LEVEL 2 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A133	REFLECTED CEILING PLAN - LEVEL 3 - COMPOSITE	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A133A	REFLECTED CEILING PLAN - LEVEL 3 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A133B	REFLECTED CEILING PLAN - LEVEL 3 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A134	REFLECTED CEILING PLAN - LEVEL 4 - COMPOSITE	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A134A	REFLECTED CEILING PLAN - LEVEL 4 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A134B	REFLECTED CEILING PLAN - LEVEL 4 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A135	REFLECTED CEILING PLAN - LEVEL 5 - COMPOSITE	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A135A	REFLECTED CEILING PLAN - LEVEL 5 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A135B	REFLECTED CEILING PLAN - LEVEL 5 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A151	GEOMETRY PLAN - LEVEL 1	10/31/2025	ASI 003	11/26/2025	7
A152	GEOMETRY PLAN - LEVEL 2	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A153	GEOMETRY PLAN - LEVEL 3 - 5	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A156	GEOMETRY PLAN - LEVEL PENTHOUSE	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A200	EXTERIOR ELEVATIONS - NORTH AND EAST COMPOSITE ELEVATIONS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A201	EXTERIOR ELEVATIONS - SOUTH AND WEST COMPOSITE ELEVATIONS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A202	EXTERIOR ELEVATIONS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A203	EXTERIOR ELEVATIONS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A204	EXTERIOR ELEVATIONS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A210	ENLARGED TYP. EXT. ELEVATIONS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A220	EXTERIOR CURTAINWALL ELEVATIONS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A221	EXTERIOR CURTAINWALL ELEVATIONS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A222	EXTERIOR CURTAINWALL ELEVATIONS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A223	EXTERIOR CURTAINWALL ELEVATIONS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A224	EXTERIOR CURTAINWALL ELEVATIONS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A230	BUILDING SECTIONS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A231	BUILDING SECTIONS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A232	BUILDING SECTIONS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A233	BUILDING SECTIONS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A300	BUILDING ASSEMBLY TYPES - VERTICAL	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A301	BUILDING ASSEMBLY TYPES - VERTICAL	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A302	BUILDING ASSEMBLY TYPES - HORIZONTAL	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A303	BUILDING ASSEMBLY - ENLARGED TYPICAL DETAILS	12/15/2025	BP3-CD: ADDENDUM 01	01/07/2025	10
A305	SUB-GRADE DETAILS	09/29/2025	BP1-CD: SITE AND FOUNDATION PACKAGE	09/29/2025	2
A310	EXTERIOR WALL SECTIONS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A311	EXTERIOR WALL SECTIONS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A312	EXTERIOR WALL SECTIONS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A313	EXTERIOR WALL SECTIONS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A314	EXTERIOR WALL SECTIONS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A330	EXTERIOR SECTION DETAILS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A331	EXTERIOR SECTION DETAILS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A332	EXTERIOR SECTION DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A333	EXTERIOR SECTION DETAILS	12/15/2025	BP3-CD: ADDENDUM 01	01/07/2025	10
A334	EXTERIOR SECTION DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A335	EXTERIOR SECTION DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A336	EXTERIOR SECTION DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A350	EXTERIOR PLAN DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A351	EXTERIOR PLAN DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A352	EXTERIOR PLAN DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A353	EXTERIOR PLAN DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A354	EXTERIOR PLAN DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A355	EXTERIOR PLAN DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A356	EXTERIOR PLAN DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A357	EXTERIOR PLAN DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A358	EXTERIOR PLAN DETAILS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A359	EXTERIOR PLAN DETAILS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	8
A360	EXTERIOR PLAN DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A370	ROOF DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A390	INTEGRATED EXTERIOR MOCKUP	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A400	WEST VERTICAL CIRCULATION - ENLARGED PLANS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A401	WEST VERTICAL CIRCULATION - SECTIONS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A402	EAST VERTICAL CIRCULATION - ENLARGED PLANS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A403	EAST VERTICAL CIRCULATION - SECTIONS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A404	VERTICAL CIRCULATION - ENLARGED PLANS AND SECTIONS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A405	EGRESS STAIR DETAILS	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A408	COMMUNICATING STAIR PLANS & SECTIONS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A409	COMMUNICATING STAIR ELEVATIONS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A410	COMMUNICATING STAIR DETAILS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A411	BACK OF HOUSE STAIRS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A420	ENLARGED FLOOR PLANS AND ELEVATIONS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A421	ENLARGED FLOOR PLANS AND ELEVATIONS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A422	ENLARGED FLOOR PLANS AND ELEVATIONS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A430	ENLARGED CEILING PLANS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A431	ENLARGED CEILING PLANS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A440	INTERIOR PLAN DETAILS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A441	INTERIOR PLAN DETAILS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A450	INTERIOR SECTION DETAILS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A451	INTERIOR SECTION DETAILS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A460	INTERIOR CEILING DETAILS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A461	INTERIOR CEILING DETAILS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A500	EXTERIOR OPENING SCHEDULE	12/15/2025	BP3-CD: ADDENDUM 03	01/19/2025	12
A501	INTERIOR OPENING SCHEDULE	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A502	INTERIOR OPENING SCHEDULE	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A505	OPENING ELEVATIONS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	1
A510	OPENING DETAILS	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE	12/15/2025	1
A521	INTERIOR STOREFRONT SYSTEM DETAILS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A522	INTERIOR STOREFRONT SYSTEM DETAILS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A602	INTERIOR ELEVATIONS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A603	INTERIOR ELEVATIONS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A604	INTERIOR ELEVATIONS	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A720	MILLWORK	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A721	MILLWORK	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A722	MILLWORK	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
A723	MILLWORK	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
139					

SHEET INDEX - ARCHITECTURAL / INTERIOR FINISH

SHEET NUMBER	SHEET NAME	SHEET ISSUE DATE	SHEET ISSUE DESCRIPTION	CURRENT REVISION DATE	CURRENT REVISION
06-INTERIORS					
IF000	INTERIOR FINISH SCHEDULE	09/29/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF001	INTERIOR FINISH DETAILS	09/29/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF111A	INTERIOR FINISH PLAN - LEVEL 1 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF111B	INTERIOR FINISH PLAN - LEVEL 1 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF112A	INTERIOR FINISH PLAN - LEVEL 2 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF112B	INTERIOR FINISH PLAN - LEVEL 2 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF113A	INTERIOR FINISH PLAN - LEVEL 3 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF113B	INTERIOR FINISH PLAN - LEVEL 3 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF114A	INTERIOR FINISH PLAN - LEVEL 4 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF114B	INTERIOR FINISH PLAN - LEVEL 4 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF115A	INTERIOR FINISH PLAN - LEVEL 5 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF115B	INTERIOR FINISH PLAN - LEVEL 5 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF116A	INTERIOR FINISH PLAN - LEVEL 6 - AREA A	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF116B	INTERIOR FINISH PLAN - LEVEL 6 - AREA B	12/15/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF911	INTERIOR SIGNAGE PLAN - LEVEL 1	09/29/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF912	INTERIOR SIGNAGE PLAN - LEVEL 2	09/29/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF913	INTERIOR SIGNAGE PLAN - LEVEL 3	09/29/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF914	INTERIOR SIGNAGE PLAN - LEVEL 4	09/29/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF915	INTERIOR SIGNAGE PLAN - LEVEL 5	09/29/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
19					
07-FURNISHINGS					
IF201	FURNITURE PLAN - LEVEL 1 - COMPOSITE	09/29/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF202	FURNITURE PLAN - LEVEL 2 - COMPOSITE	09/29/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF203	FURNITURE PLAN - LEVEL 3 - COMPOSITE	09/29/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF204	FURNITURE PLAN - LEVEL 4 - COMPOSITE	09/29/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
IF205	FURNITURE PLAN - LEVEL 5 - COMPOSITE	09/29/2025	BP4-100% DD: BUILD-OUT PACKAGE	12/15/2025	1
5					

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP4-100% DD: BUILD-OUT PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
3	01/19/2025	BP3-CD: ADDENDUM 03
2	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
1	09/29/2025	BP1-CD: SITE AND FOUNDATION PACKAGE

ANDREW JOHN HUNT
REGISTERED
No. AR10400213
STATE OF INDIANA
ARCHITECT

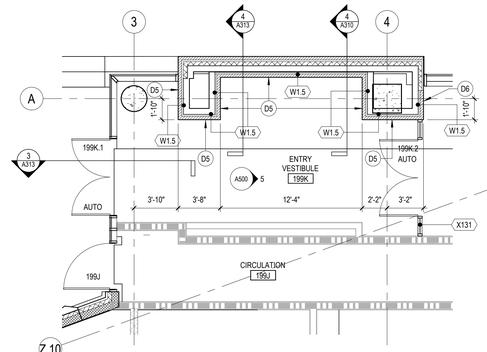
SHEET INDEX

DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

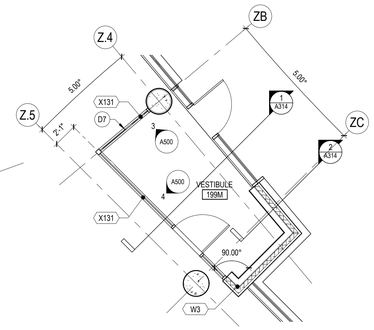
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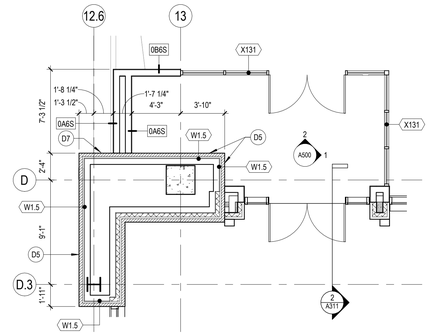
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4 A101 ENLARGED FLOOR PLAN - LEVEL 1 - PLAN NORTHWEST VESTIBULE
3/16" = 1'-0"



3 A101 ENLARGED FLOOR PLAN - LEVEL 1 - NORTHEAST VESTIBULE
3/16" = 1'-0"



2 A101 ENLARGED FLOOR PLAN - LEVEL 1 - SOUTHEAST VESTIBULE
3/16" = 1'-0"

_KEYNOTE SCHEDULE

NUMBER	TEXT
32 3113.A01	CHAIN LINK FENCE
32 3219.A01	DECORATIVE METAL FENCES

SHEET NOTE SCHEDULE

NUMBER	TEXT
D5	INTERIOR BRICK UP TO GYPSUM BOARD CEILING.
D6	INTERIOR BRICK UP TO STRUCTURE ABOVE.
D7	ALIGN WALL WITH COLUMN LINE AND PREPENDICULAR TO COLUMN.
D7	INTERIOR BRICK UP TO 6" ABOVE CEILING, MIN.

ARCHITECTURAL GRAPHIC LEGEND

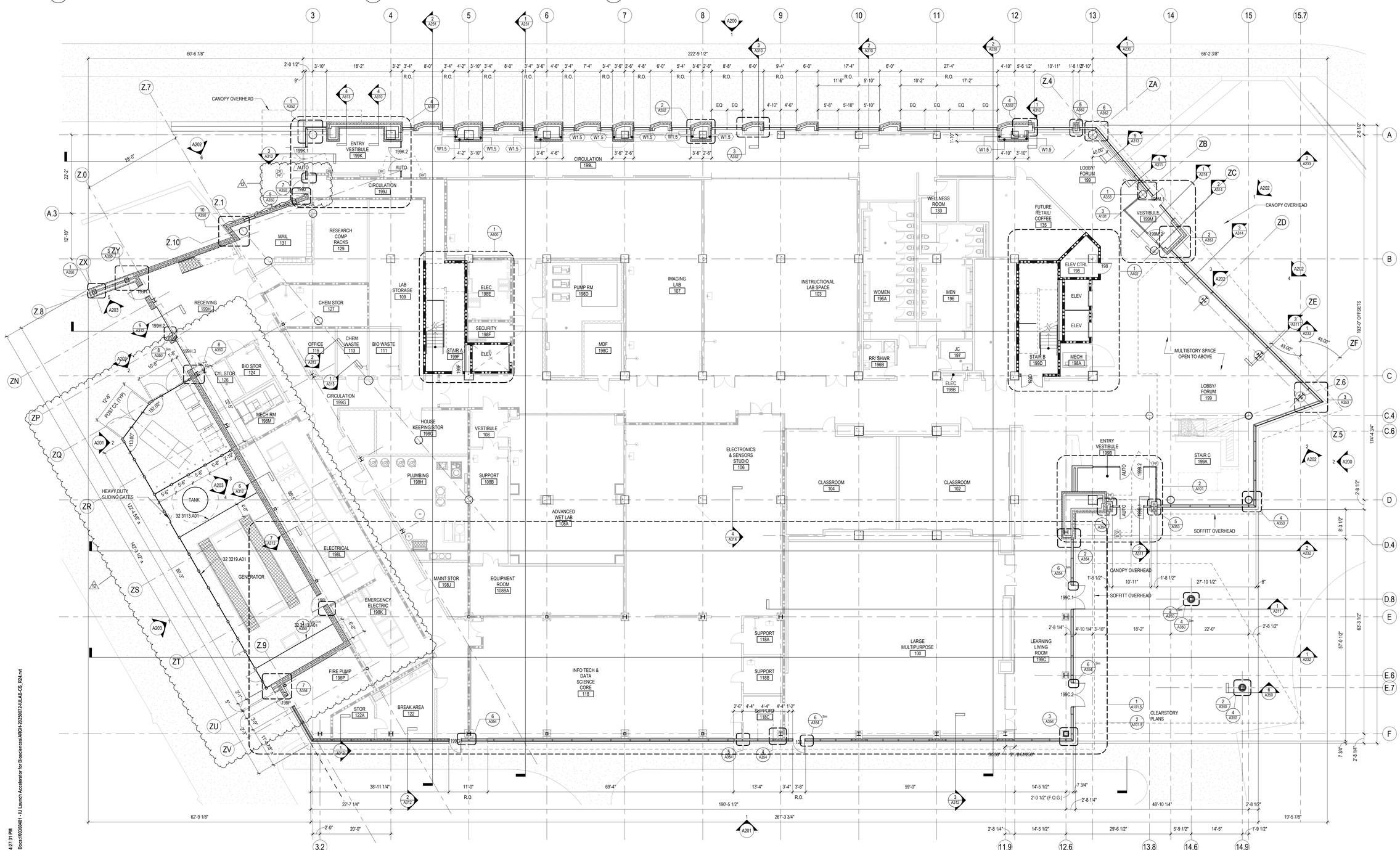
WALL RATING LEGEND

- 0B3S — INTERIOR PARTITION TAG - REFER TO PARTITION SCHEDULE
- UNRATED PARTITION
- SMOKE PARTITION
- SMOKE BARRIER
- 1-HOUR FIRE BARRIER
- 1-HOUR FIRE/SMOKE BARRIER
- 2-HOUR FIRE BARRIER
- 2-HOUR FIRE/SMOKE BARRIER
- 3-HOUR FIRE BARRIER

ARCHITECTURAL PLAN LEGEND

ARCHITECTURAL PLAN NOTES

1. DIMENSIONS ARE TO FACE OF PARTITION, UNLESS NOTED OTHERWISE.
2. FOR ASYMETRICAL PARTITIONS, INSTALL HIGHER NUMBER OF GYPSUM WALLBOARD LAYERS ON FACE WHERE PARTITION TAG IS LOCATED.
3. STANDARD WALL FURRING AT STAIRWAYS AND ELEVATORS TO BE PARTITION TYPE (_____), UNLESS NOTED OTHERWISE.
4. LOCATE DOOR FRAMES 4" FROM ADJACENT PARTITION, UNLESS DIMENSIONED OTHERWISE.
5. INSTALL TWO 33 MIL STUDS TO STRUCTURE ABOVE AT DOOR, BORROWED LITE JAMBS, AND PARTITION CORNER LOCATIONS.
6. SMOKE RESISTANT AND FIRE RESISTANCE RATED ASSEMBLIES TO BE CONTINUOUS ABOVE DOOR AND WINDOW OPENINGS. PROVIDE JOINT FIRESTOPPING WHERE GYPSUM WALLBOARD MEETS APPLIED FIRE PROTECTION ON COLUMNS, BEAMS, AND METAL DECK FOR FIRE RESISTANCE RATED PARTITIONS.
7. REFER TO AREA PLANS FOR INTERIOR PARTITION TAGS AND INTERIOR DOOR TAGS FOR ALL INTERIOR WALLS AND DOORS EXCEPT FOR EGRESS STAIRS AND ELEVATOR CONTROL ROOMS.
8. REFER TO AREA PLANS FOR INTERIOR PARTITION TAGS AND INTERIOR DOOR TAGS FOR ALL INTERIOR WALLS AND DOORS EXCEPT FOR EGRESS STAIRS AND ELEVATOR CONTROL ROOMS.



1 A101 COMPOSITE FLOOR PLAN - LEVEL 1
3/32" = 1'-0"

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH
TRUE NORTH

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
1	08/15/2025	CITY SUBMITTAL

ANDREW JOHN HAMILTON REGISTERED ARCHITECT No. AR10400213 STATE OF INDIANA

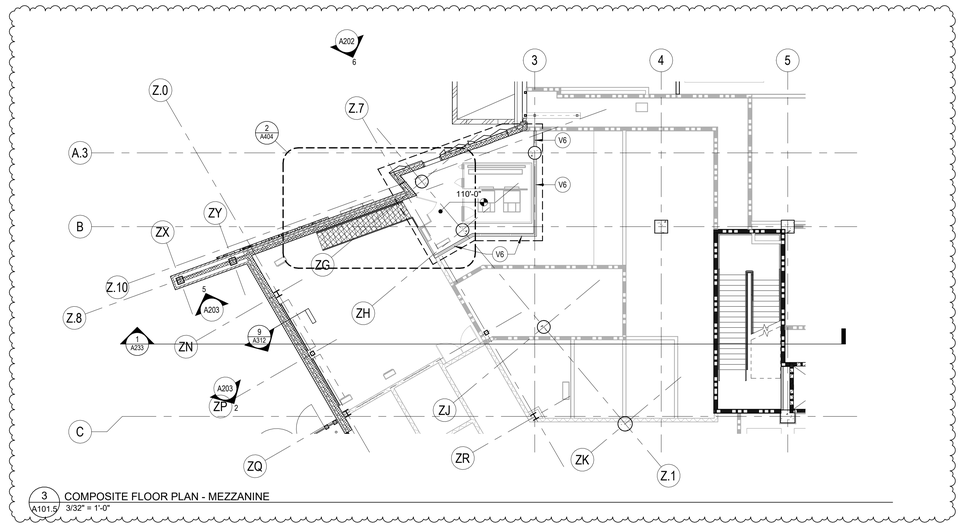
COMPOSITE PLAN - LEVEL 1

DATE — REF: SHEET INDEX
BSA PROJECT NO. — 00360481

A101

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3 A101.5 COMPOSITE FLOOR PLAN - MEZZANINE 3/32" = 1'-0"

_KEYNOTE SCHEDULE	
NUMBER	TEXT

SHEET NOTE SCHEDULE	
NUMBER	TEXT
V6	STEEL GUARDRAIL

ARCHITECTURAL GRAPHIC LEGEND

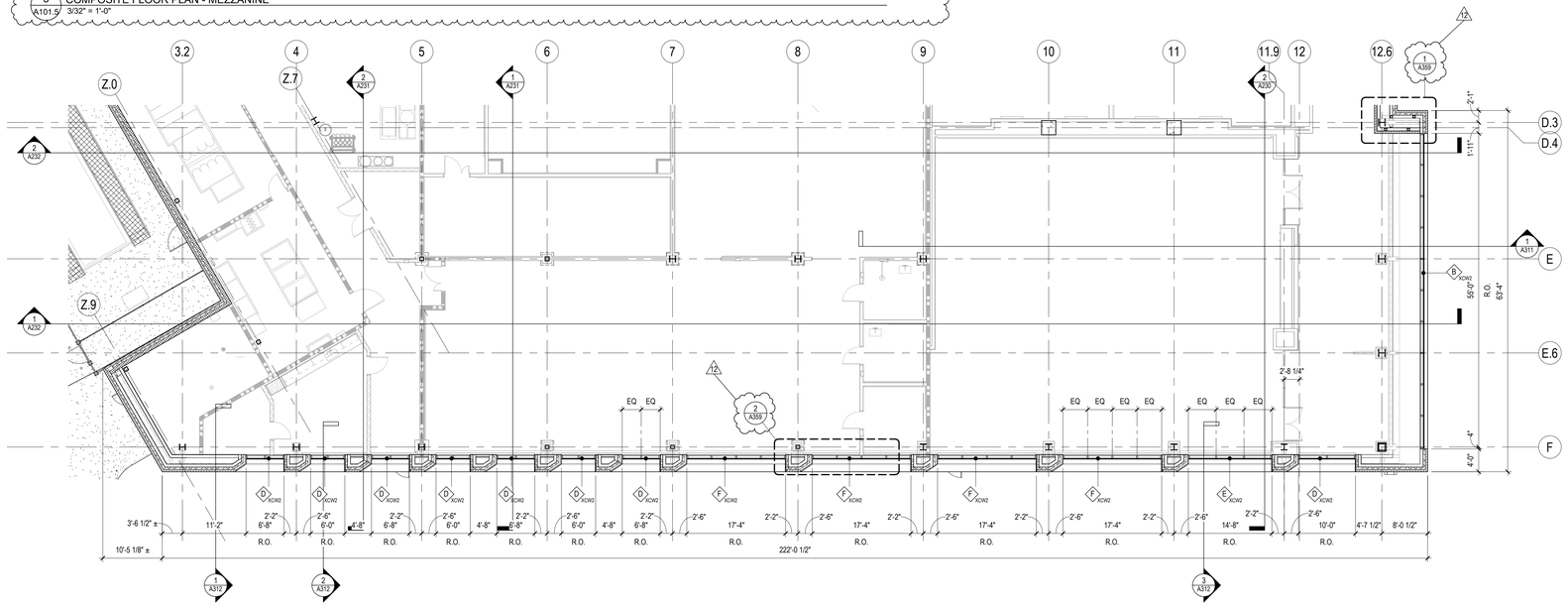
WALL RATING LEGEND

- OB3S — INTERIOR PARTITION TAG - REFER TO PARTITION SCHEDULE
- UNRATED PARTITION
- SMOKE PARTITION
- SMOKE BARRIER
- 1-HOUR FIRE BARRIER
- 1-HOUR FIRE/SMOKE BARRIER
- 2-HOUR FIRE BARRIER
- 2-HOUR FIRE/SMOKE BARRIER
- 3-HOUR FIRE BARRIER

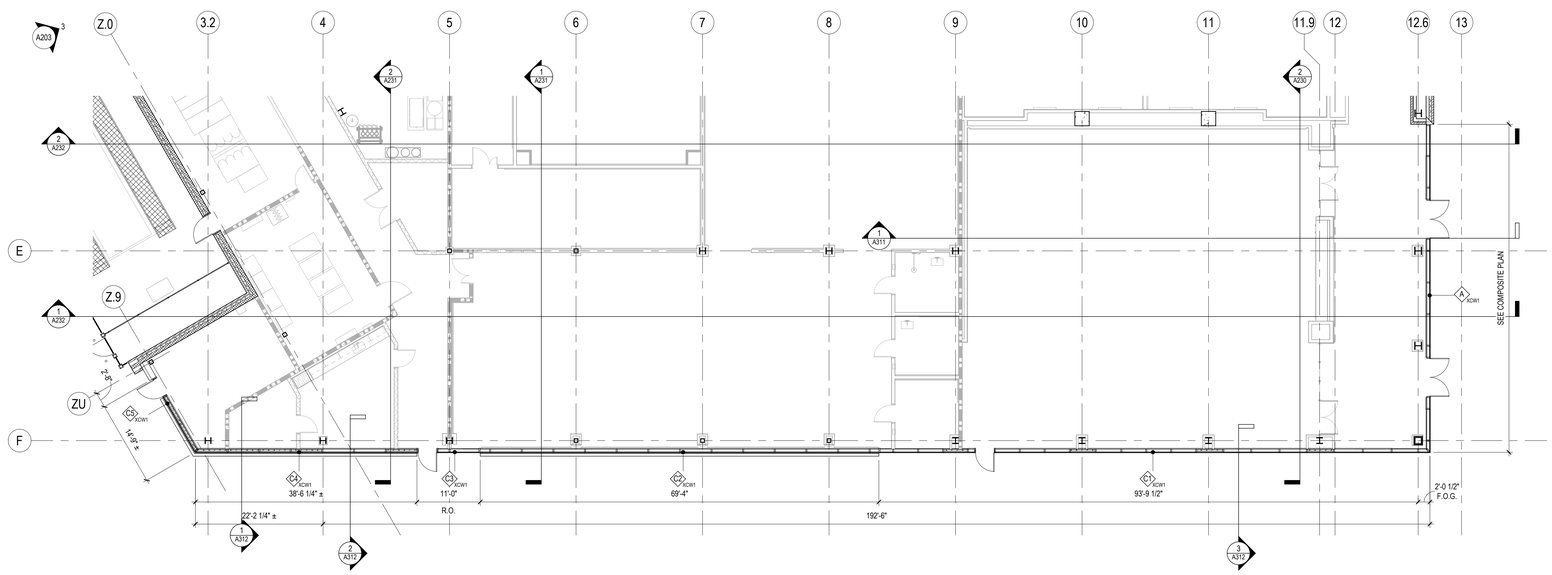
ARCHITECTURAL PLAN LEGEND

ARCHITECTURAL PLAN NOTES

1. DIMENSIONS ARE TO FACE OF PARTITION, UNLESS NOTED OTHERWISE.
2. FOR ASYMETRICAL PARTITIONS, INSTALL HIGHER NUMBER OF GYPSUM WALLBOARD LAYERS ON FACE WHERE PARTITION TAG IS LOCATED.
3. STANDARD WALL FURRING AT STAIRWAYS AND ELEVATORS TO BE PARTITION TYPE (_____), UNLESS NOTED OTHERWISE.
4. LOCATE DOOR FRAMES 4" FROM ADJACENT PARTITION, UNLESS DIMENSIONED OTHERWISE.
5. INSTALL TWO 33 MIL STUDS TO STRUCTURE ABOVE AT DOOR, BORROWED LITE JAMBS, AND PARTITION CORNER LOCATIONS.
6. SMOKE RESISTANT AND FIRE RESISTANCE RATED ASSEMBLIES TO BE CONTINUOUS ABOVE DOOR AND WINDOW OPENINGS.
7. PROVIDE JOINT FIRESTOPPING WHERE GYPSUM WALLBOARD MEETS APPLIED FIRE PROTECTION ON COLUMNS, BEAMS, AND METAL DECK FOR FIRE RESISTANCE RATED PARTITIONS.
8. REFER TO AREA PLANS FOR INTERIOR PARTITION TAGS AND INTERIOR DOOR TAGS FOR ALL INTERIOR WALLS AND DOORS EXCEPT FOR EGRESS STAIRS AND ELEVATOR CONTROL ROOMS.



2 A101.5 HIGH CLEARSTORY FLOOR PLAN - LEVEL 1 - PLAN CUT AT 13'-0" A.F.F. 3/32" = 1'-0"



1 A101.5 LOW CLEARSTORY FLOOR PLAN - LEVEL 1 - PLAN CUT AT 6'-0" A.F.F. 3/32" = 1'-0"

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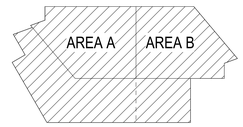
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH
TRUE NORTH

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
1	08/15/2025	CITY SUBMITTAL

ANDREW JOHN JOHNS REGISTERED No. AR10400213 STATE OF INDIANA ARCHITECT

COMPOSITE PLAN - LEVEL 1 AT CLERESTORY

DATE — REF: SHEET INDEX
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_KEYNOTE SCHEDULE	
NUMBER	TEXT
07 6200.B11	DOWNSPOUT

SHEET NOTE SCHEDULE	
NUMBER	TEXT

ARCHITECTURAL GRAPHIC LEGEND

WALL RATING LEGEND

- INTERIOR PARTITION TAG - REFER TO PARTITION SCHEDULE (e.g. 0B3S)
- UNRATED PARTITION
- SMOKE PARTITION
- SMOKE BARRIER
- 1-HOUR FIRE BARRIER
- 1-HOUR FIRE/SMOKE BARRIER
- 2-HOUR FIRE BARRIER
- 2-HOUR FIRE/SMOKE BARRIER
- 3-HOUR FIRE BARRIER

ARCHITECTURAL PLAN LEGEND

ARCHITECTURAL PLAN NOTES

1. DIMENSIONS ARE TO FACE OF PARTITION, UNLESS NOTED OTHERWISE.
2. FOR ASYMETRICAL PARTITIONS, INSTALL HIGHER NUMBER OF GYPSUM WALLBOARD LAYERS ON FACE WHERE PARTITION TAG IS LOCATED.
3. STANDARD WALL FURRING AT STAIRWAYS AND ELEVATORS TO BE PARTITION TYPE (_____), UNLESS NOTED OTHERWISE.
4. LOCATE DOOR FRAMES 4" FROM ADJACENT PARTITION, UNLESS DIMENSIONED OTHERWISE.
5. INSTALL TWO 33 MIL STUDS TO STRUCTURE ABOVE AT DOOR, BORROWED LITE JAMBS, AND PARTITION CORNER LOCATIONS.
6. SMOKE RESISTANT AND FIRE RESISTANCE RATED ASSEMBLIES TO BE CONTINUOUS ABOVE DOOR AND WINDOW OPENINGS.
7. PROVIDE JOINT FIRESTOPPING WHERE GYPSUM WALLBOARD MEETS APPLIED FIRE PROTECTION ON COLUMNS, BEAMS, AND METAL DECK FOR FIRE RESISTANCE RATED PARTITIONS.
8. REFER TO AREA PLANS FOR INTERIOR PARTITION TAGS AND INTERIOR DOOR TAGS FOR ALL INTERIOR WALLS AND DOORS EXCEPT FOR EGRESS STAIRS AND ELEVATOR CONTROL ROOMS.

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

AREA A | AREA B

KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH

ISSUED / REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
1	08/15/2025	CITY SUBMITTAL

ANDREW JOHN HUCKLEBERRY REGISTERED No. AR10400213 STATE OF INDIANA ARCHITECT

COMPOSITE PLAN - LEVEL 2

DATE	REF: SHEET INDEX
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A102

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1 A102 COMPOSITE FLOOR PLAN - LEVEL 2
3/32" = 1'-0"

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_KEYNOTE SCHEDULE	
NUMBER	TEXT
07 4113.A02	DOUBLE LOCK STANDING SEAM METAL ROOFING

SHEET NOTE SCHEDULE	
NUMBER	TEXT
E18	CANOPY ROOF BELOW.

ARCHITECTURAL GRAPHIC LEGEND

WALL RATING LEGEND

- INTERIOR PARTITION TAG - REFER TO PARTITION SCHEDULE (e.g. OB3S)
- UNRATED PARTITION
- SMOKE PARTITION
- SMOKE BARRIER
- 1-HOUR FIRE BARRIER
- 1-HOUR FIRE/SMOKE BARRIER
- 2-HOUR FIRE BARRIER
- 2-HOUR FIRE/SMOKE BARRIER
- 3-HOUR FIRE BARRIER

ARCHITECTURAL PLAN LEGEND

ARCHITECTURAL PLAN NOTES

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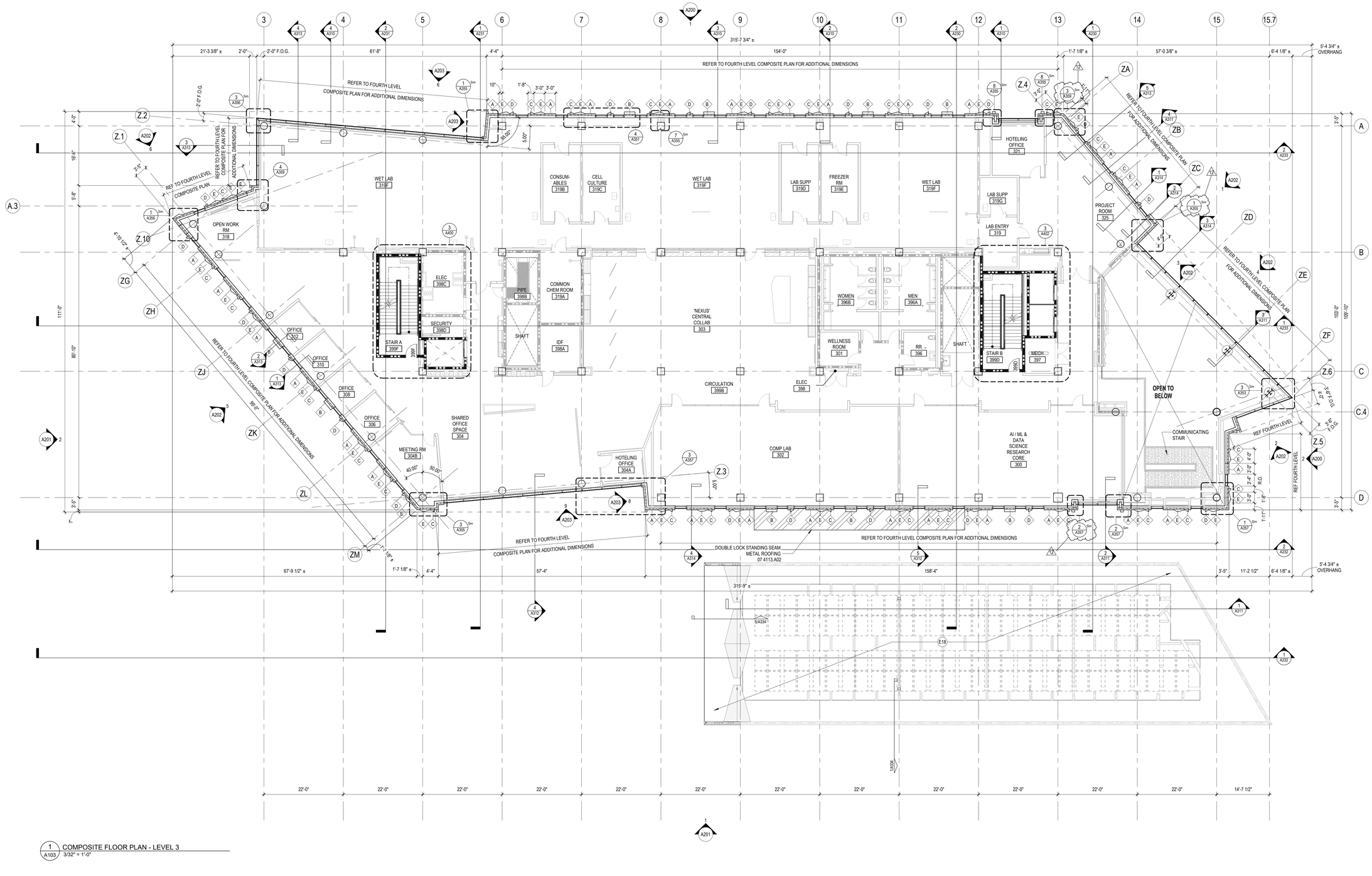
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN

PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH

TRUE NORTH

ISSUED / REVISIONS SCHEDULE

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8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
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COMPOSITE PLAN - LEVEL 3

DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

A103

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1 A103 COMPOSITE FLOOR PLAN - LEVEL 3
3/32" = 1'-0"

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_KEYNOTE SCHEDULE	
NUMBER	TEXT

SHEET NOTE SCHEDULE	
NUMBER	TEXT

ARCHITECTURAL GRAPHIC LEGEND

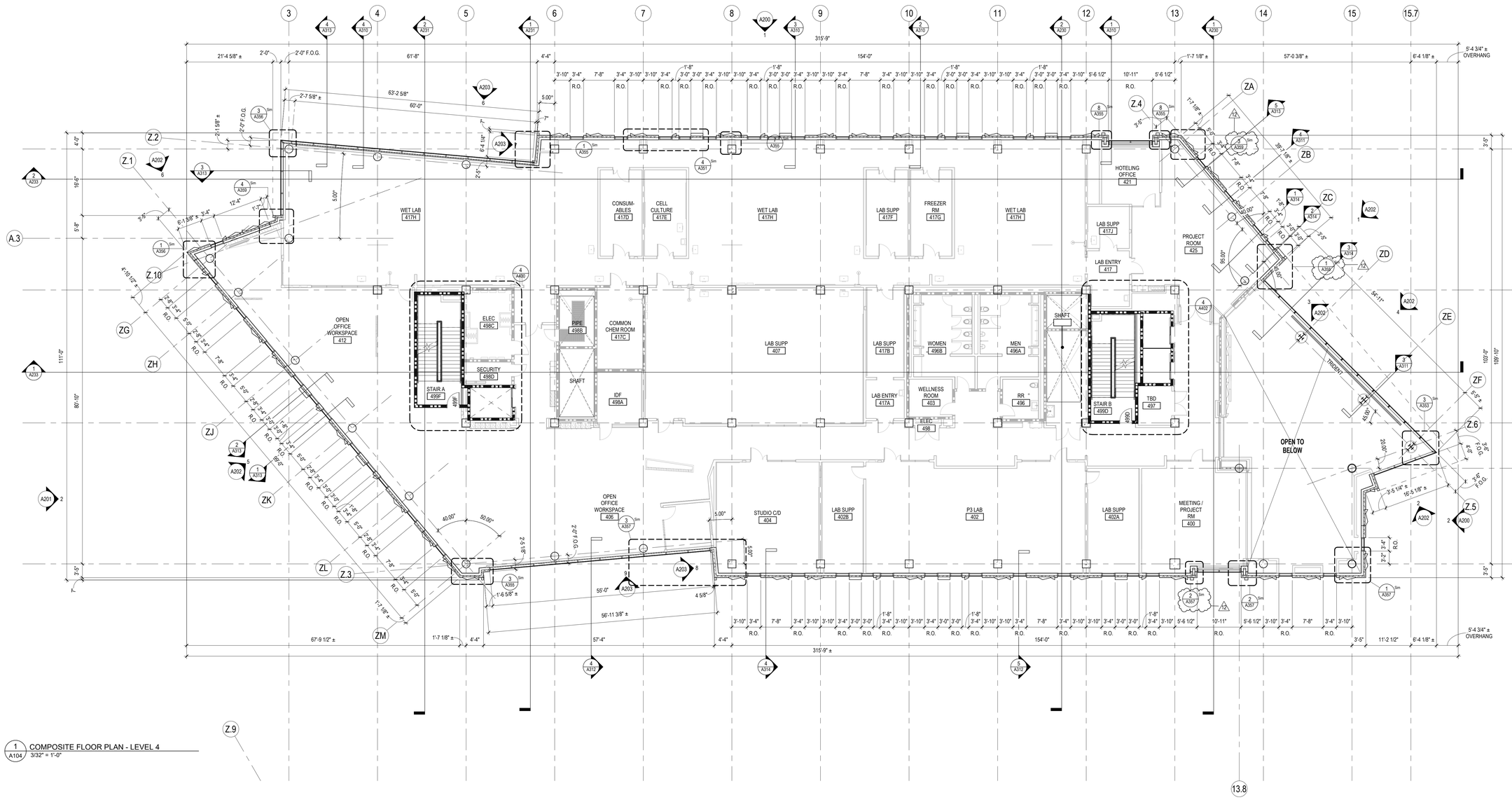
WALL RATING LEGEND

- OB3S — INTERIOR PARTITION TAG - REFER TO PARTITION SCHEDULE
- UNRATED PARTITION
- SMOKE PARTITION
- SMOKE BARRIER
- 1-HOUR FIRE BARRIER
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ARCHITECTURAL PLAN LEGEND

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1 A104 COMPOSITE FLOOR PLAN - LEVEL 4
3/32" = 1'-0"

AREA A AREA B

KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH
TRUE NORTH

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
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CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

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COMPOSITE PLAN - LEVEL 4

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A104

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_KEYNOTE SCHEDULE	
NUMBER	TEXT

SHEET NOTE SCHEDULE	
NUMBER	TEXT
E22	INTERIOR BUILDING SIGNAGE

ARCHITECTURAL GRAPHIC LEGEND

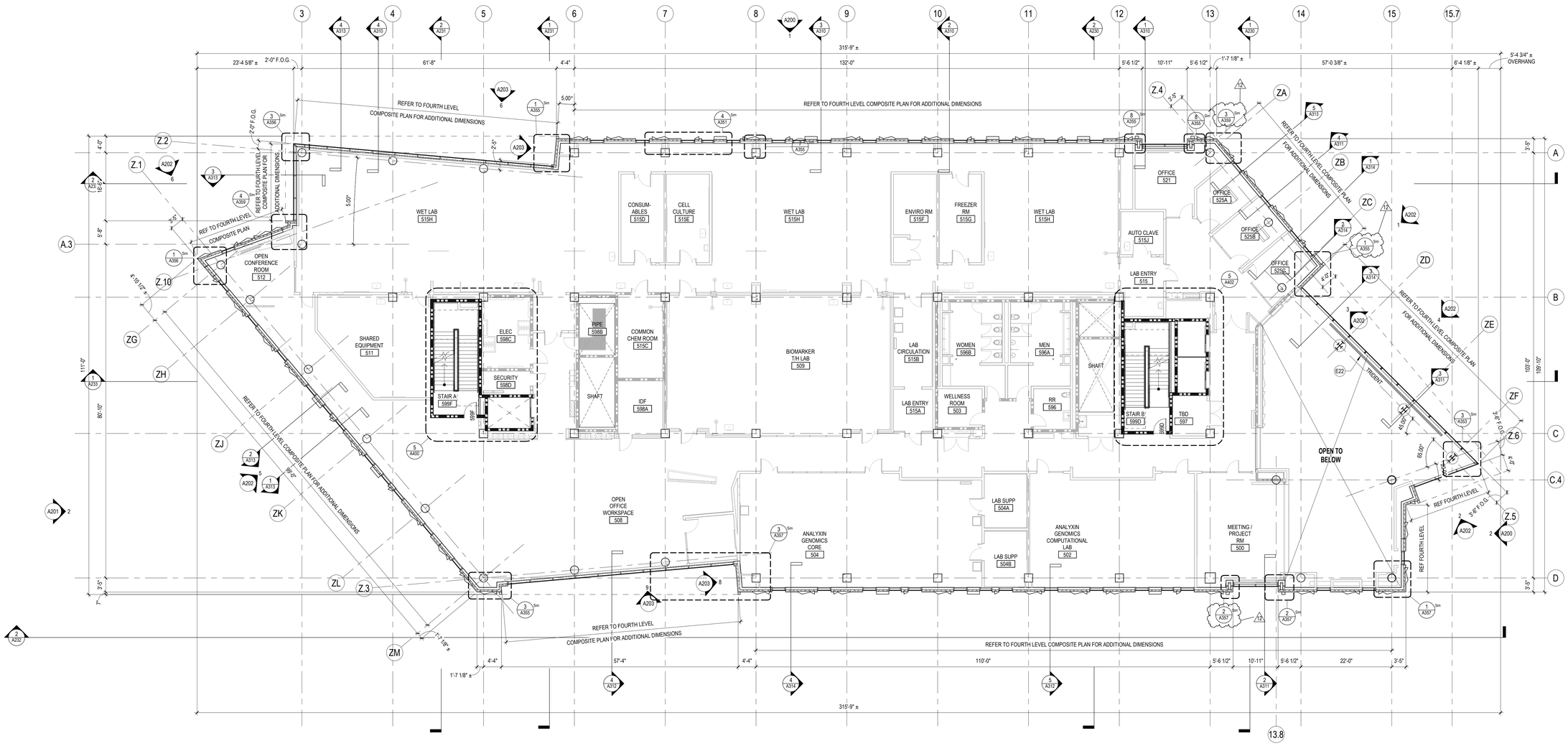
WALL RATING LEGEND

- 0B3S — INTERIOR PARTITION TAG - REFER TO PARTITION SCHEDULE
- UNRATED PARTITION
- SMOKE PARTITION
- SMOKE BARRIER
- 1-HOUR FIRE BARRIER
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- 3-HOUR FIRE BARRIER

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1 / A105 COMPOSITE FLOOR PLAN - LEVEL 5
3/32" = 1'-0"

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

AREA A AREA B

KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH
TRUE NORTH

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
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1	08/15/2025	CITY SUBMITTAL

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COMPOSITE PLAN - LEVEL 5

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A105

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_KEYNOTE SCHEDULE	
NUMBER	TEXT
07 7200.B00	ROOF HATCH

SHEET NOTE SCHEDULE	
NUMBER	TEXT
E23	AIRHOOD AND FAN SCREENING.
E24	ALLOW FOR A REMOVABLE PANEL WITHIN THE INSULATED PANEL SYSTEM. PROVIDE JAMB AND HEAD STEEL FRAMING AT PERIMETER OF OPENING. SEE WALL ASEMBLY TYPE WS.1 ON SHEET A301.
E25	SUPPLEMENTAL SUPPORT STRUCTURE FOR EXTERIOR BUILDING SIGNAGE TO BE PROVIDED AS PART OF BID ISSUE 3. SIGNAGE AND SUBSEQUENT SUPPORT STRUCTURE DESIGN TO BE FINALIZED IN BID ISSUE 4. SEE ADDENDUM NARRATIVE FOR NOTATION OF ALLOWANCE.

ARCHITECTURAL GRAPHIC LEGEND

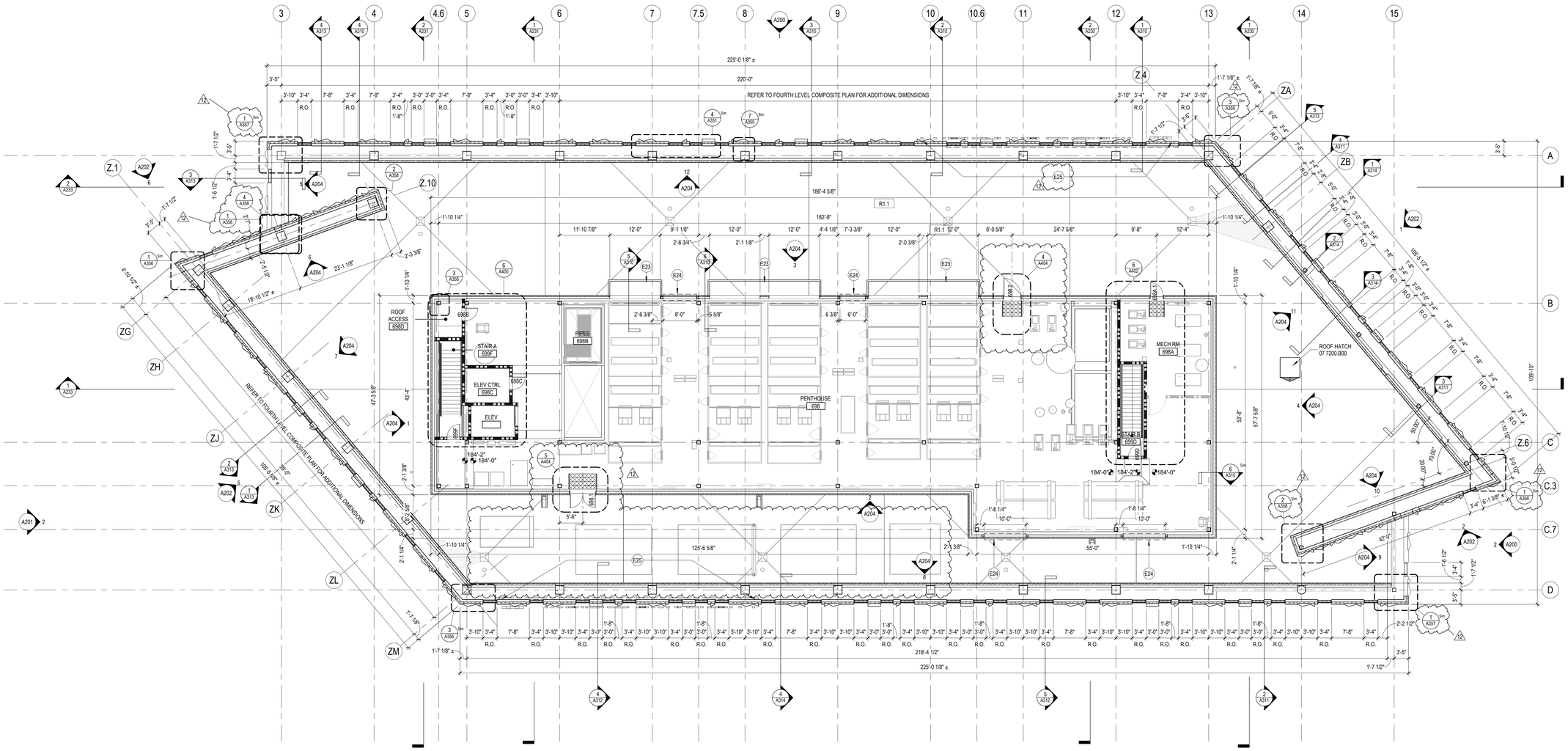
WALL RATING LEGEND

- INTERIOR PARTITION TAG - REFER TO PARTITION SCHEDULE
- UNRATED PARTITION
- SMOKE PARTITION
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ARCHITECTURAL PLAN LEGEND

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1 A106 COMPOSITE FLOOR PLAN - PENTHOUSE
3/32" = 1'-0"

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INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

AREA A | AREA B

KEYPLAN
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TRUE NORTH

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1	08/15/2025	CITY SUBMITTAL

ANDREW JOHN DUNCAN
REGISTERED
No. AR10400213
STATE OF INDIANA
ARCHITECT

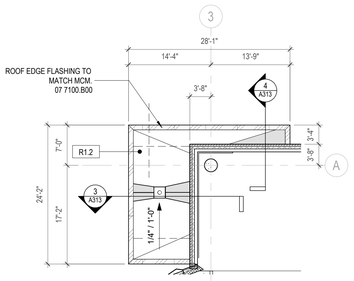
COMPOSITE PLAN - PENTHOUSE

DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

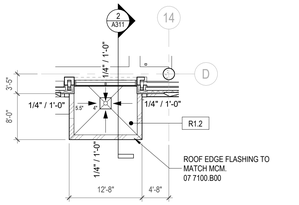
A106

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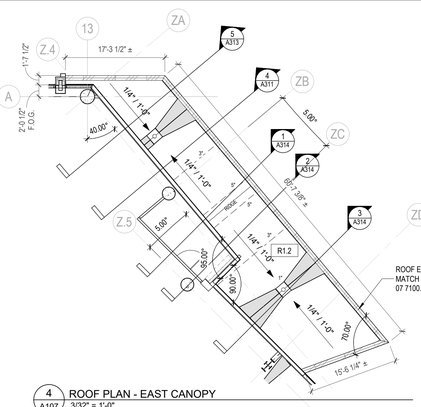
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3 A107 ROOF PLAN - WEST CANOPY
3/32" = 1'-0"



5 A107 ROOF PLAN - SOUTH CANOPY
3/32" = 1'-0"



4 A107 ROOF PLAN - EAST CANOPY
3/32" = 1'-0"

A200 1

_KEYNOTE SCHEDULE	
NUMBER	TEXT
07 4213.23.A02	METAL COMPOSITE PREFABRICATED FASCIA ASSEMBLY
07 5323.B02	PREFORMED CRICKET
07 6200.B12	CONDUCTOR HEAD AND 6" SQUARE DOWNSPOUT. DRAIN TO DAYLIGHT AT ROOF PLANE.
07 6200.B13	SPLASH PAD
07 7100.A00	COPING TO MATCH MCM FINISH.
07 7100.A01	ALUM GRAVEL STOP TO MATCH MCM FINISH.
07 7100.B00	ROOF EDGE FLASHING TO MATCH MCM.
07 7200.B00	ROOF HATCH
07 7200.B03	SOUND RATED ROOF HATCH
11 8129.A02	NON-PENETRATING, COUNTERWEIGHT FALL PROTECTION GUARDRAIL SYSTEM.

SHEET NOTE SCHEDULE	
NUMBER	TEXT
E7	ROOFTOP MECHANICAL EQUIPMENT; REFER TO MECHANICAL DRAWINGS.
E9	2' WIDE ROOFTOP RUBBERIZED WALKWAY PAD
E10	DEEP PARAPET (CONCEAL PROJECTING STRUCTURAL COLUMNS.
E12	FIXED, DELTA WING ORIENTATION PV PANEL ARRAY. BALLAST SUPPORTED (NO PENETRATIONS FOR STRUCTURAL SUPPORT MEMBERS). SYSTEM SHOWN FOR LOCATION REFERENCE. FULLY ENGINEERED, TURN KEY SYSTEM TO BE PROVIDED IN FUTURE PACKAGE.
E16	PROBE CONNECTION TO VECTOR LEAK DETECTION MAT IN ROOF ASSEMBLY. FINAL LOCATION TO BE DETERMINED BY MANUFACTURER
E17	2' X 2' CONCRETE ROOF WALKWAY PADS

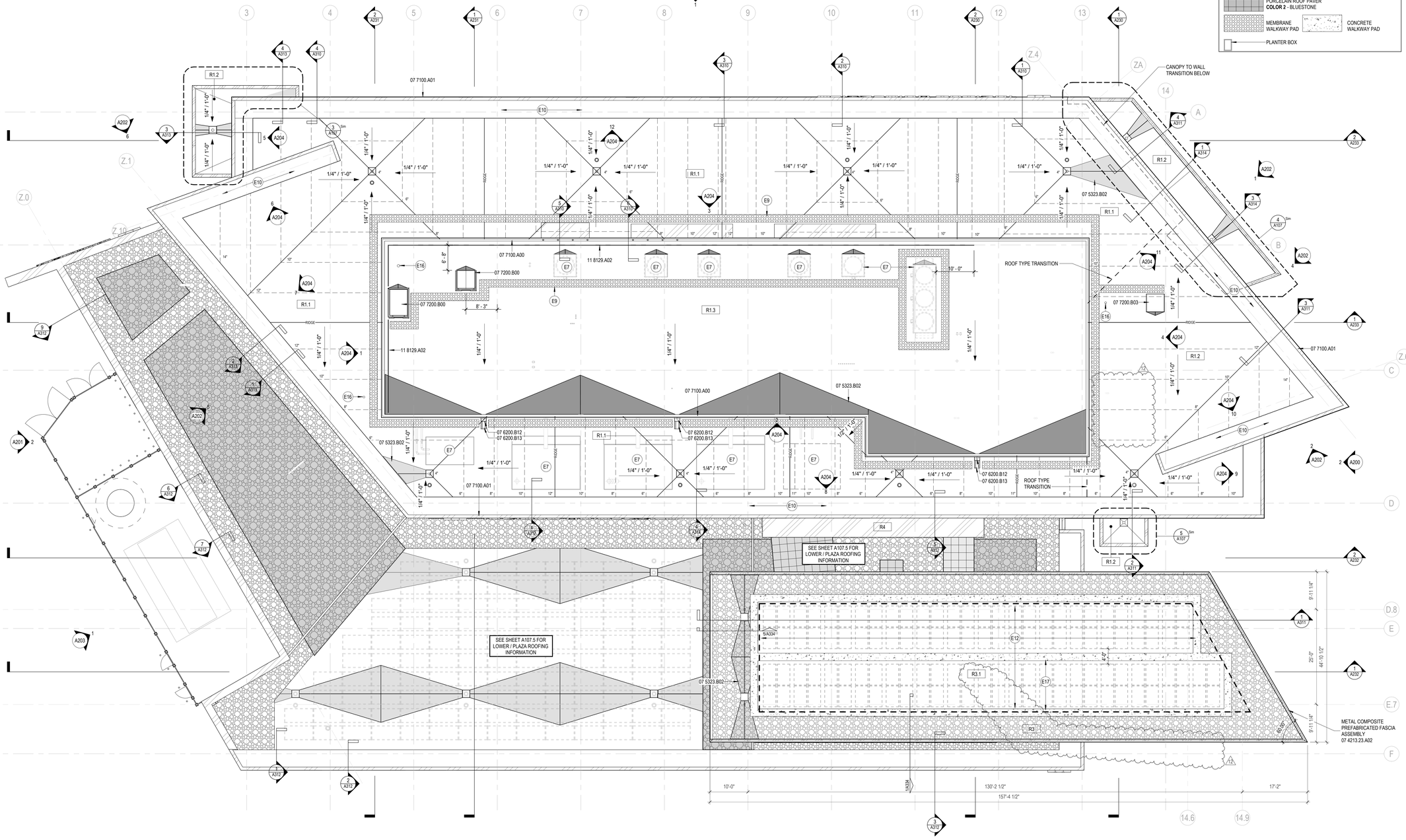
ROOF PLAN LEGEND

ROOF NOTES

1. TAPERED INSULATON SHALL SLOPE AT 1/4" PER FOOT TO DRAINS.
2. CRICKETS SHALL SLOPE AT 1/2" PER FOOT.
3. ALL ROOF MEMBRANE TERMINATIONS, TRANSITIONS, FLASHINGS, ETC. SHALL CONFORM WITH MANUFACTURER'S RECOMMENDATIONS AND WARRANTY REQUIREMENTS.
4. ALL PENETRATIONS SHALL CONFORM WITH MANUFACTURER'S RECOMMENDATIONS AND WARRANTY REQUIREMENTS.
5. REFER TO MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
6. FURNISH LEAK DETECTION (VECTOR MAPPING) SYSTEM AT ALL ROOFING OVER ENCLOSED SPACES, UNLESS NOTED OTHERWISE.
7. REFER TO A107 FOR OVERAL COMPOSITE ROOF. REFER TO A107.5 FOR SECOND LEVEL / PLAZA ROOF.
8. IF SOLAR PANELS ARE INSTALLED, BALLAST ARE NOT REQUIRED UNDER PANELS.

SYMBOLS

- ROOF DRAIN
- OVERFLOW DRAIN
- TAPERED OR SLOPED INSULATION
- CRICKET
- SOLAR PANELS
- DECORATIVE AGGREGATE BALLAST **COLOR 1** - CHIPPED SLATE
- DECORATIVE AGGREGATE BALLAST **COLOR 2** - LARGE FORMAT MERAMEC
- PORCELAIN ROOF PAVER **COLOR 1** - LIMESTONE
- PORCELAIN ROOF PAVER **COLOR 2** - BLUESTONE
- MEMBRANE WALKWAY PAD
- CONCRETE WALKWAY PAD
- PLANTER BOX



6 A107 COMPOSITE ROOF PLAN
3/32" = 1'-0"

AREA A | AREA B

KEYPLAN
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INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

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BP3-CD: CORE AND SHELL PACKAGE

JOHN A. DUNN
REGISTERED
No. AR10400213
STATE OF
INDIANA
ARCHITECT

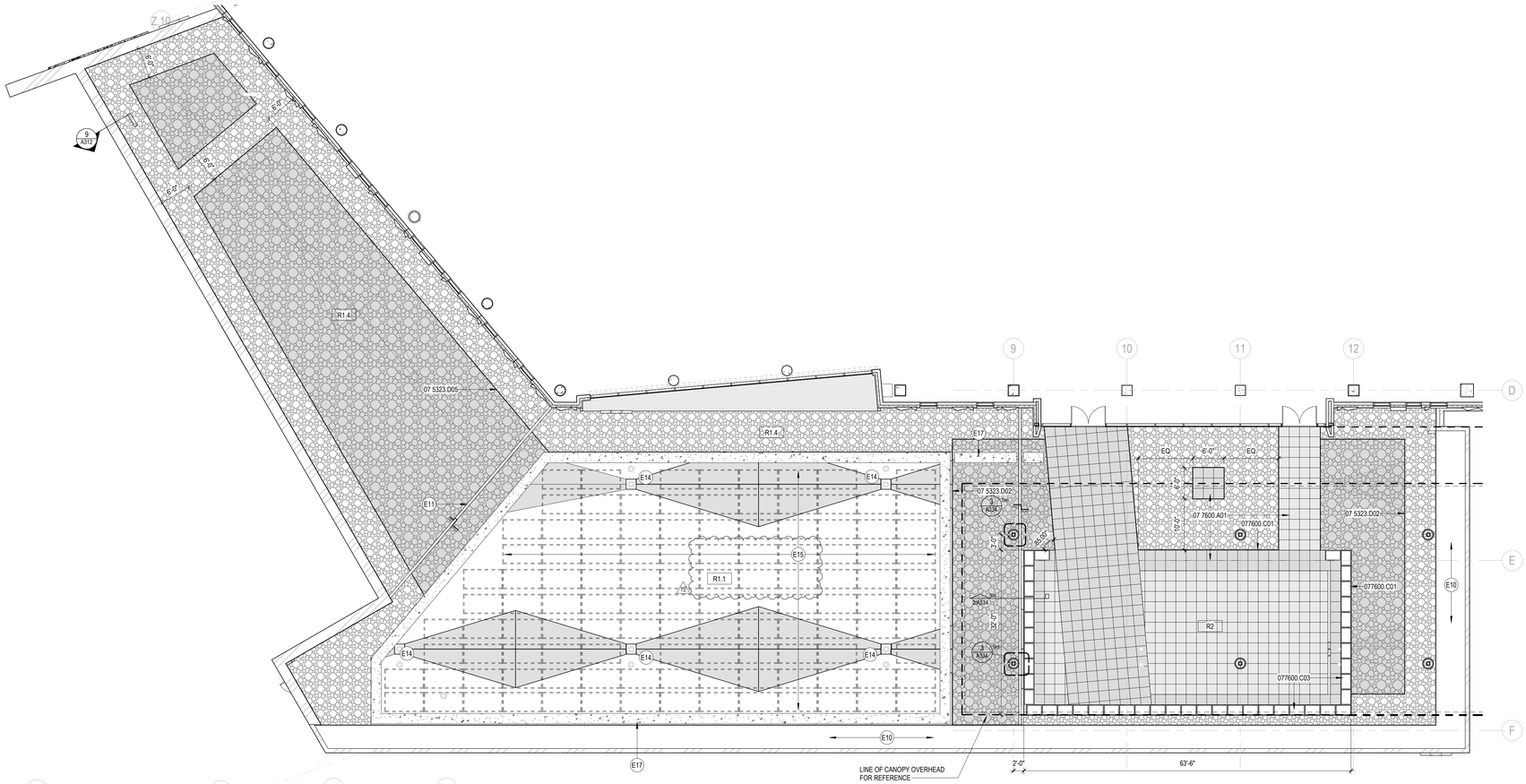
COMPOSITE ROOF PLAN

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A107

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2 A107.5 COMPOSITE ROOF PLAN_PLAZA LEVEL - PLAZA / BALLAST
3/32" = 1'-0"

1 A107.5 COMPOSITE ROOF PLAN_PLAZA LEVEL - MEMBRANE
3/32" = 1'-0"

ROOF PLAN LEGEND

ROOF NOTES

1. TAPERED INSULATON SHALL SLOPE AT 1/4" PER FOOT TO DRAINS.
2. CRICKETS SHALL SLOPE AT 1/2" PER FOOT.
3. ALL ROOF MEMBRANE TERMINATIONS, TRANSITIONS, FLASHINGS, ETC. SHALL CONFORM WITH MANUFACTURER'S RECOMMENDATIONS AND WARRANTY REQUIREMENTS.
4. ALL PENETRATIONS SHALL CONFORM WITH MANUFACTURER'S RECOMMENDATIONS AND WARRANTY REQUIREMENTS.
5. REFER TO MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
6. FURNISH LEAK DETECTION (VECTOR MAPPING) SYSTEM AT ALL ROOFING OVER ENCLOSED SPACES, UNLESS NOTED OTHERWISE.
7. REFER TO A107 FOR OVERAL COMPOSITE ROOF. REFER TO A107.5 FOR SECOND LEVEL / PLAZA ROOF.
8. IF SOLAR PANELS ARE INSTALLED, BALLAST ARE NOT REQUIRED UNDER PANELS.

SYMBOLS

- ROOF DRAIN
- OVERFLOW DRAIN
- TAPERED OR SLOPED INSULATION
- CRICKET
- SOLAR PANELS
- DECORATIVE AGGREGATE BALLAST **COLOR 1** - CHIPPED SLATE
- DECORATIVE AGGREGATE BALLAST **COLOR 2** - LARGE FORMAT MERAMEC
- PORCELAIN ROOF PAVER **COLOR 1** - LIMESTONE
- PORCELAIN ROOF PAVER **COLOR 2** - BLUESTONE
- MEMBRANE WALKWAY PAD
- CONCRETE WALKWAY PAD
- PLANTER BOX

_KEYNOTE SCHEDULE

NUMBER	TEXT
05 7500.C02	FACTORY FABRICATED MCM COLUMN COVER
07 5323.B02	PREFORMED CRICKET
07 5323.D02	PREFINISHED AGGREGATE BALLAST EDGE BARRIER/RETAINER.
07 5323.D05	AGGREGATE BALLAST EDGING/RETAINER AT PERIMETER OF BALLAST COLOR TRANSITION
07 7100.A00	COPING TO MATCH MCM FINISH.
07 7600.A01	3/4" PORCELAIN ROOF PAVERS ON TRAY SUPPORT
077600.C01	TWO PIECE PRE-FINISHED 22 GA. EDGE METAL AT PERIMETER OF PEDESTAL ASSEMBLY.
077600.C03	24" X 36" FIBERGLASS PLANTER BOX.

SHEET NOTE SCHEDULE

NUMBER	TEXT
E10	DEEP PARAPET (CONCEAL PROJECTING STRUCTURAL COLUMNS.
E11	ROOFING TRANSITION BETWEEN CHANGES IN INSULATION PLANE.
E13	DOWNSPOUT FROM CANOPY ABOVE TO RUN TIGHT TO COLUMN CONCEALED IN METAL COLUMN ENCLOSURE AND DISCHARGE TO DAYLIGHT AT THE ROOF PLANE.
E14	OMIT SOLAR PANEL ASSEMBLY (IF INCLUDED IN PROJECT) AT ROOF DRAINS, TYPICAL
E15	FIXED, SINGLE POSITION PV PANEL ARRAY. BALLAST SUPPORTED (NO PENETRATIONS FOR STRUCTURAL SUPPORT MEMBERS). SYSTEM SHOWN FOR LOCATION REFERENCE. FULLY ENGINEERED, TURN KEY SYSTEM TO BE PROVIDED IN FUTURE PACKAGE.
E16	PROBE CONNECTION TO VECTOR LEAK DETECTION MAT IN ROOF ASSEMBLY. FINAL LOCATION TO BE DETERMINED BY MANUFACTURER
E17	2' X 2' CONCRETE ROOF WALKWAY PADS

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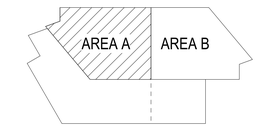
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH
TRUE NORTH

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
10	01/07/2025	BP3-CD: ADDENDUM 01
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN CULLEN
REGISTERED
No. AR10400213
STATE OF INDIANA
ARCHITECT

PLAZA LEVEL ROOF PLANS

DATE — REF: SHEET INDEX
BSA PROJECT NO. — 00360481

A107.5

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SHEET NOTE SCHEDULE	
NUMBER	TEXT
D1	STAIR OPENING
D2	ELEVATOR SHAFT OPENING

ARCHITECTURAL GRAPHIC LEGEND

WALL RATING LEGEND

- OB3S — INTERIOR PARTITION TAG - REFER TO PARTITION SCHEDULE
- UNRATED PARTITION
- SMOKE PARTITION
- SMOKE BARRIER
- 1-HOUR FIRE BARRIER
- 1-HOUR FIRE/SMOKE BARRIER
- 2-HOUR FIRE BARRIER
- 2-HOUR FIRE/SMOKE BARRIER
- 3-HOUR FIRE BARRIER

ARCHITECTURAL PLAN LEGEND

ARCHITECTURAL PLAN NOTES

1. DIMENSIONS ARE TO FACE OF PARTITION, UNLESS NOTED OTHERWISE.
2. FOR ASYMETRICAL PARTITIONS, INSTALL HIGHER NUMBER OF GYPSUM WALLBOARD LAYERS ON FACE WHERE PARTITION TAG IS LOCATED.
3. STANDARD WALL FURRING AT STAIRWAYS AND ELEVATORS TO BE PARTITION TYPE (_____), UNLESS NOTED OTHERWISE.
4. LOCATE DOOR FRAMES 4" FROM ADJACENT PARTITION, UNLESS DIMENSIONED OTHERWISE.
5. INSTALL TWO 33 MIL STUDS TO STRUCTURE ABOVE AT DOOR, BORROWED LITE JAMBS, AND PARTITION CORNER LOCATIONS.
6. SMOKE RESISTANT AND FIRE RESISTANCE RATED ASSEMBLIES TO BE CONTINUOUS ABOVE DOOR AND WINDOW OPENINGS.
7. PROVIDE JOINT FIRESTOPPING WHERE GYPSUM WALLBOARD MEETS APPLIED FIRE PROTECTION ON COLUMNS, BEAMS, AND METAL DECK FOR FIRE RESISTANCE RATED PARTITIONS.
8. REFER TO AREA PLANS FOR INTERIOR PARTITION TAGS AND INTERIOR DOOR TAGS FOR ALL INTERIOR WALLS AND DOORS EXCEPT FOR EGRESS STAIRS AND ELEVATOR CONTROL ROOMS.

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AREA A | AREA B

KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH

TRUE NORTH

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN JOHNSON
REGISTERED ARCHITECT
No. AR10400213
STATE OF INDIANA

GEOMETRY PLAN - LEVEL 2

DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

A152

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1 A152 GEOMETRY PLAN - LEVEL 2
3/32" = 1'-0"

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12

SHEET NOTE SCHEDULE	
NUMBER	TEXT
G1	SLOPE

ARCHITECTURAL GRAPHIC LEGEND

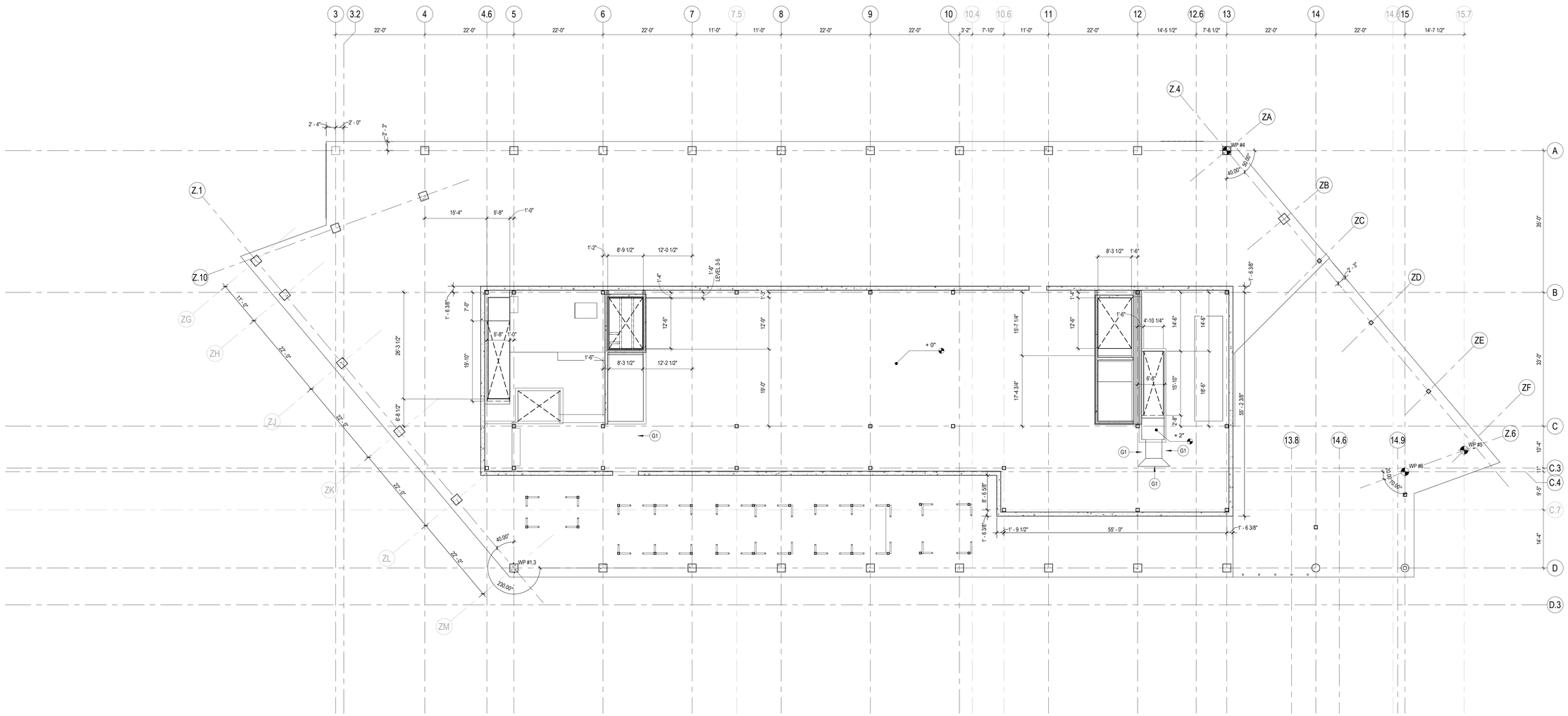
WALL RATING LEGEND

- OB3S — INTERIOR PARTITION TAG - REFER TO PARTITION SCHEDULE
- UNRATED PARTITION
- SMOKE PARTITION
- SMOKE BARRIER
- 1-HOUR FIRE BARRIER
- 1-HOUR FIRE/SMOKE BARRIER
- 2-HOUR FIRE BARRIER
- 2-HOUR FIRE/SMOKE BARRIER
- 3-HOUR FIRE BARRIER

ARCHITECTURAL PLAN LEGEND

ARCHITECTURAL PLAN NOTES

1. DIMENSIONS ARE TO FACE OF PARTITION, UNLESS NOTED OTHERWISE.
2. FOR ASYMETRICAL PARTITIONS, INSTALL HIGHER NUMBER OF GYPSUM WALLBOARD LAYERS ON FACE WHERE PARTITION TAG IS LOCATED.
3. STANDARD WALL FURRING AT STAIRWAYS AND ELEVATORS TO BE PARTITION TYPE (____), UNLESS NOTED OTHERWISE.
4. LOCATE DOOR FRAMES 4" FROM ADJACENT PARTITION, UNLESS DIMENSIONED OTHERWISE.
5. INSTALL TWO 33 MIL STUDS TO STRUCTURE ABOVE AT DOOR, BORROWED LITE JAMBS, AND PARTITION CORNER LOCATIONS.
6. SMOKE RESISTANT AND FIRE RESISTANCE RATED ASSEMBLIES TO BE CONTINUOUS ABOVE DOOR AND WINDOW OPENINGS.
7. PROVIDE JOINT FIRESTOPPING WHERE GYPSUM WALLBOARD MEETS APPLIED FIRE PROTECTION ON COLUMNS, BEAMS, AND METAL DECK FOR FIRE RESISTANCE RATED PARTITIONS.
8. REFER TO AREA PLANS FOR INTERIOR PARTITION TAGS AND INTERIOR DOOR TAGS FOR ALL INTERIOR WALLS AND DOORS EXCEPT FOR EGRESS STAIRS AND ELEVATOR CONTROL ROOMS.



1 / A156 GEOMETRY PLAN - PENTHOUSE
3/32" = 1'-0"

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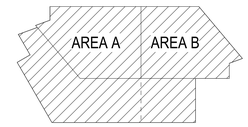
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INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH
TRUE NORTH

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN DUNN
REGISTERED
No. AR10400213
STATE OF INDIANA
ARCHITECT

GEOMETRY PLAN - LEVEL PENTHOUSE

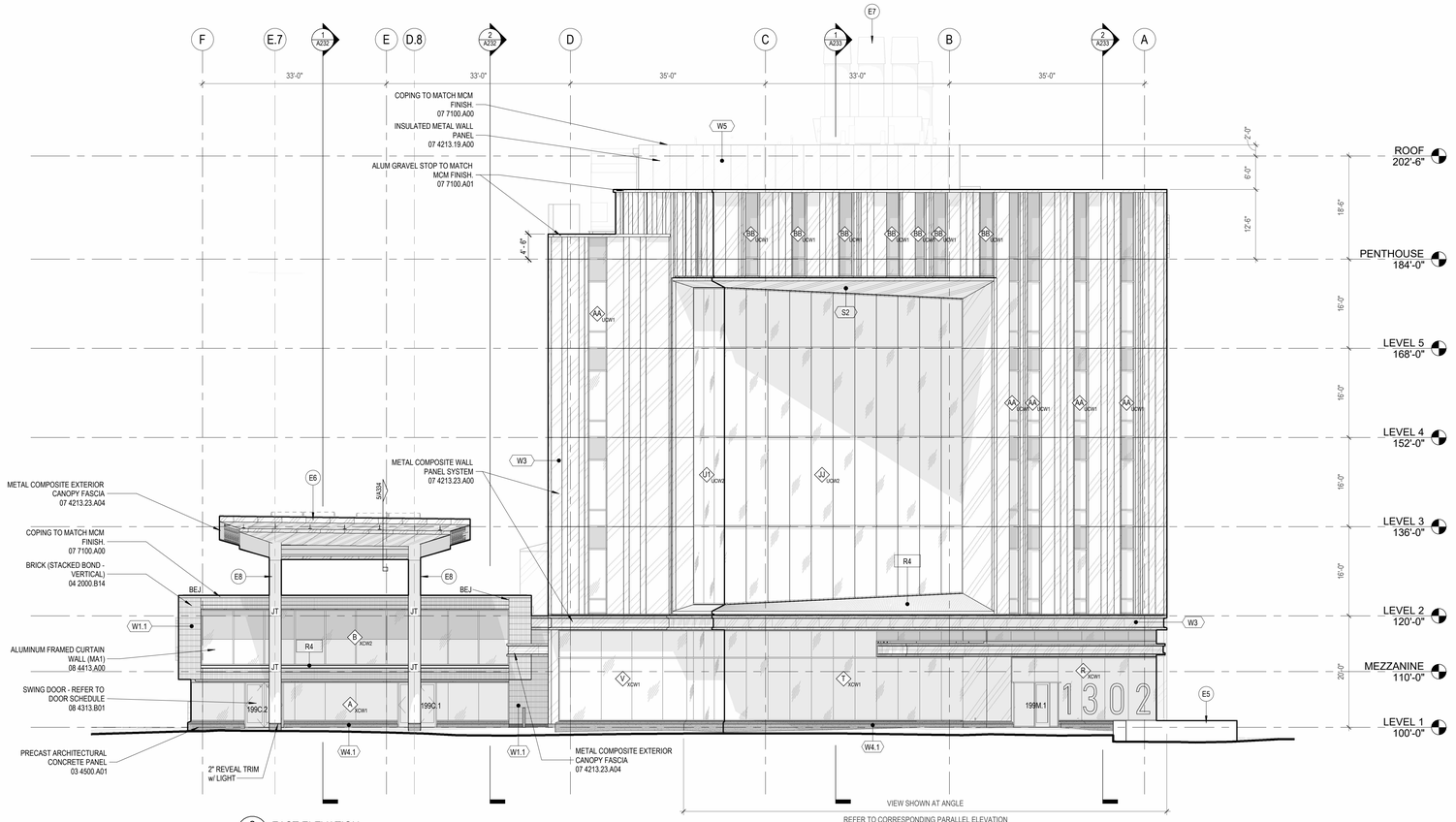
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2 A200 EAST ELEVATION
3/32" = 1'-0"

_KEYNOTE SCHEDULE	
NUMBER	TEXT
03 4500.A00	PRECAST ARCHITECTURAL CONCRETE UNIT
03 4500.A01	PRECAST ARCHITECTURAL CONCRETE PANEL
04 2000.B14	BRICK (STACKED BOND - VERTICAL)
07 4113.A02	DOUBLE LOCK STANDING SEAM METAL ROOFING
07 4213.19.A00	INSULATED METAL WALL PANEL
07 4213.23.A00	METAL COMPOSITE WALL PANEL SYSTEM
07 4213.23.A03	METAL COMPOSITE SOFFIT PANEL ASSEMBLY
07 4213.23.A04	METAL COMPOSITE EXTERIOR CANOPY FASCIA
07 7100.A00	COPING TO MATCH MCM FINISH.
07 7100.A01	ALUM GRAVEL STOP TO MATCH MCM FINISH.
08 4313.B01	SWING DOOR - REFER TO DOOR SCHEDULE
08 4413.A00	ALUMINUM FRAMED CURTAIN WALL (MA1)
11 8129.A02	NON-PENETRATING, COUNTERWEIGHT FALL PROTECTION GUARDRAIL SYSTEM.

SHEET NOTE SCHEDULE	
NUMBER	TEXT
E5	SITE WALL; REFER TO CIVIL DRAWINGS.
E6	EXTERIOR CANOPY
E7	ROOFTOP MECHANICAL EQUIPMENT; REFER TO MECHANICAL DRAWINGS.
E8	EXTERIOR ALUMINUM COLUMN ENCLOSURE
E18	EXTERIOR SIGNAGE. LOCATION SHOWN FOR REFERENCE.
E19	AIR INTAKE ENCLOSURE

EXTERIOR ELEVATION LEGEND

- W1 — BUILDING ASSEMBLY TAG, SEE BUILDING ASSEMBLY TYPES A300'S
- A / CWW — GLAZING ELEVATION TAG, REFERENCE GLAZING ELEVATIONS A220'S; CURTAIN WALL ASSEMBLY TYPE
- A — WINDOW TAG, SEE WINDOW SCHEDULE
- BR1 — MATERIAL TAG, SEE EXTERIOR FINISH SCHEDULE

HATCH	ASSY	DESCRIPTION
	W1	EXTERIOR VERTICALLY STACKED BRICK MASONRY VENEER (NORMAN SOLDIER BOND- 2 1/4" X 1- 0") WITH CUSTOM MORTAR COLOR
	W2	EXTERIOR MASONRY LIMESTONE VENEER TYP. 3 5/8" THICK - (SIZES TBD) WITH CUSTOM MORTAR COLOR
	W3	EXTERIOR METAL COMPOSITE PANEL. REFER TO 1/A350
	W4	EXTERIOR PRECAST CONCRETE CURB W4.1- DARK; W4.2- MATCH LIMESTONE; W4.3 MATCH BRICK
	W5	EXTERIOR METAL INSULATED PANEL - MECHANICAL PENTHOUSE
	W6	EXTERIOR INSULATED WALL (INTERIOR FACING) - PARAPET
	S1	'V' JOINTS, TYP. EXTERIOR INSULATOIN AND FINISH SYSTEM (EIFS).
	S2	EXTERIOR METAL COMPOSITE PANEL
	S3	STEEL PLATE; GALVANIZED AND PAINTED
12 EGL-2 / EGL-2S	XCW1	EXTERIOR CURTAIN WALL SYSTEM - STICK BUILT - HORIZONTALLY CAPTURED
EGL-2 / EGL-2S	XCW2	EXTERIOR CURTAIN WALL SYSTEM - STICK BUILT - VERTICALLY CAPTURED
EGL-1 / EGL-1S	UCW1	EXTERIOR CURTAIN WALL SYSTEM - UNITIZED - FULLY CAPTURED (GL-1F; DARK OPAQUE FILM APPLIED TO SURFACE 4)
EGL-2 / EGL-2S	UCW2	EXTERIOR CURTAIN WALL SYSTEM - UNITIZED - HORIZONTALLY

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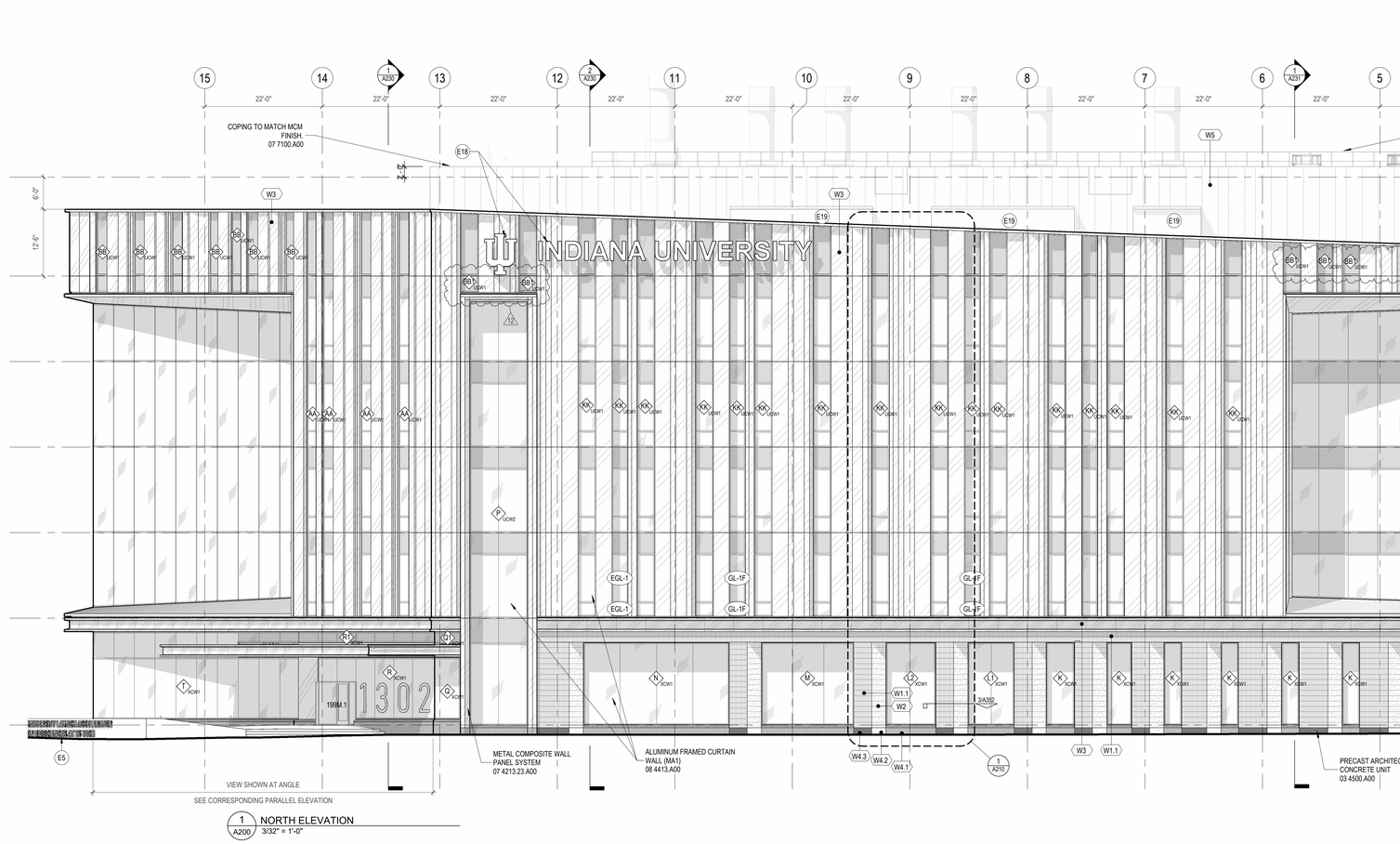
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INDIANAPOLIS, INDIANA

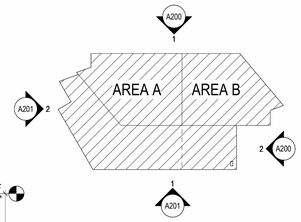
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CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



1 A200 NORTH ELEVATION
3/32" = 1'-0"



KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH
TRUE NORTH

ISSUED / REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
1	08/15/2025	CITY SUBMITTAL

ANGEL JOHN JOHNSON REGISTERED No. AR10400213 STATE OF INDIANA ARCHITECT

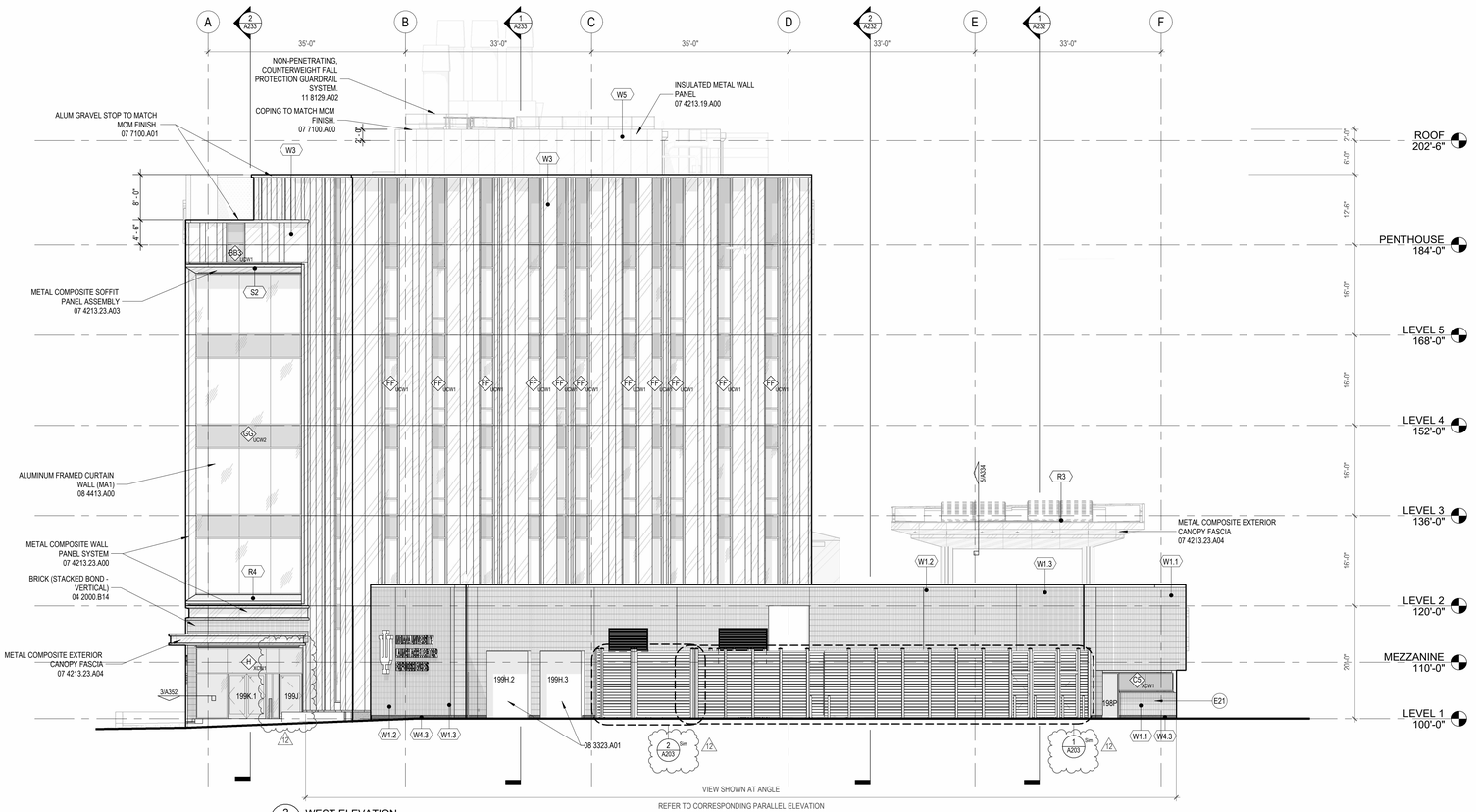
EXTERIOR ELEVATIONS - NORTH AND EAST COMPOSITE ELEVATIONS

DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

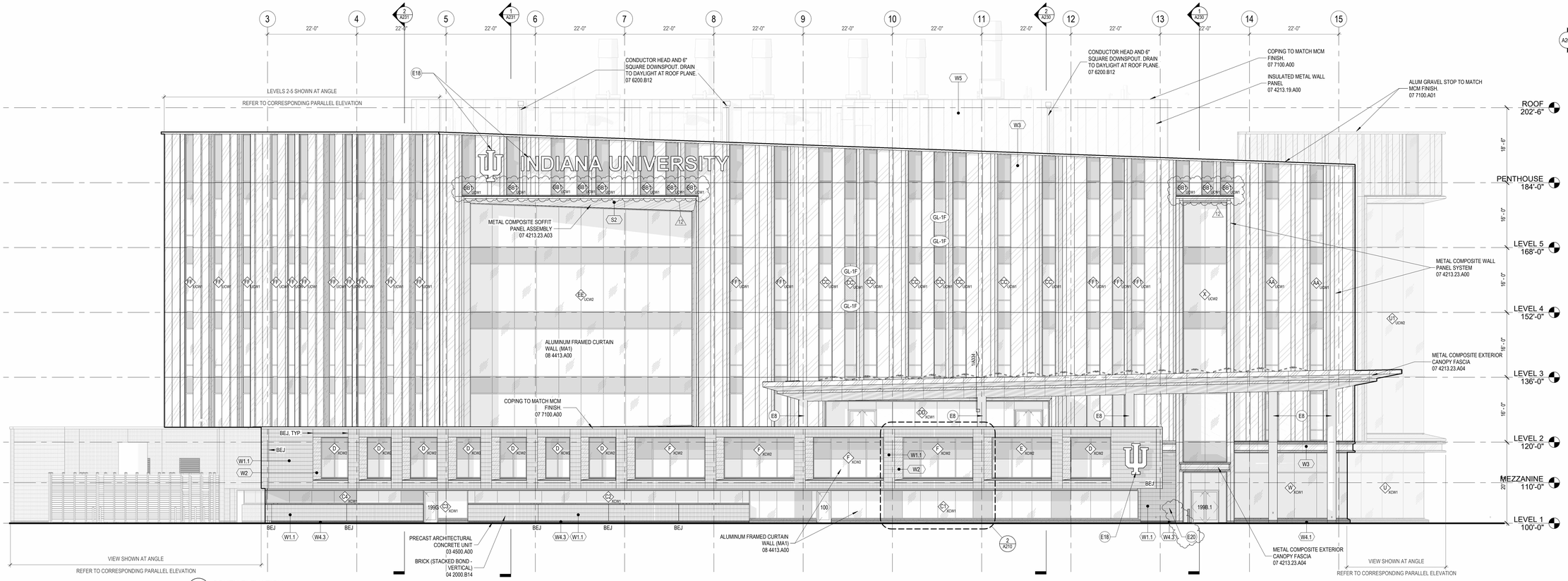
A200

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2 A201 **WEST ELEVATION**
3/32" = 1'-0"



1 A201 **SOUTH ELEVATION**
3/32" = 1'-0"

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_KEYNOTE SCHEDULE

NUMBER	TEXT
03 4500.A00	PRECAST ARCHITECTURAL CONCRETE UNIT
04 2000.B14	BRICK (STACKED BOND - VERTICAL)
07 4213.19.A00	INSULATED METAL WALL PANEL
07 4213.23.A00	METAL COMPOSITE WALL PANEL SYSTEM
07 4213.23.A03	METAL COMPOSITE SOFFIT PANEL ASSEMBLY
07 4213.23.A04	METAL COMPOSITE EXTERIOR CANOPY FASCIA
07 6200.B12	CONDUCTOR HEAD AND 6" SQUARE DOWNSPOUT. DRAIN TO DAYLIGHT AT ROOF PLANE.
07 7100.A00	COPING TO MATCH MCM FINISH.
07 7100.A01	ALUM GRAVEL STOP TO MATCH MCM FINISH.
08 3323.A01	EXTERIOR COILING DOOR, INSULATED
08 4413.A00	ALUMINUM FRAMED CURTAIN WALL (MA1)
11 8129.A02	NON-PENETRATING, COUNTERWEIGHT FALL PROTECTION GUARDRAIL SYSTEM.

SHEET NOTE SCHEDULE

NUMBER	TEXT
E8	EXTERIOR ALUMINUM COLUMN ENCLOSURE
E18	EXTERIOR SIGNAGE. LOCATION SHOWN FOR REFERENCE.
E20	RECESSED KNOX BOX. FINAL LOCATION TO BE CONFIRMED WITH OWNER AND FIRE MARSHALL
E21	FIRE DEPARTMENT CONNECTION

EXTERIOR ELEVATION LEGEND

- W1 — BUILDING ASSEMBLY TAG, SEE BUILDING ASSEMBLY TYPES A300'S
- A / CWW — GLAZING ELEVATION TAG, REFERENCE GLAZING ELEVATIONS A220'S; CURTAIN WALL ASSEMBLY TYPE
- A — WINDOW TAG, SEE WINDOW SCHEDULE
- BR1 — MATERIAL TAG, SEE EXTERIOR FINISH SCHEDULE

HATCH	ASSY	DESCRIPTION
	W1	EXTERIOR VERTICALLY STACKED BRICK MASONRY VENEER (NORMAN SOLDIER BOND: 2 1/4" X 1' - 0") WITH CUSTOM MORTAR COLOR
	W2	EXTERIOR MASONRY LIMESTONE VENEER TYP. 3 5/8" THICK - (SIZES TBD) WITH CUSTOM MORTAR COLOR
	W3	EXTERIOR METAL COMPOSITE PANEL. REFER TO 11A350
	W4	EXTERIOR PRECAST CONCRETE CURB W4.1- DARK; W4.2- MATCH LIMESTONE; W4.3 MATCH BRICK
	W5	EXTERIOR METAL INSULATED PANEL - MECHANICAL PENTHOUSE
	W6	EXTERIOR INSULATED WALL (INTERIOR FACING) - PARAPET
	S1	EXTERIOR INSULATOIN AND FINISH SYSTEM (EIFS). 'V' JOINTS, TYP.
	S2	EXTERIOR METAL COMPOSITE PANEL
	S3	STEEL PLATE; GALVANIZED AND PAINTED
EGL-2 / EGL-2S	XCW1	EXTERIOR CURTAIN WALL SYSTEM - STICK BUILT - HORIZONTALLY CAPTURED
EGL-2 / EGL-2S	XCW2	EXTERIOR CURTAIN WALL SYSTEM - STICK BUILT - VERTICALLY CAPTURED
EGL-1 / EGL-1S	UCW1	EXTERIOR CURTAIN WALL SYSTEM - UNITIZED - FULLY CAPTURED (GL-1F; DARK OPAQUE FILM APPLIED TO SURFACE 4)
EGL-2 / EGL-2S	UCW2	EXTERIOR CURTAIN WALL SYSTEM - UNITIZED - HORIZONTALLY

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INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

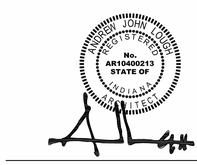
BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH
TRUE NORTH

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
1	08/15/2025	CITY SUBMITTAL

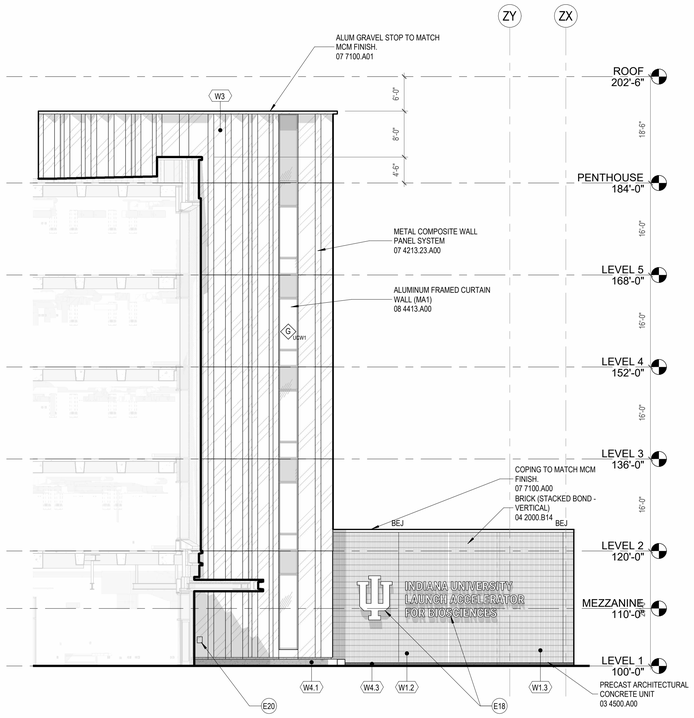


EXTERIOR ELEVATIONS - SOUTH AND WEST COMPOSITE ELEVATIONS

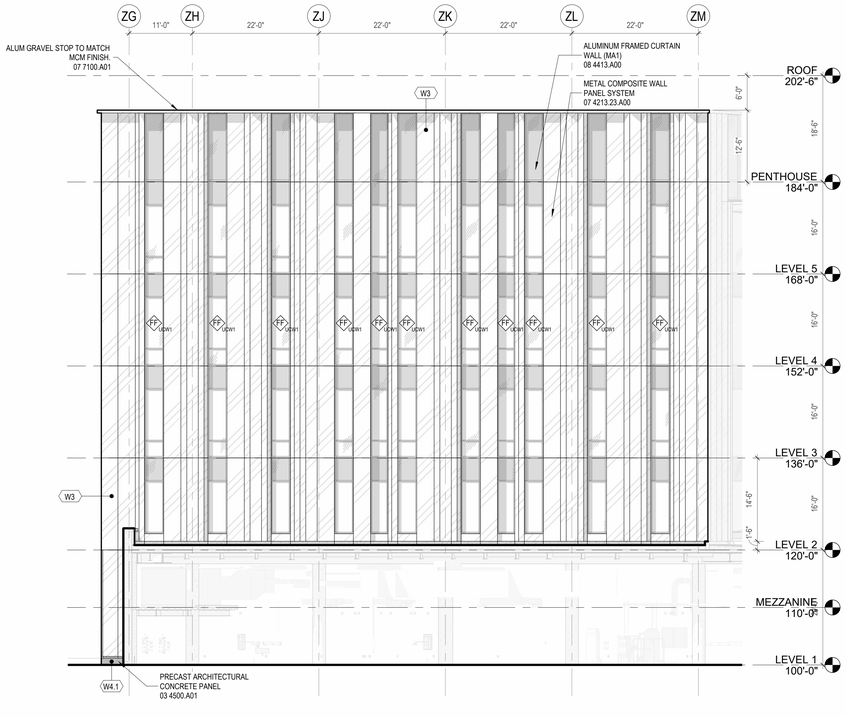
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A201

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6 A202 EXTERIOR ELEVATION
3/32" = 1'-0"



5 A202 EXTERIOR ELEVATION
3/32" = 1'-0"

_KEYNOTE SCHEDULE

NUMBER	TEXT
03 4500.A00	PRECAST ARCHITECTURAL CONCRETE UNIT
03 4500.A01	PRECAST ARCHITECTURAL CONCRETE PANEL
04 2000.B14	BRICK (STACKED BOND - VERTICAL)
07 4113.A02	DOUBLE LOCK STANDING SEAM METAL ROOFING
07 4213.23.A00	METAL COMPOSITE WALL PANEL SYSTEM
07 4213.23.A03	METAL COMPOSITE SOFFIT PANEL ASSEMBLY
07 4213.23.A04	METAL COMPOSITE EXTERIOR CANOPY FASCIA
07 7100.A00	COPING TO MATCH MCM FINISH.
07 7100.A01	ALUM GRAVEL STOP TO MATCH MCM FINISH.
08 4413.A00	ALUMINUM FRAMED CURTAIN WALL (MA1)

SHEET NOTE SCHEDULE

NUMBER		TEXT
E18		EXTERIOR SIGNAGE. LOCATION SHOWN FOR REFERENCE.
E20	12	RECESSED KNOX BOX. FINAL LOCATION TO BE CONFIRMED WITH OWNER AND FIRE MARSHALL

EXTERIOR ELEVATION LEGEND

- W1 — BUILDING ASSEMBLY TAG, SEE BUILDING ASSEMBLY TYPES A300'S
- A / CWF — GLAZING ELEVATION TAG, REFERENCE GLAZING ELEVATIONS A220'S; CURTAIN WALL ASSEMBLY TYPE
- A — WINDOW TAG, SEE WINDOW SCHEDULE
- BR1 — MATERIAL TAG, SEE EXTERIOR FINISH SCHEDULE

HATCH	ASS'Y	DESCRIPTION
	W1	EXTERIOR VERTICALLY STACKED BRICK MASONRY VENEER (NORMAN SOLDIER BOND; 2 1/4" X 1' - 0") WITH CUSTOM MORTAR COLOR
	W2	EXTERIOR MASONRY LIMESTONE VENEER TYP. 3 5/8" THICK - (SIZES TBD) WITH CUSTOM MORTAR COLOR
	W3	EXTERIOR METAL COMPOSITE PANEL. REFER TO 1/A350
	W4	EXTERIOR PRECAST CONCRETE CURB W4.1- DARK; W4.2- MATCH LIMESTONE; W4.3 MATCH BRICK
	W5	EXTERIOR METAL INSULATED PANEL - MECHANICAL PENTHOUSE
	W6	EXTERIOR INSULATED WALL (INTERIOR FACING) - PARAPET
	S1	"V" JOINTS, TYP. EXTERIOR INSULATOIN AND FINISH SYSTEM (EIFS).
	S2	EXTERIOR METAL COMPOSITE PANEL
	S3	STEEL PLATE; GALVANIZED AND PAINTED
EGL-2 / EGL-2S	XCW1	EXTERIOR CURTAIN WALL SYSTEM - STICK BUILT - HORIZONTALLY CAPTURED
EGL-2 / EGL-2S	XCW2	EXTERIOR CURTAIN WALL SYSTEM - STICK BUILT - VERTICALLY CAPTURED
EGL-1 / EGL-1S	UCW1	EXTERIOR CURTAIN WALL SYSTEM - UNITIZED - FULLY CAPTURED (GL-1F; DARK OPAQUE FILM APPLIED TO SURFACE 4)
EGL-2 / EGL-2S	UCW2	EXTERIOR CURTAIN WALL SYSTEM - UNITIZED - HORIZONTALLY

12

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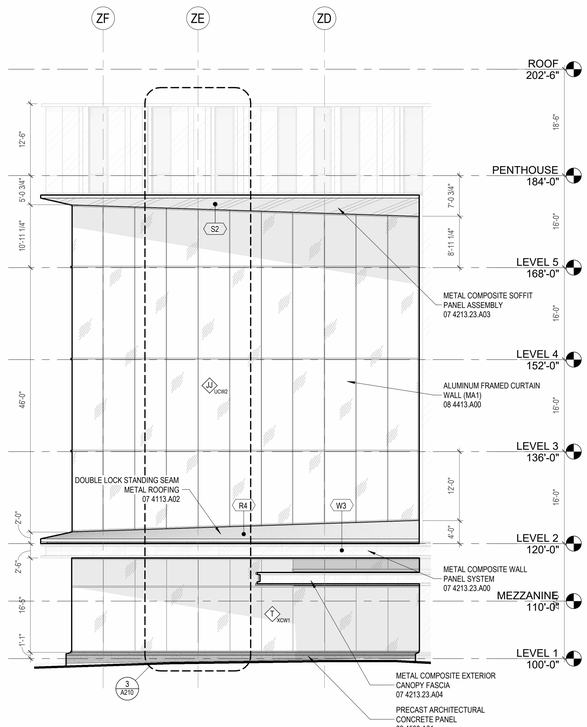
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INDIANAPOLIS, INDIANA

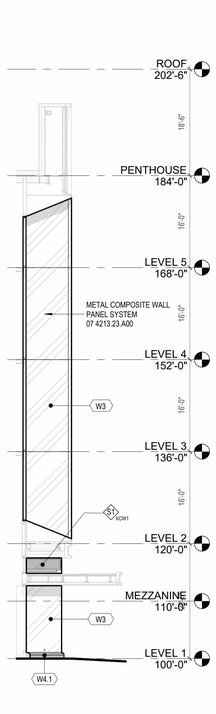
CLIENT PROJECT NO. - 20250072

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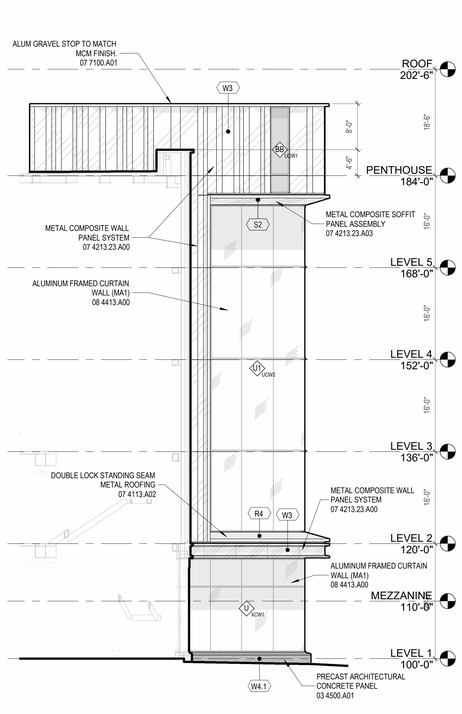
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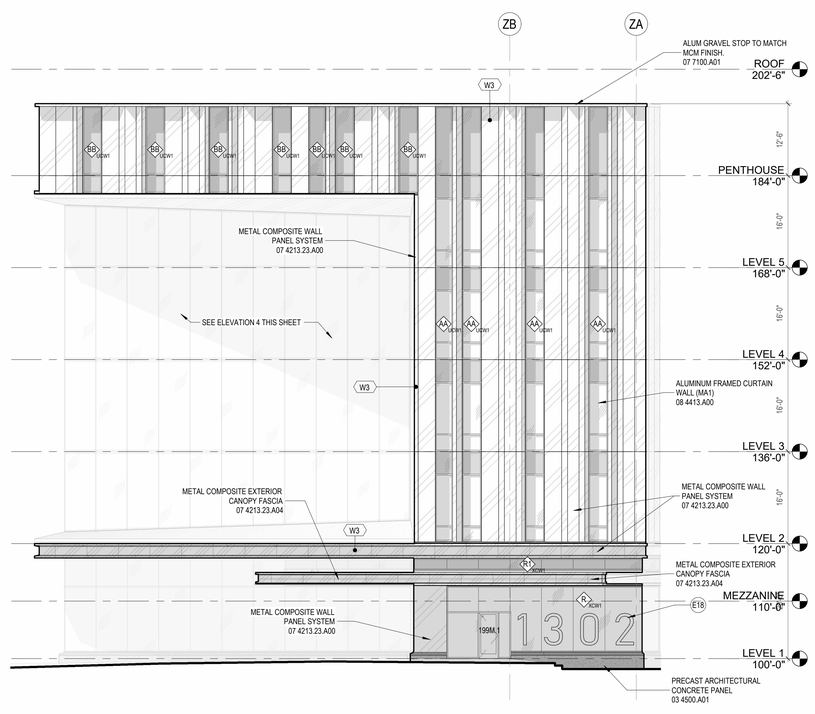
4 A202 ELEVATION - NE SECONDARY
3/32" = 1'-0"



3 A202 ELEVATION - NE HIDDEN
3/32" = 1'-0"



2 A202 ELEVATION - SE
3/32" = 1'-0"



1 A202 ELEVATION - NE PRIMARY
3/32" = 1'-0"

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
1	08/15/2025	CITY SUBMITTAL

JAMES JOHN JOHNSON REGISTERED ARCHITECT No. AR10400213 STATE OF INDIANA

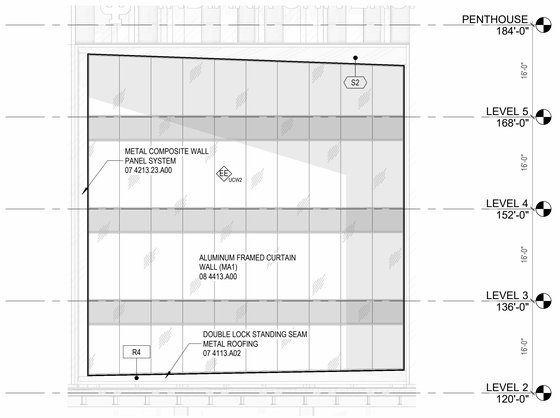
EXTERIOR ELEVATIONS

DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

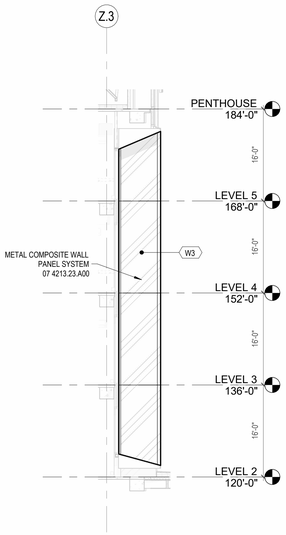
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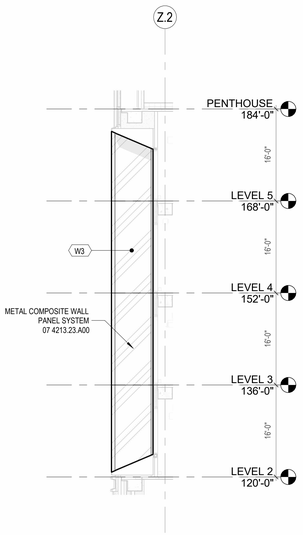
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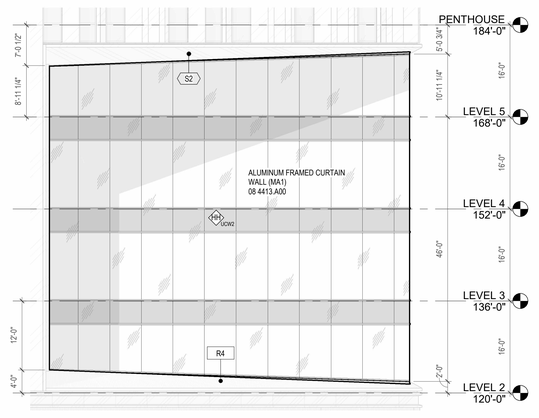
9 A203 ELEVATION - S. SECONDARY
3/32" = 1'-0"



8 A203 ELAVATION - S. SECONDARY HIDDEN
3/32" = 1'-0"



7 A203 ELEVATION - N. SECONDARY HIDDEN
3/32" = 1'-0"



6 A203 ELEVATION - N. SECONDARY
3/32" = 1'-0"

EXTERIOR ELEVATION LEGEND

- W1 — BUILDING ASSEMBLY TAG, SEE BUILDING ASSEMBLY TYPES A300'S
- A / CW# — GLAZING ELEVATION TAG, REFERENCE GLAZING ELEVATIONS A220'S; CURTAIN WALL ASSEMBLY TYPE
- A — WINDOW TAG, SEE WINDOW SCHEDULE
- BR1 — MATERIAL TAG, SEE EXTERIOR FINISH SCHEDULE

HATCH	ASS'Y	DESCRIPTION
	W1	EXTERIOR VERTICALLY STACKED BRICK MASONRY VENEER (NORMAN SOLDIER BOND; 2 1/4" X 1' - 0") WITH CUSTOM MORTAR COLOR
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	W3	EXTERIOR METAL COMPOSITE PANEL. REFER TO 1/A350
	W4	EXTERIOR PRECAST CONCRETE CURB W4.1- DARK; W4.2- MATCH LIMESTONE; W4.3 MATCH BRICK
	W5	EXTERIOR METAL INSULATED PANEL - MECHANICAL PENTHOUSE
	W6	EXTERIOR INSULATED WALL (INTERIOR FACING) - PARAPET
	S1	"V" JOINTS, TYP. EXTERIOR INSULATOIN AND FINISH SYSTEM (EIFS).
	S2	EXTERIOR METAL COMPOSITE PANEL
	S3	STEEL PLATE; GALVANIZED AND PAINTED
EGL-2 / EGL-2S	XCW1	EXTERIOR CURTAIN WALL SYSTEM - STICK BUILT - HORIZONTALLY CAPTURED
EGL-2 / EGL-2S	XCW2	EXTERIOR CURTAIN WALL SYSTEM - STICK BUILT - VERTICALLY CAPTURED
EGL-1 / EGL-1S	UCW1	EXTERIOR CURTAIN WALL SYSTEM - UNITIZED - FULLY CAPTURED (GL-1F; DARK OPAQUE FILM APPLIED TO SURFACE 4)
EGL-2 / EGL-2S	UCW2	EXTERIOR CURTAIN WALL SYSTEM - UNITIZED - HORIZONTALLY

_KEYNOTE SCHEDULE

NUMBER	TEXT
03 4500.A00	PRECAST ARCHITECTURAL CONCRETE UNIT
04 2000.B14	BRICK (STACKED BOND - VERTICAL)
07 4113.A02	DOUBLE LOCK STANDING SEAM METAL ROOFING
07 4213.23.A00	METAL COMPOSITE WALL PANEL SYSTEM
07 7100.A00	COPING TO MATCH MCM FINISH.
08 1113.C01	LOUVER
08 3323.A01	EXTERIOR COILING DOOR, INSULATED
08 4313.B01	SWING DOOR - REFER TO DOOR SCHEDULE
08 4413.A00	ALUMINUM FRAMED CURTAIN WALL (MA1)
32 3113.A01	CHAIN LINK FENCE

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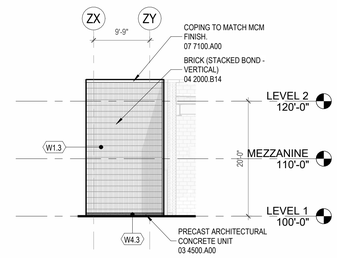
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INDIANAPOLIS, INDIANA

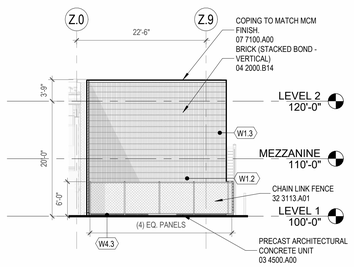
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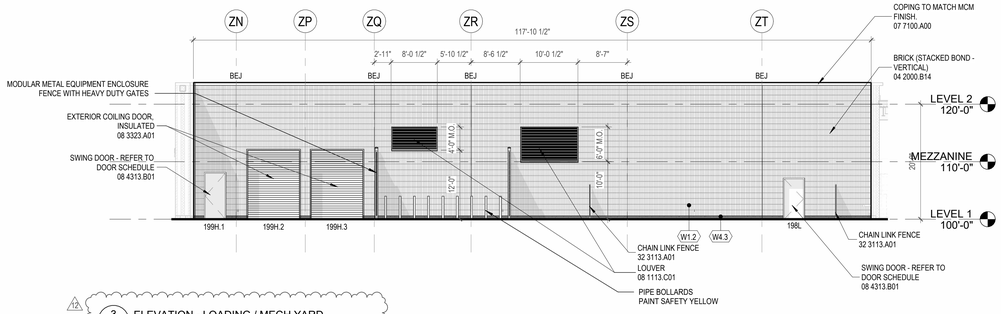
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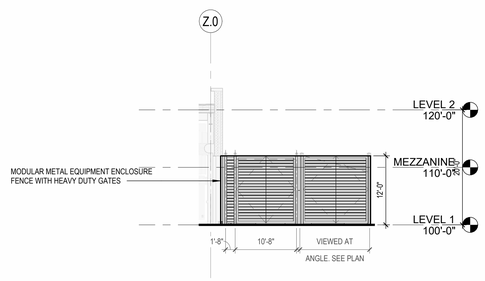
5 A203 ELEVATION - SCREEN/WING WALL
3/32" = 1'-0"



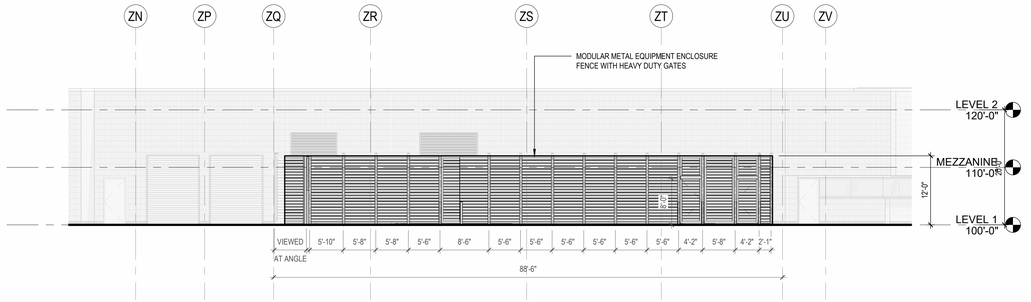
12 4 A203 ELEVATION - MECH YARD
3/32" = 1'-0"



12 3 A203 ELEVATION - LOADING / MECH YARD
3/32" = 1'-0"



12 2 A203 ELEVATION - GATES
3/32" = 1'-0"



12 1 A203 ELEVATION - MECH YARD SCREEN WALL
3/32" = 1'-0"

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
10	01/07/2025	BP3-CD: ADDENDUM 01
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
1	08/15/2025	CITY SUBMITTAL

JOHN D. JOUR
REGISTERED
No. AR10400213
STATE OF INDIANA
ARCHITECT

EXTERIOR ELEVATIONS

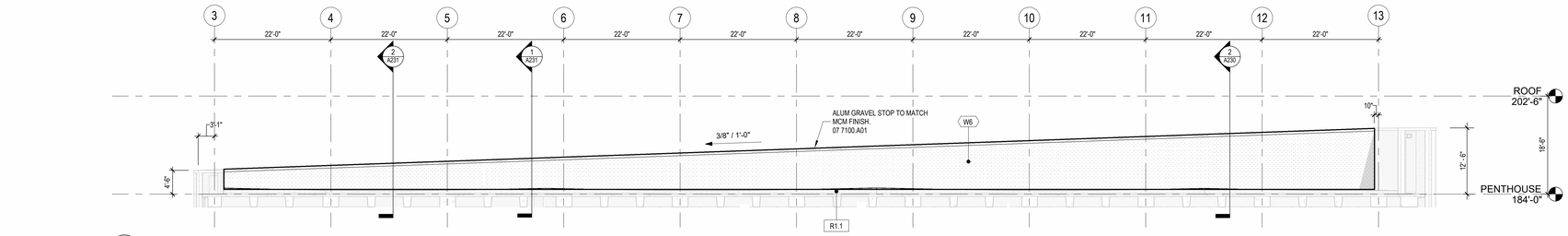
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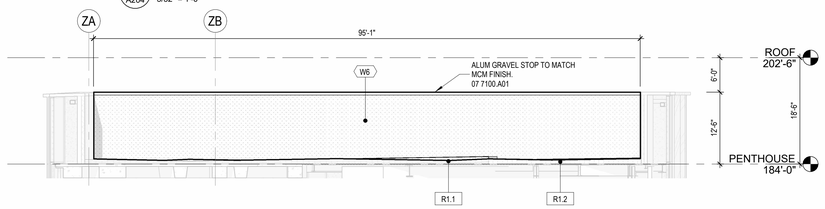
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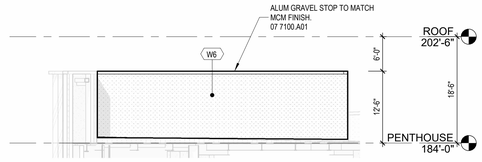
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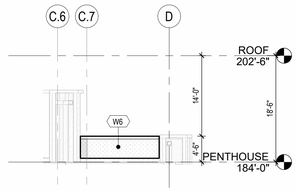
12 A204 ELEVATION - PARAPET, SOUTH 3/32" = 1'-0"



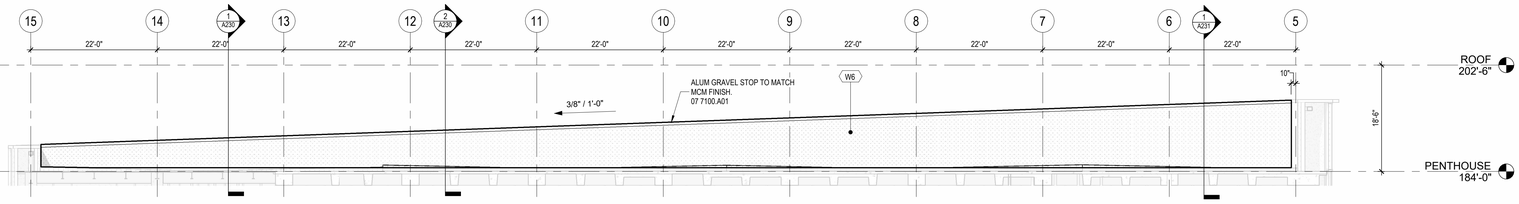
11 A204 ELEVATION - PARAPET, SW 3/32" = 1'-0"



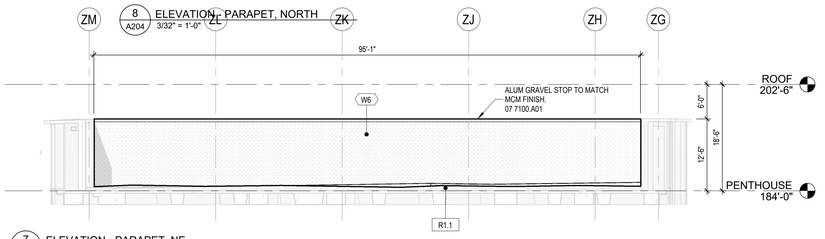
10 A204 ELEVATION - PARAPET, NW 3/32" = 1'-0"



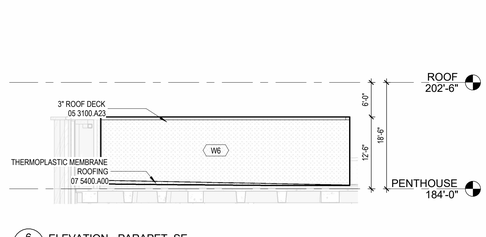
9 A204 ELEVATION - PARAPET, WEST 3/32" = 1'-0"



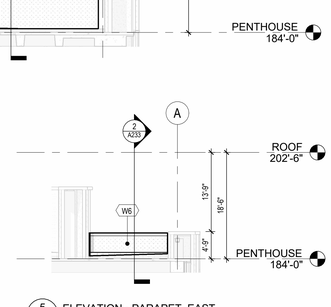
8 A204 ELEVATION - PARAPET, NORTH 3/32" = 1'-0"



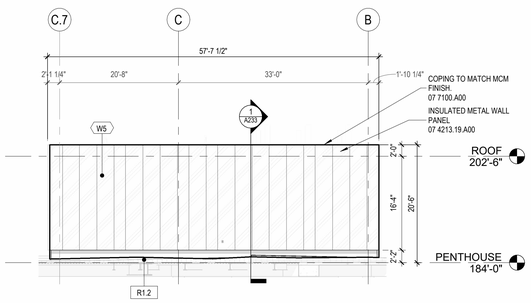
7 A204 ELEVATION - PARAPET, NE 3/32" = 1'-0"



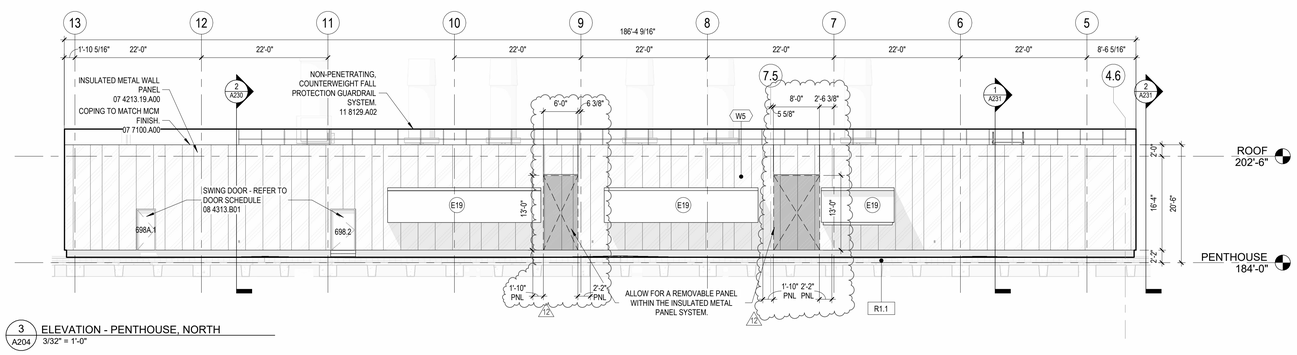
6 A204 ELEVATION - PARAPET, SE 3/32" = 1'-0"



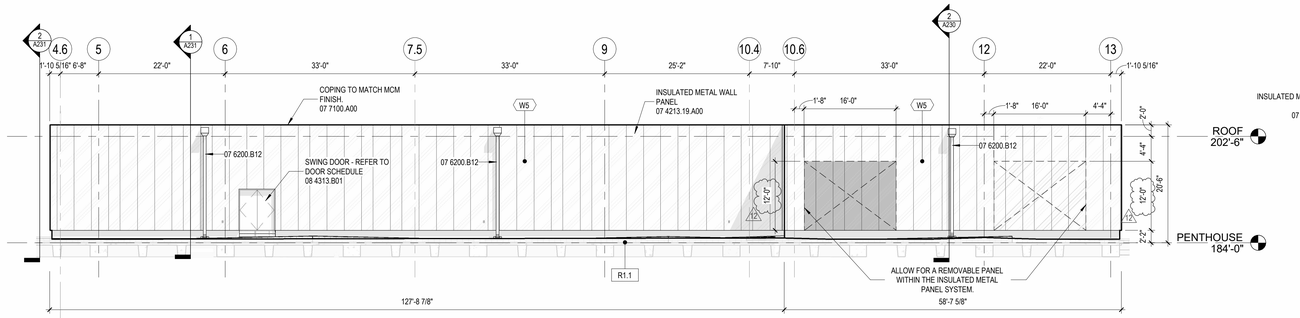
5 A204 ELEVATION - PARAPET, EAST 3/32" = 1'-0"



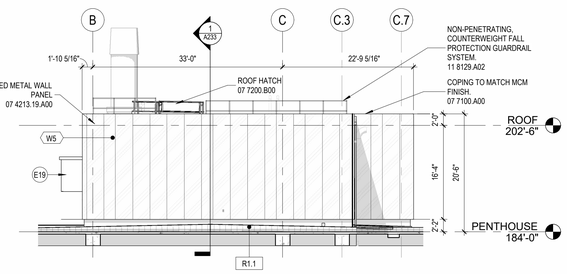
4 A204 ELEVATION - PENTHOUSE, EAST 3/32" = 1'-0"



3 A204 ELEVATION - PENTHOUSE, NORTH 3/32" = 1'-0"



2 A204 ELEVATION - PENTHOUSE, SOUTH 3/32" = 1'-0"



1 A204 ELEVATION - PENTHOUSE, WEST 3/32" = 1'-0"

EXTERIOR ELEVATION LEGEND

- W1 — BUILDING ASSEMBLY TAG, SEE BUILDING ASSEMBLY TYPES A300'S
- A / CW# — GLAZING ELEVATION TAG, REFERENCE GLAZING ELEVATIONS A220'S; CURTAIN WALL ASSEMBLY TYPE
- A — WINDOW TAG, SEE WINDOW SCHEDULE
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HATCH	ASS'Y	DESCRPITION
	W1	EXTERIOR VERTICALLY STACKED BRICK MASONRY VENEER (NORMAN SOLDIER BOND; 2 1/4" X 1' - 0") WITH CUSTOM MORTAR COLOR
	W2	EXTERIOR MASONRY LIMESTONE VENEER TYP. 3 5/8" THICK - (SIZES TBD) WITH CUSTOM MORTAR COLOR
	W3	EXTERIOR METAL COMPOSITE PANEL. REFER TO 1/A350
	W4	EXTERIOR PRECAST CONCRETE CURB W4.1- DARK; W4.2- MATCH LIMESTONE; W4.3 MATCH BRICK
	W5	EXTERIOR METAL INSULATED PANEL - MECHANICAL PENTHOUSE
	W6	EXTERIOR INSULATED WALL (INTERIOR FACING) - PARAPET
	S1	"V' JOINTS, TYP. EXTERIOR INSULATOIN AND FINISH SYSTEM (EIFS).
	S2	EXTERIOR METAL COMPOSITE PANEL
	S3	STEEL PLATE; GALVANIZED AND PAINTED
EGL-2 / EGL-2S	XCW1	EXTERIOR CURTAIN WALL SYSTEM - STICK BUILT - HORIZONTALLY CAPTURED
EGL-2 / EGL-2S	XCW2	EXTERIOR CURTAIN WALL SYSTEM - STICK BUILT - VERTICALLY CAPTURED
EGL-1 / EGL-1S	UCW1	EXTERIOR CURTAIN WALL SYSTEM - UNITIZED - FULLY CAPTURED (GL-1F; DARK OPAQUE FILM APPLIED TO SURFACE 4)
EGL-2 / EGL-2S	UCW2	EXTERIOR CURTAIN WALL SYSTEM - UNITIZED - HORIZONTALLY

_KEYNOTE SCHEDULE

NUMBER	TEXT
05 3100.A23	3" ROOF DECK
07 4213.19.A00	INSULATED METAL WALL PANEL
07 5400.A00	THERMOPLASTIC MEMBRANE ROOFING
07 6200.B12	CONDUCTOR HEAD AND 6" SQUARE DOWNSPOUT. DRAIN TO DAYLIGHT AT ROOF PLANE.
07 7100.A00	COPING TO MATCH MCM FINISH.
07 7100.A01	ALUM GRAVEL STOP TO MATCH MCM FINISH.
07 7200.B00	ROOF HATCH
08 4313.B01	SWING DOOR - REFER TO DOOR SCHEDULE
11 8129.A02	NON-PENETRATING, COUNTERWEIGHT FALL PROTECTION GUARDRAIL SYSTEM.

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE
1	08/15/2025	CITY SUBMITTAL

ANDREW JOHN CLINCH REGISTERED No. AR10400213 STATE OF INDIANA ARCHITECT

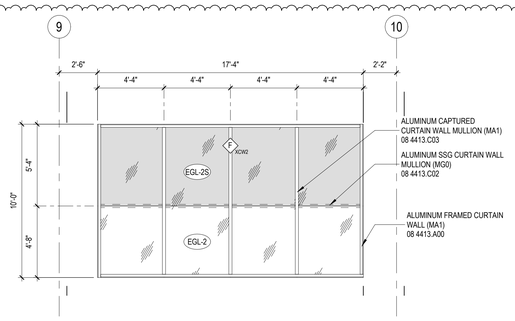
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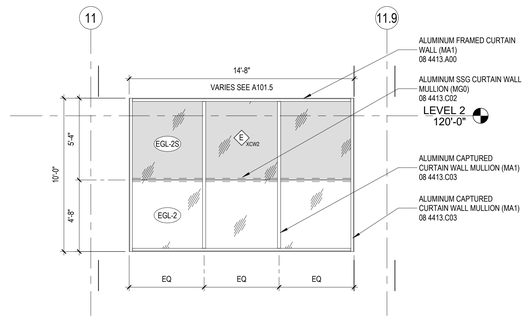
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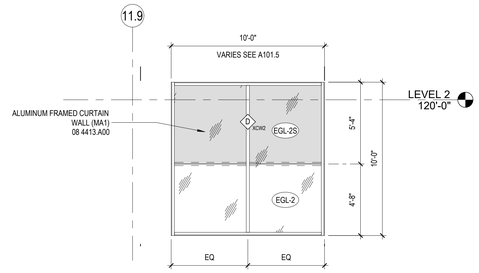
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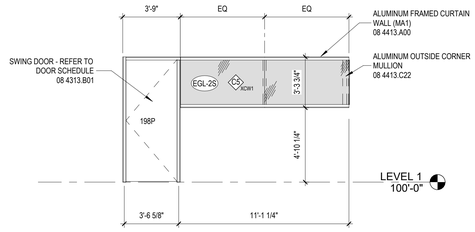
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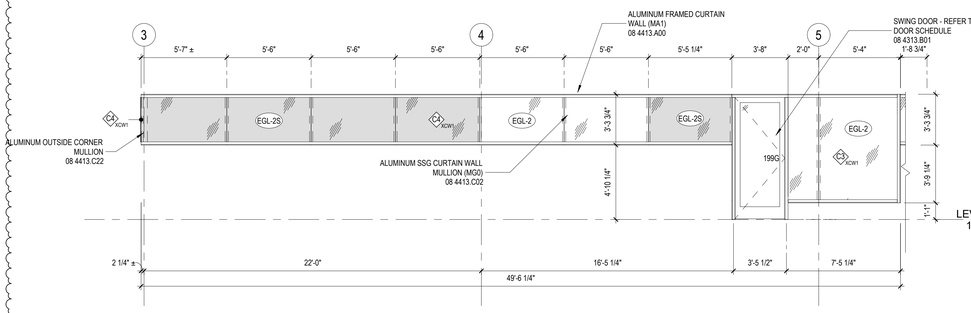


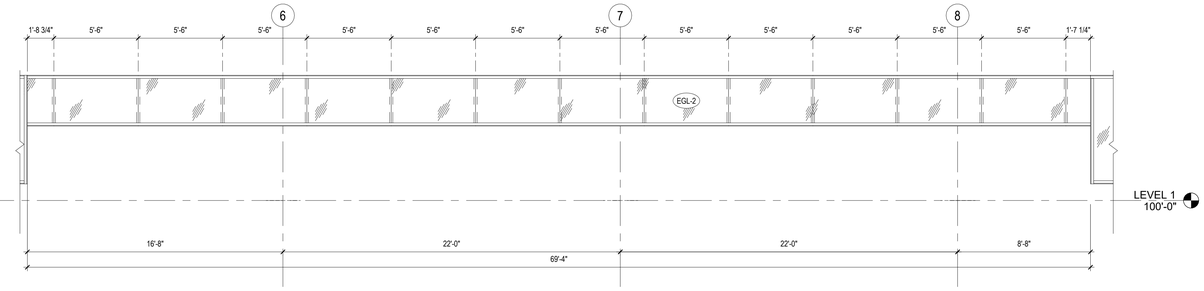
8 A220 CW ELEVATION 'F' - LEVEL 01 SOUTH ELEVATION CLERSTORY
1/4" = 1'-0"

7 A220 CW ELEVATION 'E' - LEVEL 01 SOUTH ELEVATION CLERSTORY
1/4" = 1'-0"

6 A220 CW ELEVATION 'D' - LEVEL 01 SOUTH ELEVATION CLERSTORY
1/4" = 1'-0"

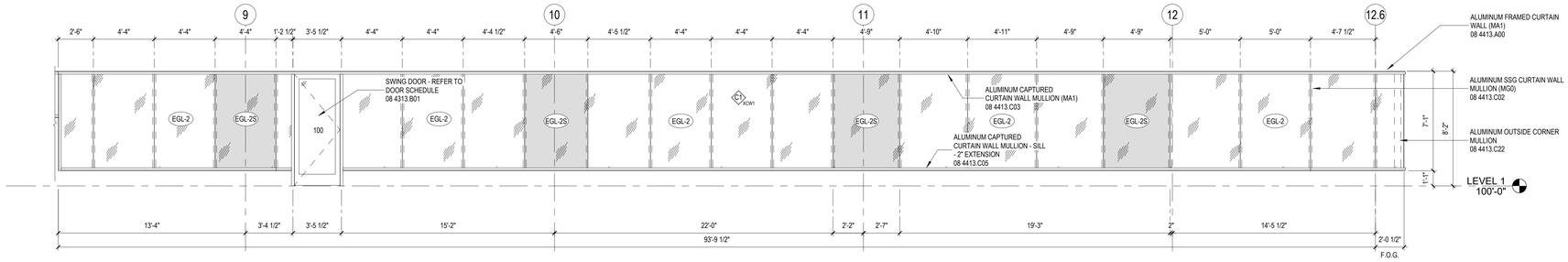
9 A220 CW ELEVATION 'C5' - LEVEL 01 SOUTH ELEVATION
1/4" = 1'-0"



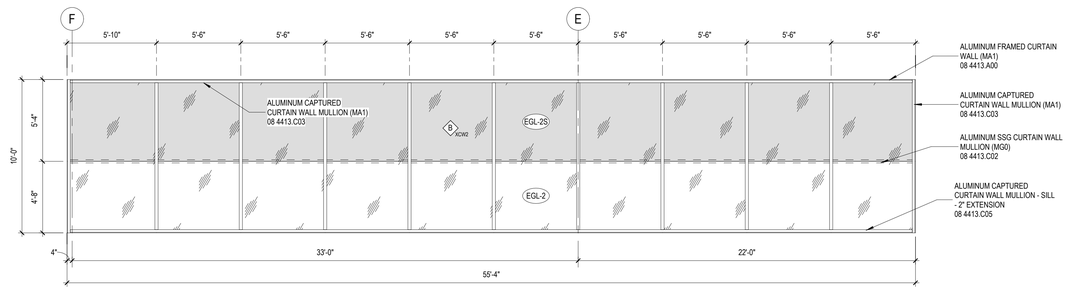


5 A220 CW ELEVATION 'C3' + 'C4' - LEVEL 01 SOUTH ELEVATION
1/4" = 1'-0"

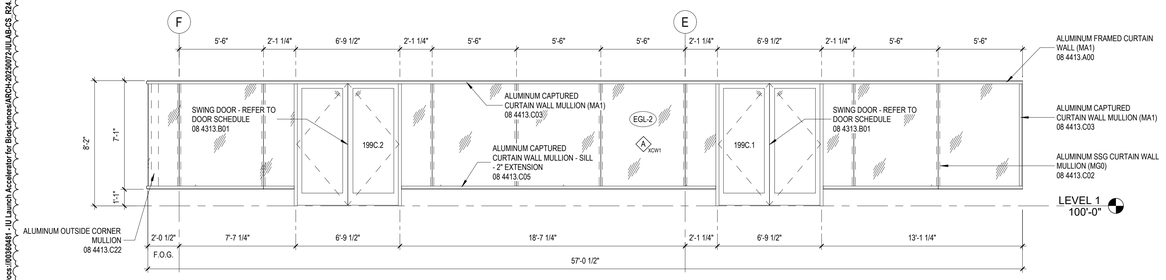
4 A220 CW ELEVATION 'C2' - LEVEL 01 SOUTH ELEVATION
1/4" = 1'-0"



3 A220 CW ELEVATION 'C1' - LEVEL 01 SOUTH ELEVATION
1/4" = 1'-0"



2 A220 CW ELEVATION 'B' - LEVEL 01 EAST ELEVATION - CLEARSTORY
1/4" = 1'-0"



1 A220 CW ELEVATION 'A' - LEVEL 01 EAST ELEVATION
1/4" = 1'-0"

EXTERIOR GLAZING LEGEND

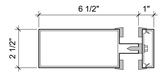
EGL-1	• VIRACON, SPANDREL 1" INSULATING LOW E GLASS: • OUTSIDE LITE 1/4 PURE MID IRON, LOW-E ON #2 SURFACE (HEAT-STRENGTHENED) • 1/2" AIR SPACE • INSIDE LITE 1/4" CLEAR WITH SPD PAINTED COATING ON #4 SURFACE • WHERE TEMPERED UNITS ARE REQUIRED BY CODE AND/OR CALLED OUT ON THE DRAWING, JUST INTERIOR PANEL SHALL BE TEMPERED
EGL-1S	• VIRACON, SPANDREL 1" INSULATING LOW E GLASS: • OUTSIDE LITE 1/4 CLEAR, LOW-E ON #2 SURFACE (HEAT-STRENGTHENED) • 1/2" AIR SPACE • INSIDE LITE 1/4" CLEAR WITH SPD PAINTED COATING ON #4 SURFACE • WHERE TEMPERED UNITS ARE REQUIRED BY CODE AND/OR CALLED OUT ON THE DRAWING, JUST INTERIOR PANEL SHALL BE TEMPERED
EGL-2	• VIRACON VNE35-63, 1" INSULATING LOW E GLASS • OUTSIDE LITE 1/4 PURE MID IRON, LOW-E #2 SURFACE (HEAT-STRENGTHENED) • 1/2" AIR SPACE • 1/4" CLEAR (ANNEALED) • WHERE TEMPERED UNITS ARE REQUIRED BY CODE AND/OR CALLED OUT ON THE DRAWING, JUST INTERIOR PANEL SHALL BE TEMPERED
EGL-2S	• VIRACON, SPANDREL 1" INSULATING LOW E GLASS: • OUTSIDE LITE 1/4 PURE MID IRON, LOW-E ON #2 SURFACE (HEAT-STRENGTHENED) • 1/2" AIR SPACE • INSIDE LITE 1/4" CLEAR WITH SPD PAINTED COATING ON #4 SURFACE • WHERE TEMPERED UNITS ARE REQUIRED BY CODE AND/OR CALLED OUT ON THE DRAWING, JUST INTERIOR PANEL SHALL BE TEMPERED

CURTAIN WALL MULLION LEGEND

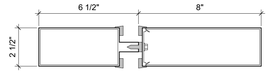
NOTES

CURTAIN WALL ASSEMBLIES TO BE DUAL-FINISH:
1. EXTERIOR MULLION CAP FINISH TO BE **AL1** UNLESS OTHERWISE NOTED.
2. INTERIOR MULLION FINISH TO BE **AL2** UNLESS OTHERWISE NOTED.
3. PROVIDE ALIGNMENT PINS AND END CAPS, TYPICAL.

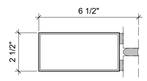
MA1
MA1 CW MULLION
08 4413.D01



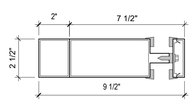
MA8
MA8 CW MULLION
08 4413.D02



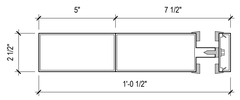
MG0
MG0 CW MULLION
08 4413.D60



MA1.2
ALUMINUM CAPTURED CURTAIN WALL MULLION - SILL - 2" EXTENSION
08 4413.C05



MA1.5
ALUMINUM CAPTURED CURTAIN WALL MULLION - SILL - 5" EXTENSION
08 4413.C06



ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

JAMES JOHN JONES
REGISTERED
No. AR10400213 STATE OF INDIANA
ARCHITECT

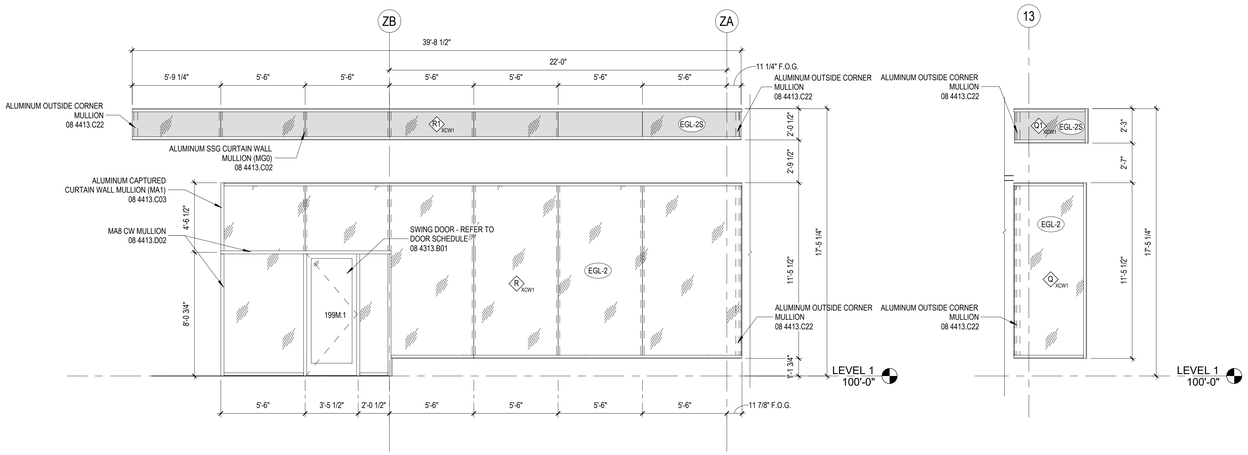
EXTERIOR CURTAINWALL ELEVATIONS

DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

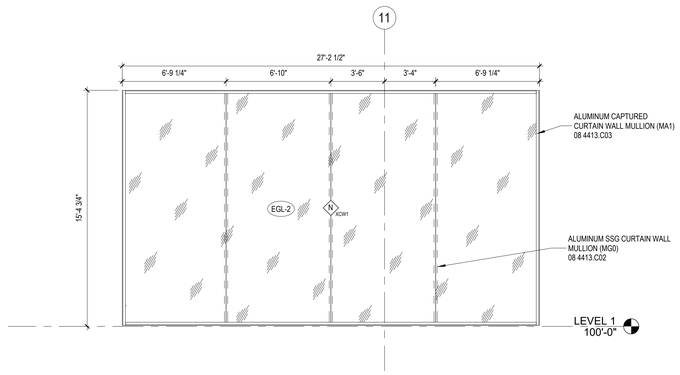
A220

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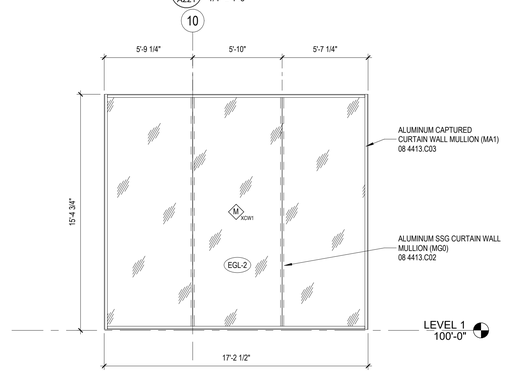
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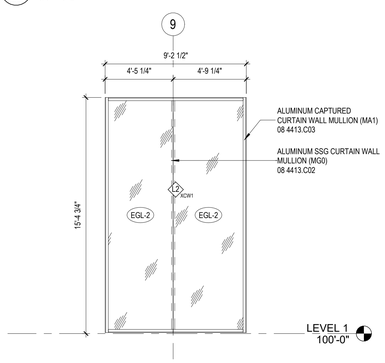
11 A221 CW ELEVATION 'R' + 'R1' - LEVEL 01 EAST ELEVATION
1/4" = 1'-0"



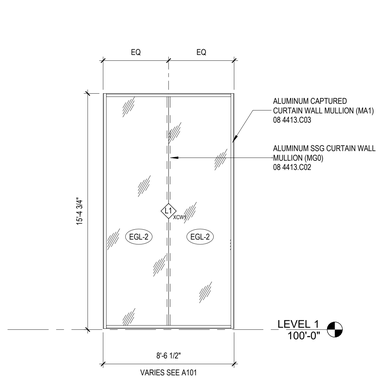
10 A221 CW ELEVATION 'Q' + 'Q1' - LEVEL 01 NORTH ELEVATION
1/4" = 1'-0"



9 A221 CW ELEVATION 'N' - LEVEL 01 NORTH ELEVATION
1/4" = 1'-0"

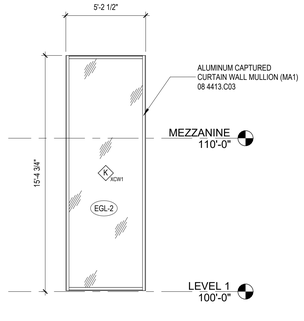


8 A221 CW ELEVATION 'M' - LEVEL 01 NORTH ELEVATION
1/4" = 1'-0"

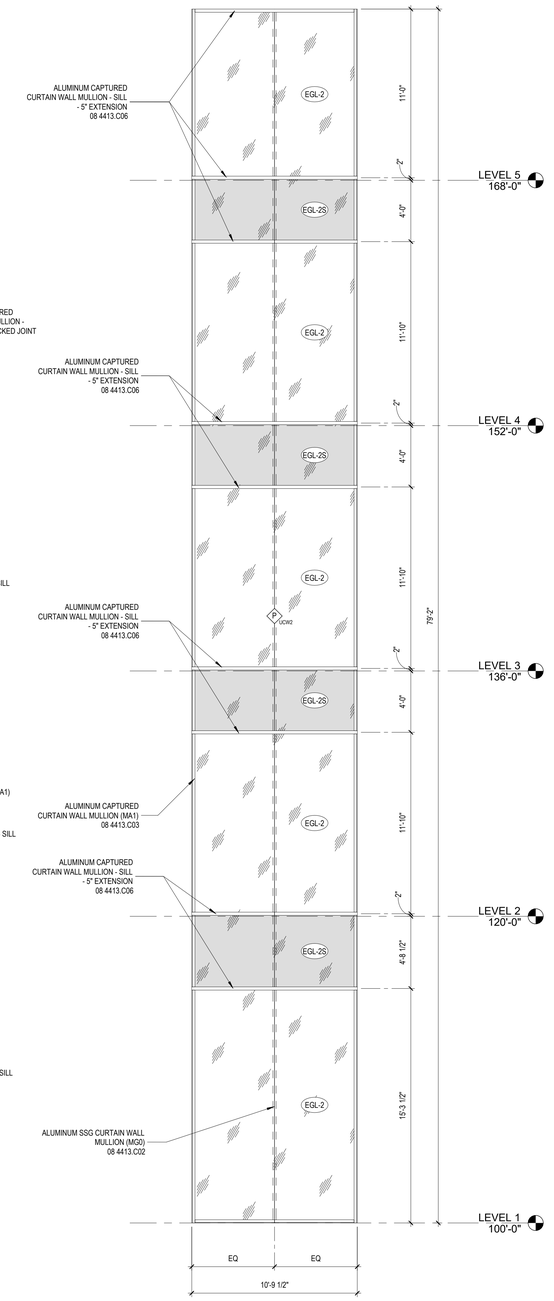


7 A221 CW ELEVATION ' L2' - LEVEL 01 NORTH ELEVATION
1/4" = 1'-0"

6 A221 CW ELEVATION ' L1' - LEVEL 01 NORTH ELEVATION
1/4" = 1'-0"

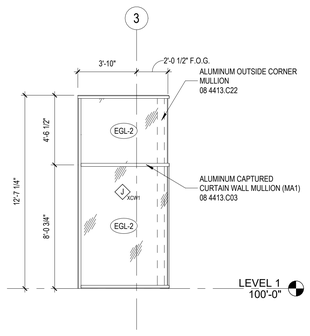


5 A221 CW ELEVATION 'K' - LEVEL 01 NORTH ELEVATION
1/4" = 1'-0"

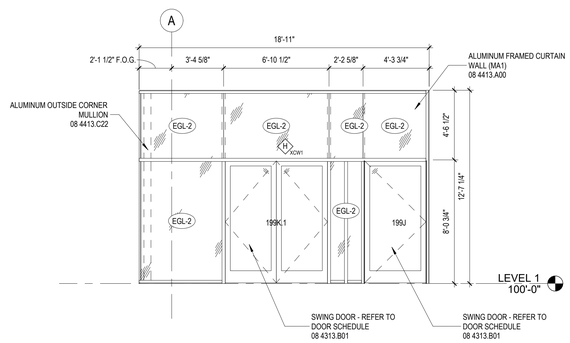


4 A221 CW ELEVATION 'P' - LEVEL 01 NORTH ELEVATION - A
1/4" = 1'-0"

3 A221 CW ELEVATION 'J' - LEVEL 01 NORTH ELEVATION
1/4" = 1'-0"



2 A221 CW ELEVATION 'H' - LEVEL 01 WEST ELEVATION
1/4" = 1'-0"



1 A221 CW ELEVATION 'G' - LEVEL 01 NORTH ELEVATION
1/4" = 1'-0"

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

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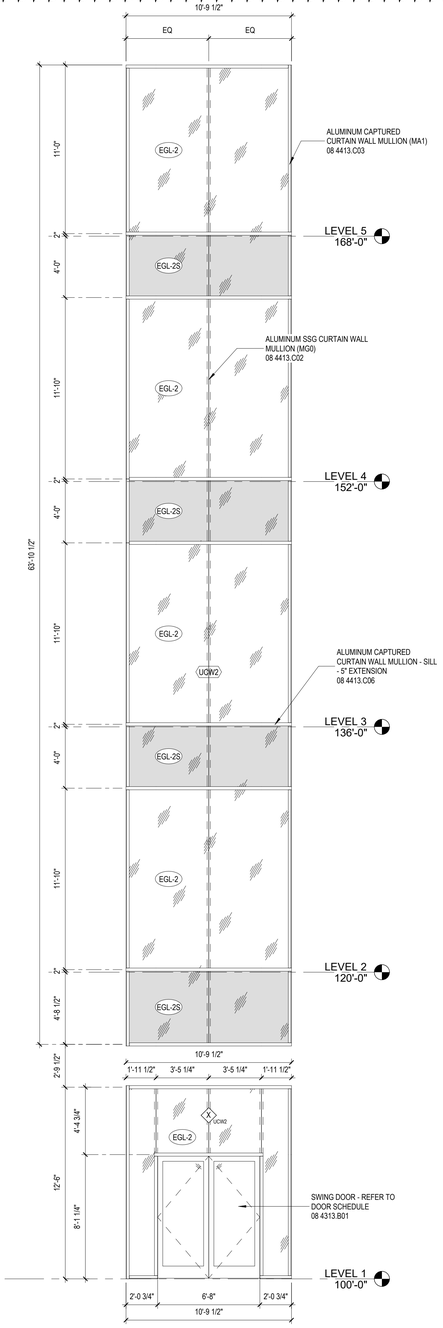
EXTERIOR CURTAINWALL ELEVATIONS

DATE — REF: SHEET INDEX
BSA PROJECT NO. — 00360481

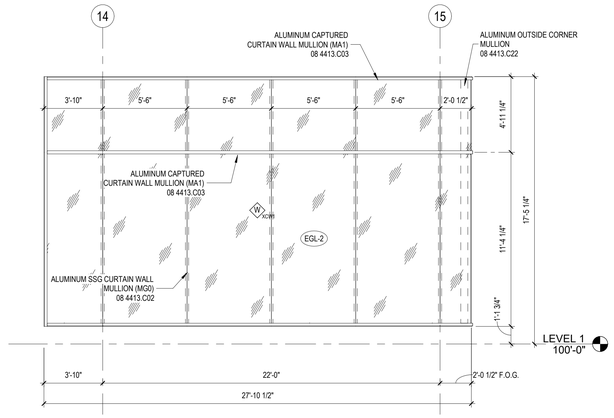
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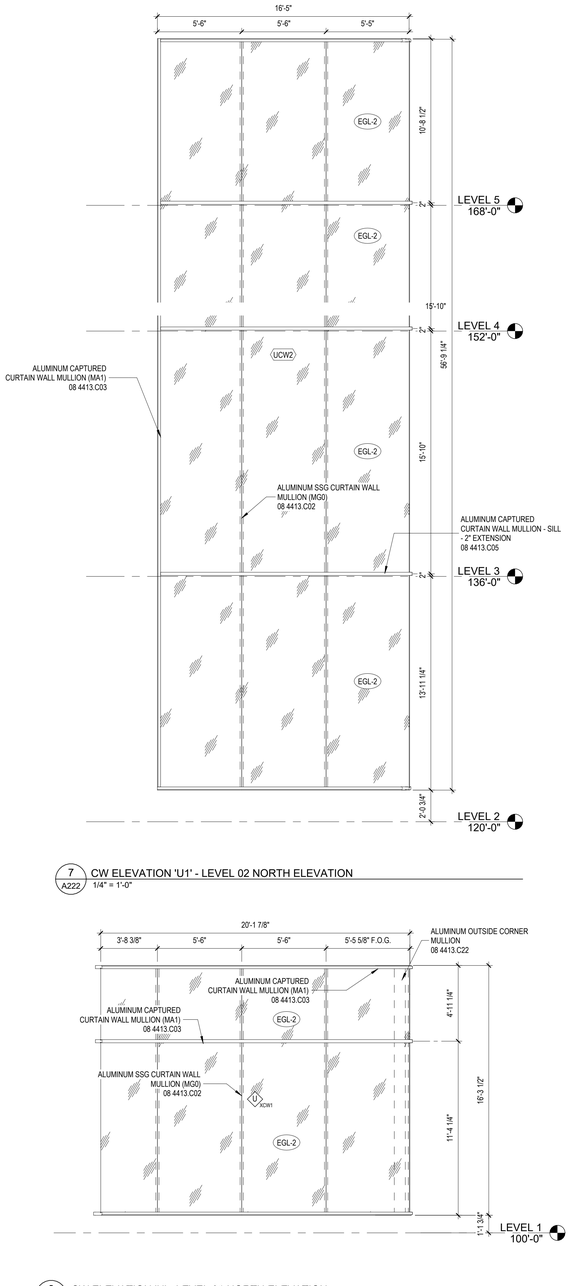
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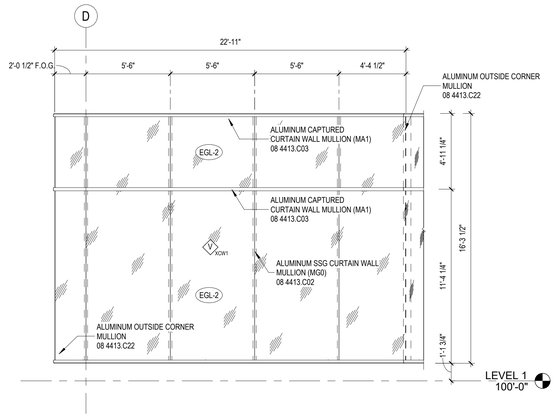
6 A222 CW ELEVATION 'X' - LEVEL 01 EAST ELEVATION - B
1/4" = 1'-0"



5 A222 CW ELEVATION 'W' - LEVEL 01 EAST ELEVATION
1/4" = 1'-0"

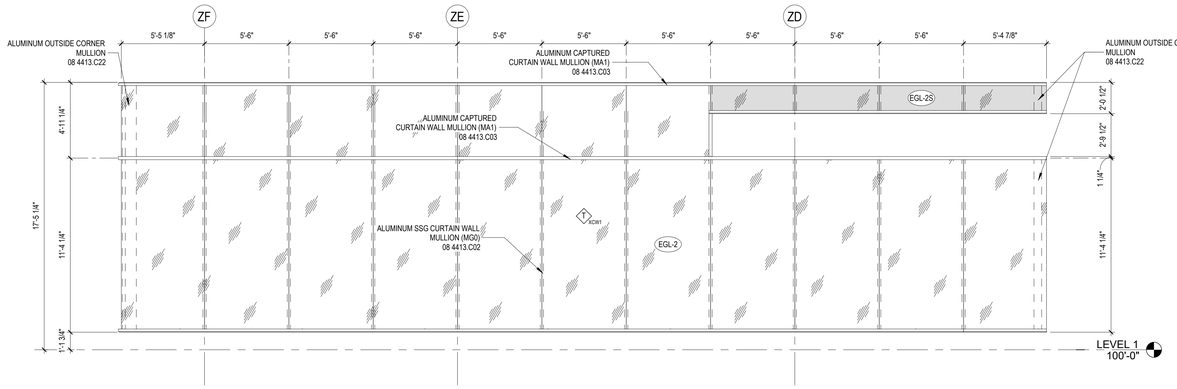


7 A222 CW ELEVATION 'U1' - LEVEL 02 NORTH ELEVATION
1/4" = 1'-0"

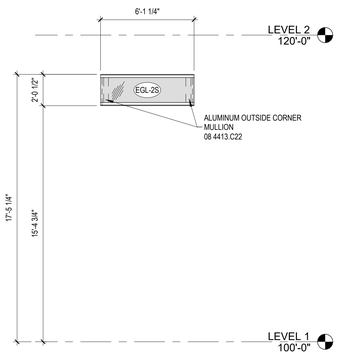


4 A222 CW ELEVATION 'V' - LEVEL 01 NORTH ELEVATION
1/4" = 1'-0"

3 A222 CW ELEVATION 'U' - LEVEL 01 NORTH ELEVATION
1/4" = 1'-0"



2 A222 CW ELEVATION 'T' - LEVEL 01 EAST ELEVATION
1/4" = 1'-0"



1 A222 CW ELEVATION 'S1' - LEVEL 01 NORTHEAST ELEVATION
1/4" = 1'-0"

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CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2026	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

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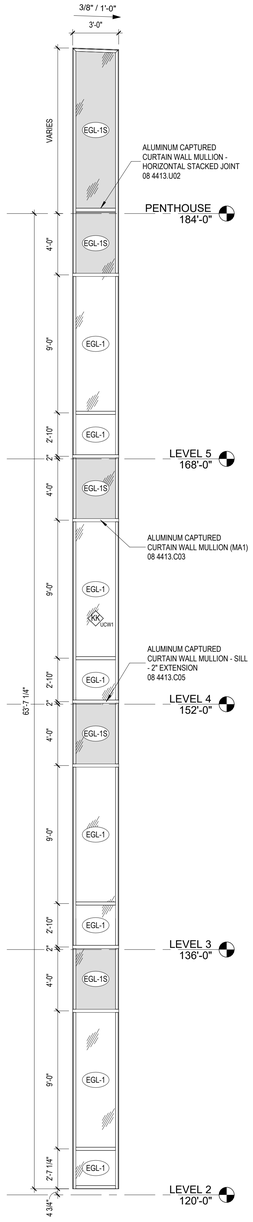
EXTERIOR CURTAINWALL ELEVATIONS

DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

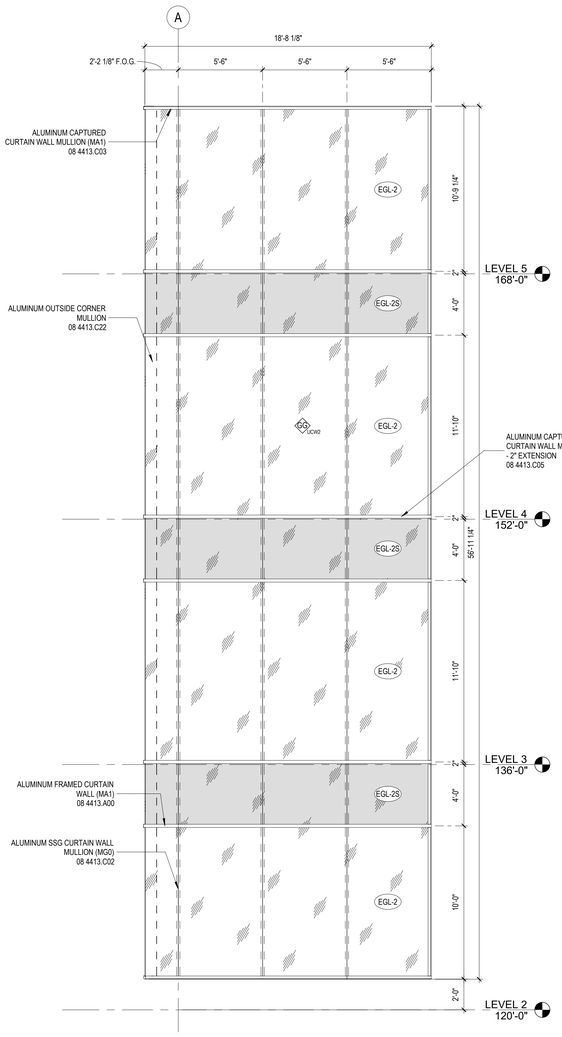
A222

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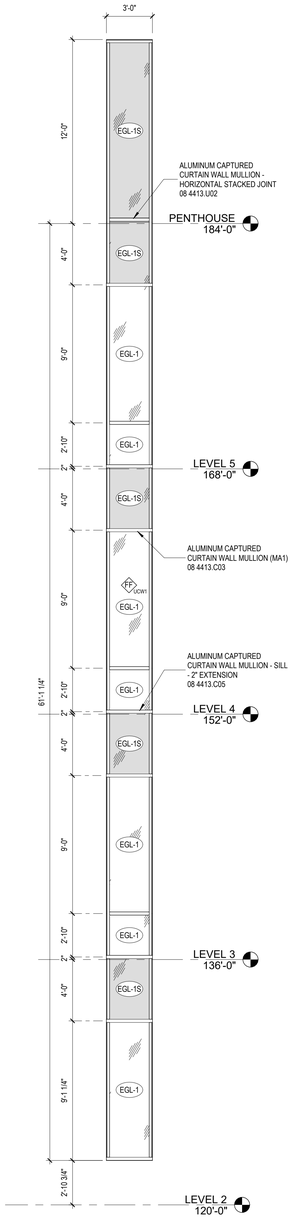
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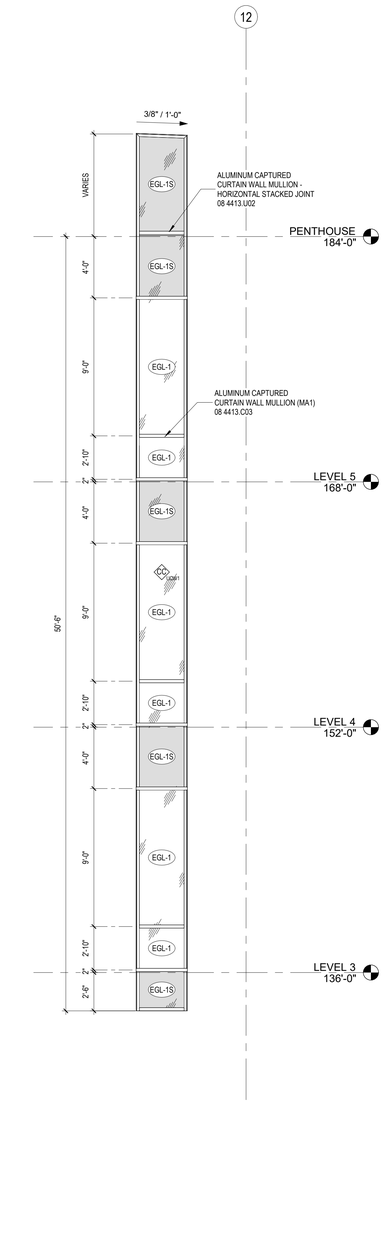
7 A223 CW ELEVATION 'KK' - 02 EAST ELEVATION
1/4" = 1'-0"



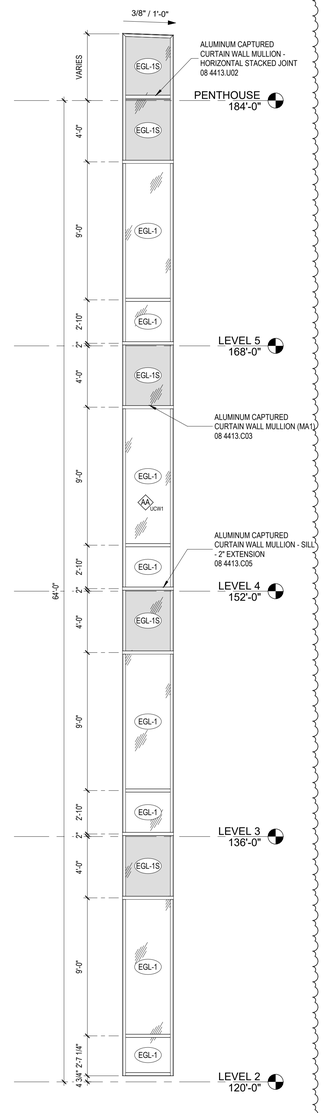
6 A223 CW ELEVATION 'GG' - LEVEL 02 NORTHWEST ELEVATION (ALIGNED)
1/4" = 1'-0"



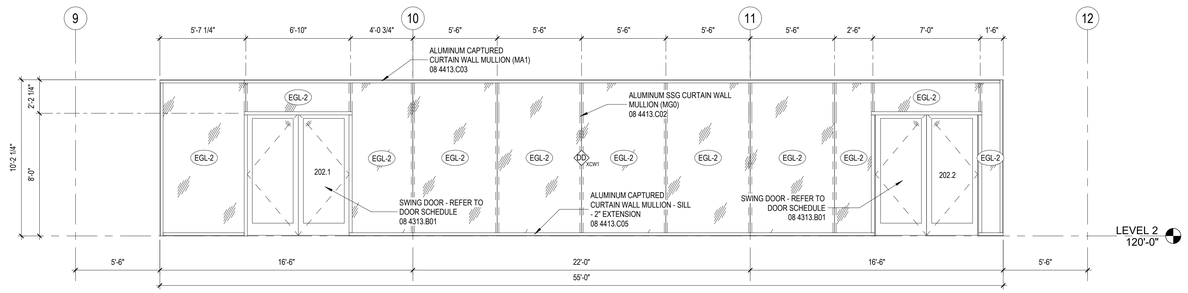
5 A223 CW ELEVATION 'FF'- LEVEL 02 WEST ELEVATION (ALIGNED)
1/4" = 1'-0"



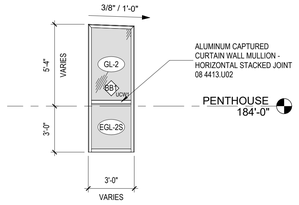
4 A223 CW ELEVATION 'CC' - LEVEL 02 SOUTH ELEVATION
1/4" = 1'-0"



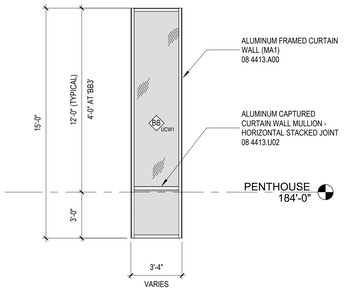
3 A223 CW ELEVATION 'AA' - LEVEL 02 SOUTH ELEVATION
1/4" = 1'-0"



2 A223 CW ELEVATION 'DD' - LEVEL 02 SOUTH ELEVATION - D
1/4" = 1'-0"



1A A223 CW ELEVATION 'BB1' - LEVEL PH SOUTH ELEVATION - B
1/4" = 1'-0"



8 A223 CW ELEVATION 'BB' - LEVEL PH NORTHEAST ELEVATION
1/4" = 1'-0"

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CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

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12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN HUDSON REGISTERED No. AR10400213 STATE OF INDIANA LICENSED ARCHITECT

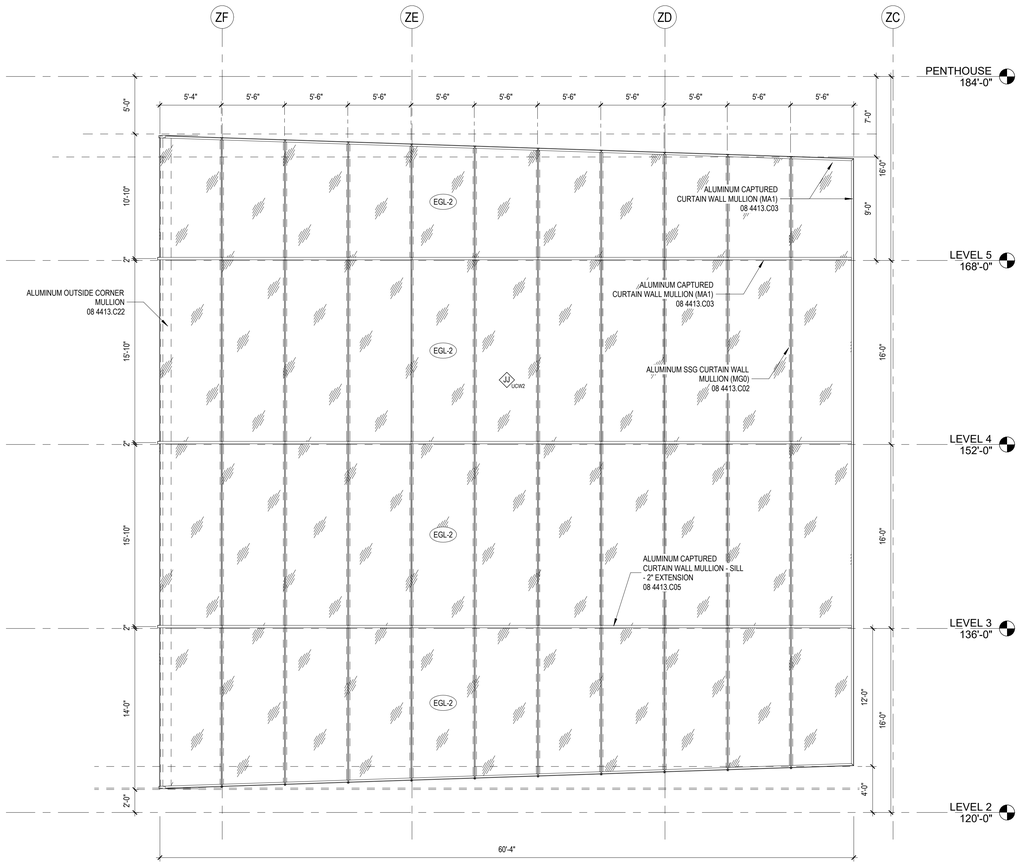
EXTERIOR CURTAINWALL ELEVATIONS

DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

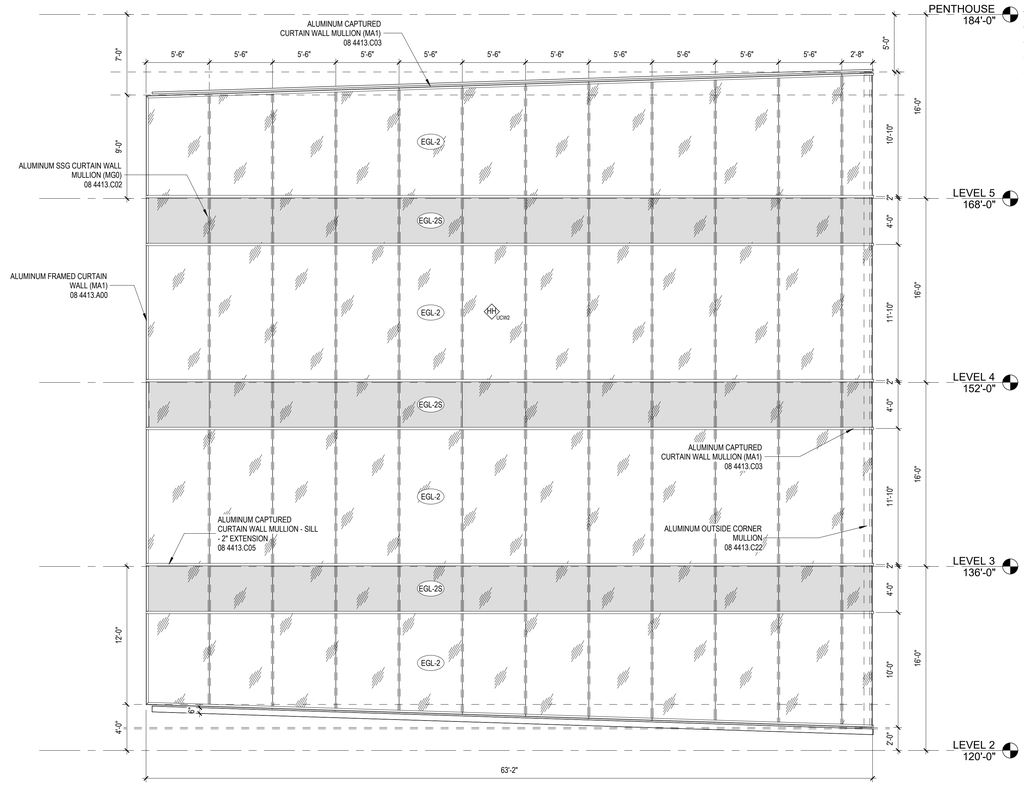
A223

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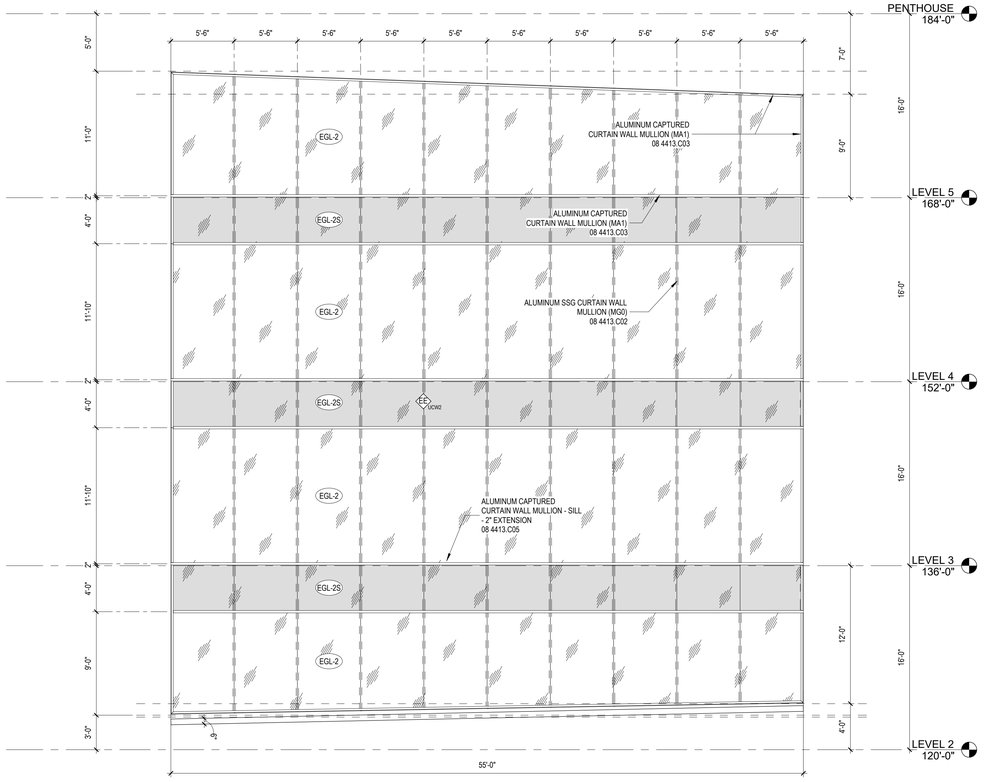
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Autodesk Docs://00360481 - IU Launch Accelerator for Biosciences/ARCH-20250973AILAB-CS_R24.rvt



3 A224 CW ELEVATION 'JJ' E
3/16" = 1'-0"



2 A224 CW ELEVATION 'HH' N
3/16" = 1'-0"



12

1 A224 CW ELEVATION 'EE' - LEVEL 02 SOUTH ELEVATION
3/16" = 1'-0"

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN DUNN
REGISTERED
No. AR10400213
STATE OF
INDIANA
ARCHITECT

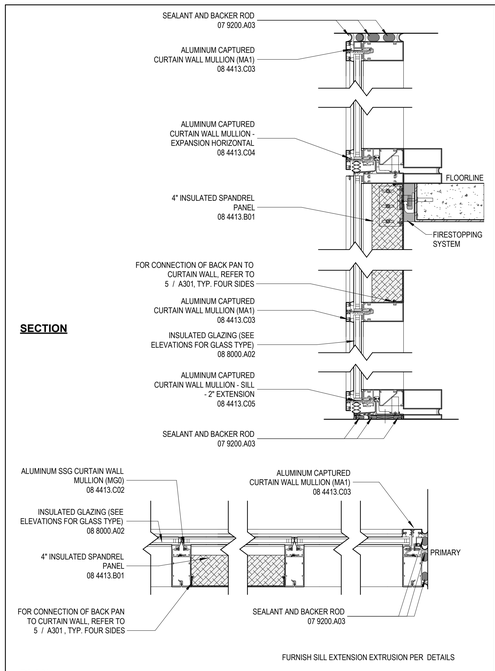
EXTERIOR CURTAINWALL ELEVATIONS

DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

A224

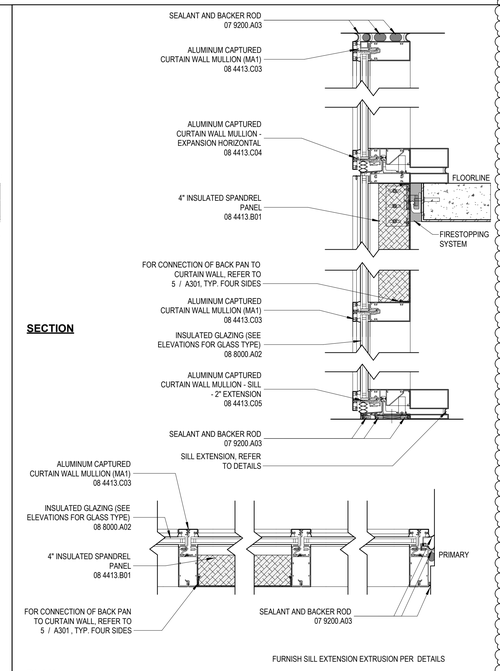
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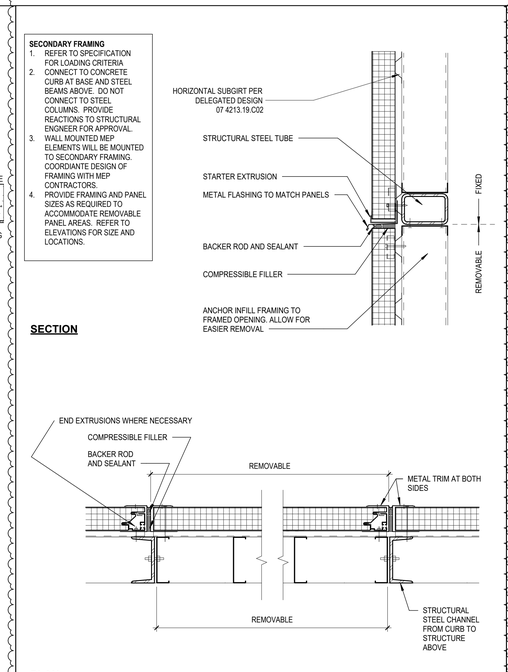
UCW2 **7 1/2" UNTIZED ALUMINUM CURTAIN WALL SYSTEM. 2 SIDED STRUCTURALLY VERTICALLY GLAZED AND HORIZONTALLY CAPTURED**

MARK	DESCRIPTION OF MINOR VARIATION



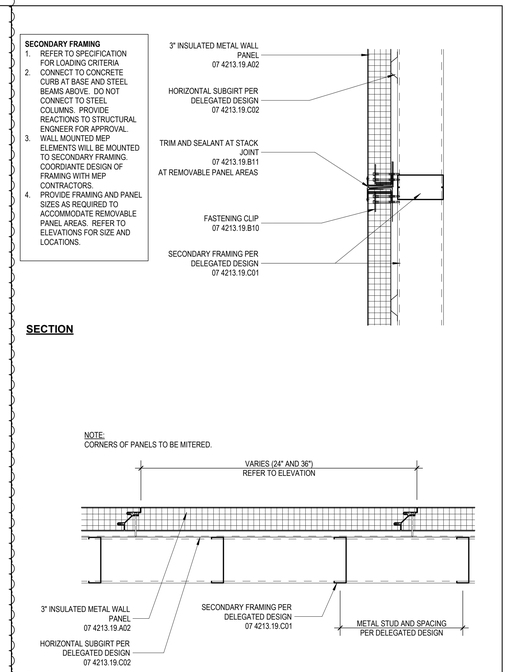
UCW1 **7 1/2" UNITIZED ALUMINUM CURTAIN WALL SYSTEM. 4 SIDED CAPTURED**

MARK	DESCRIPTION OF MINOR VARIATION



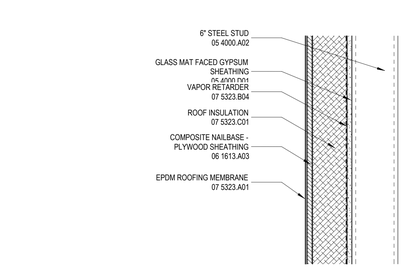
W5.1 **INSULATED METAL PANEL - REMOVABLE**

MARK	DESCRIPTION OF MINOR VARIATION



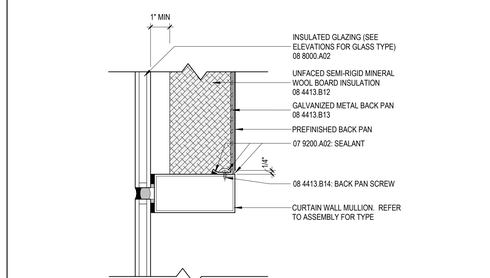
W5 **INSULATED METAL PANEL ON SECONDRY FRAMING**

MARK	DESCRIPTION OF MINOR VARIATION

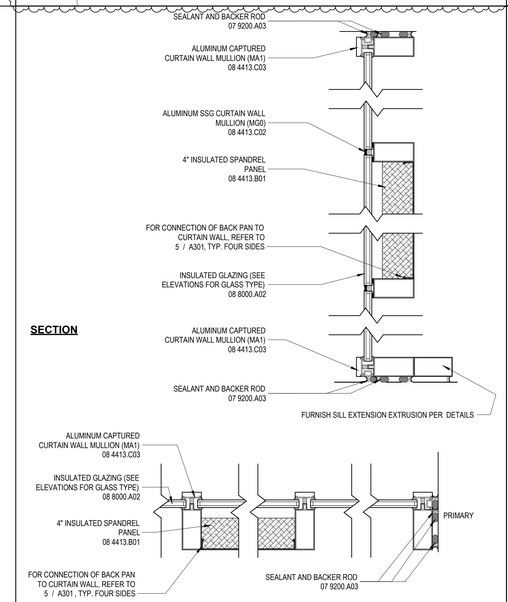


W6 **BACK OF PARAPET**

MARK	DESCRIPTION OF MINOR VARIATION

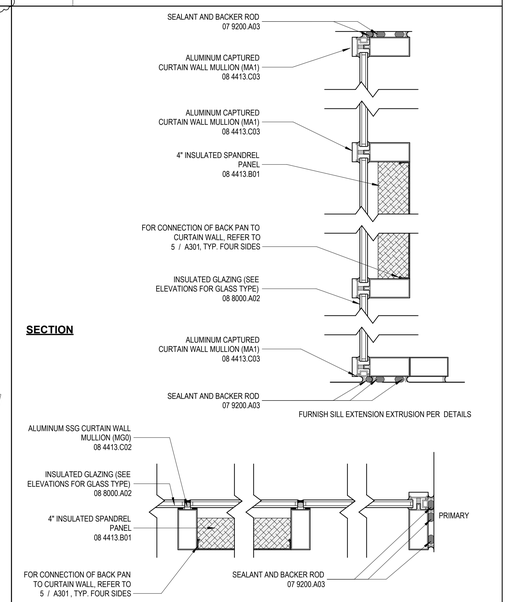


5 A301 CURTAIN WALL SPANDREL GLASS PANEL WITH BACK PAN
3" = 1'-0"



XCW2 **7 1/2" ALUMINUM CURTAIN WALL SYSTEM. 2 SIDED STRUCTURALLY HORIZONTALLY GLAZED AND VERTICALLY CAPTURED.**

MARK	DESCRIPTION OF MINOR VARIATION



XCW1 **7 1/2" ALUMINUM CURTAIN WALL SYSTEM. 2 SIDED STRUCTURALLY VERTICALLY GLAZED AND HORIZONTALLY CAPTURED.**

MARK	DESCRIPTION OF MINOR VARIATION

BSA LifeStructures
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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

JOHN JOSEPH ANDERSON REGISTERED No. AR10400213 STATE OF INDIANA ARCHITECT

BUILDING ASSEMBLY TYPES - VERTICAL

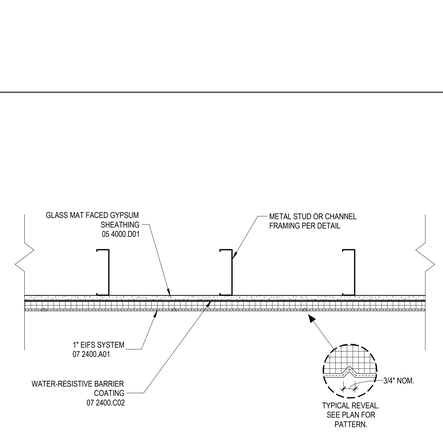
DATE REF: SHEET INDEX

BSA PROJECT NO. 00360481

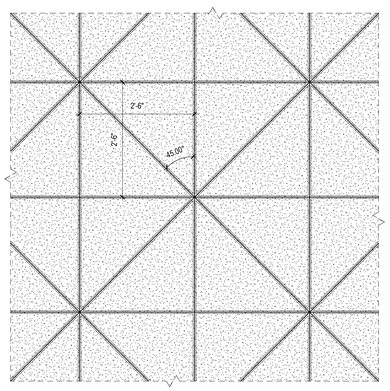
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SECTION

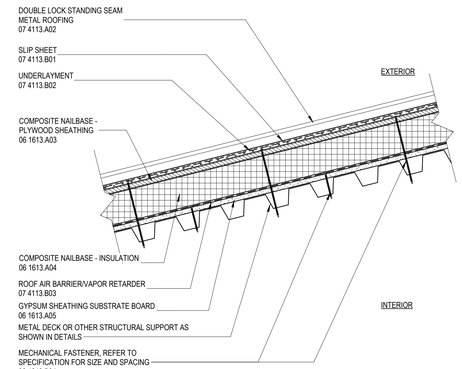


PLAN

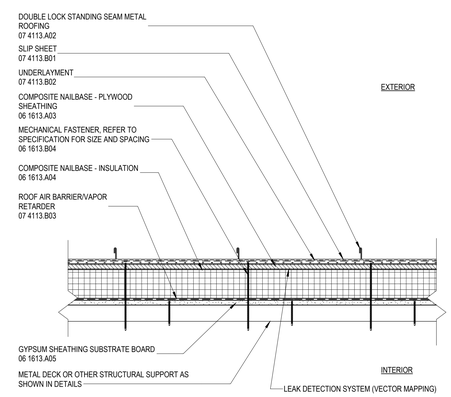
S1 **E.I.F.S SOFFIT**

Continuous R-20

MARK	DESCRIPTION OF MINOR VARIATION



LONGITUDINAL (WITH SLOPE) SECTION

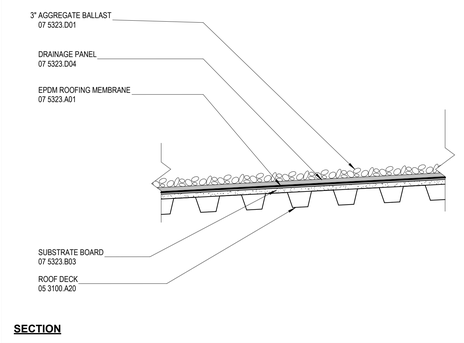


CROSS SECTION (PERPENDICULAR TO SLOPE)

R4 **METAL ROOFING**

Continuous R-20

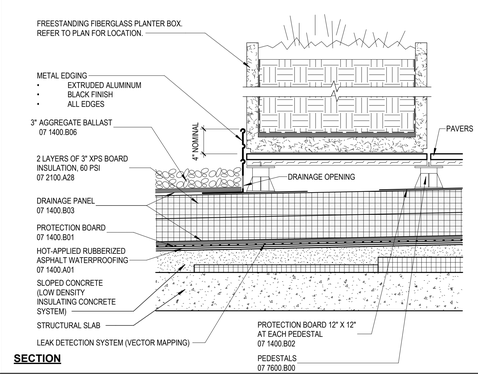
MARK	DESCRIPTION OF MINOR VARIATION



SECTION

R3 **SINGLE PLY EDPM ON SHEATHING ON SLOPED METAL DECK**

MARK	DESCRIPTION OF MINOR VARIATION
R3.1	OMIT DECORATIVE BALLAST AND DRAINAGE BOARD (ASSEMBLY AT SOLAR ARRAY INSTALLATION)

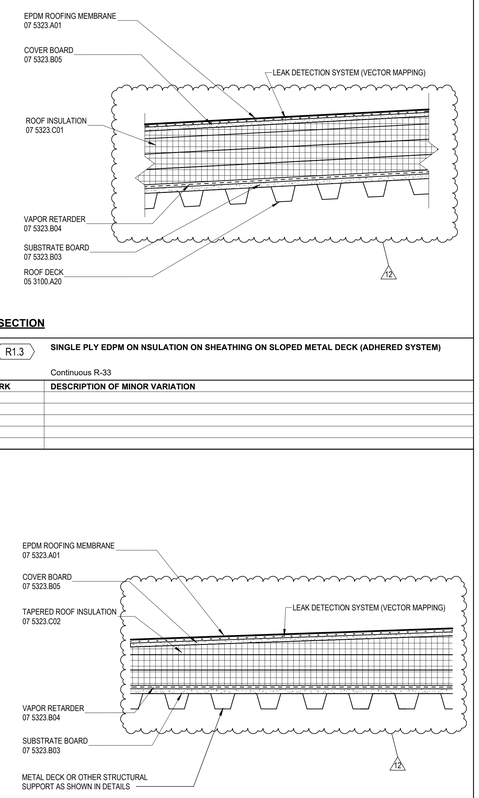


SECTION

R2 **PAVERS, INSULATION, RUBBERIZED ASPHALT ROOFING**

Continuous R-20

MARK	DESCRIPTION OF MINOR VARIATION

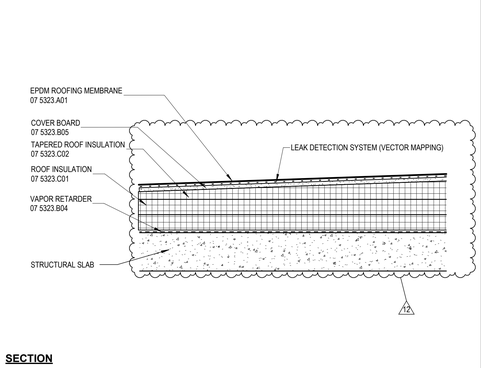


SECTION

R1.2 **SINGLE PLY EDPM ON TAPERED INSULATION ON SHEATHING ON METAL DECK (ADHERED SYSTEM)**

Continuous R-20 ci & R-33 Average Insulation

MARK	DESCRIPTION OF MINOR VARIATION



SECTION

R1.1 **SINGLE PLY EDPM ON TAPERED INSULATION ON SHEATHING ON CONCRETE (ADHERED SYSTEM)**

Continuous R-20 ci & R-33 Average Insulation

MARK	DESCRIPTION OF MINOR VARIATION
R1.4	ADD 3/4" DRAINAGE BOARD AND DECORATIVE AGGREGATE BALLAST

SECTION

R1.3 **SINGLE PLY EDPM ON NSULATION ON SHEATHING ON SLOPED METAL DECK (ADHERED SYSTEM)**

Continuous R-33

MARK	DESCRIPTION OF MINOR VARIATION

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175 S. Rangeline Rd, Suite 200
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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
10	01/07/2025	BP3-CD: ADDENDUM 01
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN CULLEN
REGISTERED
No. AR10400213
STATE OF
INDIANA
ARCHITECT

BUILDING ASSEMBLY TYPES - HORIZONTAL

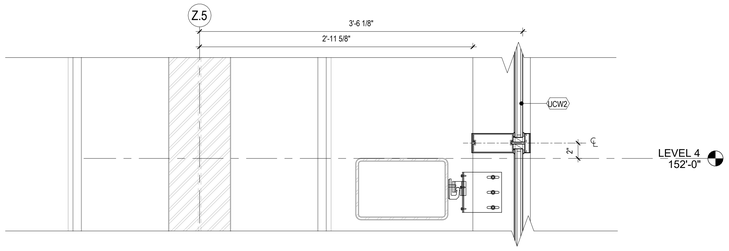
DATE REF: SHEET INDEX

BSA PROJECT NO. 00360481

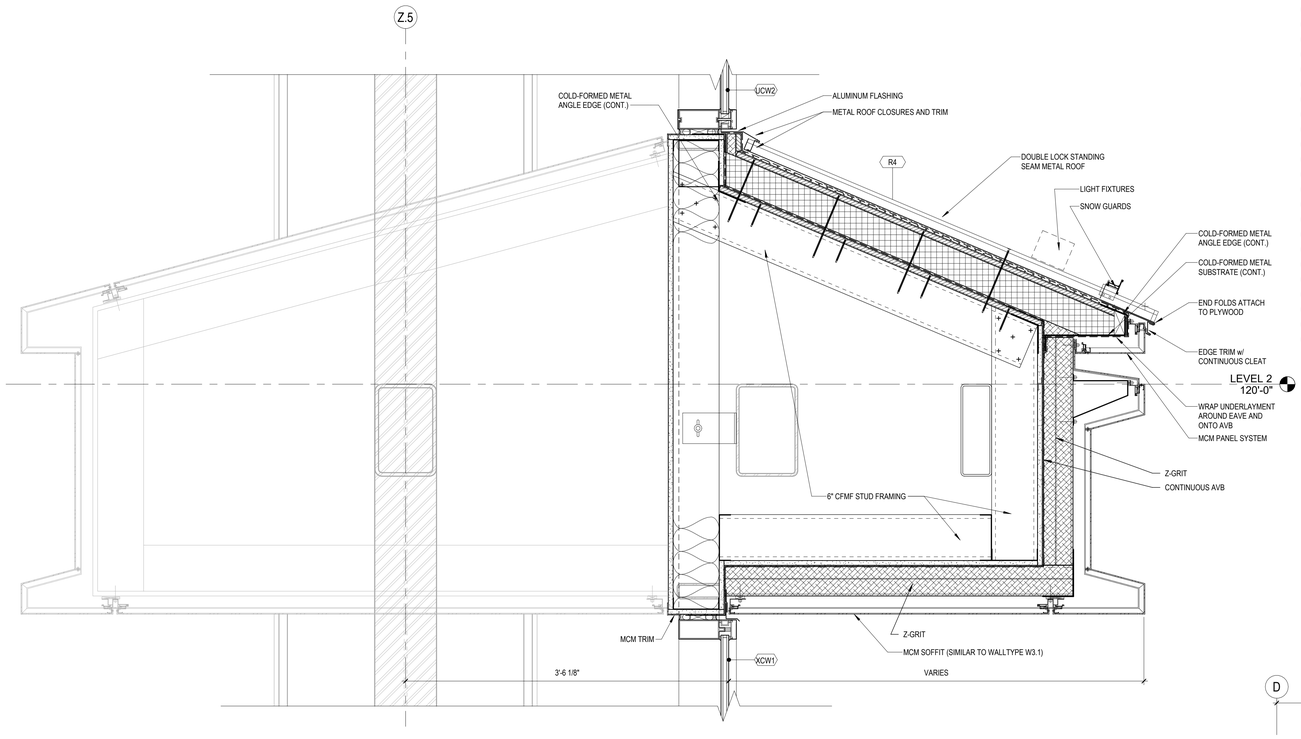
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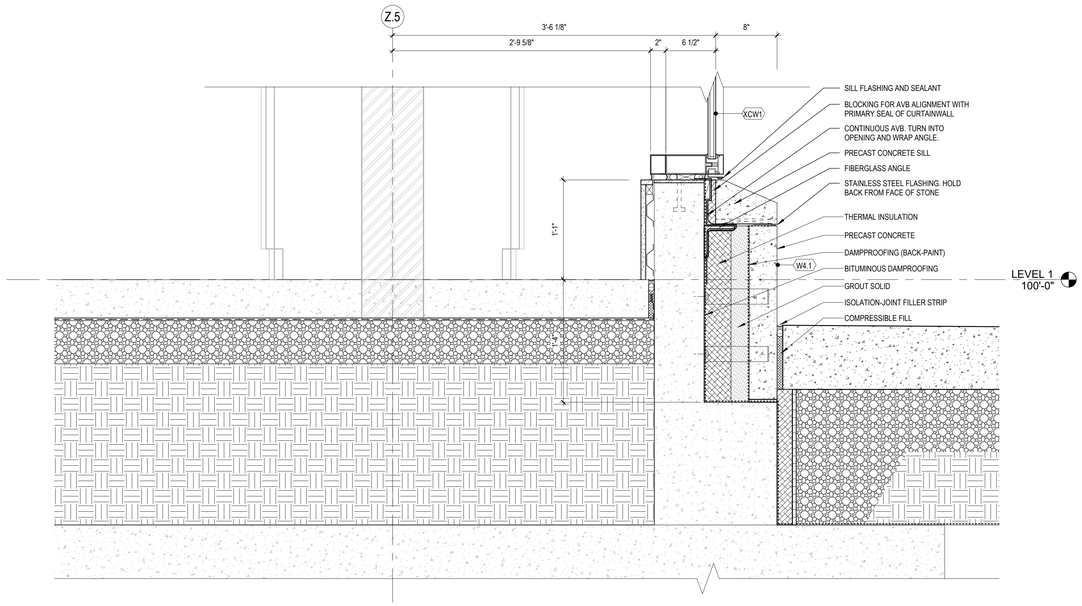
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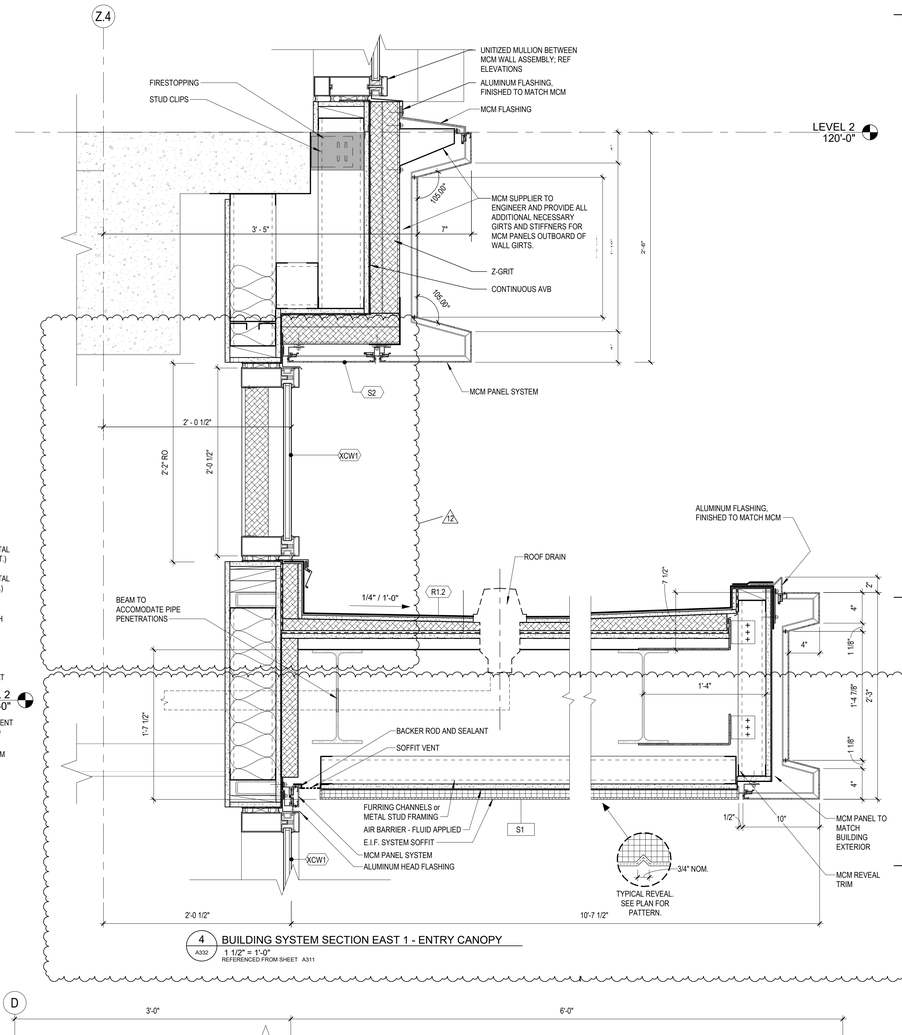
2 A332 BUILDING SYSTEM SECTION EAST 2 - HORIZONTAL BEAM CONNECTION
1 1/2" = 1'-0"
REFERENCED FROM SHEET A311



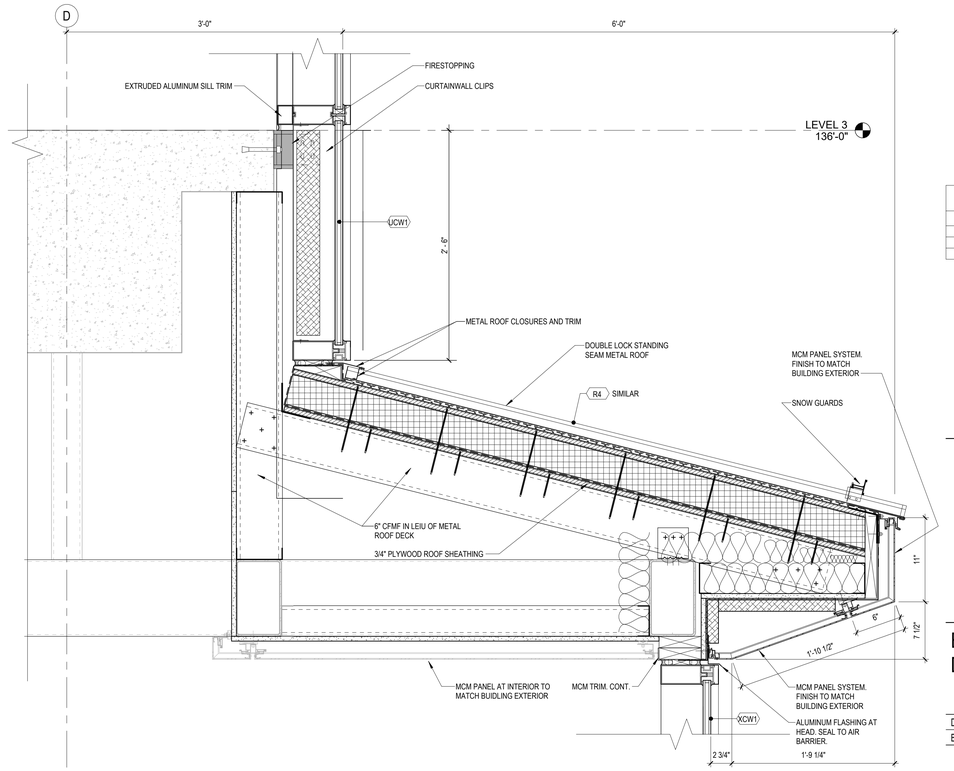
1 A332 BUILDING SYSTEM SECTION EAST 2 - SLOPED ROOF AT EAST CW CUT
1 1/2" = 1'-0"
REFERENCED FROM SHEET A311



7 A332 BUILDING SYSTEM SECTION EAST 2 - TYP BASE DETAIL AT EAST C.W.
1 1/2" = 1'-0"
REFERENCED FROM SHEET A311



4 A332 BUILDING SYSTEM SECTION EAST 1 - ENTRY CANOPY
1 1/2" = 1'-0"
REFERENCED FROM SHEET A311



3 A332 BUILDING SYSTEM SECTION SOUTH 5 - PODIUM PLAZA ACCESS PORTAL HEAD
1 1/2" = 1'-0"
REFERENCED FROM SHEET A312

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
10	01/07/2025	BP3-CD: ADDENDUM 01
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN WITTE REGISTERED ARCHITECT No. AR10400213 STATE OF INDIANA

EXTERIOR SECTION DETAILS

DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

A332

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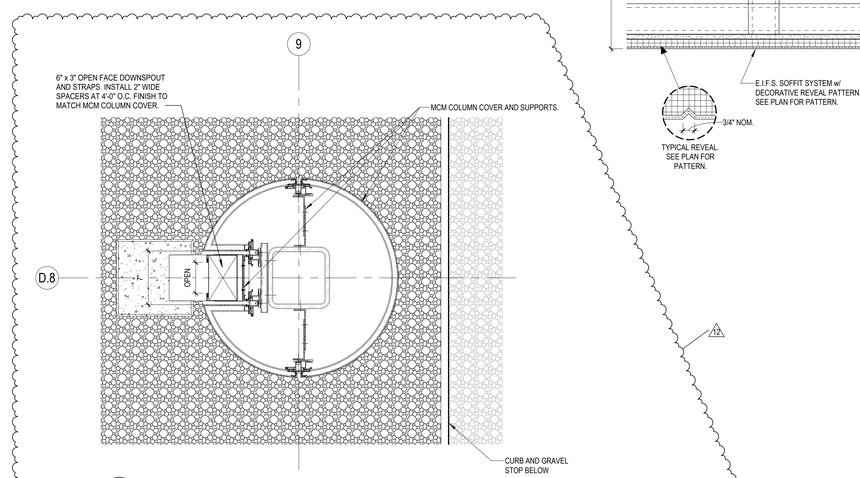
DETAILS LEGEND

LEGEND APPLIES TO ALL A300 SERIES

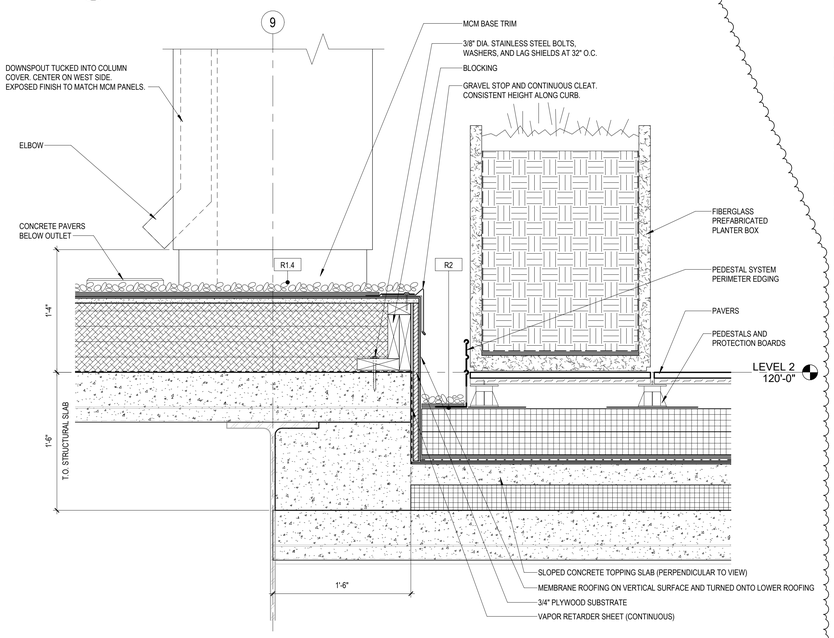
- BRICK
- C.M.U.
- RIGID INSUL.
- STEEL
- RECONSTRUCTED STONE
- SOLID GROUT
- CONCRETE
- SPRAY-APPLIED CLOSED CELL INSULATION WITH SPRAY-APPLIED FIRE RATED BARRIER ON EXPOSED SURFACES
- FIRESTOPPING ASSEMBLY
- BATT INSULATION
- METAL STUD
- RUNNER TRACK
- WEEP OR HEAD VENT
- EXPANSION ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- TERM. BAR & SEALANT
- REINFORCING BAR IN GROUTED CORES
- WOOD BLOCKING
- BACKER ROD & SEALANT

DETAILS GENERAL NOTES

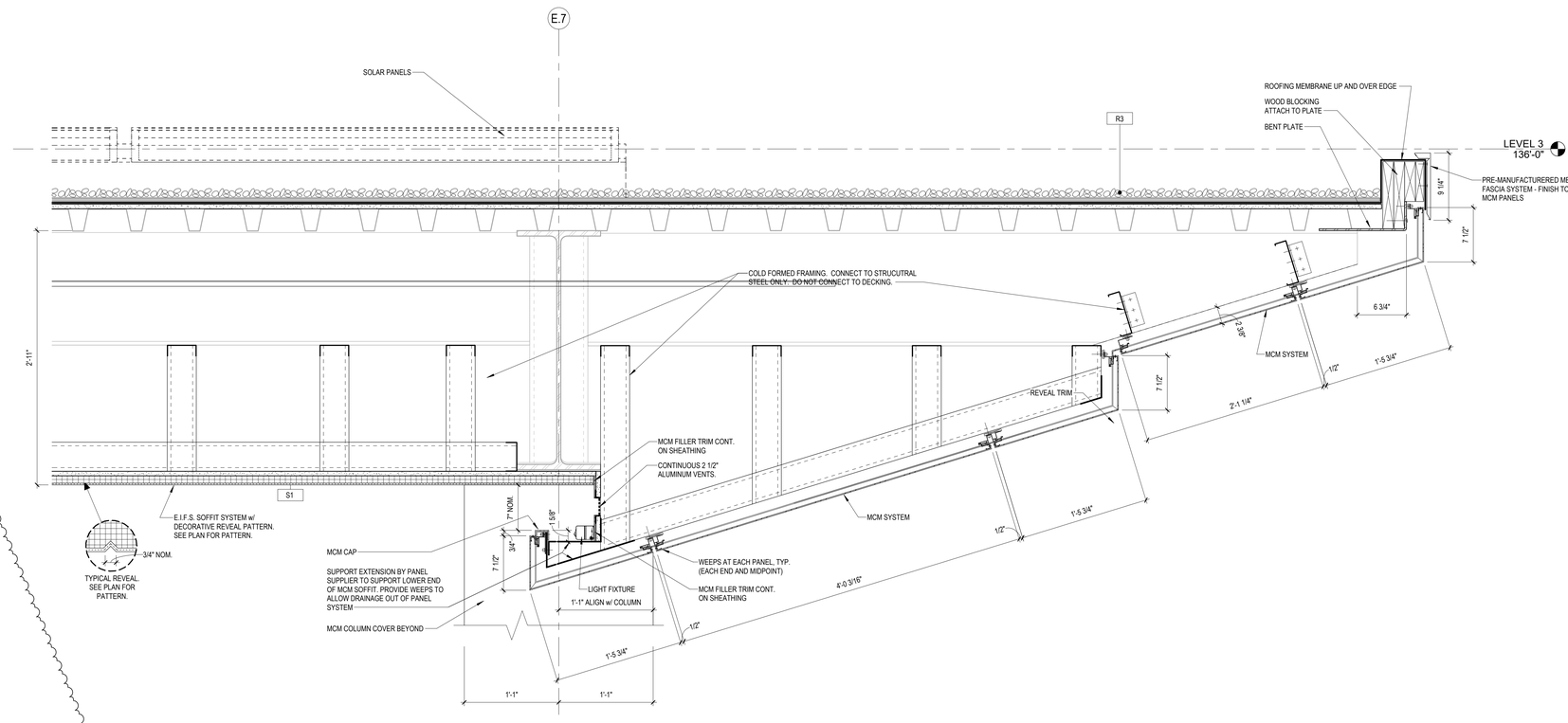
A. REFER TO A300 - A303 FOR TYPICAL EXTERIOR DETAILS.
B. DIMENSIONS ARE TAKEN TO TOP OF BRICK OR STONE. 3/8" JOINT TYPICAL AT VENEER AND MASONRY JOINTS.
C. ALL C.M.U. WALLS TO HAVE HORIZONTAL REINFORCING AT 16" O.C.
D. REFER TO ENLARGED FIN TUBE DRAWINGS FOR EXACT CONFIGURATION.
E. NOTES REPEAT WHERE DRAWN TYPICAL.
F. REFER TO STRUCTURAL FOR ADDITIONAL C.M.U. REINFORCING.
G. COORDINATE EXACT SCOPE OF BID PACKAGES WITH CONSTRUCITON MANAGER. SOME ITEMS SHOWN ARE REFERENCE ONLY.
H. INSTALL FIRE PROOFING PER CODE SUMMARY -TYP. AT STEEL FRAMING. FIREPROOFING MAY NOT BE SHOWN GRAPHICALLY.
J. REFER TO CEILING PLANS FOR EXACT SHADES, BULKHEADS, CEILINGS.
K. FURNISH END CLOSURE CAPS FOR ALL MULLION CAPS, PANEL ENDS WHERE EXPOSED.
L. FURNISH DAMPROOFING ON BACK SIDE OF RECONSTRUCTED STONE ALL LOCATIONS, TYPICAL.
M. FURNISH METAL (PAINTED) BETWEEN SHADE BOX AND CURTAINWALL, TYP.
N. REFER TO ELEVATIONS FOR GLASS TYPES AND 2-WAY OR 4-WAY SYSTEM.



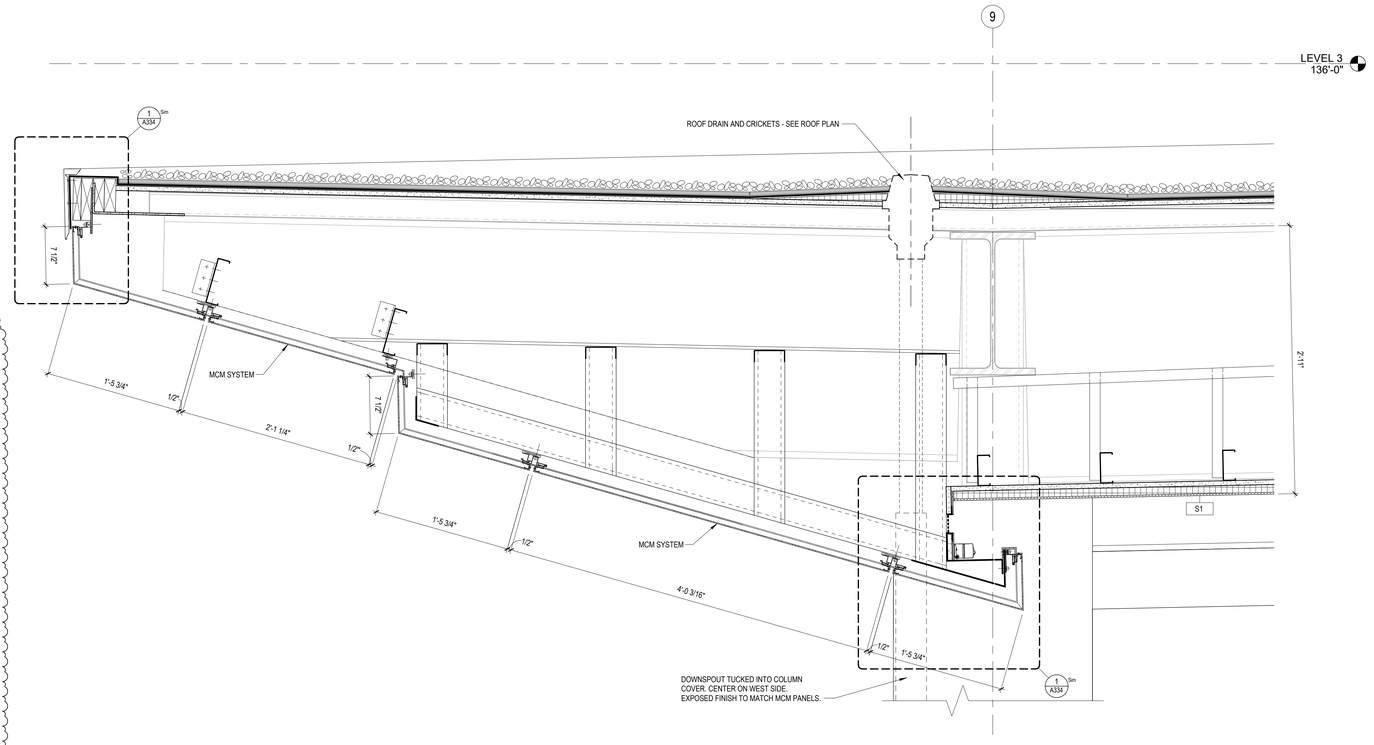
3 A334 PLAN DETAIL
1 1/2" = 1'-0"



2 A334 WALL SECTION DETAIL AT TRANSITION
1 1/2" = 1'-0"



1 A334 SECTION - CANOPY PERIMETER, WEST END
1 1/2" = 1'-0"
REFERENCED FROM SHEET A103



5 A334 BUILDING SYSTEM SECTION SOUTH 2
1 1/2" = 1'-0"
REFERENCED FROM SHEET A103

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

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8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN CULICH REGISTERED No. AR10400213 STATE OF INDIANA ARCHITECT

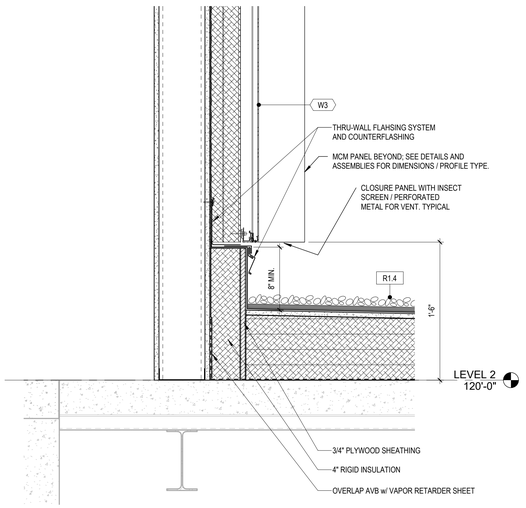
EXTERIOR SECTION DETAILS

DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

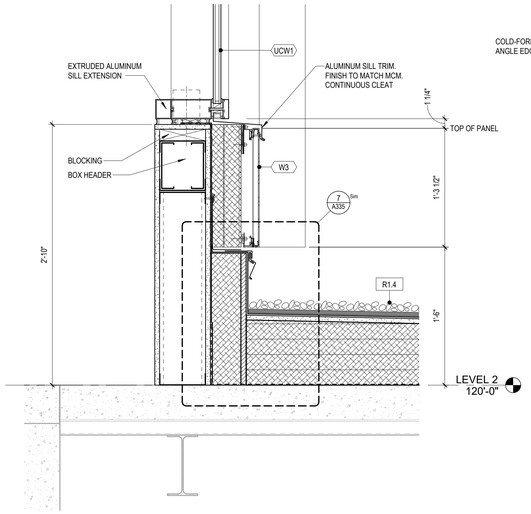
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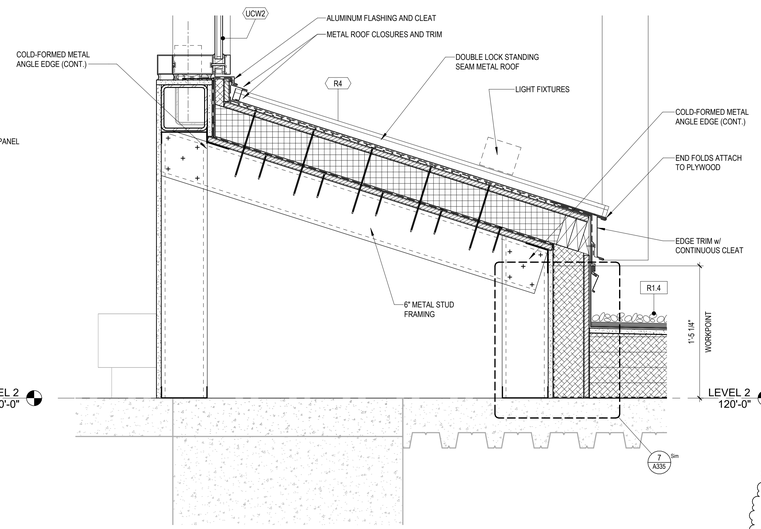
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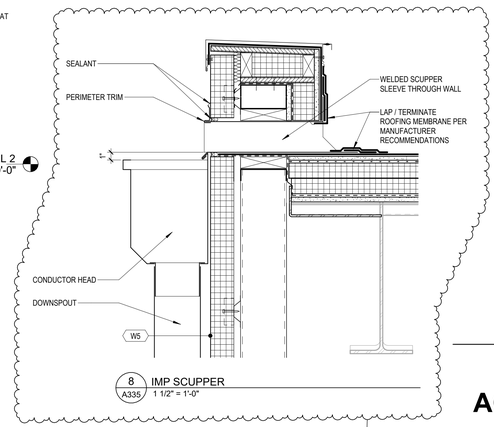
7 A335 DETAIL
1 1/2" = 1'-0"



6 A335 DETAIL
1 1/2" = 1'-0"



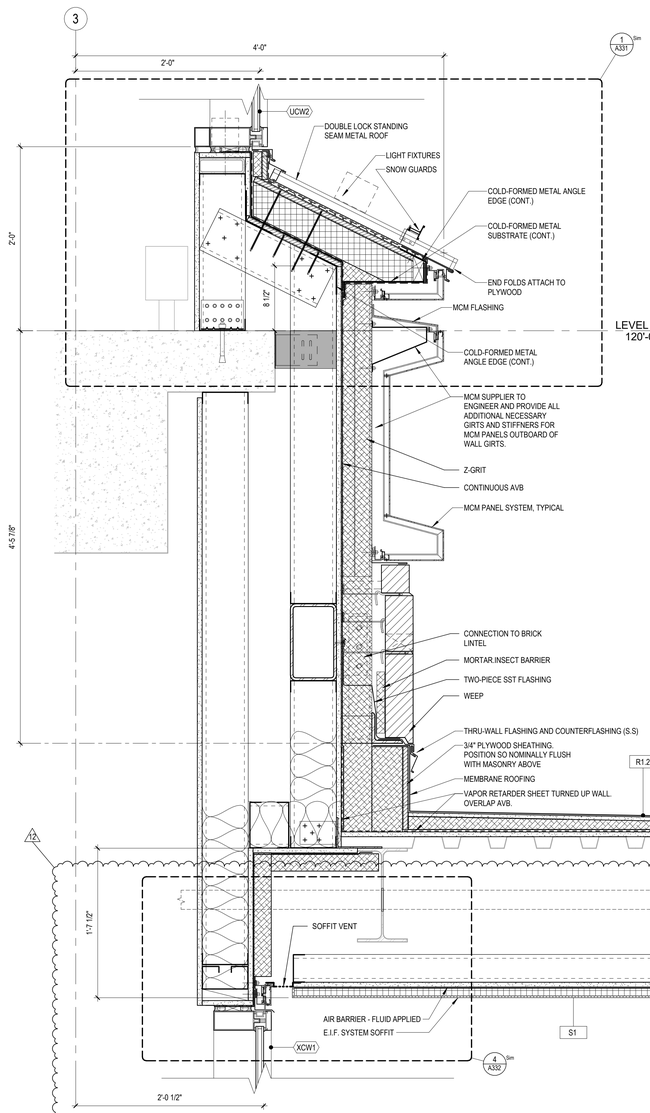
4 A335 DETAIL
1 1/2" = 1'-0"



8 A335 IMP SCUPPER
1 1/2" = 1'-0"

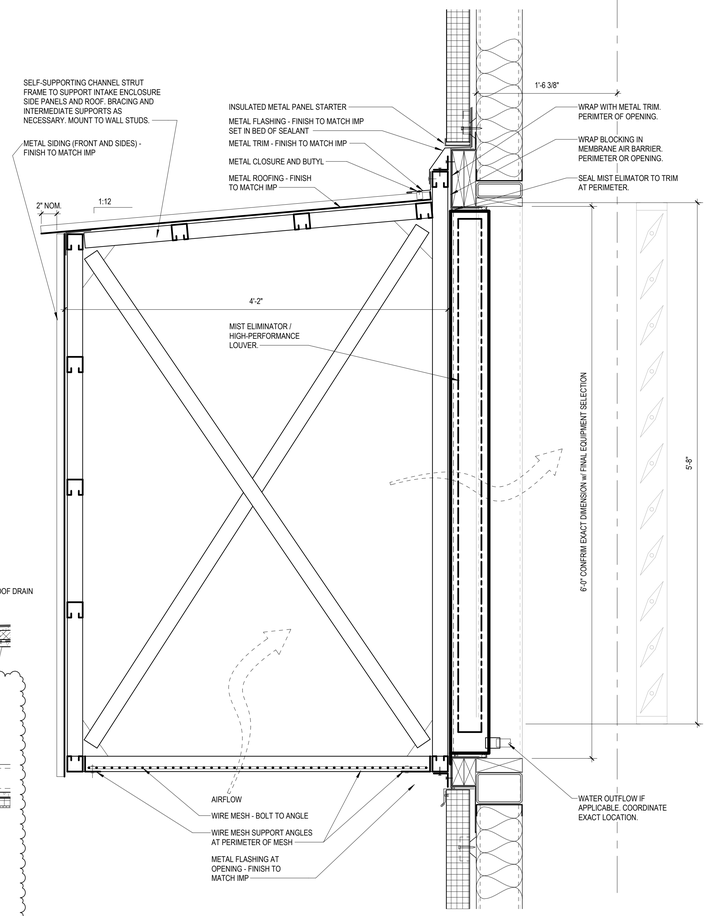
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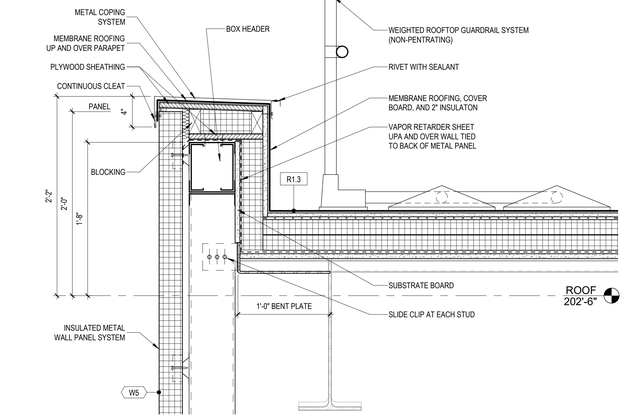


5 A335 WALL SECTION DETAIL
1 1/2" = 1'-0"

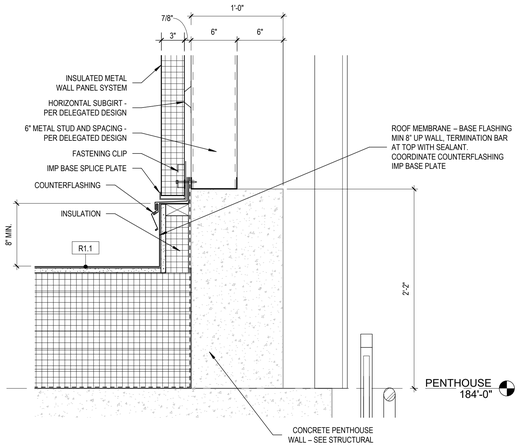
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3 A335 WALL SECTION DETAIL
1 1/2" = 1'-0"



2 A335 INSULATED METAL PANEL DETAIL AT PARAPET
1 1/2" = 1'-0"



1 A335 BASE DETAIL AT PENTHOUSE WALL
1 1/2" = 1'-0"

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INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
10	01/07/2025	BP3-CD: ADDENDUM 01
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN KNOX REGISTERED ARCHITECT No. AR10400213 STATE OF INDIANA

EXTERIOR SECTION DETAILS

DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

A335

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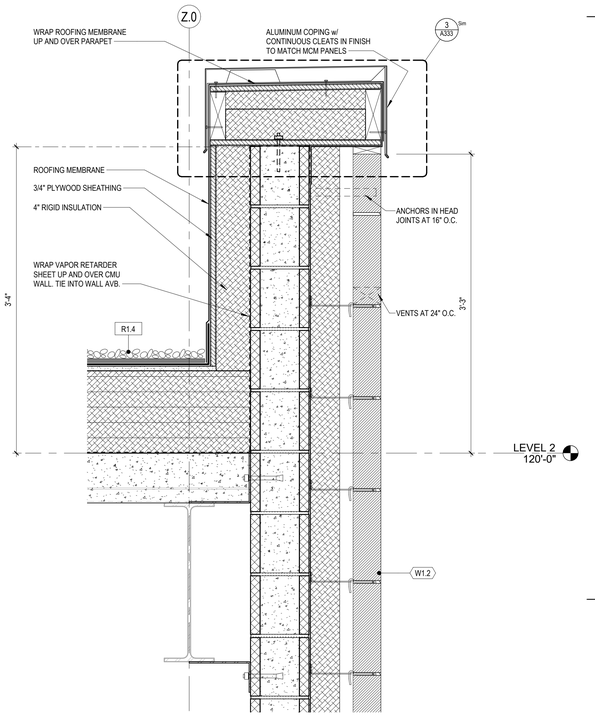
DETAILS LEGEND

LEGEND APPLIES TO ALL A300 SERIES

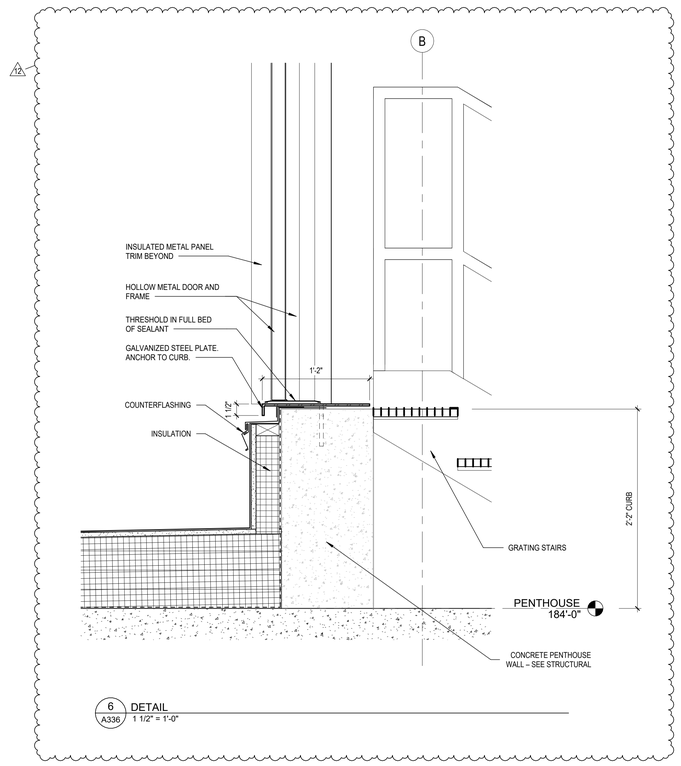
- BRICK
- C.M.U.
- RIGID INSUL.
- STEEL
- RECONSTRUCTED STONE
- SOLID GROUT
- CONCRETE
- SPRAY-APPLIED CLOSED CELL INSULATION WITH SPRAY-APPLIED FIRE RATED BARRIER ON EXPOSED SURFACES
- FIRESTOPPING ASSEMBLY
- BATT INSULATION
- METAL STUD
- RUNNER TRACK
- WEEP OR HEAD VENT
- EXPANSION ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- TERM. BAR & SEALANT
- REINFORCING BAR IN GROUTED CORES
- WOOD BLOCKING
- BACKER ROD & SEALANT

DETAILS GENERAL NOTES

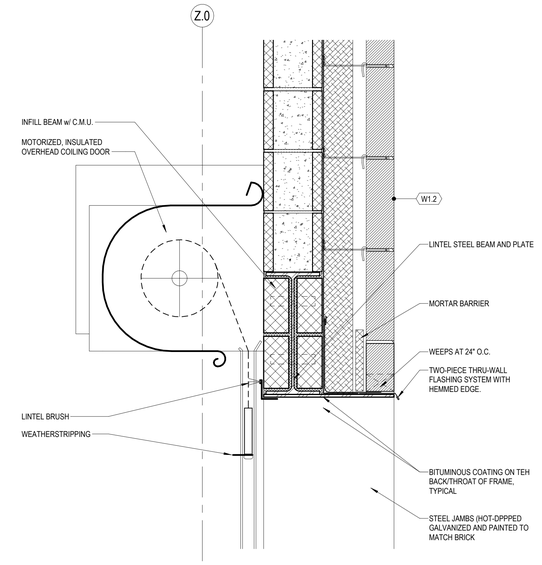
A. REFER TO A300 - A303 FOR TYPICAL EXTERIOR DETAILS.
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L. FURNISH DAMPROOFING ON BACK SIDE OF RECONSTRUCTED STONE ALL LOCATIONS, TYPICAL.
M. FURNISH METAL (PAINTED) BETWEEN SHADE BOX AND CURTAINWALL, TYP.
N. REFER TO ELEVATIONS FOR GLASS TYPES AND 2-WAY OR 4-WAY SYSTEM.



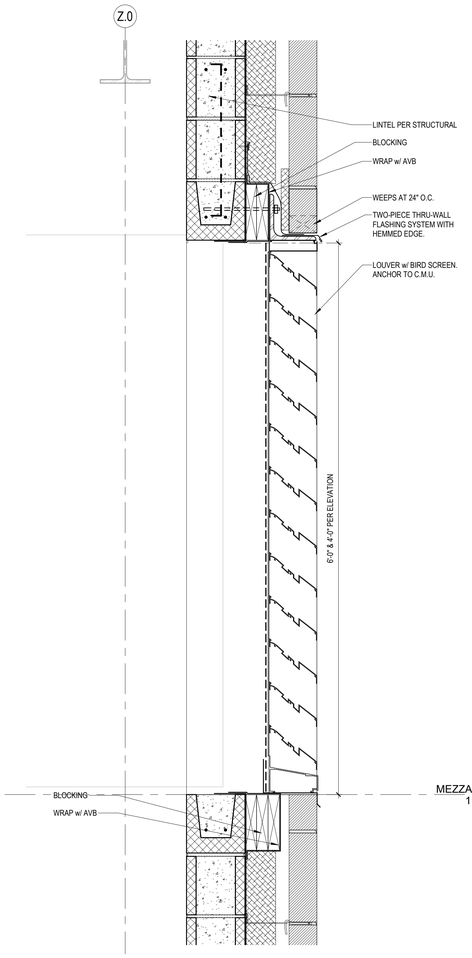
2 / A336 DETAIL
1 1/2" = 1'-0"



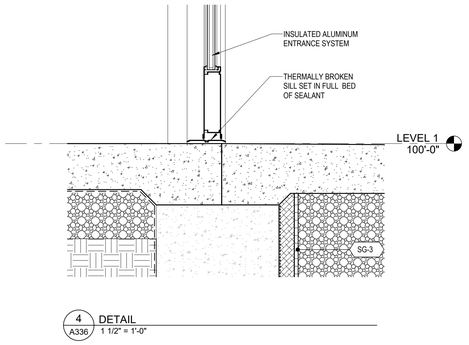
6 / A336 DETAIL
1 1/2" = 1'-0"



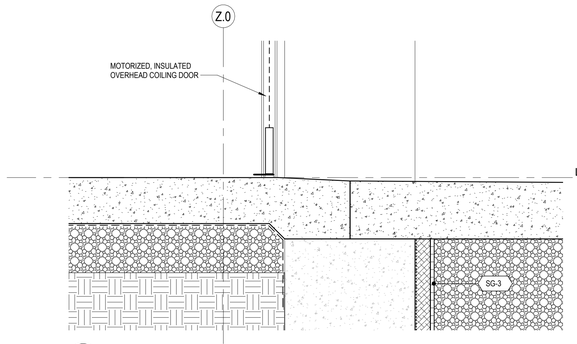
1 / A336 DETAIL
1 1/2" = 1'-0"



3 / A336 DETAIL
1 1/2" = 1'-0"



4 / A336 DETAIL
1 1/2" = 1'-0"



5 / A336 DETAIL
1 1/2" = 1'-0"

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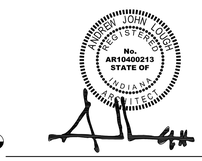
CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE



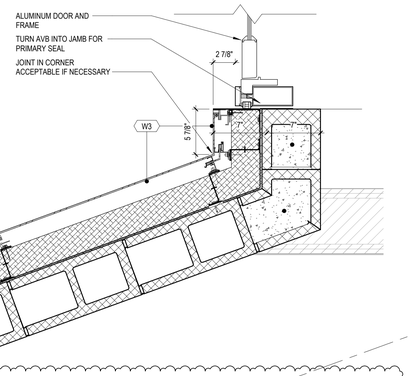
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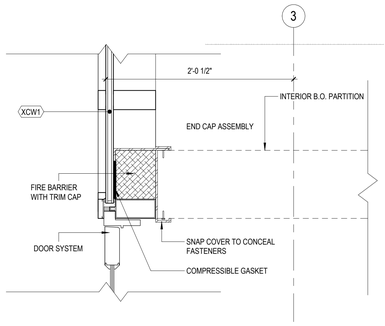
DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

A336

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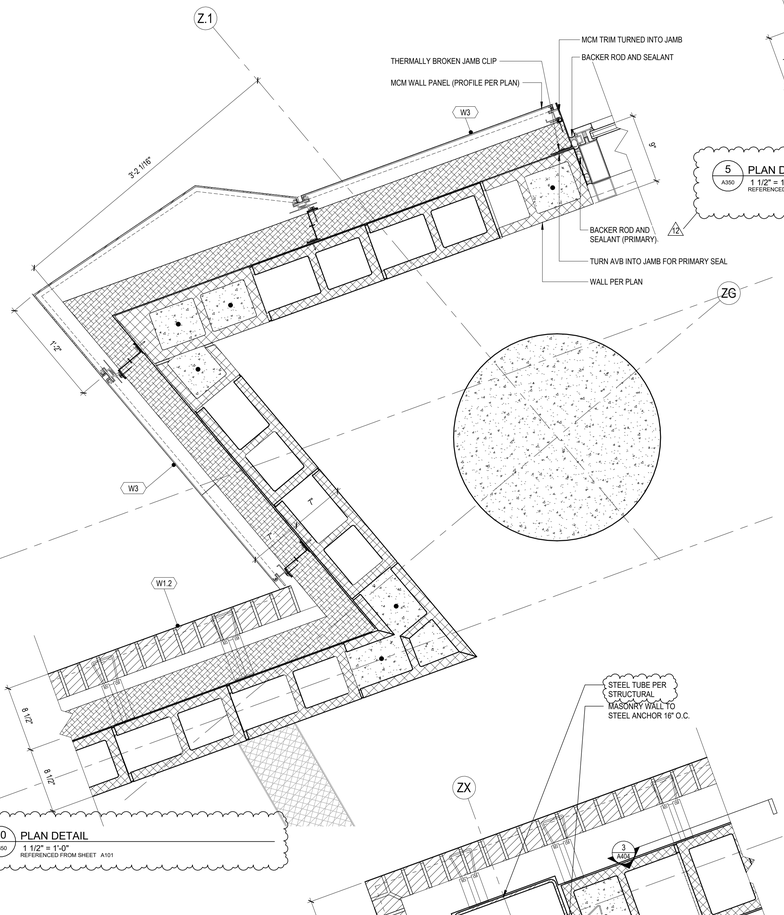
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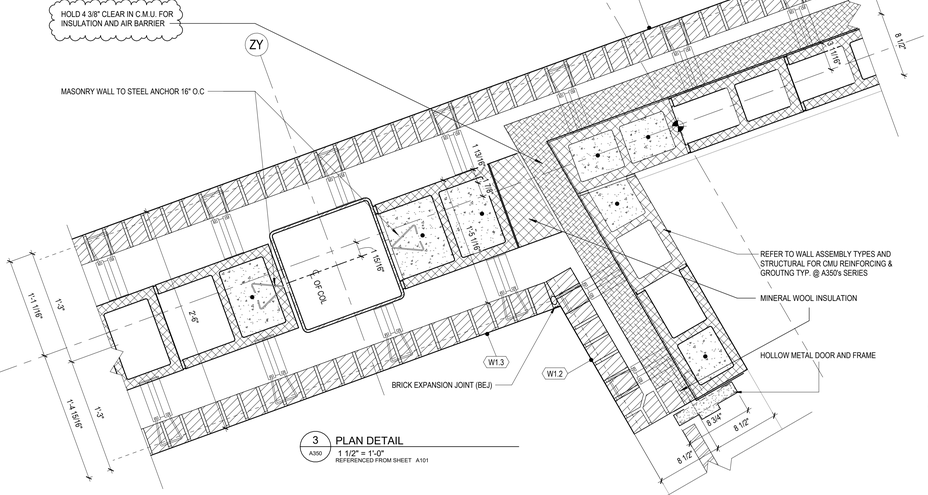


7 A350 PLAN DETAIL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101

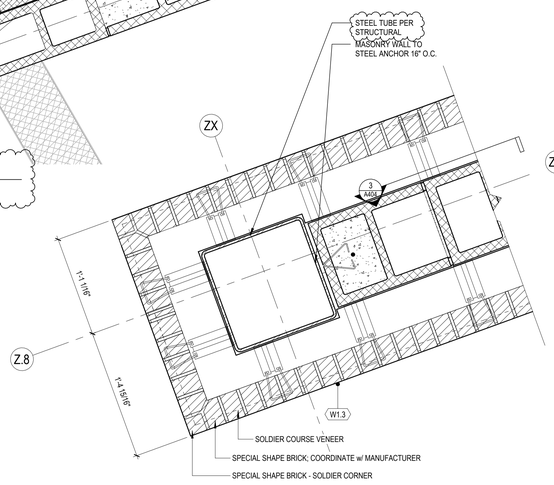
5 A350 PLAN DETAIL
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REFERENCED FROM SHEET A101



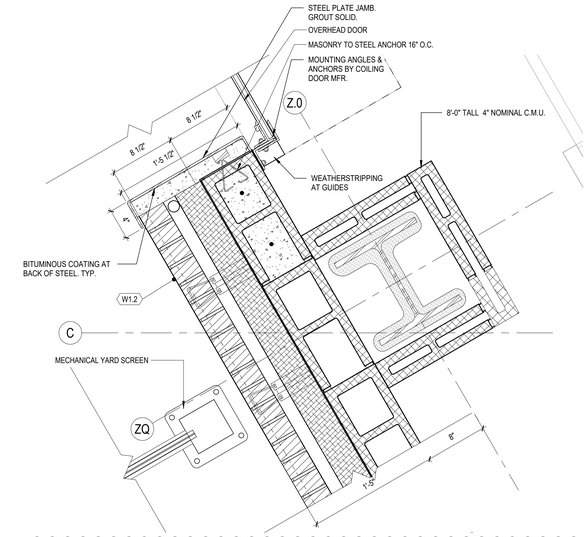
10 A350 PLAN DETAIL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101



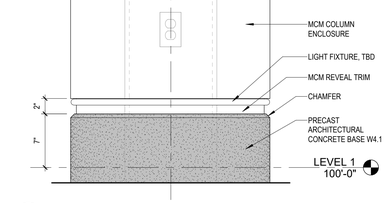
3 A350 PLAN DETAIL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101



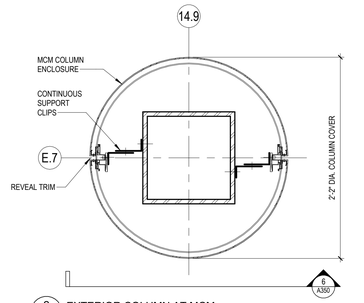
1 A350 PLAN DETAIL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101



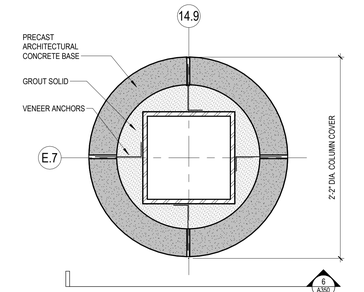
8 A350 PLAN DETAIL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101



6 A350 EXTERIOR COLUMN AT BASE
1 1/2" = 1'-0"



2 A350 EXTERIOR COLUMN AT MCM
1 1/2" = 1'-0"



4 A350 EXTERIOR COLUMN AT BASE
1 1/2" = 1'-0"

DETAILS LEGEND
LEGEND APPLIES TO ALL A300 SERIES

- BRICK
- C.M.U.
- RIGID INSUL.
- STEEL
- RECONSTRUCTED STONE
- SOLID GROUT
- CONCRETE
- SPRAY-APPLIED CLOSED CELL INSULATION WITH SPRAY-APPLIED FIRE RATED BARRIER ON EXPOSED SURFACES
- FIRESTOPPING ASSEMBLY
- BATT INSULATION
- METAL STUD
- RUNNER TRACK
- WEEP OR HEAD VENT
- EXPANSION ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- TERM. BAR & SEALANT
- REINFORCING BAR IN GROUTED CORES
- WOOD BLOCKING
- BACKER ROD & SEALANT

DETAILS GENERAL NOTES

A. REFER TO A300 - A303 FOR TYPICAL EXTERIOR DETAILS.
B. DIMENSIONS ARE TAKEN TO TOP OF BRICK OR STONE. 3/8" JOINT TYPICAL AT VENEER AND MASONRY JOINTS.
C. ALL C.M.U. WALLS TO HAVE HORIZONTAL REINFORCING AT 16" O.C.
D. REFER TO ENLARGED FIN-TUBE DRAWINGS FOR EXACT CONFIGURATION.
E. NOTES REPEAT WHERE DRAWN TYPICAL.
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N. REFER TO ELEVATIONS FOR GLASS TYPES AND 2-WAY OR 4-WAY SYSTEM.

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CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN TUCKER REGISTERED No. AR10400213 STATE OF INDIANA ARCHITECT

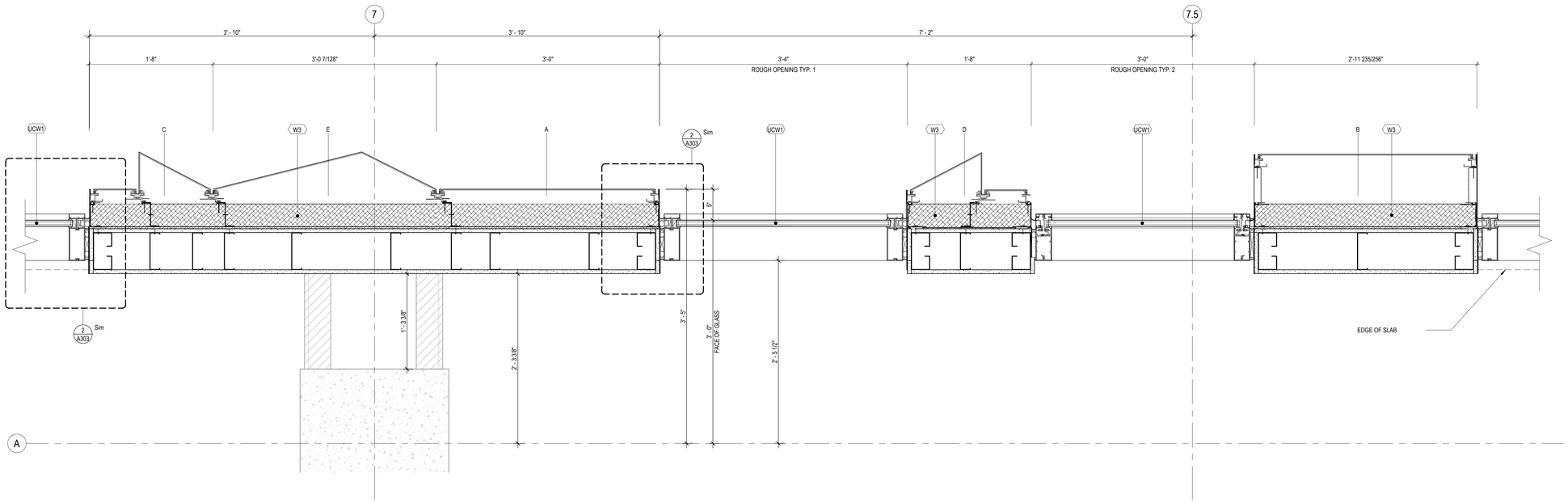
EXTERIOR PLAN DETAILS

DATE — REF: SHEET INDEX
BSA PROJECT NO. — 00360481

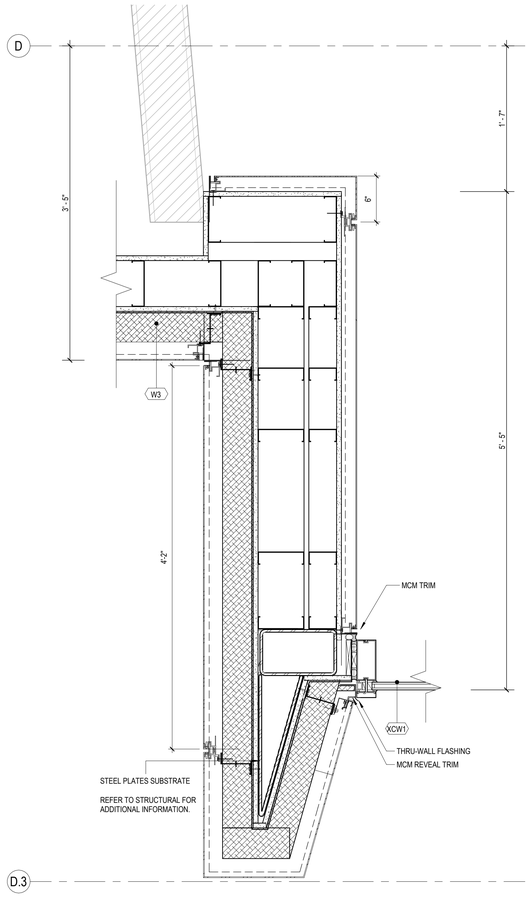
A350

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4 A361 PLAN DETAIL - TYPICAL METAL PANEL AND CURTAIN WALL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A102



3 A351 METAL PANEL COVERING AT TERRACE ACCESS - SOUTH - TYPICAL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A102

DETAILS LEGEND
LEGEND APPLIES TO ALL A300 SERIES

- BRICK
- C.M.U.
- RIGID INSUL.
- STEEL
- RECONSTRUCTED STONE
- SOLID GROUT
- CONCRETE
- SPRAY-APPLIED CLOSED CELL INSULATION WITH SPRAY-APPLIED FIRE RATED BARRIER ON EXPOSED SURFACES
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- BATT INSULATION
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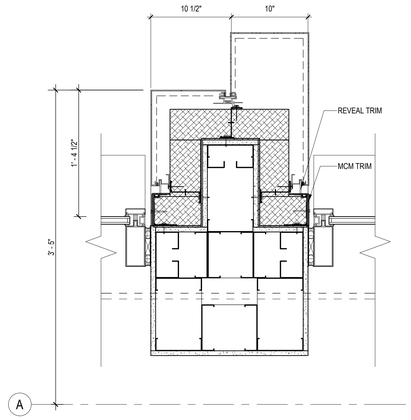
EXTERIOR PLAN DETAILS

DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

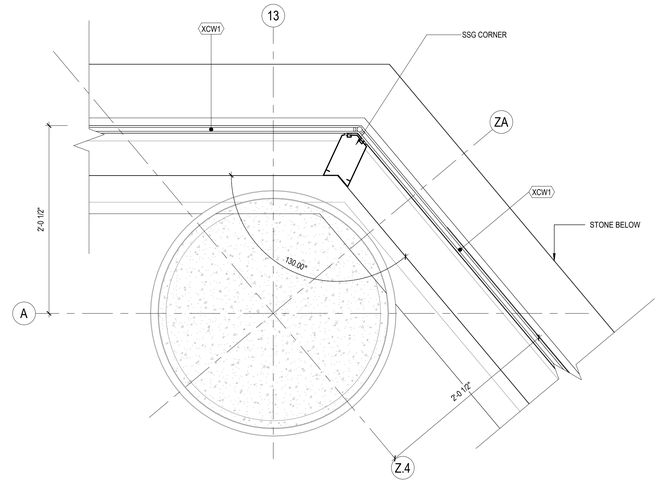
A351

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5 A352 METAL PANEL COVERING @ TALL OPENING - NORTH - TYPICAL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101



6 A352 PLAN DETAIL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101

DETAILS LEGEND
LEGEND APPLIES TO ALL A300 SERIES

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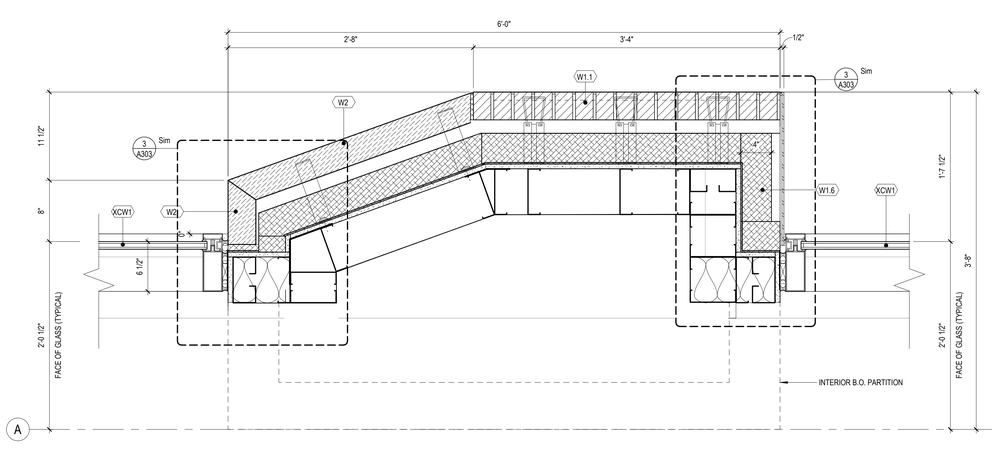
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

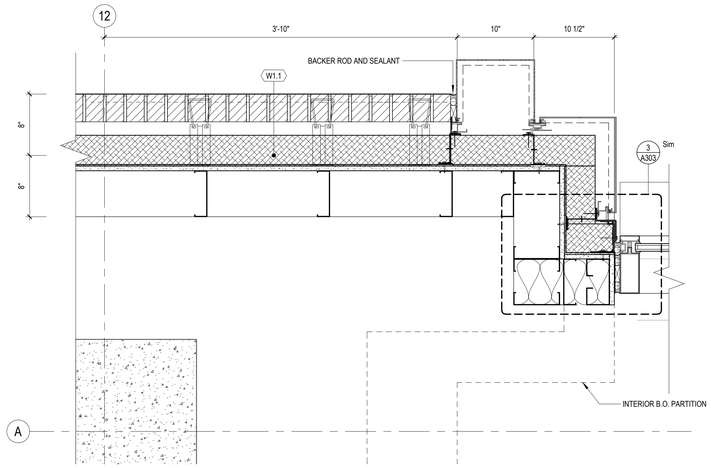
CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

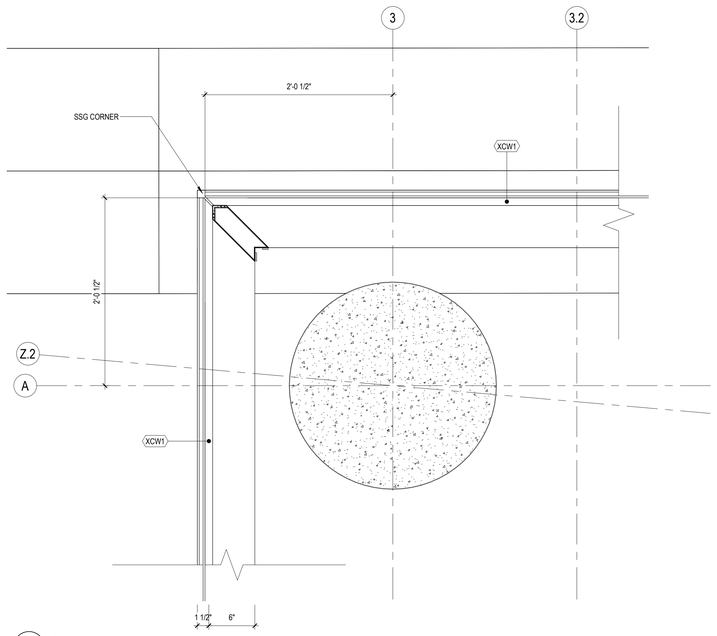
BP3-CD: CORE AND SHELL PACKAGE



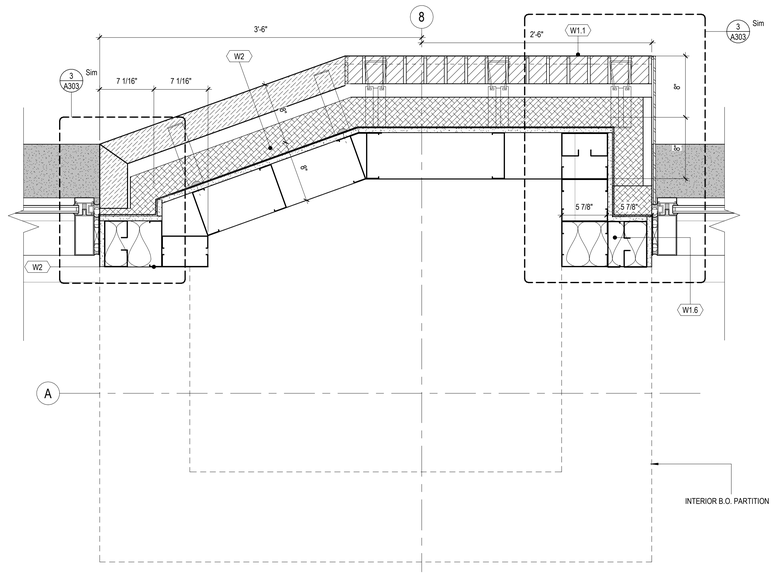
3 A352 BRICK/LIMESTONE PIER - NORTH - TYPICAL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101



4 A352 METAL PANEL COVERING @ TALL OPENING/BRICK - NORTH - LEVEL 1
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101
/2



1 A352 PLAN DETAIL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101



2 A352 PLAN DETAIL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101

ISSUED / REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN HUNT
REGISTERED
No. AR10400213
STATE OF INDIANA
ARCHITECT

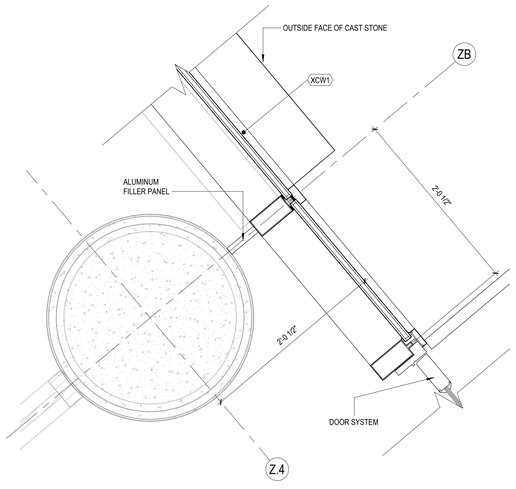
EXTERIOR PLAN DETAILS

DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

A352

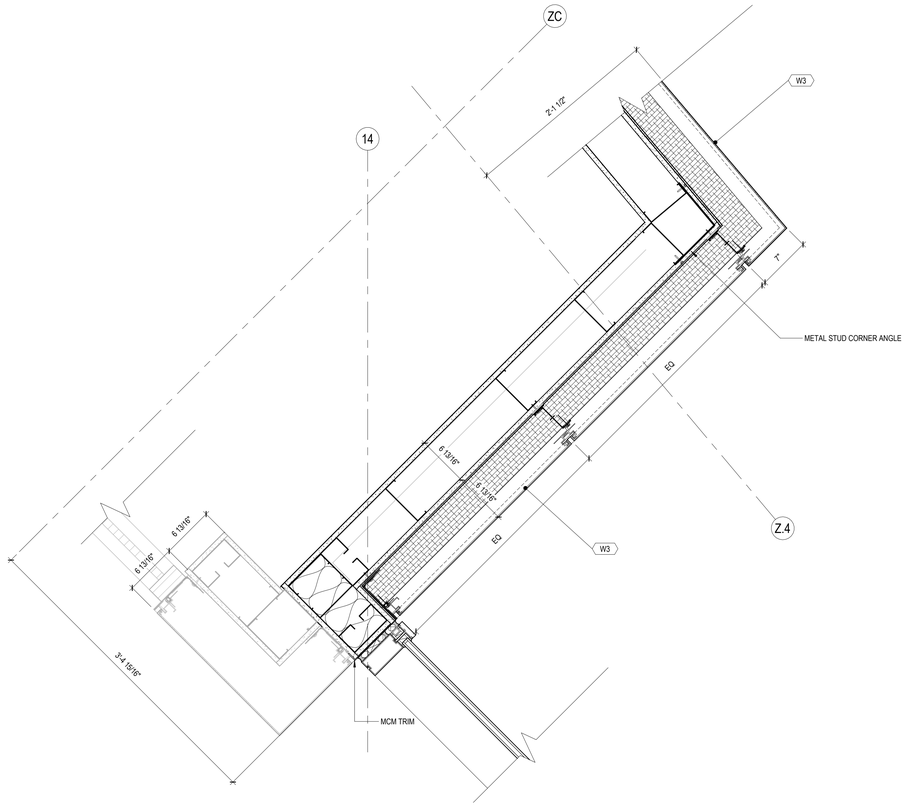
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1 PLAN DETAIL
A353 1 1/2" = 1'-0"
REFERENCED FROM SHEET A101

12



2 PLAN DETAIL
A353 1 1/2" = 1'-0"
REFERENCED FROM SHEET A101

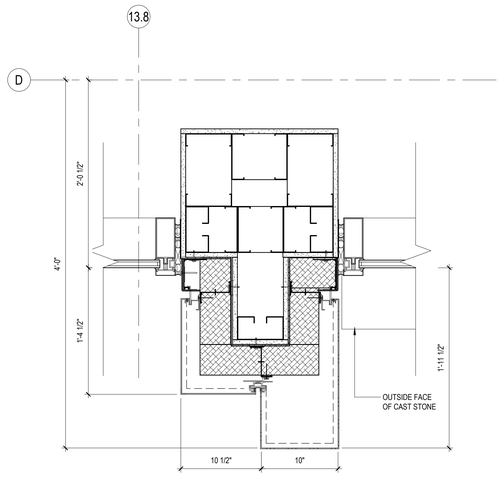
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DETAILS LEGEND
LEGEND APPLIES TO ALL A300 SERIES

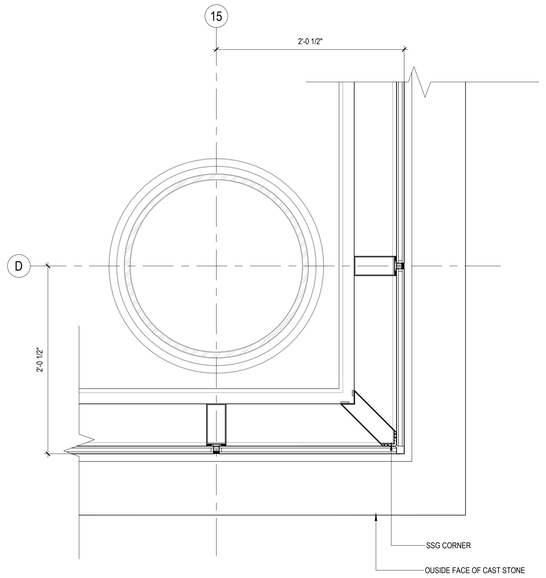
- BRICK
- C.M.U.
- RIGID INSUL.
- STEEL
- RECONSTRUCTED STONE
- SOLID GROUT
- CONCRETE
- SPRAY-APPLIED CLOSED CELL INSULATION WITH SPRAY-APPLIED FIRE RATED BARRIER ON EXPOSED SURFACES
- FIRESTOPPING ASSEMBLY
- BATT INSULATION
- METAL STUD
- RUNNER TRACK
- WEEP OR HEAD VENT
- EXPANSION ANCHOR
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- VENEER ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- TERM. BAR & SEALANT
- REINFORCING BAR IN GROUTED CORES
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DETAILS GENERAL NOTES

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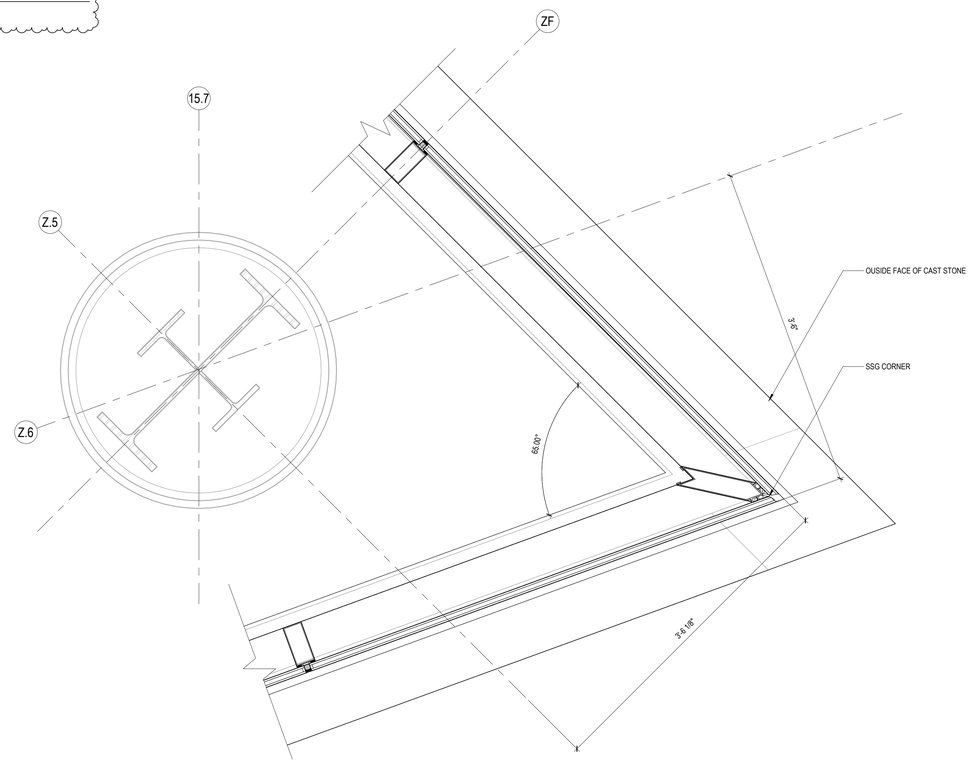


5 PLAN DETAIL
A353 1 1/2" = 1'-0"
REFERENCED FROM SHEET A101



4 PLAN DETAIL
A353 1 1/2" = 1'-0"
REFERENCED FROM SHEET A101

12



3 PLAN DETAIL
A353 1 1/2" = 1'-0"
REFERENCED FROM SHEET A101

12

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INDIANAPOLIS, INDIANA

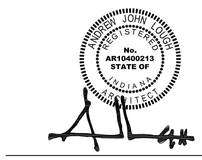
CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

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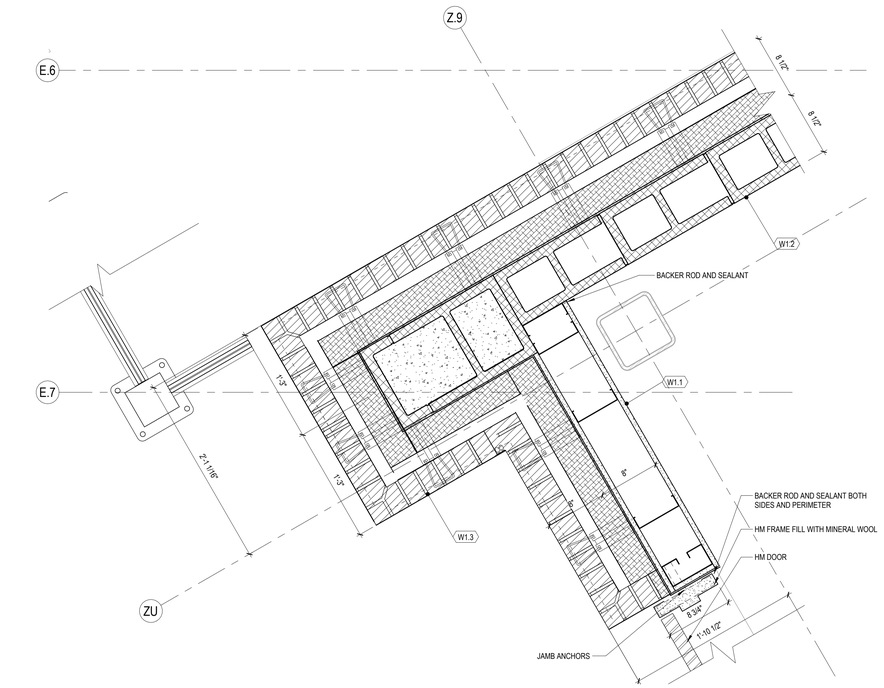
EXTERIOR PLAN DETAILS

DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

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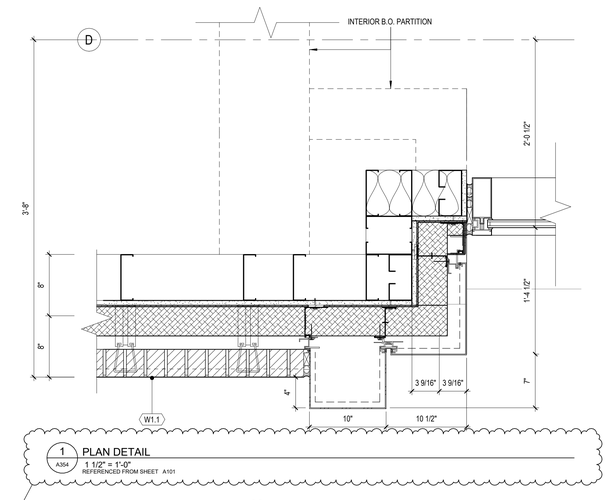
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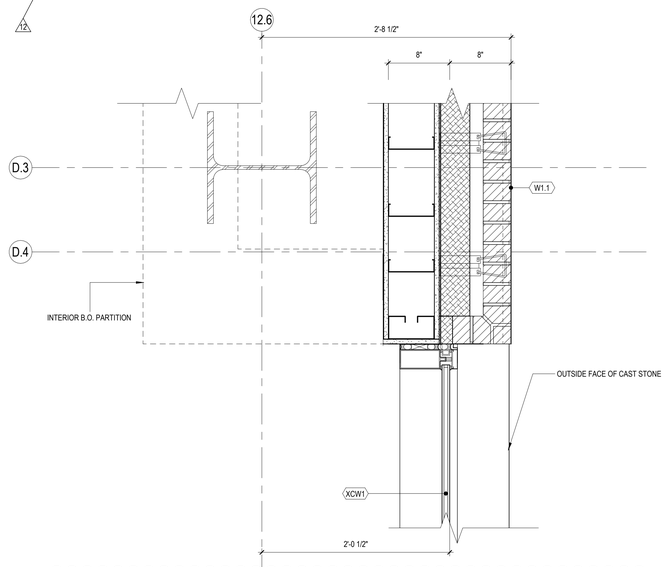
7 A354 PLAN DETAIL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101

12



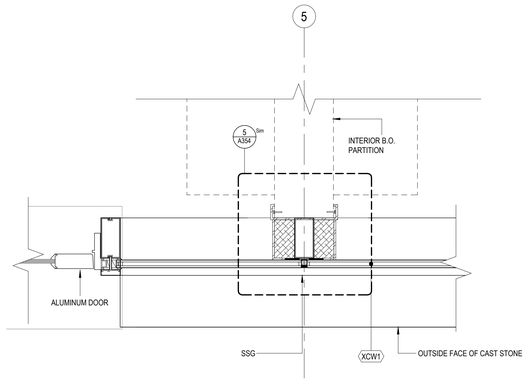
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1 1/2" = 1'-0"
REFERENCED FROM SHEET A101

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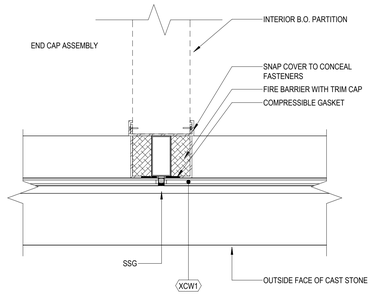
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1 1/2" = 1'-0"
REFERENCED FROM SHEET A101

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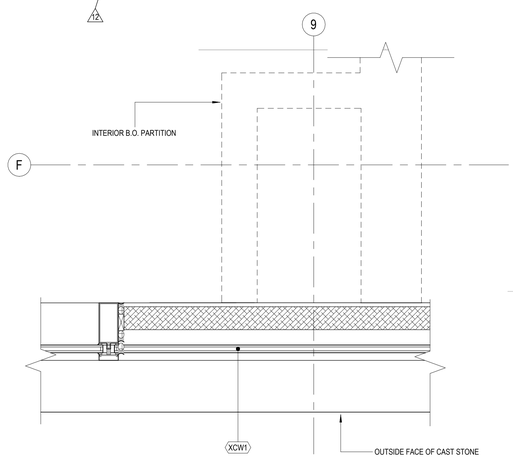
6 A354 PLAN DETAIL
1 1/2" = 1'-0"
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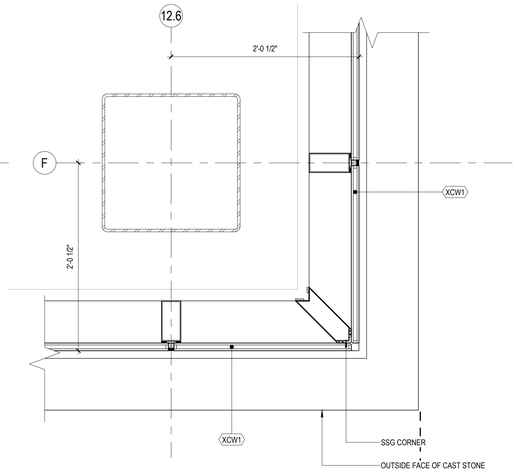


5 A354 PLAN DETAIL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101

12



4 A354 PLAN DETAIL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101



3 A354 PLAN DETAIL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A101

12

DETAILS LEGEND
LEGEND APPLIES TO ALL A300 SERIES

- BRICK
- C.M.U.
- RIGID INSUL.
- STEEL
- RECONSTRUCTED STONE
- SOLID GROUT
- CONCRETE
- SPRAY-APPLIED CLOSED CELL INSULATION WITH SPRAY-APPLIED FIRE RATED BARRIER ON EXPOSED SURFACES
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- BATT INSULATION
- METAL STUD
- RUNNER TRACK
- WEEP OR HEAD VENT
- EXPANSION ANCHOR
- VENEER ANCHOR
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- VENEER ANCHOR
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INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN TAYLOR
REGISTERED
No. AR10400213
STATE OF INDIANA
ARCHITECT

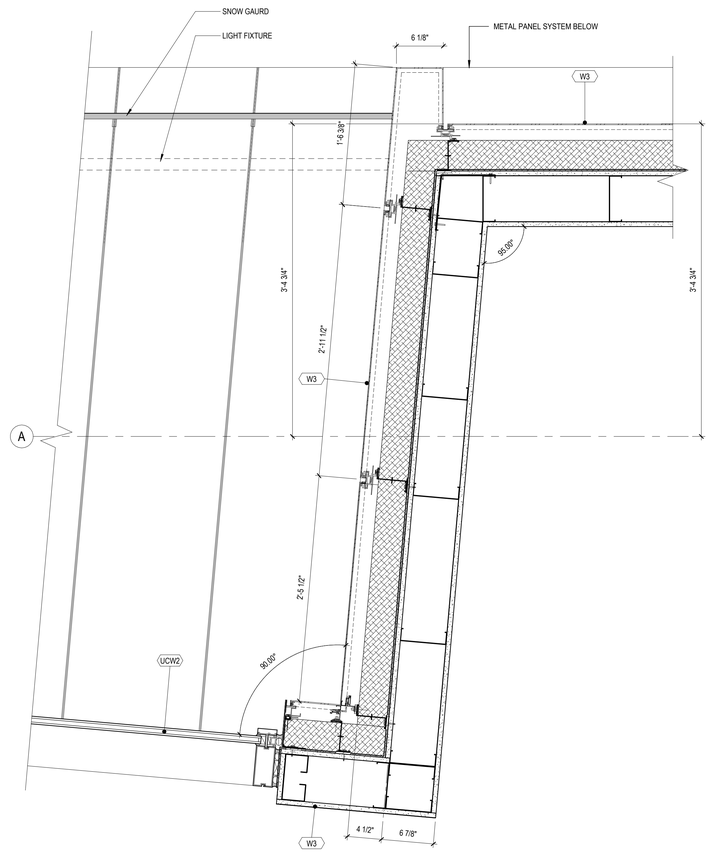
EXTERIOR PLAN DETAILS

DATE — REF: SHEET INDEX
BSA PROJECT NO. — 00360481

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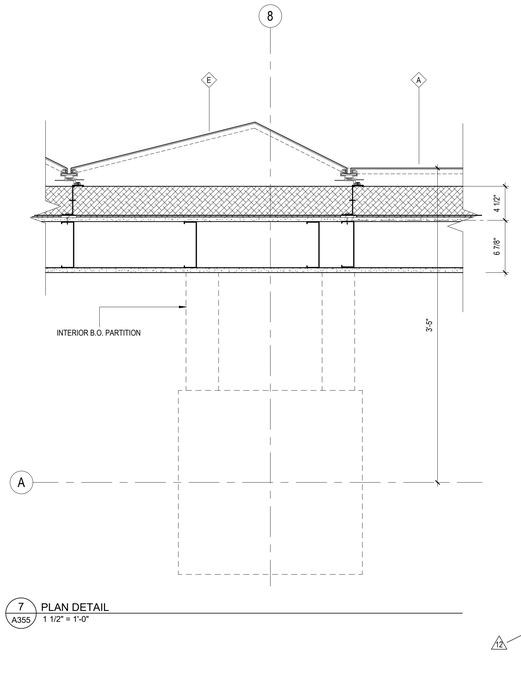
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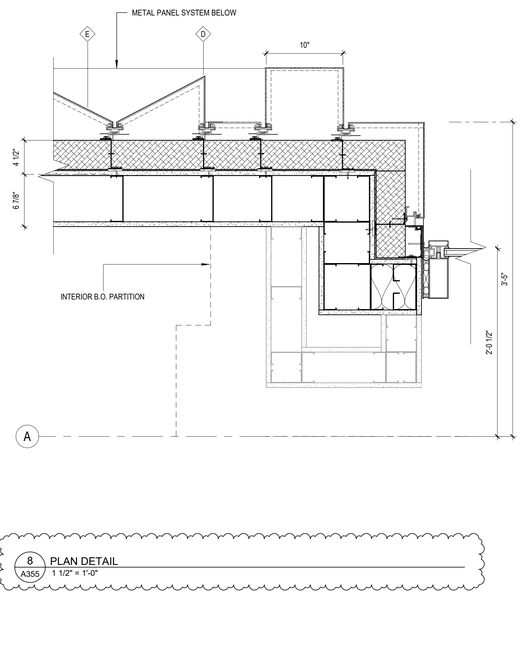


1 A355 PLAN DETAIL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A102

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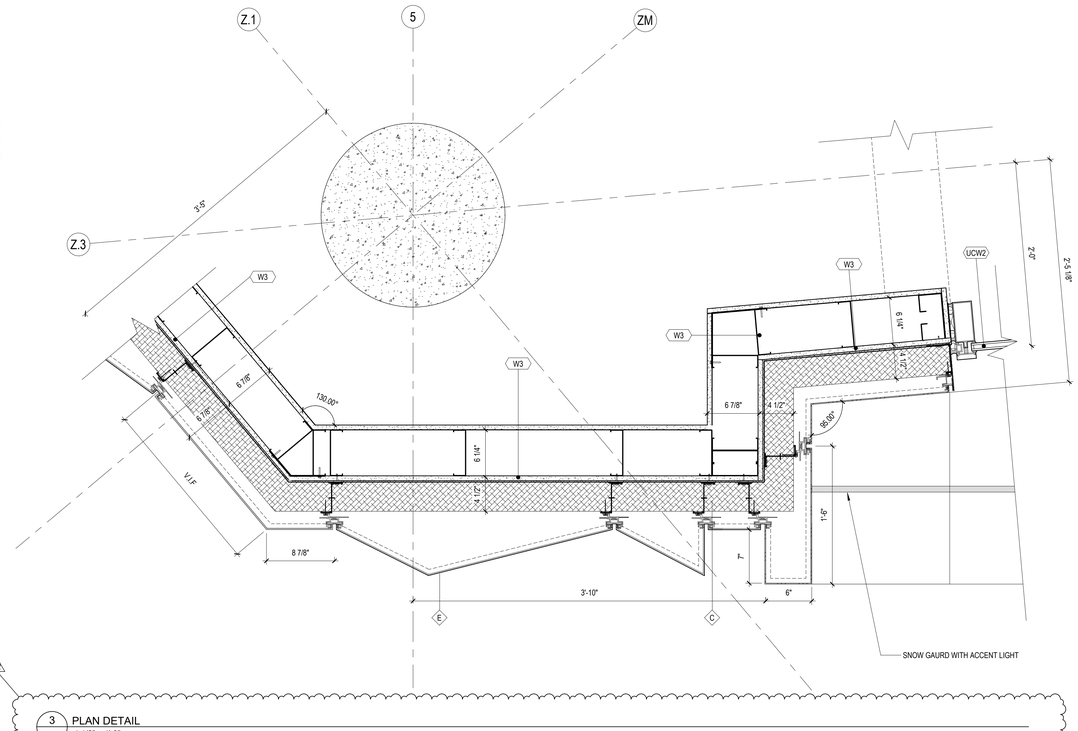


7 A355 PLAN DETAIL
1 1/2" = 1'-0"



8 A355 PLAN DETAIL
1 1/2" = 1'-0"

12



3 A355 PLAN DETAIL
1 1/2" = 1'-0"
REFERENCED FROM SHEET A102

12

DETAILS LEGEND
LEGEND APPLIES TO ALL A300 SERIES

- BRICK
- C.M.U.
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- STEEL
- RECONSTRUCTED STONE
- SOLID GROUT
- CONCRETE
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- BATT INSULATION
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STATE OF
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ARCHITECT

EXTERIOR PLAN DETAILS

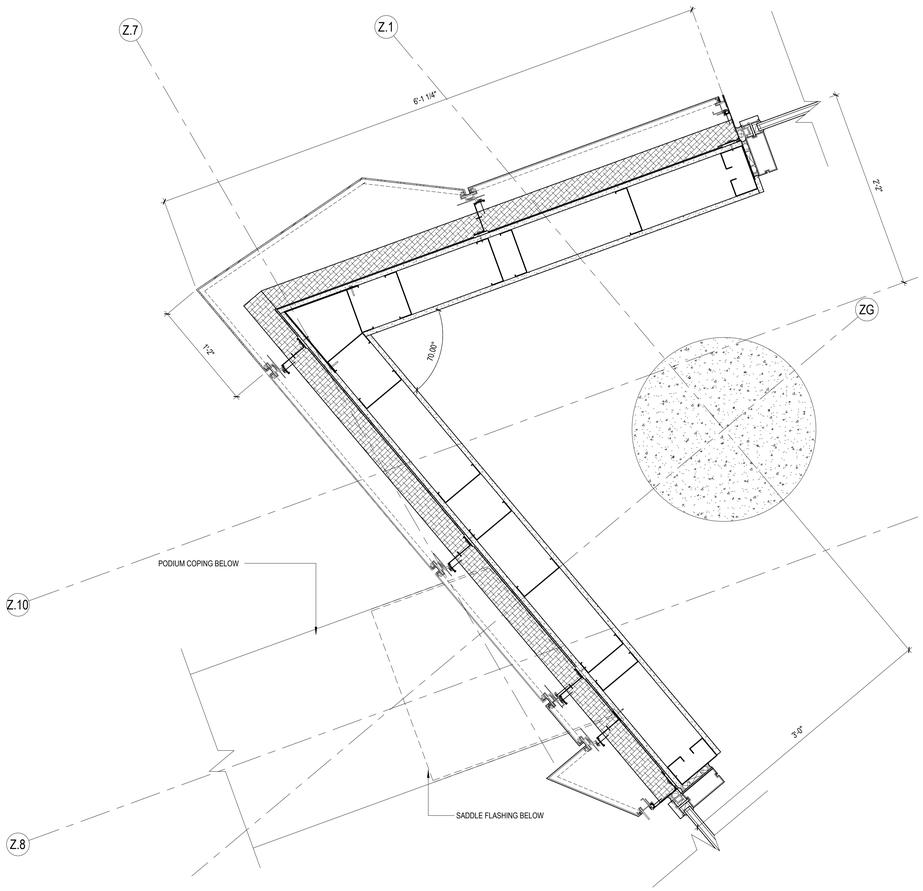
DATE
BSA PROJECT NO. 00360481

REF: SHEET INDEX

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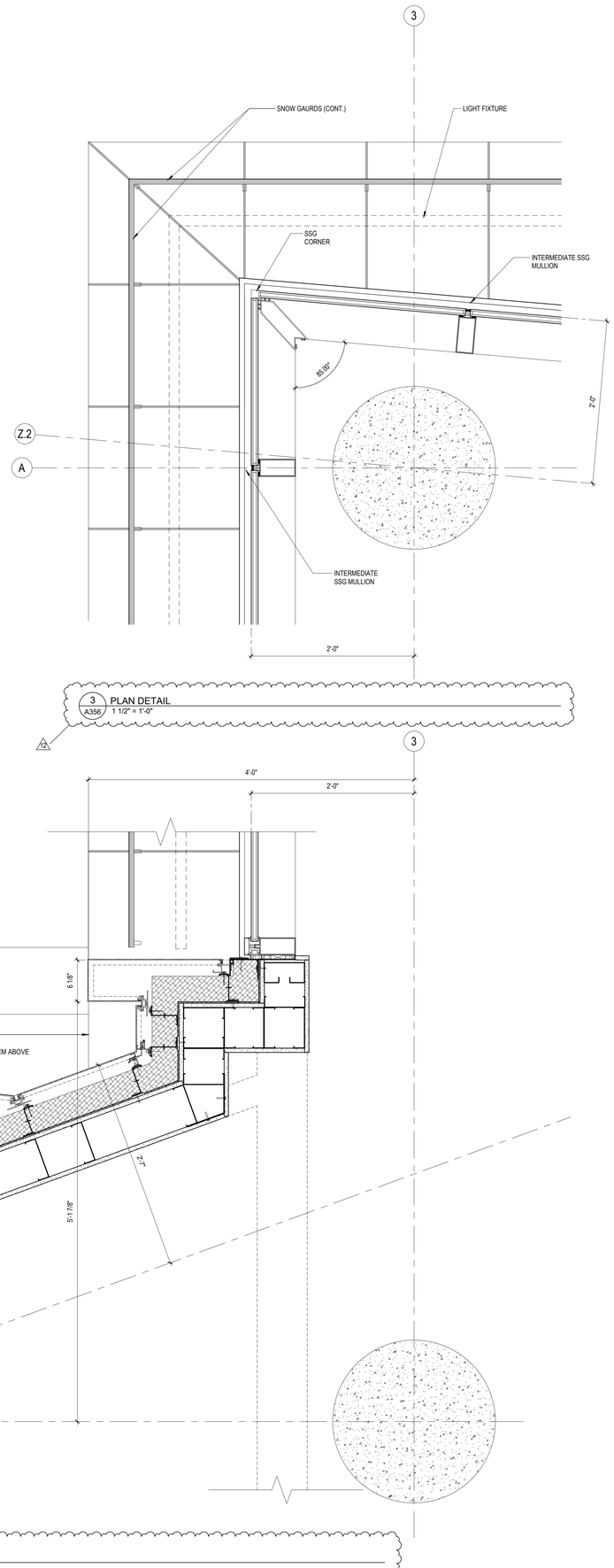
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1 PLAN DETAIL
A356 1 1/2" = 1'-0"

12



3 PLAN DETAIL
A356 1 1/2" = 1'-0"

12

2 PLAN DETAIL
A356 1 1/2" = 1'-0"

DETAILS LEGEND
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STATE OF INDIANA
ARCHITECT

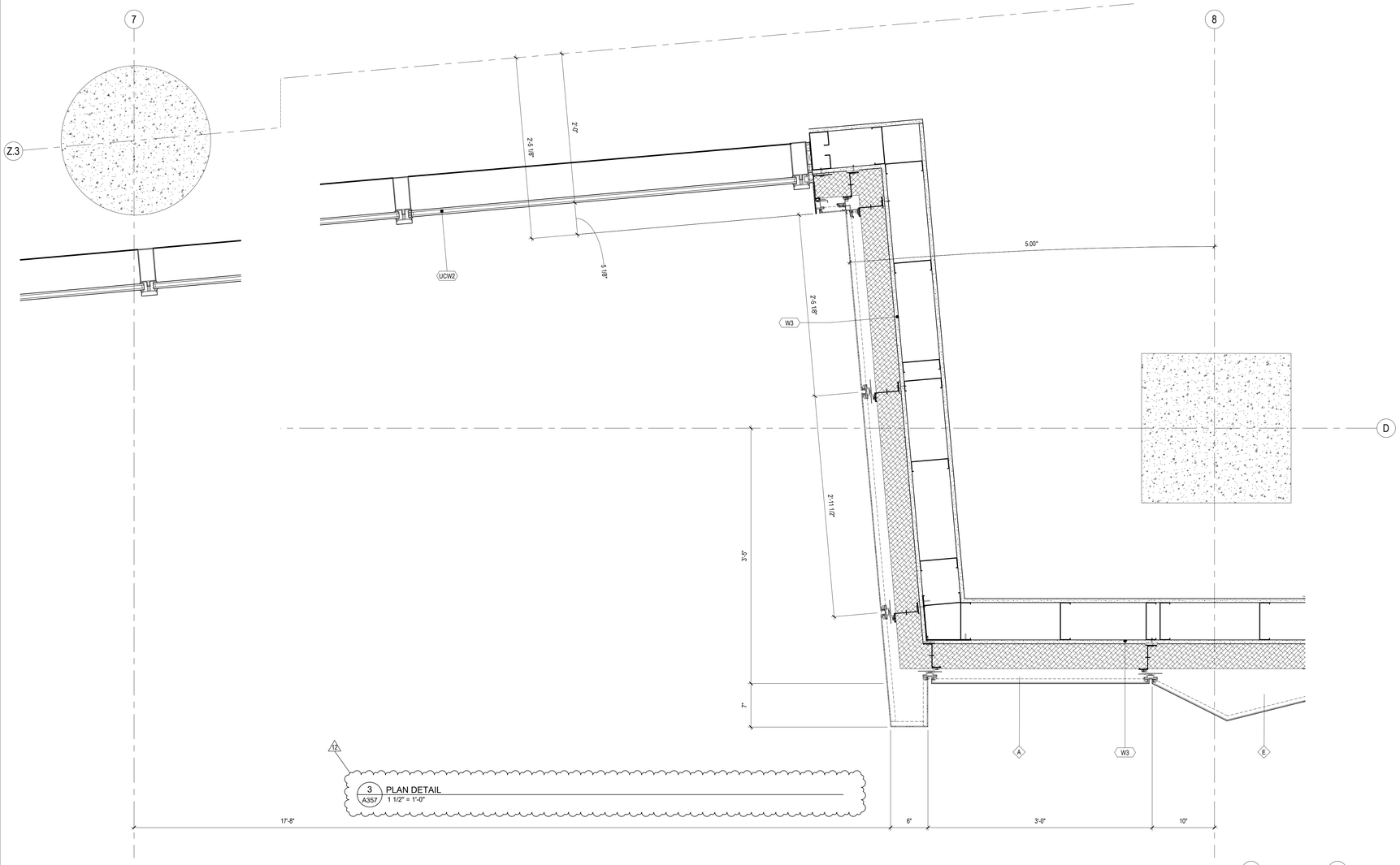
EXTERIOR PLAN DETAILS

DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

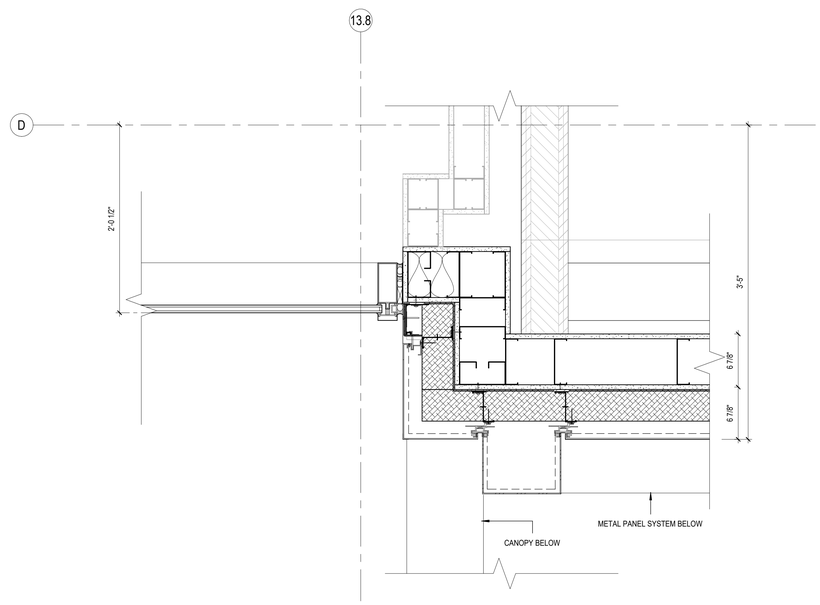
A356

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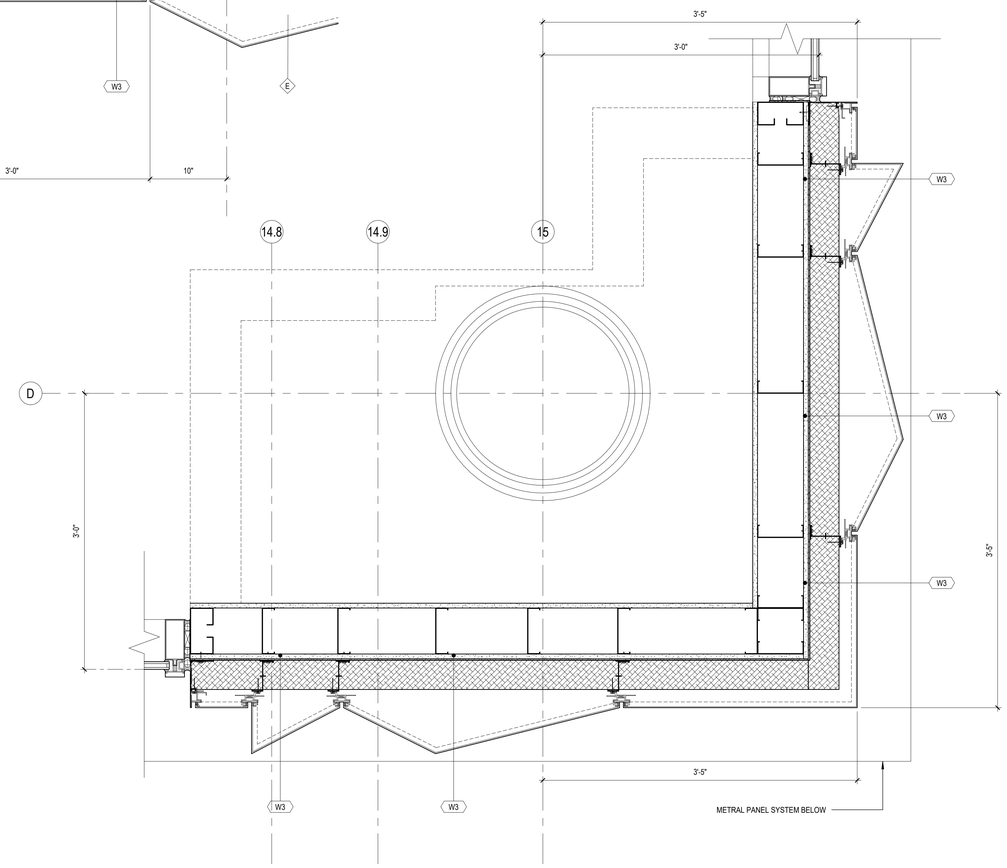
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Autodesk Docs://00360481 - IU Launch Accelerator for Biosciences/ARCH-20250917-IUL-AB-CS_R24.rvt



3 PLAN DETAIL
A357 1 1/2" = 1'-0"



2 PLAN DETAIL
A357 1 1/2" = 1'-0"



1 PLAN DETAIL
A357 1 1/2" = 1'-0"

DETAILS LEGEND
LEGEND APPLIES TO ALL A300 SERIES

- BRICK
- C.M.U.
- RIGID INSUL.
- STEEL
- RECONSTRUCTED STONE
- SOLID GROUT
- CONCRETE
- SPRAY-APPLIED CLOSED CELL INSULATION WITH SPRAY-APPLIED FIRE RATED BARRIER ON EXPOSED SURFACES
- FIRESTOPPING ASSEMBLY
- BATT INSULATION
- METAL STUD
- RUNNER TRACK
- WEEP OR HEAD VENT
- EXPANSION ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- TERM. BAR & SEALANT
- REINFORCING BAR IN GROUTED CORES
- WOOD BLOCKING
- BACKER ROD & SEALANT

DETAILS GENERAL NOTES

A. REFER TO A300 - A303 FOR TYPICAL EXTERIOR DETAILS.
B. DIMENSIONS ARE TAKEN TO TOP OF BRICK OR STONE. 3/8" JOINT TYPICAL AT VENEER AND MASONRY JOINTS.
C. ALL C.M.U. WALLS TO HAVE HORIZONTAL REINFORCING AT 16" O.C.
D. REFER TO ENLARGED FIN-TUBE DRAWINGS FOR EXACT CONFIGURATION.
E. NOTES REPEAT WHERE DRAWN TYPICAL.
F. REFER TO STRUCTURAL FOR ADDITIONAL C.M.U. REINFORCING.
G. COORDINATE EXACT SCOPE OF BID PACKAGES WITH CONSTRUCITON MANAGER. SOME ITEMS SHOWN ARE REFERENCE ONLY.
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K. FURNISH END CLOSURE CAPS FOR ALL MULLION CAPS, PANEL ENDS WHERE EXPOSED.
L. FURNISH DAMPROOFING ON BACK SIDE OF RECONSTRUCTED STONE ALL LOCATIONS, TYPICAL.
M. FURNISH METAL (PAINTED) BETWEEN SHADE BOX AND CURTAINWALL, TYP.
N. REFER TO ELEVATIONS FOR GLASS TYPES AND 2-WAY OR 4-WAY SYSTEM.

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN JOHNSON
REGISTERED
No. AR10400213
STATE OF
INDIANA
ARCHITECT

EXTERIOR PLAN DETAILS

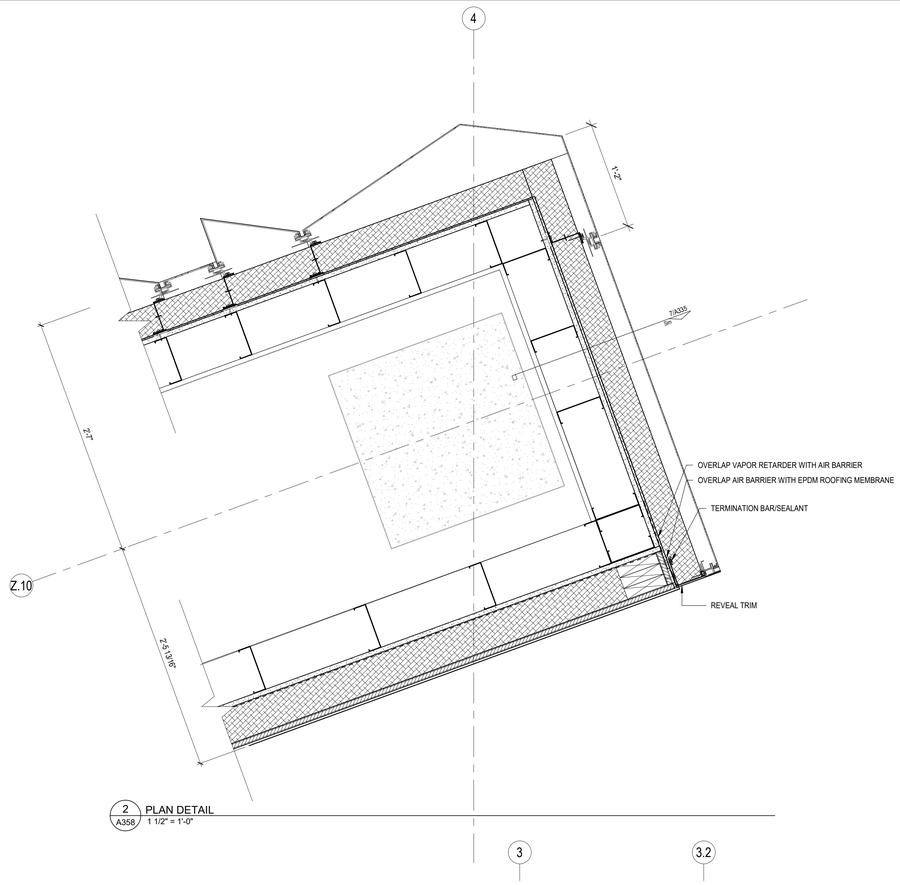
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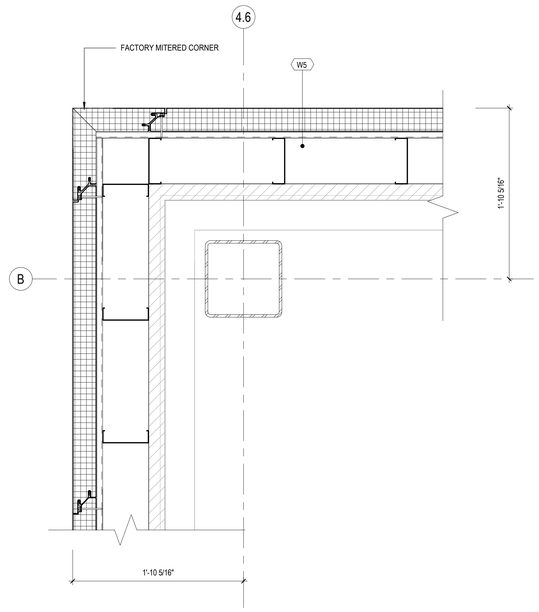
A357

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2 A358 PLAN DETAIL
1 1/2" = 1'-0"



3 A358 PLAN DETAIL
1 1/2" = 1'-0"

DETAILS LEGEND
LEGEND APPLIES TO ALL A300 SERIES

- BRICK
- C.M.U.
- RIGID INSUL.
- STEEL
- RECONSTRUCTED STONE
- SOLID GROUT
- CONCRETE
- SPRAY-APPLIED CLOSED CELL INSULATION WITH SPRAY-APPLIED FIRE RATED BARRIER ON EXPOSED SURFACES
- FIRESTOPPING ASSEMBLY
- BATT INSULATION
- METAL STUD
- RUNNER TRACK
- WEEP OR HEAD VENT
- EXPANSION ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
- VENEER ANCHOR
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- BACKER ROD & SEALANT

DETAILS GENERAL NOTES

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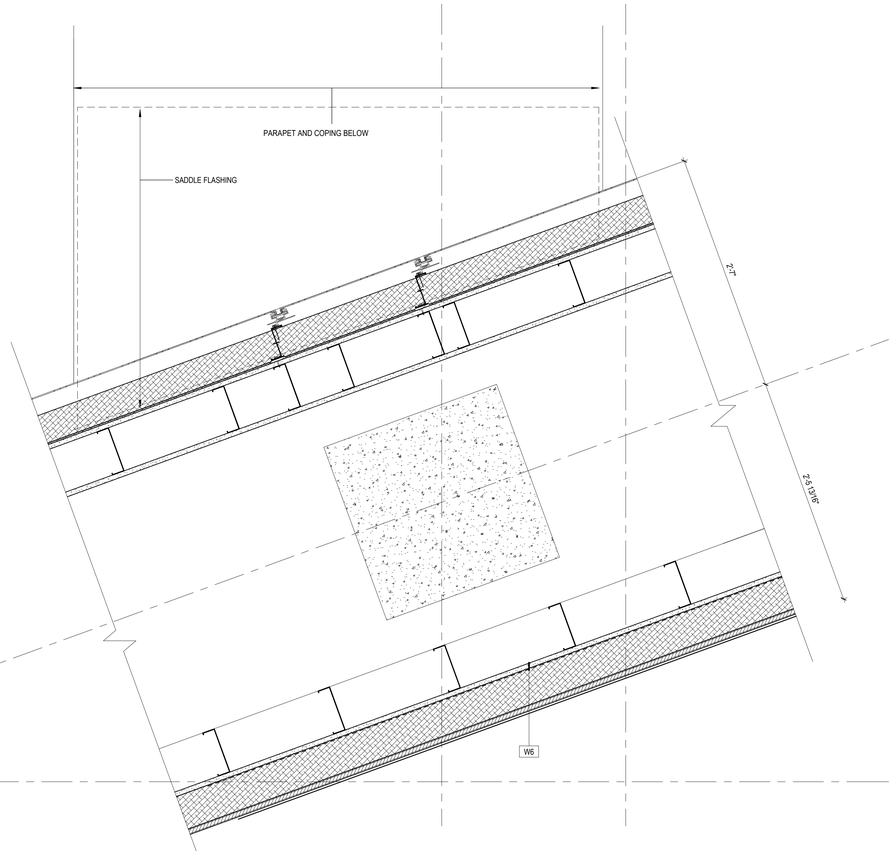
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INDIANAPOLIS, INDIANA

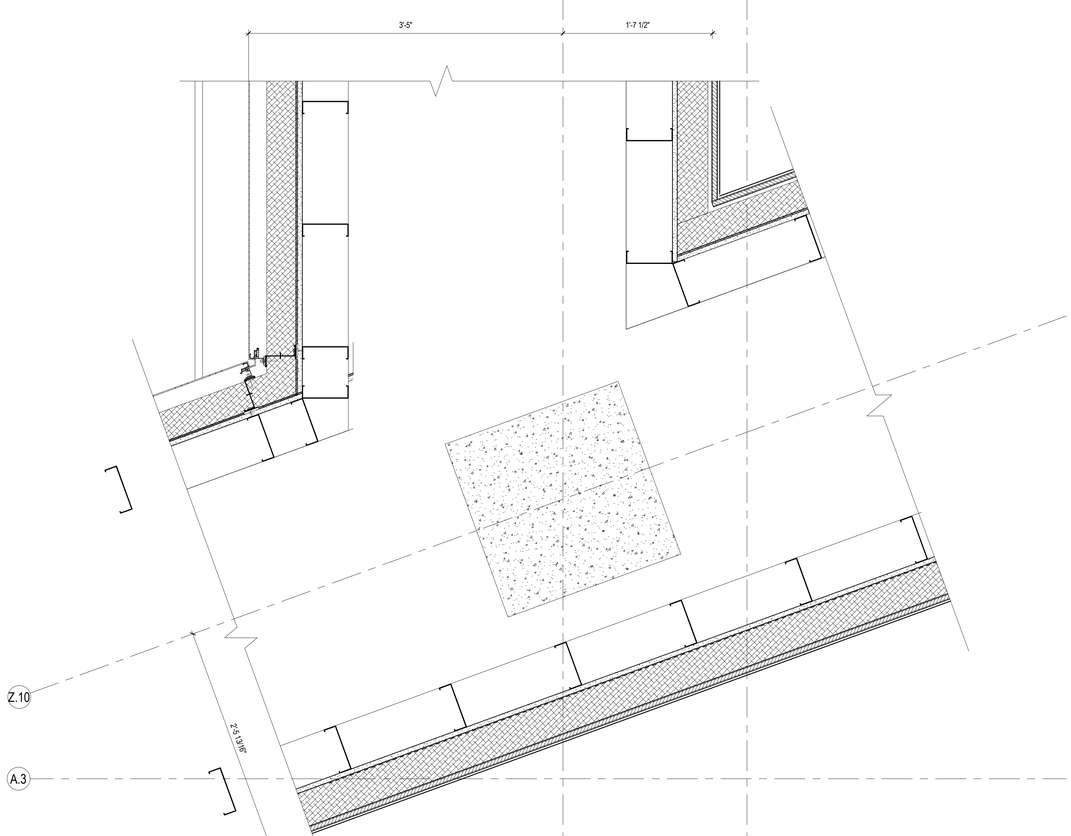
CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



4 A358 PLAN DETAIL
1 1/2" = 1'-0"



1 A358 PLAN DETAIL
1 1/2" = 1'-0"

ISSUED / REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

AUBREY JOHN COOK
REGISTERED
No. AR10400213
STATE OF
INDIANA
ARCHITECT

12

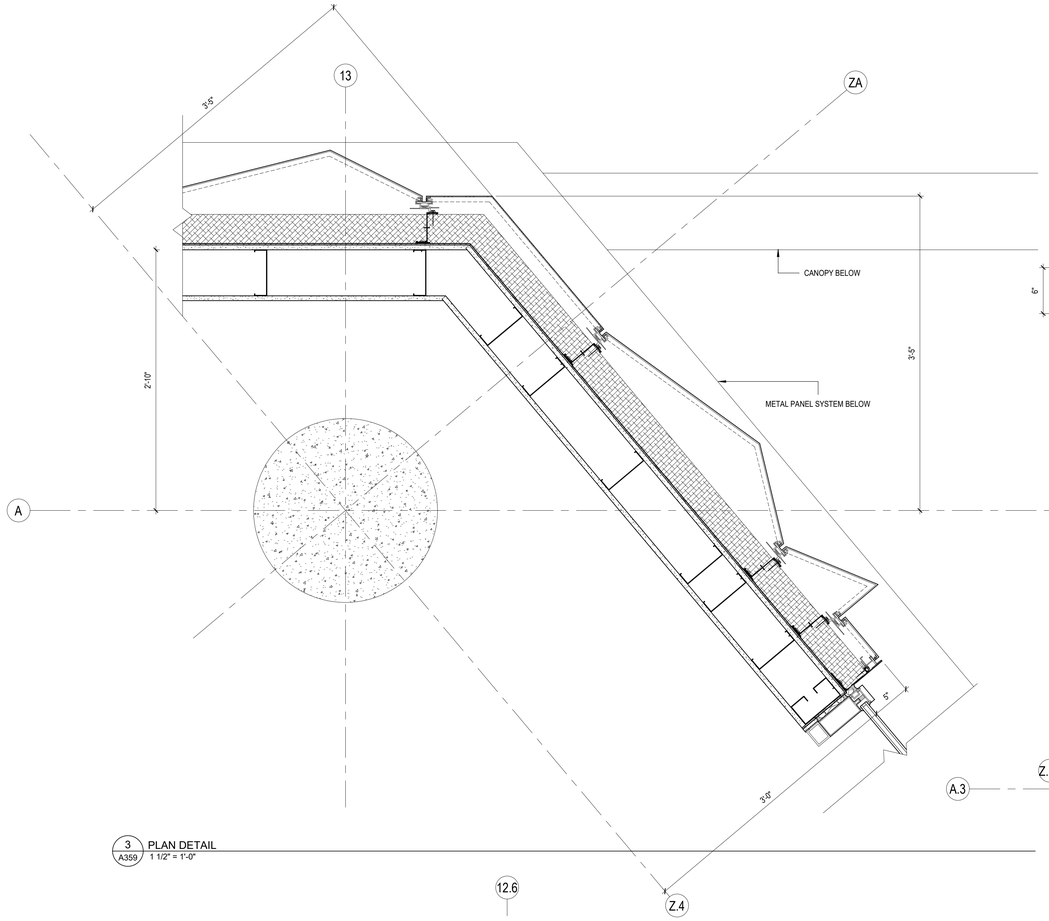
EXTERIOR PLAN DETAILS

DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

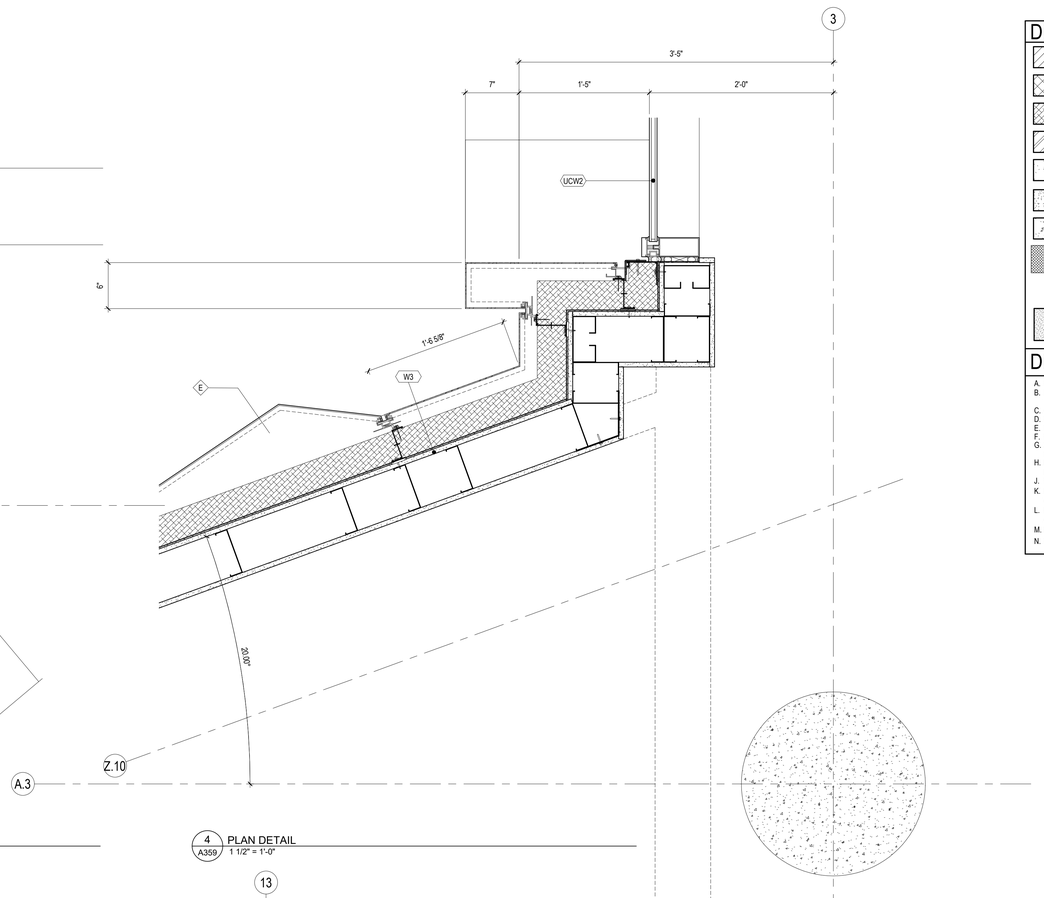
A358

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3 A359 PLAN DETAIL
1 1/2" = 1'-0"



4 A359 PLAN DETAIL
1 1/2" = 1'-0"

DETAILS LEGEND
LEGEND APPLIES TO ALL A300 SERIES

- BRICK
- C.M.U.
- RIGID INSUL.
- STEEL
- RECONSTRUCTED STONE
- SOLID GROUT
- CONCRETE
- SPRAY-APPLIED CLOSED CELL INSULATION WITH SPRAY-APPLIED FIRE RATED BARRIER ON EXPOSED SURFACES
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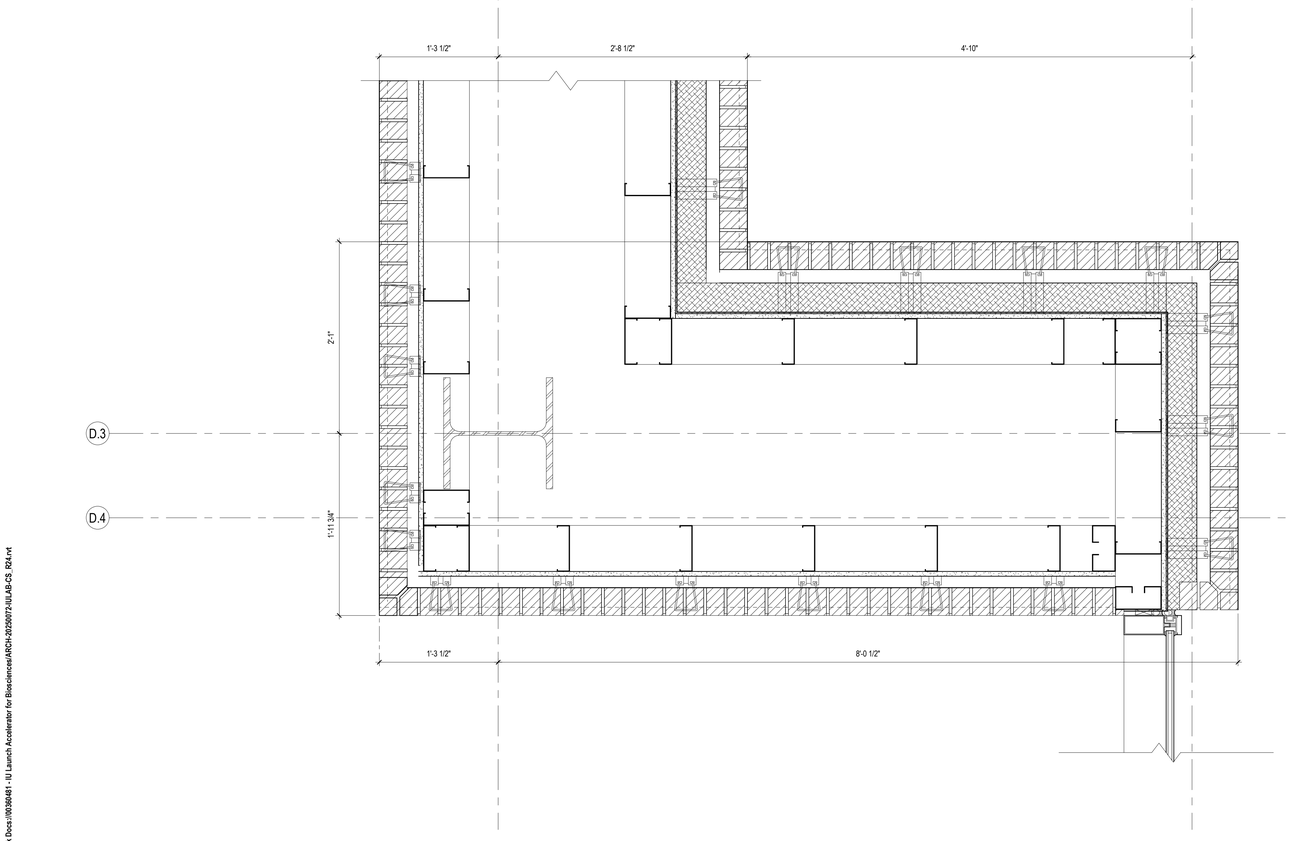
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INDIANAPOLIS, INDIANA

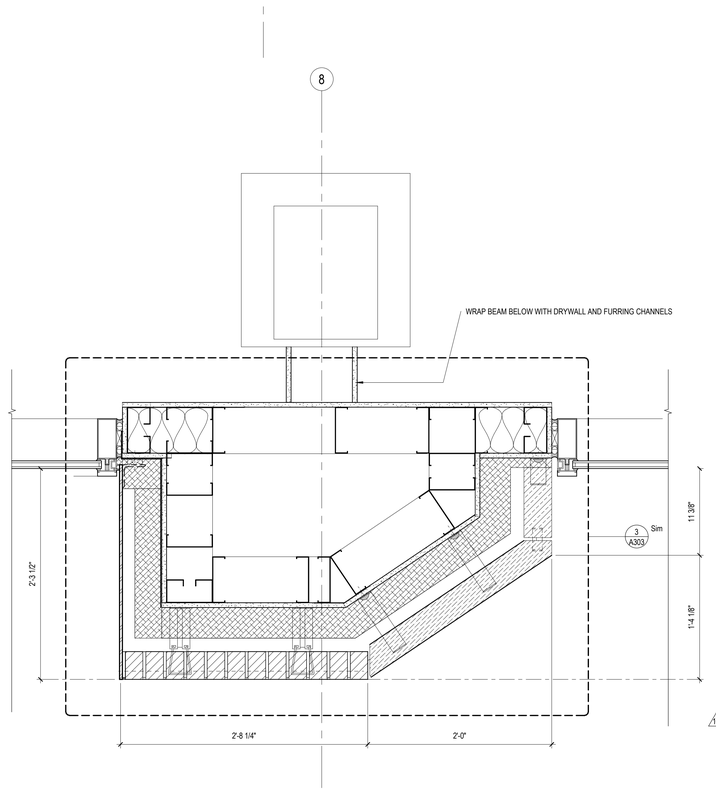
CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



1 A359 PLAN DETAIL
1 1/2" = 1'-0"



2 A359 PLAN DETAIL
1 1/2" = 1'-0"

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE



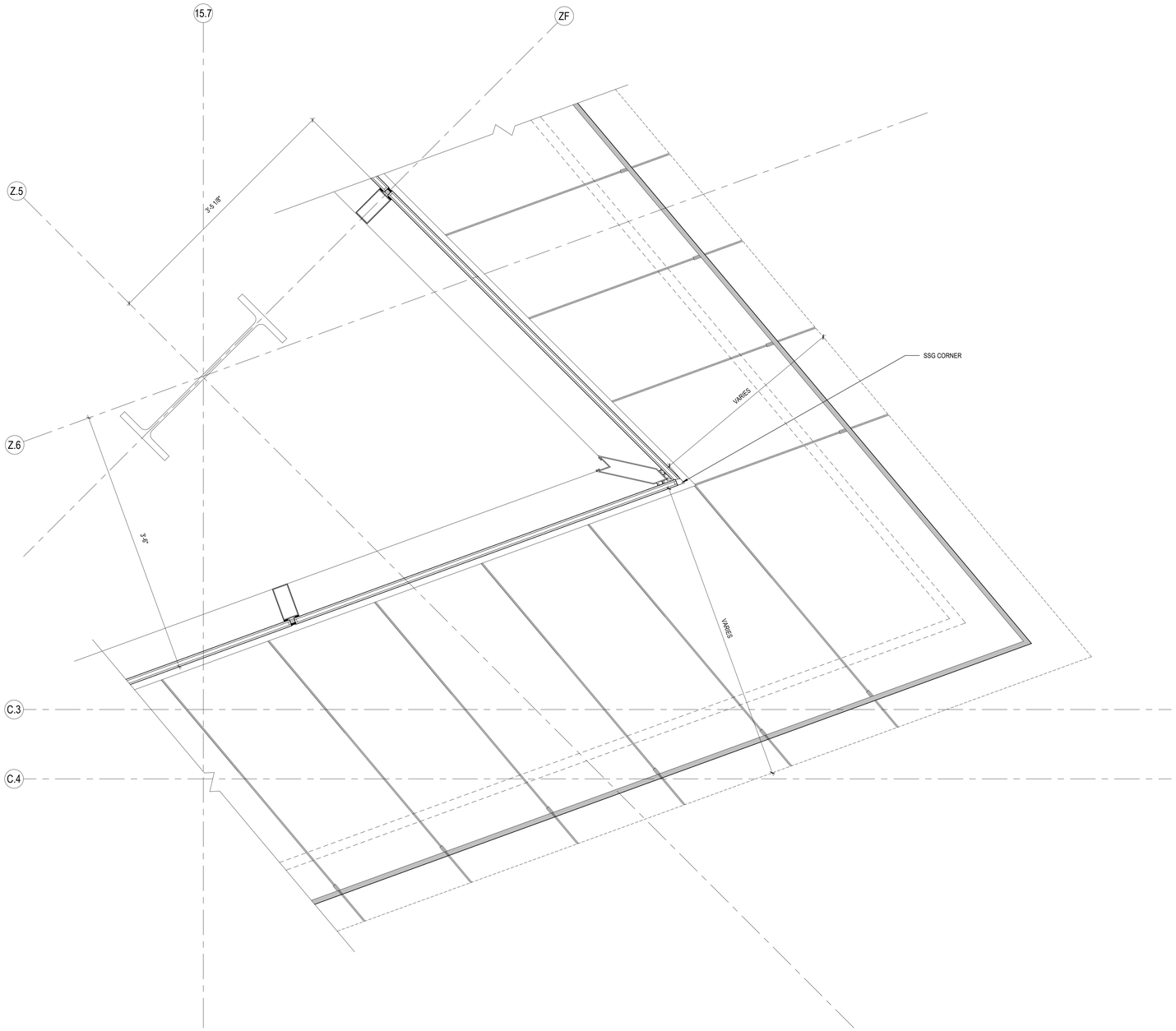
EXTERIOR PLAN DETAILS

DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

A359

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1 A360 Detail 74
1 1/2" = 1'-0"

DETAILS LEGEND
LEGEND APPLIES TO ALL A300 SERIES

- BRICK
- C.M.U.
- RIGID INSUL.
- STEEL
- RECONSTRUCTED STONE
- SOLID GROUT
- CONCRETE
- SPRAY-APPLIED CLOSED CELL INSULATION WITH SPRAY-APPLIED FIRE RATED BARRIER ON EXPOSED SURFACES
- FIRESTOPPING ASSEMBLY
- BATT INSULATION
- METAL STUD
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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN HAUN REGISTERED ARCHITECT No. AR10400213 STATE OF INDIANA

12

EXTERIOR PLAN DETAILS

DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

A360

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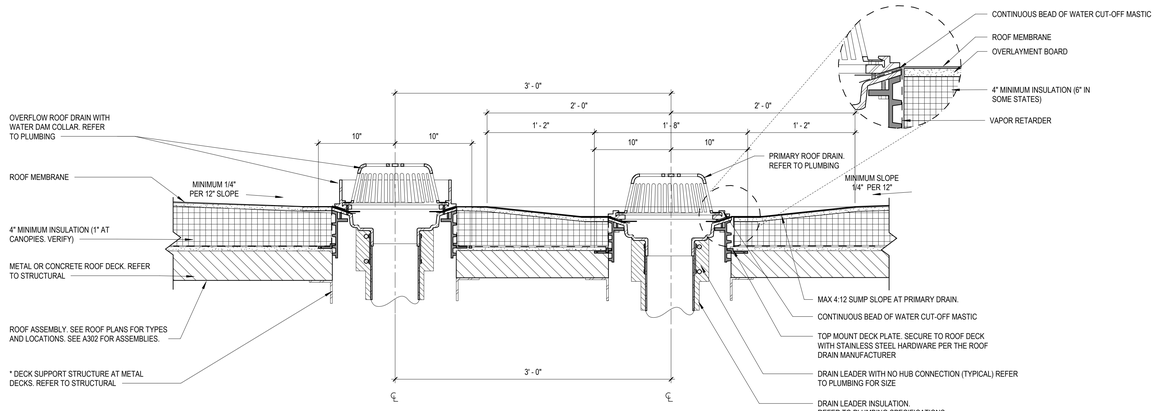
INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

2 A370 ROOF HATCH DETAIL
1 1/2" = 1'-0"



1 A370 TYPICAL ROOF DRAIN DETAIL
1 1/2" = 1'-0"



KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH
TRUE NORTH

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03

ANDREW JOHN JOHNSON REGISTERED No. AR10400213 STATE OF INDIANA LICENSED ARCHITECT

ROOF DETAILS

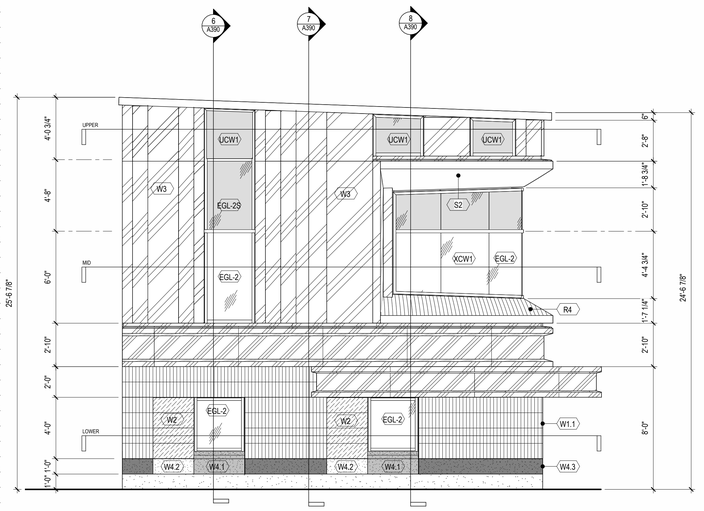
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BSA PROJECT NO. 00360481

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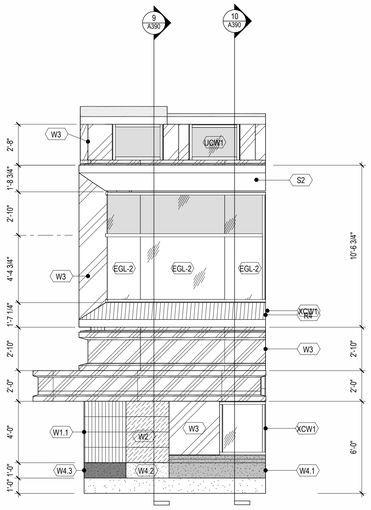
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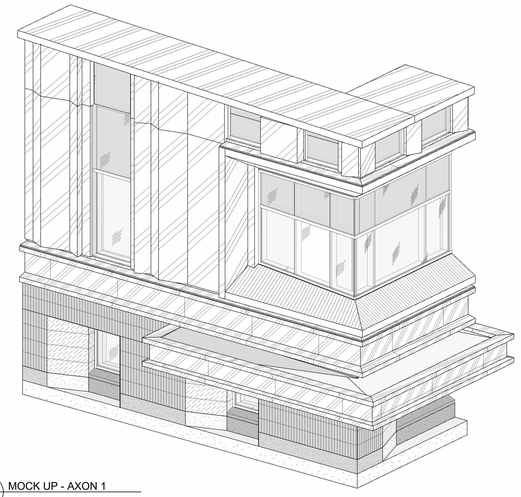
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4 A390 MOCK UP - ELEVATION A
1/4" = 1'-0"



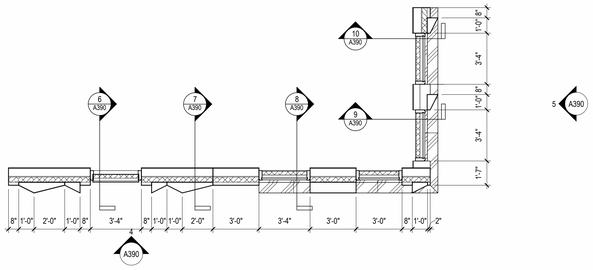
5 A390 MOCK UP - ELEVATION B
1/4" = 1'-0"



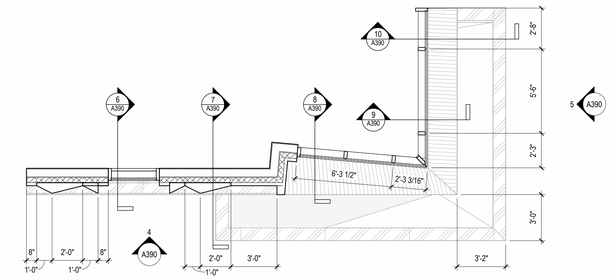
11 A390 MOCK UP - AXON 1



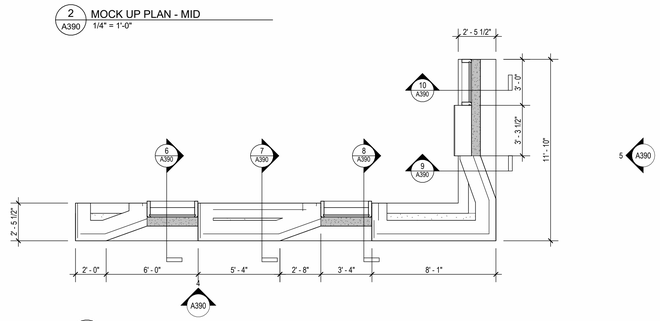
12 A390 MOCK UP - AXON 2



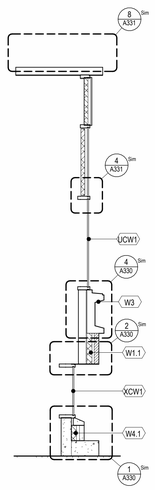
3 A390 MOCK UP PLAN - UPPER
1/4" = 1'-0"



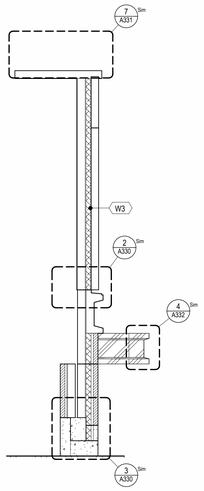
2 A390 MOCK UP PLAN - MOCK UP
1/4" = 1'-0"



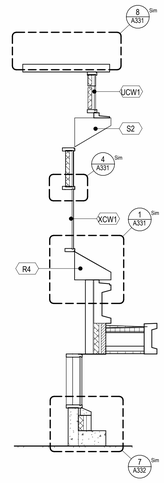
1 A390 MOCK UP PLAN - LOWER
1/4" = 1'-0"



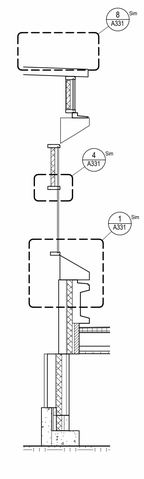
6 A390 SECTION A
1/4" = 1'-0"



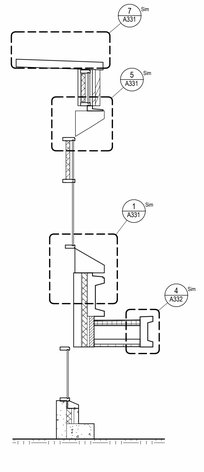
7 A390 SECTION B
1/4" = 1'-0"



8 A390 SECTION C
1/4" = 1'-0"



9 A390 SECTION D
1/4" = 1'-0"



10 A390 SECTION E
1/4" = 1'-0"

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN LUCAS
REGISTERED
No. AR10400213
STATE OF INDIANA
ARCHITECT

INTEGRATED EXTERIOR MOCKUP

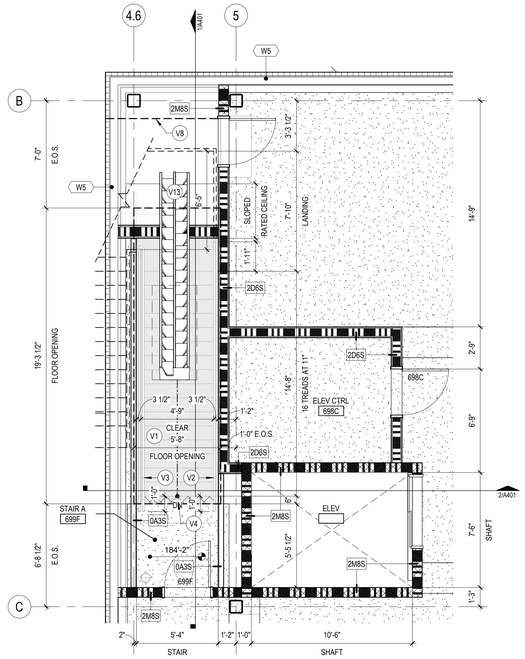
DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

A390

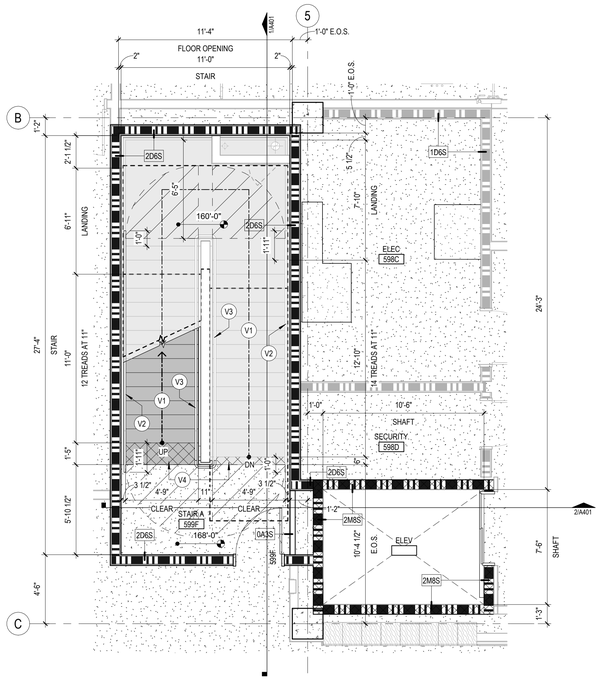
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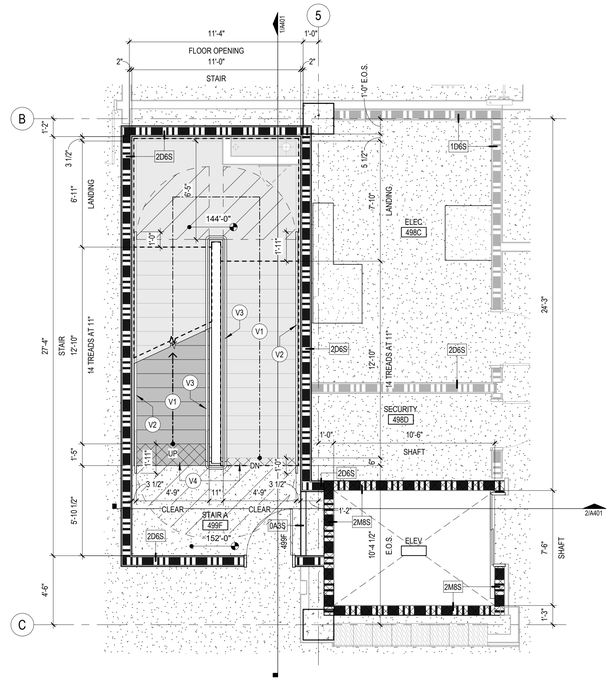
SHEET NOTE SCHEDULE	
NUMBER	TEXT
V1	METAL STAIRS WITH CONCRETE TREADS
V2	STAINLESS STEEL WALL-MOUNTED RAILING
V3	STEEL GUARDRAIL AND STAINLESS STEEL HANDRAIL
V4	TREAD FLUSH WITH FLOOR/LANDING
V8	FACE OF STAIR WALL BELOW
V9	STAINLESS STEEL CANE DETECTION RAILING
V13	ALTERNATING TREAD STAIR



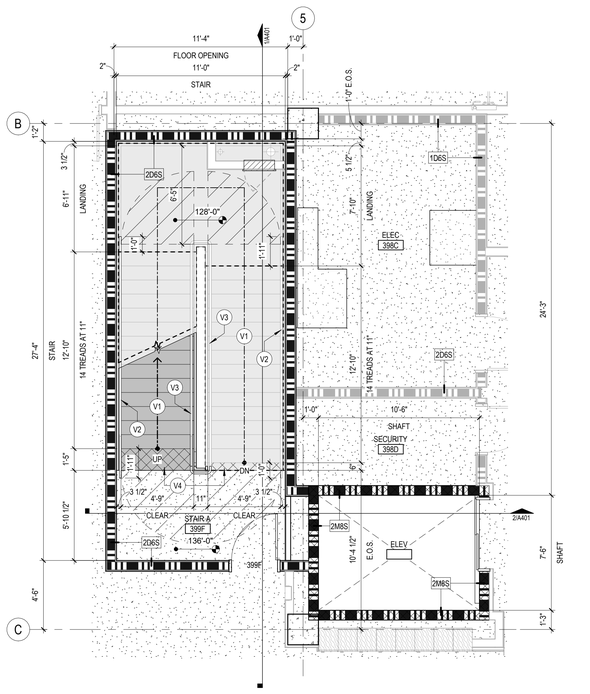
6 A400 WEST VERTICAL CIRCULATION - PENTHOUSE
1/4" = 1'-0"



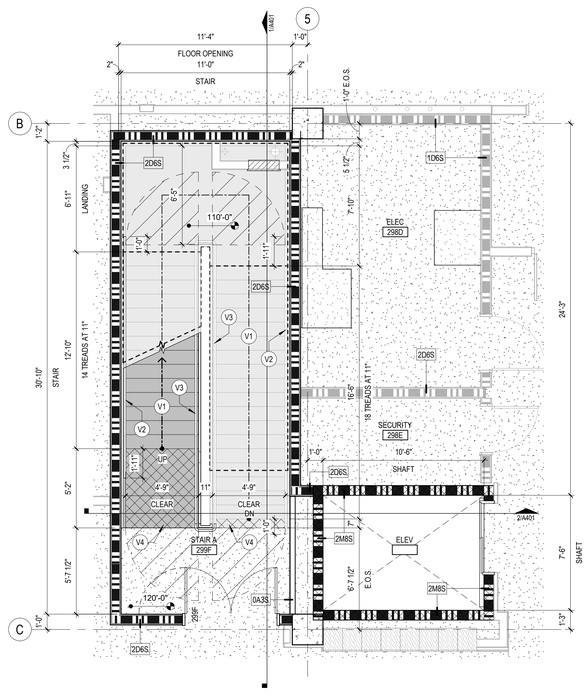
5 A400 WEST VERTICAL CIRCULATION - LEVEL 5
1/4" = 1'-0"



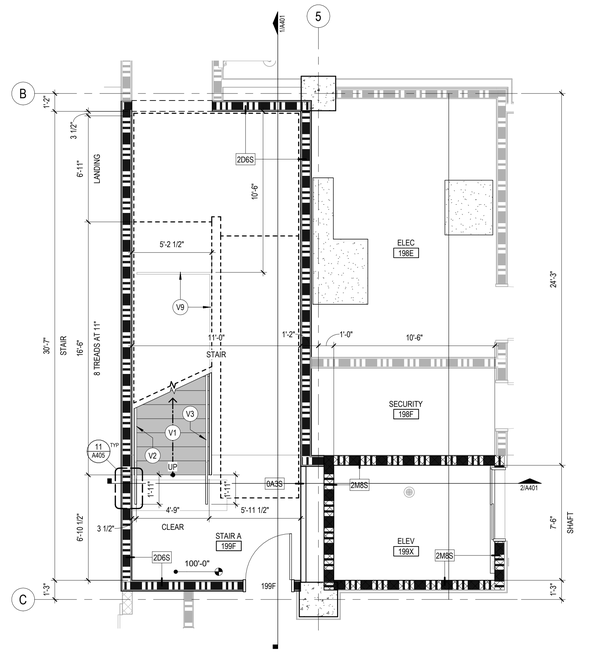
4 A400 WEST VERTICAL CIRCULATION - LEVEL 4
1/4" = 1'-0"



3 A400 WEST VERTICAL CIRCULATION - LEVEL 3
1/4" = 1'-0"



2 A400 WEST VERTICAL CIRCULATION - LEVEL 2
1/4" = 1'-0"



1 A400 WEST VERTICAL CIRCULATION - LEVEL 1
1/4" = 1'-0"

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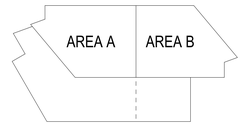
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH
TRUE NORTH

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

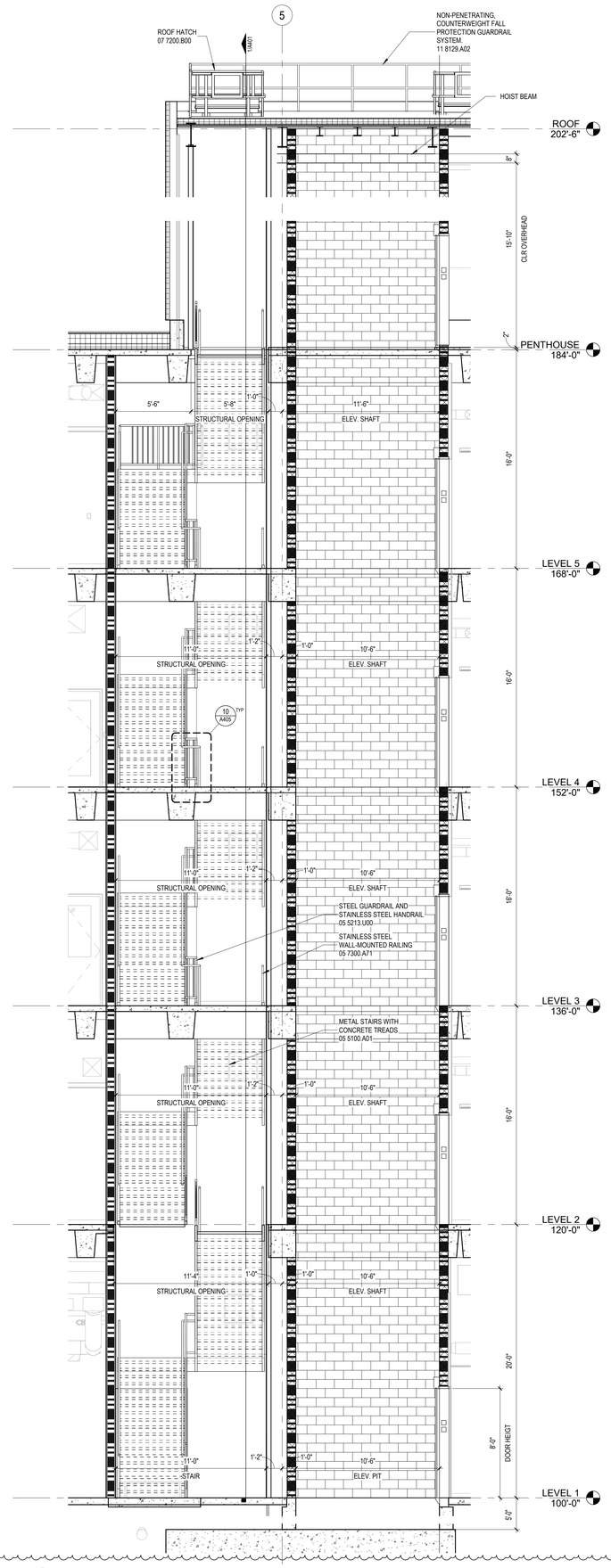
ANDREW JOHN HICKS REGISTERED No. AR10400213 STATE OF INDIANA ARCHITECT

WEST VERTICAL CIRCULATION - ENLARGED PLANS

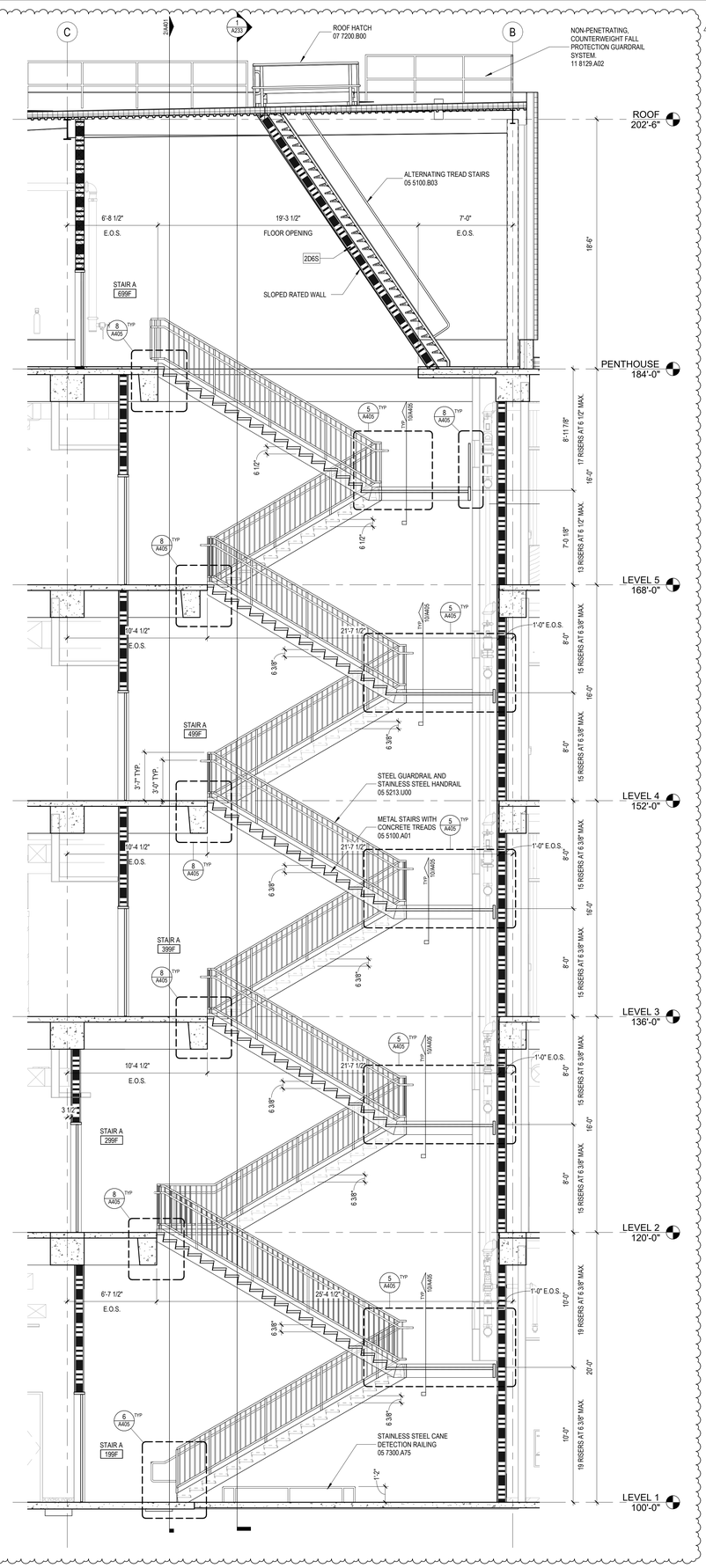
DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

A400

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2 / A401 SECTION - WEST STAIR AND ELEVATOR
1/4" = 1'-0"



1 / A401 SECTION - WEST STAIR
1/4" = 1'-0"

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN FRENCH REGISTERED ARCHITECT No. AR10400213 STATE OF INDIANA

WEST VERTICAL CIRCULATION - SECTIONS

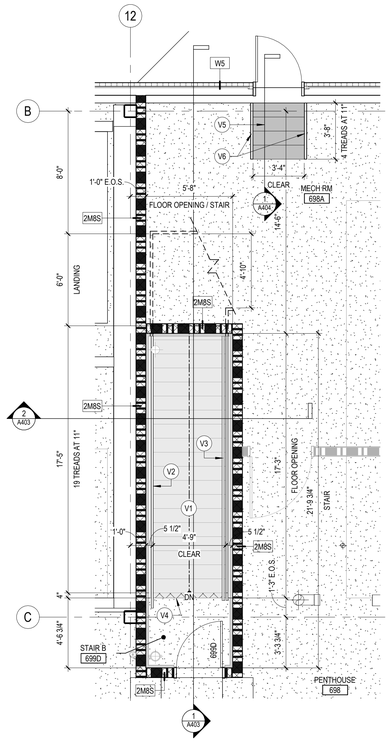
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BSA PROJECT NO.	00360481

A401

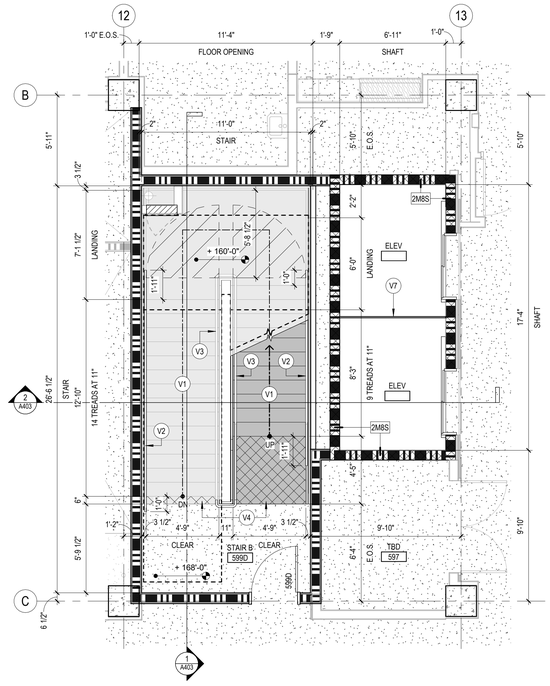
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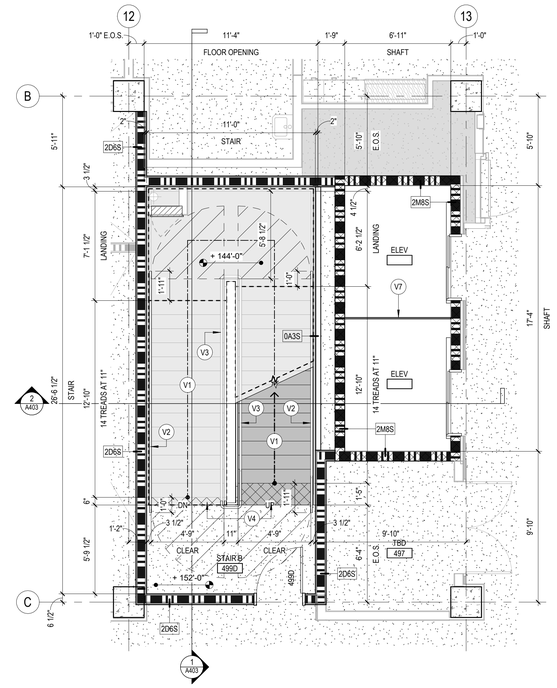
SHEET NOTE SCHEDULE	
NUMBER	TEXT
D4	ALIGN
V1	METAL STAIRS WITH CONCRETE TREADS
V2	STAINLESS STEEL WALL-MOUNTED RAILING
V3	STEEL GUARDRAIL AND STAINLESS STEEL HANDRAIL
V4	TREAD FLUSH WITH FLOOR/LANDING
V5	METAL STAIRS WITH GRATING TREADS
V6	STEEL GUARDRAIL
V7	FULL HEIGHT METAL SCREEN GUARD MOUNTED TO DIVIDER BEAM, TYPICAL EACH LEVEL



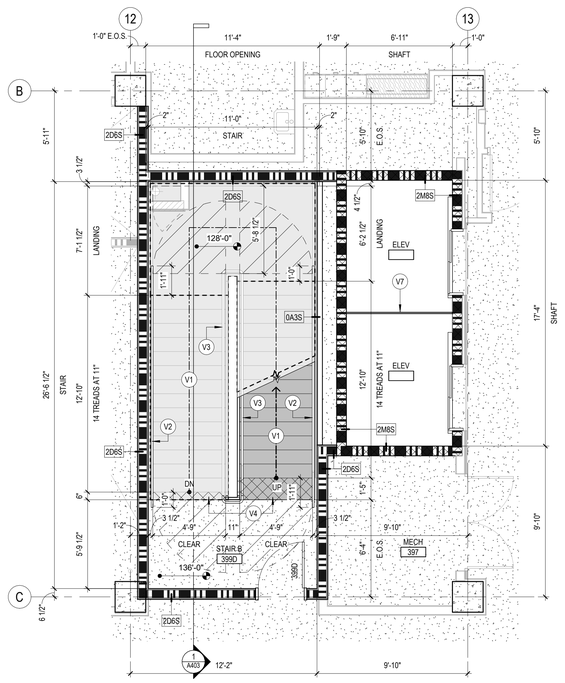
6 A402 EAST VERTICAL CIRCULATION - PENTHOUSE
1/4" = 1'-0"



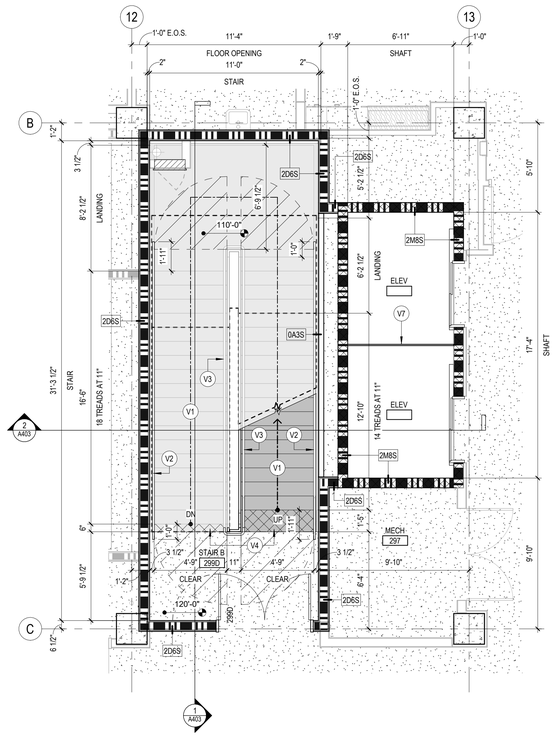
5 A402 EAST VERTICAL CIRCULATION - LEVEL 5
1/4" = 1'-0"



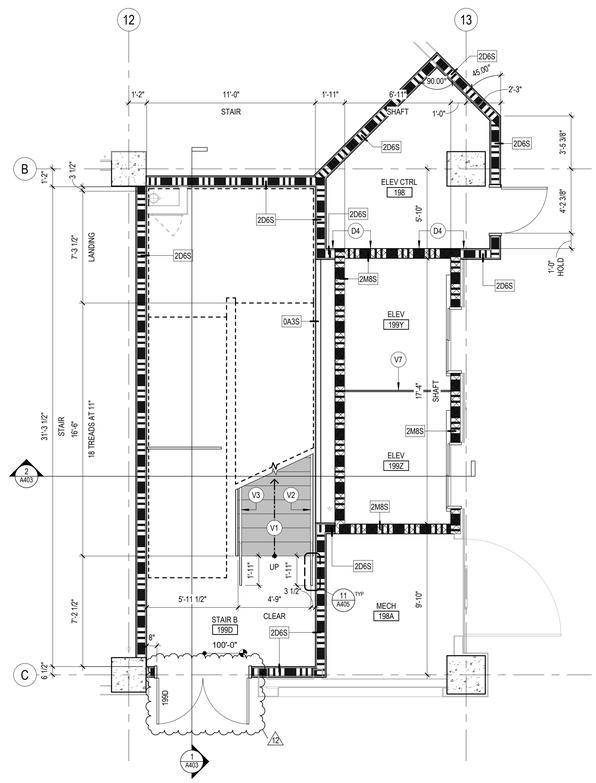
4 A402 EAST VERTICAL CIRCULATION - LEVEL 4
1/4" = 1'-0"



3 A402 EAST VERTICAL CIRCULATION - LEVEL 3
1/4" = 1'-0"



2 A402 EAST VERTICAL CIRCULATION - LEVEL 2
1/4" = 1'-0"



1 A402 EAST VERTICAL CIRCULATION - LEVEL 1
1/4" = 1'-0"

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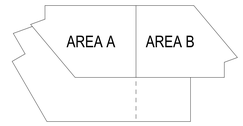
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN
PROJECT NORTH
REFER TO CIVIL DRAWINGS FOR TRUE NORTH
TRUE NORTH

ISSUED / REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN JOHNS
REGISTERED
No. AR10400213
STATE OF
INDIANA
ARCHITECT

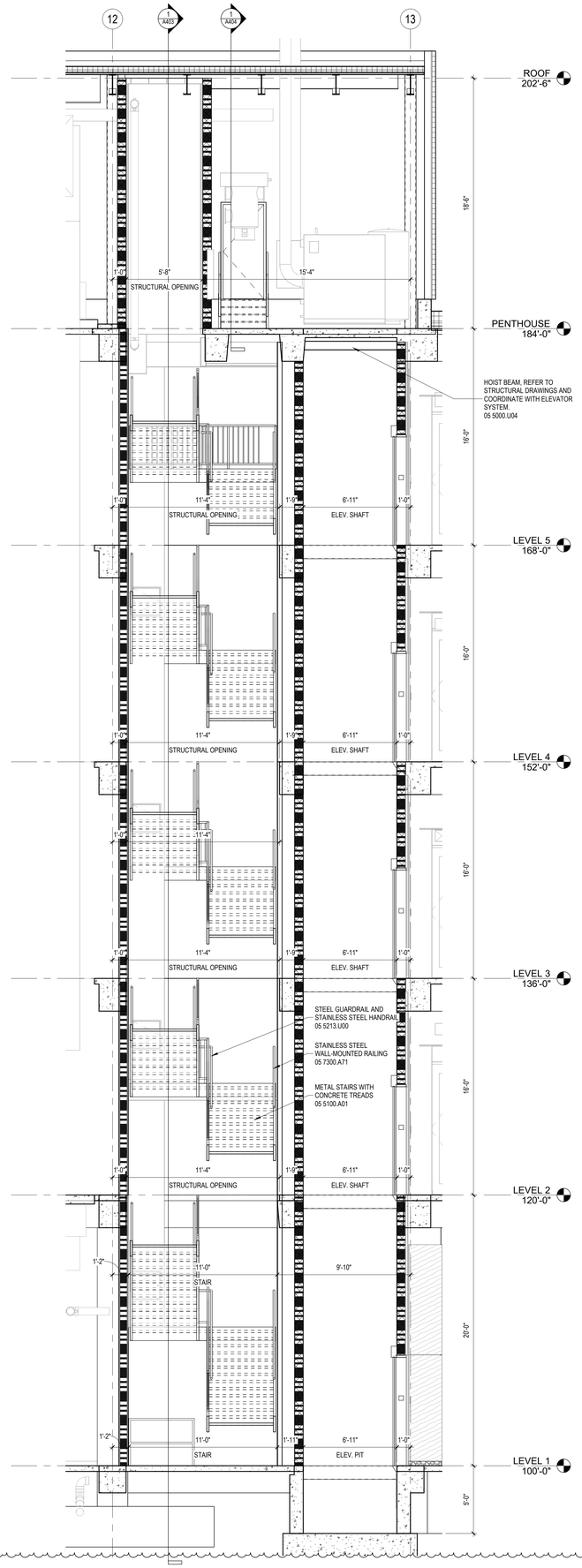
EAST VERTICAL CIRCULATION - ENLARGED PLANS

DATE REF: SHEET INDEX
BSA PROJECT NO. 00360481

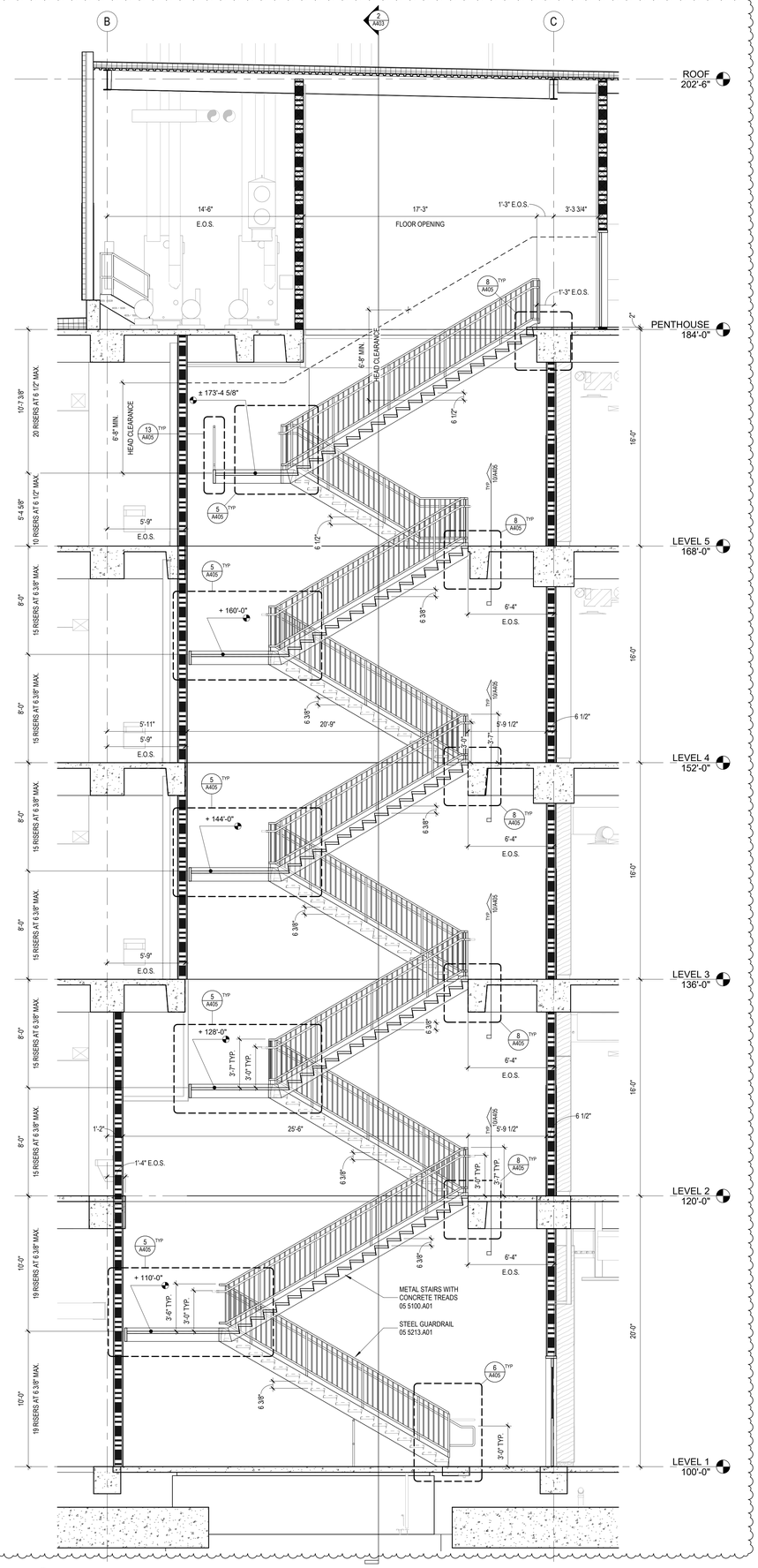
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2 A403 SECTION - EAST STAIR AND ELEVATOR
1/4" = 1'-0"



1 A403 SECTION - EAST STAIR
1/4" = 1'-0"

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CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN JOHNSON REGISTERED ARCHITECT No. AR10400213 STATE OF INDIANA

EAST VERTICAL CIRCULATION - SECTIONS

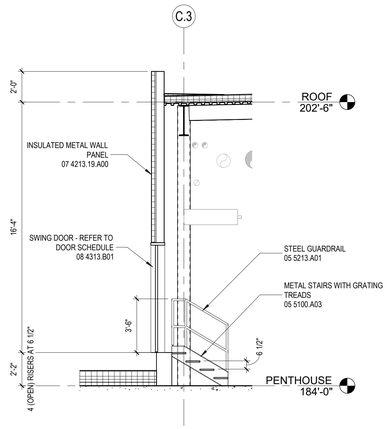
DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

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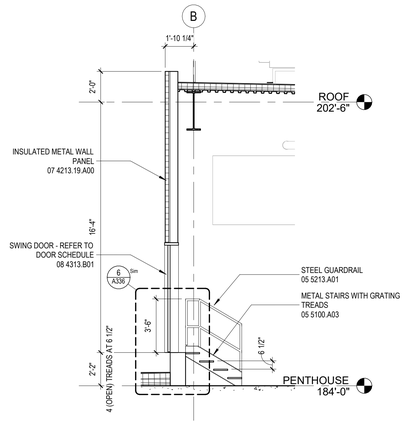
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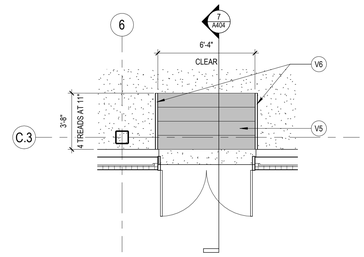
SHEET NOTE SCHEDULE	
NUMBER	TEXT
V4	TREAD FLUSH WITH FLOOR/LANDING
V5	METAL STAIRS WITH GRATING TREADS
V6	STEEL GUARDRAIL



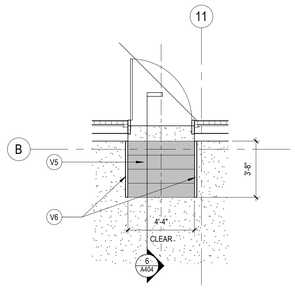
7 A404 SECTION - PENTHOUSE STAIR FOR ROOF ACCESS 03
1/4" = 1'-0"



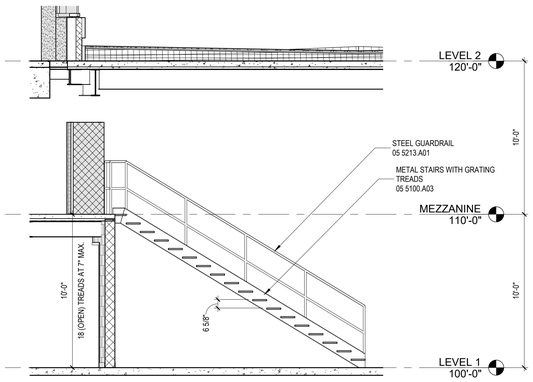
6 A404 SECTION - PENTHOUSE STAIR FOR ROOF ACCESS 02
1/4" = 1'-0"



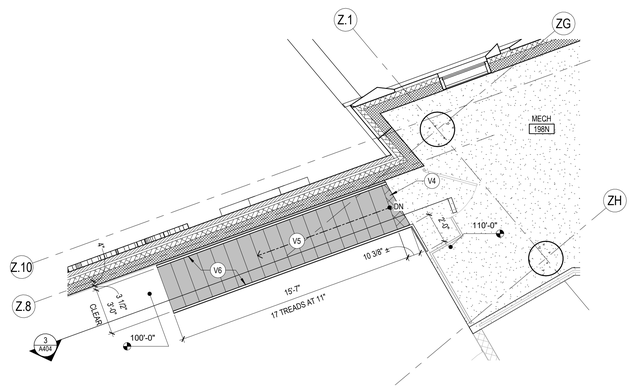
5 A404 ENLARGED STAIR PLAN - PENTHOUSE - ACCESS STAIR 03
1/4" = 1'-0"



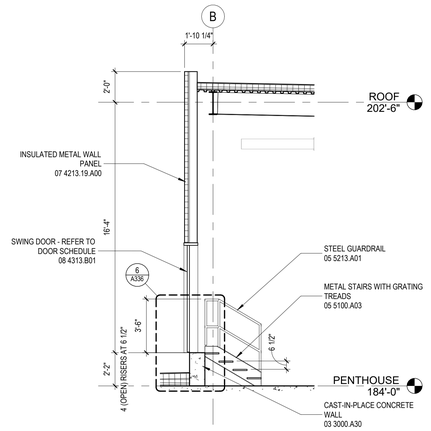
4 A404 ENLARGED STAIR PLAN - PENTHOUSE - ACCESS STAIR 02
1/4" = 1'-0"



3 A404 SECTION - MEZZANINE STAIR
1/4" = 1'-0"



2 A404 MEZZANINE VERTICAL CIRCULATION1
1/4" = 1'-0"



1 A404 SECTION - PENTHOUSE STAIR FOR ROOF ACCESS 01
1/4" = 1'-0"

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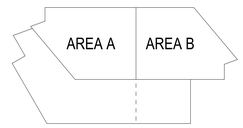
LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE



KEYPLAN
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TRUE NORTH

ISSUED / REVISIONS SCHEDULE		
MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03

ANDREW JOHN KNOX
REGISTERED ARCHITECT
No. AR10400213
STATE OF INDIANA

VERTICAL CIRCULATION - ENLARGED PLANS AND SECTIONS

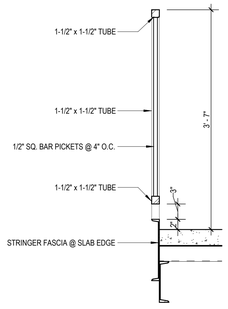
DATE	REF: SHEET INDEX
BSA PROJECT NO.	00360481

A404

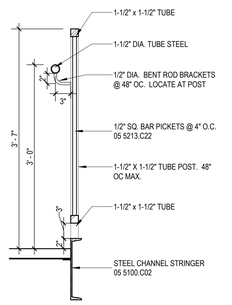
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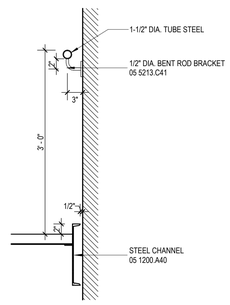
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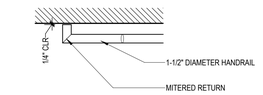
14 A405 EGRESS STAIR GUARD SECTION AT LANDING
1" = 1'-0"



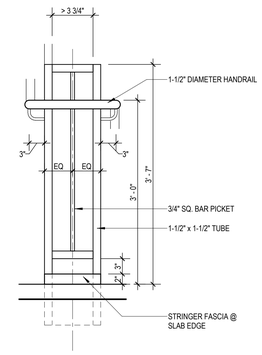
13 A405 EGRESS STAIR GUARD SECTION
1" = 1'-0"



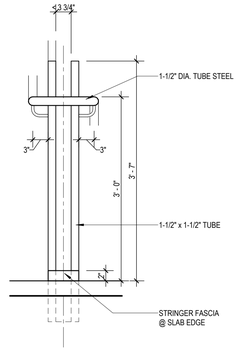
12 A405 EGRESS STAIR HANDRAIL SECTION
1" = 1'-0"



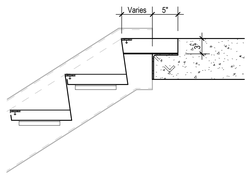
11 A405 EGRESS STAIR HANDRAIL END CONDITION
1" = 1'-0"



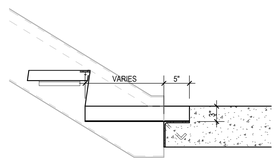
10 A405 EGRESS STAIR GUARD WIDE END
1" = 1'-0"



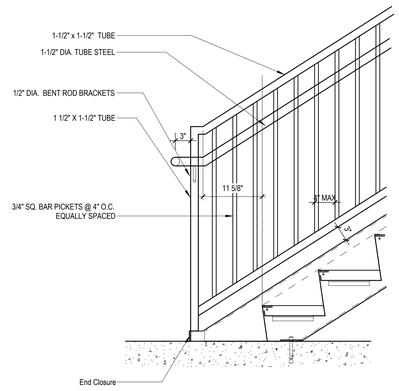
9 A405 EGRESS STAIR GUARD NARROW END
1" = 1'-0"



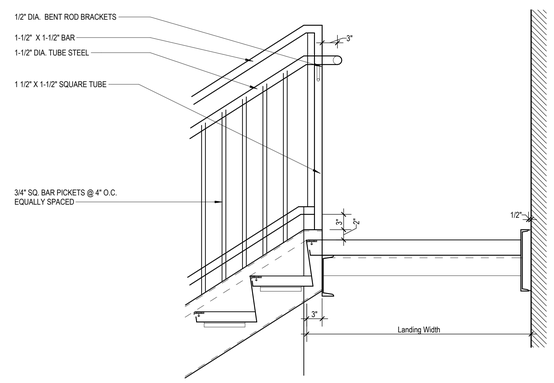
8 A405 EGRESS STAIR TOP OF RUN LANDING (CONCRETE)
1" = 1'-0"



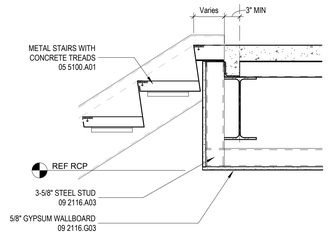
7 A405 EGRESS STAIR BOTTOM OR RUN LANDING (CONCRETE)
1" = 1'-0"



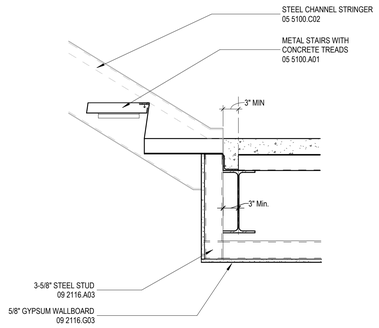
6 A405 EGRESS STAIR RUN AT GRADE LANDING - GUARD
1" = 1'-0"



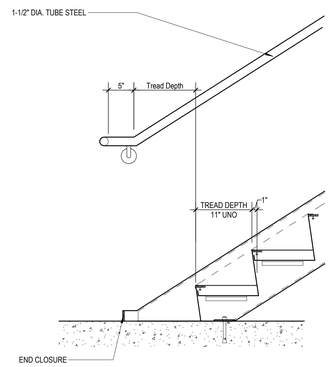
5 A405 EGRESS STAIR RUN AT INTERMEDIATE LANGING - GUARD
1" = 1'-0"



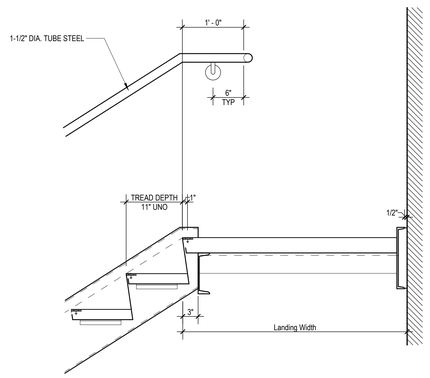
4 A405 EGRESS STAIR TOP OF RUN LANDING (STEEL)
1" = 1'-0"



3 A405 EGRESS STAIR BOTTOM OR RUN LANDING (STEEL)
1" = 1'-0"



2 A405 EGRESS STAIR RUN AT GRADE LANDING - HANDRAIL
1" = 1'-0"



1 A405 EGRESS STAIR RUN AT INTERMEDIATE LANGING - HANDRAIL
1" = 1'-0"

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN CRUNCH
REGISTERED
No. AR10400213
STATE OF INDIANA
ARCHITECT

EGRESS STAIR DETAILS

DATE
BSA PROJECT NO. 00360481

REF: SHEET INDEX

A405

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EXTERIOR OPENING SCHEDULE

OPENING NUMBER	OPENING			PANEL					FRAME					GLAZING TYPE	FIRE RATING (MINUTES)	COMMENTS	REV.
	TYPE	WIDTH	HEIGHT	MATERIAL	WIDTH		TYPE		MATERIAL	TYPE	SIDELITE WIDTH		DETAIL SET				
					PRIMARY	SECONDARY	PRIMARY	SECONDARY			HINGE SIDE	LATCH SIDE					
LEVEL 1																	
100	SW1	3'-3"	7'-11 1/2"	AL	3'-3"	0"	P4.1 : ENTRANCE FULL LITE	--	AL	F0.0 : NONE	0"	0"	--	GL	--		
198	SW1	3'-0"	8'-0"	HM	3'-0"	0"	P1.1 : FLUSH	--	HM	F1.1 : STANDARD	0"	0"	01	--	90 MIN	INTERIOR DOOR	
198L	SW1	3'-4"	7'-0"	HM	3'-4"	0"	P1.1 : FLUSH	--	HM	F1.1 : STANDARD	0"	0"	--	NA	--		
198P	SW1	3'-4"	8'-0"	HM	3'-4"	0"	P1.1 : FLUSH	--	HM	F0.0 : NONE	0"	0"	A354-7	NA	--		
199B.1	SW2	6'-8"	8'-0"	AL	3'-4"	3'-4"	P4.1 : ENTRANCE FULL LITE	P4.1 : ENTRANCE FULL LITE	AL	F0.0 : NONE	0"	0"	--	GL	--	AUTO OPERATOR RHR	
199B.2	SW2	6'-8"	8'-0"	AL	3'-4"	3'-4"	P4.1 : ENTRANCE FULL LITE	P4.1 : ENTRANCE FULL LITE	AL	F0.0 : NONE	0"	0"	--	GL	--	AUTO OPERATOR RHR	
199C.1	SW2	6'-8"	8'-0"	AL	3'-4"	3'-4"	P4.1 : ENTRANCE FULL LITE	P4.1 : ENTRANCE FULL LITE	AL	F0.0 : NONE	0"	0"	--	GL	--		
199C.2	SW2	6'-8"	8'-0"	AL	3'-4"	3'-4"	P4.1 : ENTRANCE FULL LITE	P4.1 : ENTRANCE FULL LITE	AL	F0.0 : NONE	0"	0"	--	GL	--		
199D	SW2	6'-0"	8'-0"	HM	3'-0"	3'-0"	P2.1a : VISION LITE NARROW	P2.1a : VISION LITE NARROW	HM	F1.1 : STANDARD	0"	0"	01	GL	90 MIN	INTERIOR DOOR	
199F	SW1	3'-0"	8'-0"	HM	3'-0"	0"	P2.1a : VISION LITE NARROW	--	HM	F1.1 : STANDARD	0"	0"	01	GL	90 MIN	INTERIOR DOOR	
199G	SW1	3'-3"	7'-11 1/2"	AL	3'-3"	0"	P4.1 : ENTRANCE FULL LITE	--	AL	F0.0 : NONE	0"	0"	--	GL	--		
199H.1	SW1	3'-6"	8'-0"	HM	3'-6"	0"	P1.1 : FLUSH	--	HM	F1.1 : STANDARD	0"	0"	A350-3	NA	--		
199H.2	OHC	9'-0"	12'-0"	AL	9'-0"	0"	NOT : APPLICABLE	NOT : APPLICABLE	AL	NOT : APPLICABLE	0"	0"	A336-1, A350-8	NA	--		
199H.3	OHC	9'-0"	12'-0"	AL	9'-0"	0"	NOT : APPLICABLE	NOT : APPLICABLE	AL	NOT : APPLICABLE	0"	0"	A336-1,A350-8	NA	--		
199J	SW1	4'-0"	8'-0"	AL	4'-0"	0"	P4.1 : ENTRANCE FULL LITE	--	AL	F0.0 : NONE	0"	0"	A350-5	GL	--		
199K.1	SW2	6'-8"	8'-0"	AL	3'-4"	3'-4"	P4.1 : ENTRANCE FULL LITE	P4.1 : ENTRANCE FULL LITE	AL	F0.0 : NONE	0"	0"	--	GL	--	AUTO OPERATOR RHR	
199K.2	SW2	6'-8"	8'-0"	AL	3'-4"	3'-4"	P4.1 : ENTRANCE FULL LITE	P4.1 : ENTRANCE FULL LITE	AL	F0.0 : NONE	0"	0"	--	GL	--	AUTO OPERATOR RHR	
199M.1	SW1	3'-4"	8'-0"	AL	3'-4"	0"	P4.1 : ENTRANCE FULL LITE	--	AL	F0.0 : NONE	0"	0"	A353-1	GL	--		
199M.2	SW1	3'-4"	8'-0"	AL	3'-4"	0"	P4.1 : ENTRANCE FULL LITE	--	AL	F0.0 : NONE	0"	0"	--	GL	--		
LEVEL 2																	
202.1	SW2	6'-8"	8'-0"	AL	3'-4"	3'-4"	P4.1 : ENTRANCE FULL LITE	P4.1 : ENTRANCE FULL LITE	AL	F0.0 : NONE	0"	0"	--	GL	--		
202.2	SW2	6'-8"	8'-0"	AL	3'-4"	3'-4"	P4.1 : ENTRANCE FULL LITE	P4.1 : ENTRANCE FULL LITE	AL	F0.0 : NONE	0"	0"	--	GL	--		
299D	SW2	6'-0"	8'-0"	HM	3'-0"	3'-0"	P2.1a : VISION LITE NARROW	P2.1a : VISION LITE NARROW	HM	F1.1 : STANDARD	0"	0"	01	GL	90 MIN	INTERIOR DOOR	
299F	SW2	6'-0"	8'-0"	HM	3'-0"	3'-0"	P2.1a : VISION LITE NARROW	P2.1a : VISION LITE NARROW	HM	F1.1 : STANDARD	0"	0"	01	GL	90MIN	INTERIOR DOOR	
LEVEL 3																	
399D	SW1	3'-0"	8'-0"	HM	3'-0"	0"	P2.1a : VISION LITE NARROW	--	HM	F1.1 : STANDARD	0"	0"	01	GL	90MIN	INTERIOR DOOR	
399F	SW1	3'-0"	8'-0"	HM	3'-0"	0"	P2.1a : VISION LITE NARROW	--	HM	F1.1 : STANDARD	0"	0"	01	GL	90MIN	INTERIOR DOOR	
LEVEL 4																	
499D	SW1	3'-0"	8'-0"	HM	3'-0"	0"	P2.1a : VISION LITE NARROW	--	HM	F1.1 : STANDARD	0"	0"	01	GL	90MIN	INTERIOR DOOR	
499F	SW1	3'-0"	8'-0"	HM	3'-0"	0"	P2.1a : VISION LITE NARROW	--	HM	F1.1 : STANDARD	0"	0"	01	GL	90MIN	INTERIOR DOOR	
LEVEL 5																	
599D	SW1	3'-0"	8'-0"	HM	3'-0"	0"	P2.1a : VISION LITE NARROW	--	HM	F1.1 : STANDARD	0"	0"	01	GL	90MIN	INTERIOR DOOR	
599F	SW1	3'-0"	8'-0"	HM	3'-0"	0"	P2.1a : VISION LITE NARROW	--	HM	F1.1 : STANDARD	0"	0"	01	GL	90MIN	INTERIOR DOOR	
PENTHOUSE																	
698.1	SW2	6'-0"	7'-0"	HM	3'-0"	3'-0"	P1.1 : FLUSH	P1.1 : FLUSH	HM	F1.1 : STANDARD	0"	0"	H.J.S.	NA	--		
698.2	SW1	4'-0"	7'-0"	HM	4'-0"	0"	P1.1 : FLUSH	--	HM	F1.1 : STANDARD	0"	0"	H.J.S.	NA	--		
698A.1	SW1	3'-0"	7'-0"	HM	3'-0"	0"	P1.1 : FLUSH	--	HM	F1.1 : STANDARD	0"	0"	H.J.S.	NA	--		
698B	SW1	3'-0"	7'-0"	HM	3'-0"	0"	P1.1 : FLUSH	--	HM	F1.1 : STANDARD	0"	0"	01	NA	90MIN		
698C	SW1	3'-0"	7'-0"	HM	3'-0"	0"	P1.1 : FLUSH	--	HM	F1.1 : STANDARD	0"	0"	01	NA	90MIN		
699D	SW1	3'-0"	7'-0"	HM	3'-0"	0"	P2.1a : VISION LITE NARROW	--	HM	F1.1 : STANDARD	0"	0"	01	GL	90MIN		
699F	SW1	3'-0"	7'-0"	HM	3'-0"	0"	P2.1a : VISION LITE NARROW	--	HM	F1.1 : STANDARD	0"	0"	01	GL	90MIN		

OPENING LEGEND

GENERAL OPENING NOTES

1. REFER TO SHEET A510 FOR OPENING DETAILS.
2. REFER TO SPECIFICATION SECTION 087100 FOR DOOR HARDWARE SET REQUIREMENTS.
3. FRAME TYPES ARE SHOWN AS SEEN FROM THE PUBLIC APPROACH SIDE OF FRAME.
4. PROVIDE LEAD CONTENT EQUIVALENT TO PROTECTION REQUIREMENTS OF ADJACENT LEAD SHEET PROTECTION FOR DOORS, FRAMES, AND WINDOWS.

OPENING SCHEDULE NOTES

A. PANEL MATERIAL:
- **HM** = HOLLOW METAL
- **WD** = WOOD
- **AL** = ALUMINUM
- **FG** = FIBERGLASS

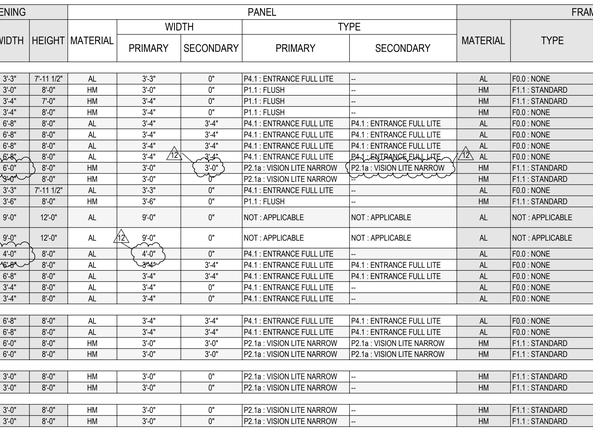
B. FRAME MATERIAL:
- **HM** = HOLLOW METAL
- **SF** = ALUMINUM-FRAMED STOREFRONT
- **CW** = GLAZED ALUMINUM CURTAIN WALL
- **AG** = ALL GLASS
- **SSF** = SPECIALTY STOREFRONT
- **PFG** = PROTECTED FRAMED GLAZING

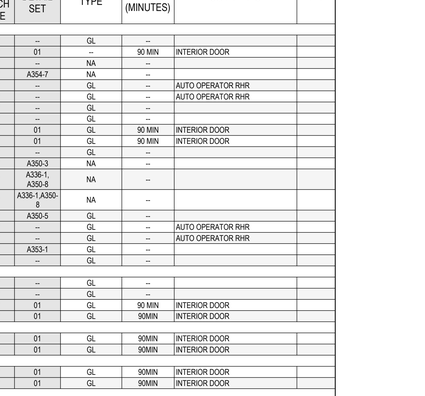
C. STOREFRONT MULLION DIMENSIONS: 2" WIDE x 4 1/2" DEEP, UNLESS NOTED OTHERWISE

D. HOLLOW METAL FRAME DIMENSIONS: 2" WIDE x 5 7/8" DEEP, UNLESS NOTED OTHERWISE

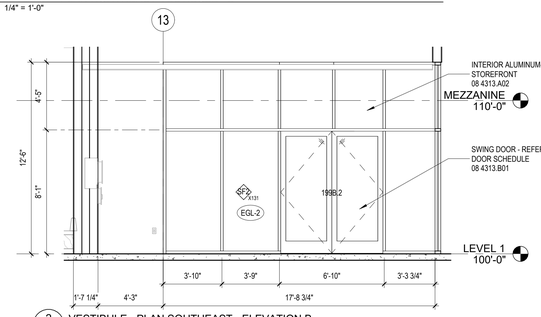


5 A500 VESTIBULE - PLAN NORTHWEST - ELEVATION A
1/4" = 1'-0"



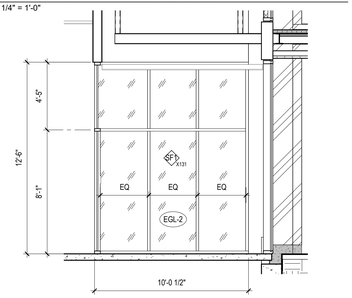


4 A500 LEVEL 01 - PLAN NORTHEAST VESTIBULE - B
1/4" = 1'-0"



2 A500 VESTIBULE - PLAN SOUTHEAST - ELEVATION B
1/4" = 1'-0"

3 A500 LEVEL 01 - PLAN NORTHEAST VESTIBULE - A
1/4" = 1'-0"



1 A500 VESTIBULE - PLAN SOUTHEAST - ELEVATION A
1/4" = 1'-0"

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LAUNCH ACCELERATOR FOR BIOSCIENCES

INDIANAPOLIS, INDIANA

CLIENT PROJECT NO. - 20250072

CUMULATIVE DOCUMENTS

BP3-CD: CORE AND SHELL PACKAGE

ISSUED / REVISIONS SCHEDULE

MARK	DATE	DESCRIPTION
12	01/19/2025	BP3-CD: ADDENDUM 03
8	12/15/2025	BP3-CD: CORE AND SHELL PACKAGE

ANDREW JOHN LEACH REGISTERED ARCHITECT No. AR10400213 STATE OF INDIANA

EXTERIOR OPENING SCHEDULE

DATE — REF: SHEET INDEX
BSA PROJECT NO. — 00360481

A500

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