BATESVILLE SHELL BUILDING

OCTOBER 3, 2014 - CONSTRUCTION PERMIT SET

BATESVILLE INDUSTRIAL PARK, BATESVILLE INDIANA, 46038

DESIGN TEAM CONTACTS

ARCHITECT
AXIS ARCHITECTURE+INTERIORS
KEVIN COOPER - PARTNER-IN-CHARGE - kcooper@axisarch.com
STEPHEN ANDOH - PROJECT ARCHITECT - sandoh@axisarch.com
618 EAST MARKET STREET
INDIANAPOLIS, INDIANA 46202
PH 317.264.8162

MEP ENGINEERING
THE ENGINEERING COLLABORATIVE
SAM HURT - sam@tec-mep.com
10 SOUTH NEW JERSEY
INDIANAPOLIS, INDIANA 46203
PH 317.423.1550

SITE/CIVIL ENGINEER
CIVIL & ENVIRONMENTAL CONSULTANTS, INC
DAVID ROTH - droth@cecinc.com
530 EAST OHIO STREET, SUITE G
INDIANAPOLIS, INDIANA 46204
PH 877.746.0749

PROJECT CONTACTS

DEVELOPER
GM DEVELOPMENT
GREG MANTZ - greg@gm-development.com

OPERATING AUTHORITY
CITY OF BATESVILLE
132 SOUTH MAIN STREET
BATESVILLE, INDIANA 47006

CONSTRUCTION MANAGER
BRUNS-GUTZMILLER, INC
TOM BRUNS - tom@bruns-gutzwiller.com

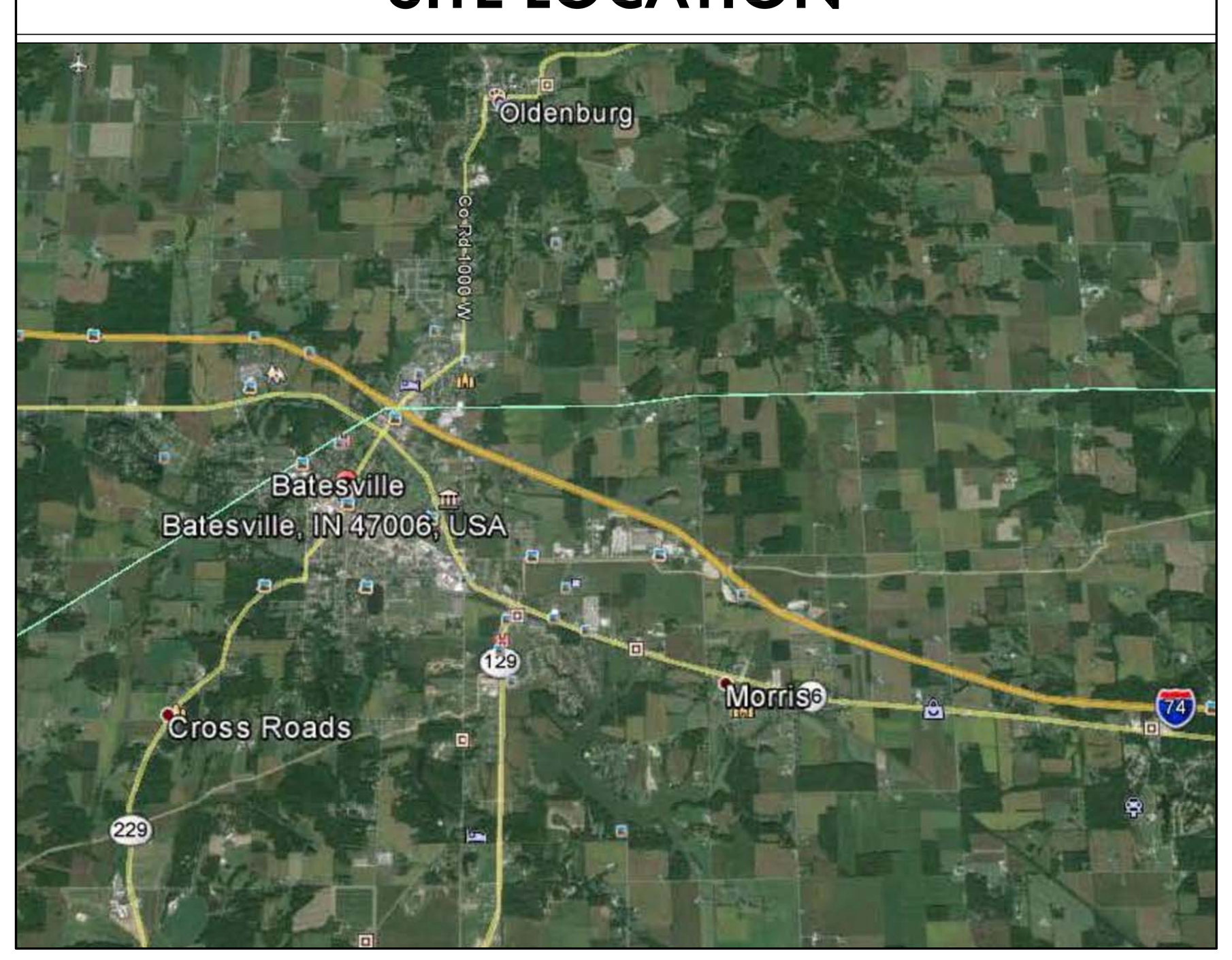
BUILDING INFORMATION

BUILDING GROSS AREA	50,140 sf
CONSTRUCTION TYPE	II B
OCCUPANCY TYPE	F-2/S-2

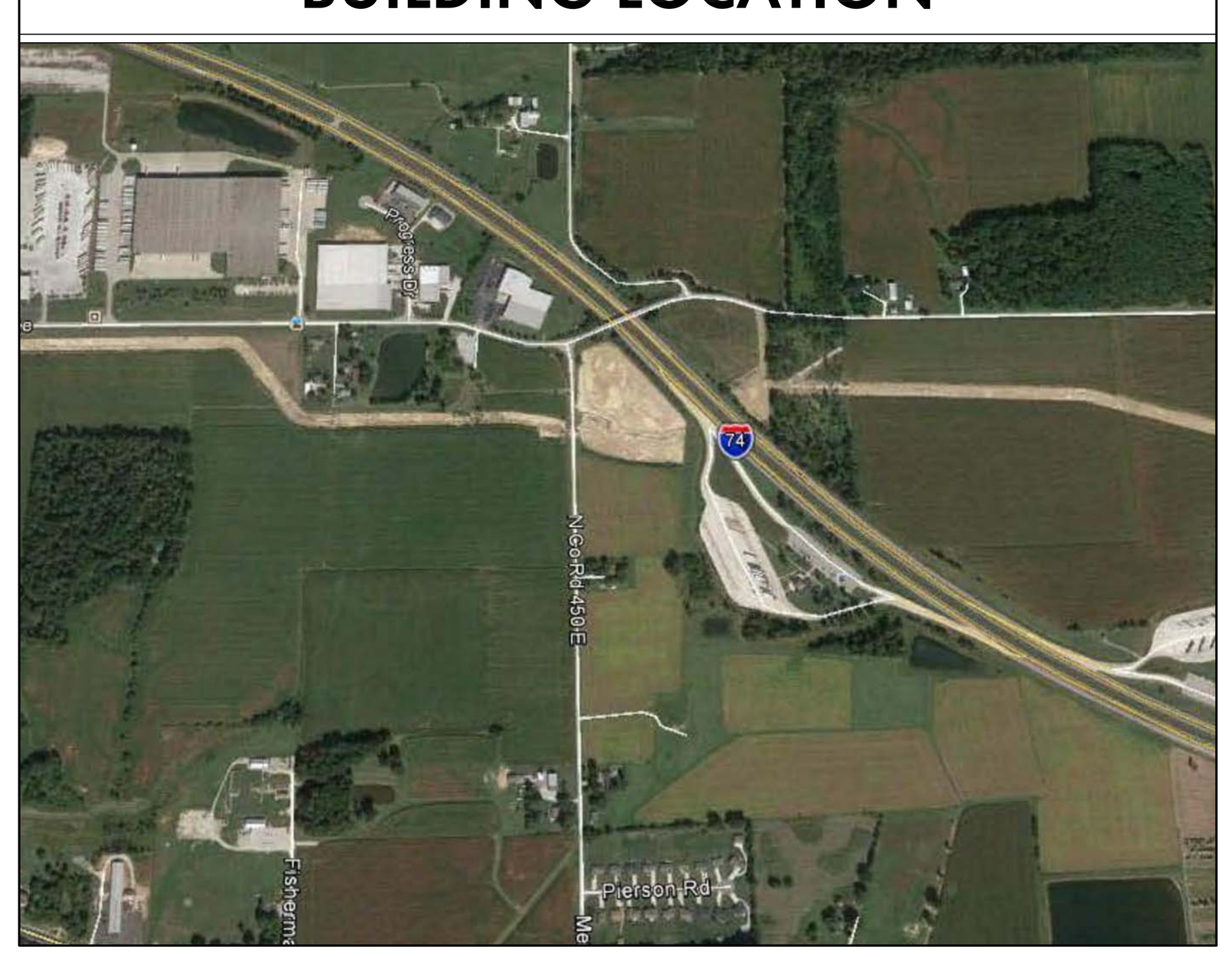
APPLICABLE CODES

Indiana General Administrative Rules
2008 Indiana Building Code (2006 International Building Code with Indiana Ammendments
2008 Indiana Fire Code (2006 International Fire Code with Ammendments)
2008 Indiana Mechanical Code
2010 Indiana Energy Code
2012 Indiana Plumbing Code
2005 National Electrical Code
Americans with Disabilities Act Accessible Guidelines (ADAAG) for Buildings and Facilities
American National Standards Institute Accessible and Usable Buildings and Facilities Standard
(CABO/ANSI A117.1-1992)

SITE LOCATION



BUILDING LOCATION



DRAWING INDEX

2014- OCTOBER 3 - CONSTRUCTION PERMIT SET				2014- OCTOBER 3 - FOR REFERENCE ONLY	DWG #	DRAWING NAME
GENERAL						
●					C001	COVER SHEET
●					G001	LIFE SAFETY SHEET
CIVIL DRAWINGS (INCLUDED FOR REFERENCE ONLY)						
				●	1	PRIMARY PLAT
INRASTRUCTURE PLANS						
				●	C000	TITLE SHEET
				●	C100	EXISTING TOPOGRAPHY
				●	C200	OVERALL SITE PLAN
				●	C201	TYPICAL STREET CROSS-SECTIONS
				●	C202	STREET PLAN & PROFILE
				●	C203	INTERSECTION DETAIL
				●	C400	OVERALL DRAINAGE PLAN
				●	C401	DETENTION POND PLAN
				●	C402	STORM SEWER PLAN & PROFILE
				●	C403	DETENTION POND SECTIONS AND DETAILS
				●	C500	OVERALL UTILITY PLAN
				●	C501	SANITARY SEWER PLAN & PROFILE
				●	C502	LIFT STATION DETAILS
				●	C503	WATER MAIN PLAN & PROFILE
				●	C800	MISCELLANEOUS DETAILS
				●	C900	STORMWATER POLLUTION PREVENTION PLAN
				●	C901	STORMWATER POLLUTION PREVENTION PLAN NOTES
				●	C902	STORMWATER POLLUTION PREVENTION DETAILS
				●	L100	LANDSCAPE PLAN
				●	L101	LANDSCAPE DETAILS
BUILDING NO.1 PLANS						
				●	C000	TITLE SHEET
				●	C001	GENERAL NOTES
				●	C100	EXISTING CONDITIONS
				●	C200	SITE PLAN
				●	C300	OVERALL GRADING PLAN
				●	C301	ENLARGED GRADING PLAN
				●	C700	LANDSCAPE PLAN
				●	C701	LANDSCAPE DETAILS
				●	C800	SITE DETAILS
				●	C900	EROSION CONTROL PLAN
				●	C901	EROSION CONTROL NOTES
				●	C902	EROSION CONTROL DETAILS
STRUCTURAL DRAWINGS						
●					F-111	FOUNDATION PLAN
●					F-511	FOUNDATION DETAILS
ARCHITECTURAL DRAWINGS						
●					A001	FIRST FLOOR PLAN - ENVELOPE COMCHECK
●					A101	FIRST FLOOR CONSTRUCTION PLAN & ENLARGED PLANS
●					A102	ROOF PLAN
●					A201	BUILDING ELEVATIONS
●					A301	WALL SECTIONS
●					A302	DETAILS
●					A401	DOOR AND WINDOW ELEVATIONS, DETAILS AND SCHEDULE
MEP DRAWINGS						
●					E101	ELECTRICAL PLAN
●					E601	ELECTRICAL RISER DIAGRAM AND SCHEDULES
●					E701	ELECTRICAL DETAILS AND SYMBOLS
●					E901	ELECTRICAL SPECIFICATIONS

AXIS
618 East Market Street
Indianapolis, Indiana 46202
ph 317/264.8162 fx 317/264.8165
axisarch.com

Scope Drawings
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of work.

DRAWN BY SAA
CHECKED BY –
DATE ISSUED AUGUST 22, 2014

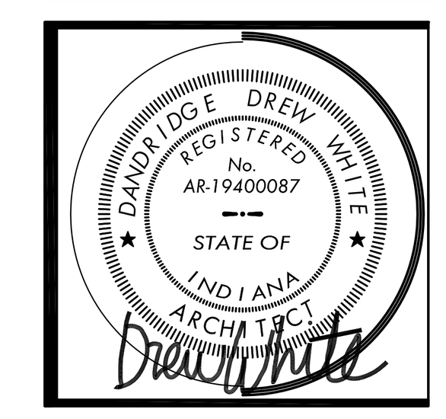
REVISIONS:

THE ENGINEERING COLLABORATIVE
MEP ENGINEERS
10 South New Jersey Street, Suite 320
Indianapolis, IN 46202
Sam Hurt
ph. 317.636.3941

FINK ROBERTS & PETRIE, INC.
CONSULTING ENGINEERS
9449 Priority Way, West Drive, Suite 200
Indianapolis, IN 46240
Bill Horton
ph. 317.872.8400
fx. 317.876.2408

CIVIL & ENVIRONMENTAL
CONSULTANTS INC.
530 E. Ohio Street Suite G.
Indianapolis, IN 46204
David Roth
ph. 877.746.0794
fx. 317.655.7778

BATESVILLE SHELL BUILDING
MERKEL ROAD, BATESVILLE, INDIANA 46038

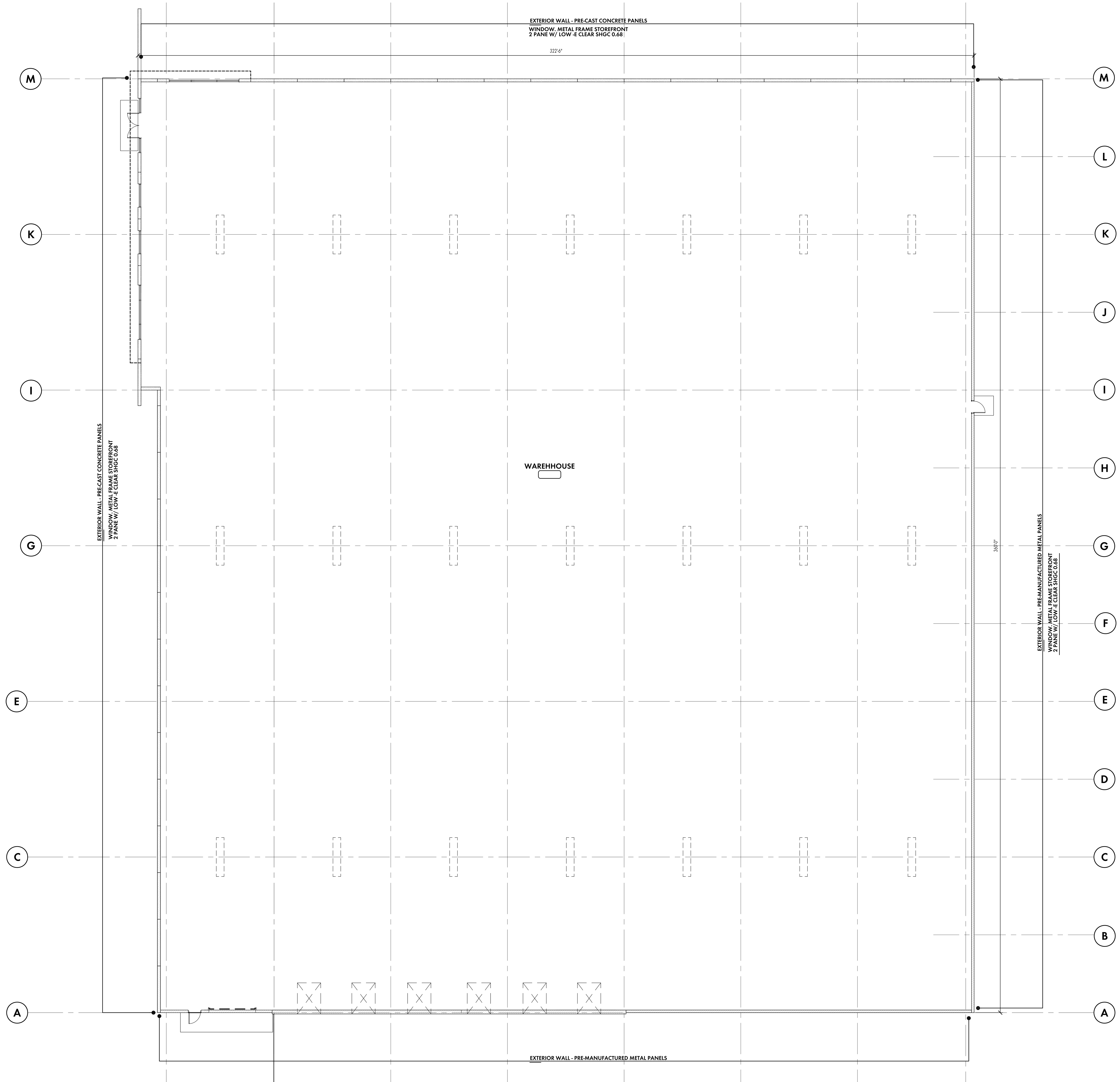


COVER SHEET

C001

PROJECT NUMBER: 13076

P:\ACTIVE PROJECTS\13076 - BATESVILLE SPEC BLDG\03 CD\DWG\C001.DWG



01 FIRST FLOOR PLAN - ENVELOPE COMCHECK

SCALE: 3/32" = 1'-0"

AXIS

618 East Market Street
Indianapolis, Indiana 46202
ph 317/264.8162 fx 317/264.8165
a x i s a r c h . c o m

Scope Drawings
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of work.

DRAWN BY SAA
CHECKED BY SAA
DATE ISSUED 10.03.2014

REVISIONS:

THE ENGINEERING COLLABORATIVE *Sam Hurt*
MEP ENGINEERS
10 South New Jersey Street, Suite 320
Indianapolis, IN 46202
ph. 317.636.3941

FINK ROBERTS & PETRIE, INC. *Bill Horton*
CONSULTING ENGINEERS
9449 Priority Way, West Drive, Suite 200
Indianapolis, IN 46240
ph. 317.872.8400
fx. 317.876.2408

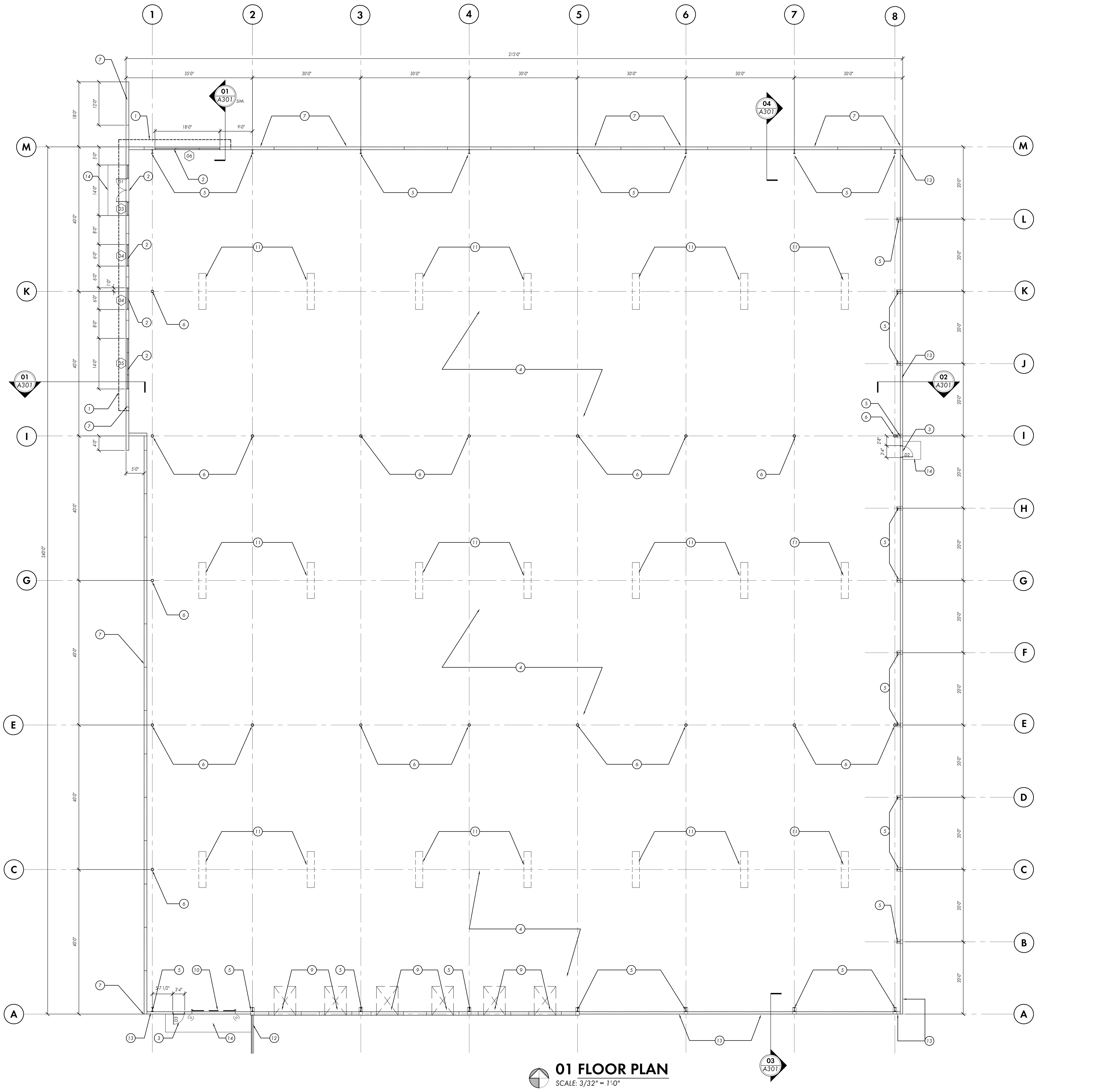
CIVIL & ENVIRONMENTAL *David Roth*
CONSULTANTS INC.
530 E. Ohio Street Suite G.
Indianapolis, IN 46204
ph. 877.746.0794
fx. 317.655.7778

BATESVILLE SHELL BUILDING
MERKEL ROAD, BATESVILLE, INDIANA 46038

DANDRIDGE DREW WHITE
REGISTERED
No. AR-19400087
STATE OF INDIANA
ARCHITECT

ENVELOPE COMCHECK FLOOR PLAN

A001
PROJECT NUMBER: *13076*



01 FLOOR PLAN
SCALE: 3/32" = 1'-0"

GENERAL PLAN NOTES:

A. REFER TO A200 SERIES, EXTERIOR ELEVATIONS, FOR ADDITIONAL EXTERIOR FACADE WORK

PLAN KEYED NOTES:

1. LINE OF PREFINISHED ALUMINUM PANEL "EYEBROW CANOPY" ON LIGHT GAUGE METAL FRAMING ABOVE SHOWN DASHED
2. ANODIZED ALUMINUM STOREFRONT AND ENTRANCE SYSTEM (CLEAR LOW E GLASS) REFER TO DOOR FRAME SCHEDULE
3. EXTERIOR HOLLOW METAL DOOR AND FRAME, PAINTED.
4. 4" COMPACTED CRUSHED STONE (TOP OF STONE = 99'-4")
5. PRE-ENGINEERED METAL BUILDING STRUCTURAL FRAME
6. STEEL COLUMNS, PAINTED YELLOW UP TO 12' A.BOVE FINISH FLOOR. REFER TO STRUCTURAL DRAWINGS FOR COLUMN SIZES.
7. INSULATED PRECAST CONCRETE PANELS, PAINTED (ARCHITECT TO SELECT UP TO 3 COLORS)
8. PRECAST CONCRETE PANEL SEALANT JOINT
9. FUTURE 9' WIDE X 10" HIGH INSULATED SECTIONAL OVERHEAD DOCK DOOR
10. FUTURE 12' WIDE X 14' HIGH INSULATED SECTIONAL OVERHEAD DOCK DOOR
11. 2'-0" X10' -0" SKYLIGHT ABOVE SHOWN DASHED
12. CONCRETE RETAINING WALL, REFER TO STRUCTURAL DRAWINGS
13. EXTERIOR METAL PANELS WITH INSULATION OVER STEEL BYPASS GIRTS AND 8' HIGH INTERIOR METAL LINER PANELS ON PRE-ENGINEERED METAL BUILDING STRUCTURAL FRAME
14. CONCRETE STOOP. REFER TO STRUCTURAL DRAWINGS

AXIS
618 East Market Street
Indianapolis, Indiana 46202
ph 317/264.8162 fx 317/264.8165
a x i s a r c h . c o m

Scope Drawings
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of work.

DRAWN BY	SAA
CHECKED BY	SA
DATE ISSUED	09.26.2014

REVISIONS:

THE ENGINEERING COLLABORATIVE
MEP ENGINEERS
10 South New Jersey Street, Suite 320
Indianapolis, IN 46202
Sam Hurt
ph. 317.636.3941

FINK ROBERTS & PETRIE, INC.
CONSULTING ENGINEERS
9449 Priority Way, West Drive, Suite 200
Indianapolis, IN 46240
Bill Horton
ph. 317.872.8400
fx. 317.876.2408

CIVIL & ENVIRONMENTAL
CONSULTANTS INC.
530 E. Ohio Street Suite G.
Indianapolis, IN 46204
David Roth
ph. 877.746.0794
fx. 317.655.7778

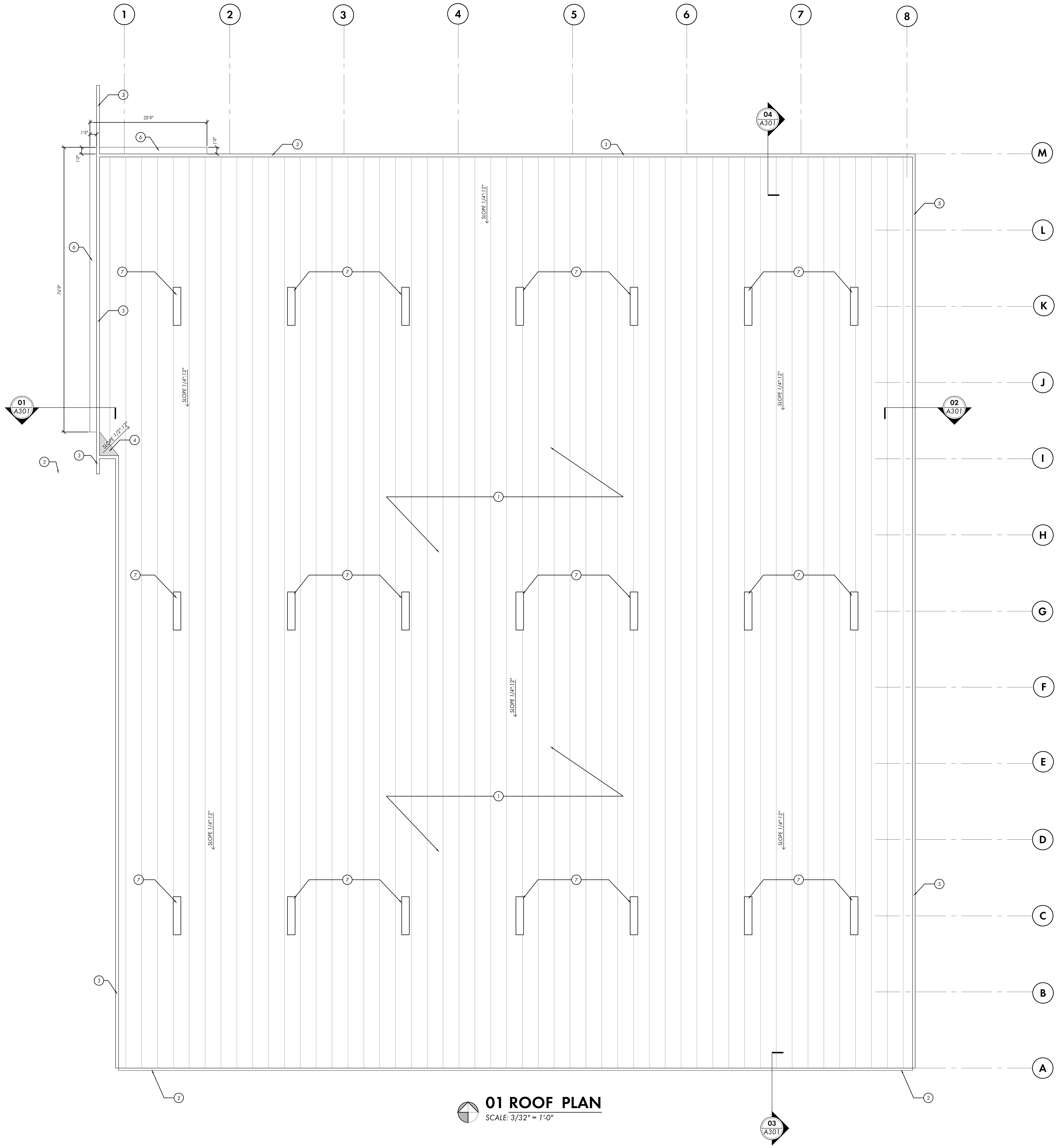
BATESVILLE SHELL BUILDING
MERKEL ROAD, BATESVILLE, INDIANA 46038

DANDRIDGE DREW WHITE
REGISTERED
No. AR-19400087
STATE OF INDIANA
ARCHITECT

FLOOR PLAN

A101

PROJECT NUMBER: 13076



01 ROOF PLAN

SCALE: 3/32" = 1'-0"

GENERAL ROOF PLAN NOTES:

A. DO NOT SCALE THE DRAWINGS. REFER DISCREPENCIES TO ARCHITECT FOR FINAL DECISIONS ON LAYOUT.

ROOF PLAN NOTES:

(XXX)

1. PRE-FINISHED STANDING SEAM METAL ROOF PANELS - 24 GAUGE ON 6 INCH THICK FIBERGLASS INSULATION WITH POLYPROPYLENE FACING (R-19MINIMUM)
2. PRE-FINISHED ALUMINUM GUTTER AND DOWNSPOUT
3. FORMED METAL COPING.
4. CRICKET, FORM AS REQUIRED FOR DRAINAGE - SLOPE MINIMUM OF 1/2" PER FOOT
5. TOP OF PARAPET
6. LINE OF ALUMINUM COMPOSITE MATERIAL CANOPY BELOW
7. 2'-0" X 10'-0" SKYLIGHT

AXIS
618 East Market Street
Indianapolis, Indiana 46202
ph 317/264.8162 fx 317/264.8165
axisarch.com

Scope Drawings
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of work.

DRAWN BY KK
CHECKED BY SA
DATE ISSUED 10.3.2014

REVISIONS:

THE ENGINEERING COLLABORATIVE — Sam Hurt
MEP ENGINEERS
10 South New Jersey Street, Suite 320
Indianapolis, IN 46202
ph. 317.636.3941

FINK ROBERTS & PETRIE, INC. — Bill Horton
CONSULTING ENGINEERS
9449 Priority Way, West Drive, Suite 200
Indianapolis, IN 46240
ph. 317.872.8400
fx. 317.876.2408

CIVIL & ENVIRONMENTAL CONSULTANTS INC. — David Roth
530 E. Ohio Street Suite G.
Indianapolis, IN 46204
ph. 877.746.0794
fx. 317.655.7778

BATESVILLE SHELL BUILDING

MERKEL ROAD, BATESVILLE, INDIANA 46038

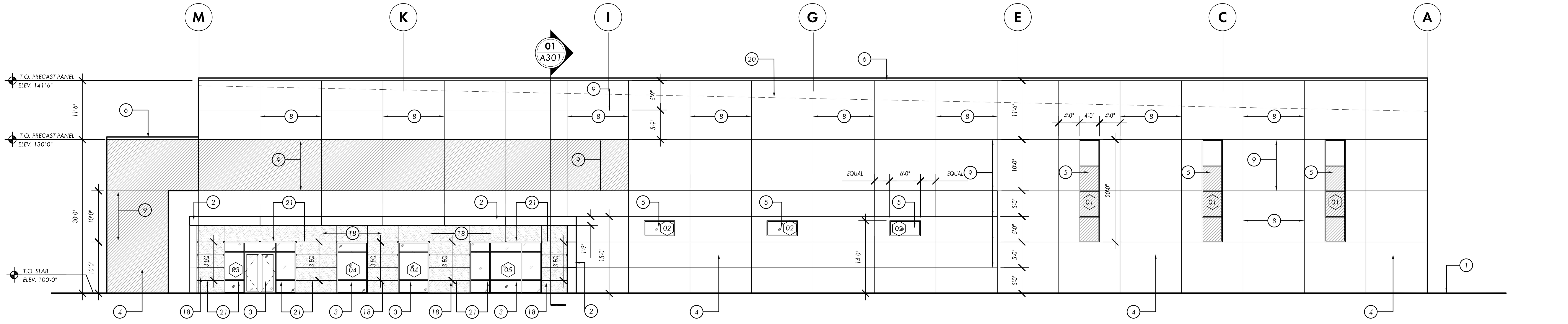
DANDRIDGE DREW WHITE
REGISTERED
No. AR-19400087
STATE OF INDIANA
ARCHITECT

ROOF PLAN

A102

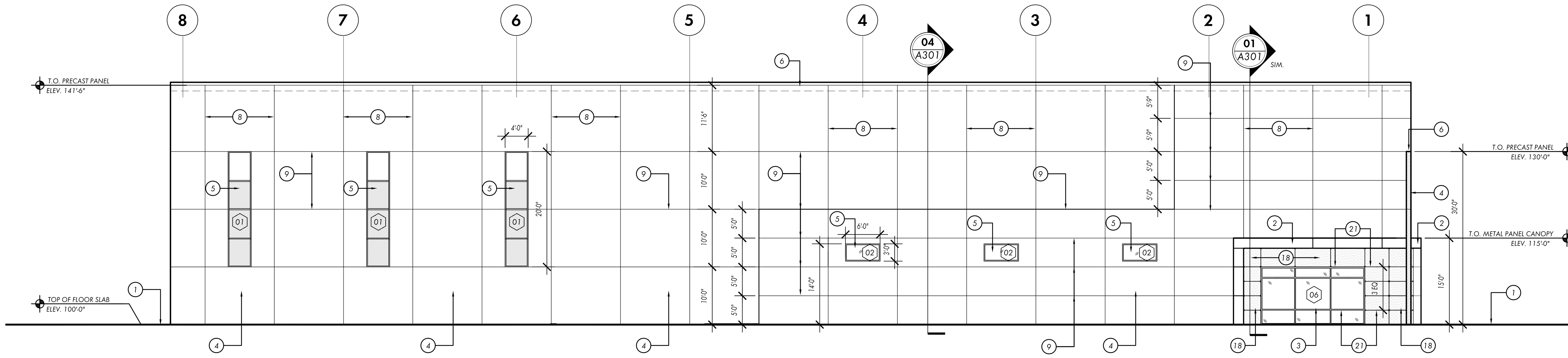
PROJECT NUMBER: 13076

P:\ACTIVE PROJECTS\13076 - BATESVILLE SPEC BLDG\03 CD\DWG\A102.DWG



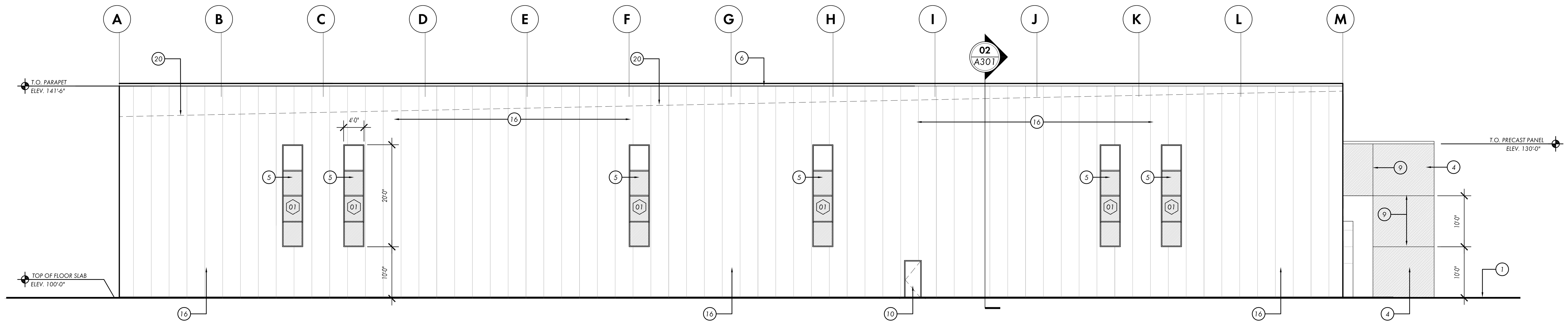
01 WEST ELEVATION

SCALE: 3/32" = 1'-0"



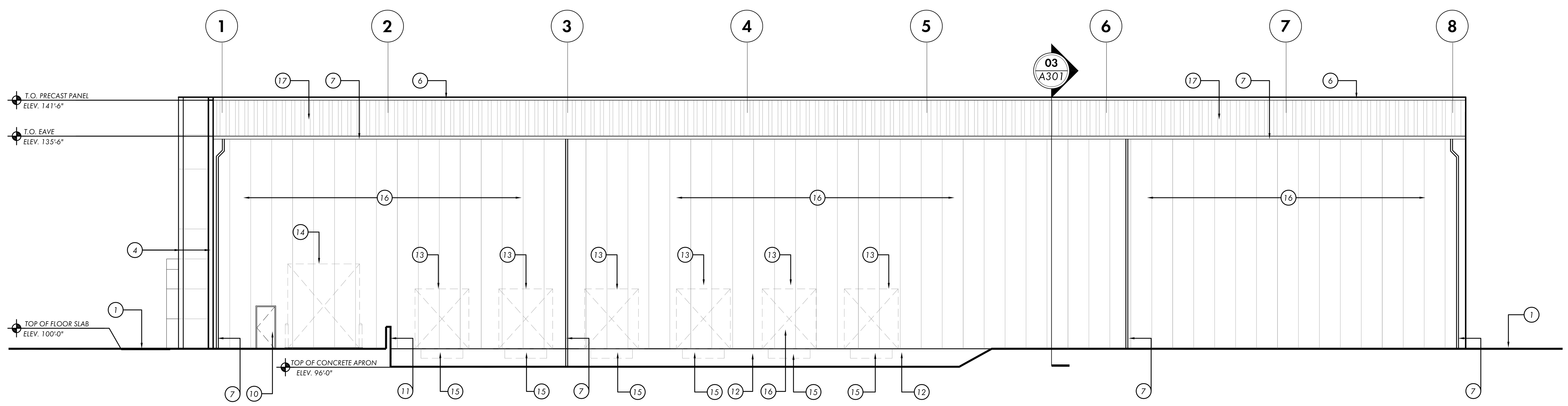
02 NORTH ELEVATION

SCALE: 3/32" = 1'-0"



03 EAST ELEVATION

SCALE: 3/32" = 1'-0"



04 SOUTH ELEVATION

SCALE: 3/32" = 1'-0"

GENERAL ELEVATION NOTES:

- GLAZING TAGS ON ELEVATIONS REFER TO THE GLAZING SCHEDULE .
- ALL OPENINGS ARE TO BE FIELD MEASURED PRIOR TO STOREFRONT FABRICATION.
- ALL STEEL RAILING DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO FABRICATION TO ENSURE ACCURACY OF STEEL FRAME AND TENSION CABLE SPANS.
- REFER TO SCAFFOLDING SUPPLIER DWGS. FOR ENGINEERING CALCULATIONS REGARDING WIND LOADING AND ANCHORING.
- SCAFFOLD ENGINEERING PROVIDED BY OTHERS.

ELEVATION NOTES:

1. GRADE
2. ARCHITECTURAL SHEET METAL PRODUCTS COMPOSITE PANEL SYSTEM D7-100 DRY JOINT SYSTEM (ON LIGHT GAUGE METAL FRAMING, ATTACHED TO FACE OF PRECAST PANEL)
3. ANODIZED ALUMINUM STOREFRONT ENTRANCE SYSTEM. (CLEAR LOW-E GLASS).
4. INSULATED PRECAST CONCRETE PANEL. PAINTED
5. FIXED ALUMINUM WINDOW. (CLEAR LOW-E GLASS AND SPANDREL GLASS).
6. PREFINISHED ALUMINUM COPING.
7. PREFINISHED ALUMINUM DOWNSPOUT AND GUTTER
8. INSULATED PRECAST CONCRETE PANEL SEALANT JOINT
9. 1/2" GROOVE IN PRECAST CONCRETE PANEL.
10. PAINTED EXTERIOR HOLLOW METAL DOOR AND FRAME.
11. CONCRETE RETAINING WALL AND RAILING- REFER TO SITE/CIVIL DRAWINGS
12. CONCRETE FOUNDATION WALL - REFER TO STRUCTURAL DRAWINGS
13. FUTURE INSULATED OVERHEAD SECTIONAL DOOR (9'-X10')
14. FUTURE INSULATED COILING OVERHEAD DOOR (12'-X14')
15. FUTURE DOCK LEVELER AND BUMPER.
16. CORRUGATED METAL SIDING - REFER TO AMERICAN BUILDINGS COMPANY MASTER PLAN NUMBER "M-337648"
17. ALUMINUM STANDING SEAM ROOFING PANELS
18. FIBER CEMENT BOARD PANELS ON STEEL FURRING STRIPS AND SELF ADHERING MODIFIED BITUMEN SHEET WATERPROOFING OVER EXTERIOR GRADE PLYWOOD AND LIGHT GUAGE METAL FRAMING
19. LIGHT FIXTURE- REFER TO ELECTRICAL DRAWINGS
20. DASHED LINE DENOTES ROOF SLOPE (1/2" PER FOOT MINIMUM)
21. ALIGN CENTER LINE OF CEMENT BOARD PANEL JOINT WITH STOREFRONT MULLION

AXIS
618 East Market Street
Indianapolis, Indiana 46202
ph 317/264.8162 fx 317/264.8165
axisarch.com

DRAWN BY KK
CHECKED BY SA
DATE ISSUED AUGUST 1, 2014

REVISIONS:

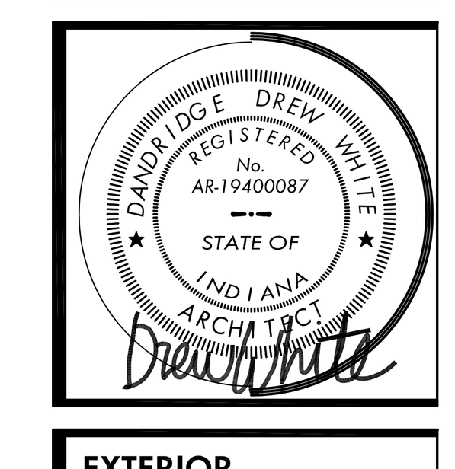
THE ENGINEERING COLLABORATIVE
MEP ENGINEERS
10 South New Jersey Street, Suite 320
Indianapolis, IN 46202
Sam Hurt
ph. 317.636.3941

FINK ROBERTS & PETRIE, INC.
CONSULTING ENGINEERS
9449 Priority Way, West Drive, Suite 200
Indianapolis, IN 46240
Bill Horton
ph. 317.872.8400
fx. 317.876.2408

CIVIL & ENVIRONMENTAL CONSULTANTS INC.
530 E. Ohio Street Suite G
Indianapolis, IN 46204
David Roth
ph. 877.746.0794
fx. 317.655.7778

BATESVILLE SHELL BUILDING

MERKEL ROAD, BATESVILLE, INDIANA 46038

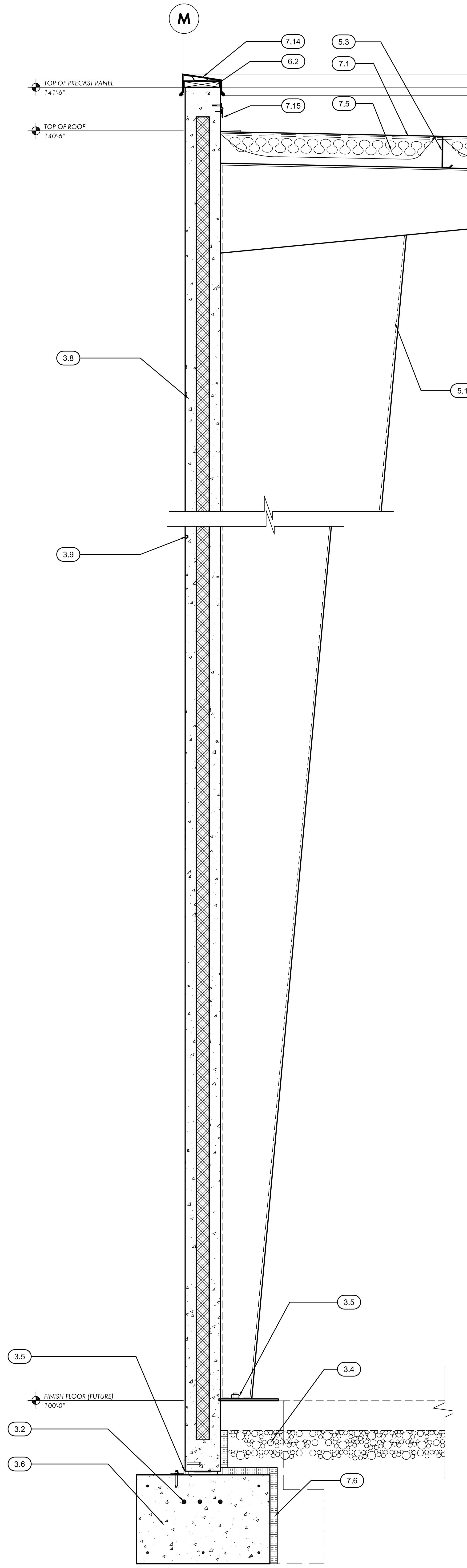


EXTERIOR ELEVATIONS

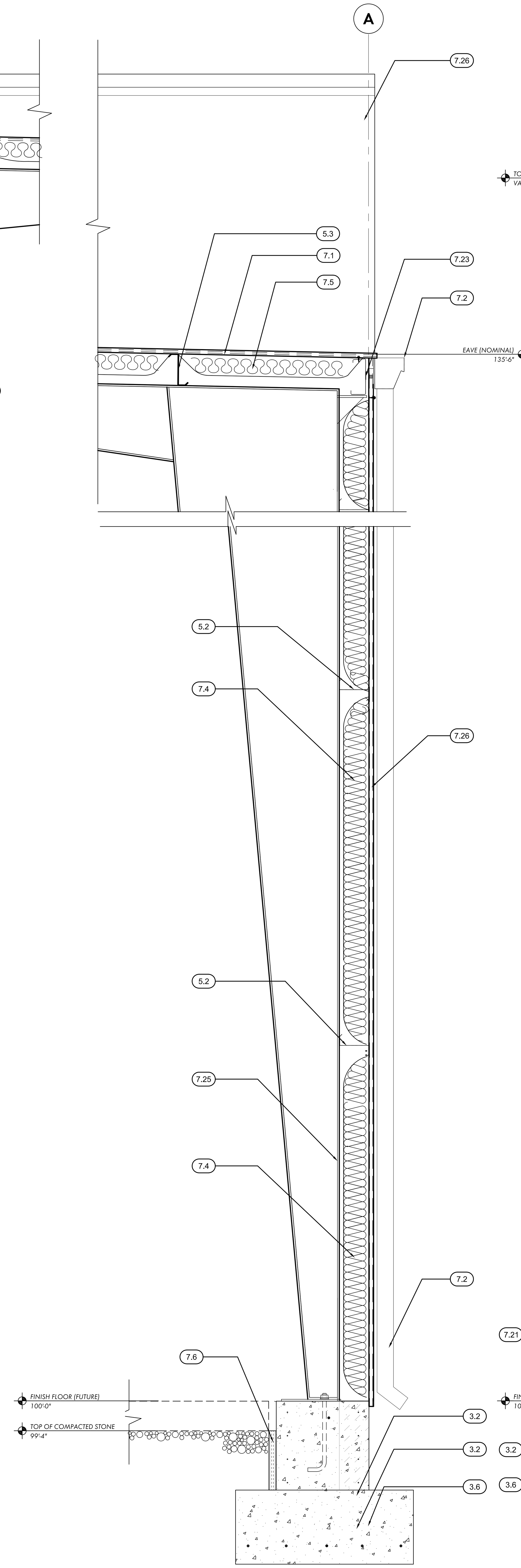
A201

PROJECT NUMBER: 13076

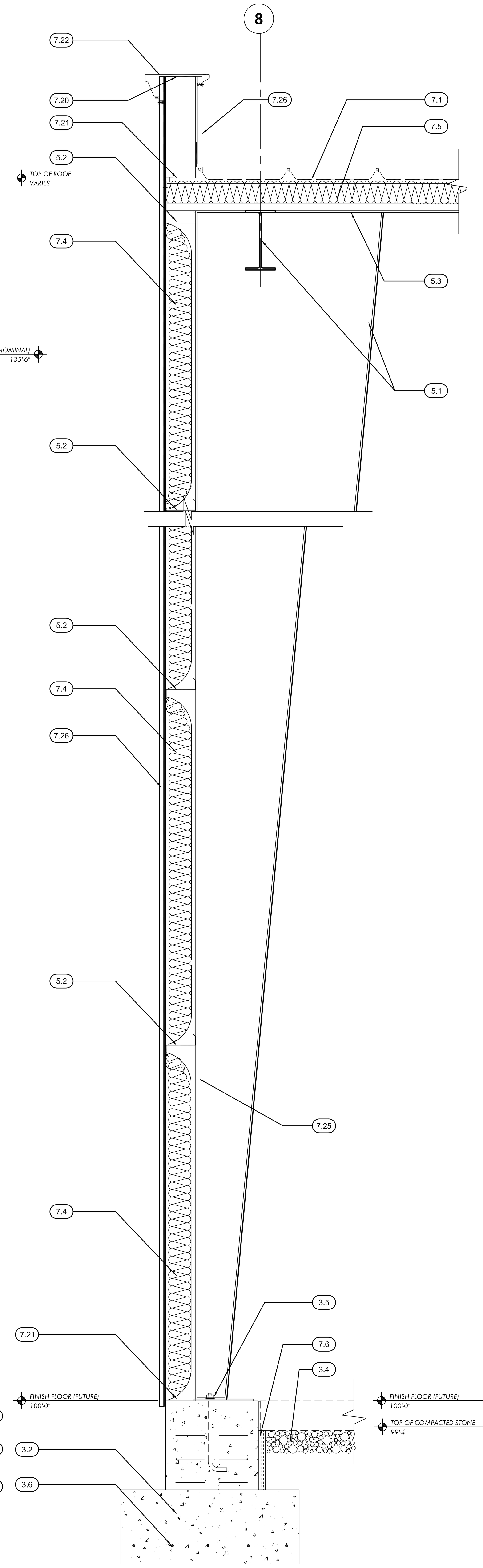
P:\ACTIVE PROJECTS\13076 - BATESVILLE SPEC BLDG\03 CD\DWG\A201.DWG



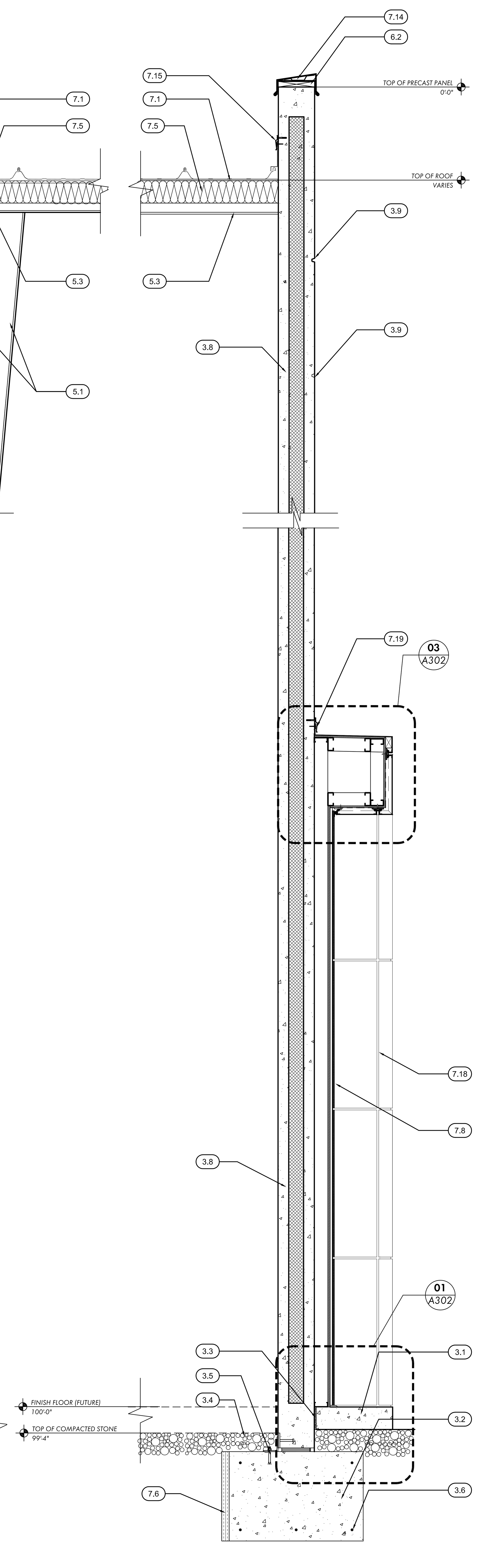
04 WALL SECTION
SCALE: 3/4" = 1'-0"



03 WALL SECTION
SCALE: 3/4" = 1'-0"



02 WALL SECTION
SCALE: 3/4" = 1'-0"



01 WALL SECTION
SCALE: 3/4" = 1'-0"

KIT OF PARTS:

DIVISION 2 - SITE WORK
2.1 FINISHED GRADE - REFER CIVIL

DIVISION 3 - CONCRETE
3.1 CONCRETE STOOP - REF. STRUCTURAL DRAWINGS
3.2 CONCRETE FOOTING - REF. STRUCTURAL DRAWINGS
3.3 1/2" EXPANSION JOINT MATERIAL - (079500)
3.4 COMPACTED GRANULAR FILL. REFER TO STRUCTURAL DRAWINGS
3.5 FOUNDATION ANCHOR. REFER TO STRUCTURAL DWGS.
3.6 STEEL REINFORCEMENT BAR. REFER TO STRUCTURAL DWGS.
3.7 CMU FOUNDATION WALL. REFER TO STRUCTURAL DWGS.
3.8 INSULATED PRECAST CONCRETE PANEL
3.9 1/2" GROOVE IN PRECAST CONCRETE PANEL- REFER TO EXTERIOR ELEVATIONS FOR LOCATIONS

DIVISION 4 - MASONRY
4.1 8" NOM CMU - REF. STRUCTURAL FOR REINFORCING.

METALS
5.1 STRUCTURAL STEEL FRAMING MEMBER (BY PRE-ENGINEERED METAL BUILDING CONTRACTOR)
5.2 BYPASS WALL GIRT (BY PRE-ENGINEERED METAL BUILDING CONTRACTOR)
5.3 ROOF PURLIN (BY PRE-ENGINEERED METAL BUILDING CONTRACTOR)
5.4 3-5/8" X 18 GAUGE COLD FORMED METAL FRAMING MEMBERS
5.5 7/8" METAL FURRING CHANNELS

WOOD AND PLASTICS
6.1 5/8" THICK EXTERIOR GRADE PLYWOOD
6.2 2 X CONTINUOUS WOOD BLOCKING

THERMAL AND MOISTURE PROTECTION
7.1 PRE-FINISHED STANDING SEAM METAL ROOF PANELS. 24 GA, BY PRE- ENGINEERED METAL BUILDING MANUFACTURER
7.2 PRE-FINISHED ALUMINUM GUTTERS AND DOWNSPOUTS BY PRE-ENGINEERED METAL BUILDING MANUFACTURER
7.3 EPDM RUBBER STRIP ON 7/8" METAL HAT FURRING CHANNELS
7.4 FIBERGLASS WALL INSULATION- 4" THICK FIBERGLASS INSULATION WITH WHITE METALIZED POLYPROPYLENE FACING (R-13 MINIMUM)
7.5 FIBERGLASS ROOF INSULATION - 6" THICK FIBERGLASS INSULATION WITH WHITE METALIZED POLYPROPYLENE FACING ON 3/4" THERMAL BLOCKS (R-19 MINIMUM)
7.6 2" RIGID INSULATION (EXTEND FROM FOOTING TO 36" ACROSS UNDERSIDE OF FUTURE FLOOR SLAB)
7.7 FIBER CEMENT BOARD TRIM - PAINT COLOR BY ARCHITECT
7.8 FIBER CEMENT BOARD PANEL -PAINT COLOR BY ARCHITECT
7.9 FIBER CEMENT BOARD FLASHING
7.10 SHIM AND SEALANT PER STOREFRONT MFR. TYP. BOTH SIDES OF FRAME
7.11 AIR SPACE
7.12 BACKER ROD AND SEALANT
7.13 SEALANT JOINT AT DISSIMILAR MATERIALS
7.14 FORMED ALUMINUM COPING
7.15 SURFACE MOUNT FLASHING REGLET
7.16 SELF ADHERING MODIFIED BITUMINOUS SHEET WATERPROOFING
7.17 APPROVED FASTENER
7.18 ALUMINUM COMPOSITE MATERIAL WALL PANEL SYSTEM WITH FRAME EXTRUSIONS AND CLIPS (D7-100 DRY JOINT ACM PANEL SYSTEM)
7.19 PREFINISHED ALUMINUM REGLET AND COUNTER FLASHING BY WALL PANEL SYSTEM MANUFACTURER
7.20 TOP CHANNEL
7.21 BASE CHANNEL
7.22 RAKE FLASHING
7.23 HIGH WALL EAVE STRUT
7.24 OUTSIDE CLOSURE PIECE
7.25 INTERIOR METAL LINER PANEL (8' HIGH)
7.26 CORRUGATED METAL SIDING (AMERICAN BUILDINGS COMPANY)
7.27 FLASHING

DOORS AND WINDOWS
8.1 ALUMINUM FRAMED ENTRANCES & STOREFRONT SYSTEM - (084113)
8.2 FIXED ALUMINUM WINDOW
8.2 INSULATED EXTERIOR HOLLOW METAL DOOR AND FRAME - (081113)
8.3 CLEAR LOW -E INSULATED GLAZING - REFER TO ELEVATIONS FOR TYPE - (088000)
8.4 MECHANICAL LOUVER/DIFFUSER, REFER TO MECHANICAL DRAWINGS FOR SIZE

FINISHES

SPECIALTIES

DIV 11 EQUIPMENT:

DIV 12 FURNISHINGS:

DIV 22 PLUMBING:

DIV 23 MECHANICAL:
15.1 MECHANICAL EQUIPMENT - REF: MEP

DIV 26 ELECTRICAL:
16.1 LIGHT FIXTURE - REF: ELEC
16.2 ELECTRICAL PANEL - REF: ELEC

AXIS
618 East Market Street
Indianapolis, Indiana 46202
ph 317/264.8162 fx 317/264.8165
axisarch.com

Scope Drawings
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of work.

DRAWN BY SAA
CHECKED BY XXX
DATE ISSUED 09.26.2014

REVISIONS:

THE ENGINEERING COLLABORATIVE
MEP ENGINEERS
10 South New Jersey Street, Suite 320
Indianapolis, IN 46202
Sam Hurt
ph. 317.636.3941

FINK ROBERTS & PETRIE, INC.
CONSULTING ENGINEERS
9449 Priority Way, West Drive, Suite 200
Indianapolis, IN 46240
Bill Horton
ph. 317.872.8400
fx. 317.876.2408

CIVIL & ENVIRONMENTAL CONSULTANTS INC.
530 E. Ohio Street Suite G.
Indianapolis, IN 46204
David Roth
ph. 877.746.0794
fx. 317.655.7778

BATESVILLE SHELL BUILDING
MERKEL ROAD, BATESVILLE, INDIANA 46038

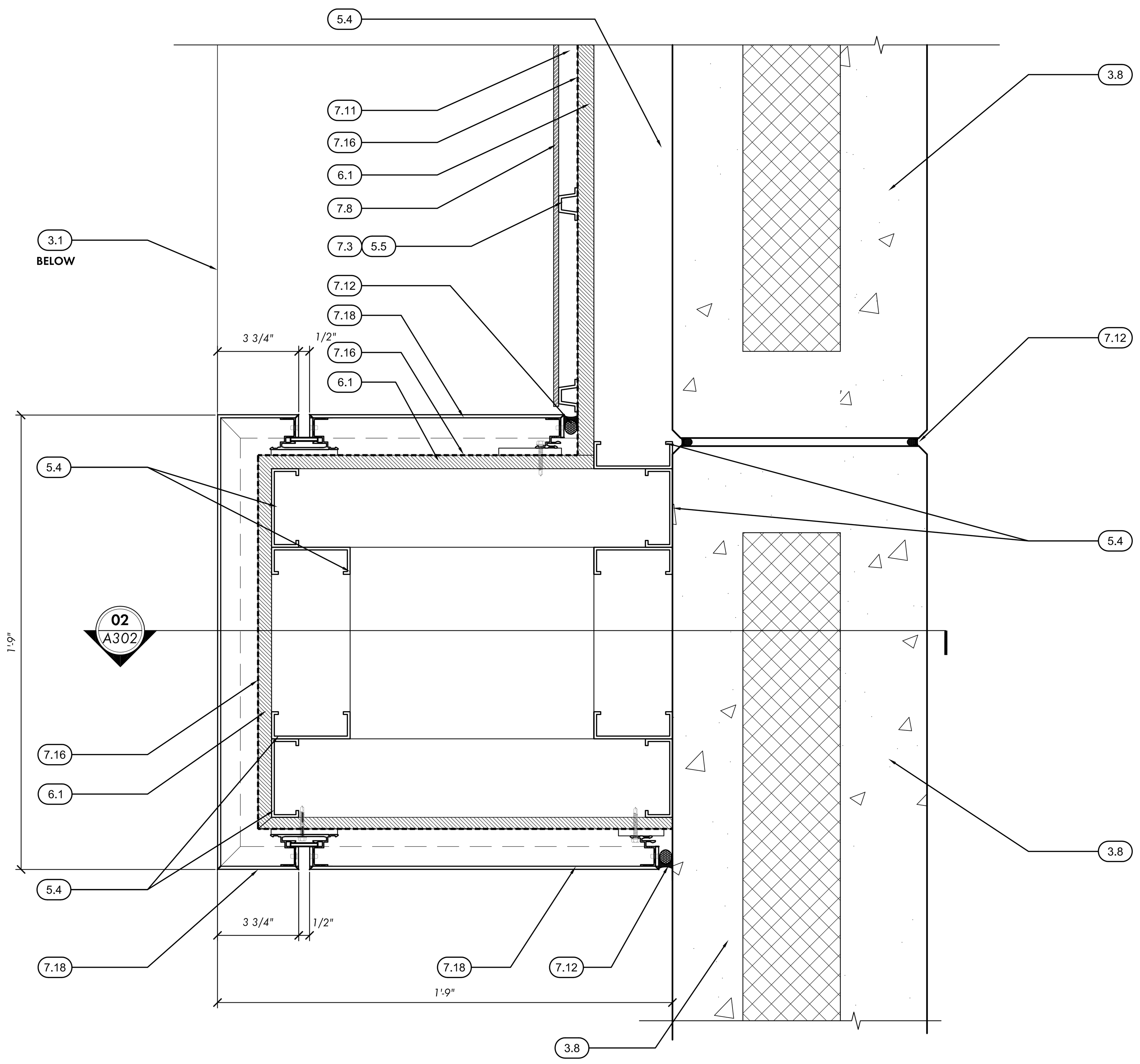
DANDRIDGE DREW WHITE
REGISTERED
No. AR-19400087
STATE OF INDIANA
ARCHITECT

WALL SECTIONS

A-301

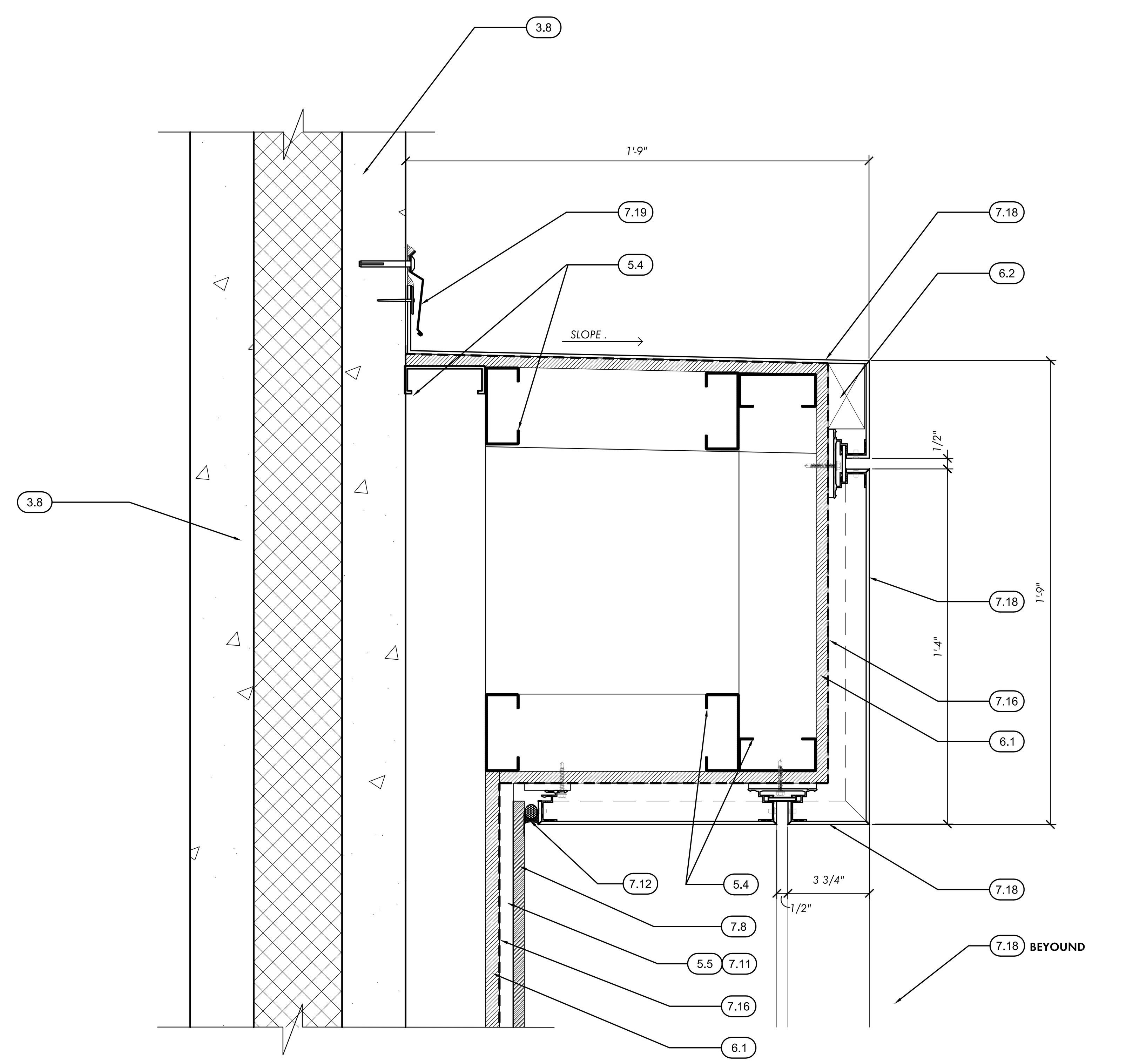
PROJECT NUMBER: 13076

A-101.DWG



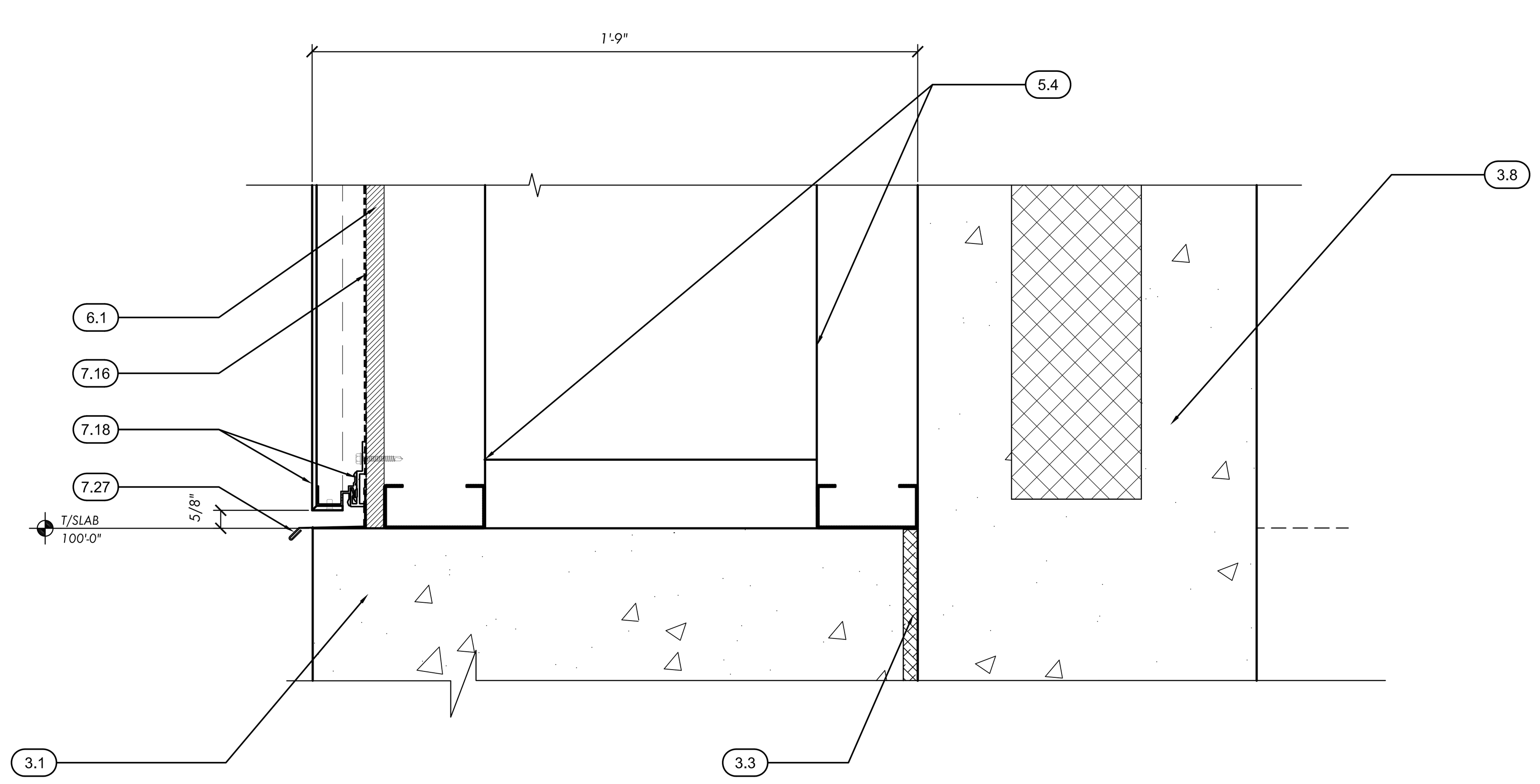
04 PLAN DETAIL

SCALE: 3" = 1'-0"



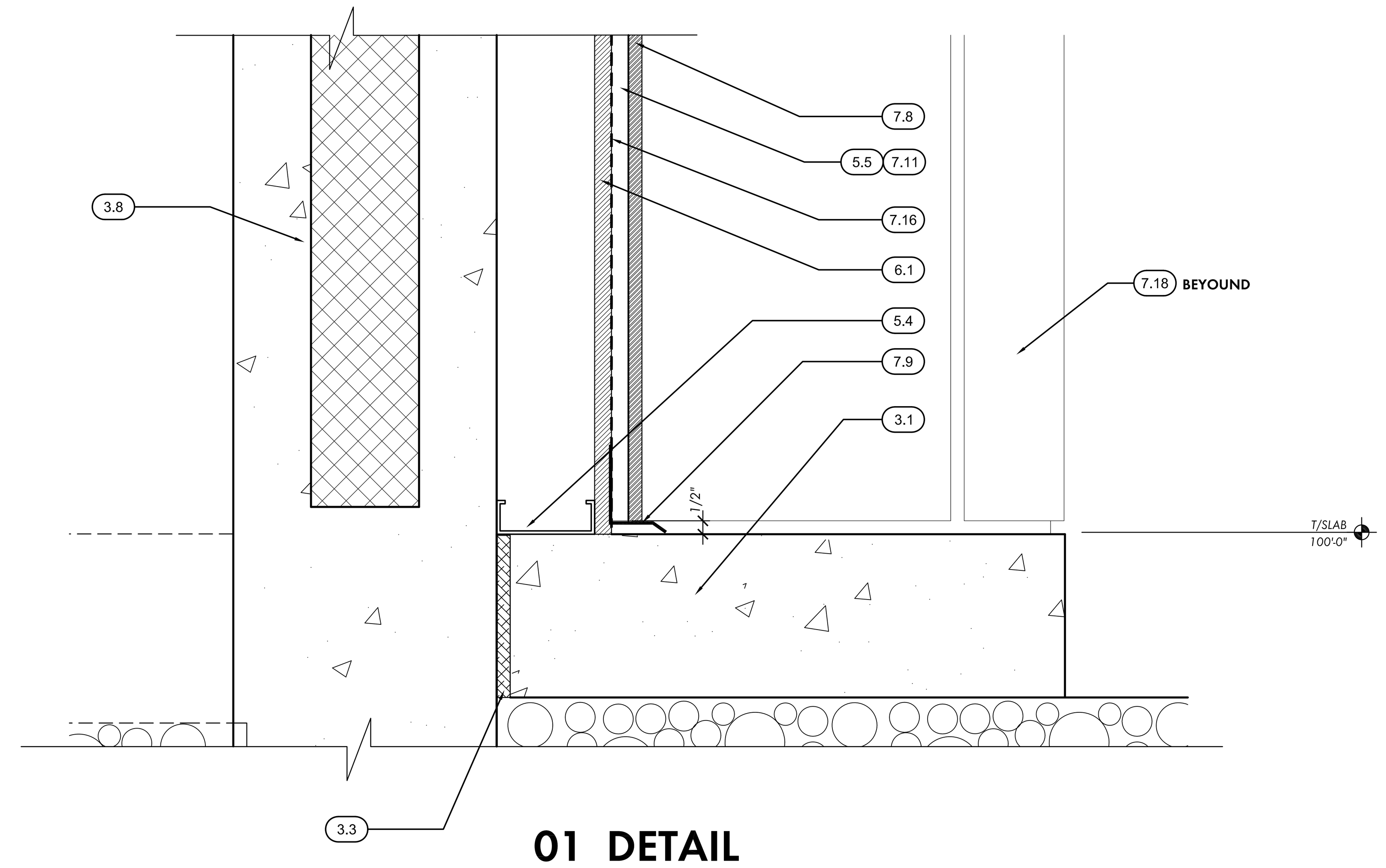
03 DETAIL

SCALE: 3" = 1'-0"



02 DETAIL

SCALE: 3" = 1'-0"



01 DETAIL

SCALE: 3" = 1'-0"

KIT OF PARTS:

DIVISION 2 - SITE WORK

2.1 FINISHED GRADE - REFER CIVIL

DIVISION 3 - CONCRETE

3.1 CONCRETE STOOP - REF. STRUCTURAL DRAWINGS
3.2 CONCRETE FOOTING - REF. STRUCTURAL DRAWINGS
3.3 1/2" EXPANSION JOINT MATERIAL - (079500)
3.4 COMPACTED GRANULAR FILL. REFER TO STRUCTURAL DRAWINGS
3.5 FOUNDATION ANCHOR. REFER TO STRUCTURAL DWGS.
3.6 STEEL REINFORCEMENT BAR. REFER TO STRUCTURAL DWGS.
3.7 CMU FOUNDATION WALL. REFER TO STRUCTURAL DWGS.
3.8 INSULATED PRECAST CONCRETE PANEL
3.9 1/2" GROOVE IN PRECAST CONCRETE PANEL- REFER TO EXTERIOR ELEVATIONS FOR LOCATIONS

DIVISION 4 - MASONRY

4.1 8" NOM CMU - REF. STRUCTURAL FOR REINFORCING.

METALS

5.1 STRUCTURAL STEEL FRAMING MEMBER (BY PRE-ENGINEERED METAL BUILDING CONTRACTOR)
5.2 BYPASS WALL GIRT (BY PRE-ENGINEERED METAL BUILDING CONTRACTOR)
5.3 ROOF PURLIN (BY PRE-ENGINEERED METAL BUILDING CONTRACTOR)
5.4 3-5/8" X 18 GAUGE COLD FORMED METAL FRAMING MEMBERS
5.5 7/8" METAL FURRING CHANNELS

WOOD AND PLASTICS

6.1 5/8" THICK EXTERIOR GRADE PLYWOOD
6.2 2 X CONTINUOUS WOOD BLOCKING

THERMAL AND MOISTURE PROTECTION

7.1 PRE-FINISHED STANDING SEAM METAL ROOF PANELS. 24 GA, BY PRE- ENGINEERED METAL BUILDING MANUFACTURER
7.2 PRE-FINISHED ALUMINUM GUTTERS AND DOWNSPOUTS BY PRE-ENGINEERED METAL BUILDING MANUFACTURER
7.3 EPDM RUBBER STRIP ON 7/8" METAL HAT FURRING CHANNELS
7.4 FIBERGLASS WALL INSULATION- 4" THICK FIBERGLASS INSULATION WITH WHITE METALIZED POLYPROPYLENE FACING (R-13 MINIMUM)
7.5 FIBERGLASS ROOF INSULATION - 6" THICK FIBERGLASS INSULATION WITH WHITE METALIZED POLYPROPYLENE FACING ON 3/4" THERMAL BLOCKS (R-19 MINIMUM)
7.6 2" RIGID INSULATION (EXTEND FROM FOOTING TO 36" ACROSS UNDERSIDE OF FUTURE FLOOR SLAB)
7.7 FIBER CEMENT BOARD TRIM - PAINT COLOR BY ARCHITECT
7.8 FIBER CEMENT BOARD PANEL -PAINT COLOR BY ARCHITECT
7.9 FIBER CEMENT BOARD FLASHING
7.10 SHIM AND SEALANT PER STOREFRONT MFR. TYP. BOTH SIDES OF FRAME
7.11 AIR SPACE
7.12 BACKER ROD AND SEALANT
7.13 SEALANT JOINT AT DISSIMILAR MATERIALS
7.14 FORMED ALUMINUM COPING
7.15 SURFACE MOUNT FLASHING REGLET
7.16 SELF ADHERING MODIFIED BITUMINOUS SHEET WATERPROOFING
7.17 APPROVED FASTENER
7.18 ALUMINUM COMPOSITE MATERIAL WALL PANEL SYSTEM WITH FRAME EXTRUSIONS AND CLIPS (D7-100 DRY JOINT ACM PANEL SYSTEM)
7.19 PREFINISHED ALUMINUM REGLET AND COUNTER FLASHING BY WALL PANEL SYSTEM MANUFACTURER
7.20 TOP CHANNEL
7.21 BASE CHANNEL
7.22 RAKE FLASHING
7.23 HIGH WALL EAVE STRUT
7.24 OUTSIDE CLOSURE PIECE
7.25 INTERIOR METAL LINER PANEL (8' HIGH)
7.26 CORRUGATED METAL SIDING (AMERICAN BUILDINGS COMPANY)
7.27 FLASHING

DOORS AND WINDOWS

8.1 ALUMINUM FRAMED ENTRANCES & STOREFRONT SYSTEM - (084113)
8.2 FIXED ALUMINUM WINDOW
8.2 INSULATED EXTERIOR HOLLOW METAL DOOR AND FRAME - (081113)
8.3 CLEAR LOW -E INSULATED GLAZING - REFER TO ELEVATIONS FOR TYPE - (088000)
8.4 MECHANICAL LOUVER/DIFFUSER, REFER TO MECHANICAL DRAWINGS FOR SIZE

FINISHES

SPECIALTIES

DIV 11 EQUIPMENT:

DIV 12 FURNISHINGS:

DIV 22 PLUMBING:

DIV 23 MECHANICAL:

15.1 MECHANICAL EQUIPMENT - REF: MEP

DIV 26 ELECTRICAL:

16.1 LIGHT FIXTURE - REF: ELEC
16.2 ELECTRICAL PANEL - REF: ELEC

A X | S

618 East Market Street
Indianapolis, Indiana 46202
ph 317/264.8162 fx 317/264.8165
a x i s a r c h . c o m

Scope Drawings
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of work.

DRAWN BY SAA
CHECKED BY XXX
DATE ISSUED 09.26.2014

REVISIONS:

THE ENGINEERING COLLABORATIVE
MEP ENGINEERS
10 South New Jersey Street, Suite 320
Indianapolis, IN 46202
Sam Hurt
ph. 317.636.3941

FINK ROBERTS & PETRIE, INC.
CONSULTING ENGINEERS
9449 Priority Way, West Drive, Suite 200
Indianapolis, IN 46240
Bill Horton
ph. 317.872.8400
fx. 317.876.2408

CIVIL & ENVIRONMENTAL CONSULTANTS INC.
530 E. Ohio Street Suite G.
Indianapolis, IN 46204
David Roth
ph. 877.746.0794
fx. 317.655.7778

BATESVILLE SHELL BUILDING

MERKEL ROAD, BATESVILLE, INDIANA 46038

DANDRIDGE DREW WHITE
REGISTERED
No. AR-19400087
STATE OF INDIANA
ARCHITECT

WALL SECTIONS

A-302

PROJECT NUMBER: 13076

A-101.DWG

DOOR HARDWARE NOTES:

CONTRACTOR TO COORDINATE HARDWARE NEEDS WITH OWNER AND PRE-MANUFACTURED BUILDING DETAILS

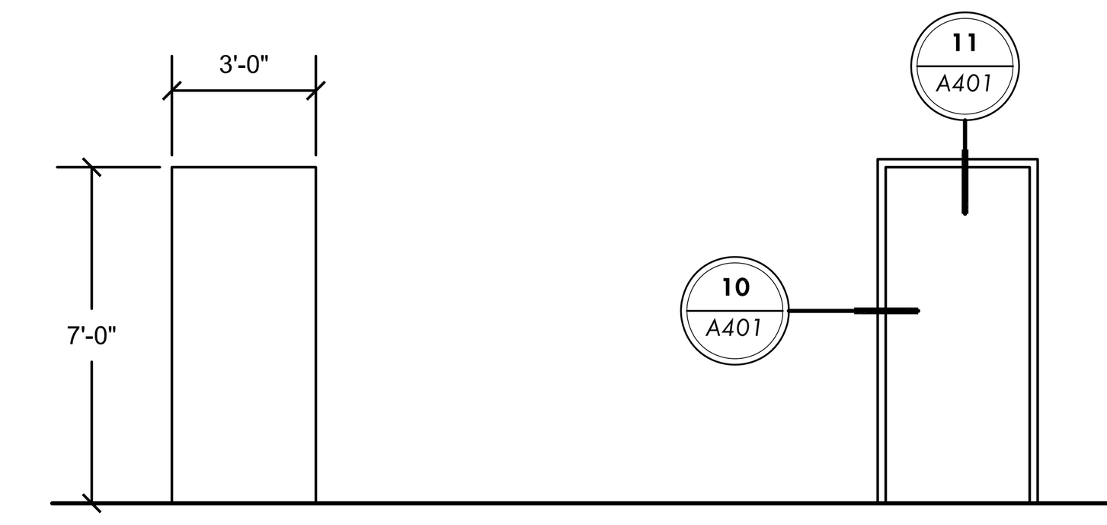
GLASS SCHEDULE

(XXX)

GLASS DESIGNATION	GLASS TYPE
G1	CLEAR LOW E INSULATING GLASS
GT	CLEAR LOW E GLASS - TEMPERED
G1T	CLEAR LOW E INSULATING GLASS - TEMPERED
SG1	CERAMIC-COATED INSULATING SPANDREL GLASS

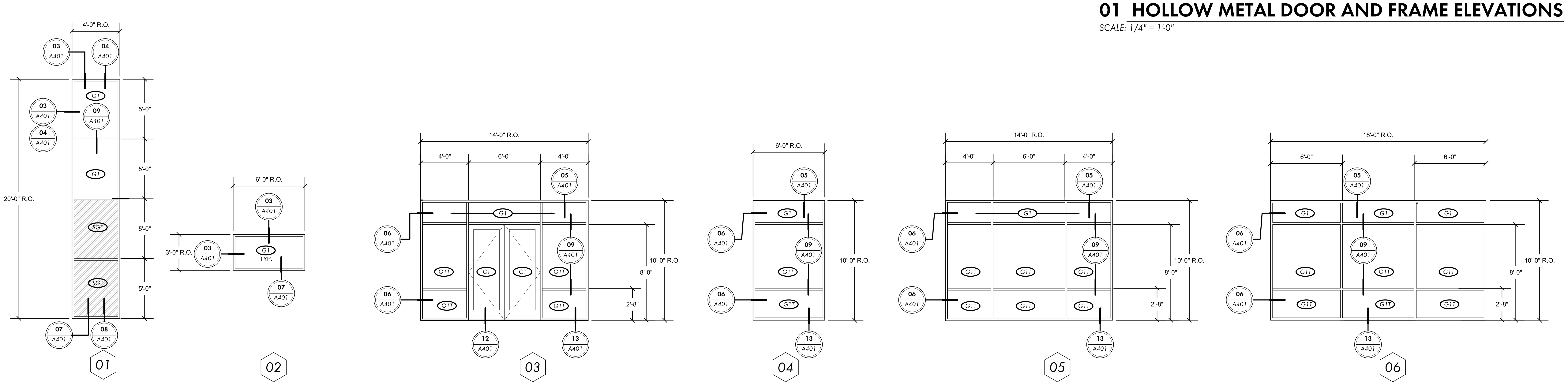
DOOR AND FRAME SCHEDULE

		DOOR						FRAME					LABEL	HARDWARE	MATERIALS
		SIZE													STL STEEL HM HOLLOW METAL AL ALUMINUM
OPENING NUMBER	ROOM NAME(RM. #)	WIDTH	HEIGHT	THICKNESS	MATERIAL	ELEVATION	GLASS	MATERIAL	ELEVATION	HEAD	JAMB	SILL	FIRE RATING	REFER TO SPECIFICATIONS	REMARKS
									-				-	-	
D1	ALUMINUM STOREFRONT DOOR	(2) 3'-0"	8'-0"	1 3/4"	AL	03	G1T	AL	-	05/A401	06/A401	12/A401	-	-	SIZE LISTED IS OPENING SIZE
D2	HOLLOW METAL DOOR	3'-0"	7'-0"	1 3/4"	HM	01	-	HM	-	11/A401	10/A401	12/A401 SIM.			SIZE LISTED IS OPENING SIZE
D3	HOLLOW METAL DOOR	3'-0"	7'-0"	1 3/4"	HM	01	-	HM	-	11/A401	10/A401	12/A401 SIM.	-	-	SIZE LISTED IS OPENING SIZE



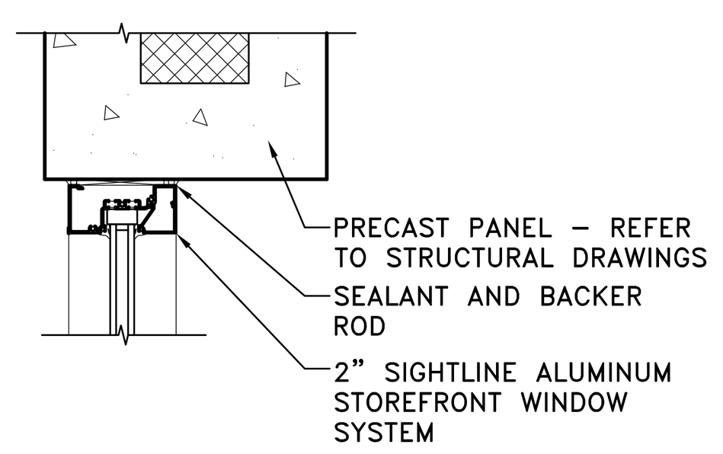
01 HOLLOW METAL DOOR AND FRAME ELEVATIONS

SCALE: 1/4" = 1'-0"



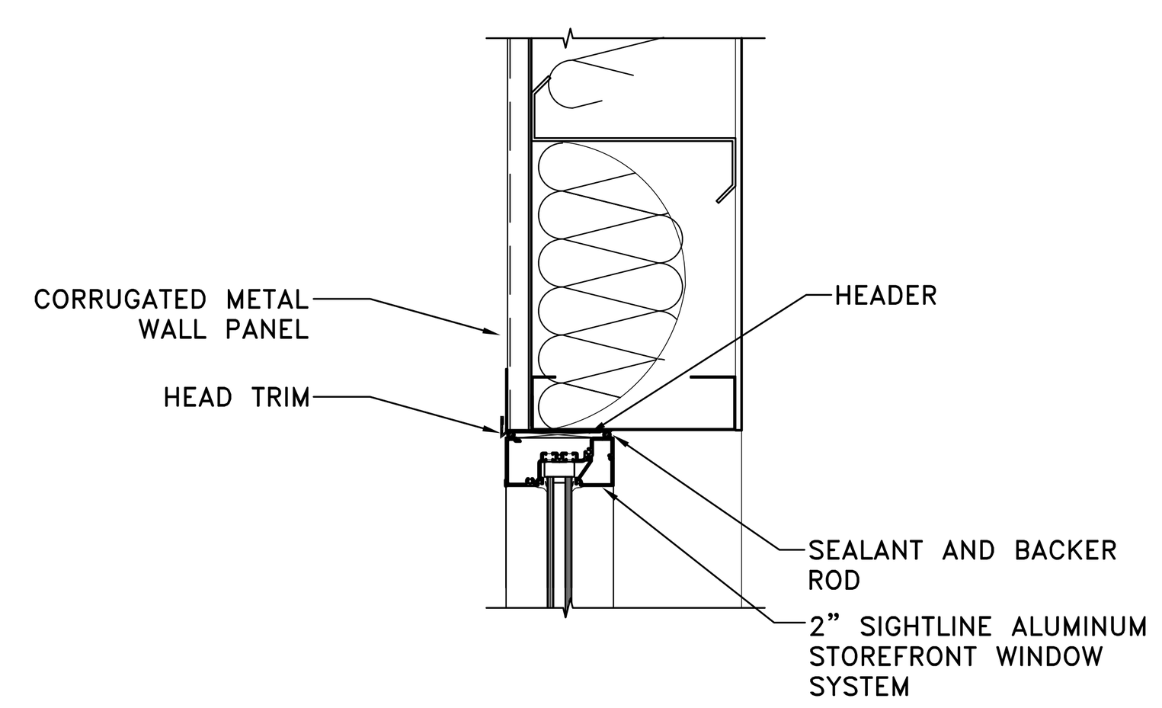
02 WINDOW ELEVATIONS

SCALE: 1/4" = 1'-0"



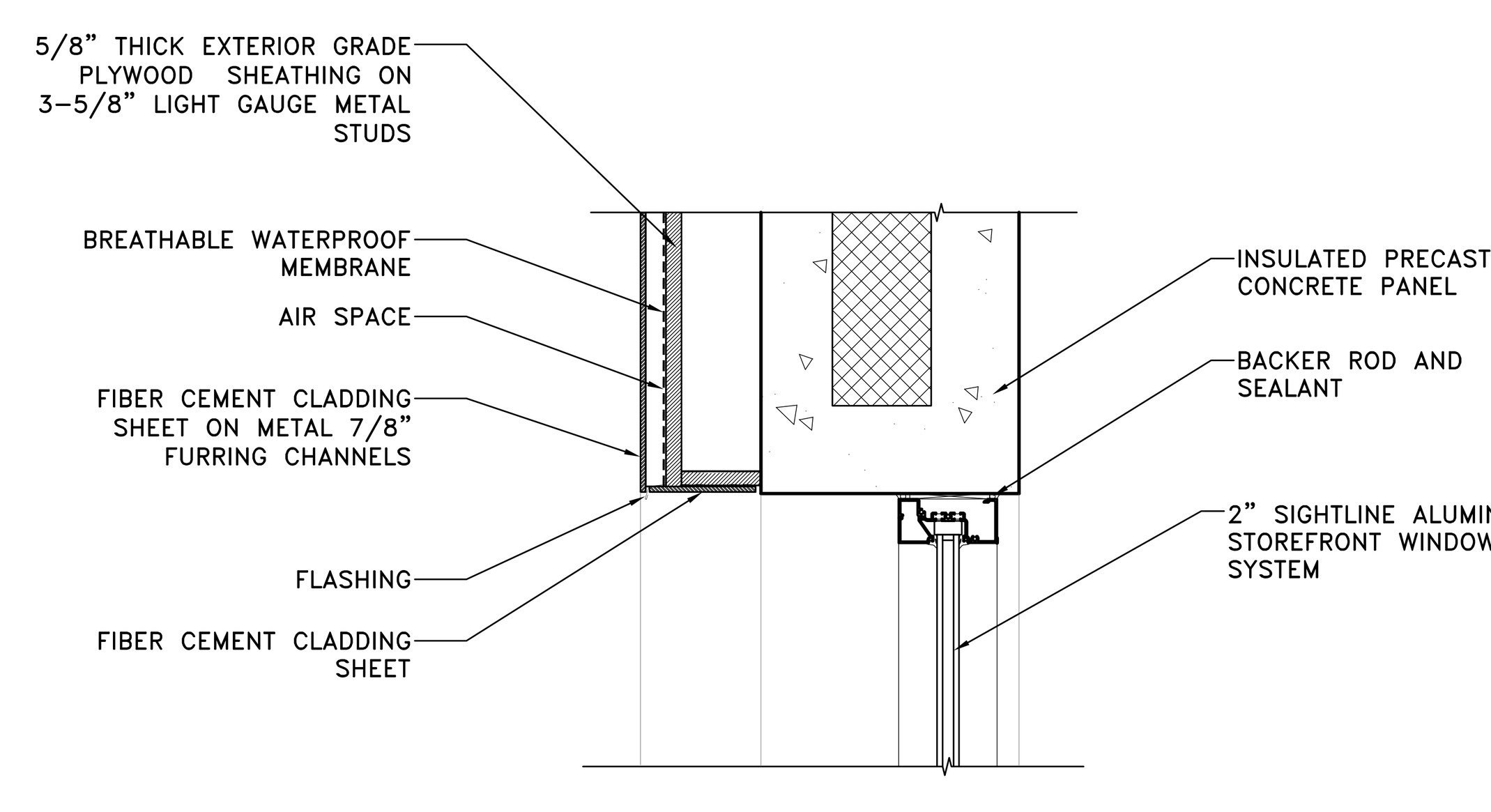
03 HEAD/JAMB DETAIL

SCALE: 1 1/2" = 1'-0"



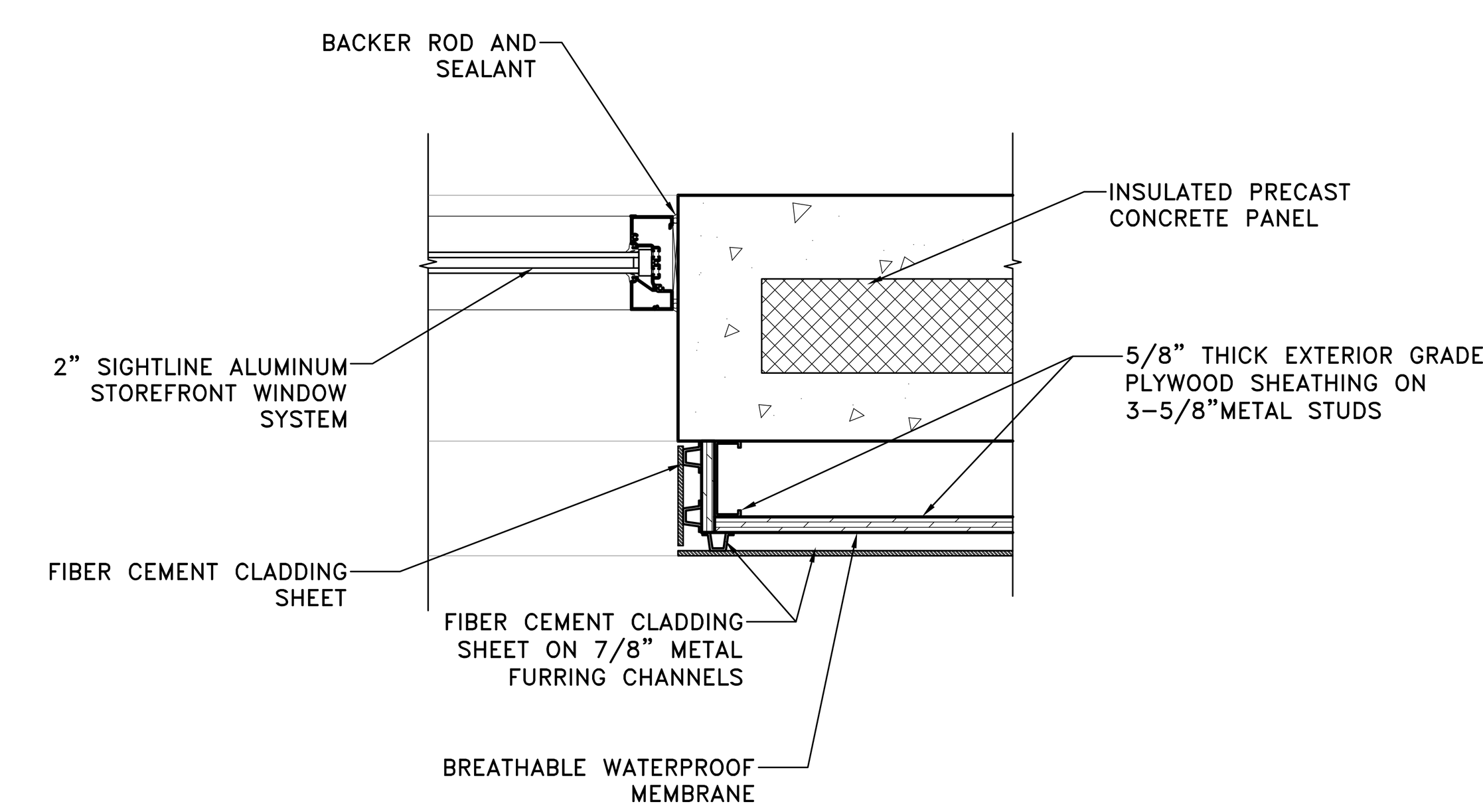
04 HEAD /JAMB DETAIL

SCALE: 1 1/2" = 1'-0"



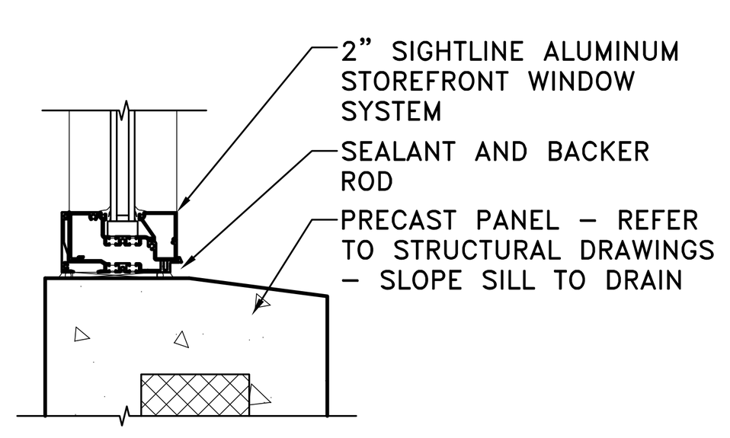
05 HEAD DETAIL

SCALE: 1 1/2" = 1'-0"



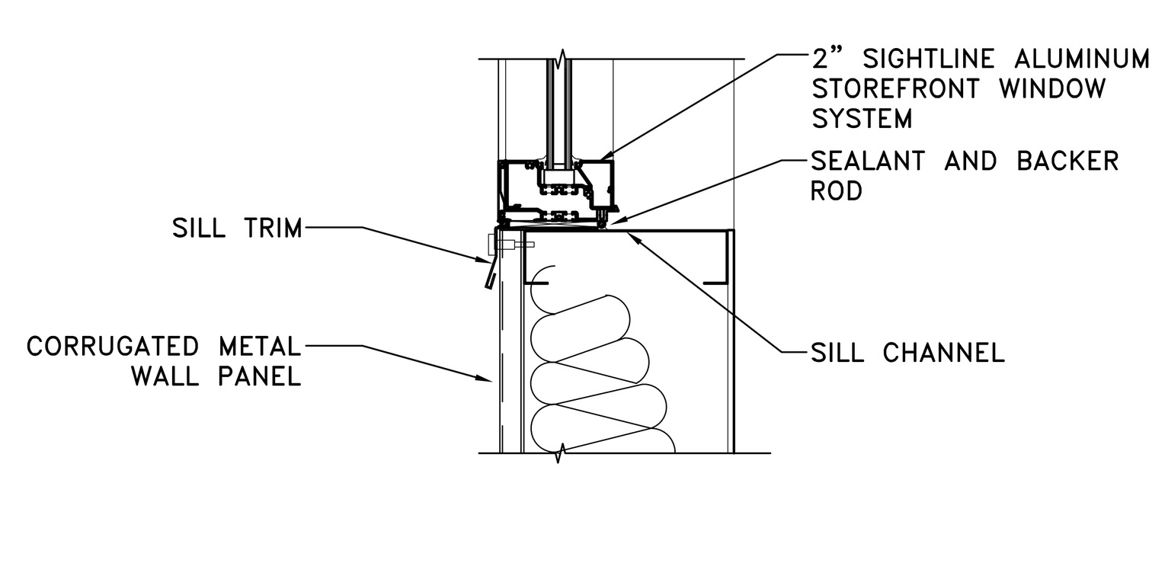
06 JAMB DETAIL

SCALE: 1 1/2" = 1'-0"



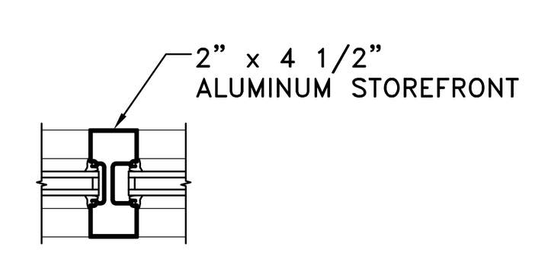
07 SILL DETAIL

SCALE: 1 1/2" = 1'-0"



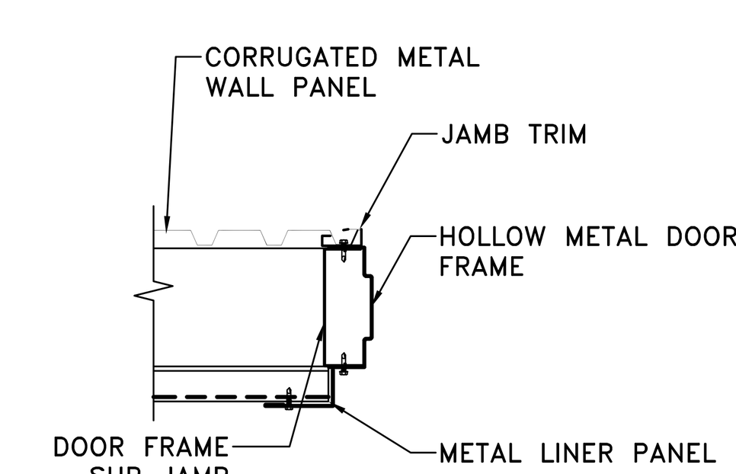
08 SILL DETAIL

SCALE: 1 1/2" = 1'-0"



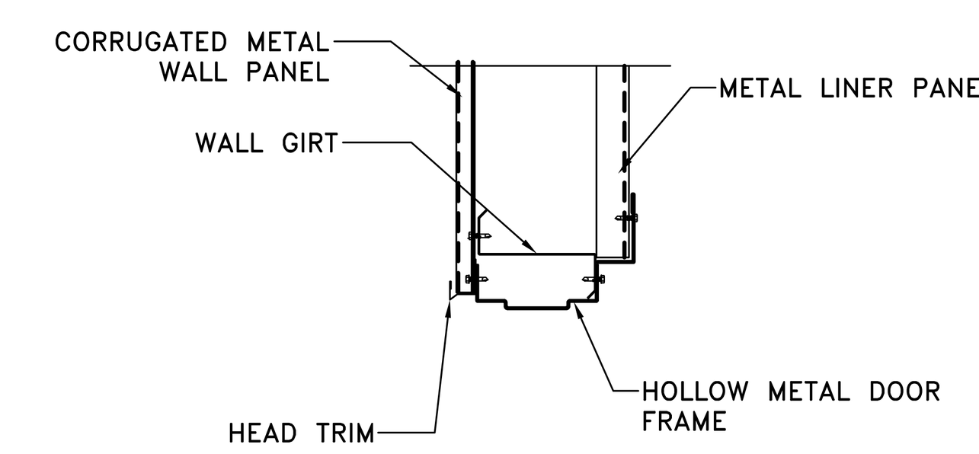
09 MULLION DETAIL

SCALE: 1 1/2" = 1'-0"



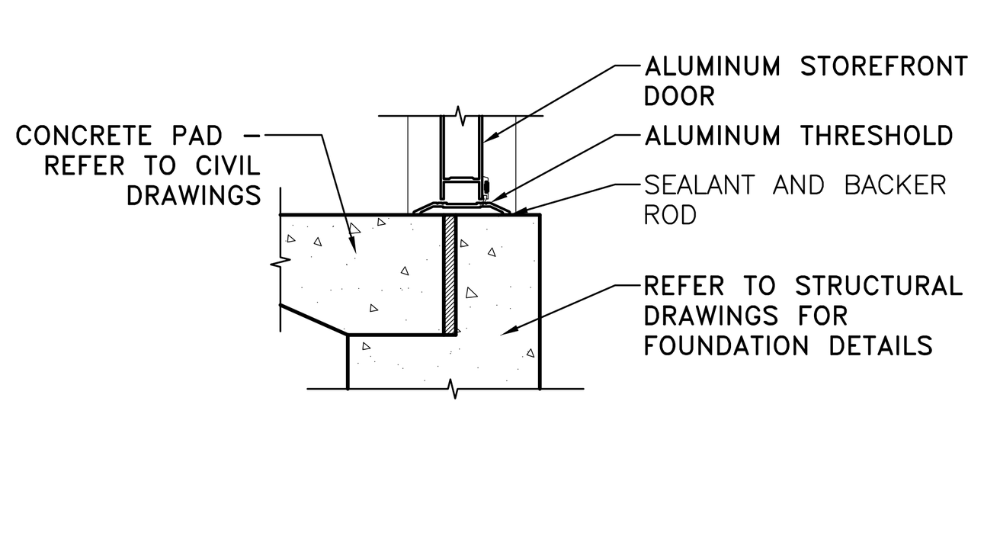
10 JAMB DETAIL

SCALE: 1 1/2" = 1'-0"



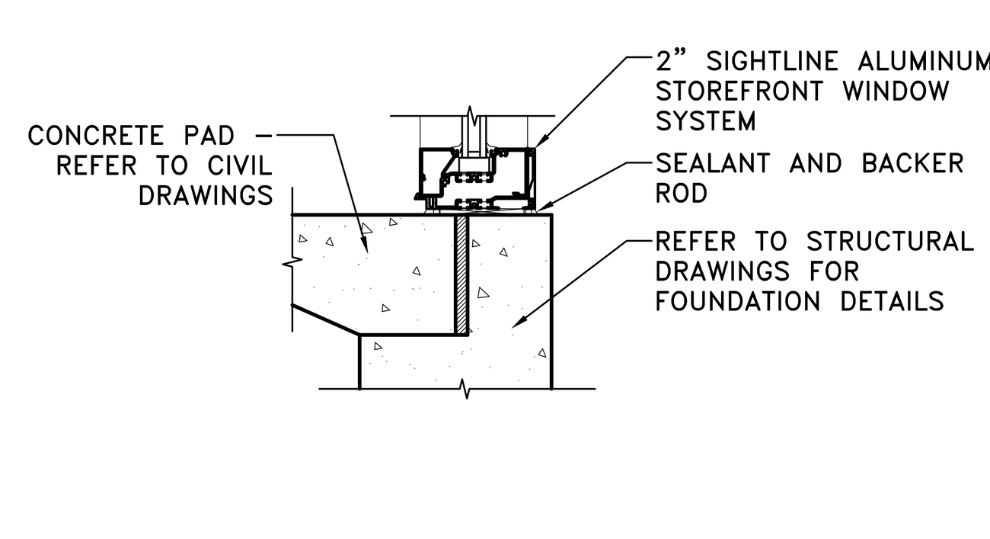
11 HEAD DETAIL

SCALE: 1 1/2" = 1'-0"



12 SILL DETAIL

SCALE: 1 1/2" = 1'-0"



13 SILL DETAIL

SCALE: 1 1/2" = 1'-0"

A-101.DWG

AXIS
618 East Market Street
Indianapolis, Indiana 46202
ph 317/264.8162 fx 317/264.8165
axisarch.com

Scope Drawings
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of work.

DRAWN BY SAA
CHECKED BY XXX
DATE ISSUED 9.26.2014

REVISIONS:

THE ENGINEERING COLLABORATIVE — Sam Hurt
MEP ENGINEERS
10 South New Jersey Street, Suite 320
Indianapolis, IN 46202
ph. 317.636.3941

FINK ROBERTS & PETRIE, INC. — Bill Horton
CONSULTING ENGINEERS
9449 Priority Way, West Drive, Suite 200
Indianapolis, IN 46240
ph. 317.872.8400
fx. 317.876.2408

CIVIL & ENVIRONMENTAL CONSULTANTS INC. — David Roth
530 E. Ohio Street Suite G.
Indianapolis, IN 46204
ph. 877.746.0794
fx. 317.655.7778

BATESVILLE SHELL BUILDING

MERKEL ROAD, BATESVILLE, INDIANA 46038

DANDRIDGE DREW WHITE — REGISTERED No. AR-19400087 — STATE OF INDIANA — ARCHITECT

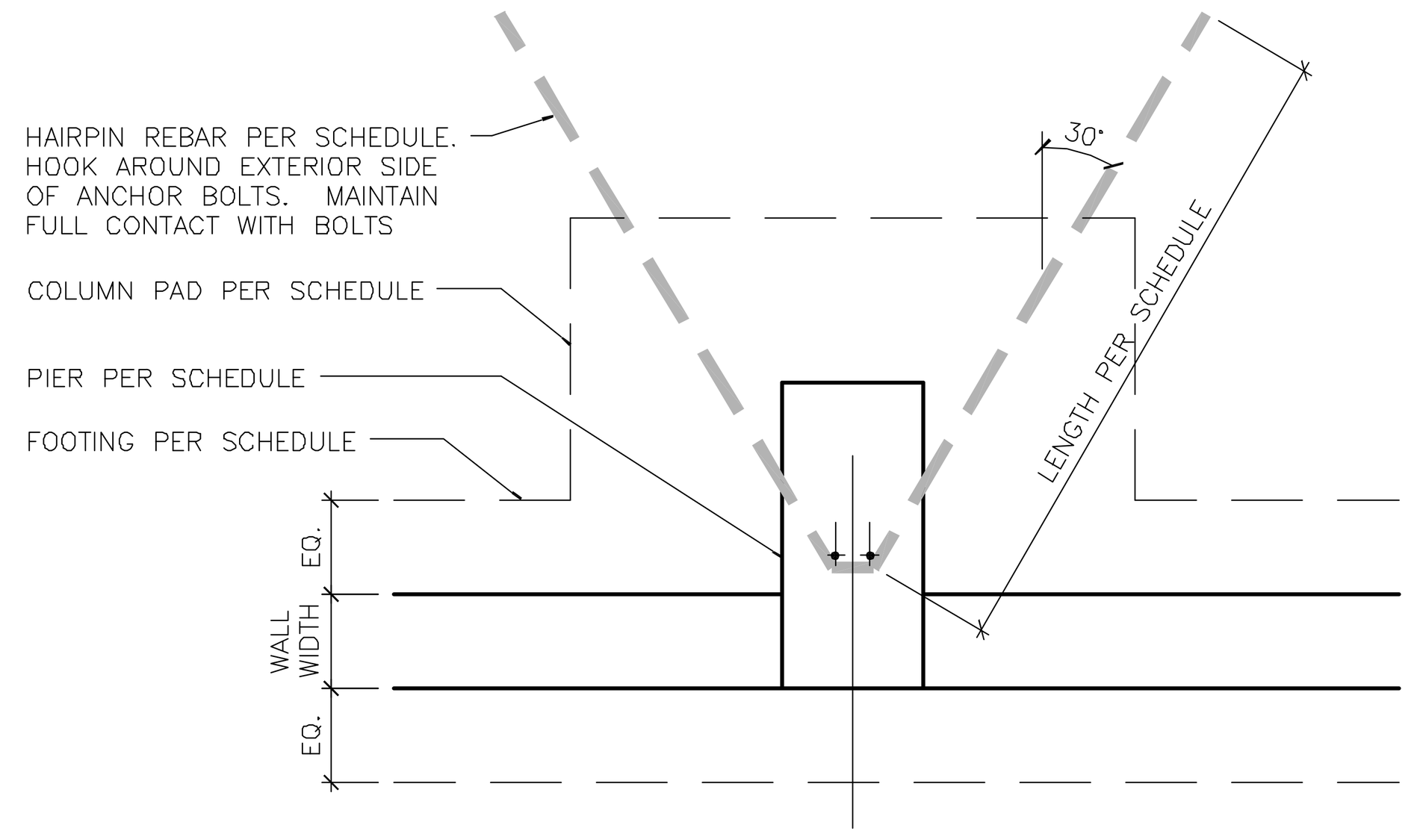
DOOR AND WINDOW ELEVATIONS, DETAILS AND SCHEDULE

A-401

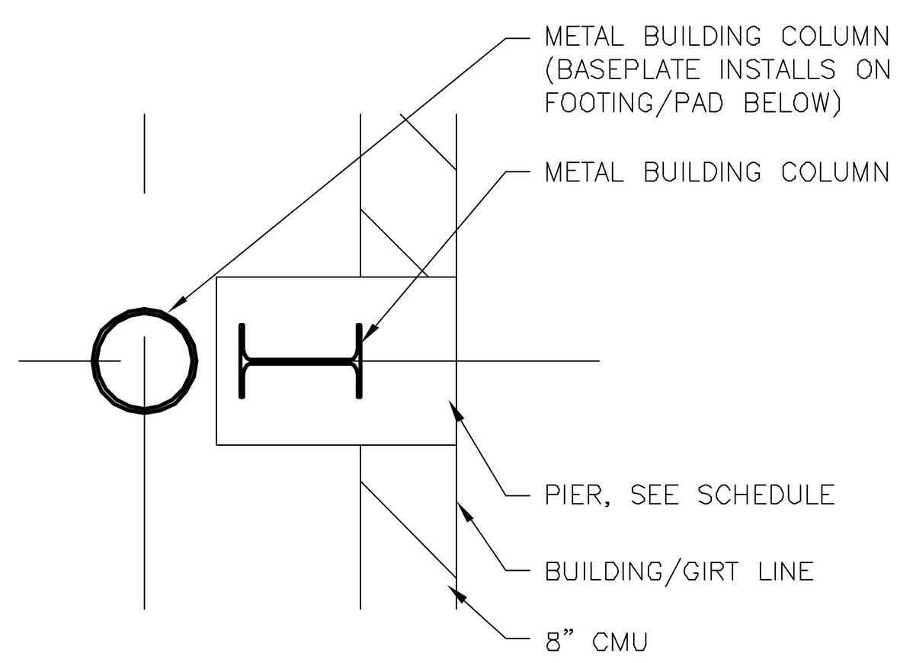
PROJECT NUMBER: 13076

FOUNDATION NOTES

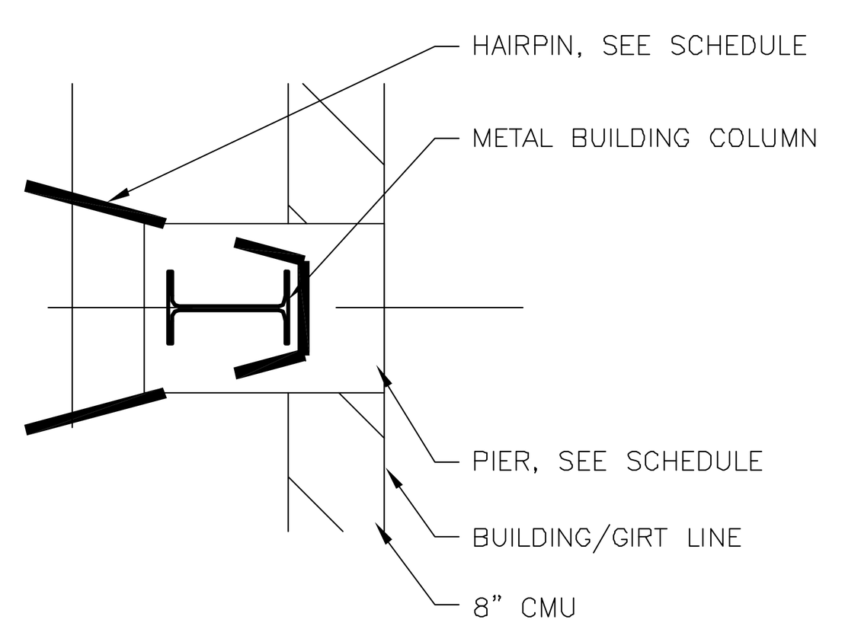
1. FOOTING CONCRETE SHALL BE 3000 PSI.
2. PIER AND WALL CONCRETE SHALL BE 4000 PSI.
3. REBAR SHALL BE GRADE 60.
4. CONTINUE ALL GRADE BEAM/CONTINUOUS FOOTING REBAR THROUGH COLUMN PADS AND/OR PIERS.
5. NET ALLOWABLE SOIL BEARING PRESSURE IS 2000 PSF. FIELD VERIFY.
6. FOOTING AND PIER SIZES ARE BASED UPON PRELIMINARY BUILDING REACTIONS. FOOTING AND PIER SIZES SHALL BE FINALIZED UPON SUBMITTAL OF FINAL REACTIONS BY METAL BUILDING MFR.



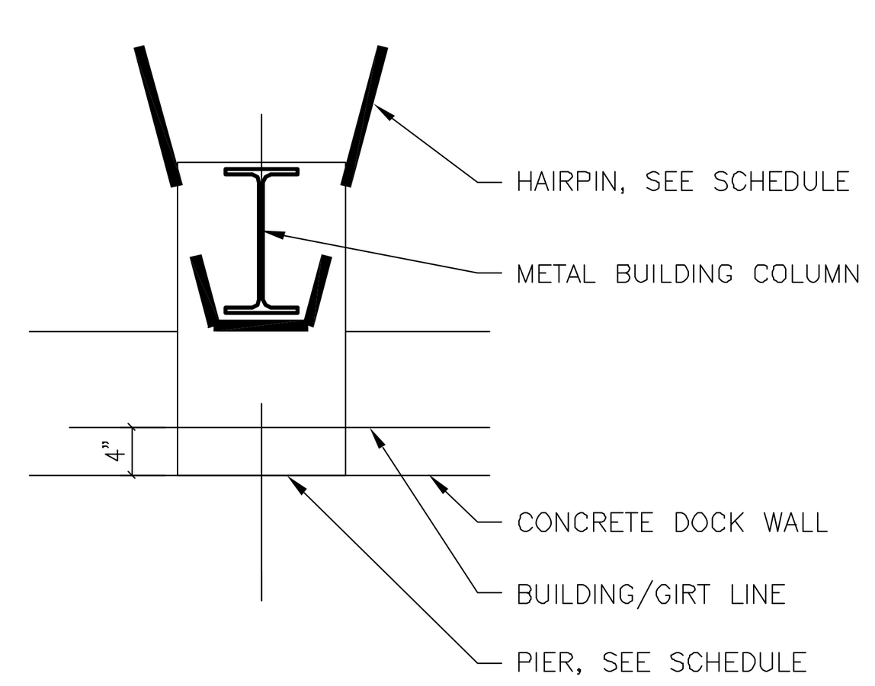
HAIRPIN DETAIL 6/F-111
SCALE: 3/4" = 1'-0"



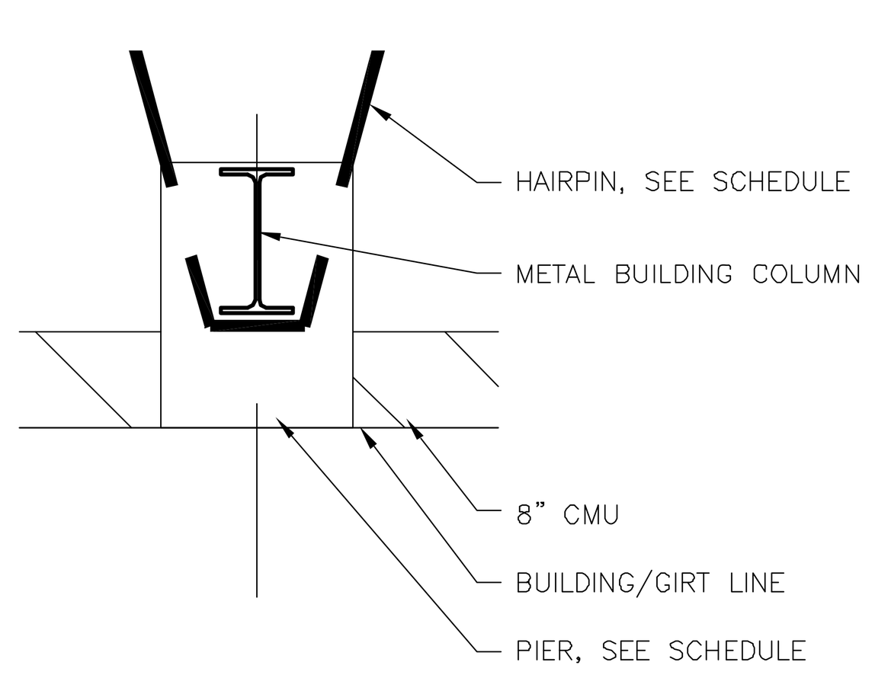
PIER DETAIL 5/F-111
SCALE: 3/4" = 1'-0"



PIER DETAIL 4/F-111
SCALE: 3/4" = 1'-0"



PIER DETAIL 2/F-111
SCALE: 3/4" = 1'-0"

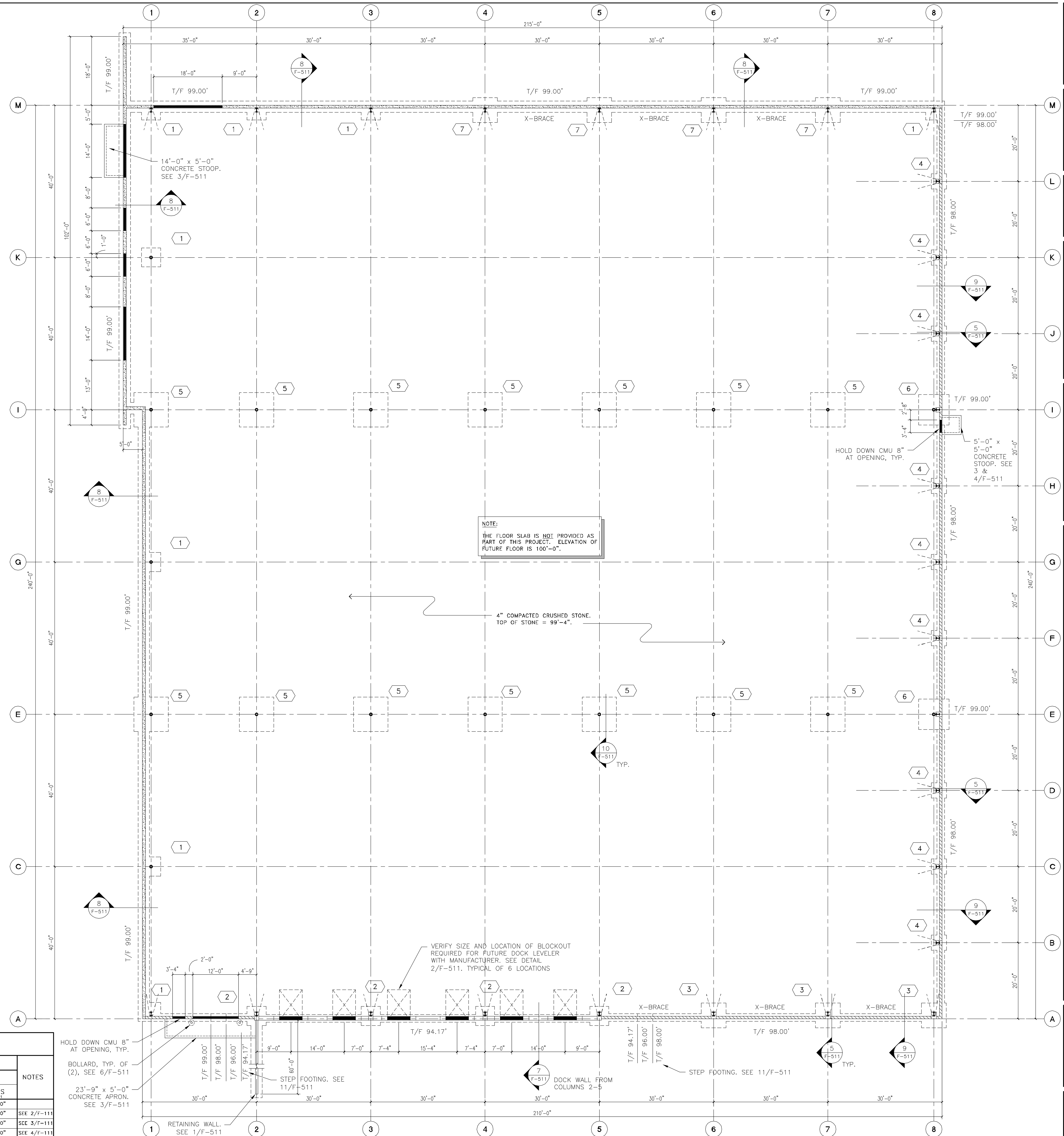


PIER DETAIL 3/F-111
SCALE: 3/4" = 1'-0"

COLUMN / PIER + FOOTING/PAD SCHEDULE

QTY.	MARK NUMB.	COLUMN/PIER: PIER SIZE WIDE	PIER SIZE LONG	REINFORCING VERTICAL	REINFORCING TIES	TOP ELEV.	FOOTING/PAD: FOOTING SIZE WIDE	FOOTING SIZE LONG	FOOTING SIZE DEEP	TOP ELEV.	REINFORCING LONGITUDINAL	REINFORCING TRANSVERSE	HAIRPINS SEE 6/F-111	NOTES
8	1	--	--	--	--	--	5'-0"	5'-0"	24"	99'-0"	10 - #5	10 - #5	#5 x 10'-0"	
4	2	14"	26"	6 - #6	#3 - 10" O.C.	100'-0"	5-0"	5'-0"	12"	94'-2"	10 - #5	10 - #5	#5 x 10'-0"	SEE 2/F-111
3	3	16"	22"	6 - #5	4 - #3	100'-0"	6'-6"	6'-6"	24"	99'-0"	12 - #5 T&B	12 - #5 T&B	#5 x 10'-0"	SEE 3/F-111
9	4	14"	20"	6 - #5	4 - #3	100'-0"	4-0"	4'-0"	12"	98'-0"	4 - #5 BOT.	4 - #5 BOT.	#5 x 10'-0"	SEE 4/F-111
14	5	--	--	--	--	--	9'-0"	9'-0"	26"	99'-0"	13 - #6 T&B	13 - #6 T&B	--	
2	6	14"	20"	6 - #6	#3 - 10" O.C.	100'-0"	8-0"	8'-0"	24"	99'-0"	13 - #6 T&B	13 - #6 T&B	--	SEE 5/F-111
4	7	--	--	--	--	--	6'-6"	6'-6"	24"	99'-0"	12 - #5 T&B	12 - #5 T&B	#5 x 10'-0"	

October 06, 2014 12:04:49 p.m. AcadVer:19.0s (LMS Tech)
Drawing: G:\DWGS\PROJECTS\BATESVILLE SHELL BLDG\14-0059\F-111.DWG
Plotted Xrefs: AxisTBLK.DWG f-fp.DWG
F-111.DWG



FOUNDATION PLAN 1/F-111
SCALE: 3/32" = 1'-0"

AXIS
618 East Market Street
Indianapolis, Indiana 46202
ph 317/264.8162
fx 317/264.8165
axisarch.com

DRAWN BY
CHECKED BY JRC
DATE ISSUED 9/25/2014

REVISIONS:
10/06/2014 PERMIT SET

FINK ROBERTS & PETRIE, INC.
CONSULTING ENGINEERS
4040 Vincennes Circle, Ste 300
Indianapolis, IN 46268
Bill Horton
ph. 317.872.8400
fx. 317.818.1911

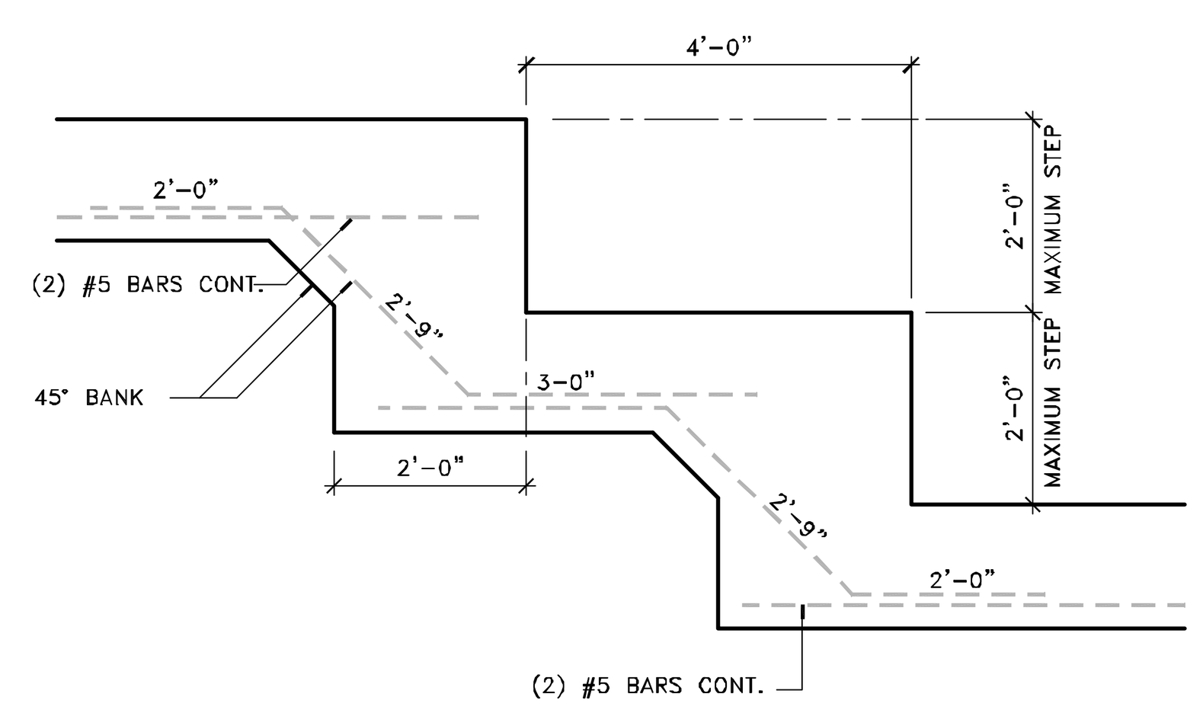
BATESVILLE SHELL BUILDING
BATESVILLE, INDIANA

JAMES N. LEWIS REGISTERED No. 900432 STATE OF INDIANA PROFESSIONAL ENGINEER

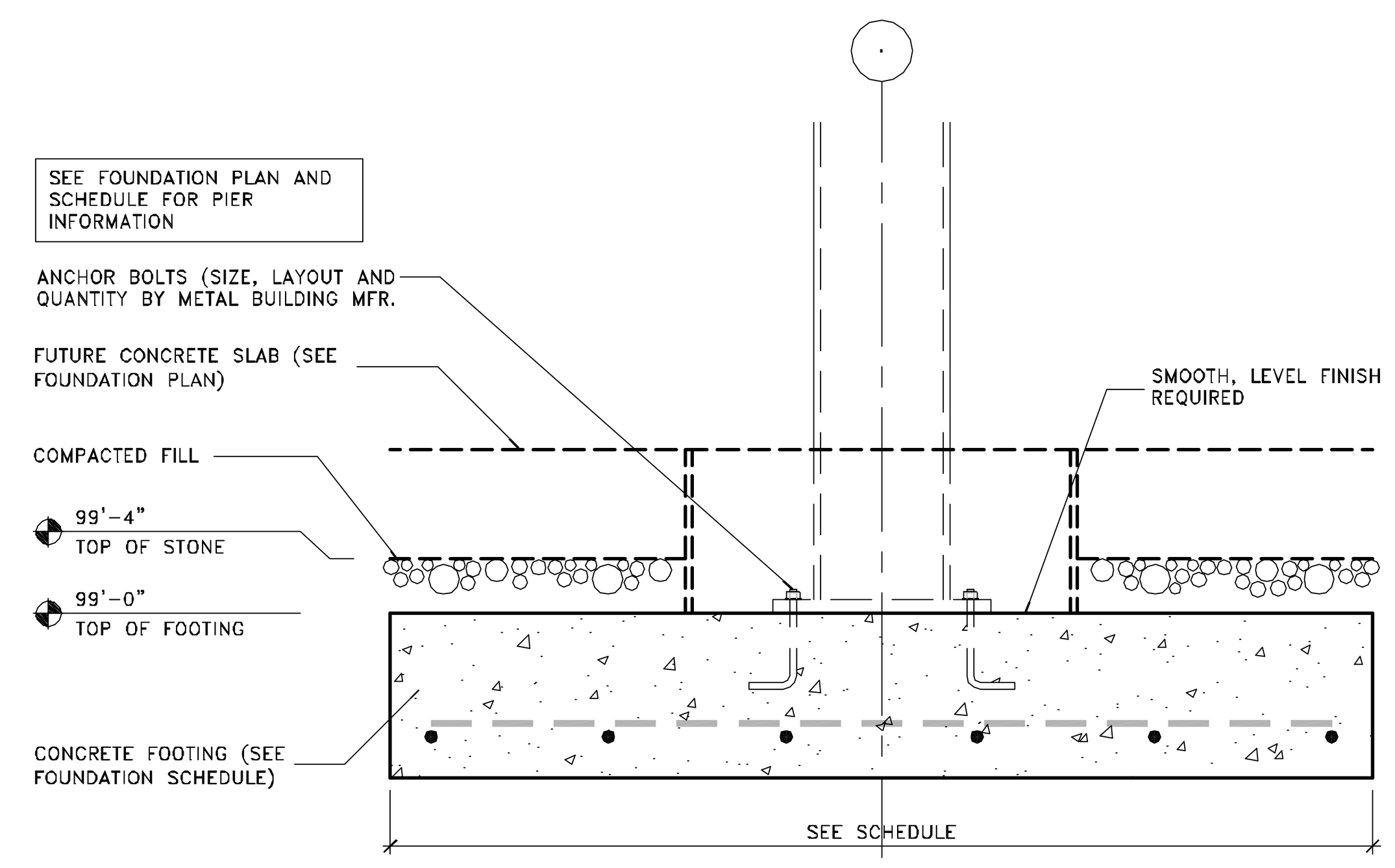
FOUNDATION PLAN

F-111

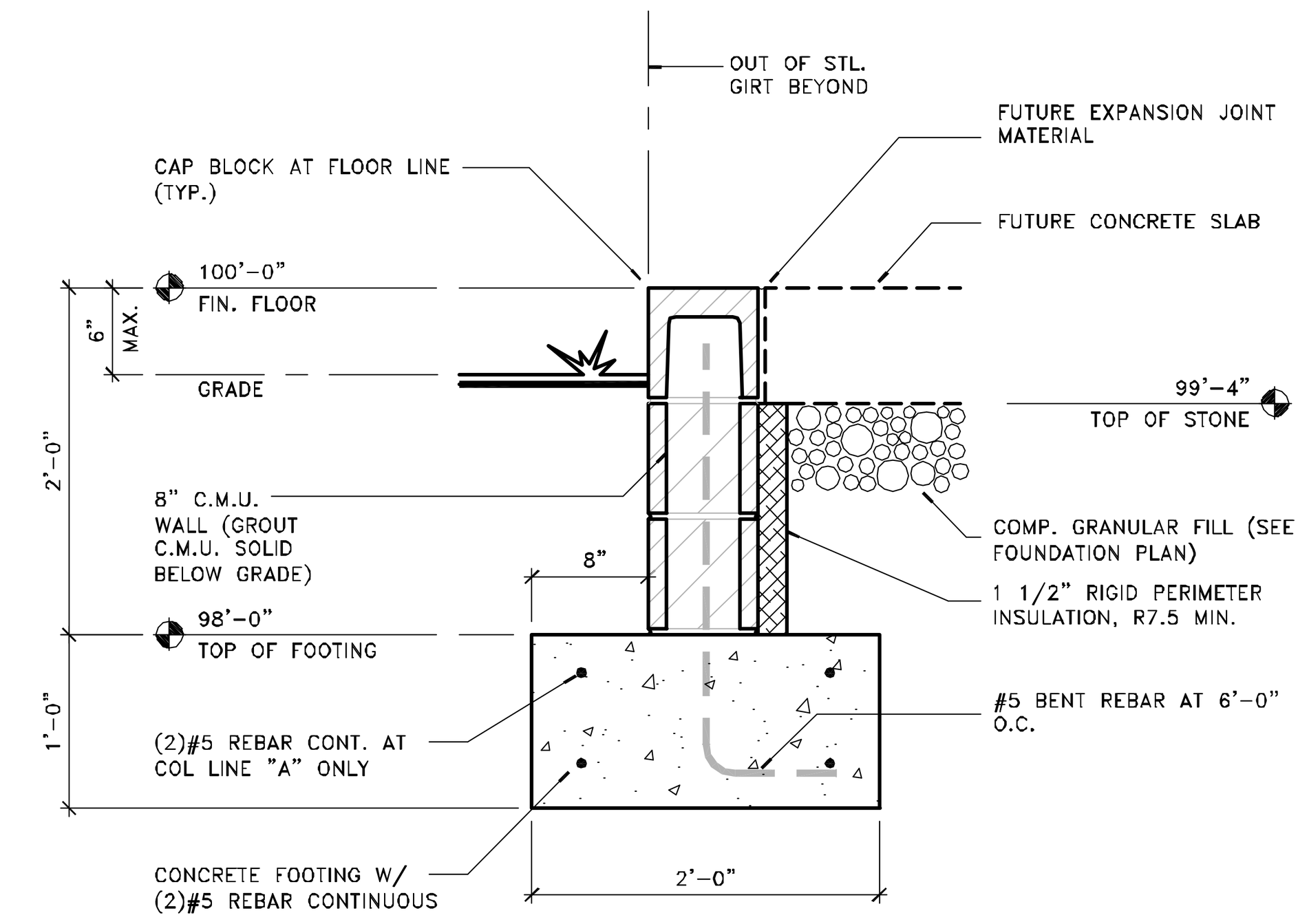
PROJECT NUMBER: 13076



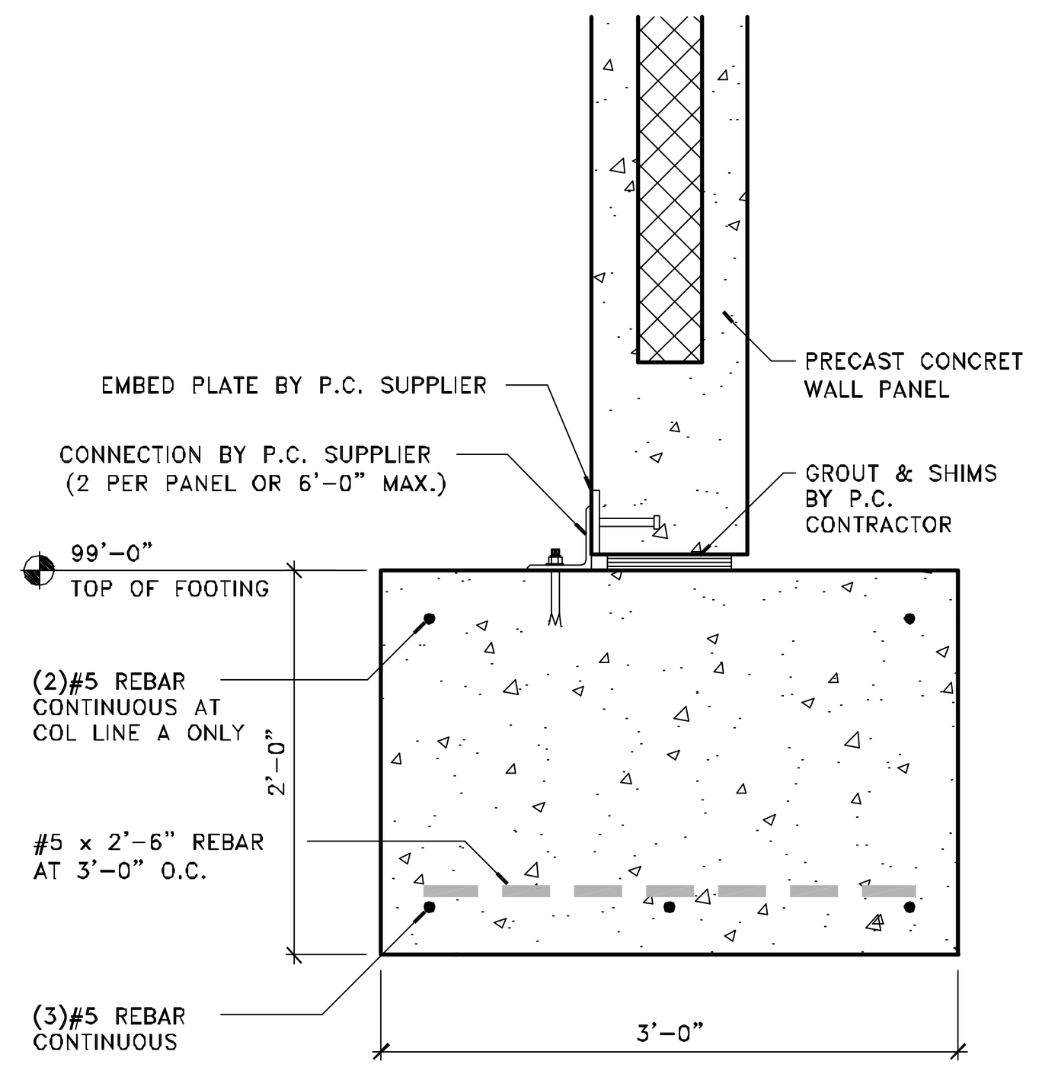
STEP FOOTING DETAIL (11 / F-511)
SCALE: 1/2" = 1'-0"



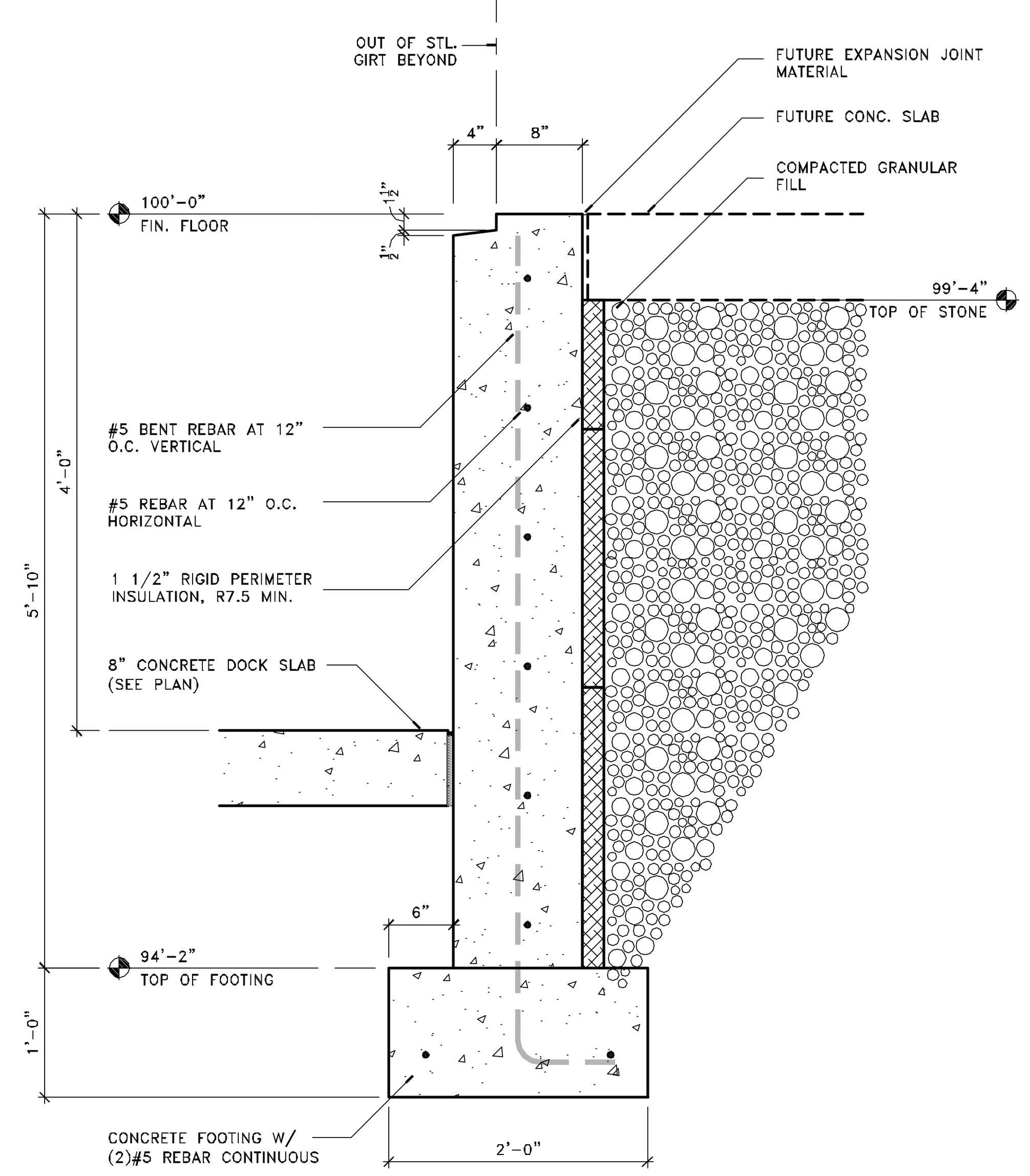
INTERIOR COLUMN PAD (10 / F-511)
SCALE: 1" = 1'-0"



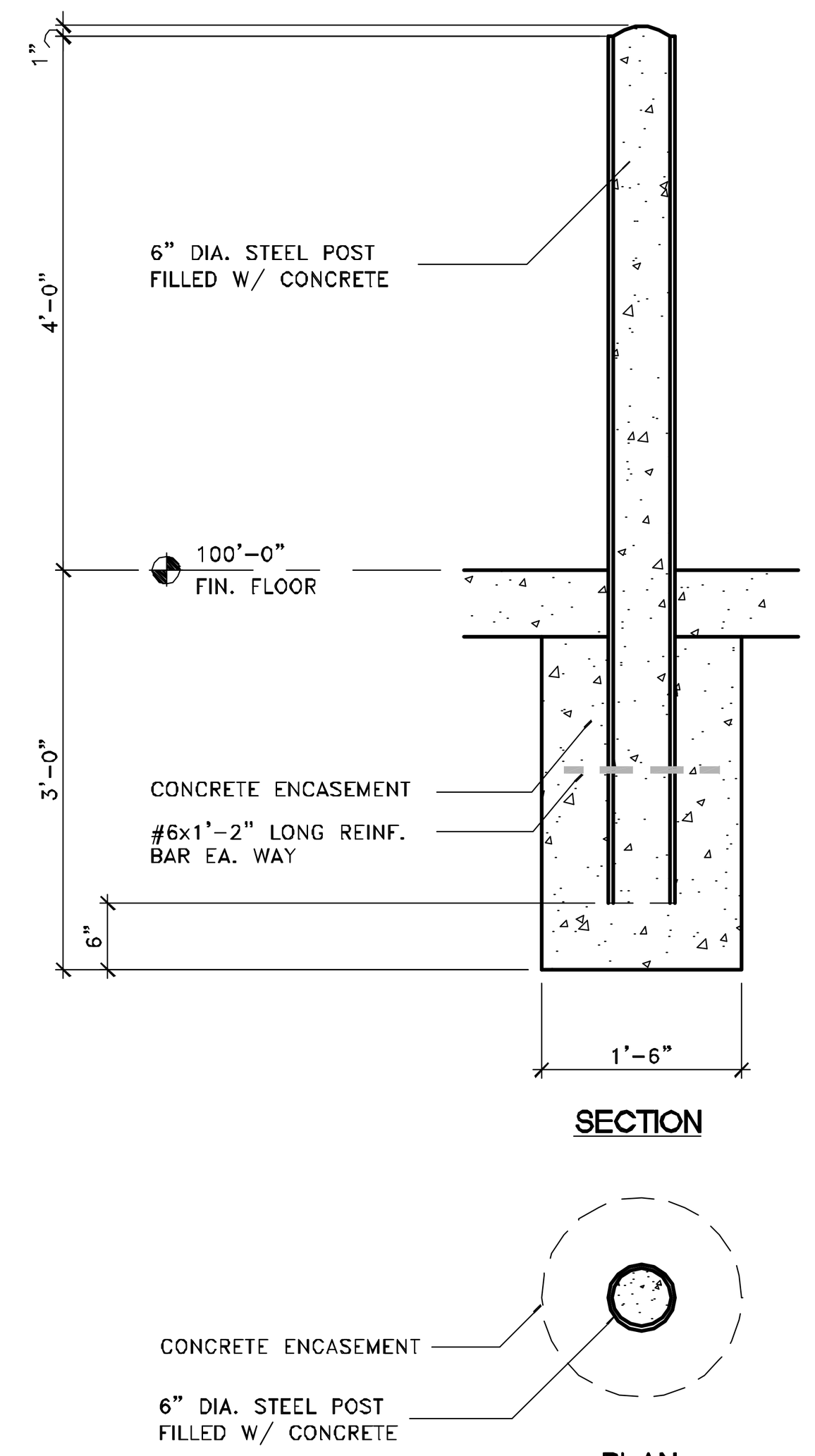
TYP. WALL FOOTING SECTION (9 / F-511)
SCALE: 1" = 1'-0"



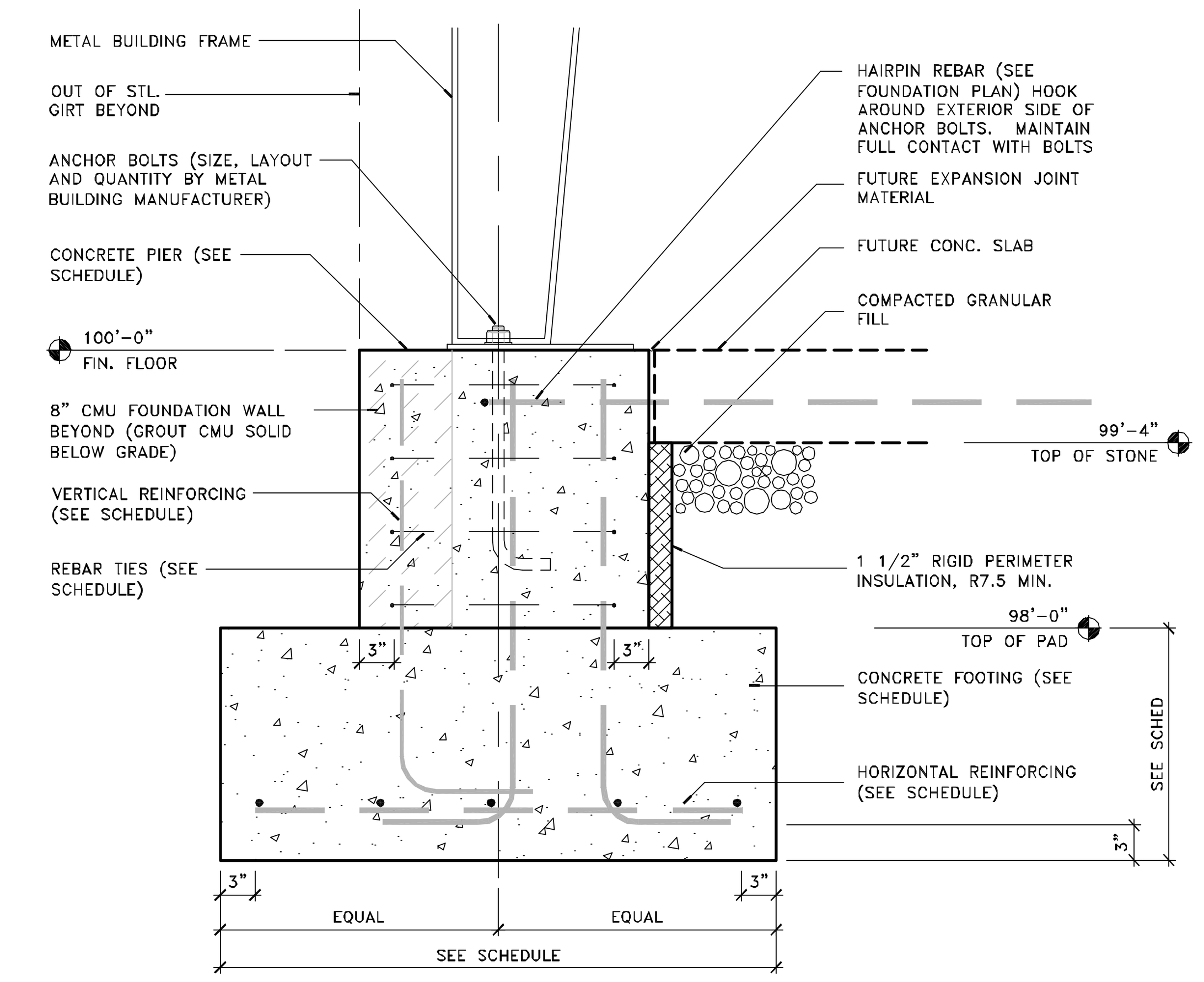
PRECAST WALL SECTION (8 / F-511)
SCALE: 1" = 1'-0"



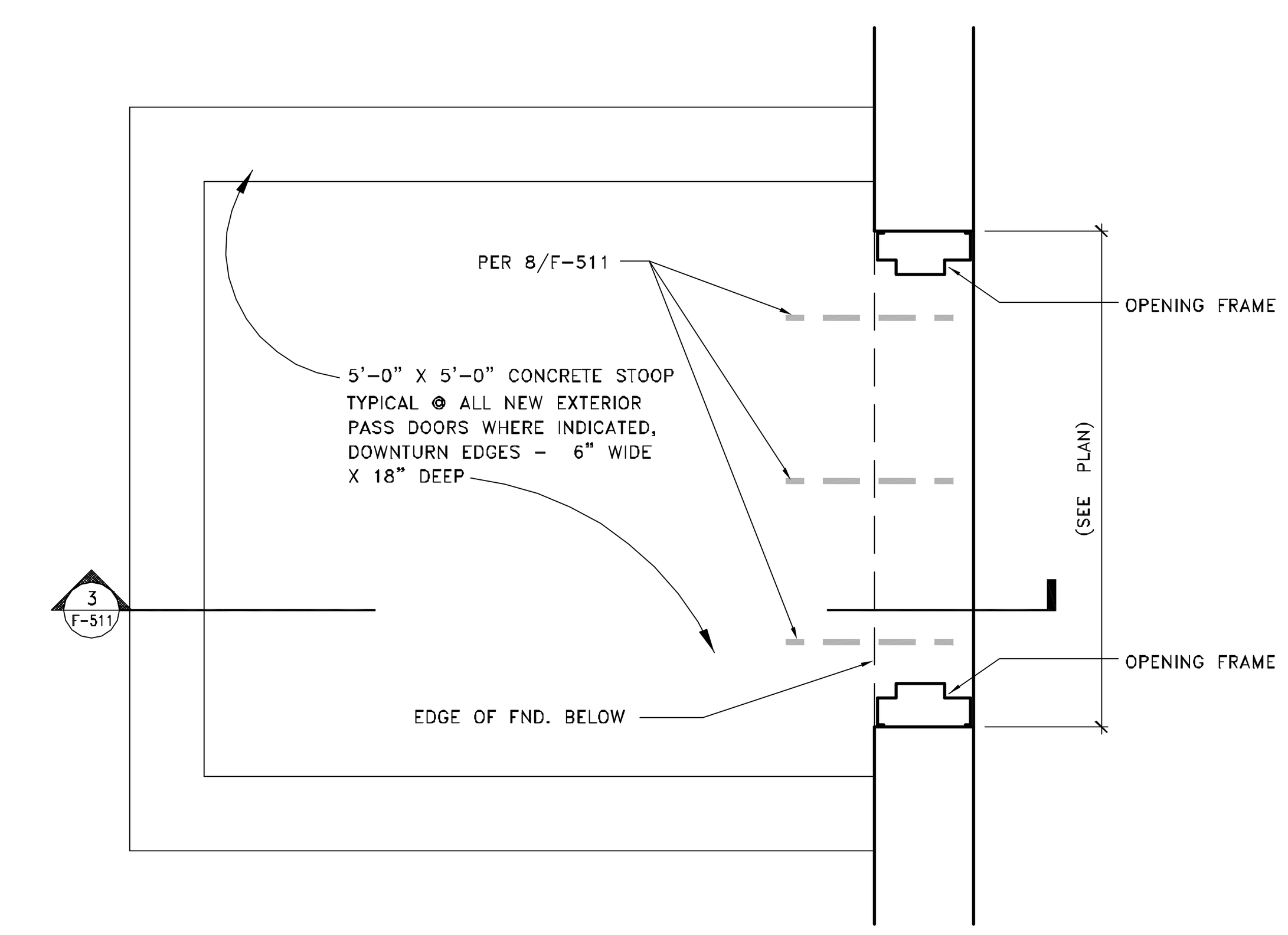
DOCK WALL SECTION (7 / F-511)
SCALE: 1" = 1'-0"



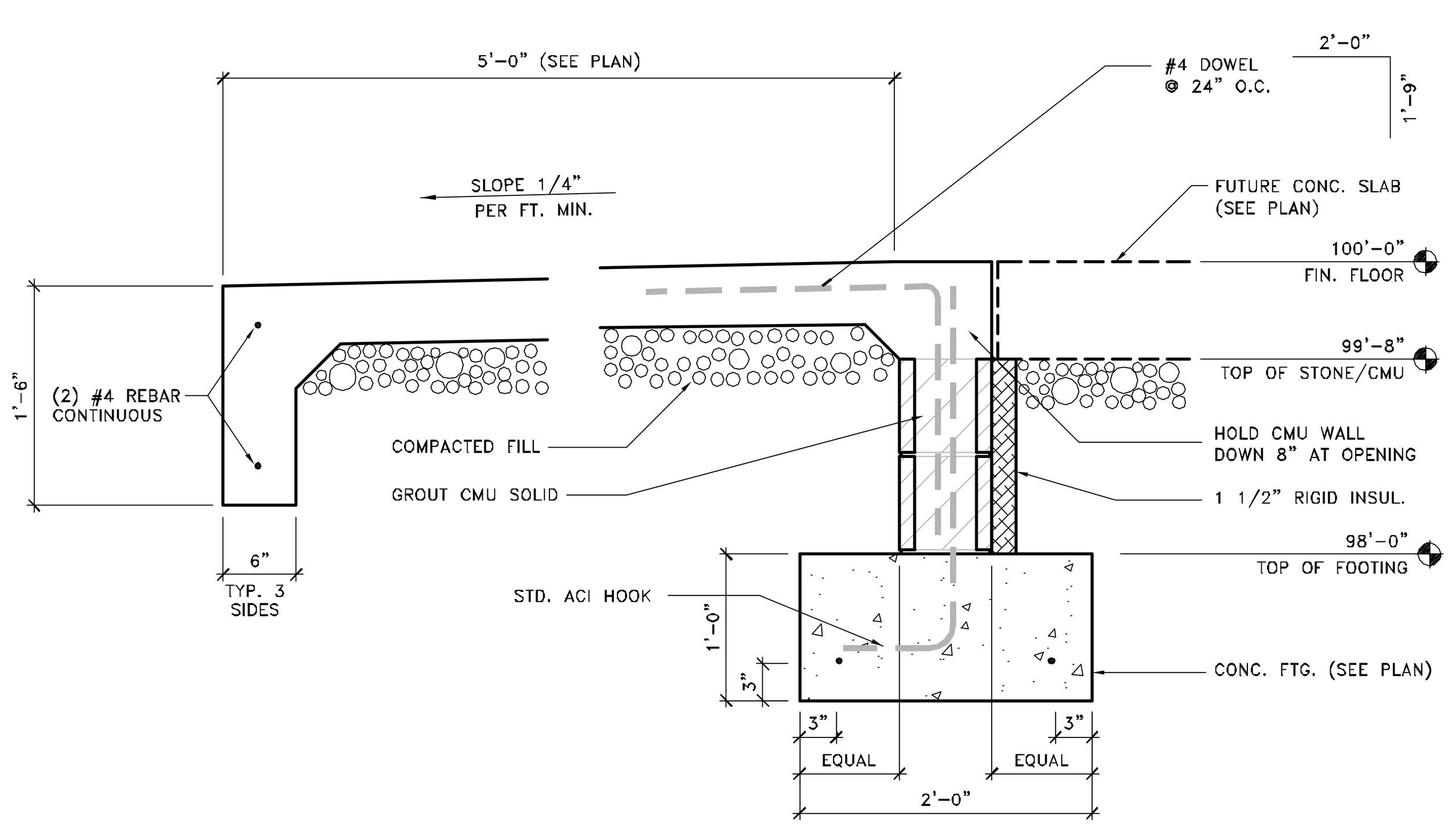
BOLLARD DETAIL (6 / F-511)
SCALE: 1/16" = 1'-0"



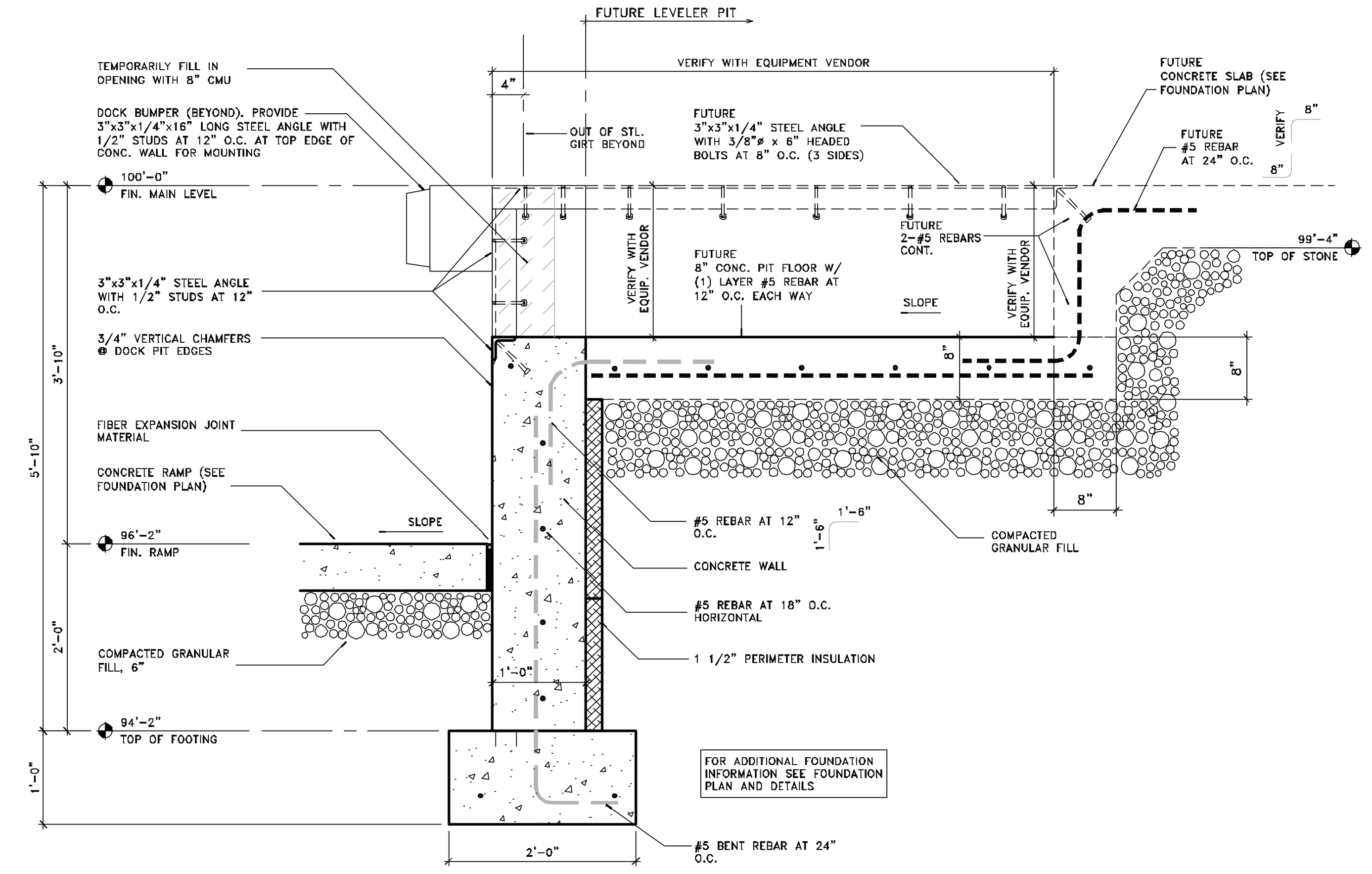
COLUMN PIER SECTION (5 / F-511)
SCALE: 1" = 1'-0"



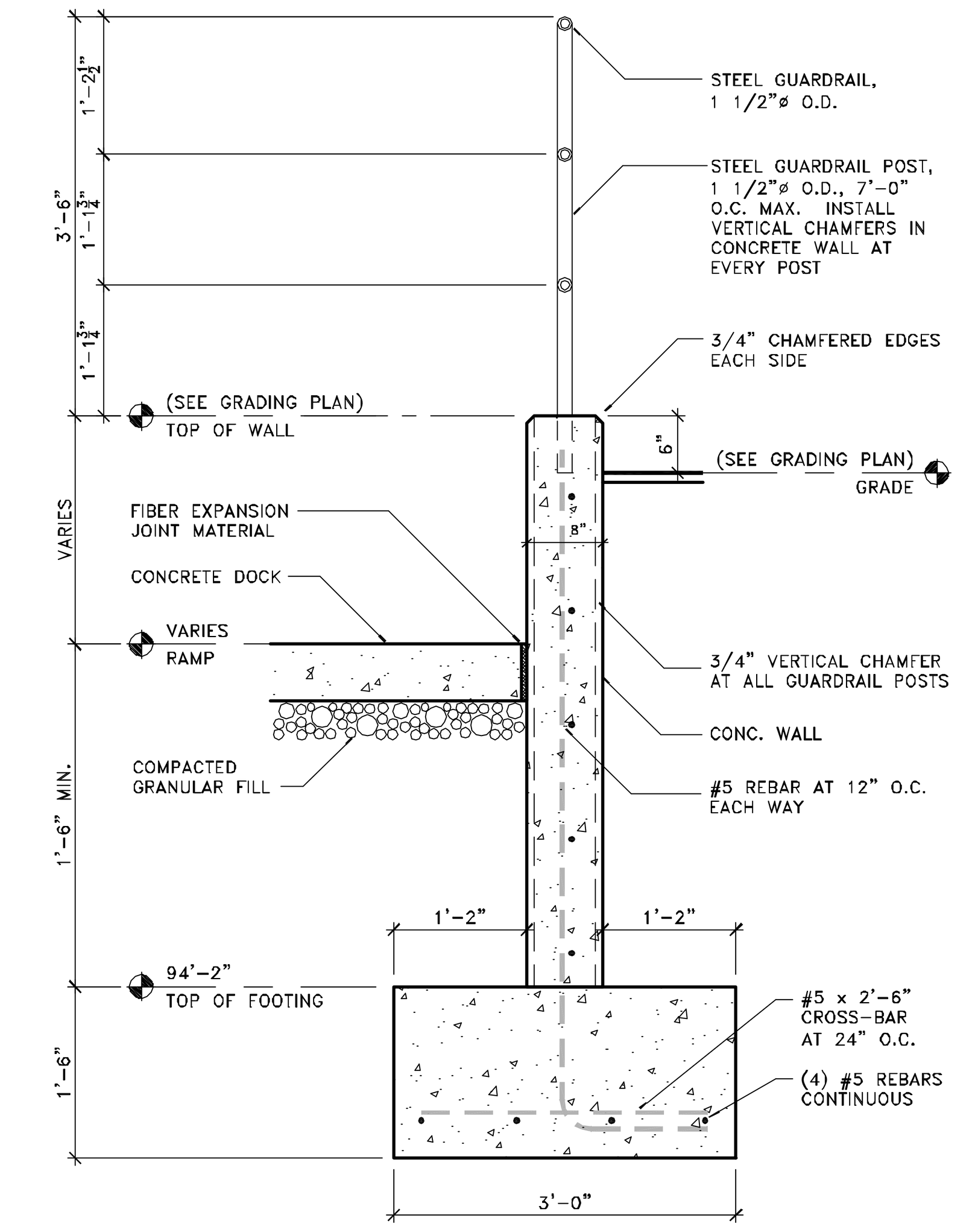
STOOP PLAN (4 / F-511)
SCALE: 1" = 1'-0"



STOOP SECTION (3 / F-511)
SCALE: 1" = 1'-0"



DOCK LEVELER SECTION (2 / F-511)
SCALE: 1/16" = 1'-0"



RETAINING WALL SECTION (1 / F-511)
SCALE: 1/16" = 1'-0"

AXIS
618 East Market Street
Indianapolis, Indiana 46202
ph 317/264.8162
fx 317/264.8165
axisarch.com

Scope Drawings
DRAWN BY: JRC
CHECKED BY:
DATE ISSUED: 9/25/2014

REVISIONS:
10/06/2014 PERMIT SET

FINK ROBERTS & PETRIE, INC.
CONSULTING ENGINEERS
4040 Vincennes Circle, Ste 300
Indianapolis, IN 46268
Bill Horton
ph. 317.872.8400
fx. 317.818.1911

BATESVILLE SHELL BUILDING
BATESVILLE, INDIANA

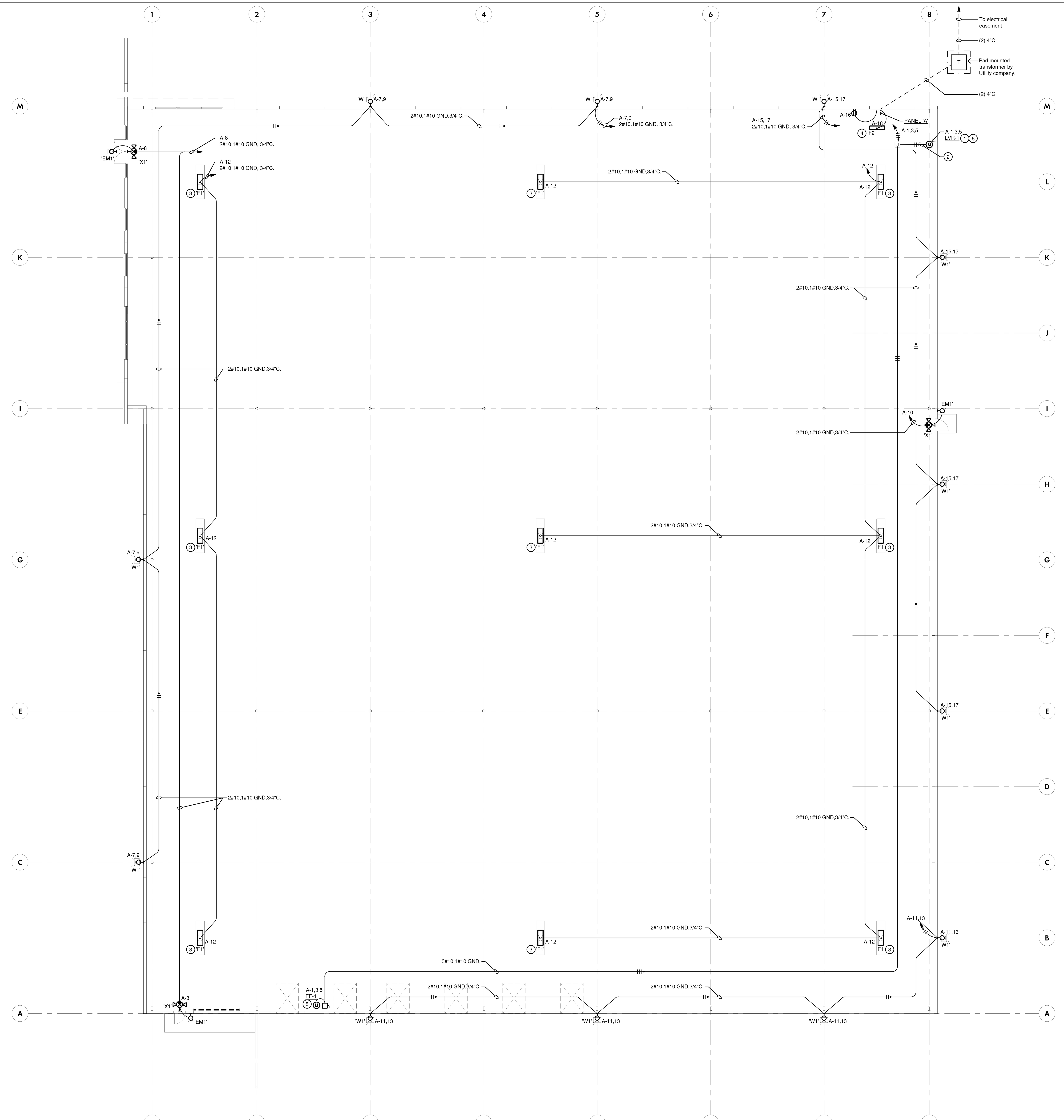
JAMES N. LEWIS REGISTERED No. 900432 STATE OF INDIANA PROFESSIONAL ENGINEER

FOUNDATION DETAILS

F-511

PROJECT NUMBER: 13076

October 06, 2014 12:09:35 p.m. AcadVer:19.0s (LMS Tech)
Drawing: G:\DWGS\PROJECTS\BATESVILLE SHELL BLDG\14-0059\F-511.DWG
Plotted Xrefs: AxisTBLK.DWG
F-511.DWG



ELECTRICAL PLAN 1/E101
SCALE: 3/32" = 1'-0"

General Notes:

A. All 120V., 20 Amp circuits over 60' in length shall be #10 AWG.

B Conduit system shall be EMT above main level ceiling. Contractor may use M.C. cable for branch circuits above accessible ceiling. All homeruns to the panel shall be EMT conduit.

C. Contractor shall coordinate with all other trades to avoid conflicts of space.

D. Contractor shall coordinate the exact location of all devices with all other trades prior to rough-in. Exact location to be determined in the field.

E. Contractor shall coordinate with the mechanical and plumbing contractors for exact locations of equipment prior to rough-in.

F. Refer to sheet E701 for dte etails and symbols.

G. Refer to sheet E901 for Electrical Specifications.

H. Shared neutrals shall not be permitted.

J. Upon completion of their work, the Electrical Contractor shall update all panel schedules that were effected by the work done in this space.

K. Contractor shall place circuit identification strips on the inside of all electrical device cover plates upon completion of their work.

M. All data cable shall run back to the Data Room from each device - unless otherwise noted. Contractor shall terminate on IT-Rack in existing Data Room shown.

N. EC shall clean and execute a functional check for the demolished devices prior to reuse.

O. If any questions arise concerning the Electrical requirements of these documents, please contact The Engineering Collaborative (317) 636-3941, prior to bidding, fabrication or installation of equipment.

Plan Notes:

1. Interconnect wall louver to open when fan is operating.
2. Control wiring to louver actuator.
3. Suspend from structure +30'-0"A.F.F.
4. Suspend from structure +9'-0"A.F.F.
5. EF-1 Exhaust fan, sidewall direct drive 20,000 cfm. Greenheck #SBE-2H42-20 or equal.
6. LVR-1 Louver/Damper combination with operable airfoil blades and actuator, coordinated with Exhaust fan operation. Greenheck #EACA-601 or equal.

THE ENGINEERING COLLABORATIVE
MECHANICAL · ELECTRICAL · PLUMBING
10 South New Jersey Street - Suite 320
Indianapolis, Indiana 46204
317.636.3941
www.tec-mep.com

AXIS
618 East Market Street
Indianapolis, Indiana 46202
ph 317/264.8162 fx 317/264.8165
axisarch.com

Scope Drawings
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of work.

DRAWN BY TC
CHECKED BY SLH
DATE ISSUED 10/3/2014

REVISIONS:

THE ENGINEERING COLLABORATIVE
10 SOUTH NEW JERSEY ST, SUITE 320
INDIANAPOLIS, IN 46204
SAM HURT
SAM@TEC-MEP.COM
P: 317.636.3941

FINK ROBERTS & PETRIE, INC.
CONSULTING ENGINEERS
4040 Vincennes Circle, Ste 300
Indianapolis, IN 46268
Bill Horton
ph. 317.872.8400
fx. 317.818.1911

BATESVILLE SHELL BUILDING
BATESVILLE, INDIANA

SAMUEL L. HURT REGISTERED No. PE10100876 STATE OF INDIANA PROFESSIONAL ENGINEER

ELECTRICAL PLAN

E101

PROJECT NUMBER: 13076

LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER	No. LAMPS	LAMP TYPE	VOLTS	MOUNTING	DESCRIPTION
'EM1'	LITHONIA #ELA-NX COLUMBIA METALUX DAY-BRITE LUMAX	1	12/PAR36	12	SURFACE	REMOTE EMERGENCY HEAD.
'F1'	LITHONIA #IB-454L-WDS COLUMBIA METALUX DAY-BRITE LUMAX	4	F54/T5/35K	120	SUSPENDED	HIGH OUTPUT FLUORESCENT HIGH BAY FIXTURE.
'F2'	LITHONIA # COLUMBIA METALUX DAY-BRITE LUMAX	2	F28/T5/35K	120	SUSPENDED	2'x4' FLUORESCENT WRAPAROUND.
'w1'	LITHONIA #TWH-400S-TB-PE-LPI COLUMBIA METALUX DAY-BRITE LUMAX	-	INCLUDED	208	SURFACE	400W HIGH PRESSURE SODIUM WALL PACK WITH MULTITAP BALLAST, INTERGRAL PHOTOCELL.
'x1'	LITHONIA #LHQM-S-W-3-R-HO COLUMBIA METALUX DAY-BRITE LUMAX	--	LED	120	SURFACE	LED EXIT SIGN WITH 2 EMERGENCY HEADS, CAPABILITY TO DRIVE ADDITIONAL REMOTE HEAD.

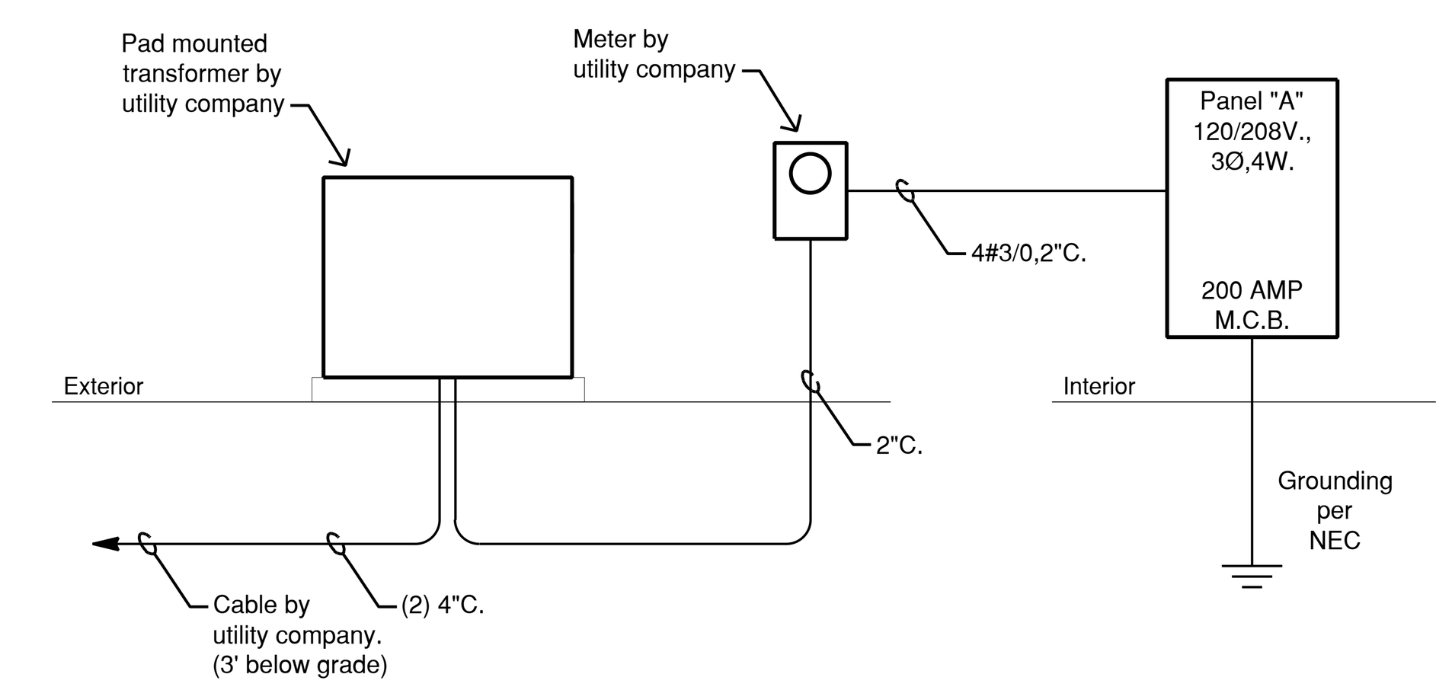
Panel 'A'

Volts: 120/ 208
Amps: 225
Phase: 3
Wire: 4

Notes:

Main: 200 Amp M.C.B.
Bus: Copper
Mounting: Surface
Location:

Remarks	Load (kw)						Cir. No.	20 AMP 1 Pole U.O.N.					Cir. No.	Load (kw)						Remarks
	Light	Rec.	Heat	A/C	Equip.	Other			A	B	C			Light	Rec.	Heat	A/C	Equip.	Other	
EF-1						1.49	1	30/3	*			30/3	2							SPARE
							3			*			4							
							5				*		6							
WALL PACKS						1.36	7	30/2	*			20/1	8	0.36						EXIT LIGHTS
							9			*		20/1	10	0.36						EXIT LIGHTS
WALL PACKS						1.82	11	20/2			*	20/1	12	1.30						LIGHTS
							13		*			20/1	14	0.65						LIGHTS
WALL PACKS						2.28	15	20/2		*		20/1	16		0.18					RECEPTACLES
							17				*	20/1	18		0.36					RECEPTACLES
SPARE							19	20/1	*			20/1	20							SPARE
SPARE							21	20/1		*		20/1	22							SPARE
SPARE							23	20/1			*	20/1	24							SPARE
SPARE							25	20/1	*			20/1	26							SPARE
SPARE							27	20/1		*		20/1	28							SPARE
SPARE							29	20/1			*	20/1	30							SPARE
SPARE							31	20/1	*			20/1	32							SPARE
SPARE							33	20/1		*		20/1	34							SPARE
SPACE							35	-			*	-	36							SPACE
SPACE							37	-	*			-	38							SPACE
SPACE							39	-		*		-	40							SPACE
SPACE							41	-			*	-	42							SPACE
	0.00	0.00	0.00	0.00	0.00	6.95	Connected Load (kw)							2.67	0.54	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	6.95	Demand Load (kw)							2.67	0.54	0.00	0.00	0.00	0.00	
Legend	Total Demand (kw)						Feeder							Calculated +/-						
	Light	Rec.	Heat	A/C	Equip	Other	Total	Fed From: Bottom						Total Demand Amps = 28.2 +/-						
	2.67	0.54	0.00	0.00	0.00	6.95	10.16	Wire Size: 4 - #3/O Conduit: 2"												



01 ELECTICAL RISER DIAGRAM
E601 SCALE: NONE

THE ENGINEERING COLLABORATIVE
MECHANICAL · ELECTRICAL · PLUMBING
10 South New Jersey Street - Suite 320
Indianapolis, Indiana 46204
317.636.3941
www.tec-mep.com

AXIS
618 East Market Street
Indianapolis, Indiana 46202
ph 317/264.8162 fx 317/264.8165
axisarch.com

Scope Drawings
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of work.

DRAWN BY TC
CHECKED BY SLH
DATE ISSUED 10/3/2014

REVISIONS:

THE ENGINEERING COLLABORATIVE
10 SOUTH NEW JERSEY ST, SUITE 320
INDIANAPOLIS, IN 46204
SAM HURT
SAM@TEC-MEP.COM
P: 317.636.3941

FINK ROBERTS & PETRIE, INC.
CONSULTING ENGINEERS
4040 Vincennes Circle, Ste 300
Indianapolis, IN 46268
Bill Horton
ph. 317.872.8400
fx. 317.818.1911

BATESVILLE SHELL BUILDING
BATESVILLE, INDIANA

SAMUEL L. HURT
REGISTERED
No.
PE10100876
STATE OF
INDIANA
PROFESSIONAL ENGINEER

ELECTRICAL RISER DIAGRAM & SCHEDULES
E601
PROJECT NUMBER: 13076

Electrical Symbols Legend

Lighting

Symbol	Description
	2'x4' fluorescent light fixture
EM	2'x4' fluorescent light fixture with emergency battery backup (switched)
EM/NL	2'x4' fluorescent light fixture with emergency battery backup (non-switched)
NL	2'x4' fluorescent light fixture (non-switched)
	1'x4' fluorescent light fixture
EM	1'x4' fluorescent light fixture with emergency battery backup (switched)
	2'x2' fluorescent light fixture
EM	2'x2' fluorescent light fixture with emergency battery backup (switched)
	4' long fluorescent strip light fixture
	Downlight
EM	Downlight with emergency battery backup (switched)
	Wall mounted incandescent or compact fluorescent light fixture
	Wall mounted H.I.D. Light fixture
	Ceiling mounted exit sign
	Wall mounted exit sign
	Wall mounted emergency lighting unit

Switches

Symbol	Description
$	Single pole switch
$3	Three-way switch
$4	Four-way switch
$OS	Wall switch type dual technology occupancy sensor. Refer to Manufacturer's instructions for exact installation requirements prior to rough-in.
OS1	Wall/corner mounted dual technology occupancy sensor. Refer to Manufacturer's instructions for exact installation requirements prior to rough-in.
OS2	Ceiling mounted, omni-directional type dual technology occupancy sensor (standard range). Refer to Manufacturer's instructions for exact installation requirements prior to rough-in.
OS3	Ceiling mounted, omni-directional type dual technology occupancy sensor (extended range). Refer to Manufacturer's instructions for exact installation requirements prior to rough-in.
$K	Single pole key operated switch
$M	Momentary contact switch
$P	Single pole switch with pilot light
$D	Dimmer switch
$F	Fusable switch
$T	Switch with thermal overloads
	Keyed push button kill switch
	Disconnect switch
	Motor starter
	Combination motor starter/disconnect

Power

Symbol	Description
	Duplex receptacle
	Duplex receptacle horizontally mounted
	Quad receptacle
	Ground fault interrupt receptacle
WP	Weatherproof, ground fault interrupt receptacle
	Combination tamper resistant duplex receptacle and *USB (Universal Serial Bus)* charging ports like Cooper #TR7746
	Single plex receptacle
	Floor mounted duplex receptacle
	Duplex receptacle mounted above counter or sink. Coordinate with furniture prior to installation
	Special purpose receptacle as noted on drawings
	Power pole
	208/120V. Panel Board
	480/277V. Panel Board
M	Motor connection
	Kitchen rough-in
T	Dry-type transformer
	Plug strip

Fire and Communication

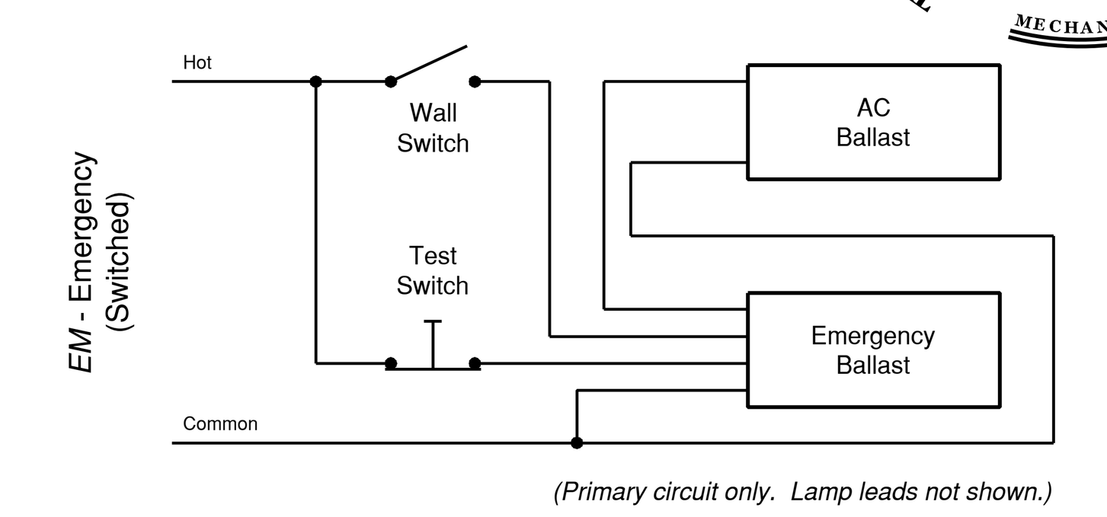
Symbol	Description
F	Fire alarm pull station
F	Combination fire alarm pull station/horn/strobe
	Combination fire alarm horn/strobe
	Fire alarm strobe light
FS	Fire alarm smoke detector
FT	Fire alarm thermal detector
FD	Fire alarm duct detector
F.A.C.P.	Fire Alarm Control Panel
T.T.B.	Telephone Terminal Board
	Telephone outlet location, 1" conduit with pullwire to above accessible ceiling
	Telephone/data outlet location, 1" conduit with pullwire to above accessible ceiling
	Data outlet location, 1" conduit with pullwire to above accessible ceiling
	Microphone jack
	Call back
S	Ceiling speaker
S	Wall mounted speaker
	Magnetic hold open
C	Clock location
TV	C.A.T.V. location

Circuiting

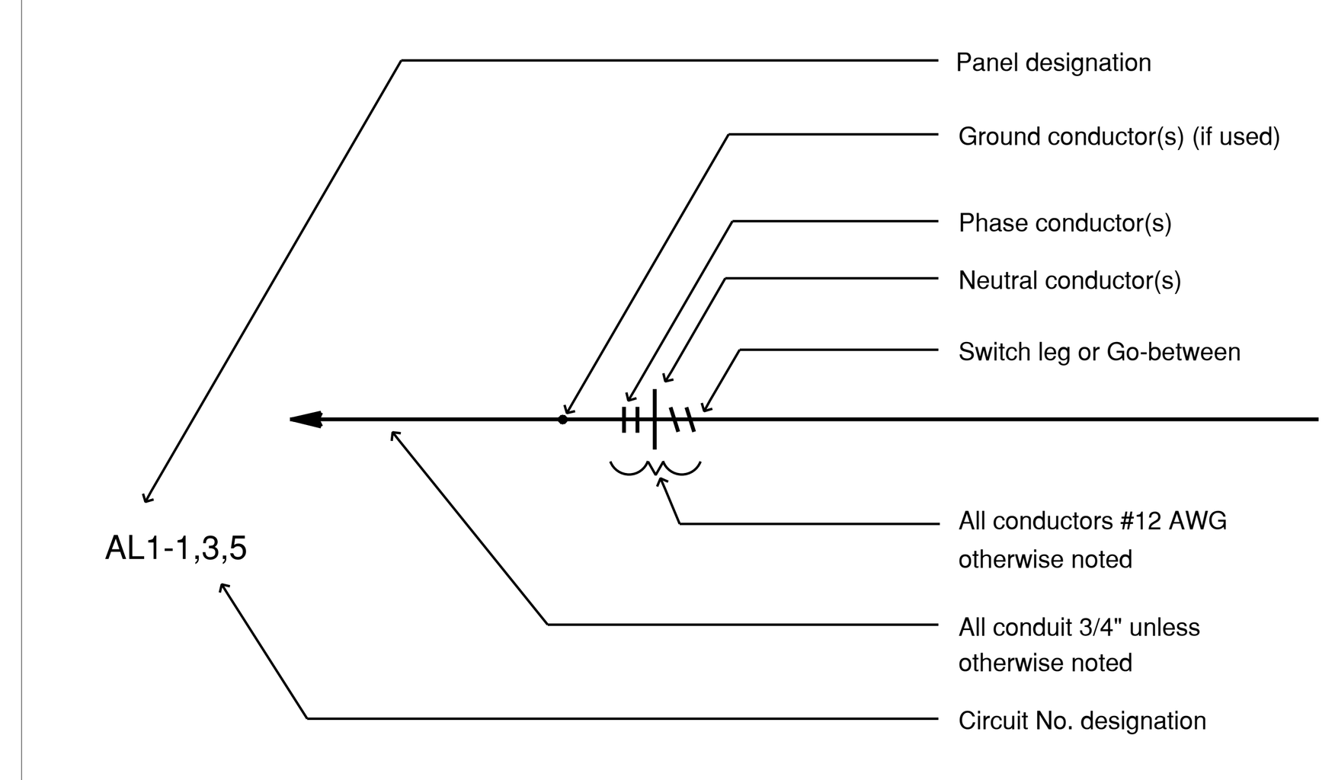
Symbol	Description
	Conduit system concealed above ceiling
	Surface mounted conduit system
	Conduit system under floor
	Homerun. Conduit system to panel as noted on drawings
J	Junction box
	Conduit up
	Conduit down

Note

Not all symbols listed above are shown on plans. The symbol legend is used for reference of symbols shown on plans. See specifications for information related to symbols.



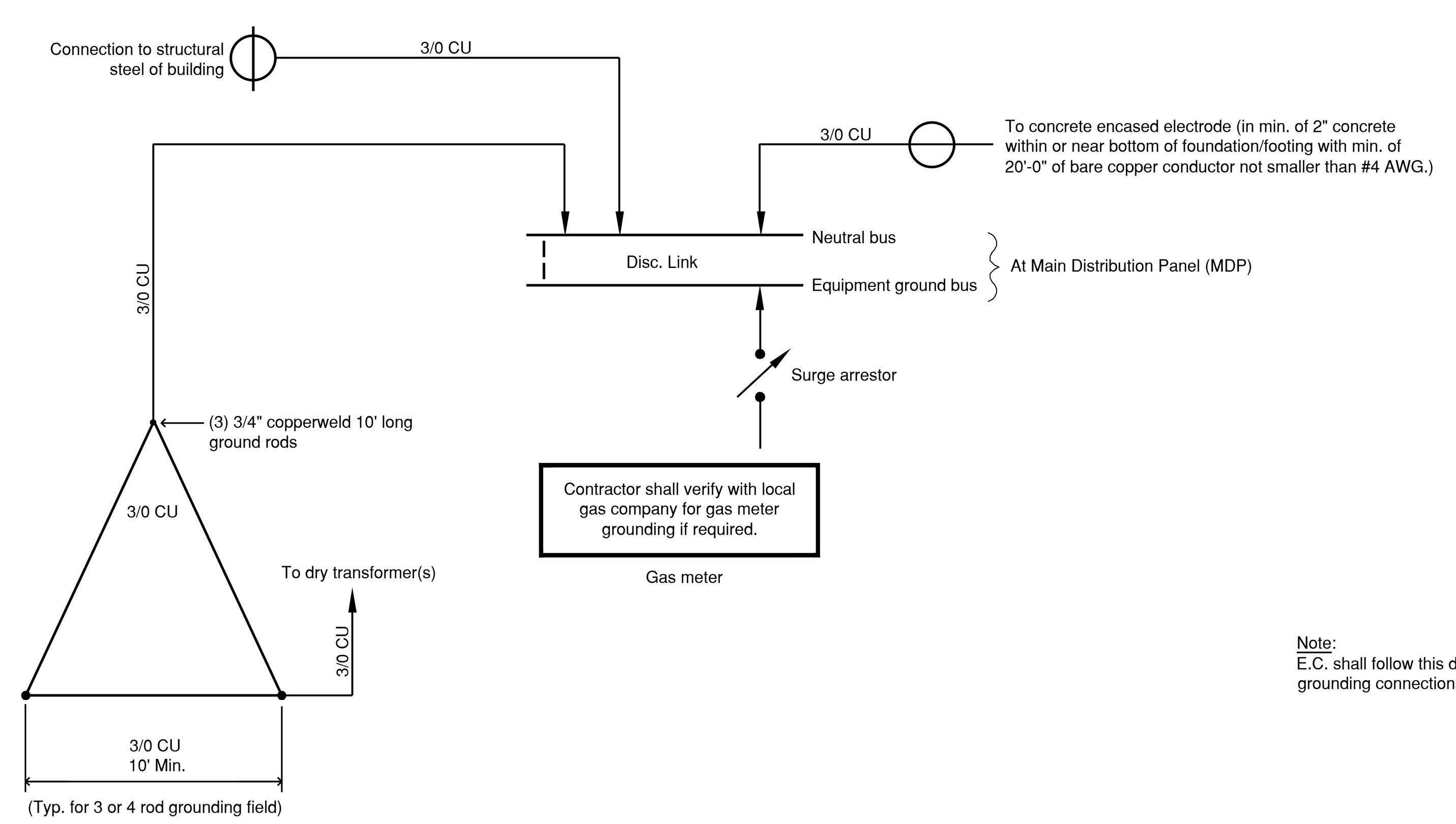
3 Light Fixture with Battery Backup Wiring Schematic
No Scale



Notes:

1. #12 AWG is min. conductor size except as noted.
2. 3/4" conduit is min. Size except as capacity permitting 24 volt control conductors and switchlegs may be in 1/2" size, others as noted.
3. 1/2" is min. Flexsteel, Greenfield and Sealite size.

2 Key to Electrical Circuit Wiring
No Scale



Note:
E.C. shall follow this detail for proper grounding connections.

1 Grounding Detail
No Scale

THE ENGINEERING COLLABORATIVE
TEC
10 South New Jersey Street - Suite 320
Indianapolis, Indiana 46204
317.636.3941
www.tec-mep.com
MECHANICAL · ELECTRICAL · PLUMBING

AXIS
618 East Market Street
Indianapolis, Indiana 46202
ph 317/264.8162 fx 317/264.8165
axisarch.com

Scope Drawings
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of work.

DRAWN BY TC
CHECKED BY SLH
DATE ISSUED 10/3/2014

REVISIONS:

THE ENGINEERING COLLABORATIVE
10 SOUTH NEW JERSEY ST, SUITE 320
INDIANAPOLIS, IN 46204
SAM HURT
SAM@TEC-MEP.COM
P: 317.636.3941

FINK ROBERTS & PETRIE, INC.
CONSULTING ENGINEERS
4040 Vincennes Circle, Ste 300
Indianapolis, IN 46268
Bill Horton
ph. 317.872.8400
fx. 317.818.1911

BATESVILLE SHELL BUILDING
BATESVILLE, INDIANA

SAMUEL L. HURT REGISTERED No. PE10100876 STATE OF INDIANA PROFESSIONAL ENGINEER

ELECTRICAL DETAILS & SYMBOLS

E701

PROJECT NUMBER: 13076

ELECTRICAL SPECIFICATIONS

WORK & WORKMANSHIP
1. Provide all required labor, materials, equipment & Contractor's services necessary for complete installation of systems required in full conformity w/requirements of authorities having jurisdiction; all as indicated on Drawings & herein specified.
2. Finished job shall be functional & complete in every detail, including any & all such items required for a complete system whether or not these items be specified or shown on Drawings.
3. Special attention shall be given to accessibility of working parts & controlling parts. Adjustable parts shall be w/in easy reach. Removable parts shall have space for removal.
4. Each Contractor shall acquaint himself w/details of all work to be performed by other trades & take necessary steps to integrate & coord. his work w/other trades.
5. It is assumed the Contractor is familiar w/standard 1st Class installation procedures. Therefore, these Specs do not attempt to include every detail or operation necessary for the complete installation.
6. It should be particularly noted that the terms "furnish" & "provide" are interchangeable & that ea. of these means to provide, install & connect, unless otherwise stated.
7. Whenever tables or schedules show quant. of materials, they shall not be used as final count. These figures serve only as a guide to Contractor. Ea. Contractor shall be responsible for furnishing all materials indicated on Drawings & in Specs.
8. Contractor shall be responsible for protection, safekeeping & cleanliness of all extg. equip., material, etc., located in spaces to be remodeled in which he is working. As part of his responsibility, he shall provide necessary covers, structures, etc., as req'd to keep all dirt, water, moisture & dust from equip. Method the Contractor proposes to use in protecting equipment shall be coordinated w/Engr. & Owner's rep. for approval before any work is started. Any damage sustained during construction shall be corrected or replaced by Contractor.

ASSIGNMENT OF MISCELLANEOUS WORK
1. Excavating & backfilling for elect. work shall be by E.C.
   A. Properly support banks of excavation w/safety sheet file. Install necessary guards. Provide adequate pumping equip. & keep excavation free of water.
   B. Excavate pipe trenches to proper depth. Where rock is encountered, excavate to 6" below pipe & refill to 6" above pipe w/compacted granular fill. Granular fill shall consist of dune sand, gravel or other suitable material containing not more than 10% by weight passing #200 sieve & 100% passing 1" sieve.
   C. Excavation for utilities shall not be backfilled until all req'd tests are performed & approved by Engr. & power co.
   D. Whenever underground feeders are run below footings & grade beams. Contractor shall backfill the void w/poured, steel-reinforced concr. to elev. of bottom of footing or grade beam.
   E. Backfill w/in bldg. lines shall be made w/granular fill or compacted backfill material laid in 6" layers & tamped to spec'd compaction after ea. layer.
   F. Backfill under paved area shall be made w/granular fill compacted backfill material laid in 12" layers & tamped to compaction after ea. layer.
   G. Backfill under open yards or fields shall be made w/non-compacted backfill laid in layers not to exceed 24" deep. Sand trenches may be allowed to settle naturally & shall be refilled back to grade as req'd during 1st yr. after final acceptance.
   H. Contractor shall refill, regrade & refinish any area that becomes unsatisfactory due to settlement w/in one yr. after final acceptance.
   I. Contractor shall verify all extg. grades, inverts, utilities, obstacles & topographical conditions prior to any trenching, excavation or underground installation. in event extg. conditions are such as to prevent installation in accordance w/Dwgs., Contractor shall immediately notify Engr.
2. Roof openings & flashing req'd by E.C. shall be by E.C. E.C. is responsible for correct size & location of same. Counterflashing by E.C.
3. Cutting & patching for elect. equip. shall be by E.C.
   A. Cut structural materials where req'd after approval from Arch. & Engr.
   B. E.C. shall do all his own cutting & patching in finished area.
4. Sleeves & small openings (not framed) for elect. equip. shall be furnished & set by E.C.
   A. Where elect. conduits pass thru walls, roofs, ceilings, or flrs., Contractor shall have sleeves set for them when flrs., walls, ceilings or roofs are constructed. If any holes are cut in finished work where sleeves have been omitted, cutting shall be done w/a concrete coring machine or other approved method & only w/consent of Engr. All such holes are to be carefully cut & shall not be larger than necessary. These holes are to be entirely covered by escutcheon plates when work is completed. Sleeves shall be made of steel pipe or rolled sheet steel no lighter than #18 ga.
   B. Where conduits pass thru sleeves in ext. walls, annular space shall be caulked w/oakum & filled inside & out w/non-hardening, waterproof sealant finished off flush w/both faces of wall.

SHOP DRAWINGS
1. Review of shop dwgs. does not relieve Contractor of responsibility for correct ordering of material & equip.
2. Include all significant data on shop dwg. submittals shown in Specs & Equip. Schedule.
3. Contractor review should insure that equip. will fit into available space.
4. Submit shop dwgs. in brochure form & include all related equip. in one brochure.
5. Submit 6 copies more than Contractor needs for his use.
6. After award of contract, submit w/in 30 days.
7. Submit shop dwgs. of all major elect.components, such as light fixt's, panels, fire alarm systems, etc. Coord. w/Engr.
8. Contractor to affix his co. name (in form of a stamp) & proj. name to all shop dwgs. & submittals before submitting.

COORDINATION BETWEEN CONTRACTORS
1. Each Contractor & Subcontractor shall study all Drawings applicable to this work so complete coord. between trades will be effected. Special attention shall be given to points where conduits cross pipes &/or ducts, where conduit pass thru walls & columns., etc.
2. It is responsibility of ea. Contractor & Subcontr. to leave necessary room for other trades. No extra compensation will be allowed to cover cost of removing piping, conduit, or equip. found encroaching on space req'd by others.

ATTACHING TO BUILDING CONSTRUCTION
1. Equipment raceway supports shall be attached to structural members (beams, joists, etc.) rather than to floor or roof slabs. Do not attach to ceiling support wires.
2. Where equip. & raceway is suspended from extg.concrete or masonry construction, use expansion shields to attach supports to construction. expansion shield bolt dia. shall be same size as support rod dia.
3. Where extg. masonry is not suitable to receive & hold expansion shield or where other means of attachment is advantageous, Contractor shall submit alternate method for approval by Engr.
4. Equip. to be installed in groups shall not be mtd. directly to masonry or concr. walls. Mount 1"x1" structural channel such as unistrut, to wall & secure equip. to these channels.
5. Where raceway is suspended from structural steel bldg. framing or supporting members, furnish & install beam clamps for attaching piping device to bldg. member.
6. Obtain approval from Owner or Engr. before cutting or welding to structural members, or before hanging heavy equip.

ELECTRICAL CONNECTIONS TO EQUIPMENT
In event that supplier requires larger starter or disconn. than those indicated on documents, he shall reimburse Contractor supplying these items for difference.

LABELLING & TAGGING
E.C. shall label all elect. equip. by one of the methods described below:
1. Printed card labels may be used on items of equip. furnished w/plastic windows. Labelling of card shall be neatly printed using lettering device such as Leroy Instrument.
2. Directories on inside of panelboards shall be typewritten & shall show list of circuits & points, equip. or areas supplied.
3. Motor starters interlocked w/other starters or controls to be provided w/labels on inside of the cover stating nature of interlock system (i.e., interlocked w/120V circuit from PRV#1).
4. Labels or tags inside cover of safety switches or motor starters noting interlocks, conductor sizes, etc., may be of embossed adhesive tape type.
5. Label inside of all wiring device coverplates to indicate circuit #. Use waterproof felt tip marker.
6. Provide engraved laminated labels on face of all panels, switchboards, etc. Labels shall be screwed or riveted to device. Letters shall be min. 1/4" high unless otherwise indicated.

DEMOLITION & REMOVAL OF EQUIPMENT
1. Contractor shall remove all equip., conduits, hangers & supports, etc., for extg. elect. devices & equip. rendered obsolete by this Contract.
2. Where extg. equip. or materials are removed or changed, all branch conduits which no longer are in service shall be removed as directed by Engr. If in course of work, outlets are covered up or otherwise rendered inaccessible, all wiring to same shall be removed to source. If ckt. that must remain in service is interrupted, it shall be reconn'd by most inconspicuous means so as to remain operational w/same cap. as before. All bldg. surfaces damaged & openings left by removal of boxes, piping & other equip. shall be repaired by Contractor. Holes left in j.boxes, switches, panels, etc., shall be closed.
3. Where new openings are cut & concealed conduits, etc., are encountered, they shall be removed or relocated as req'd. Where conduit to be removed stubs thru floors, walls & ceilings, such conduit shall be removed to point where finish surfaces can be patched adequately so that no evidence of former installation remains. Patching & refinishing req'd shall be responsibility of Contractor.
4. All conduits, equip., etc., deemed obsolete by Owner shall become property of Contractor unless otherwise noted & shall be removed from premises immediately.

CODES & STANDARDS
1. All materials & workmanship shall comply w/all applicable codes.
2. Applicable codes & stds. shall include all state laws, local ordinances, utility co. regulations & applicable req'ments of nationally accepted codes & standards.
3. In case of diff. between bldg. codes, specs, state laws, local ordinances, industry standards & utility co. regulations & Contract Documents, the most stringent shall govern. Contractor shall promptly notify Engr. in writing of such difference.
4. Non-Compliance: should Contr. perform any work that doesn't comply w/req'ments of applicable bldg. codes, state laws, local ordinance industry stds. & utility co. req'ments, he shall bear all costs arising in correcting the deficiencies.

ELECTRICAL RACEWAYS
1. Raceways
   A. Rigid steel heavy wall type: full weight mild steel pipe of std. pipe dimensions: uniform wall thickness; threaded w/coupling on one end; hot dip galv. or sherardized; UL approved. Allied; Republic Steel; Triangle or equal.
   B. Intermed. metal conduit (IMC): Hot dip galv. or sherardized steel w/biochromate finish inside & out; std. pipe dimensions, threaded; UL approved. Allied; Republic Steel; Triangle or equal.
   C. Elect. metallic tubing (EMT-Thinwall): Galv. or sherardized steel type; UL approved. Allied; Republic Steel; Triangle or equal. (M.C. cable is an accept.equal to EMT).
   D. Flex.Type: Galv. grounding & single strip type w/smooth wiring channel; UL approved; neoprene jacketed in moist locations & for connections to motors. Amer.Brass Sealtite Type EF; Electri-Flex; H. K. Porter; triangle or approved equal.
   E. Rigid Non-Metallic Type (PVC): Heavy wall, Sched.40, PVC duct; UL listed; joints solvent welded; fittings & cement by same mfr. Carlon or equal.
   F. Surface metal raceway (Wiremold): 1-piece raceway system w/all necessary fittings. Wiremold #500 or #700 Series (as req'd) or Walkermold.
2. Fittings
   A. Steel Conduit Bodies: Threaded, set screw of compression type, steel or malleable iron; fittings shall be std. pipe dimensions & maintain continuity of ground. Appleton; Raco; Thomas & Betts; or equal.
   B. Elect.Metallic Tubing(EMT): All fittings shall be raintight, concr.tight compression type thinwall, steel or malleable iron. Fittings shall maintain continuity of ground. Appleton; Raco; Thomas & Betts or equal.
   C. Flex.: Liquid-tight connectors shall have insulated throats, steel or malleable iron body, neoprene gasket & maintain continuity of ground. Connectors shall be compression type. Appleton; Raco; Thomas & Betts or equal.
   D. Bushings: metallic or insulated as req'd; steel or malleable iron constr. of std. pipe dimensions. Appleton; Raco; Thomas & Betts or equal.
   E. E.Lock Nuts: Case hardened steel or malleable iron. Lock nut shall insure continuity of ground. Appleton; Raco; Thomas & Betts; or equal.
3. Installation-General Requirements
   A. 3/4" conduits may be installed in concr.slabs 2 1/2" thick or thicker & 1" conduits may be installed in 4" slabs. No conduits larger than 1" shall be installed in concr. slabs unless shown on dwgs. or approved by Engr. Conduits shall not be installed in concr. slabs less than 2 1/2" thick. In no case will installation of conduits be permitted to interfere w/proper placement of principal reinforcement.
   B. Conduit in concr. slab shall not come to w/in 1 1/2" of finished top of slab at any point including crossovers. All crossovers shall occur at midspan. Notify Engr. where such occurrences are unavoidable.

ELECTRICAL WIRING
1. Cable Lugs & Taps
   A. Lugs for termination of conductors in distribution panels, motors, etc., either provided by mfr. or by Contractor, shall be T&B compression type or equal. Series 53100 for conductors #8 AWG to 4/0 & Series 53200 for conductors 250 MCM & larger. All lugs & contact surfaces where lugs are installed shall be silverplated.
   B. Terminal for control wire shall be tinned ring tongue type: Buchanan Termend; T&B Stakon or approved equal.
   C. Splices & connections to conductors larger than #8 AWG shall be by means of compression type T&B Series 53500 for 2-way & Series 53300 for 3-way connections; or equivalent Burndy connectors. Splices & taps shall have at least equivalent mech.strength & insul. as conductors.
   D. Splicing of conductors #10 AWG or smaller shall be by one of the following methods: conductors shall be twisted together & soldered. Preinsulated spring press. connectors such as Scotchlok types Y, R & B, Ideal Wingnut or equal.
2. Wire & Cable Up To 600 Volts
   A. Insulation: Color coded thermoplastic type rated 600 V except where otherwise noted.
   B. Conductors: soft drawn copper, ea. strand individually tinned or coated w/approved alloy (Class B stranding).
   C. Conductors #10 & Smaller: for final connections to motors & all locations where vibr. or movement is present - Class B, stranded conductors. For all other locations - solid conductors.
   D. Conductors #8 & Larger: Double braid, Class B, stranded.
   E. Min.Wire Size: General - #12; over 80' - #10; over 120' - #8; control - #14; signal - #18 or as detailed in appropriated section of these specs or shown on Dwgs.
   F. Types & Uses (Unless Otherwise Spec'd or Indicated on Dwgs): Up to & including 100 amp ckts. - THW, THWN or THHN rated at 60 deg.C ampacities. Greater than 100 amp ckts - THW, THWN or THHN, rated at 75 deg.C ampacities.
   G. Mfrs: Anaconda; ITT-Royal; Triangle; G. E. or equal.
   H. Wire Tags: Main & feeder cables shall be tagged in all pull boxes, wireways & wiring gutters of panels. Tags shall identify wire or cable # &/or equip. served as shown on Dwgs. Tags shall be metal or of flame- resisting adhesive material, T&B Type WSL or approved equal.
   I. MC Cable is accept. equal to EMT for 20 amp ckts.

OUTLET BOX INSTALLATION
1. Owner or his rep. reserve right to change location of any outlet up to distance of 10'-0" at no extra charge providing necessary instructions are given prior to roughing-in outlet.
2. Locations of all flr. outlets shall be verified before rough-in.

ELECTRICAL PANELS
1. Panels
   A. Type: Galv.steel cabinets w/trim & hinged door w/lock. All locks to be keyed alike.
   B. Finish: Std. factory finish
   C. Gutter Space: 4" min. for 225 amp or less panels. 8" min. for above 225 amp panelboard
   D. Panel: Deadfront safety type
   E. Lugs: Separate solderless type for ea. conductor.
   F. Branches: Bolt-on ckt. breakers as spec'd. # & size as indicated on dwgs.
   G. Grounding Bus: Provide separate bus for green ground conductors. Isolate ground bus from neutral bus.
   H. Mfrs: G.E.; Electric; Westinghouse; Gould/ITE' Square D (NQOD).
2. Installation: provide two 3/4" spare conduits to ab. accessible ceiling for future use.

ELECTRICAL WIRING DEVICES
1. Toggle Switches
   A. Switches shall be single pole, two pole, 3-way, 4-way, momentary or pilot ltd. as req'd & shall be heavy duty toggle or key operated, rated 20 amps, 120V.
   B. Provide 20 spare keys for key operated switches. C.Mfrs: Hubbell 1221; Bryant 4901; Pass & Seymour 20AC1
2. Receptacles
   A. All recept. shall be grounding type & shall be duplex 120V; 120/208v-240V; single phase; or 208-240V; three phase as req'd.
   B. Duplex recept. shall be 15 or 20 amp, 120V, heavy duty spec grade, grounding type. 15 amp Mfrs: Hubbell 5262; Bryant 5262; Pass & Seymour 5262. 20 amp Mrs: Hubbell 5362; Bryant 5362; Pass & Seymour 6300.
   C. Ground fault interrupter (GFI) recept. shall be duplex w/built-in GFI set to trip at a 5 milliampere max. ground fault. Recept. shall be rated 15 or 20 amps, 120V; std. or feed-thru, as req'd. Mfrs: Hubbell GF- 5262; Bryant GFR52FT; Pass & Seymour 1591-F.

ELECTRICAL MOTOR STARTERS
Manual motor starters shall be toggle type snap sw. w/thermal overload device. Manual starters shall be similar to Square D Class 2510. Magnetic motor starters shall be 3 ph across-the-line type rated in accordance w/NEMA Stds. Coils shall be of molded construction. Overload relays shall be replaceable melting alloy manual reset type, 1 per phase. Provide one spare aux. interchangeable contact. Control devices (stop/start, H-O-A, pilot light) shall be mtd. in cover of encl. Pilot lights shall be red unless otherwise indicated. Magn. starters shall be similar to Square D Class 8536. Comb. magn. motor starters w/fused (or non-fused) disconn. sw. shall be 3 ph. across-the- line type rated in accordance w/NEMA Stds. Disconn. sw. shall consist of visible blades. Disconn. handle shall be clearly marked as to whether disconn. device is "ON" or "OFF". Motor starters in comb. magn. motor starters shall meet requirements of magn. motor starters previously outlined. Comb. magn. motor starters shall be similar to Square D Class 8538.
Control stations shall contain heavy duty type devices. Pushbutton & selector switches in control stations shall be base mtd. w/double break silver contacts. Pilot lights shall be transformer type using 6-8V miniature bulb. Colored pilot light lense shall be interchangeable. Mfrs: Allen Bradley; Square D; Westinghouse; G. E.

ELECTRICAL SAFETY SWITCHES (DISCONNECTS)
1. Safety sw's shall be heavy duty fused or nonfused, w/# of poles, elect. characteristics, ratings & modifications as req'd (i.e., hp rating, short ckt. interrupting rating, etc.).
2. Switching mechanism shall be quick-make, quick-break, w/handle that is padlockable in "OFF" position.
3. Encl. shall be suitable for area in which it is to be installed & shall have defeatable door interlock which prevents door from being opened when switch is "ON".
4. Fusible units which are to be equipped w/current limiting fuses shall have fuseholders w/rejection clips to prevent other type fuses from being installed.
5. Mfrs: Square D; G. E.; Westinghouse; Gould ITE.

OVERCURRENT PROTECTION
1. General Requirements
   A. Short ckt. interrupting ratings shall be equal to or greater than max. short ckt. currents possible in ckt. location where devices will be installed & larger where indicated.
   B. Where used for other than motor ckts, devices shall be sized same as or next std. size ab. conductor ampacity.
   C. Where used for motor ckts, size shall be in accordance w/NEC & time delay characteristics shall be suitable for motors acceleration time.
   D. All devices shall be of time delay on nominal overloads & instantaneous operation on high fault current type unless otherwise noted.
2. Fuses
   A. The following fuse requirements are general in nature. All conditions shall be verified so that fuse selection will provide adequate protection & coord. Fuses shall be as follows unless otherwise indicated or req'd by field conditions.
   B. Above 600 amps: UL Class L, current limiting type, w/200,000 amp interrupting cap. (4 second time delay w/500% current). Bussman Hi-Cap KRP-C or equal.
   C. Fuses protecting ckt. breakers or ckt. breaker panels: UL Class RK-1, dual element, current limiting (10 sec. time delay w/500% current). Bussman Low Peak LPN-RK & LPS-RK or equal.
   D. All Other Fuses: UL Class RK-1, 10 sec. time delay at 500% rating, 200,000 amp interrupting cap., current limiting, dual element. Bussman Low Peak LPN-RK & LPS-RK or equal. Motor ckts: fuses for indiv. motor running protection shall be sized at 125% or motor nameplate rating unless otherwise indicated or recommended. Fuses for control ckts. shall be Bussman FNQ for control t'former primary & Bussman Fusetron FRN for secondary or equal.
3. Ckt.Breakers
   A. Ckt.Breakers shall be gang-operated, load interrupter type w/substantial case of moisture resist., non-aging molded insulating material. Breakers shall be bolted design unless otherwise indicated.
   B. Contacts shall be copper alloy or copper & silver alloy, w/arc quenchers & barrier for ea. pole.
   C. Mechanism shall be quick-make, quick-break w/trp element for ea. pole & electrically & mechanically trip-free. Overcurrent on any pole of multi-pole ckt. breaker shall cause all poles to open.
   D. Trip elements shall be amb. temp. compensated, thermal magn. type w/time delay on nominal overloads & instantaneous trip of short ckts. Ckt. breakers larger than 100 amp shall have adj. trips.
   E. Ext. operated handle shall be provided which will indicate "ON", "TRIPPED" & "OFF" positions.
   F. GFI breakers used in branch ckts. shall have built-in ground fault sensor which will auto. trip breaker on max. 5 milliamp ground fault. Unit shall have built-in push-to-test button.
   G. Breakers for control of fluor. lighting shall be switching duty type sw. Breakers for control of HID ltg. shall be SWD-HID rated.
   H. When breakers are to be installed in panelboards, breaker mfr. shall be same as panelboard mfr.

GROUNDING
1. Entire installation to be grounded in accordance w/NEC requirements.
2. Equip. shall be grounded thru one of the following paths to ground: conduit system; separate grounding conductor connected to main; grounding conductor or panelboard ground bus; separate grounding conductor connected to ground rod installation.
3. At all elect. panels, install grounding bushings on all conduits & bond to panel ground bus using bare #4 AWG copper conductor. At j.boxes, boxes in feeder conduit runs, install grounding bushings on all conduits, lug on j.box & bond conduits & box together using bare #4 AWG copper conductor.
4. Unless otherwise indicated, conduit system shall be adequate for grounding recept's, light fixts, branch ckt. j.boxes, motor starters, disconn. switches & other branch ckt. devices. Contractor shall draw up conduit connections tightly to insure proper ground continuity. If ground continuity does not exist or has high resistance, bonding straps or separate grounding conductors shall be installed.
5. Wiring run in non-metallic duct & flex. conduit shall carry separate grounding conductor.
6. At motor locations, motor frames shall be bonded to ground system by means of separate conductor pulled from panel ground bus or bonding jumper from conduit to motor frames.
7. For telephone, alarm, comm. systems, etc., a #10 AWG copper conductor from elect. ground system to ea. terminal cabinet or equip. location shall be considered sufficient unless otherwise indicated.
8. Resistance to ground at any point shall not measure more than 25 ohms.

ELECTRICAL LIGHT FIXTURES
1. Fluorescent Light Fixtures
   A. Construction: Sheet steel, dieformed to provide structural strength. Louvers to be constructed of spring steel (22 ga. min.).
   B. Painting: fixt's to be properly treated for acceptance for finish coats. Finishes to be baked white high reflectance enamel or porcelain enamel.
   C. Lens panel frames: lens panels for surf. box type fixt's & for recessed troffers shall be framed, hinge & latch. Frames & louvers shall be equipped w/retaining means to support frame during relamping.
   D. Lampholders: porcelain, turret-type for industrial fixt's. Tombstone-Type for commercial fixt's.
   E. Wires: heat resisting type in accordance w/NEC.
   F. Ballast Mounting: fixt. to be designed in such a manner that case temp. of ballast does not exceed 90 deg. C. All ballast mounting studs to be welded to fixt.
   G. Fixt. manufactured w/prepainted steel to be painted. No unpainted edges of fixt. housing will be accepted.
2. Light Fixt. Installation
   A. Fixt's to be equipped w/lamps of proper size & type as scheduled or recommended by Mfr.
   B. Tandem fixt's may be used in continuous rows providing finished appearance conforms to appearance of indiv. units.
   C. All rows of light fixt's to be properly aligned & plumbed.
   D. Sched. of Ltg. Fixt's on Dwgs. contains written description of fixt. & mfr's catalog #'s. #'s provided are intended to indicate design & quality desired. Fixt's must meet requirements of this spec & of description contained in schedule.
   E. If outlet does not have fixt. symbol, install fixt. of same type used in similar locations elsewhere on Dwgs.
   F. Provide additional trim as req'd for neat mounting of recessed fluor. lights mtd. in patterns.
   G. Light fixt's may be supported from suspended ceiling system provided ceiling suspension wires or rods are of sufficient strength to support added weight of light fixt's. It is responsibility of E.C. to coord. w/ceiling contractor & ensure adequate supports are furnished.
3. General Requirements
   A. Install proper #, type & size lamps in light fixt. as indicated on Dwgs.
   B. Replace all burned out lamps at time of acceptance.
   C. Contractor shall furnish to Owner a chart listing size & type of lamps req'd by ea. type of light fixt. This chart shall utilize the full lamp ordering code (i.e., Type A - F40CW; Type B - 150 PAR/FL).

RACEWAY USAGE
1. Exposed raceways larger than 1 1/4": rigid or intermediate
2. Exposed Raceways 1 1/4" & Smaller: EMT
3. Raceways concealed in concr. or solid plaster partitions: rigid
4. Raceways concealed in furred spaces & partitions other than concr. or solid plaster: EMT
5. Underground elect. & telephone service entrance: rigid, PVC or asbestos cement (both in 3" concr. envelope)
6. Elect. & teleph. services other than underground: rigid or IMC
7. Raceways in concr. slab: rigid, IMC or EMT. If EMT is used, fittings shall be compression type, approved for use in poured concrete.
8. Raceways below lowest flr. slab: rigid (PVC or asbestos cement in 3" concr. envelope).
9. Raceways in moist locations or exposed to weather: rigid or PVC
10. Underground raceways to remote locations such as floodlights, pumphouses, etc., when concr. protection envelope is not indicated on Dwgs: rigid raceway liberally coated w/asphaltum.
11. Final connections to motors, t'formers or other equip. requiring movement or subject to vibration: flex. raceway neoPrene jacketed.
12. From outlet box to recessed ltg. fixt.: flex. raceway
13. Short conn's & in other locations where use of rigid raceway is impractical: flex. raceway
14. All other locations unless noted otherwise on dwgs.: EMT.

THE ENGINEERING COLLABORATIVE
10 South New Jersey Street - Suite 320
Indianapolis, Indiana 46204
317.636.3941
www.tec-mep.com
MECHANICAL · ELECTRICAL · PLUMBING

AXIS
618 East Market Street
Indianapolis, Indiana 46202
ph 317/264.8162 fx 317/264.8165
axisarch.com

Scope Drawings
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of work.

DRAWN BY TC
CHECKED BY SLH
DATE ISSUED 10/3/2014

REVISIONS:

THE ENGINEERING COLLABORATIVE
10 SOUTH NEW JERSEY ST, SUITE 320
INDIANAPOLIS, IN 46204
SAM HURT
SAM@TEC-MEP.COM
P: 317.636.3941

FINK ROBERTS & PETRIE, INC.
CONSULTING ENGINEERS
4040 Vincennes Circle, Ste 300
Indianapolis, IN 46268
Bill Horton
ph. 317.872.8400
fx. 317.818.1911

BATESVILLE SHELL BUILDING
BATESVILLE, INDIANA

SAMUEL L. HURT
REGISTERED
No. PE10100876
STATE OF INDIANA
PROFESSIONAL ENGINEER

ELETRICAL SPECIFICATIONS

E901

PROJECT NUMBER: 13076