



THE SCHOOL BOARD OF VOLUSIA
COUNTY FLORIDA
200 North Clara Avenue
Deland, Florida 32720

OSTEEN ELEMENTARY SCHOOL

REPLACE GUTTERS AND DOWNSPOUTS

VCS Project NO. 2548124

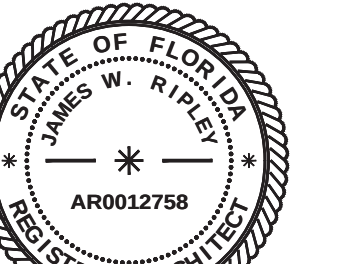
500 Doyle Road
Osteen, FL 32764

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3/14/2025
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AR0012758

James W. Ripley

DESCRIPTION OF WORK

- This scope is intended to define work required to remove and replace the existing gutter and downspouts campus wide at existing locations and include additional gutters and downspouts at new locations .
1. Remove existing gutters and downspouts at existing locations.
 2. Install new pre-finished aluminum gutters as indicated per details provided at existing locations. Provide bracket mounted gutter system with expansion joints.
 3. New extruded aluminum downspouts at existing locations. Downspouts to be reconnected to stormwater system where existing.
 4. Building 1 (South Side) - New gutter location along perimeter. New downspouts to be connected to new stormwater transitioning through sidewalk. Sidewalk to be partially excavated to install new pre-manufactured metal trench assembly draining to street.
 5. Building 1 (East Side) - Existing downspout locations draining to walkway canopy to be routed to grade and connected to nearby stormwater system.
 6. Building 3 (South Side) - New gutter location along perimeter. Downspouts located as indicated per plans and drain at grade.
 7. Building 4 (East Side) - New gutter location along perimeter. New downspouts to be connected to new stormwater transitioning through sidewalk. Sidewalk to be partially excavated to install new pre-manufactured metal trench assembly draining to street.
 8. Building 1 & 4 (Alternate) - New downspout stormwater connections to be connected to existing stormwater line in place of trenching sidewalk.

Architect's Statement of Compliance: To the best of my knowledge, these drawings and the project manual are complete and comply with the Florida Building Code.

BUILDING DATA

A. SURVEY PARCEL ID	NOT APPLICABLE FOR PROJECT TYPE
B. LEGAL DESCRIPTION	NOT APPLICABLE FOR PROJECT TYPE
C. OCCUPANCY TYPE	EDUCATIONAL
D. CONSTRUCTION TYPE	TYPE V
E. RISK CATEGORY	III
F. AUTOMATIC SPRINKLER	NOT APPLICABLE FOR PROJECT TYPE
G. BUILDING AREA	EXIST. GUTTER 3,318 LN. FT. (LOW-SLOPE PROJECT ROOF AREA) EXIST. ROOF 88205 SQ. FT. (STEEP-SLOPE PROJECT ROOF AREA)
H. BUILDING HEIGHT	VARIES, 44 FOOT MAXIMUM MEAN ROOF HEIGHT
I. OCCUPANT LOAD	NOT APPLICABLE FOR PROJECT TYPE

LOCATION MAP



SITE VICINITY MAP

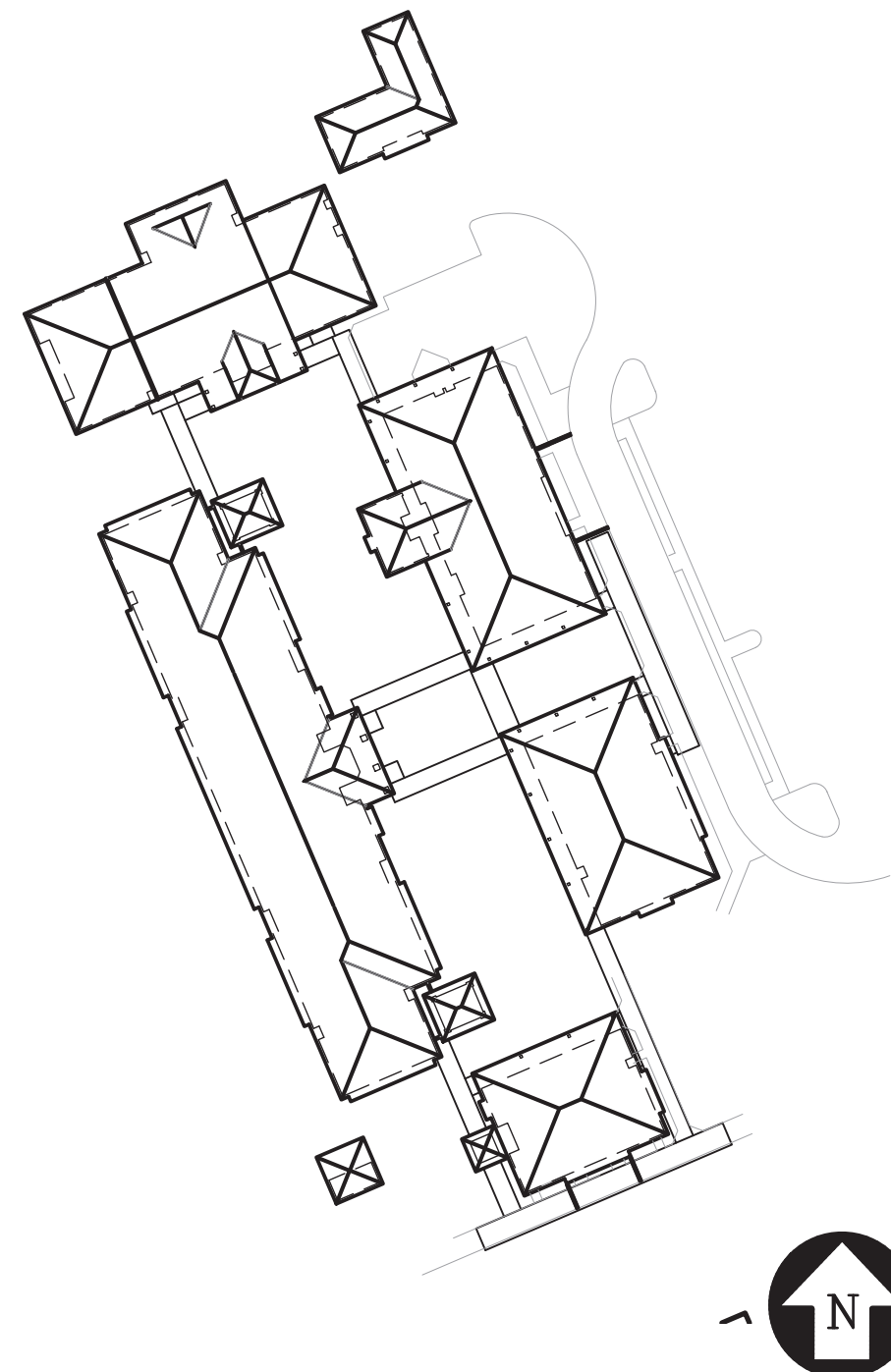
NOT TO SCALE

ENGINEERS & CONSULTANTS

Building Envelope

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601 NORTH FERN CREEK AVENUE, SUITE 100
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PROJECT MANAGER
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CAMPUS PLAN (FOR REFERENCE)



DRAWING INDEX

SHEET NUMBER	SHEET TITLE
G01	COVER SHEET, VICINITY MAP AND DRAWING INDEX
G02	GENERAL ROOF NOTES, ROOF COMPONENT FASTENING SCHEDULE & ABBREVIATIONS
A01	OVERALL ROOF PLAN, PHYSICAL CHARACTERISTICS SCHEDULE
A02	PARTIAL PLAN - NORTH, SYMBOLS LEGEND AND SPECIFIC NOTES
A03	PARTIAL PLAN - SOUTH, SYMBOLS LEGEND AND SPECIFIC NOTES
A04	TYPICAL GUTTER INSTALLATION AND FABRICATION DETAILS
A05	GUTTER FABRICATION DETAILS AND DOWNSPOUT ELEVATIONS
A06	DOWNSPOUT AND STORM DRAINAGE DETAILS
A07	MISCELLANEOUS ROOF DRAINAGE DETAILS
A08	A/R/C FIELD INVESTIGATION PHOTOS - BUILDING #1
A09	A/R/C FIELD INVESTIGATION PHOTOS - BUILDINGS #1 & #2
A10	A/R/C FIELD INVESTIGATION PHOTOS - BUILDING #2
A11	A/R/C FIELD INVESTIGATION PHOTOS - BUILDINGS #2 & #3
A12	A/R/C FIELD INVESTIGATION PHOTOS - BUILDINGS #3 & #4
A13	A/R/C FIELD INVESTIGATION PHOTOS - BUILDING #4
A14	A/R/C FIELD INVESTIGATION PHOTOS - BUILDINGS #4 & #5
A15	A/R/C FIELD INVESTIGATION PHOTOS - BUILDINGS #5 & #6
A16	A/R/C FIELD INVESTIGATION PHOTOS - BUILDINGS #6 & #7
A17	A/R/C FIELD INVESTIGATION PHOTOS - BUILDINGS #7 & #8

CONSTRUCTION DOCUMENTS - MARCH 14, 2025

OSTEEN ELEMENTARY SCHOOL
REPLACE GUTTERS AND
DOWNSPOUTS
VCS Project No. 2548124
500 DOYLE ROAD, OSTEEN, FL 32764

Architect JAMES W. RIPLEY	
DESIGNED BY JWR	DRAWN BY TJG
ISSUE DATE 3/14/2025	AE PROJECT NUMBER 24020.00
SHEET TITLE COVER SHEET, VICINITY MAP AND DRAWING INDEX	
DRAWING NO.	

G01

1. THE DIMENSIONS SHOWN ON THE PLANS OF THIS PROJECT WERE TAKEN FROM THE OWNER'S ARCHITECTURAL DOCUMENTS OR ARE THE RESULT OF FIELD MEASUREMENTS TAKEN BY A/R/C ASSOCIATES. THIS INFORMATION IS GIVEN TO ASSIST PROSPECTIVE BIDDERS IN ESTABLISHING THE APPROXIMATE SCOPE OF THE PROJECT, AS A PRE-REQUISITE FOR BIDDING THE PROJECT. HOWEVER, ALL DIMENSIONS SHALL BE FIELD VERIFIED BY EACH BIDDER SO THAT THE DIMENSIONS UTILIZED IN BIDDING THE PROJECT WILL BE THOSE DIMENSIONS TAKEN, CONFIRMED OR CORRECTED BY THE BIDDER. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DETAILS, AND EQUIPMENT NOTED AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH THE WORK.
2. THE PLANS ARE GENERAL IN NATURE & INDICATE APPROXIMATE EXISTING CONDITIONS AT THE PROJECT SITE. ALL BLDGS. ON THE SITE ARE INCLUDED IN THE PROJECT UNLESS SPECIFICALLY NOTED OTHERWISE (N.I.C.). THE CONTRACTOR SHALL BE RESPONSIBLE FOR A VISUAL FIELD SURVEY (PRIOR TO BID) IN REGARD TO QUANTITIES, & VERIFICATION OF CONFORMANCE WITH THE LOCAL BUILDING CODE.
3. PRIOR TO THE START OF ANY WORK, THE CONTRACTOR WITH THE PROJECT ARCHITECT AND OWNER'S REPRESENTATIVE SHALL VISIT THE SITE AND PHOTO AND VIDEO TAPE THE SITE AND ALL SPACES NEARBY THAT MAY BE AFFECTED BY THIS PROJECT IN ORDER TO DETERMINE THE CONTRACTOR'S RESPONSIBILITY IN KEEPING THOSE ITEMS IN THEIR CURRENT STATUS. SPECIAL ATTENTION SHALL BE GIVEN TO CEILING, LIGHT FIXTURES, EXTERIOR AND INTERIOR WALL FINISHES, AND SIDEWALKS, ETC., PARTICULARLY IN THOSE AREAS WHERE EXISTING LEAKS HAVE BEEN DESERVED.
4. ALL MECHANICAL SYSTEMS & INDIVIDUAL COMPONENTS (EQUIPMENT) SHALL BE OPERATED IN THE PRESENCE OF REPRESENTATIVES OF BOTH THE CONTRACTOR AND OWNER PRIOR TO ANY DEMOLITION OR DISCONNECTION OF MECHANICAL FUNCTIONS, IN ORDER TO ESTABLISH WORKING ORDER AND OPERATING CONDITIONS.
5. CONTRACTOR SHALL EXERCISE CARE DURING DEMOLITION AND REMOVAL TO ASSURE THAT ITEMS SCHEDULED FOR DEMOLITION ARE PROPERLY REMOVED AND ITEMS TO REMAIN AND/OR TO BE RELOCATED ARE PROTECTED FROM DAMAGE. ALL SALVAGEABLE ITEMS REMOVED THAT ARE NOT TO BE REUSED SHALL BE DISPOSED OF AS DIRECTED BY THE OWNER.
6. NO EXISTING FACILITY SHALL BE OCCUPIED DURING REMODELING OR RENOVATION UNLESS ALL EXISTING EXITS AND ANY EXISTING FIRE PROTECTION ARE CONTINUOUSLY MAINTAINED, OR IN LIEU THEREOF OTHER MEASURES ARE TAKEN WHICH PROVIDE EQUIVALENT SAFETY.
7. IN THE EVENT OF WATER DAMAGE TO THE INTERIOR OF STRUCTURES, A DAMAGE REPORT, WITH PHOTOGRAPHS SHALL BE COMPLETED BY THE PROJECT ARCHITECT ONCE THEY HAVE BEEN NOTIFIED. THE REPORT SHALL BE SUBMITTED TO THE OWNER AND THE CONTRACTOR FOR THEIR RECORDS.
8. NOTIFY THE LOCAL POLICE OFFICIALS, THE OWNER OR ARCHITECT BY TELEPHONE IN EACH INSTANCE OF PROPERTY DAMAGE RESULTING FROM FIRE, WATER DAMAGE, ILLEGAL ENTRY, VANDALISM, THEFT OR BURGLARY, OR VEHICLE DAMAGE WITHIN 24 HOURS OF DISCOVERING THE INCIDENT.
9. DETAILS REFERENCED ON THE CONTRACT DRAWINGS ARE "TYPICAL" AND ARE NOT CUT AT EVERY LOCATION WHERE THE CONDITION OCCURS. BID AND EXECUTE A COMPLETE PROJECT AS IF DETAILS WERE "CUT" AT EVERY LOCATION WHERE SUCH CONDITION OR SIMILAR CONDITION OCCURS.
10. SHEET METAL DETAILS AND TRANSFORMATIONS NOT SHOWN SHALL BE REQUIRED AS IF SHOWN. PREPARE, AND SUBMIT SHOP DRAWINGS OF THESE REQUIREMENTS TO THE ARCHITECT FOR APPROVAL PRIOR TO SHOP FABRICATION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR AND PAINTING / FINISHING OF ALL SURFACES EXPOSED OR DAMAGED AS A RESULT OF THE WORK WORK NOT COVERED BY NEWLY INSTALLED WORK. REPAIRS AND FINISHES SHALL MATCH EXISTING ADJACENT CONDITIONS TO REMAIN UNCHANGED.
12. CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE, REINSTALL, OR REPLACE INTERIOR FINISHES WHICH MAY HAVE BEEN DISTURBED OR DAMAGED DURING THE CONSTRUCTION PROCESS.
13. CONTRACTOR SHALL PROVIDE ALL SUPPLEMENTAL MATERIALS REQUIRED TO PROPERLY INSTALL, SUPPORT AND BRACE ALL ITEMS AND COMPONENTS WITHIN THE WORK.

ADJ	ADJACENT	DIA	DIAMETER	LW	LIGHTWEIGHT	RAD	RADIUS
A/C	AIR CONDITIONING	DIM	DIMENSION	LLH	LONG LEG HORIZONTAL	RUL	RAINWATER LEADER
ALT	ALTERNATE	DS	DOWNSPOUT	LLV	LONG LEG VERTICAL	REF	REFERENCE
ALUM	ALUMINUM	DWG	DRAWING			REINF	REINFORCE (D), (MENT)
ANOD	ANODIZED	E	EAST	MFR	MANUFACTURE(ER)	RCP	REINF. CONCRETE PIPE
APPROX	APPROXIMATE	ELEC	ELECTRIC(AL)	MATL	MATERIAL(S)	REV	REVISION
ARCH	ARCHITECT(URAL)	EL (ELEV)	ELEVATION	MAX	MAXIMUM	RD	ROOF DRAIN
		EQ	EQUAL	MECH	MECHANIC(AL)	RO	ROUGH OPENING
BRG	BEARING	EQUIP	EQUIPMENT	MTL	METAL		
BIT	BITUMINOUS BITUMEN	EXH	EXHAUST	MIN	MINIMUM	SCH	SCHEDULE
BLK	BLOCK	EXIST	EXISTING	MISC	MISCELLANEOUS	SEAL	SEALANT
BLKG	BLOCKING	EXP	EXPANSION	MOD	MODIFY / MODIFIED	SHT	SHEET
BD	BOARD	EXT	EXTERIOR	MTD	MOUNTED(ING)	SIM	SIMILAR
BOT	BOTTOM					S	SOUTH
BLDG	BUILDING	FIN	FINISH(ED)	NOM	NOMINAL	SFK	SPEAKER
BUR	BUILT UP ROOF	FLASH	FLASHING	N	NORTH	SPEC	SPECIFICATION(S)
		FLEX	FLEXIBLE	NTS	NOT TO SCALE		
CIP	CAST-IN-PLACE	FTG	FOOTING	NO	NUMBER	SQ	SQUARE
CB	CATCH BASIN	FDN	FOUNDATION			SF	SQUARE FEET
CLG	CEILING			OC	ON CENTER(S)	ST STL	STAINLESS STEEL
COL	COLUMN	GA	GAGE (GAUGE)	OCEW	ON CENTER EACH WAY	STD	STANDARD
COMP	COMPRESS, (ION), (IBLE)	GALV	GALVANIZED	OPG	OPENING	STL	STEEL
		GWUB	GYPSPUM WALL BOARD	OPP	OPPOSITE	STRUCT	STRUCTURAL
CONC	CONCRETE	HDWE	HARDWARE	OD	OUTSIDE DIAMETER OUTSIDE DIMENSION	THK	THICK(NESS)
CMU	CONCRETE MASONRY UNIT	HYAC	HEATING/VENTILATION /AIR CONDITIONING			T & G	TONGUE AND GROOVE
CONST	CONSTRUCTION	HT (HGT)	HEIGHT	FTD	PAINT(ED)	TYP	TYPICAL
CONT	CONTINUOUS OR CONTINUE	HM	HOLLOW METAL	FR	PAIR		
CJ	CONTROL JOINT	HORIZ	HORIZONTAL	FL	PLATE	UNO	UNLESS NOTED OTHER
CTR	CENTER			FLYWD	PLYWOOD	VERT	VERTICAL
CF	CUBIC FOOT	INCL	INCLUDE(D), (ING)	PVC	POLYVINYL CHLORIDE		
		ID	INSIDE DIAMETER INSIDE DIMENSION	PSF	POUNDS PER SQUARE FOOT	WUF	WELDED WIRE FABRIC
DEMO	DEMOLISH, DEMOLITION	INSUL	INSULATE(D), (ION)	PSI	POUNDS PER SQUARE INCH	W	WEST
		INT	INTERIOR	PC	PRECAST CONCRETE	WM	WIRE MESH
DET	DETAIL			PT	PRESSURE TREATED	W/	WITH
DIAG	DIAGONAL					W/O	WITHOUT
						WD	WOOD

GENERAL NOTES:

- THIS SCHEDULE AND THE FASTENING METHODS INDICATED HEREIN ARE INTENDED TO ADDRESS TYPICAL CONDITIONS, AND MAY NOT APPLY TO ALL CONDITIONS FOR THIS PROJECT.
- CONTRACTOR / INSTALLER MUST ALSO REFER TO THE DETAILS FOR THIS SPECIFIC PROJECT. IN THE CASE OF CONFLICTING DATA, THE PROJECT SPECIFIC DETAILS SHALL GOVERN.
- FOR ALL CONDITIONS NOT COVERED WITHIN SCHEDULE, REFER TO FASTENER REQUIREMENTS OF THE SPECIFICATIONS OR CONSULT WITH THE ARCHITECT.
- MANUFACTURERS OF SPECIALTY FASTENER SHALL PERFORM FIELD TESTS TO VERIFY WITHDRAWAL VALUES AND FASTENING PATTERNS FOR THE SPECIFIC PROJECT CONDITIONS PRIOR TO INSTALLATION. A WRITTEN REPORT SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL.
- ALL EXPOSED FASTENERS AND THOSE USED IN PRESSURE TREATED LUMBER SHALL BE STAINLESS STEEL. ALL OTHERS MUST HAVE A CORROSION RESISTANT COATING THAT EXCEEDS F.M. APPROVAL STANDARD 4410, UNLESS NOTED OTHERWISE.
- ALL FASTENERS AND THEIR INSTALLATION METHODS MUST COMPLY WITH THE REQUIREMENTS DEFINED IN THE FLORIDA BUILDING CODE, ROOFING APPLICATION STANDARD (RAS) NO. III - "STANDARD REQUIREMENTS FOR ATTACHMENT OF PERIMETER WOOD BLOCKING AND METAL FLASHINGS", UNLESS NOTED OTHERWISE.

WOOD BLOCKING (2" NOMINAL THICKNESS):

- CONCRETE: 3/8" DIA. ST. STL. SELF-TAPPING MASONRY SCREW AT 16" O.C. MAX., LENGTH AS REQUIRED FOR 1.75" MIN. EMBEDMENT. OPTION: 5/16" DIA. DEFORMED OR FLUTED NAIL AT 12" O.C. MAX., LENGTH AS REQUIRED FOR 125" MIN. EMBEDMENT. COUNTERSINK HEADS AS REQUIRED.
- CONCRETE BLOCK (CMU): 3/8" DIA. ST. STL. SELF-TAPPING MASONRY SCREW AT 12" O.C. MAX., LENGTH AS REQUIRED FOR 1.75" MIN. EMBEDMENT. OPTION: 3/8" DIA. HEAVY DUTY SLEEVE STYLE EXPANSION BOLT ANCHOR (RAWL-BOLT) @ 18" O.C., LENGTH AS REQUIRED FOR 2" MIN. EMBEDMENT. COUNTER-SINK HEADS AS REQUIRED.
- BRICK: 3/8" DIA. ST. STL. SELF-TAPPING MASONRY SCREW AT 12" O.C. MAX., LENGTH AS REQUIRED FOR 1.75" MIN. EMBEDMENT. OPTION: 3/8" DIA. HEAVY DUTY SLEEVE STYLE EXPANSION BOLT ANCHOR (RAWL-BOLT) @ 18" O.C., LENGTH AS REQUIRED FOR 2" MIN. EMBEDMENT. COUNTERSINK HEADS AS REQUIRED.
- STRUCTURAL STEEL: 1/4" DIA. ST. STL. SELF-DRILLING, SELF-TAPPING SCREWS WITH "WINGS" @ 16" O.C. MAX., LENGTH AS REQUIRED FOR 1/2" MIN. PENETRATION OF THREADS THROUGH STEEL. COUNTERSINK HEADS AS REQUIRED.
- METAL DECK: 1/4" DIA. ST. STL. SELF-TAPPING "DECK" SCREWS AT 12" O.C. MAX., LENGTH AS REQUIRED FOR 1/2" MIN. PENETRATION THROUGH UNDERSIDE OF DECK. COUNTERSINK HEADS REQUIRED.
- LIGHT GAGE METAL FRAMING: 1/4" DIA. ST. STL. SELF-TAPPING "DECK" SCREWS, ONE MIN. PER FRAMING MEMBER, LENGTH AS REQ'D FOR 1/2" MIN. PENETRATION THROUGH FRAMING. COUNTERSINK HEADS AS REQUIRED.
- PLYWOOD DECK: 1/4" DIA. ST. STL. SELF-TAPPING "DECK" SCREWS, ONE MIN. PER FRAMING MEMBER, LENGTH AS REQ'D FOR 1/2" MIN. PENETRATION THROUGH UNDERSIDE OF DECK. COUNTERSINK HEADS AS REQUIRED.
- WOOD BLOCKING: 1/4" DIA. ST. STL. SELF-TAPPING "DECK" SCREWS AT 12" O.C. MAX., LENGTH AS REQUIRED FOR 150" MIN. EMBEDMENT. OPTION: TWO 3/8" DIA. CONTINUOUS BEADS OF CONSTRUCTION ADHESIVE THE FULL LENGTH OF THE BOARD TO BE APPLIED, 4 1/2" NAILS @ 4" O.C. (IN 2 ROWS-STAGGERED).

PLYWOOD SHEATHING:

- CONCRETE: 1/4" DIA. ST. STL. SELF-TAPPING MASONRY SCREWS AT 12" O.C. MAX. (AT EDGES), AND 16" O.C. MAX. IN THE FIELD, LENGTH AS REQUIRED FOR 150" MIN. EMBEDMENT. OPTION: 1/4" DIA. DEFORMED OR FLUTED NAIL AT SAME SPACING AS ABOVE, LENGTH AS REQ'D. FOR 1/4" MIN. EMBEDMENT.
- CONCRETE BLOCK (CMU): 1/4" DIA. ST. STL. SELF-TAPPING MASONRY SCREWS AT 12" O.C. MAX. (AT EDGES), AND 16" O.C. MAX. IN THE FIELD, LENGTH AS REQUIRED FOR 150" MIN. EMBEDMENT. OPTION: 1/4" DIA. DEFORMED OR FLUTED NAIL AT SAME SPACING AS ABOVE, LENGTH AS REQ'D. FOR 1/4" MIN. EMBEDMENT.
- BRICK: 1/4" DIA. ST. STL. SELF-TAPPING MASONRY SCREWS AT 12" O.C. MAX. (AT EDGES), AND 16" O.C. MAX. IN THE FIELD, LENGTH AS REQUIRED FOR 150" MIN. EMBEDMENT. OPTION: 1/4" DIA. DEFORMED OR FLUTED NAIL AT SAME SPACING AS ABOVE, LENGTH AS REQ'D. FOR 1/4" MIN. EMBEDMENT.
- STRUCTURAL STEEL: #10 DIA. ST. STL. SELF-DRILLING, SELF-TAPPING SCREWS WITH "WINGS" AT 12" O.C. MAX. (AT EDGES), AND 16" O.C. MAX. IN THE FIELD, LENGTH AS REQ'D. FOR 1/2" MIN. PENETRATION OF THREADS THROUGH STEEL.
- METAL DECK: #10 DIA. SELF-TAPPING "DECK" SCREWS AT 12" O.C. MAX. (AT EDGES), AND 16" O.C. MAX. IN THE FIELD, LENGTH AS REQUIRED FOR 1/2" MIN. PENETRATION THROUGH UNDERSIDE OF DECK.
- LIGHT GAGE METAL FRAMING: #10 DIA. SELF-TAPPING "DECK" SCREWS AT 12" O.C. MAX. (AT EDGES) AND 16" O.C. MAX. ALONG EACH FRAMING MEMBER, LENGTH AS REQ'D FOR 1/2" MIN. PENETRATION THROUGH FRAMING. FRAMING TO BE SPACED AT 24" O.C. MAX., UNLESS NOTED OTHERWISE BY DETAILS.
- WOOD FRAMING: #10 DIA. SELF-TAPPING "DECK" SCREWS AT 12" O.C. MAX. ALONG EACH FRAMING MEMBER, LENGTH AS REQUIRED FOR 150" MIN. EMBEDMENT. OPTION: 8d ANNUAL RING NAILS AT 6" O.C. MAX. (AT EDGES), AND 12" O.C. MAX. IN FIELD OF PANEL. DECREASE SPACING AT ROOF EDGE & CORNER WIND ZONES TO 4" O.C. MAX. AT EDGES, AND 8" O.C. MAX. IN FIELD.

METAL DECKING:

- INSTALL AND SECURE PER STEEL JOIST INSTITUTE (SJI) GUIDELINES, SEE SPECIFICATIONS OR STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION.

MINOR STRUCTURAL STEEL:

- ANCHORAGE OF LOAD BEARING STEEL AND LARGE STEEL FABRICATIONS, (SUCH AS LADDERS), IS TO BE AS DEFINED BY STRUCTURAL ENGINEERING DRAWINGS, OR AS ENGINEERED BY THE SUPPLIER. MINOR STRUCTURAL STEEL WOULD BE CONSIDERED ITEMS SUCH AS SUPPORT STANDS, WALL LEDGER ANGLES, ETC.

- CONCRETE: 3/8" DIA. HEAVY-DUTY, SLEEVE STYLE EXPANSION BOLT ANCHOR (RAWL-BOLT) @ 16" O.C., LENGTH AS REQ'D FOR 2" MIN. EMBEDMENT.
- CONCRETE BLOCK (CMU): 3/8" DIA. HEAVY-DUTY, SLEEVE STYLE EXPANSION BOLT ANCHOR (RAWL-BOLT) @ 16" O.C., LENGTH AS REQUIRED FOR 2" MIN. EMBEDMENT. IF CMU IS HOLLOW, BREAK INTO BLOCK ABOVE, AND FILL CELL OF BLOCK TO RECEIVE ANCHOR SOLID, PERFORM ANY REPAIR AND PATCHING NECESSARY
- BRICK: 3/8" DIA. HEAVY-DUTY, SLEEVE STYLE EXPANSION BOLT ANCHOR (RAWL-BOLT) @ 16" O.C., LENGTH AS REQ'D FOR 2" MIN. EMBEDMENT.
- STRUCTURAL STEEL: 1/4" DIA. ST. STL. SELF-DRILLING, SELF-TAPPING SCREWS @ 16" O.C. MAX., LENGTH AS REQUIRED FOR 1/2" MIN. PENETRATION OF THREADS THROUGH STEEL.

RIGID INSULATION BOARD:

- INSTALL AND SECURE PER THE MANUFACTURER'S RECOMMENDATIONS, TESTING AND APPROVALS TO COMPLY WITH THE DESIGN REQUIREMENTS OF THIS PROJECT. SEE PROJECT SPECIFICATIONS AND FASTENING DETAIL FOR ADDITIONAL INFORMATION.

ROOF MEMBRANE SYSTEM:

- INSTALL AND SECURE PER THE MANUFACTURER'S RECOMMENDATIONS, TESTING AND APPROVALS TO COMPLY WITH THE DESIGN REQUIREMENTS OF THIS PROJECT. SEE PROJECT SPECIFICATIONS AND FASTENING DETAIL FOR ADDITIONAL INFORMATION.

FLANGED SHEETMETAL (EDGE METAL):

- WOOD BLOCKING: #12 GAGE x 150" ANNUAL RING STAINLESS STEEL ROOFING NAILS AT 4" O.C. MAX., STAGGERED IN 2 ROWS INSET AT 3/4" FROM EACH EDGE OF THE FLANGE.
- LIGHTGAGE METAL: #10 DIA. STAINLESS STEEL, SELF TAPPING, WAFER OR FLAT HEAD SCREWS AT 12" O.C. MAX., 8" O.C. WITHIN ROOF CORNER ZONES, LENGTH AS REQUIRED FOR 1/2" MIN. PENETRATION OF THREADS THROUGH STEEL.
- CONCRETE: 3/16" DIA. ST. STL. SELF-DRILLING, SELF-TAPPING, MASONRY SCREW, LENGTH AS REQUIRED FOR 150" MIN. EMBEDMENT. OPTION: 1/4" DIA. x 150" LONG ZAMAC "NAIL-IN" DRIVE PIN, EXPANSION TYPE FASTENER WITH A STAINLESS STEEL DRIVE PIN. INSTALL AT 12" O.C. MAX., 8" O.C. WITHIN ROOF CORNER ZONES

CLEATS FOR SHEETMETAL FLASHINGS:

- WOOD BLOCKING: #12 GAGE x 150" ANNUAL RING, STAINLESS STEEL ROOFING NAILS AT 8" O.C. MAX., (4" O.C. AT CORNER ZONES OF ROOF)
- LIGHTGAGE METAL: #10 DIA. STAINLESS STEEL, SELF TAPPING, WAFER OR FLAT HEAD SCREWS, LENGTH AS REQ'D FOR 1/2" MIN. PENETRATION OF THREADS THROUGH STEEL, LOCATE AT 10" O.C. MAX., 6" O.C. WITHIN ROOF CORNER ZONES.
- CONCRETE: 3/16" DIA. ST. STL. SELF-DRILLING, SELF-TAPPING, MASONRY SCREW, LENGTH AS REQUIRED FOR 150" MIN. EMBEDMENT. OPTION: 1/4" DIA. x 150" LONG ZAMAC "NAIL-IN" DRIVE PIN, EXPANSION TYPE FASTENER WITH A STAINLESS STEEL DRIVE PIN. INSTALL AT 10" O.C. MAX., 6" O.C. WITHIN ROOF CORNER ZONES.
- CONCRETE BLOCK (CMU): 3/16" DIA. ST. STL. SELF-DRILLING, SELF-TAPPING, MASONRY SCREW, LENGTH AS REQUIRED FOR 150" MIN. EMBEDMENT. OPTION: 1/4" DIA. x 150" LONG ZAMAC "NAIL-IN" DRIVE PIN, EXPANSION TYPE FASTENER WITH A STAINLESS STEEL DRIVE PIN. INSTALL AT 10" O.C. MAX., 6" O.C. WITHIN ROOF CORNER ZONES.
- BRICK: 1/4" DIA. ST. STL. SELF-DRILLING, SELF-TAPPING, MASONRY SCREW, LENGTH AS REQUIRED FOR 150" MIN. EMBEDMENT. OPTION: 1/4" DIA. x 150" LONG ZAMAC "NAIL-IN" DRIVE PIN, EXPANSION TYPE FASTENER WITH A STAINLESS STEEL DRIVE PIN. INSTALL AT 10" O.C. MAX., 6" O.C. WITHIN ROOF CORNER ZONES.

APPLIED SHEETMETAL (COUNTERFLASHINGS, ETC.):

- WOOD BLOCKING: #12 DIA. SELF-TAPPING, STAINLESS STEEL SCREWS AT 8" O.C. MAX., LENGTH AS REQUIRED FOR 125" MIN. EMBEDMENT INTO WOOD. IF EXPOSED TO THE WEATHER, USE "SCOTS" TYPE SCREW WITH INTEGRAL NEOPRENE SEALING WASHER.
- SHEETMETAL BACKING: #12 DIA. SELF-TAPPING STAINLESS STEEL SCREWS AT 8" O.C. MAX., LENGTH AS REQ'D FOR 1/2" MIN. PENETRATION OF THREADS THROUGH STEEL. IF EXPOSED TO THE WEATHER, PROVIDE "SCOTS" TYPE SCREW WITH INTEGRAL NEOPRENE SEALING WASHER.
- CONCRETE: 1/4" DIA. SELF-TAPPING STAINLESS STEEL MASONRY SCREWS AT 8" O.C. MAX., LENGTH AS REQUIRED FOR 1/4" MIN. EMBEDMENT. OPTION: 1/4" DIA. x 150" ZAMAC "NAILIN" DRIVE PIN, EXPANSION TYPE FASTENERS @ 8" O.C. MAX., WITH STAINLESS STEEL DRIVE PIN. IF EXPOSED TO THE WEATHER PROVIDE METAL BACKED NEOPRENE SEALING WASHERS - ADJUST LENGTH AS REQ'D BY OVERLYING FINISH TO MAINTAIN 125" MIN. EMBEDMENT INTO CONCRETE.
- CONCRETE BLOCK (CMU): 1/4" DIA. SELF-TAPPING STAINLESS STEEL MASONRY SCREWS AT 8" O.C. MAX., LENGTH AS REQUIRED FOR 125" MIN. EMBEDMENT. OPTION: 1/4" DIA. x 150" ZAMAC "NAILIN" DRIVE PIN, EXPANSION TYPE FASTENERS @ 8" O.C. MAX., WITH STAINLESS STEEL DRIVE PIN. IF EXPOSED TO THE WEATHER PROVIDE METAL BACKED NEOPRENE SEALING WASHERS - INCREASE LENGTH IF REQ'D BY OVERLYING FINISH FOR 125" MIN. EMBEDMENT INTO CONCRETE BLOCK.
- BRICK: 1/4" DIA. SELF-TAPPING STAINLESS STEEL MASONRY SCREWS AT 8" O.C. MAX., LENGTH AS REQUIRED FOR 125" MIN. EMBEDMENT. OPTION: 1/4" DIA. x 150" ZAMAC "NAILIN" DRIVE PIN, EXPANSION TYPE FASTENERS @ 8" O.C. MAX., WITH STAINLESS STEEL DRIVE PIN. IF EXPOSED TO THE WEATHER PROVIDE METAL BACKED NEOPRENE SEALING WASHERS - INCREASE LENGTH IF REQ'D BY OVERLYING FINISH FOR 125" MIN. EMBEDMENT INTO BRICK.

[illegible]

OSTEEN ELEMENTARY SCHOOL
REPLACE GUTTERS AND
DOWNSPOUTS
VCS Project No. 2548124
500 DOYLE ROAD, OSTEEN, FL 32764

Architect JAMES W. RIPLEY		ARCHITENOR OF RECORD
DESIGNED BY JWR	DRAWN BY TJG	
ISSUE DATE 3/14/2025	AE PROJECT NUMBER 24020.00	
SHEET TITLE GENERAL ROOFING NOTES, ROOF COMPONENT FASTENING SCHEDULE, AND ABBREVIATIONS		

G02

ROOF AREA	SQ. FT.	GUTTER LIN. FT.	PROPOSED SCOPE OF WORK
A/1	7,426	358	REMOVE EXISTING GUTTER AND DOWNSPOUT. REPLACE WITH NEW 20090" GUTTERS AND EXTRUDED ALUMINUM DOWNSPOUTS AT EXISTING AND NEW LOCATIONS AS INDICATED PER PLANS.
B/2	432	-	
A/2	8,379	312	
B/2	13,516	761	DOWNSPOUTS TO DRAIN ALONG EXISTING GRADE OR TRANSITION TO BELOW GRADE STORMWATER SYSTEM IN PLACE.
C/2	8,370	312	
D/2	976	125	NEW DOWNSPOUTS SHALL REQUIRE CONNECTING TO NEARBY CATCH BASINS WITH NEW STORMWATER OR CONSTRUCTION OF WORKWAY TRENCH SYSTEMS WHERE INDICATED PER PLANS.
E/2	976	125	
A/3	15,560	304	
A/4	11,411	530	
A/5	4,003	181	
B/5	9,501	174	FREESTANDING PAVILION IS DESIGNATED WITHIN THESE DOCUMENTS. THIS BUILDING IS NOT WITHIN THE BASE BID SCOPE OF WORK OF THIS PROJECT, AND NOT SHOWN ON THIS SCHEDULE OR THE OVERALL CAMPUS PLAN BELOW.
C/5	4,013	181	
A/6	3,733	181	
A/7	119	60	
TOTAL = 82,205 (X 1.03 SLOPE FACTOR) = 90,251 SQ. FT. OF TOTAL FOR ALL ROOF AREA 3,676 LN. FT. OF TOTAL GUTTER LENGTH REPLACEMENT AND NEW			



VCS Project No. 2548124
500 DOYLE ROAD, OSTEEN, FL 32764

DESIGNED BY WR	DRAWN BY TJG
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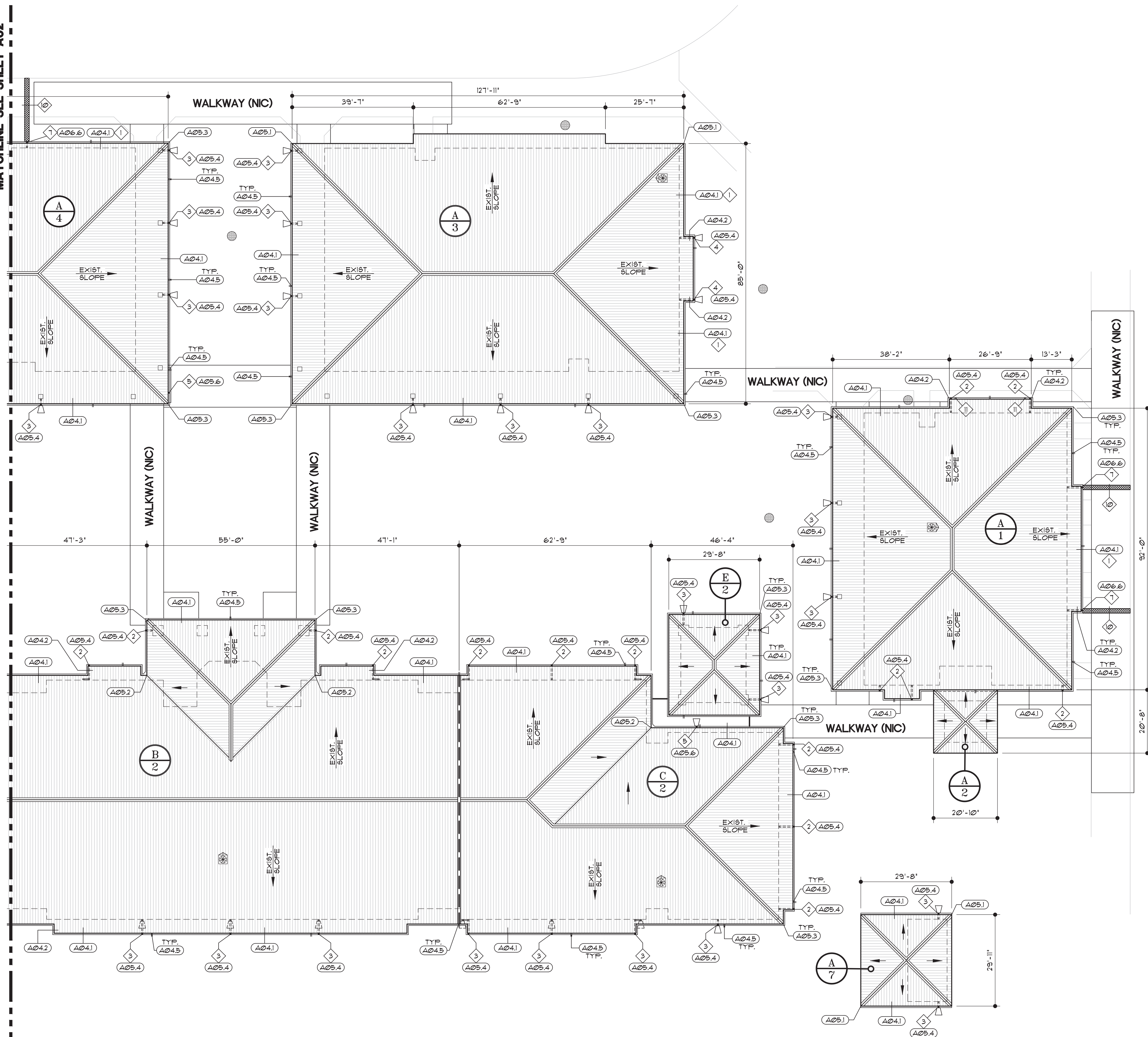
OVERALL ROOF PLAN,
PHYSICAL CHARACTERISTICS
SCHEDULE

A01



A02

MATCHLINE SEE SHEET A02



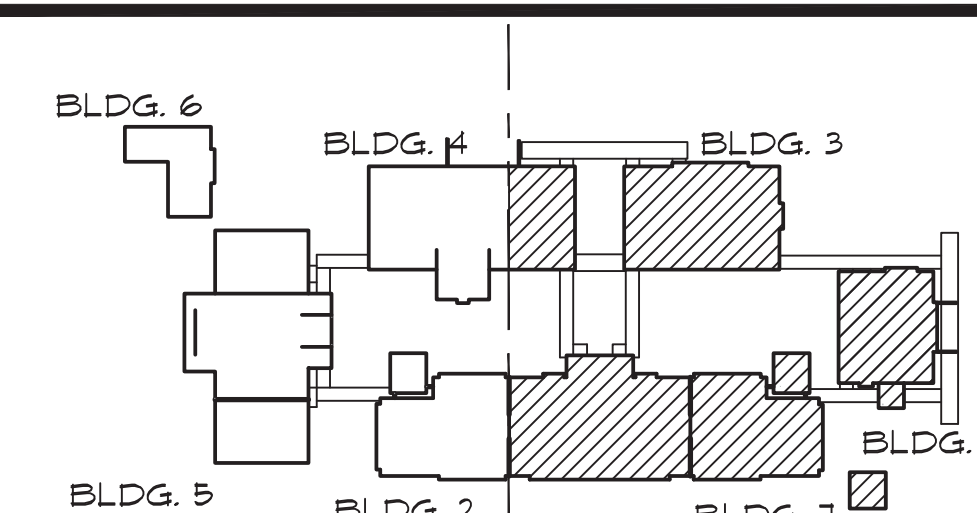
A03.1 PARTIAL PLAN - SOUTH
SCALE: 1/16" = 1'-0"

SYMBOLS LEGEND

- ROOF EDGE
- GUTTER W/ DOWNSPOUT
- TYPICAL GUTTER WITH EXPANSION JOINT
- TYPICAL GUTTER OVERFLOW DIVERTER
- TAPER LINE
- BUILDING BELOW
- AREA DIVIDER
- SANITARY VENT
- STORMWATER DRAIN
- GRAVITY VENT
- SPECIFIC NOTE
- ROOF AREA IDENTIFICATION
- SPECIFIC NOTE TAG

SPECIFIC NOTES

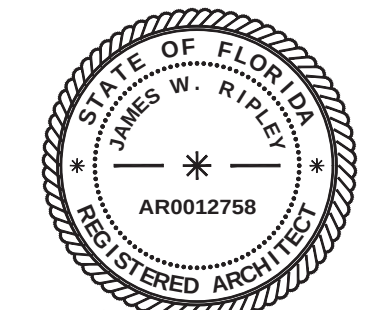
- GUTTER TO BE INSTALLED ALONG PERIMETER EDGE WHERE NONE PREVIOUSLY EXISTED.
- INSTALL NEW 4" SQ. EXTRUDED ALUMINUM DOWNSPOUT AT EXISTING D.S. LOCATION, FIELD VERIFY LENGTH AND ANY REQUIRED OFFSETS. RECONNECT TO EXISTING UNDERGROUND DRAINAGE SYSTEM, SEE DETAIL A06.4
- INSTALL NEW 4" SQ. EXTRUDED ALUMINUM DOWNSPOUT AT EXISTING D.S. LOCATION, FIELD VERIFY LENGTH AND ANY REQUIRED OFFSETS. DISCHARGE AT GRADE PER DETAIL A06.2
- INSTALL NEW 4" SQ. EXTRUDED ALUMINUM DOWNSPOUT AT LOCATION INDICATED ON ROOF PLAN. FIELD VERIFY ACTUAL LOCATION, DISCHARGE AT GRADE PER DETAIL A06.2
- INSTALL NEW 4" SQ. EXTRUDED ALUMINUM DOWNSPOUT AT LOCATION INDICATED ON ROOF PLAN. FIELD VERIFY ACTUAL LOCATION, DISCHARGE ON EXISTING MEMBRANE ROOF WITH SPLASHBLOCK OR METAL WALKWAY WITH NEW ALUMINUM DISTRIBUTION CHANNEL PER DETAIL A05.6.
- INSTALL NEW 4" SQ. EXTRUDED ALUMINUM DOWNSPOUT AT LOCATION INDICATED ON ROOF PLAN. ROUTE DOWNSPOUT ALONG WALL TO AVOID OBSTRUCTIONS. FIELD VERIFY ACTUAL LOCATION, RECONNECT TO EXISTING UNDERGROUND DRAINAGE SYSTEM, SEE DETAIL A06.4
- INSTALL NEW 4" SQ. EXTRUDED ALUMINUM DOWNSPOUT AT LOCATION INDICATED ON ROOF PLAN. FIELD VERIFY ACTUAL LOCATION, DISCHARGE AT GRADE ALONG NEW TRENCH DRAIN SYSTEM INSTALLED. SEE DETAIL A07.1
- EXISTING DOWNSPOUTS TO BE ABANDONED. DOWNSPOUT FROM UPPER ROOF TO LOWER GUTTER AND DOWNSPOUT ROUTED VERTICALLY THAT DRAINS AT CONCRETE TO BE REMOVED AND NOT REPLACED.
- INSTALL NEW 4" SQ. EXTRUDED ALUMINUM DOWNSPOUTS AT EXISTING D.S. LOCATION DOWNSPOUTS TO CONTINUE TO DRAIN FROM UPPER GUTTER TO LOWER, FIELD VERIFY LENGTH AND ANY REQUIRED OFFSETS. RECONNECT TO EXISTING UNDERGROUND DRAINAGE SYSTEM, SEE DETAIL A06.4
- INSTALL NEW DRAINAGE TRENCH AT EXISTING CONCRETE SIDEWALK. FIELD VERIFY LOCATION TO AVOID OBSTACLES WITH NEW DOWNSPOUT. SAW-CUT EXISTING CONCRETE SIDEWALK TO INSTALL PRE-FAB. TRENCH FORM AND CAST CONCRETE PER DETAIL A07.2
- ABANDON DOWNSPOUT LOCATIONS ON WALKWAY CANOPY
- REMOVE EXISTING SPLASH-GUARD AT GUTTER AND REPLACE WITH NEW PRE-FINISHED ALUMINUM GUTTER SPLASH-GUARD PER DETAIL A07.3



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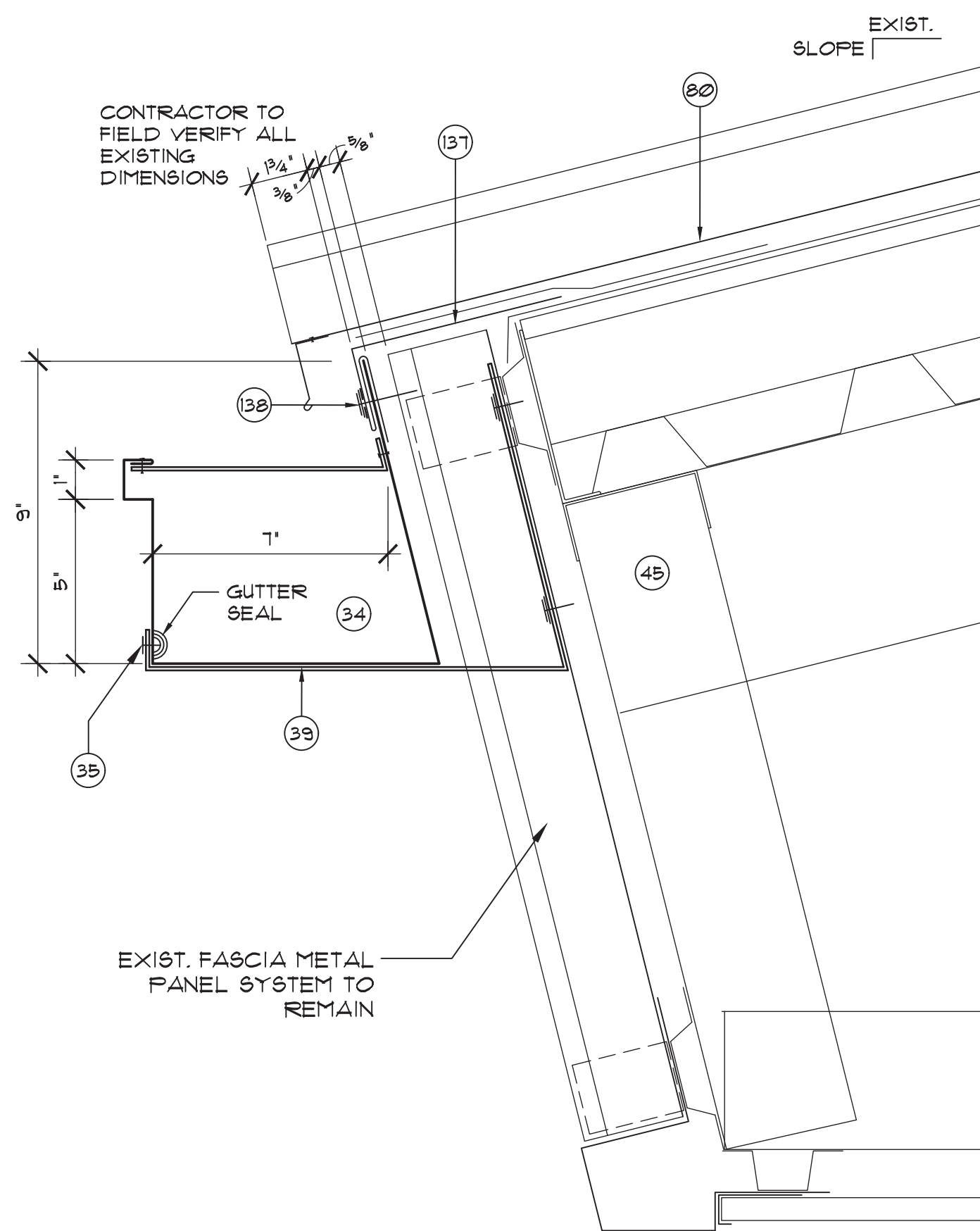
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OSTEEN ELEMENTARY SCHOOL
REPLACE GUTTERS AND
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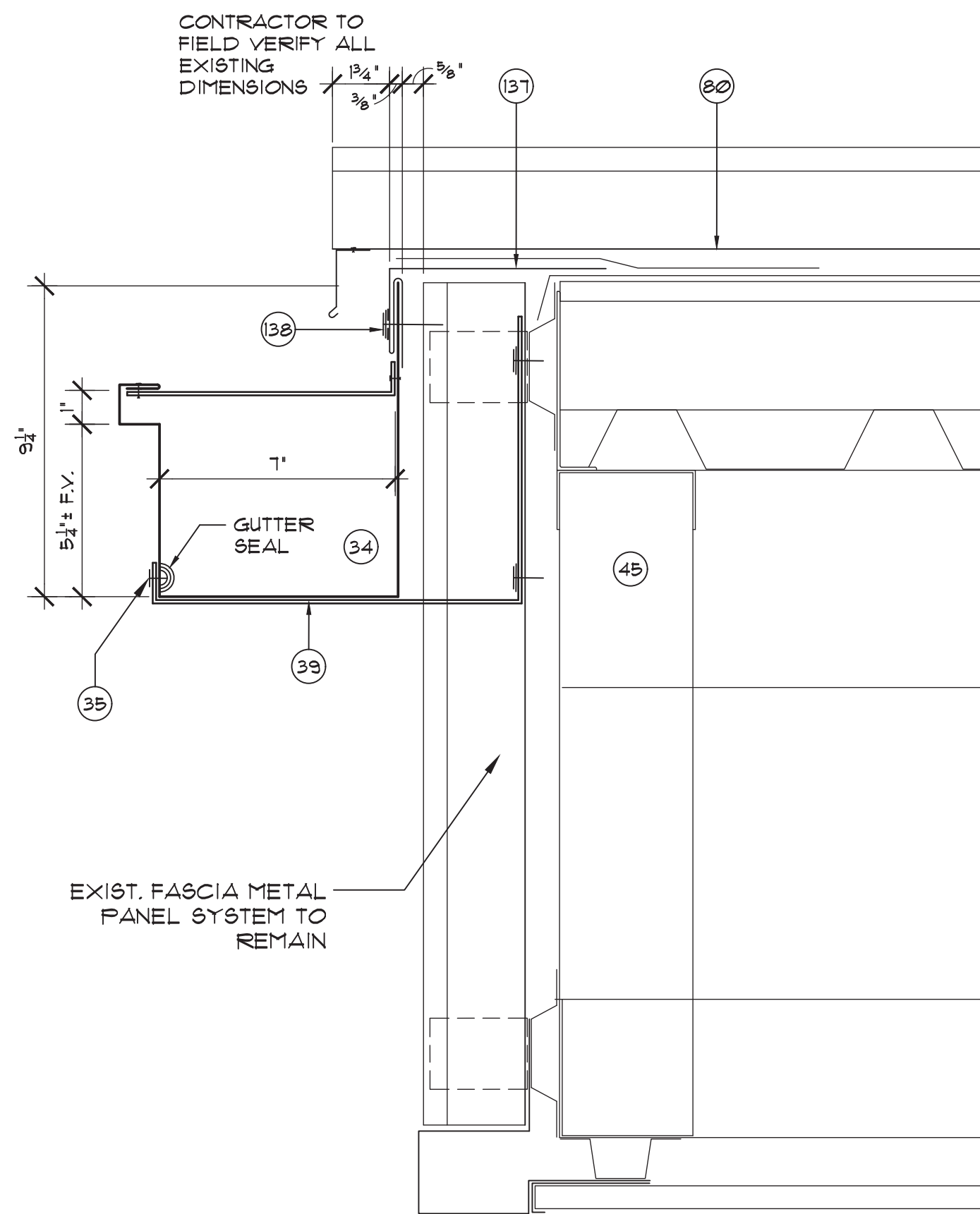
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Architect
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DRAWN BY
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ISSUE DATE
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AE PROJECT NUMBER
24020.00
SHEET TITLE
PARTIAL PLAN - SOUTH,
SYMBOLS LEGEND AND
SPECIFIC NOTES

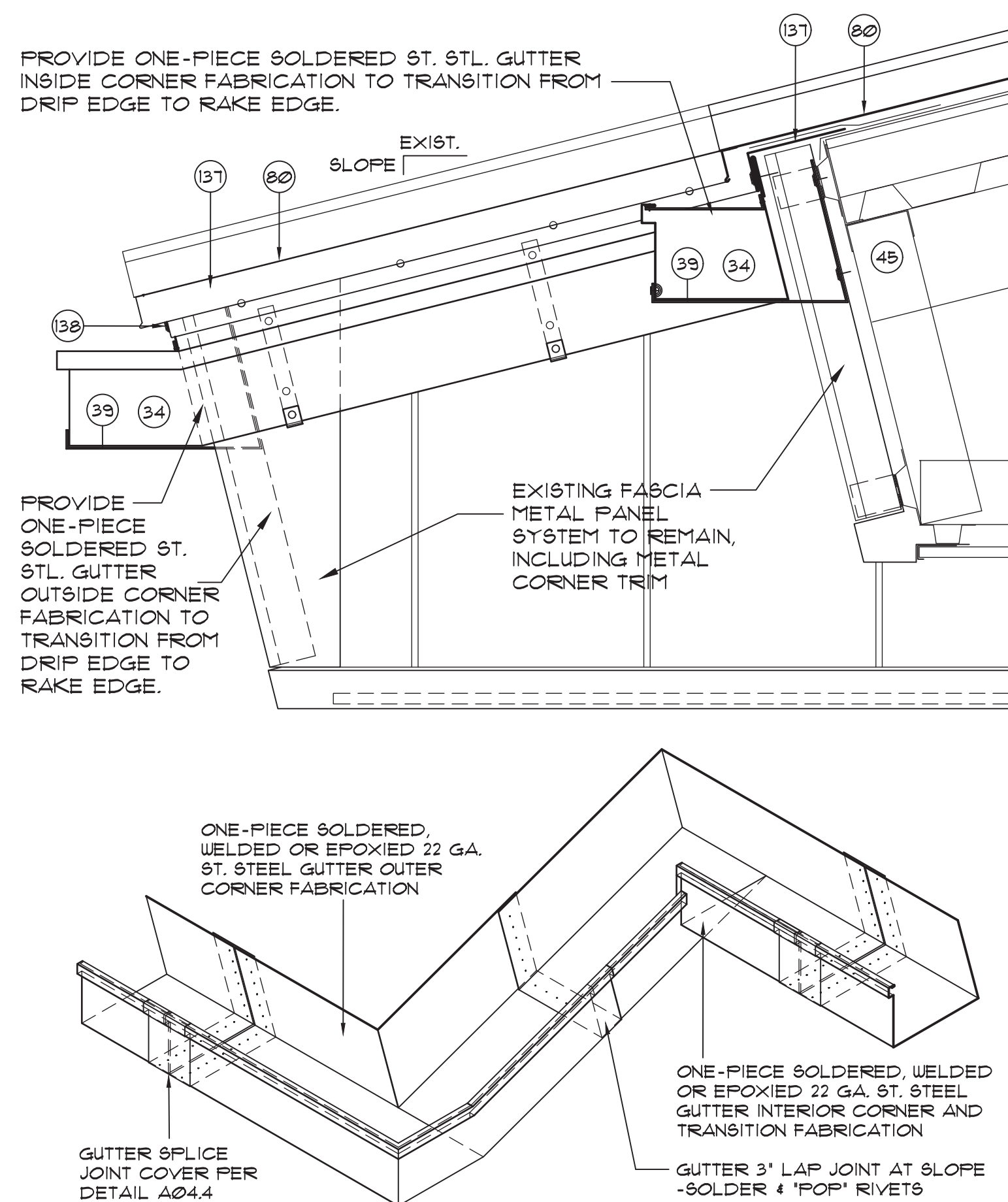
A03



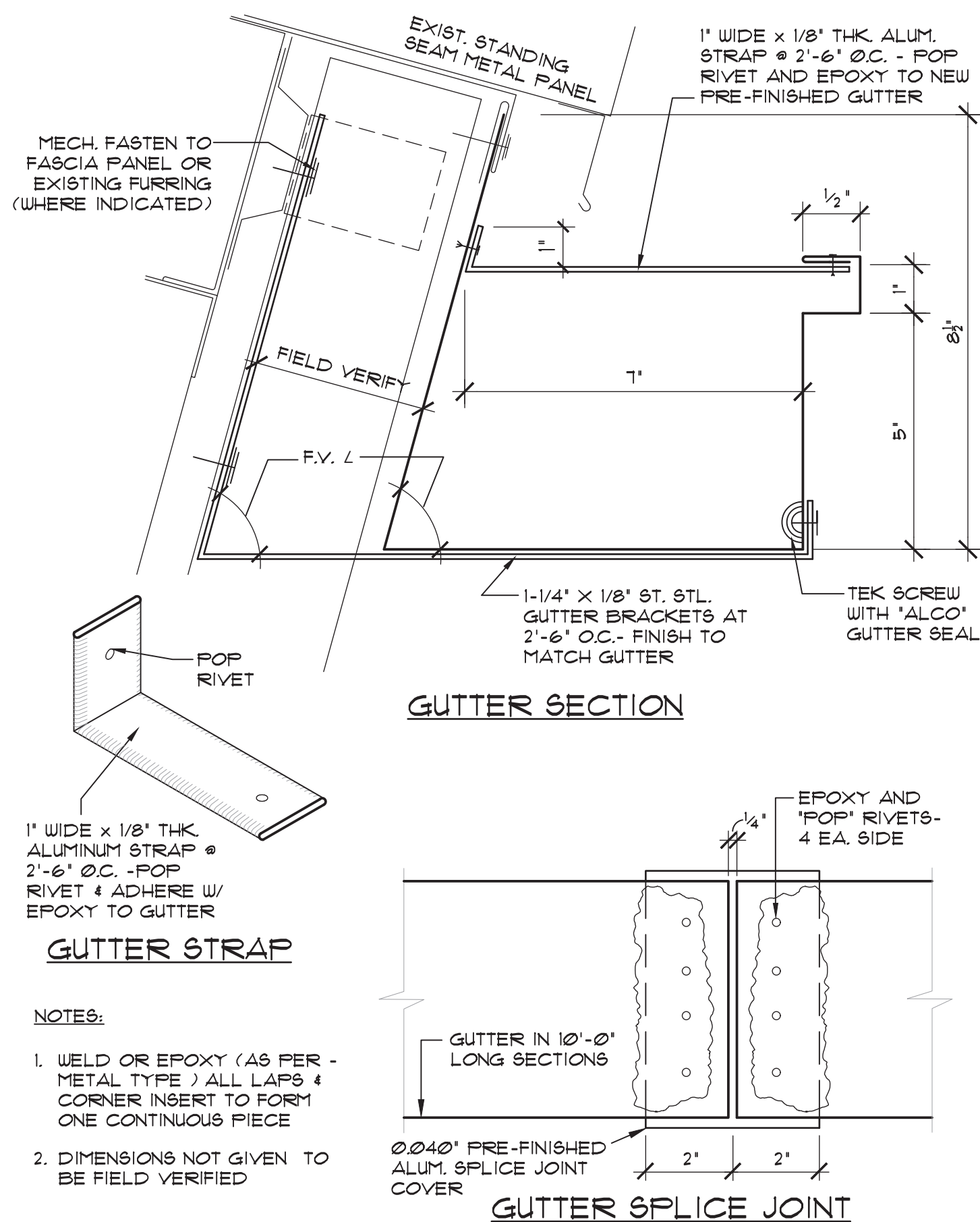
A04.1 TYPICAL PERIMETER DRIP EDGE WITH NEW GUTTER INSTALLATION DETAIL
SCALE: 3" = 1'-0"



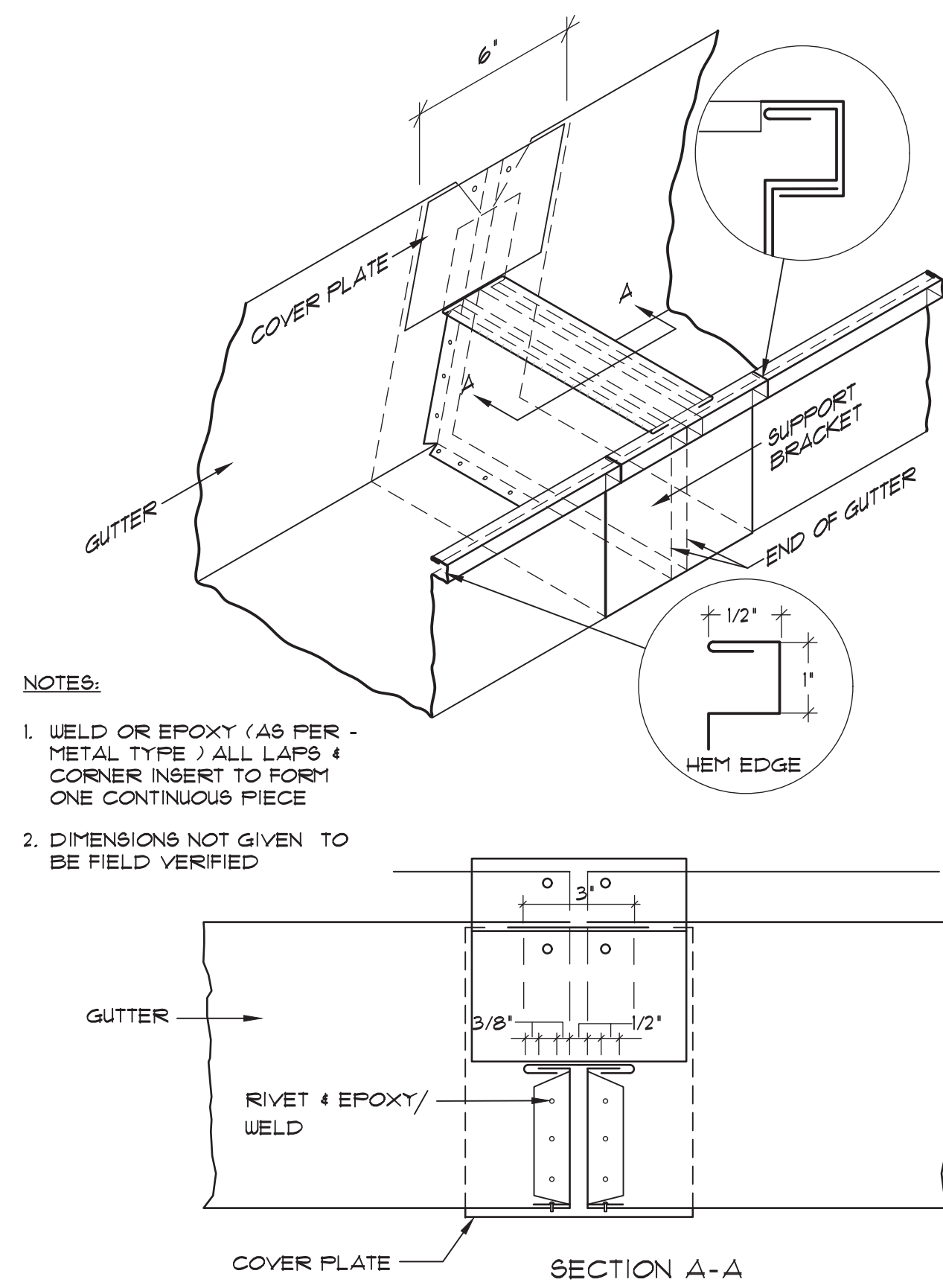
A04.2 TYPICAL PERIMETER RAKE EDGE WITH NEW GUTTER INSTALLATION DETAIL
SCALE: 3" = 1'-0"



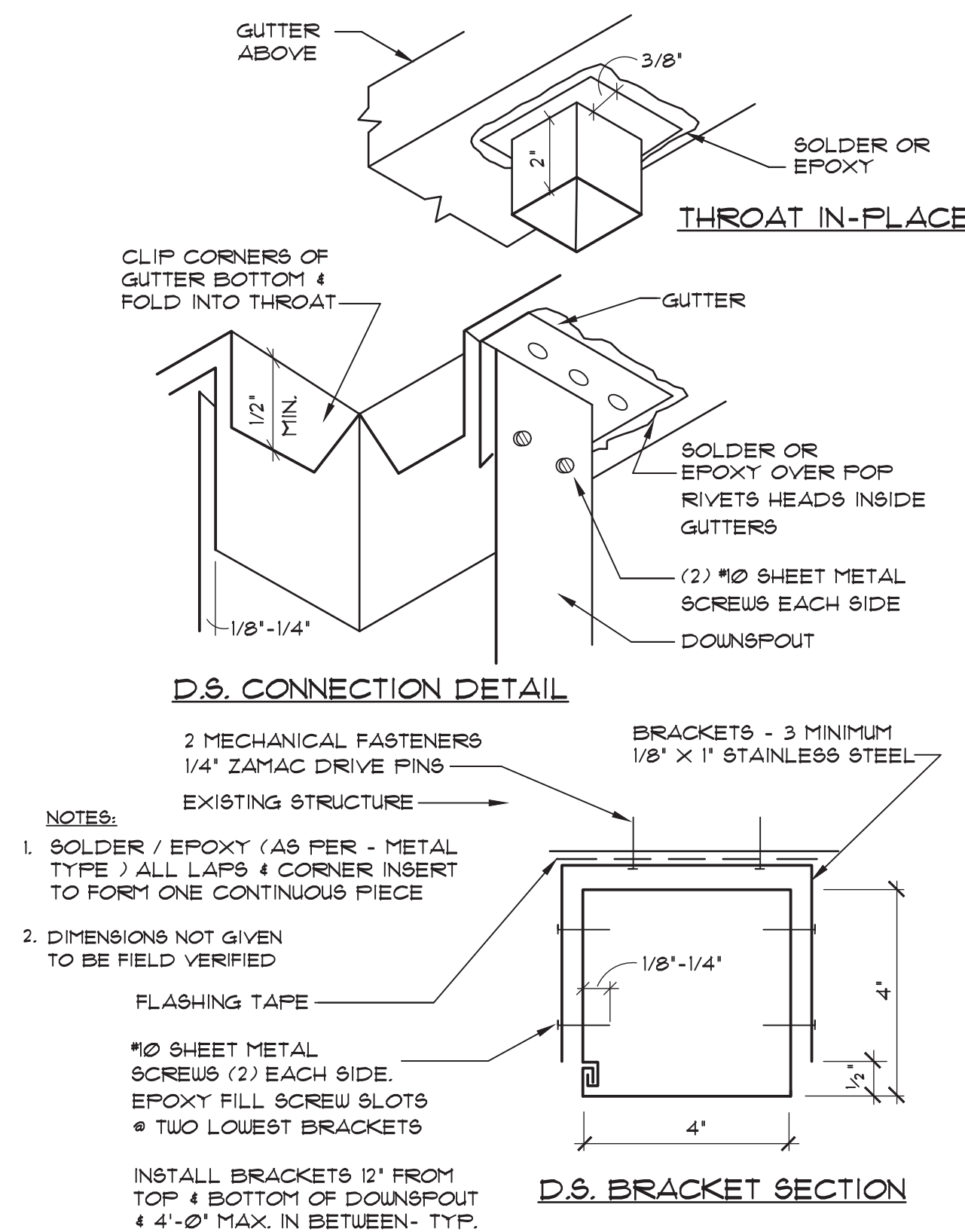
A04.3 SLOPED GUTTER TRANSITION AND FABRICATION DETAILS
SCALE: NONE



A04.4 TYPICAL GUTTER AND SPLICE JOINT FABRICATION DETAILS
SCALE: NONE



A04.5 TYPICAL GUTTER EXPANSION JOINT FABRICATION DETAIL
SCALE: NONE



A04.6 TYP. GUTTER OUTLET FABRICATION AND DOWNSPOUT CONNECTION DETAIL
SCALE: NONE

DETAIL NOTES

2. EXISTING WALL.
34. NEW KYNAR PREFINISHED 0.050" ALUM. GUTTER - SEE DETAIL A04.4.
35. SECURE EACH GUTTER BRACKET TO GUTTER WITH #10 ST. STL. SCREW, THEN SEAL WITH 'ALCO GUTTER SEAL' OR EQUAL.
39. NEW 125" x 1/8" STAINLESS STEEL GUTTER BRACKETS AT 2'-6" O.C. -TREAT, PRIME AND PAINT TO MATCH GUTTER FINISH.
45. EXISTING SOFFIT FRAMING STRUCTURE TO REMAIN UNCHANGED.
80. EXISTING METAL ROOF 4/OR WALL PANEL TO REMAIN UNCHANGED, ROOF EDGE REINFORCING ANGLE IS EXISTING.
137. EXISTING PREFINISHED METAL DRIP EDGE WITH HEMMED RECEIVER TO REMAIN -ADJUST 4/OR REPAIR AS REQUIRED RECEIVE NEW GUTTER.
138. INSERT NEW GUTTER BACK FLANGE INTO EXISTING DRIP EDGE RECEIVER AND LIFT, SECURE GUTTER INTO RECEIVER WITH #10 x 1" ST. STL. SCREW WITH NEOPRENE BACKED WASHER @ 12" O.C. AS SHOWN.

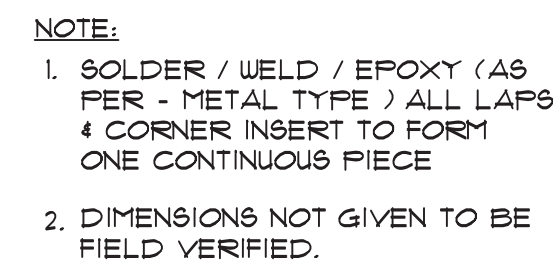
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REVISIONS	
NO.	DESCRIPTION
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SHEET TITLE
TYPICAL GUTTER
INSTALLATION AND
FABRICATION DETAILS
DRAWING NO.



A05.4 TYPICAL DOWNSPOUT SECTION AND DISCHARGE AT BUILDING WITH SOFFIT
SCALE: NONE



A05

