

SERVICE CONTRACTOR FACILITY ONE

CITY OF COLORADO SPRINGS, METRO TRANSIT DIVISION

DESIGN EDGE

architecture interior design

711 N. CASCADE AVE. SUITE 100
COLORADO SPRINGS, CO 80903
TELEPHONE: (719) 667-1972

482 S. BROADWAY
DENVER, COLORADO 80209
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REGISTRATION:

SERVICE CONTRACTOR FACILITY 1
 CITY OF COLORADO SPRINGS METRO TRANSIT
 1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

DRAWING SYMBOLS	GENERAL NOTES	CODE STATEMENT	DRAWING INDEX
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DRAWING SYMBOLS

ROOM NAME AND NUMBER: ROOM NAME: RM. NO.

OPENING NUMBER: (101)

CONSTRUCTION NOTE: (2)

DETAIL REFERENCE NUMBER SHEET NUMBER: (1 / A6.4)

SECTION / ELEVATION NUMBER SHEET NUMBER: (1 / A4.2)

REVISION NOTE:

ELEVATION REFERENCE TO TOP OF FLOOR SLAB. ELEVATION VARIES: DESCRIPTION: ELEVATION 100'-0"

SPOT ELEVATION: 100'-0"

STRUCTURAL GRID: (5)

EXTERIOR WINDOW FRAME NOTE: (A)

FIRE EXTINGUISHER CABINET:

- GENERAL NOTES**
- CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY CONFLICTS OR OMISSIONS IMMEDIATELY PRIOR TO THE PERFORMANCE OF THE WORK IN QUESTION.
 - DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN ALL PARTITION LOCATIONS. ALL DOOR AND OPENING LOCATIONS SHALL BE INDICATED ON PLAN. IN CASE OF CONFLICT, NOTIFY THE ARCHITECT. ALL DIMENSIONS MARKED "CLEAR" SHALL BE MAINTAINED AND SHALL ALLOW FOR THICKNESS OF ALL FINISHES INCLUDING CARPET, PAD, TILE, SHEET VINYL, MAINSCOT, ETC.
 - ITEMS INDICATED IN THIS SET OF DOCUMENTS ARE NOT TO BE ALTERED WITHOUT WRITTEN CONSENT FROM THE ARCHITECT OR ENGINEER. IF ALTERATIONS MADE BY THE OWNER OR CONTRACTOR, THE ARCHITECT AND/OR ENGINEER ASSUME NO RESPONSIBILITY FOR SUCH CHANGES.
 - STRUCTURAL PORTIONS OF THE PROJECT ARE TO BE DESIGN BUILD. THOSE SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR THE DESIGN OF THEIR WORK BY AN ENGINEER LICENSED IN THE APPLICABLE JURISDICTION(S).
 - PROVIDE A.D.A. SIGNAGE FOR THE RESTROOMS PER IBC SECTION 110.1.

CODE STATEMENT

GOVERNING CODES
 2003 FIKES PEAK REGIONAL BUILDING CODE
 2003 INTERNATIONAL BUILDING CODE
 2003 INTERNATIONAL CONSERVATION CODE
 2003 INTERNATIONAL MECHANICAL CODE
 2003 INTERNATIONAL FUEL GAS CODE
 2003 INTERNATIONAL PLUMBING CODE
 2003 NATIONAL ELECTRICAL CODE
 2003 ICC/ANSI A111 ASSEMBLY STANDARDS
 2003 INTERNATIONAL FIRE CODE, PLUS AMENDMENTS

CODE DATA
 OCCUPANCY CLASSIFICATION: B
 CONSTRUCTION TYPE: V-B NON SPRINKLED

EXTERIOR WALL PROTECTION
 ALL WALLS NON PROTECTED DUE TO REQUIRED DISTANCE SEPARATION

FLOOR / CEILING ASSEMBLY REQUIREMENT
 NON-RATED

ROOF / CEILING ASSEMBLY
 NON-RATED

FIRE SPRINKLERS
 NON SPRINKLED

AREA AND HEIGHT CALCULATION:
 SQUARE FOOTAGE (BASIC ALLOWED) B OCCUPANCY = 9,000 GSF

<u>BUILDING AREA</u>	<u>ACTUAL</u>	<u>ALLOWED</u>
1ST FLOOR	3,560 GSF	9000 GSF

NUMBER OF STORIES PER TABLE 503

ONE	TWO
-----	-----

BUILDING HEIGHT

18'-0" (TOP OF PARAPET)	60'-0"
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OCCUPANCY LOAD CALCULATION:
 OCCUPANCY LOAD FACTOR = 100 GROSS
 TOTAL NO. OF OCCUPANTS = 3560/100 = 36 OCCUPANTS

PLUMBING FIXTURE CALCULATION
 TOTAL NO. OF MEN: 18
 TOTAL NO. OF WOMEN: 18

FIXTURE TYPE:	REQUIRED		PROVIDED	
	MEN	WOMEN	MEN	WOMEN
TOILETS	1	1	1	2
URINALS	NONE		1	
LAVATORIES	2	2	2	2
MOP SINK		1 (ONE)		1 (ONE)
DRINKING FOUNTAIN		SINK IN BREAK AREA FOR WATER		

DRAWING INDEX

DATA SHEET	STRUCTURAL
T.1 PROJECT INFORMATION SHEET	S1 FOUNDATION PLAN
	S2 FOUNDATION DETAILS AND NOTES
CIVIL	MECHANICAL
1/4 GRADING AND EROSION CONTROL PLAN COVER SHEET	M1 HVAC SCHEDULES
2/4 GRADING AND EROSION CONTROL PLAN	M2 HVAC PLAN
3/4 GRADING AND EROSION CONTROL DETAILS	M3 HVAC DETAILS
4/4 POND DETAIL DETAILS	
1/2 PARTIAL DETAIL GRADING PLAN	PLUMBING
2/2 PARTIAL DETAIL GRADING PLAN	P1 PLUMBING LEGENDS
1/1 UTILITY SERVICE PLAN	P2 PLUMBING SCHEDULES
	P3 UNDERGROUND PLUMBING PLAN
LANDSCAPE AND IRRIGATION	P4 PLUMBING PLAN
LP-01 LANDSCAPE PLAN	P5 ROOF PLUMBING PLAN
LP-02 LANDSCAPE NOTES AND DETAILS	P6 PLUMBING RISER DIAGRAMS
IR-1 IRRIGATION PLAN	P7 PLUMBING DETAILS
IR-2 IRRIGATION NOTES	
IR-3 DRIP DETAILS	ELECTRICAL
	E1 ELECTRICAL LEGENDS, NOTES & ONE-LINE DIAGRAM
ARCHITECTURAL	E2 ELECTRICAL SITE PLAN & DETAILS
A1.0 COLD STEEL FRAMING NOTES AND DETAILS	E3 LIGHTING PLAN
A1.1 FIRST FLOOR PLAN	E4 POWER PLAN
A1.2 REFLECTED CEILING PLAN	E5 ELECTRICAL SCHEDULES
A1.3 ROOF PLAN	
A2.1 BUILDING ELEVATIONS	
A3.1 BUILDING SECTIONS	
A4.1 WALL SECTIONS	
A4.2 WALL SECTIONS & DETAILS	
A5.1 INTERIOR ELEVATIONS	
A6.1 OPENING ELEVATIONS & SCHEDULES, OPENING DETAILS	

GRAPHIC SYMBOLS

CONTINUOUS LINE INDICATES NEW WALL PARTITION:

OVERHEAD LINES (ROOF, ETC.):

NEW METAL STUD PARTITION:

ONE HOUR RATED WALL CONSTRUCTION:

TWO HOUR RATED WALL CONSTRUCTION:

EARTH:

CONCRETE:

GRAVEL:

METAL STUD:

WOOD STUD FRAMING:

WOOD BLOCKING:

INSULATION:

WALL PANEL:

BRICK:

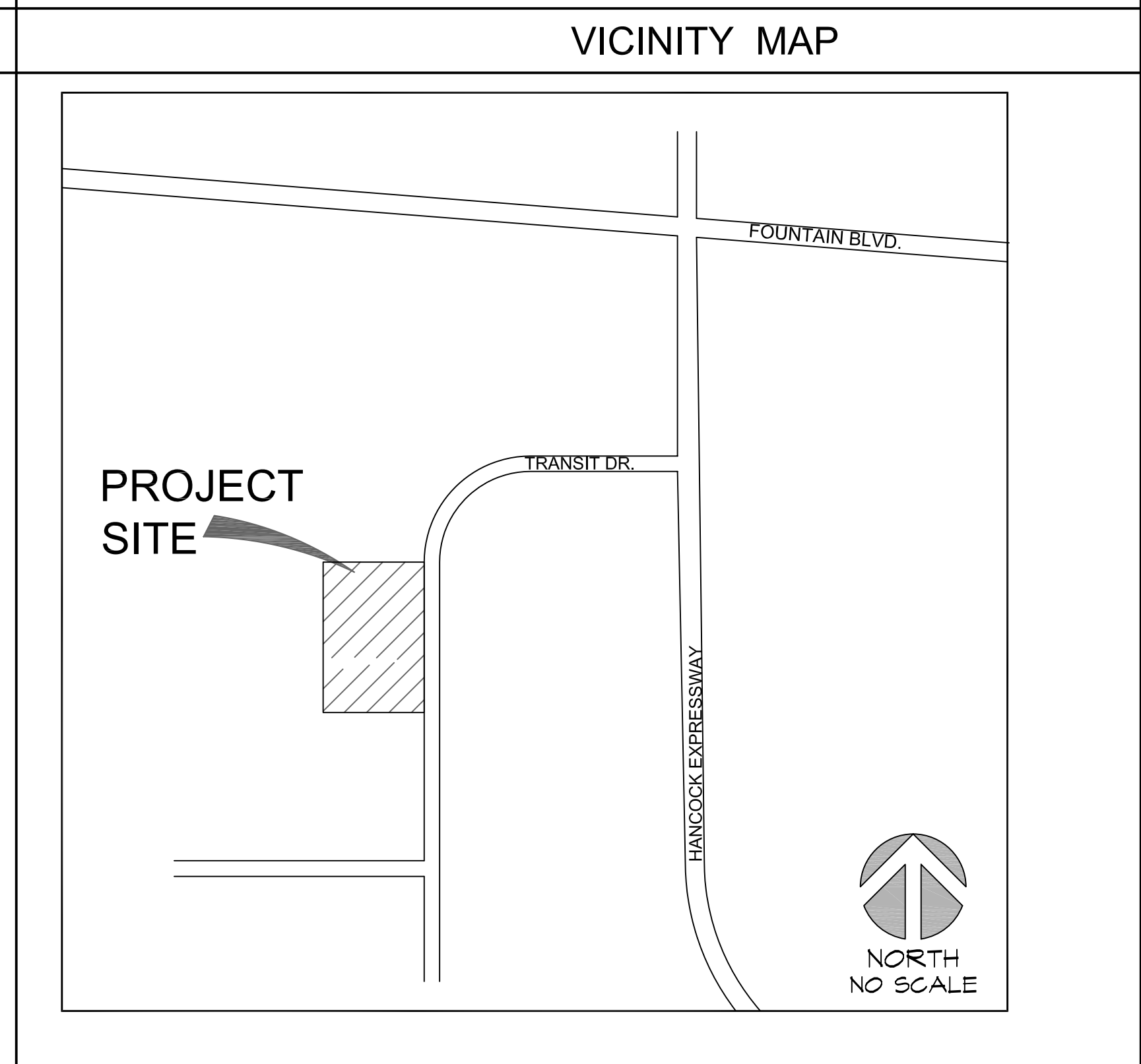
STEEL:

PLYWOOD:

GYPSUM BOARD:

ABBREVIATIONS

ACP ACOUSTICAL CEILING PANEL	MAX MAXIMUM
AFF ABOVE FINISH FLOOR	MIN MINIMUM
ALUM ALUMINUM	MO MASONRY OPENING
ANOD ANODIZED	MT CONCRETE MICROTOPPING
4 ANGLE	
BBT BIO-BASED TILE	NIC NOT IN CONTRACT NUMBER
BD BOARD	NTS NOT TO SCALE
BM BEAM	
B.O. BOTTOM OF	OC ON CENTER
BTM BOTTOM	OD OVERFLOW DRAIN
CJ CONTROL JOINT	+/- PLUS OR MINUS
CLF CENTER LINE	
CLM CHAIN-LINK FENCE	PLAM PLASTIC LAMINATE
CMU CONCRETE MASONRY UNIT	FR FAIR
CONC CONCRETE	
CT CERAMIC TILE	
DIA DIAMETER	RAD RADIUS
(E) EXISTING	RB RUBBER BASE
EIFS EXTERIOR INSULATION & FINISH SYSTEM	RD ROOF DRAIN
EXP EXPANSION JOINT	REF REFER TO
EJ ELEVATION	R.O. ROUGH OPENING
EQ EQUAL	
ENG ELECTRIC WATER COOLER	ST STAIN
FD FLOOR DRAIN	TB TOWEL BAR (LENGTH AS NOTED)
FEC FIRE EXTINGUISHER CABINET	TBD TO BE DETERMINED
FNG FLOORING MATERIAL CHANGE	T.O. TOP OF
FRT FIRE RETARDANT TREATED	TP TOILET PAPER HOLDER
FV FIELD VERIFY	TR TOWEL RING
	TS TUBE STEEL
	TYP TYPICAL
GA GAUGE	
GB GYPSUM BOARD	UNO UNLESS NOTED OTHERWISE
GC GENERAL CONTRACTOR	
GYP GYPSUM	
	VB VINYL BASE
HM HOLLOW METAL	VCT VINYL COMPOSITION TILE
LAM LAMINATE	
	WIF WROUGHT IRON FENCE
	WD WOOD



PARTICIPANTS

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ISSUE DATES:
 ISSUED FOR BID 03/24/2010

PROJECT NO. 9016
 DRAWN BY: SGT
 CHECKED BY: SGT
 DATE: 03/24/2010

SHEET TITLE:
 DRAWING INDEX: PARTICIPANTS;
 CODE STATEMENT: VICINITY MAP
 GEN'L NOTES: ABBREVIATIONS;
 DRAWING & MATERIAL SYMBOLS

SHEET NO.
T-1

GENERAL NOTES:

- ALL PAVING AND CURB & GUTTER SHALL BE CONSTRUCTED SO AS NOT TO OBSTRUCT THE DRAINAGE PATHS. GRADES SHALL BE MAINTAINED AS SHOWN IN THESE PLANS FOR THE DRAINAGE PATHS. IF THIS CANNOT BE ACCOMPLISHED, THEN THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CORRECTION.
- POSITIVE DRAINAGE AWAY FROM THE BUILDING SHALL BE MAINTAINED DURING AND AFTER SITE CONSTRUCTION. SWALES SHALL BE CONSTRUCTED AROUND BUILDINGS TO DIRECT DRAINAGE AWAY FROM STRUCTURES.
- SITE CONSTRUCTION INCLUDING PAVING AND CURB & GUTTER INSTALLATION SHALL MAINTAIN POSITIVE DRAINAGE AS SHOWN ON THIS PLAN. STANDING WATER OR PONDING ANYWHERE ON THE SITE IS UNACCEPTABLE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK. THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NONEXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.

BASIC GRADING, EROSION AND STORMWATER QUALITY REQUIREMENTS AND GENERAL PROHIBITIONS:

- *INFORMATION TAKEN FROM THE CITY OF COLORADO SPRINGS DRAINAGE CRITERIA MANUAL VOLUME 2, HEREIN REFERRED TO AS THE "MANUAL."
- STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS.
 - CONCRETE WASH WATER SHALL NOT BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM FACILITIES.
 - BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. BMP'S MAY BE REQUIRED BY CITY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES (E.G., ESTIMATED TIME OF EXPOSURE, SEASON OF THE YEAR, ETC.).
 - VEHICLE TRACKING OF SOILS OFF-SITE SHALL BE MINIMIZED.
 - ALL WASTES COMPOSED OF BUILDING MATERIALS MUST BE REMOVED FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
 - NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE CITY ENGINEER. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
 - BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
 - ALL PERSONS ENGAGED IN EARTH DISTURBANCE SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BMP'S IN CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS OF THE MANUAL AND IN ACCORDANCE WITH THE EROSION AND STORMWATER QUALITY CONTROL PLAN APPROVED BY THE CITY OF COLORADO SPRINGS, IF REQUIRED.
 - ALL TEMPORARY EROSION CONTROL FACILITIES INCLUDING BMP'S AND ALL PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF ANY EARTH DISTURBANCE OPERATIONS, SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS AND THE MANUAL AND MAINTAINED THROUGHOUT THE DURATION OF THE EARTH DISTURBANCE OPERATION. THE INSTALLATION OF THE FIRST LEVEL OF TEMPORARY EROSION CONTROL FACILITIES AND BMP'S SHALL BE INSTALLED AND INSPECTED PRIOR TO ANY EARTH DISTURBANCE OPERATIONS TAKING PLACE.
 - ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION.
 - ALL EARTH DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED IN SUCH A MANNER SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME.
 - ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
 - SUSPENDED SEDIMENT CAUSED BY ACCELERATED SOIL EROSION SHALL BE MINIMIZED IN RUNOFF WATER BEFORE IT LEAVES THE SITE OF THE EARTH DISTURBANCE.
 - ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE DESIGNED TO LIMIT THE DISCHARGE TO A NON-EROSIVE VELOCITY.
 - TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO THE STANDARDS AND SPECIFICATIONS PRESCRIBED IN THE MANUAL, AND IN ACCORDANCE WITH THE PERMANENT EROSION CONTROL FEATURES SHOWN ON THE EROSION AND STORMWATER QUALITY CONTROL PLANS APPROVED BY THE CITY OF COLORADO SPRINGS, IF REQUIRED.
 - SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN TWENTY ONE (21) CALENDAR DAYS AFTER FINAL GRADING, OR FINAL EARTH DISTURBANCE HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMP'S SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.
 - NO PERSON SHALL CAUSE, PERMIT, OR CONTRIBUTE TO THE DISCHARGE INTO THE MUNICIPAL SEPARATE STORM SEWER POLLUTANTS THAT COULD CAUSE THE CITY OF COLORADO SPRINGS TO BE IN VIOLATION OF ITS COLORADO DISCHARGE PERMIT SYSTEM MUNICIPAL STORMWATER DISCHARGE PERMIT.
 - THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
 - NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER, INCLUDING THE TEMPORARY OR PERMANENT RAMPING WITH MATERIALS FOR VEHICLE ACCESS.
 - INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), REGULATIONS PROMULGATED, CERTIFICATIONS OR PERMITS ISSUED, IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE MANUAL. IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND WATER QUALITY CONTROL LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL OR STATE AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
 - THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS. MATERIALS SHALL NOT BE STORED IN A LOCATION WHERE THEY MAY BE CARRIED BY STORMWATER RUNOFF INTO A STATE WATER AT ANY TIME.
 - SPILL PREVENTION AND CONTAINMENT MEASURES SHALL BE USED AT STORAGE, AND EQUIPMENT FUELING AND SERVICING AREAS TO PREVENT THE POLLUTION OF ANY STATE WATERS, INCLUDING WETLANDS. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY, OR CONTAINED UNTIL APPROPRIATE CLEANUP METHODS CAN BE EMPLOYED. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE FOLLOWED, ALONG WITH PROPER DISPOSAL METHODS.

STANDARD GRADING AND EROSION CONTROL PLAN NOTES

- ANY LAND DISTURBANCE BY ANY OWNER, DEVELOPER, BUILDER, CONTRACTOR, OR OTHER PERSON SHALL COMPLY WITH THE BASIC GRADING, EROSION AND STORMWATER QUALITY CONTROL REQUIREMENTS AND GENERAL PROHIBITIONS NOTED IN THE DRAINAGE CRITERIA MANUAL VOLUME 2.
- NO CLEARING, GRADING, EXCAVATION, FILLING OR OTHER LAND DISTURBING ACTIVITIES SHALL BE PERMITTED UNTIL SIGNOFF AND ACCEPTANCE OF THE GRADING PLAN AND EROSION AND STORMWATER QUALITY CONTROL PLAN IS RECEIVED FROM CITY ENGINEERING.
- THE INSTALLATION OF THE FIRST LEVEL OF TEMPORARY EROSION CONTROL FACILITIES AND BMP'S SHALL BE INSTALLED AND INSPECTED PRIOR TO ANY EARTH DISTURBANCE OPERATIONS TAKING PLACE. CALL CITY STORMWATER INSPECTIONS, 385-5980, 48 HOURS PRIOR TO CONSTRUCTION.
- SEDIMENT (MUD AND DIRT) TRANSPORTED ONTO A PUBLIC ROAD, REGARDLESS OF THE SIZE OF THE SITE, SHALL BE CLEANED AT THE END OF EACH DAY.
- CONCRETE WASH WATER SHALL NOT BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN TWENTY-ONE (21) CALENDAR DAYS AFTER FINAL GRADING OR FINAL EARTH DISTURBANCE HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMP'S SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.
- THE GRADING AND EROSION CONTROL PLAN WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF COLORADO SPRINGS ENGINEERING SHOULD ANY OF THE FOLLOWING OCCUR: GRADING DOES NOT COMMENCE WITHIN 12 MONTHS OF THE CITY ENGINEER'S ACCEPTANCE OF THE PLAN, A CHANGE IN PROPERTY OWNERSHIP, PROPOSED DEVELOPMENT CHANGES, OR PROPOSED GRADING REVISIONS.
- THE PLAN SHALL NOT SUBSTANTIALLY CHANGE THE DEPTH OF COVER, OR ACCESS TO UTILITY FACILITIES. ADDITIONALLY, THE PLAN SHALL NOT INCREASE OR DIVERT WATER TOWARDS UTILITY FACILITIES. ANY CHANGES TO UTILITY FACILITIES TO ACCOMMODATE THE PLAN, MUST BE DISCUSSED AND AGREED TO BY THE AFFECTED UTILITY PRIOR TO IMPLEMENTING THE PLAN. THE RESULTING COST TO RELOCATE OR PROTECT UTILITIES, OR PROVIDE INTERIM ACCESS IS AT THE EXPENSE OF THE PLAN APPLICANT.

TIMING
ANTICIPATED STARTING AND COMPLETION TIME PERIOD OF SITE GRADING: SPRING 2010

EXPECTED DATE ON WHICH THE FINAL STABILIZATION WILL BE COMPLETED: FALL 2011

AREAS
TOTAL AREA OF THE SITE TO BE CLEARED, EXCAVATED, OR GRADED: 1.1 ACRES

RECEIVING WATERS
NAME OF RECEIVING WATERS: MISCELLANEOUS DRAINAGE BASIN

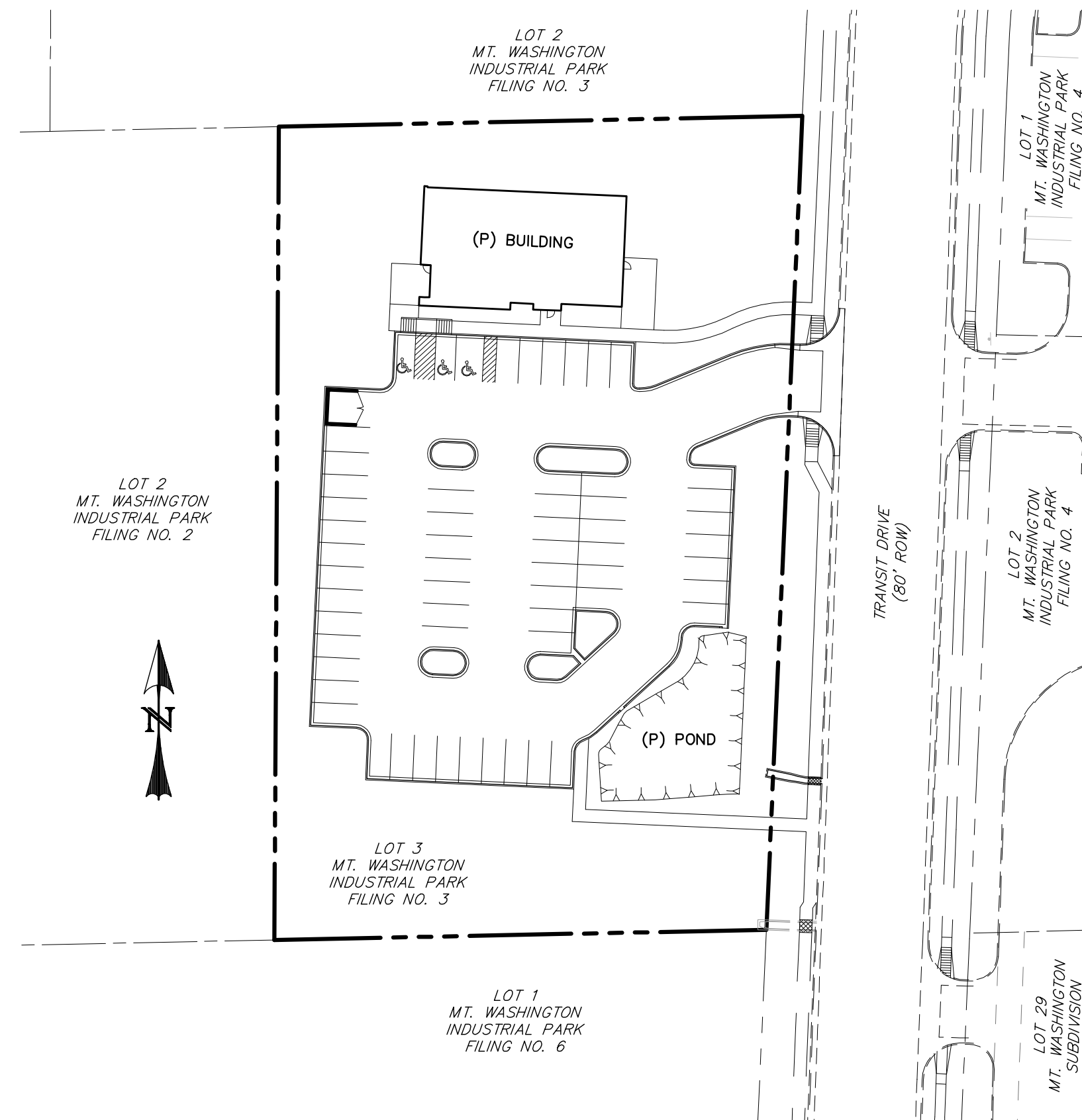
SOILS
NELSON-TASSEL FINE SANDY LOAMS

MOUNTAIN METRO TRANSIT

1070 TRANSIT DRIVE

GRADING & EROSION CONTROL PLAN

CITY OF COLORADO SPRINGS, EL PASO COUNTY, COLORADO

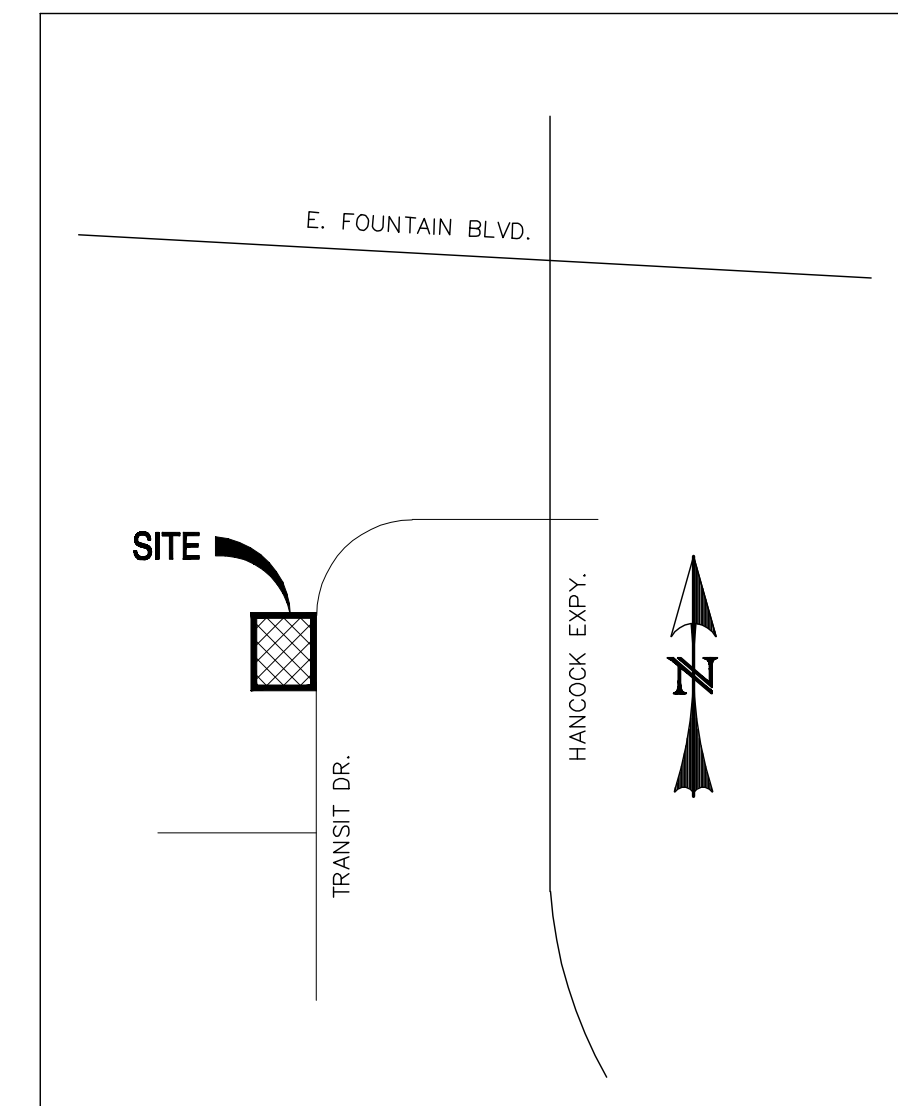
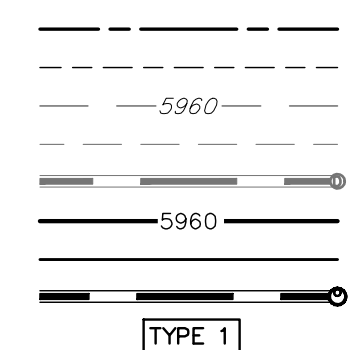


GRADING & EROSION CONTROL OPINION OF PROBABLE COST			
DESCRIPTION	QUANTITY	UNIT COST	TOTAL COST
EROSION CONTROL - SILT FENCE	494 LF	\$ 3 /LF	\$ 1,482
EROSION CONTROL - CURB SOCK	4 EA	\$ 4 /EA	\$ 16
SEED & MULCH	0.7 AC	\$ 300 /AC	\$ 210
WATER QUALITY POND W/ OUTFALL	1 LS	\$ 5,000 /LS	\$ 5,000
VEHICLE TRACKING CONTROL	1 EA	\$ 500 /EA	\$ 500
SUB-TOTAL			\$ 7,208
MAINTENANCE	1 LS	25 %	\$ 1,802
TOTAL			\$ 9,010

NOTE: THIS OPINION OF PROBABLE COST IS MADE ON THE BASIS OF EXPERIENCE AND QUALIFICATIONS AND REPRESENTS WESTWORKS ENGINEERING'S BEST JUDGMENT AS AN EXPERIENCED AND QUALIFIED PROFESSIONAL FIRM, FAMILIAR WITH THE CONSTRUCTION INDUSTRY. WESTWORKS ENGINEERING CANNOT AND WILL NOT GUARANTEE THAT ACTUAL CONSTRUCTION COSTS WILL NOT VARY FROM THIS OPINION OF PROBABLE COST.

LEGEND

EXISTING (E)	ANGLE POINT AP, ANG PNT	LOT LINE
PROPOSED (P)	CURB RETURN CR	EASEMENT
ADDRESS (1234)	BEGIN TRANSITION BT	(E) CONTOUR, INDEX
CURB AND GUTTER C&G	END TRANSITION ET	(E) CONTOUR
EASEMENT ESMT	INVERT INV	(E) STORM SEWER
ELEVATION EL, ELEV	STORM STM	(P) CONTOUR, INDEX
TEMPORARY TEMP	TOP OF WALL TOW	(P) CONTOUR
LINEAR FEET LF	BOTTOM OF WALL BOW	(P) STORM SEWER, MH
RIGHT-OF-WAY ROW	TYPICAL TYP	CURB TYPE CALL-OUT
CENTERLINE CL	GRADE BREAK GB	
FLOWLINE FL	BOUNDARY	
RADIUS R	RIGHT-OF-WAY	



ENGINEERS STATEMENT

THIS EROSION CONTROL/GRADING PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. IF SUCH WORK IS PERFORMED IN ACCORDANCE WITH THE GRADING AND EROSION CONTROL PLAN, THE WORK WILL NOT BECOME A HAZARD TO LIFE AND LIMB, ENDANGER PROPERTY, OR ADVERSELY AFFECT THE SAFETY, USE, OR STABILITY OF A PUBLIC WAY, DRAINAGE CHANNEL, OR OTHER PROPERTY.

CHAD D. KUZBEK, COLORADO P.E. NO. 35751
FOR AND ON BEHALF OF WESTWORKS ENGINEERING

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FAX: (719) 685-1429

DEVELOPERS/OWNERS STATEMENT

THE OWNER WILL COMPLY WITH THE REQUIREMENTS OF THE EROSION AND STORMWATER QUALITY CONTROL PLAN. THE OWNER WILL COMPLY WITH THE INSPECTION REQUIREMENTS PER THE EL PASO COUNTY/COLORADO SPRINGS DRAINAGE CRITERIA MANUAL, VOL. 2, SECTION 3.2. I ACKNOWLEDGE THE RESPONSIBILITY TO DETERMINE WHETHER THE CONSTRUCTION ACTIVITIES ON THESE PLANS REQUIRE COLORADO DISCHARGE PERMIT SYSTEM (CDPS) PERMITTING FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY.

DEVELOPER/OWNER SIGNATURE: _____ DATE: _____
DBA: _____ PHONE: _____
TITLE: _____ FAX: _____
NAME: _____ EMAIL: _____
ADDRESS: _____

CITY OF COLORADO SPRINGS GRADING AND EROSION CONTROL REVIEW

THIS GRADING PLAN IS FILED IN ACCORDANCE WITH SECTION 7.7.1503 (ENACTED AS ORD. 82-56) OF THE CODE OF THE CITY OF COLORADO SPRINGS, 2001, AS AMENDED. EROSION CONTROL IS REVIEWED IN ACCORDANCE WITH THE DRAINAGE CRITERIA MANUAL, VOLUME 1 (OCTOBER 1994) AND VOLUME 2 (AUGUST 2002); LATEST REVISIONS.

FOR THE CITY ENGINEER: _____ DATE: _____
NOTES: _____

BENCHMARK:

NORTHWESTERLY PROPERTY CORNER; A REBAR AND CAP MARKED "PLS 13226".
ELEVATION = 6009.41 [NGVD 1929 FIMS DATUM]

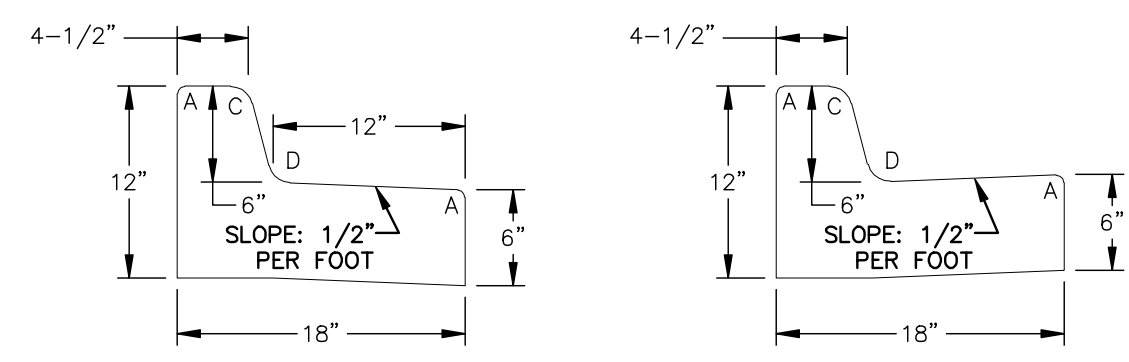
BASIS OF BEARINGS:

ASSUMED: NORTH BOUNDARY WHICH BEARS S88°49'07"W A DISTANCE OF 205.99 FEET.

SHEET INDEX:

TITLE SHEET	1 OF 4
DETAILED GRADING & EROSION CONTROL PLAN	2 OF 4
DETAIL SHEET	3 OF 4
POND OUTFALL DETAIL SHEET	4 OF 4

<p>811 Know what's below. Call 72 hours before you dig. For more details visit: www.call811.com</p>	<p>PREPARED FOR: CITY OF COLORADO SPRINGS TRANSIT DIVISION 1015 TRANSIT DRIVE COLORADO SPRINGS, CO 80903</p>	<p>PREPARED UNDER MY DIRECT SUPERVISION FOR AND BEHALF OF WESTWORKS ENGINEERING.</p> <p>CHAD D. KUZBEK, COLORADO PE #35751 DATE: _____</p>	<p>WESTWORKS ENGINEERING 1023 W. COLORADO COLORADO SPRINGS, CO 80904 (719) 685-1670</p>	<p>MOUNTAIN METRO TRANSIT 1070 TRANSIT DRIVE</p>	DESIGNED BY: MGP SCALE: N/A	DRAWN BY: MGP DATE: 03/22/10
				<p>GRADING & EROSION CONTROL PLAN</p>	JOB NUMBER: 90910	SHEET: 1 OF 4

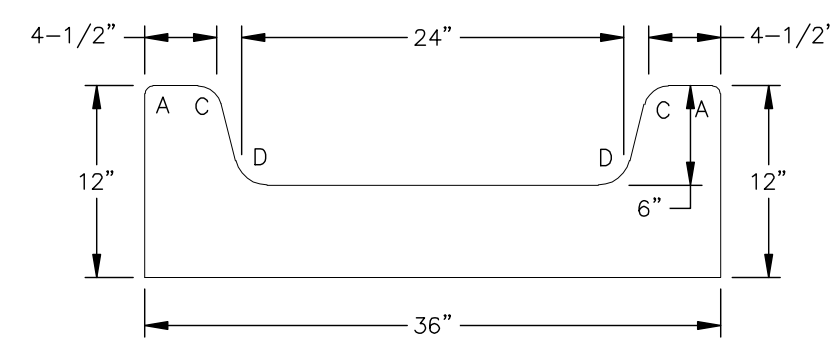


TYPE 3
MEDIAN CURB & GUTTER
SCALE: N.T.S.

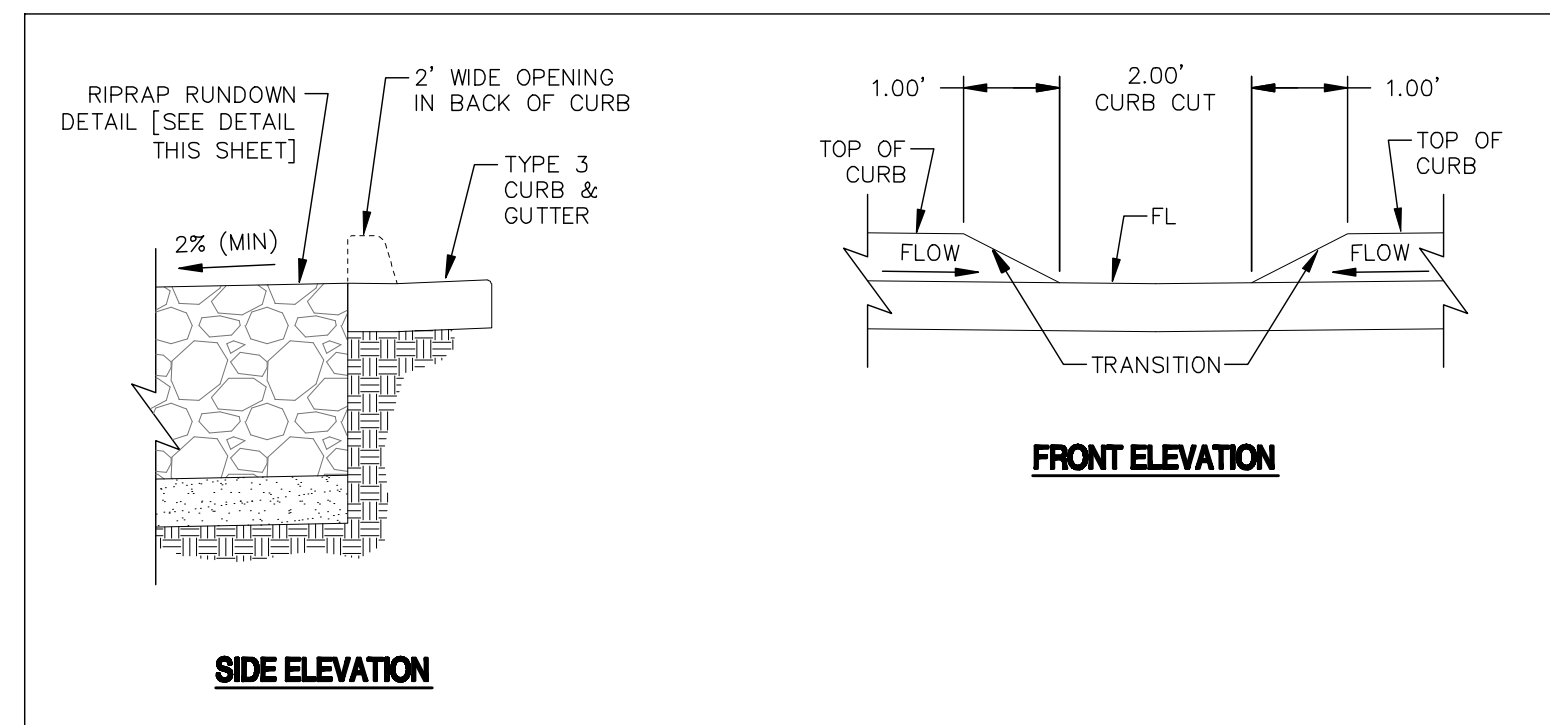
TYPE 3-CARRY
MODIFIED MEDIAN CURB & GUTTER
SCALE: N.T.S.

RADI LEGEND:

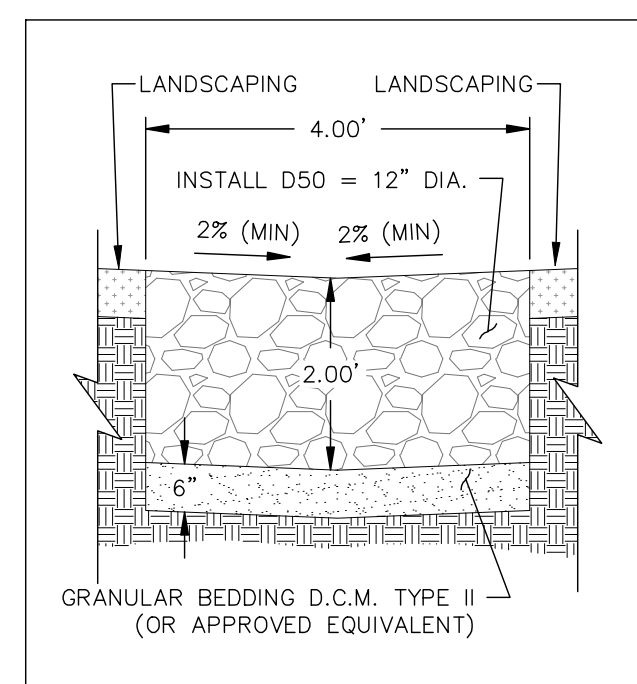
- A = 1/2"
- C = 1-1/2"
- D = 1-1/2" TO 2"



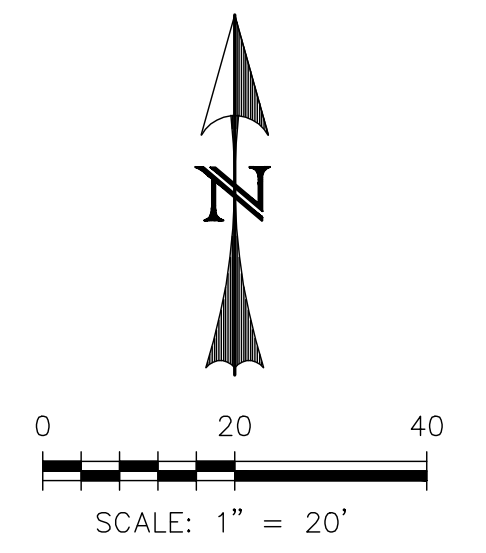
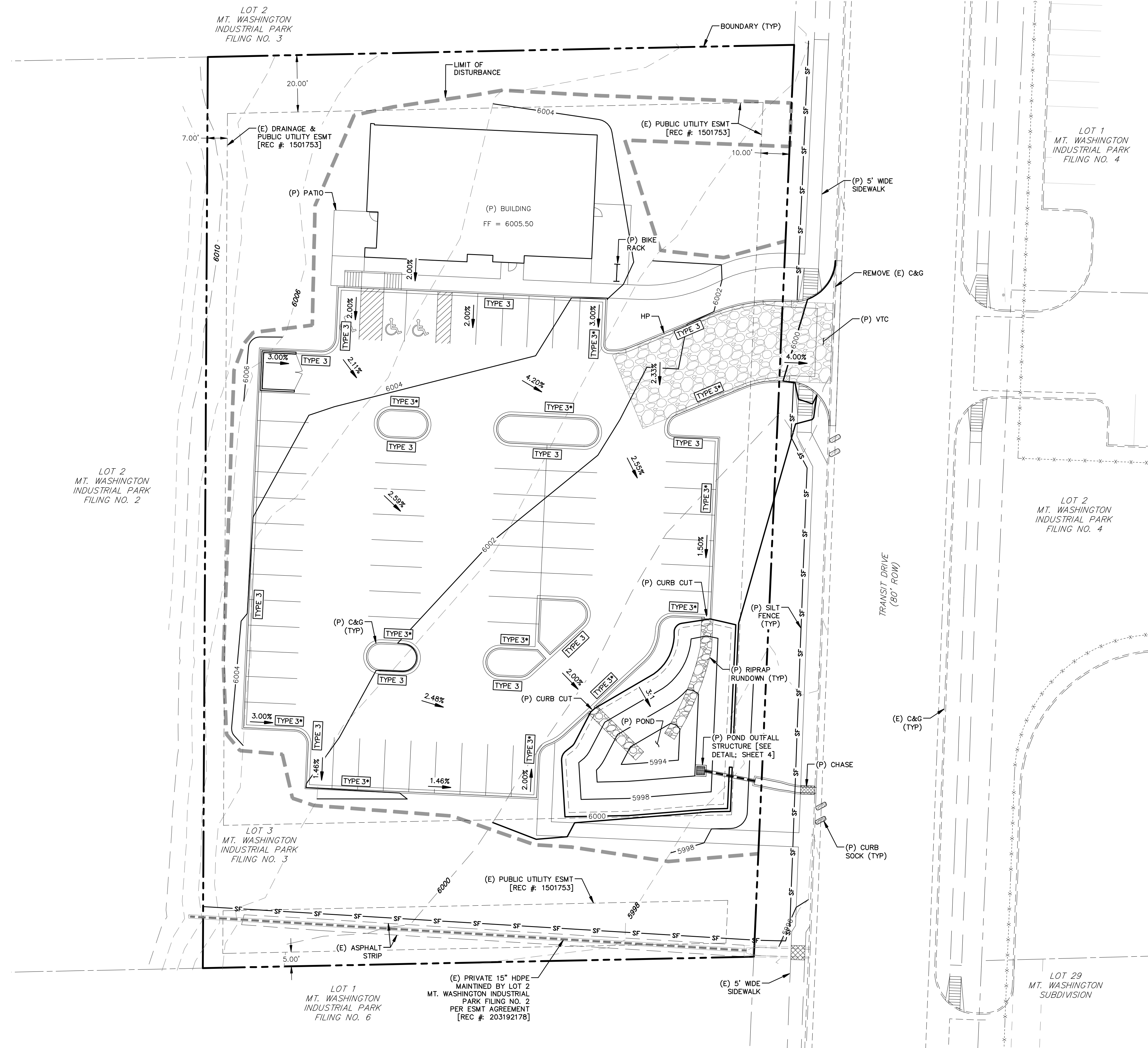
CURB CHASE
SCALE: N.T.S.



CURB CUT DETAIL
SCALE: 1" = 2"



RIPRAP RUNDOWN DETAIL
SCALE: 1" = 2"



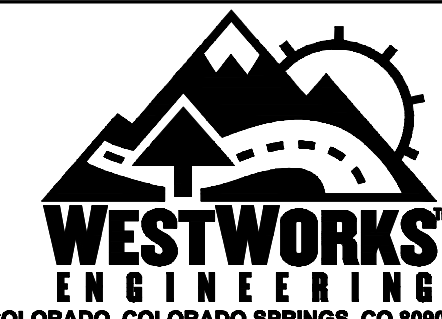
REV.	DESCRIPTION	DATE



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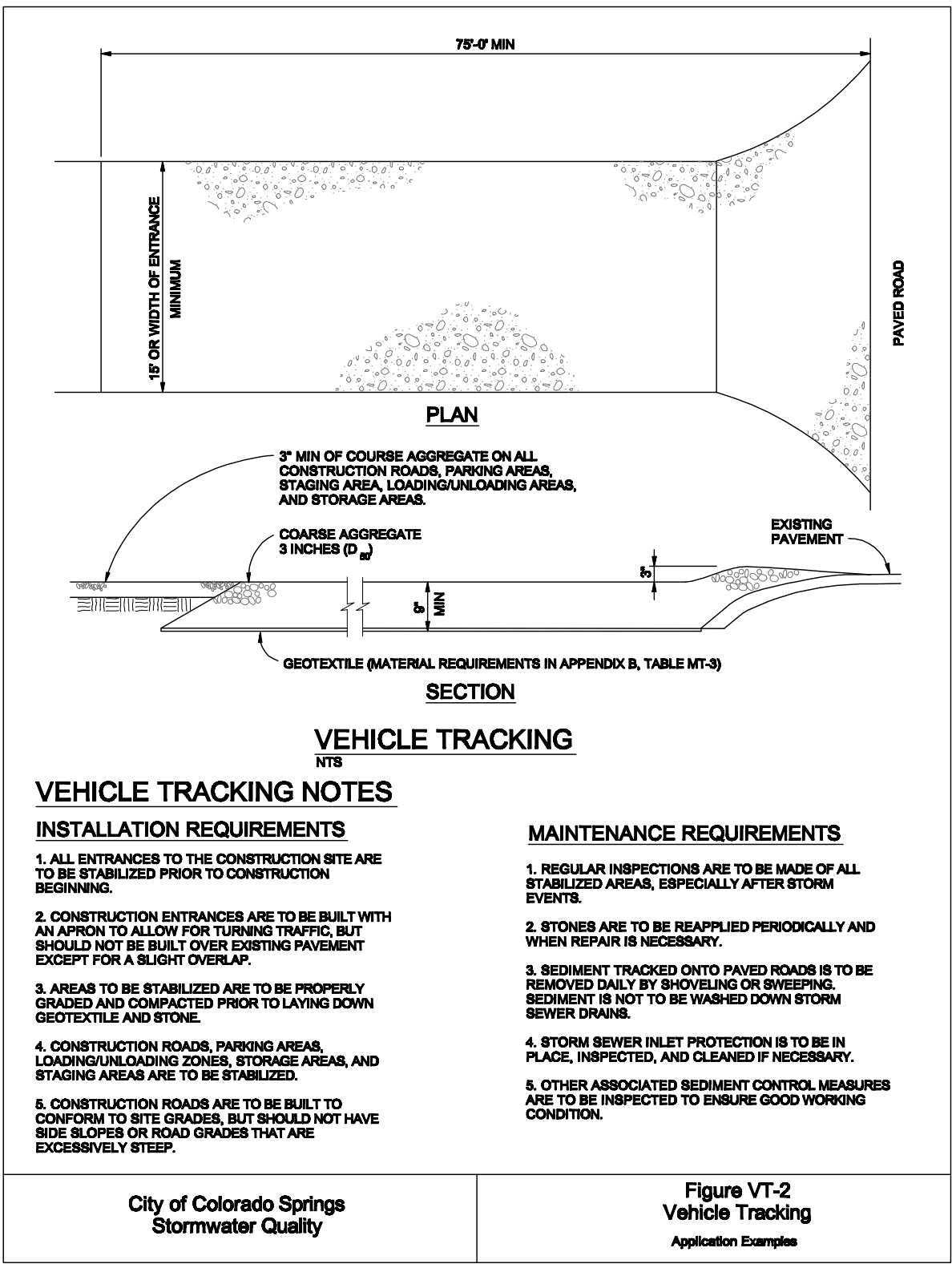
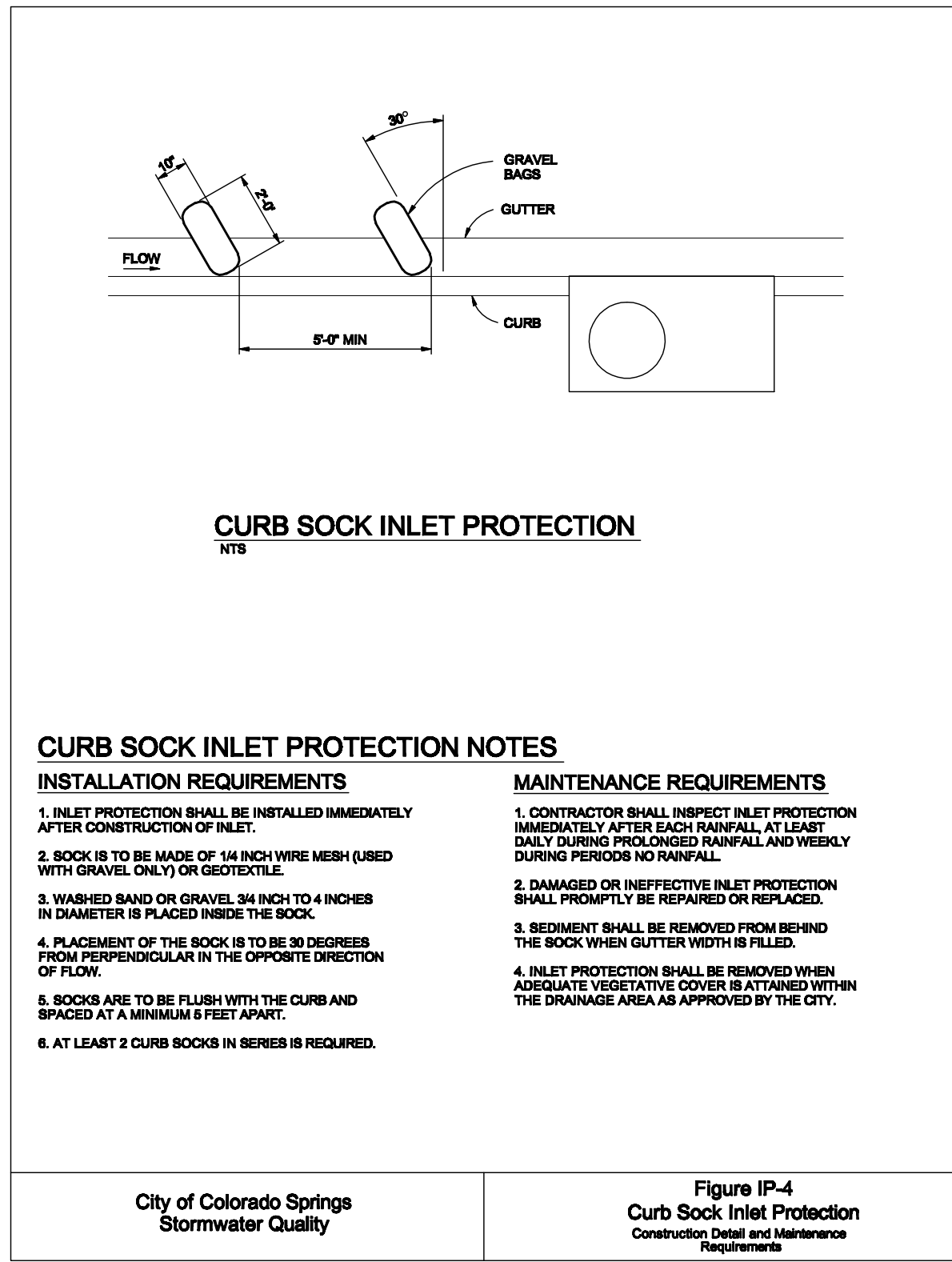
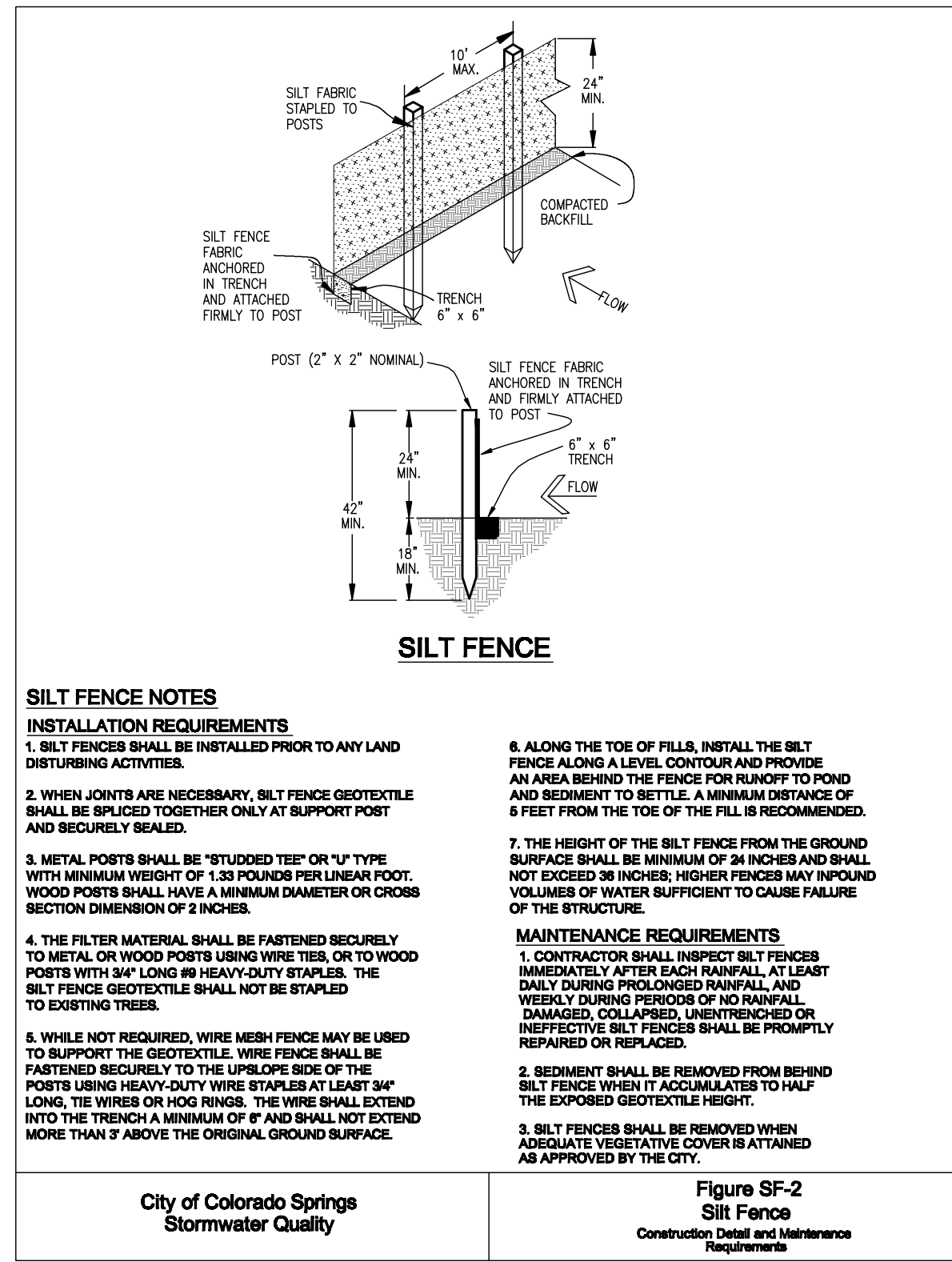
PREPARED UNDER MY DIRECT SUPERVISION FOR AND BEHALF OF
WESTWORKS ENGINEERING.

CHAD D. KUZBEK, COLORADO PE #35751 DATE



**MOUNTAIN METRO TRANSIT
1070 TRANSIT DRIVE**
**GRADING & EROSION
CONTROL PLAN**

DESIGNED BY: MGP	DRAWN BY: MGP
SCALE: 1"=20'	DATE: 03/22/10
JOB NUMBER: 90910	SHEET: 2 OF 4



SEEDING GUIDELINES

- SEEDBED PREPARATION**
THE SEEDBED SHOULD BE WELL-SETTLED AND FIRM, BUT FRAGILE ENOUGH THAT THE SEED CAN BE PLACED AT THE SPECIFIED DEPTHS. COMPETITIVE STANDS OF WEEDS THAT ARE PRESENT BEFORE SEEDING MUST BE CONTROLLED BY SHALLOW TILLAGE OR BY APPLICATION OF HERBICIDES. SOILS THAT HAVE BEEN OVER-COMPACTED BY TRAFFIC OR EQUIPMENT, ESPECIALLY WHEN WET, SHOULD BE TILLED TO BREAK UP ROOTING-RESTRICTIVE LAYERS, THEN HARROWED, ROLLED, OR PACKED TO PREPARE THE REQUIRED FIRM SEEDBED.
- FERTILIZER**
FERTILIZER SHOULD BE APPLIED AT A RATE OF 50 POUNDS OF AVAILABLE NITROGEN PER ACRE AND 40 POUNDS OF AVAILABLE PHOSPHATE PER ACRE. THE TIME OF APPLICATION SHOULD BE IMMEDIATELY PRIOR TO SEEDING, AT THE TIME OF SEEDING, OR IMMEDIATELY FOLLOWING SEEDING, DEPENDING ON THE KIND OF FERTILIZER AND TYPE OF EQUIPMENT USED.
- SEEDING**
SEED SHOULD BE PLANTED WITH A GRASS DRILL ON ALL SLOPES OF 3:3% (3:1) OR FLATTER. SEED MAY BE BROADCAST BY HAND, BY MECHANICAL SPREADER, OR BY HYDRAULIC EQUIPMENT ON AREAS THAT ARE SMALL, TOO STEEP, OR NOT ACCESSIBLE FOR SEED DRILL OPERATIONS. SEED PLANTED WITH A DRILL SHOULD BE COVERED WITH SOIL TO A DEPTH OF 1/4 TO 3/4 INCH. SEED PLANTED BY THE BROADCAST METHOD SHALL BE INCORPORATED INTO THE SOIL SURFACE, NOT TO EXCEED A DEPTH OF 3/4 INCH, BY RAKING, HARROWING, OR OTHER PROVEN METHOD.
THE TIME OF SEEDING IS FROM OCTOBER 15TH - MAY 31ST. SEED PLANTED IN THE LATE FALL WILL REMAIN DORMANT UNTIL SPRING, WHEN IT WILL GERMINATE.
- MULCHING**
SEEDING AREAS SHOULD BE MULCHED TO CONSERVE MOISTURE, PREVENT SURFACE COMPACTION OR CRUSTING; REDUCE RUNOFF AND EROSION; CONTROL INSECTS; AND HELP ESTABLISH PLANT COVER.
NATIVE HAY OR STRAW SHOULD BE APPLIED AT A RATE OF 4,000 POUNDS PER ACRE AND CRIMPED INTO THE GROUND, ON SLOPES GREATER THAN 3:1, AN AGRONOMY BLANKET SHOULD BE USED.
- SUPPLEMENTAL WATER**
IN LOW RAINFALL AREAS, WHERE WATER IS AVAILABLE AND WHERE RAPID ESTABLISHMENT IS NEEDED, IRRIGATION OF NEW SEEDING SHOULD BE PERFORMED DURING THE FIRST GROWING SEASON. WATER SHOULD BE APPLIED AT APPROXIMATELY ONE WEEK INTERVALS, AT A RATE OF 3/4 TO 1 INCH PER APPLICATION, WHEN RAINFALL IS DEFICIENT FOR PLANT DEVELOPMENT.

EROSION PROTECTION & REVEGETATION REQUIREMENTS
PER U.S.D.A. SOIL CONSERVATION SERVICE GUIDELINES:
RANGE SITE: SANDY FOOTHILLS

1. PRACTICE NO. & NAME: 342 - CRITICAL AREA TREATMENT

2. PLANNED: SEEDING PREP: A METHOD: DRILL XX
B DATES OCT. 15 - MAY 31 INTERSEED XX
C CLEAN TILLED XX BROADCAST XX
D STUBBLE COVER XX
E OTHER XX

SEEDING OPERATION:
A METHOD: DRILL XX
B DATES OCT. 15 - MAY 31 INTERSEED XX
C CLEAN TILLED XX BROADCAST XX
D STUBBLE COVER XX
E OTHER XX

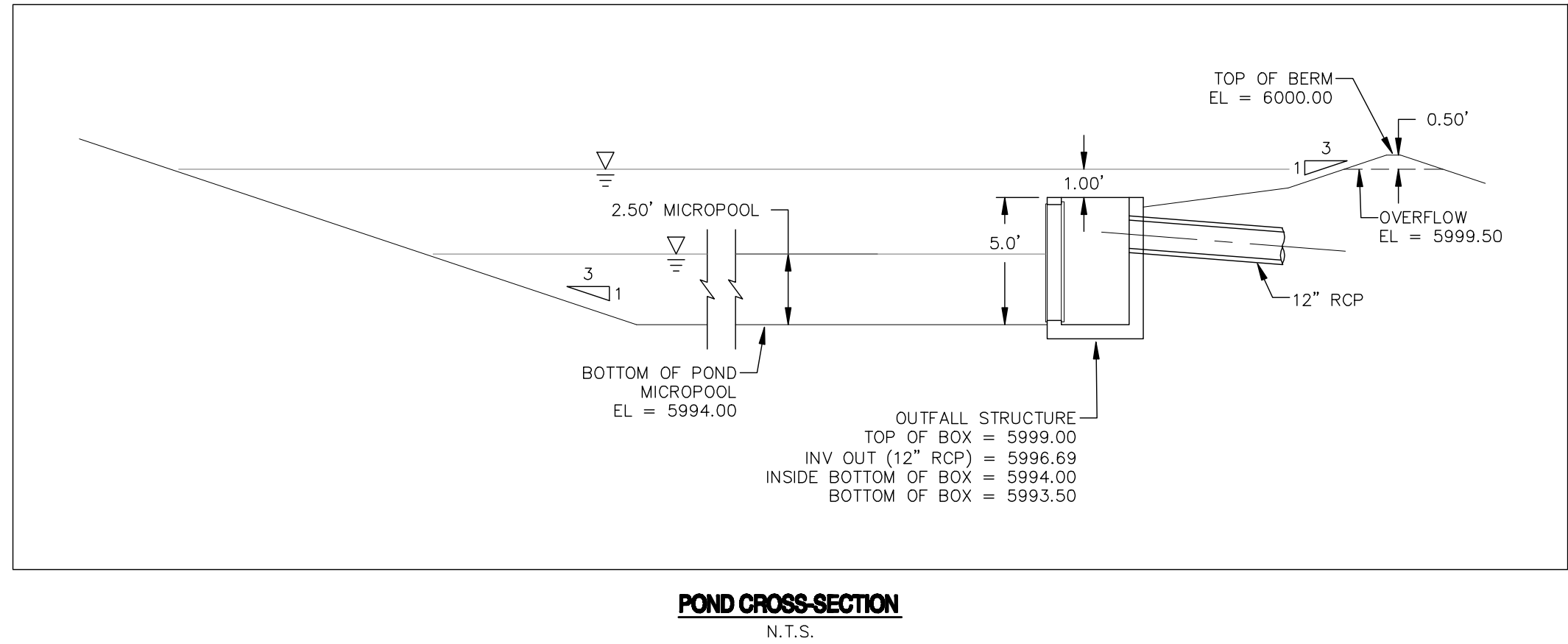
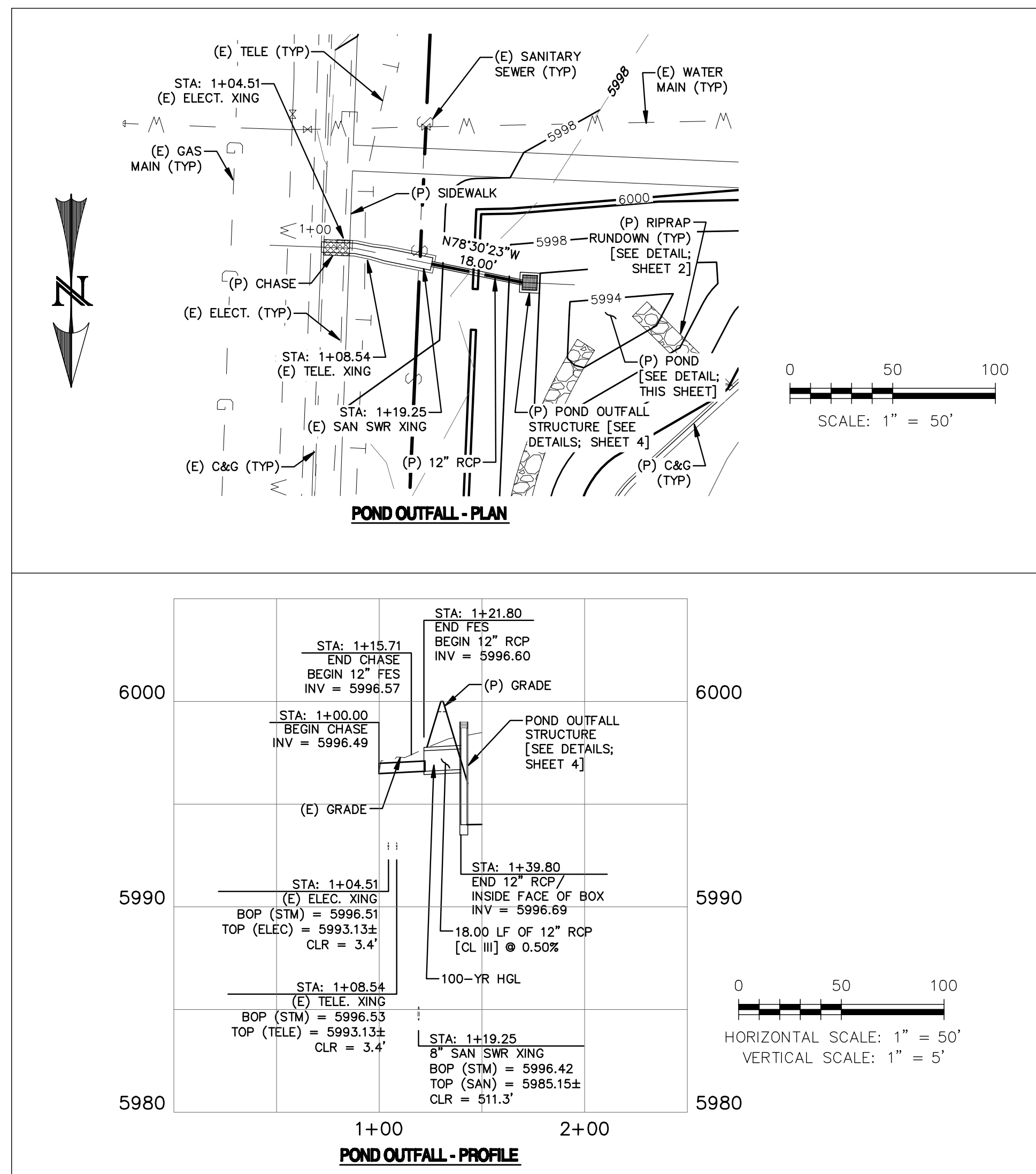
FERTILIZER:
POUNDS ACTUAL PER ACRE N2: 40
(AVAILABLE) 40
P205: 40
K: N/A

MULCH:
KIND: LONG - STEM NATIVE HAY
AMOUNT: 4,000 POUNDS/ACRE
HOW-APPLIED: N/A
HOW-ANCHORED: CRIMPED
ANCHORAGE DEPTH: 4

SEED:
VARIETY SPECIES (1) REQUIRED PLS RATES PER ACRES (100%)

(2)	(3) PLS SEEDING RATE PER SPECIES/ACRE (1) x (2)	(4) PLANNED ACRE	(5) TOTAL PLS LBS./SPECIES PLANNED (3) x (4)
15	0.98	0.70	0.68
25	2.25	0.70	1.58
15	0.45	0.70	0.32
20	0.90	0.70	0.63
25	1.75	0.70	1.23

Figure TS-1
TEMPORARY SEEDING
Construction Detail and Maintenance Requirements



REV.	DESCRIPTION	DATE

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1015 TRANSIT DRIVE
COLORADO SPRINGS, CO 80903

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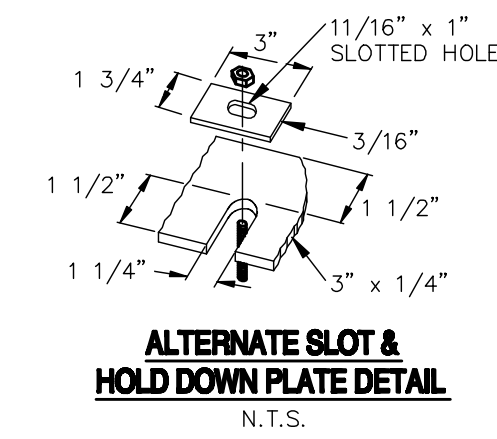
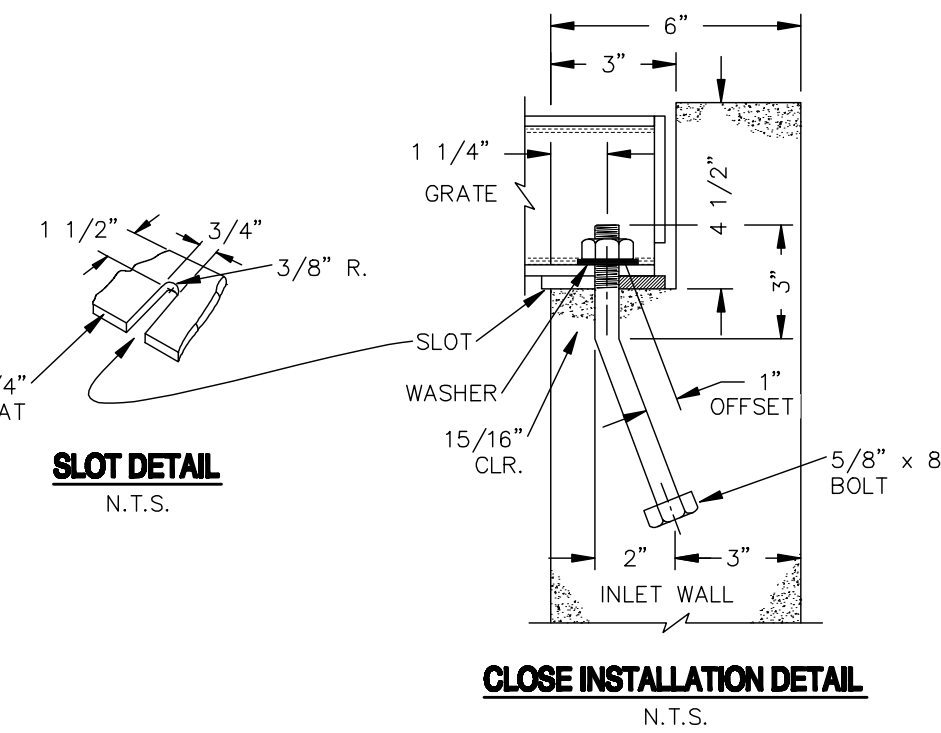
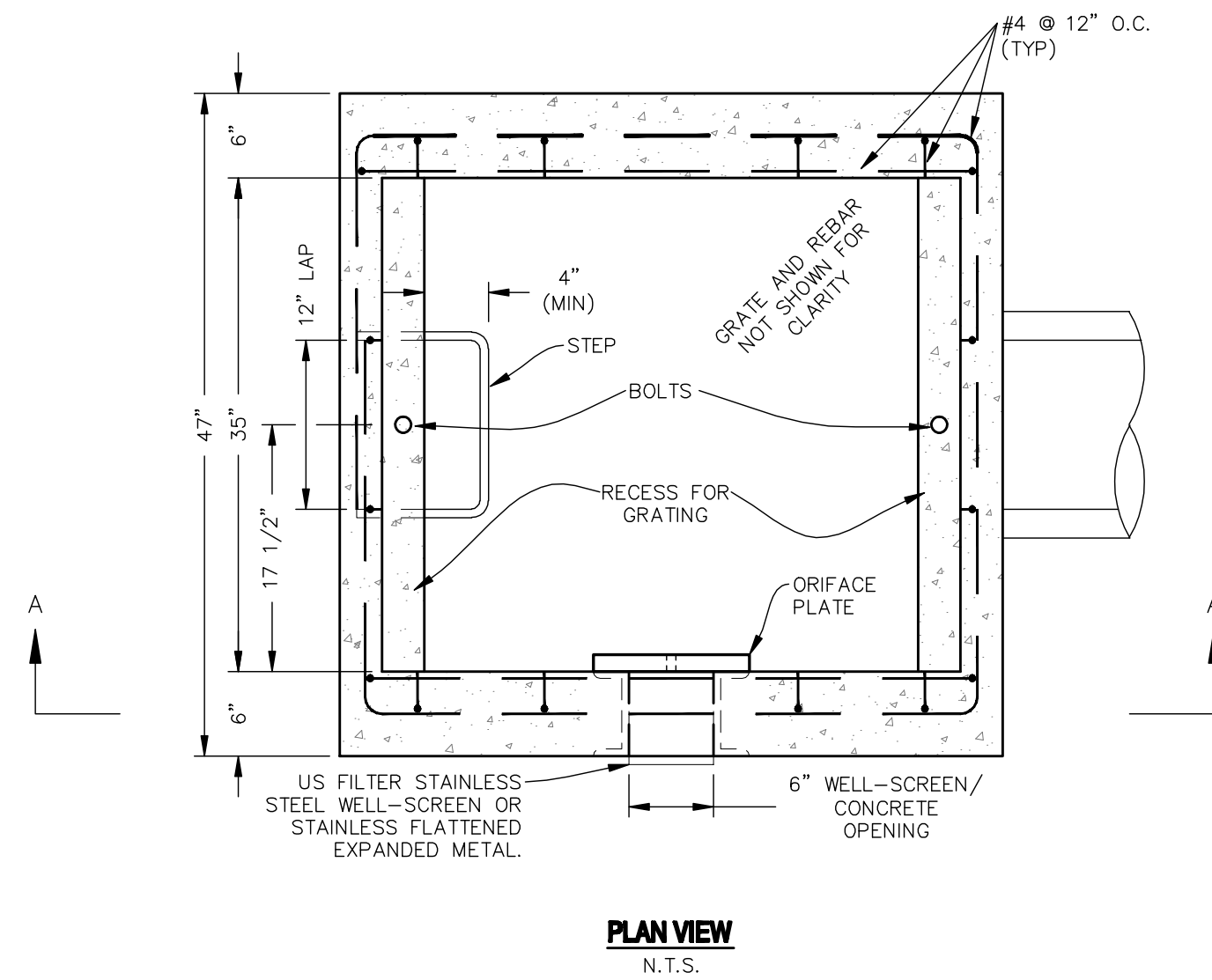
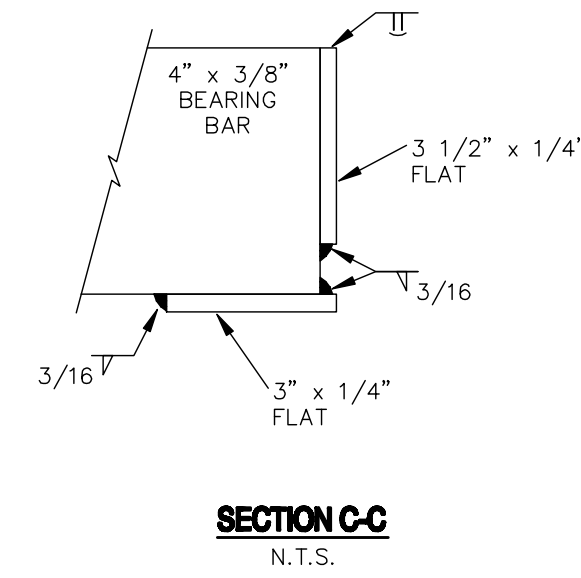
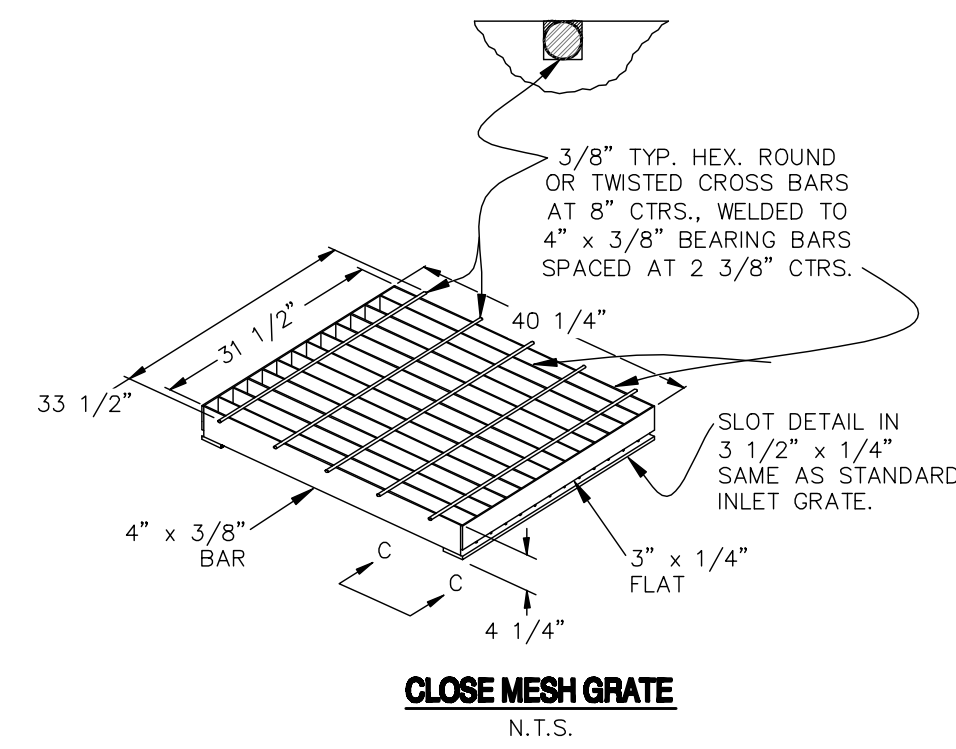


**MOUNTAIN METRO TRANSIT
1070 TRANSIT DRIVE**

DETAIL SHEET

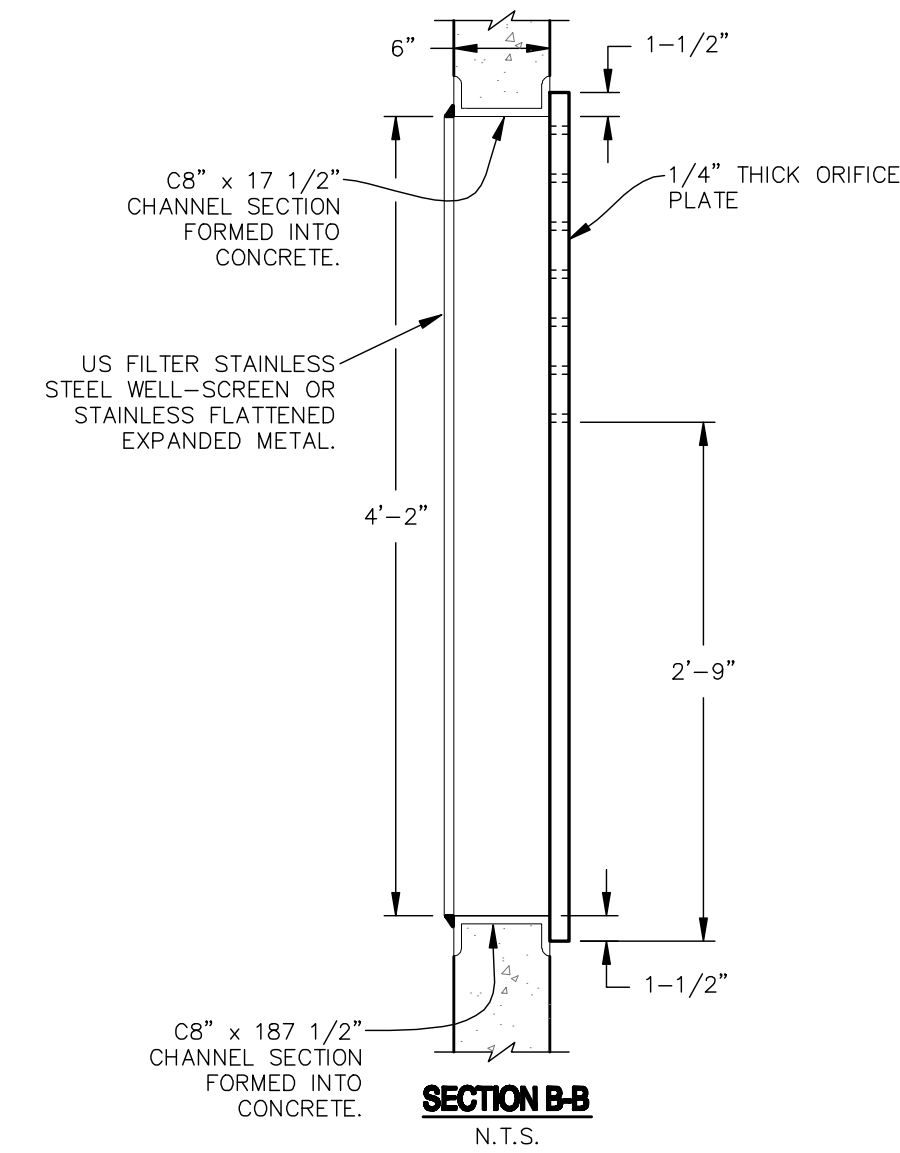
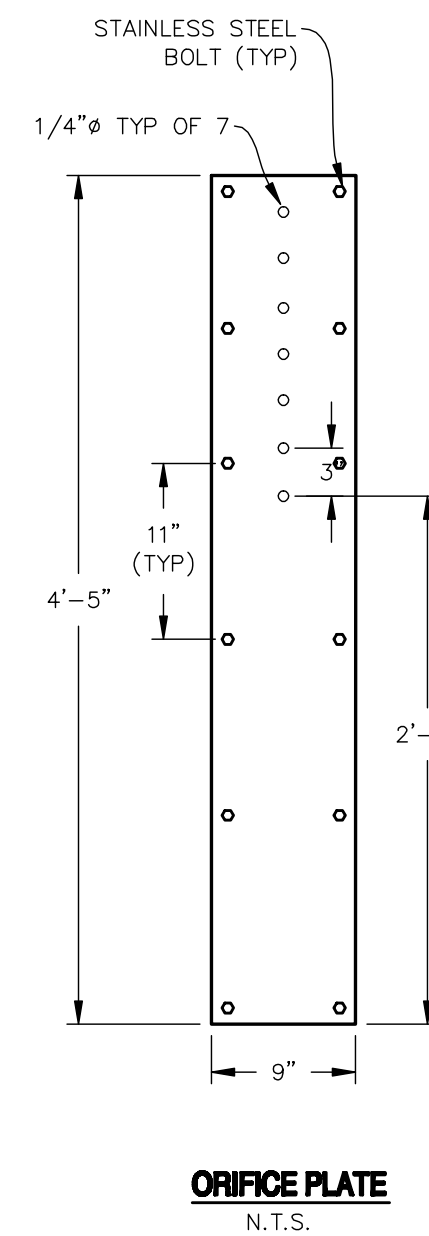
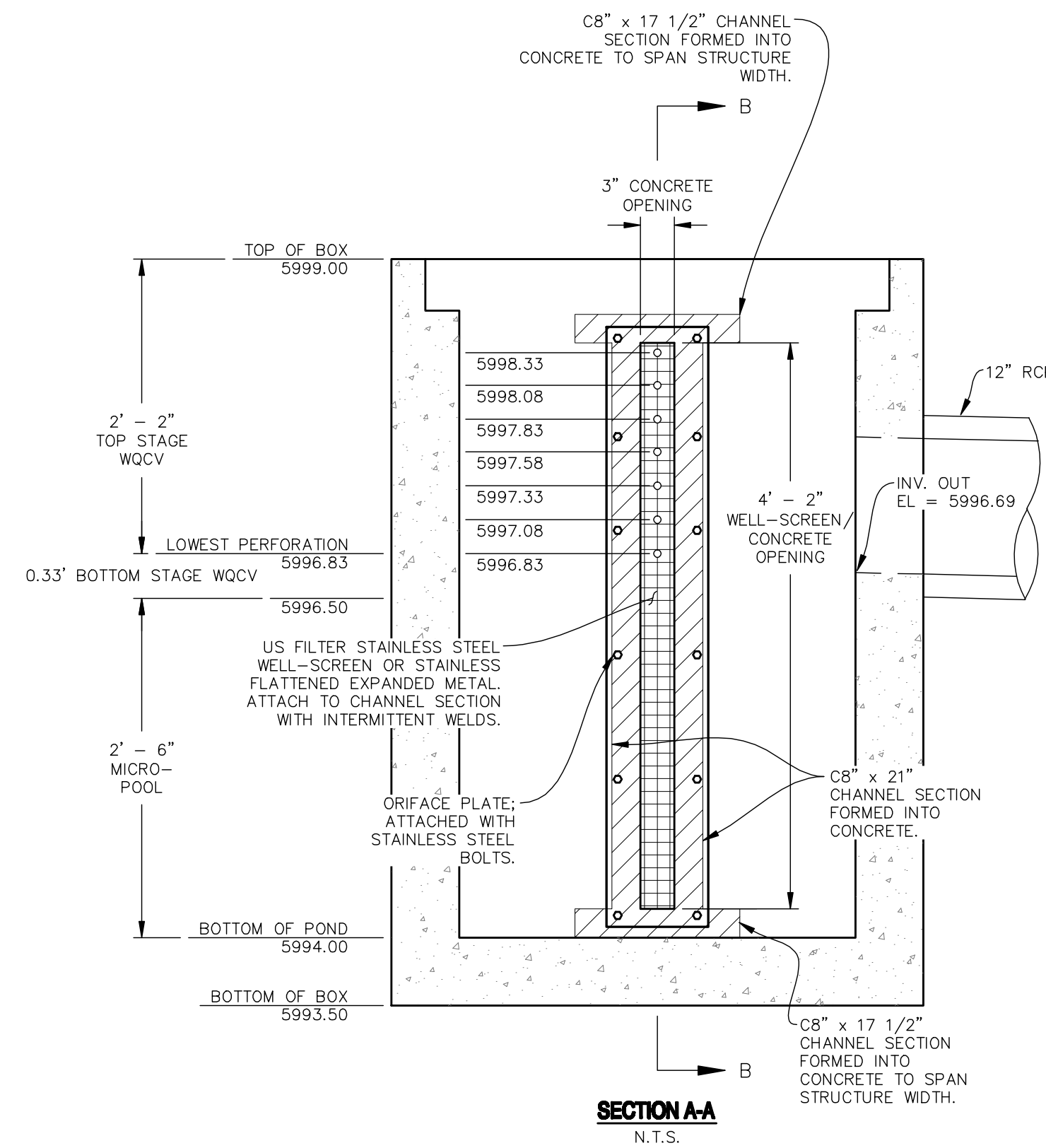
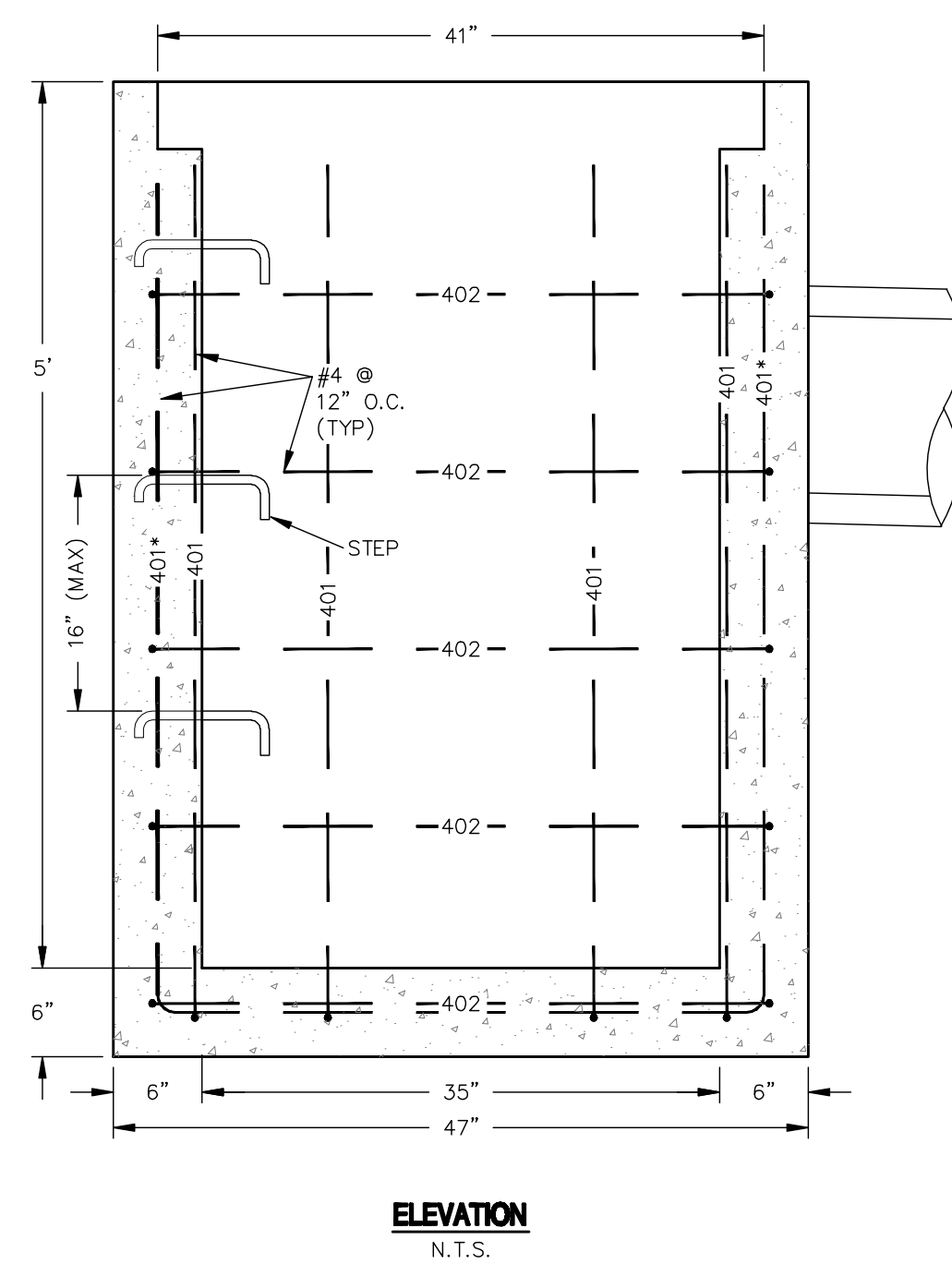
DESIGNED BY: MGP	DRAWN BY: MGP
SCALE: VARIES	DATE: 03/22/10
JOB NUMBER: 90910	SHEET: 3 OF 4

CHAD D. KUZBEK, COLORADO PE #35751 DATE



BAR LIST & BENDING DIAGRAM			
MARK	NUMBER REQUIRED	HEIGHT	LENGTH
401*	2	4' - 3"	11' - 11"
401	6	4' - 7"	12' - 7"
402	5	N/A	15' - 0"

1. ALL BARS TO BE 1/2" DIA.
2. CUT OR BEND AROUND PIPES AS REQUIRED.
3. 402 BARS WILL BE EQUALLY SPACED FROM EACH OTHER.



GENERAL NOTES:

- CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
- REINFORCING BARS SHALL HAVE A MINIMUM 2 IN. CLEARANCE.
- CONCRETE SLOPE AND DITCH PAVING SHALL CONFORM TO SECTION 507. REINFORCEMENT FOR CONCRETE SLOPE PAVING SHALL BE 6 X 6 - W1.4 X W1.4 OR 6 X 6 - W2.1 X W2.1.
- STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED AND SHALL BE IN ACCORDANCE WITH 712.06.
- THE STANDARD INLET GRATES SHALL BE USED ON ALL TYPE C INLETS UNLESS CLOSE MESH GRATES ARE SPECIFIED ON THE PLANS.
- STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" EXCEEDS 3 FT.-6 IN. AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.
- SEE SHEET M-604-11, INLET, TYPE D, FOR REINFORCEMENT AROUND THE PIPE OPENING.
- CONCRETE SLOPE AND DITCH PAVING WILL BE REQUIRED WHEN SHOWN ON PLANS.

REV.	DESCRIPTION	DATE



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1015 TRANSIT DRIVE
COLORADO SPRINGS, CO 80903

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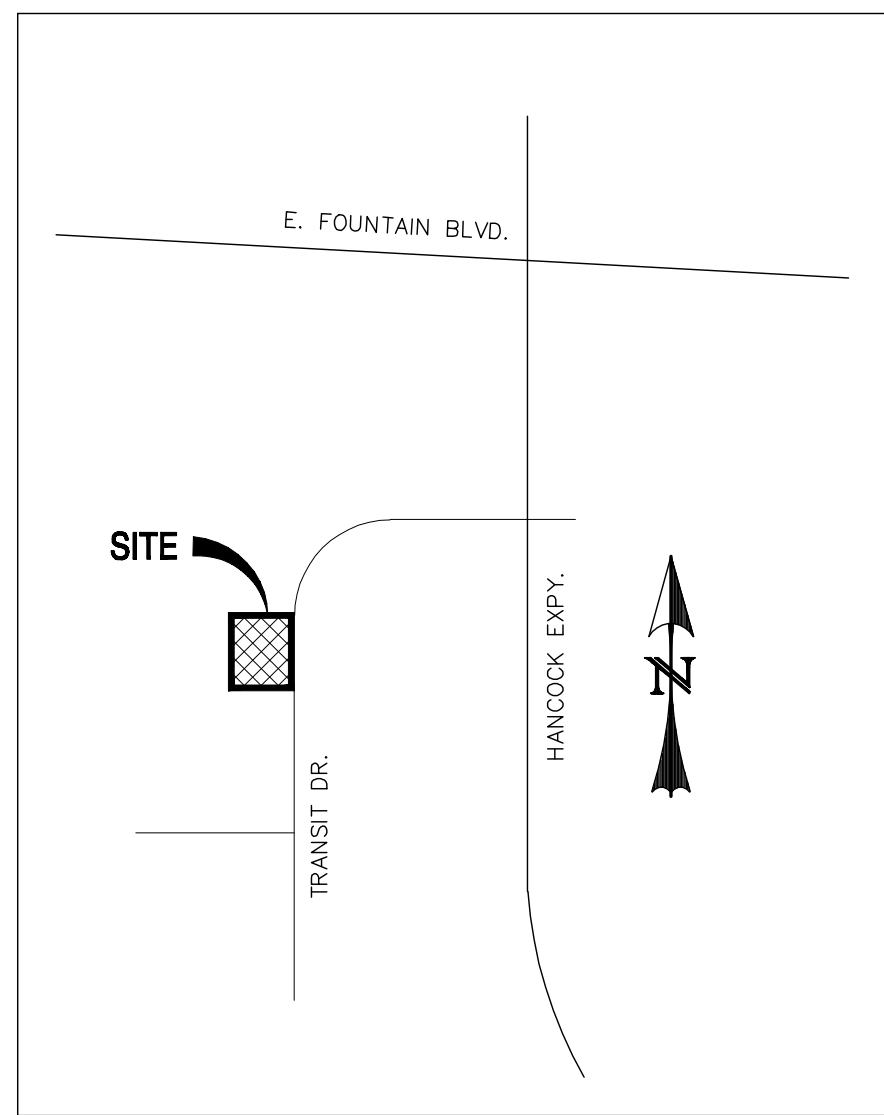


**MOUNTAIN METRO TRANSIT
1070 TRANSIT DRIVE**

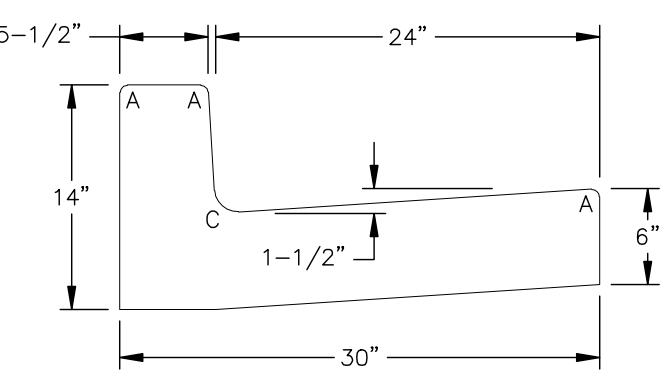
**POND OUTFALL
DETAIL SHEET**

DESIGNED BY: MGP	DRAWN BY: MGP
SCALE: VARIES	DATE: 03/22/10
JOB NUMBER: 90910	SHEET: 4 OF 4

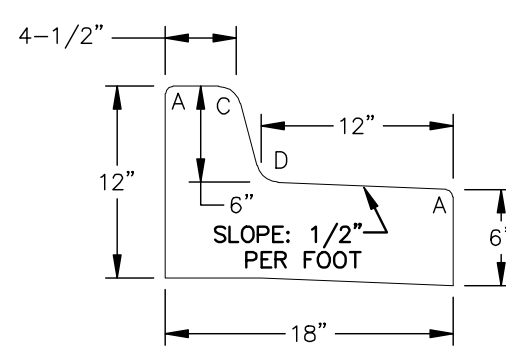
CHAD D. KUZBEK, COLORADO PE #35751 DATE



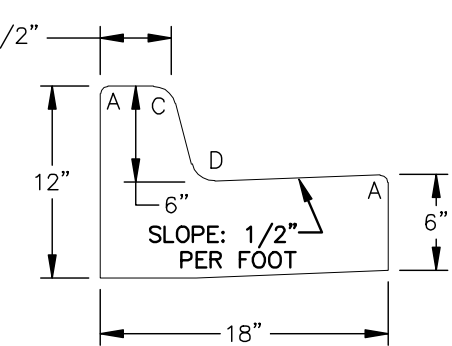
VICINITY MAP
SCALE: N.T.S.



TYPE 1
VERTICAL CURB & GUTTER
SCALE: N.T.S.



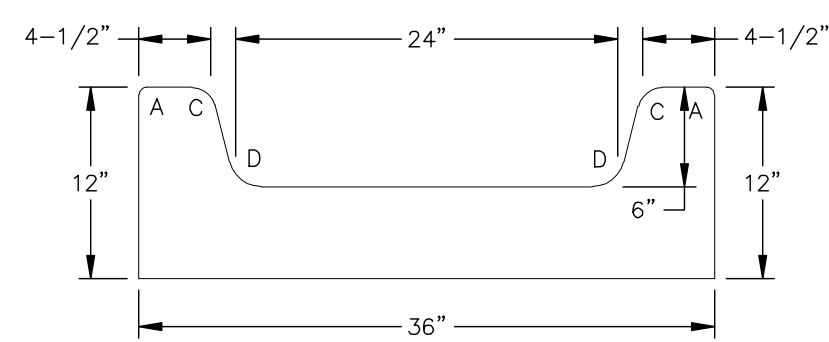
TYPE 3
MEDIAN CURB & GUTTER
SCALE: N.T.S.



TYPE 3-CARRY
MODIFIED MEDIAN CURB & GUTTER
SCALE: N.T.S.

RADIUS LEGEND:

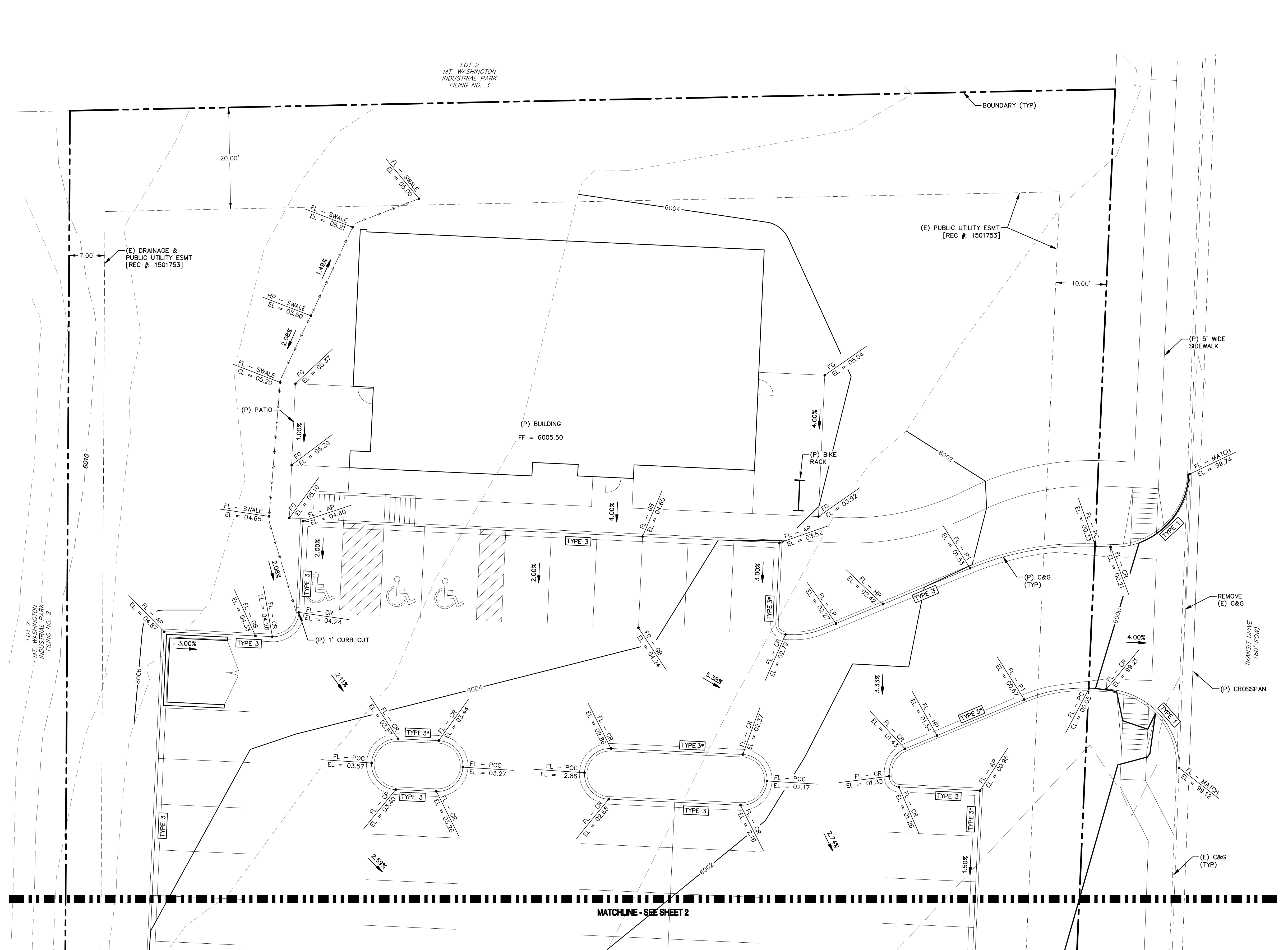
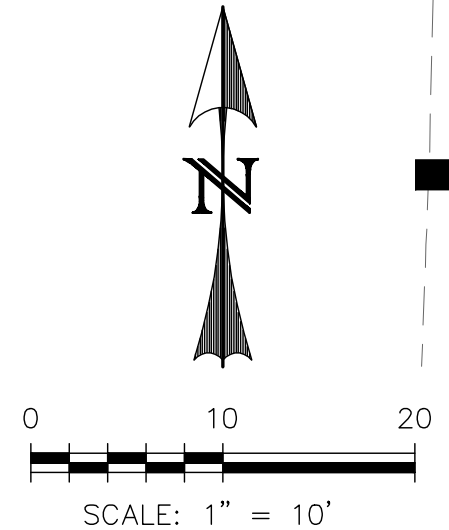
- A = 1/2"
- C = 1-1/2"
- D = 1-1/2" TO 2"



CURB CHASE
SCALE: N.T.S.

LEGEND

- EXISTING (E)
- PROPOSED (P)
- CURB AND GUTTER (C&G)
- EASEMENT (ESMT)
- FLOWLINE (FL)
- ANGLE POINT (AP)
- CURB RETURN (CR)
- TYPICAL (TYP)
- GRADE BREAK (GB)
- HIGH POINT (HP)
- LOW POINT (LP)
- BOUNDARY (BOUNDARY)
- EASEMENT (EASEMENT)
- (E) CONTOUR, INDEX (E) CONTOUR, INDEX
- (P) CONTOUR, INDEX (P) CONTOUR, INDEX
- CURB TYPE CALL-OUT (TYPE 1)



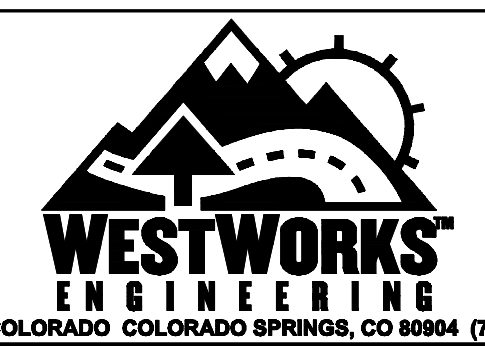
REV.	DESCRIPTION	DATE

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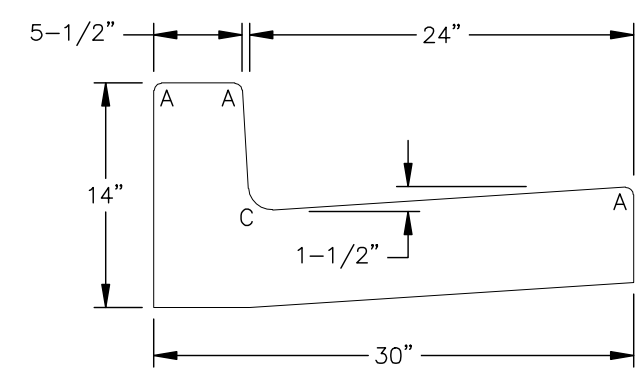
CHAD D. KUZBEK, COLORADO PE #35751 DATE



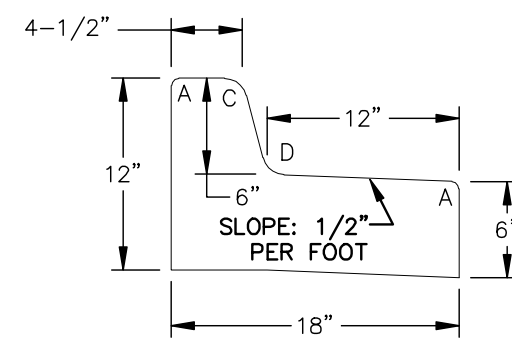
MOUNTAIN METRO TRANSIT
1070 TRANSIT DRIVE
DETAILED GRADING PLAN

DESIGNED BY: MGP	DRAWN BY: MGP
SCALE: 1"=10'	DATE: 03/05/10
JOB NUMBER: 90910	SHEET: 1 OF 2

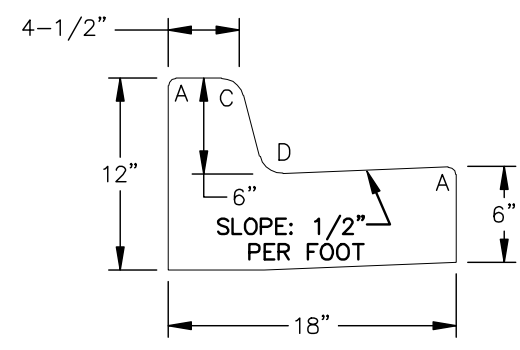
1023 W. COLORADO, COLORADO SPRINGS, CO 80904 (719) 686-1670



TYPE 1
VERTICAL CURB & GUTTER
SCALE: N.T.S.



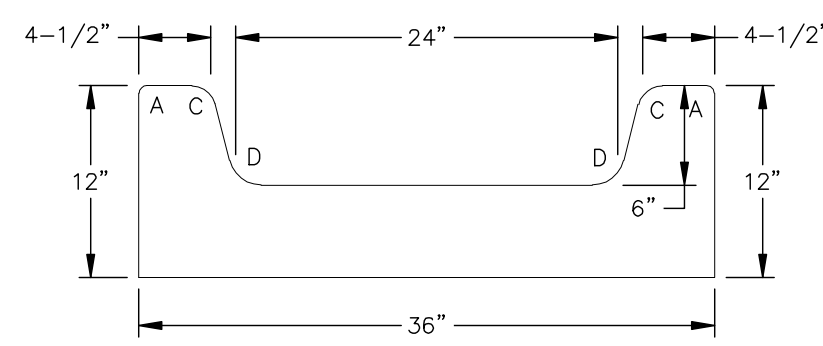
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MEDIAN CURB & GUTTER
SCALE: N.T.S.



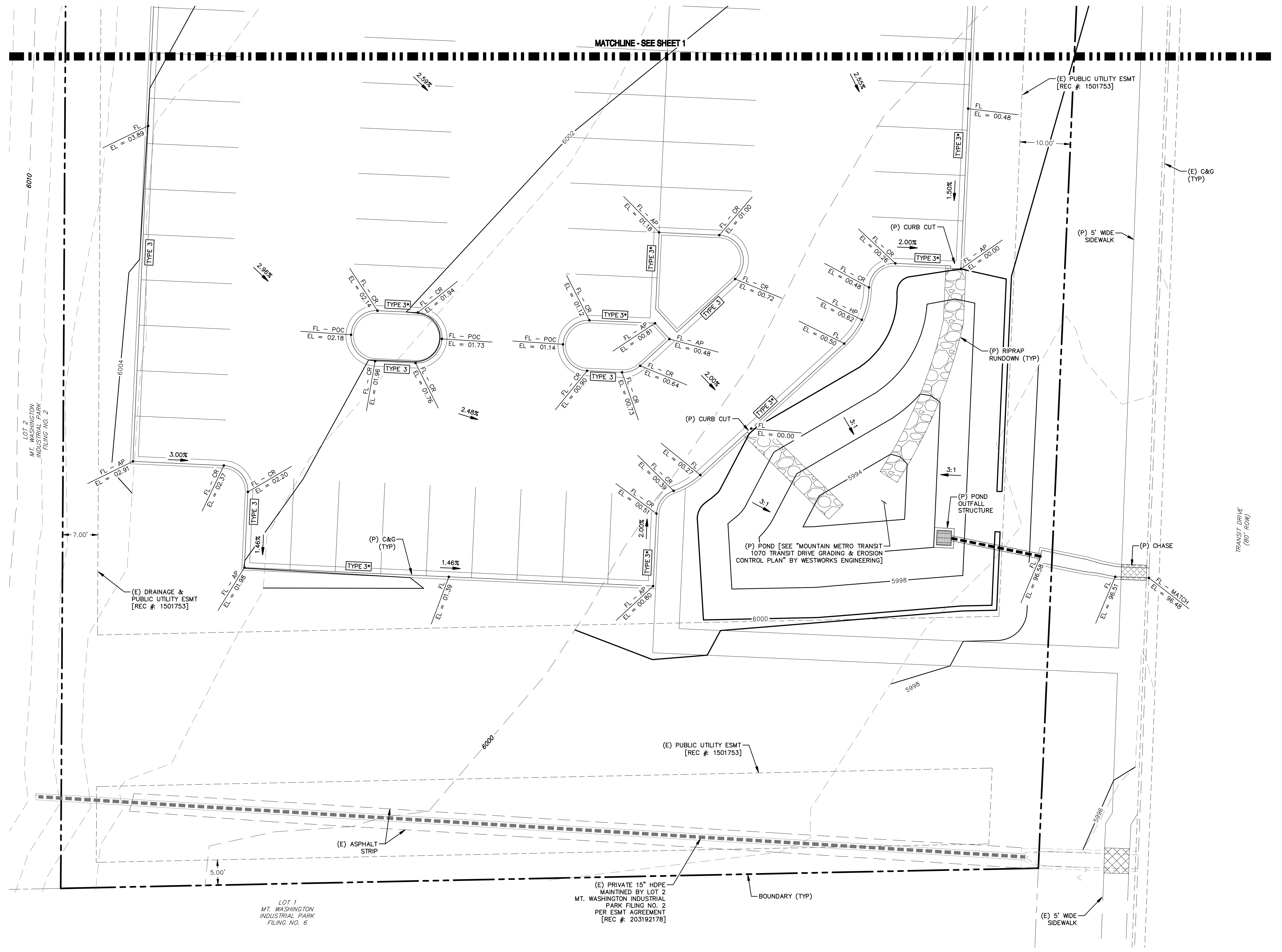
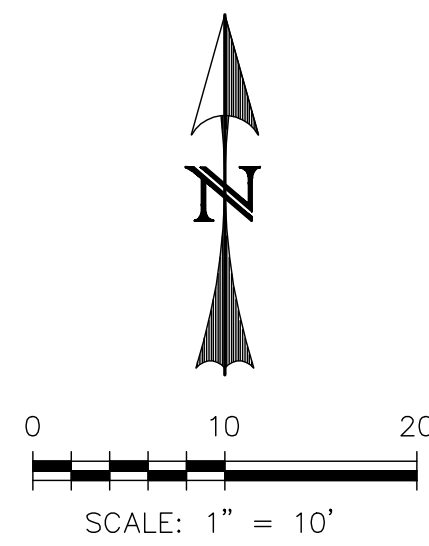
TYPE 3-CARRY
MODIFIED MEDIAN CURB & GUTTER
SCALE: N.T.S.

RADI LEGEND:

- A = 1/2"
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CURB CHASE
SCALE: N.T.S.



REV.	DESCRIPTION	DATE



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**MOUNTAIN METRO TRANSIT
1070 TRANSIT DRIVE**
DETAILED GRADING PLAN

DESIGNED BY: MGP	DRAWN BY: MGP
SCALE: 1"=10'	DATE: 03/05/10
JOB NUMBER: 90910	SHEET: 2 OF 2

GENERAL NOTES FOR SANITARY SERVICE LINES:

(TO BE ADDED TO SERVICE PLANS, REF: WASTEWATER DETAIL DRAWINGS C 5-1, 2, 3, & 4)

THE CONTRACTOR SHALL NOTIFY THE COLORADO SPRINGS UTILITIES, DISPATCH (668-3524) 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO OUTLINE METHODS OF CONSTRUCTION, MATERIALS TO BE USED, AND CONSTRUCTION STAKING.

1. WASTEWATER SERVICES TO BE LOCATED IN THE CENTER OF THE LOT, OR THE CENTER OF THE DRIVEWAY FOR A FLAG LOT. (PER WASTEWATER DETAIL DRAWING C 5-1).
- NOTE: ALTERNATE SERVICE LOCATION, IS ONLY WITH THE APPROVAL OF COLORADO SPRINGS UTILITIES SHOWN ON WASTEWATER DETAIL DRAWING C 5-1.
2. SANITARY SEWER SERVICES TO BE INSTALLED A MINIMUM OF 7 FEET INTO THE PROPERTY UNLESS OTHERWISE SHOWN. WATER SERVICE LINES SHALL BE INSTALLED TO THE PROPERTY LINE, I.E. CURB STOP BOX.
3. PROPERTY END OF ALL SEWER SERVICES TO BE MARKED WITH A 2"x4"x12" WOOD POST EXTENDING VERTICALLY FROM FLOW-LINE.
4. FINAL LOCATION OF ALL SEWER, WATER AND GAS SERVICES TO BE APPROVED IN THE FIELD BY THE COLORADO SPRINGS UTILITY INSPECTOR.
5. UTILITY LOCATIONS, WHETHER OR NOT SHOWN ON THIS PLAN, IN NO WAY RELIEVES THE CONTRACTOR FROM THE RESPONSIBILITY OF CALLING FOR AND OBTAINING UTILITY LOCATIONS FROM THE APPROPRIATE AUTHORITIES PRIOR TO BEGINNING EXCAVATION.
6. SANITARY SEWER SERVICE CONNECTIONS TO BE A MINIMUM OF 5 FEET FROM ANY MANHOLE ON THE MAIN LINE AND TWO (2) FEET BETWEEN TAPS CENTER TO CENTER.
7. ALL CLEAN-OUTS SHALL BE THE SAME SIZE AS THE HOST PIPE (I.E. 6" SERVICE LINE REQUIRES A 6" CLEAN-OUT, TO BE INSTALLED PER COLORADO SPRINGS UTILITIES STANDARD DETAIL C 5-4).

WATER SERVICE INSTALLATION GENERAL NOTES:

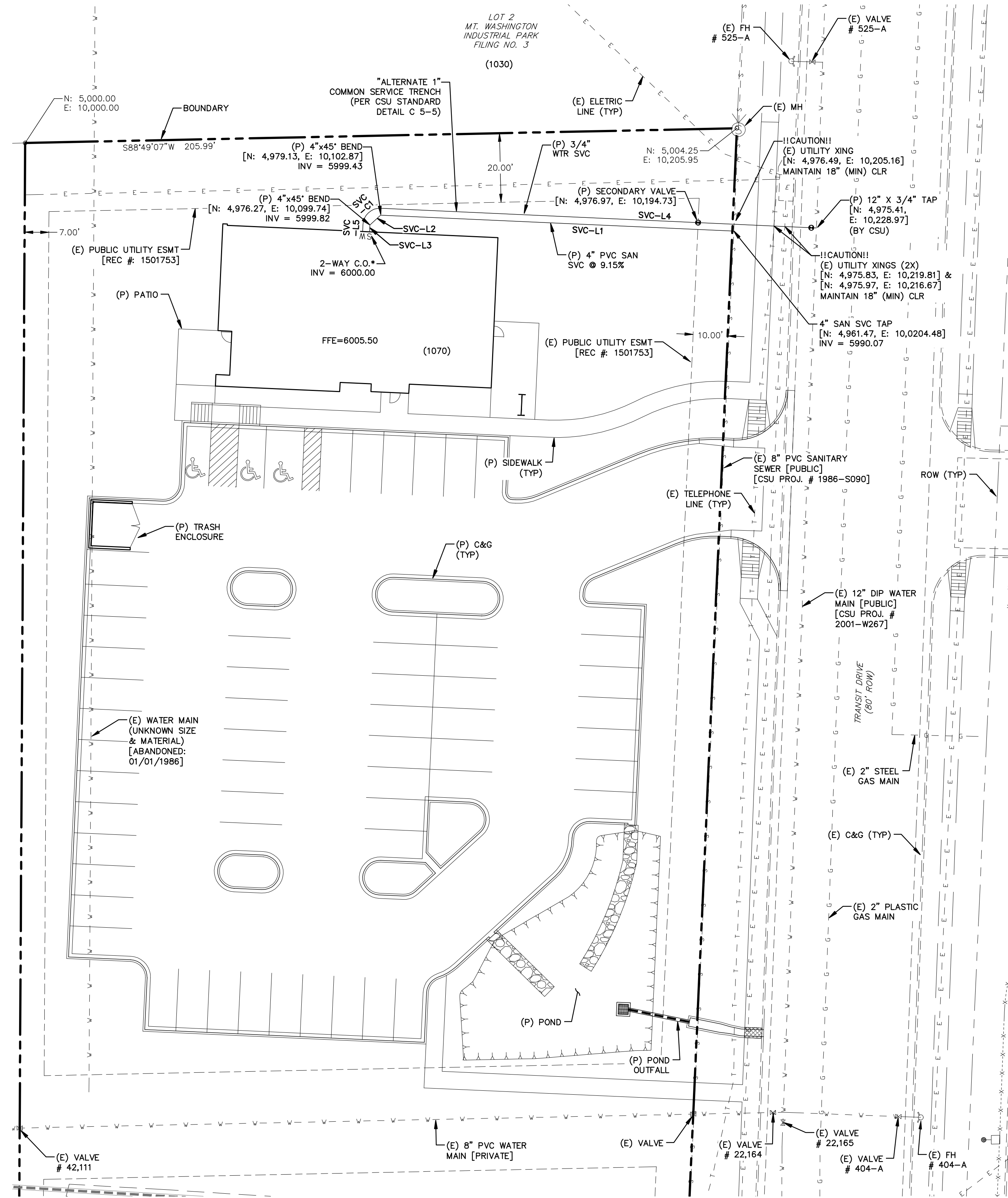
1. ALL WORK ON FABRICATION AND INSTALLATION OF METER BOXES SHALL CONFORM TO THE FOLLOWING CODES, LATEST EDITION:
PIKES PEAK REGIONAL BUILDING CODE
CURRENT ADOPTED VERSION OF THE INTERNATIONAL PLUMBING CODE
BUILDING CODE FOR REINFORCED CONCRETE (ACI)
AMERICAN WELDING SOCIETY SPECIFICATIONS
UNIFORM MECHANICAL CODE
2. ALL MATERIAL, COMPONENTS CONSIDERED DEFECTIVE BY COLORADO SPRINGS UTILITIES SHALL BE REJECTED AND IMMEDIATELY REMOVED FROM THE SITE AT NO EXPENSE TO COLORADO SPRINGS UTILITIES.
3. THE CONTRACTOR SHALL VERIFY AND COORDINATE THE DIMENSIONS OF ALL OPENINGS, METERS, INSERTS, ETC., WITH COLORADO SPRINGS UTILITIES AND THE MANUFACTURER.
4. CONCRETE WORK SHALL CONFORM TO THE CONCRETE SPECIFICATIONS DESCRIBED WITHIN THIS DOCUMENT AND ALSO CONFORM TO THE WATER LINE EXTENSION AND SERVICE STANDARDS.
5. GROUTING OF CONCRETE WALLS AROUND PIPES AND FOOTINGS AS SHOWN ON DRAWINGS SHALL BE DONE WITH NON-SHRINK GROUT.
6. IN THE EVENT THAT GROUNDWATER OR OTHER UNSTABLE AND UNUSUAL CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY COLORADO SPRINGS UTILITIES IMMEDIATELY FOR INSPECTION AND RECOMMENDATIONS FOR DRAINS, GRAVEL FILL, ADDITIONAL REINFORCING, ETC. APPROVED RUBBER WATER STOPS SHALL BE USED IN ALL CONCRETE JOINTS FOR CONDITIONS WHERE SUBSURFACE WATER IS ENCOUNTERED.
7. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN METER SIZE AND DIMENSIONS FROM APPLICATIONS AND PERMITS. ALL SIZES AND DIMENSIONS SHALL CONFORM TO COLORADO SPRINGS UTILITIES STANDARDS AND SPECIFICATIONS. REGULATORS MAY BE LOCATED IN A METER PIT OR IN THE BUILDING. REGARDLESS OF LOCATION, THE REGULATOR MUST BE ON THE INLET SIDE OF THE METER.
8. ONLY ONE (1) WATER METER SHALL BE INSTALLED IN A PIT, REGARDLESS OF SIZE (IF A SECOND METER IS TO BE INSTALLED, THIS IS WITH APPROVAL OF COLORADO SPRINGS UTILITIES FIELD SERVICES).
9. THE "CURB STOP" AND "SECONDARY VALVE" SHALL BE DEFINED AS THE CONTROL AT PROPERTY LINE OR THE FIRST VALVE AFTER CONNECTION OF THE CORPORATION STOP OR TAP VALVE TO A WATER DISTRIBUTION MAIN, NOT TO INCLUDE ANY STOPS OR VALVES ON PRIVATE MAINS OR SERVICES WHICH WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.
10. ALL IRRIGATION, FIRE AND COMMERCIAL POTABLE WATER SERVICE CONNECTIONS SHALL INCLUDE BACK-FLOW PREVENTION ASSEMBLIES, WHICH MEET THE STANDARDS SPECIFIED BY THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE). NO WATER SERVICE LINE WILL BE APPROVED BY COLORADO SPRINGS UTILITIES FOR METER INSTALLATION UNTIL THE REQUIRED BACK-FLOW PREVENTION MEASURES HAVE BEEN MET. A REDUCED PRESSURE BACKFLOW DEVICE SHALL BE REQUIRED WHERE A HIGH HAZARD CONDITION EXISTS SUCH AS, BUT NOT LIMITED TO, CHEMICAL'S RUST INHIBITORS OR BOOPLY FLUIDS THAT COULD POTENTIALLY BE BACK SIPHONED INTO THE DOMESTIC WATER SUPPLY.
11. ON 1-1/2" THROUGH 12" METER INSTALLATIONS A 1/4" OR 3/8" TEE MAY BE INSTALLED TO ALLOW FOR A GAUGE BEFORE THE PRESSURE REDUCING VALVE FOR PURPOSES OF MONITORING INCOMING (MAIN LINE) PRESSURE WITH APPROVAL OF COLORADO SPRINGS UTILITIES.

NOTES:

1. NO LANDSCAPING (LARGE TREES, ETC.) OR STRUCTURE SHALL BE CONSTRUCTED WITHIN FIFTEEN FEET (15' EACH SIDE OF CENTERLINE) OF A SANITARY SEWER PIPELINE.
2. MAINTAIN 18" MIN. CLEARANCE AT ALL UTILITY CROSSINGS.
3. * CLEAN-OUTS PER CSU STANDARD DETAIL C 5-4

LEGEND

EXISTING	(E)
PROPOSED	(P)
ADDRESS	(1070)
BOUNDARY	---
ROW	---
LOT LINE	---
EASEMENT	---
(E) SANITARY, MH	---
(E) WATER MAIN, VALVE, FH	---
(E) GAS MAIN	---
(E) TELEPHONE	---
(E) ELECTRIC	---
(P) 4" PVC SAN. SEWER SERVICE	---
(P) 3/4" WATER SERVICE	---
TYPE "K" COPPER	---

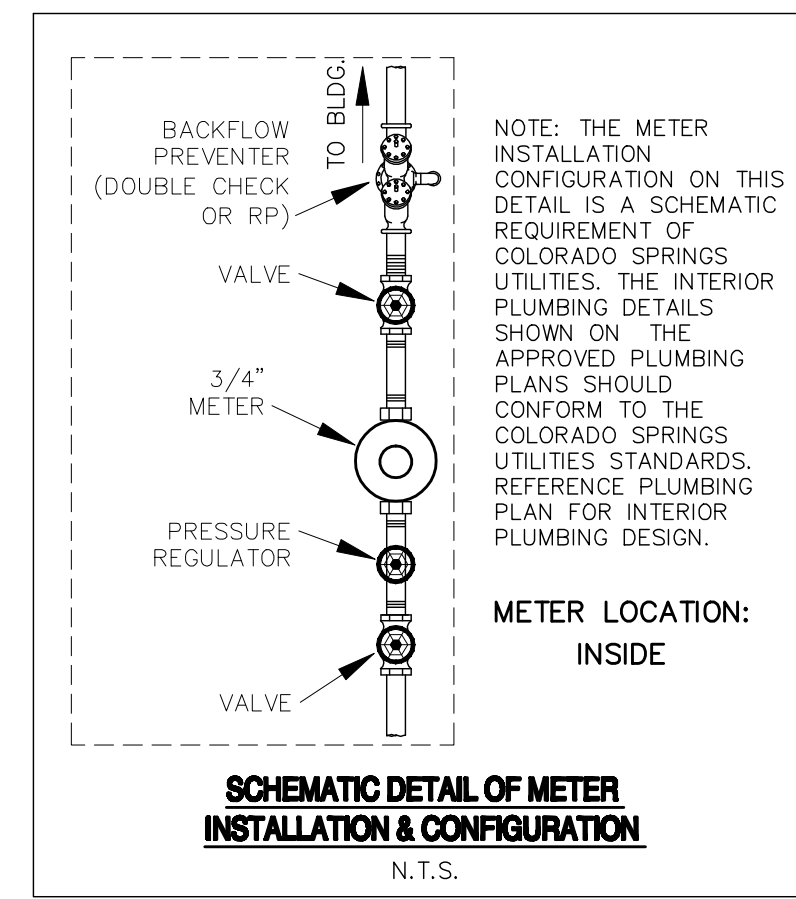
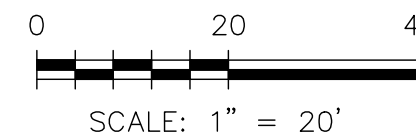


LINE TABLE - SERVICES

LINE	BEARING	DISTANCE
SVC-L1	N87°24'13\"/>	

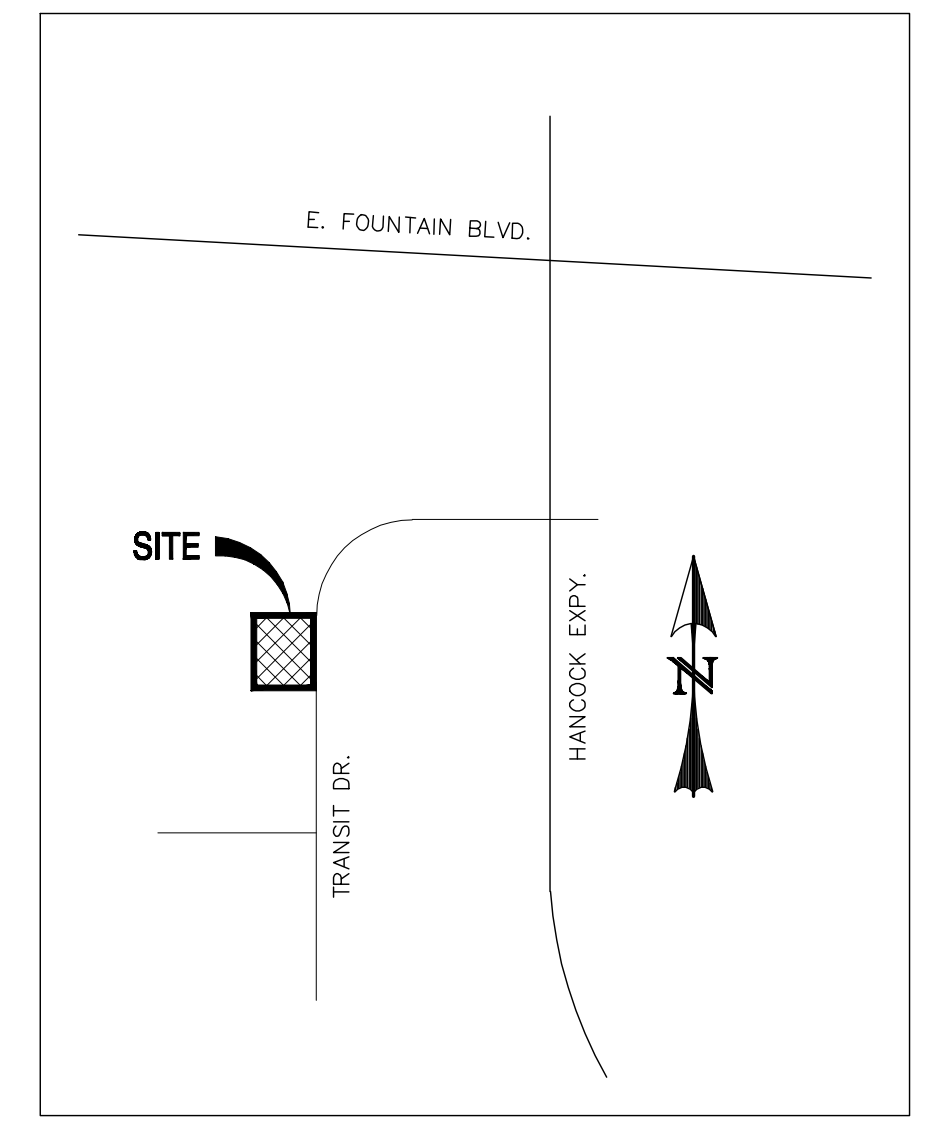
CURVE TABLE - SERVICE

CURVE	DELTA	RADIUS	LENGTH
SVC-C1	90°00'00\"/>		



BUILDING INFO: 1070 Transit Drive

BUILDING SIZE:	3,520 SF
CONSTRUCTION TYPE:	V-B
FIRE FLOW REQUIRED:	1,500 GPM
HYDRANTS REQUIRED:	1
HYDRANTS PROVIDED:	2 (EXISTING)
BUILDING SPRINKLED:	NO
FIRE WALLS:	NO
DISTANCE BETWEEN HYDRANTS:	500
HOSE LAYS:	250



UTILITY SERVICE PLAN

OWNER/DEVELOPER STATEMENT

THE UNDERSIGNED OWNER/DEVELOPER AGREES THAT THE INSTALLATION OF THESE PROPOSED UTILITY SERVICES WILL BE MADE IN ACCORDANCE WITH COLORADO SPRINGS UTILITIES STANDARDS. THE APPROVAL DATE ON THE PLAN(S) EXPIRES IN ONE (1) YEAR AND SHALL REQUIRE RE-SUBMITTAL FOR SIGNATURE IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

SIGNED: _____ DATE: _____

OWNER/DEVELOPER: _____

PRINTED NAME: _____

DBA: _____

ADDRESS: _____

PHONE: _____

FIRE PREVENTION DIVISION APPROVAL:

ACCORDING TO CALCULATIONS REVIEWED BY THE COLORADO SPRINGS UTILITIES THE THEORETICAL AVAILABLE FIRE FLOW AT NODE "404-A" IS _____ GPM AND NODE "525-A" IS _____ GPM UNDER MAXIMUM DAY DEMAND WITH A 20 PSI RESIDUAL. ACTUAL FIRE FLOW MAY VARY DUE TO VARIOUS PARAMETERS.

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO COLORADO SPRINGS UTILITIES SPECIFICATIONS. THE NUMBER OF FIRE HYDRANTS AND HYDRANT LOCATIONS AS SHOWN ON THIS WATER INSTALLATION PLAN ARE CORRECT AND ADEQUATE TO SATISFY THE FIRE PROTECTION REQUIREMENTS AS SPECIFIED BY THE CITY OF COLORADO SPRINGS FIRE DEPARTMENT.

C.S.F.D. FIRE PREVENTION DIVISION, C.S.F.D. _____ DATE: _____

C.S.F.D. PLAN REVIEW NUMBER: _____

COLORADO SPRINGS UTILITIES WATER SERVICE APPROVAL

SIGNED: _____ DATE: _____

PROJECT NUMBER: 2010-C RMS NO: _____

APPROVAL EXPIRES ONE (1) YEAR FROM DESIGN APPROVAL DATE.

COLORADO SPRINGS UTILITIES WASTEWATER SERVICE APPROVAL

SIGNED: _____ DATE: _____

PROJECT NUMBER: 2010-C RMS NO: _____

APPROVAL EXPIRES ONE (1) YEAR FROM DESIGN APPROVAL DATE.

REV.	DESCRIPTION	DATE



FIMS MAP NO.: I-36
PRESSURE ZONE: LOWLINE
PLAT RECEPTION NUMBER: 1501753

PREPARED FOR:
CITY OF COLORADO SPRINGS TRANSIT DIVISION
1015 TRANSIT DRIVE
COLORADO SPRINGS, CO 80903

PREPARED UNDER MY DIRECT SUPERVISION FOR AND BEHALF OF
WESTWORKS ENGINEERING.

CHAD D. KUZBEK, COLORADO PE #35751 DATE: _____

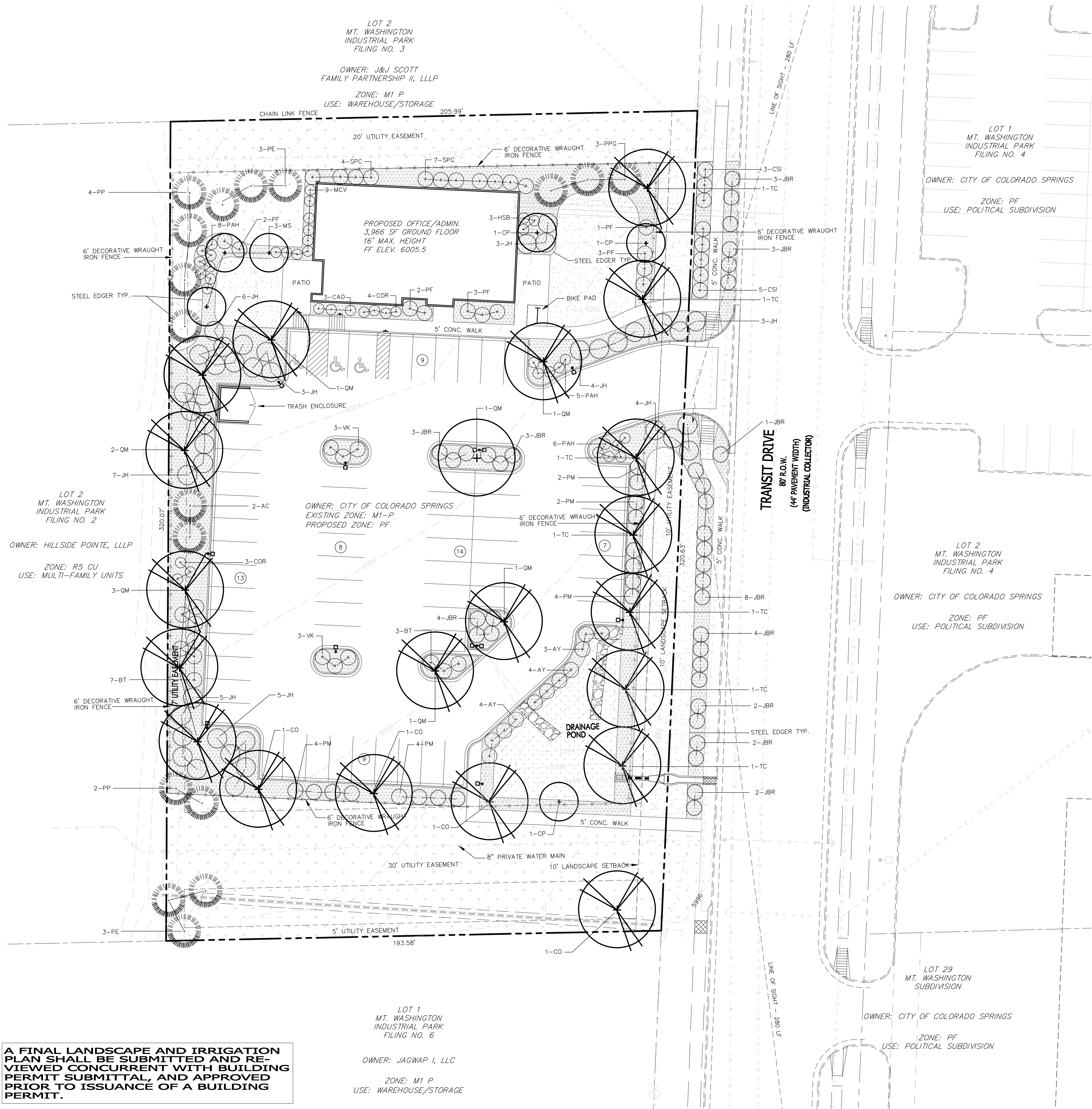


MOUNTAIN METRO TRANSIT 1070 TRANSIT DRIVE

UTILITY SERVICE PLAN

DESIGNED BY: MGP DRAWN BY: MGP
SCALE: N/A DATE: 03/22/10
JOB NUMBER: 90910 SHEET: 1 OF 1

DP #: AR-UP 09-082
APPROVED: 03/10/10



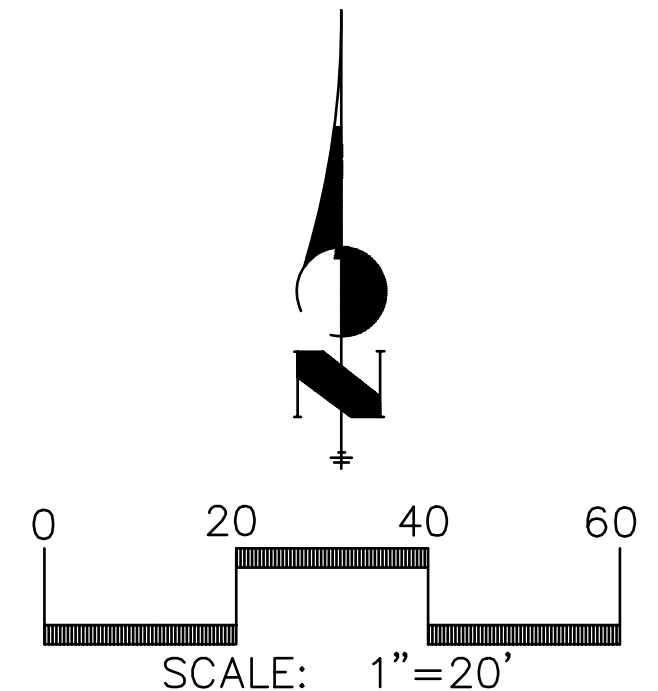
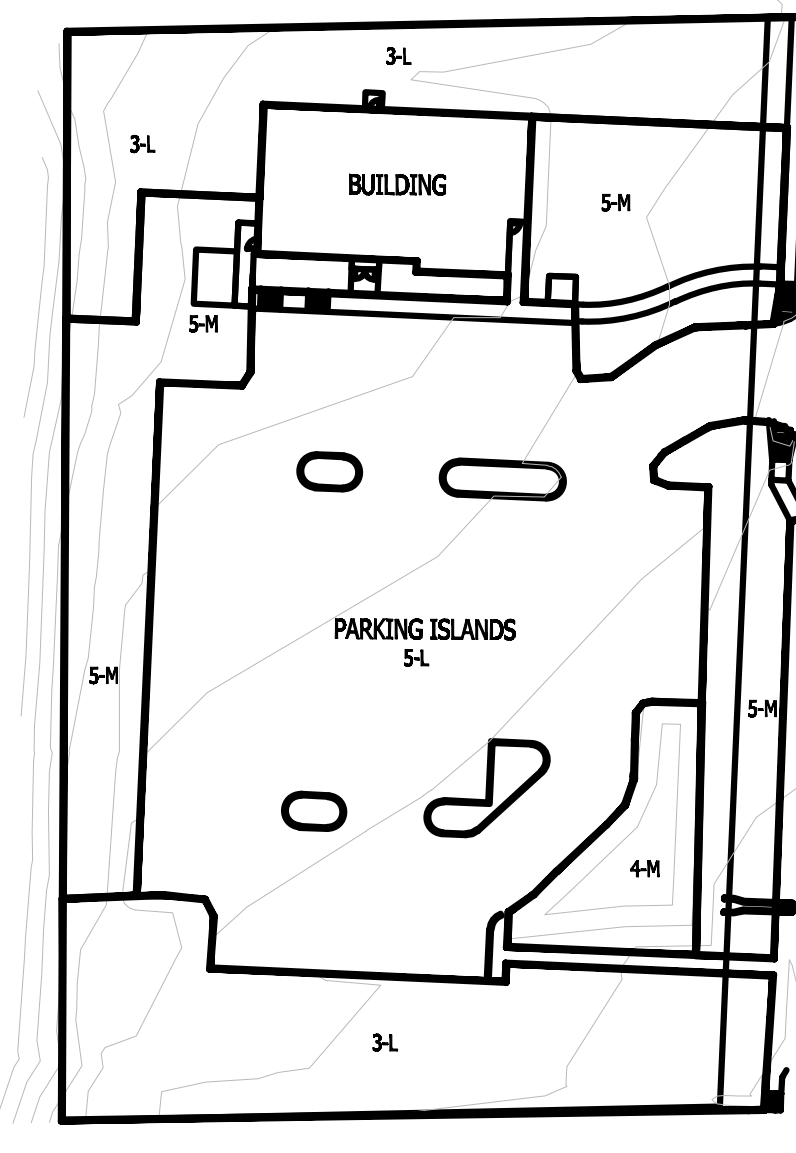
PLANT SCHEDULE:

(Required by Policy 312)

Symbol	Abbr.*	Qty.	Botanical Name	Common Name	Key from Appendix B	Mature Width	Planting Size	Notes
TREES:								
AC	2	Abies concolor	White Fir	45678SA	15-25'	8HT	B&B	
CO	4	Celtis occidentalis	Hackberry	3467DA	40-50'	2' cal.	B&B	
CP	3	Crataegus phaenopyrum	Washington Hawthorne	45AS	20-30'	2' cal.	B&B	
MS	3	Malus 'Spring Snow'	Spring Snow Crabapple	467S	12-15'	2' cal.	B&B	
PE	6	Pinus edulis	Pinon Pine	1256D	12-15'	8HT	B&B	
PPG	3	Pinus pungens	Colorado Spruce	678S	15-18'	8HT	B&B	
PP	6	Pinus ponderosa	Ponderosa Pine	2678D	20-30'	8HT	B&B	
QM	10	Quercus macrocarpa	Bur oak	4DA	50-60'	2' cal.	B&B	
TC	7	Tilia cordata	Littleleaf Linden	4S	50-60'	2' cal.	B&B	
Percent Signature Trees**: (60% minimum - Policy 311.3K)					Signature Trees: 44 Total No. of Trees: 44 = 100.0% Signature Trees			
SHRUBS:								
AY	11	Aronia arbutifolia 'Brilliantissima'	Red Chokecherry	47S	4-5'	5 GAL.	CONT.	
BT	10	Berberis thunbergii var atropurpurea	Redleaf Barbary	45A	4-5'	5 GAL.	CONT.	
CSI	8	Cornus sericea 'Iscariot'	Iscariot Dogwood	1256D	4-6'	5 GAL.	CONT.	
JBR	35	Juniperus sabinna 'Broadmoor'	Broadmoor Juniper	588A	6-8'	5 GAL.	CONT.	
JH	40	Juniperus horizontalis 'Hughes'	Hughes Juniper	2568A	6-8'	5 GAL.	CONT.	
VK	6	Viburnum carlesii	Korean Spice Viburnum	456A	4-5'	5 GAL.	CONT.	
PF	11	Potentilla fruticosa 'Goldfinger'	Goldfinger Potentilla	4567S	4-5'	5 GAL.	CONT.	
PM	16	Pinus mugo 'Compacta'	Dwarf Mugo Pine	1256D	4-5'	5 GAL.	CONT.	
SPC	11	Syringa x prestoniae 'Miss Canada'	Canadian Lilac	588A	6-8'	5 GAL.	CONT.	
Percent Signature Shrubs**: (60% minimum - Policy 311.3K)					Signature Shrubs: 148 Total No. of Shrubs: 148 = 100.0% Signature Shrubs			
ORNAMENTAL GRASSES:								
CAO	3	Calamagrostis acutiflora 'Overdam'	Variagated Feather Reed Grass	A	1-3'	1 GAL.	CONT.	
COR	7	Coracaria sellosiana	Pampus Grass		4'	1 GAL.	CONT.	
HSB	9	Heliopsis scabra 'Serrano'	Blue Cat Grass	1235D	3-4'	1 GAL.	CONT.	
MCV	9	Molinia caerulea variegata	Variagated Moor Grass	3A	2-3'	1 GAL.	CONT.	
PAH	19	Pennisetum setaceum 'Hamelii'	Dwarf Fountain Grass	A	12-18'	1 GAL.	CONT.	
Percent Signature Grasses**: (if substituted for shrub @ 2 for 1)					Signature Grasses: 41 Total No. of Grasses: 41 = 100.0% Signature Grasses			

LEGEND:

- ORGANIC CEDAR MULCH
UNIFORMLY PLACED TO A 4" DEPTH
- BLUEGRASS TURF
- PROPOSED NATIVE SEED
- EXISTING NATIVE GRASS
(TO REMAIN UNDISTURBED)
- PARKING LOT LIGHT
- SITE CATEGORY ABBREVIATIONS**
 - (S) SETBACKS/STREETSCAPES
 - (I) INTERNAL
 - (P) PARKING
 - (B) BUFFER
- SEED MIXES AND APPLICATION RATES:**
LOW GROW MIX
EPHRAIM CRESTED WHEATGRASS - 30%
PERENNIAL RYEGRASS - 25%
BLUE FESCUE - 20%
CANADA BLUEGRASS - 15%
CHEWINGS FESCUE - 10%
RATE: 35 BULK POUNDS/ACRE



A FINAL LANDSCAPE AND IRRIGATION PLAN SHALL BE SUBMITTED AND REVIEWED CONCURRENT WITH BUILDING PERMIT SUBMITTAL, AND APPROVED PRIOR TO ISSUANCE OF A BUILDING PERMIT.

DESIGNED BY: MIKE SHAEER
DRAWN BY: MIKE SHAEER
DATE: SEPTEMBER 2009
SCALE: 1"=20'
REVISIONS: 1/2010, 2/2010, 3/2010



TITLE: CONTRACTOR BUILDING 1
1070 TRANSIT DRIVE
FINAL LANDSCAPE PLAN

LP-O1

FILE NUMBER:
CPC DP 09-082
CPC ZC 09-081

SITE CATEGORY CALCULATIONS:

ZONING EXISTING M-1P PROPOSED PF
 LDT AREA 64,033 SF
 IMPERVIOUS AREA
 BUILDING 3,966 SF 6%
 PAVEMENT (ASPHALT/CONCRETE) 26,088 SF 41%
 PERVIOUS AREA
 ORGANIC MULCH 10,900 SF 17%
 BLUEGRASS TURF 5,776 SF 9%
 NATIVE TURF 17,303 SF 27%
 TOTAL IMPERVIOUS 30,054 SF 47%
 TOTAL PERVIOUS 33,979 SF 53%

LANDSCAPE SETBACKS/STREETSCAPES

STREET NAME TRANSIT DRIVE
 STREET CLASSIFICATION INDUSTRIAL COLLECTOR
 WIDTH REQUIRED 10'
 WIDTH PROVIDED (INCL. R.O.W. & EASEMENTS) 30'
 LINEAR FOOTAGE 320'
 TREE/FEET REQUIRED 30
 NUMBER OF TREES REQUIRED/PROVIDED 10.6/8
 SHRUB SUBSTITUTES REQUIRED/PROVIDED 30/40
 ORNAMENTAL GRASS SUBSTITUTES REQUIRED/PROVIDED 0/0

INTERNAL LANDSCAPING

NET SITE AREA (LESS PUBLIC R.O.W.) 64,033 SF.
 PERCENT MINIMUM INTERNAL AREA 5%
 INTERNAL AREA (SF) REQUIRED/PROVIDED 3,202/33,978 (LESS ASPHALT, HARDSCAPE AND BUILDING).
 INTERNAL TREES (1/500 SF) REQUIRED/PROVIDED 6.4/12
 SHRUB SUBSTITUTES REQUIRED/PROVIDED 0/35
 ORNAMENTAL GRASS SUBSTITUTES REQUIRED/PROVIDED 0/27

PARKING (MOTOR VEHICLE LOTS)

NUMBER OF VEHICLE SPACES PROVIDED 60
 SHADE TREES REQUIRED/PROVIDED (1/15 SPACES) 4.0/8
 VEHICLE LDT FRONTAGE TRANSIT DRIVE
 LENGTH OF FRONTAGE (EXCLUDING DRIVEWAY) 150'
 2/3 LENGTH OF FRONTAGE 100'
 MIN. 3' SCREENING PLANTS (AT 4' O.C.) REQUIRED/PROVIDED 25/44
 EVERGREEN PLANTS REQUIRED (50%)/PROVIDED 13/13
 LENGTH OF SCREENING WALL OR BERM PROVIDED N/A

LANDSCAPE BUFFER

LENGTH OF FRONTAGE 320'
 TREE/FEET REQUIRED 1/20
 NUMBER OF TREES REQUIRED/PROVIDED 16/16
 PERCENT OF EVERGREEN REQUIRED (50%)/PROVIDED 8/11
 NUMBER OF SHRUBS REQUIRED/PROVIDED 0/43

GENERAL LANDSCAPE NOTES:

ALL PLANTS SHALL MEET OR EXCEED STANDARDS SET BY THE COLORADO NURSERY ASSOCIATION, AND THE AMERICAN STANDARD OF NURSERY STOCK. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES, HEALTHY, FREE OF DISEASE, INSECT PESTS, MECHANICAL INJURIES, AND HAVE ADEQUATE ROOT SYSTEMS. TREES SHALL BE FULLY BRANCHED IN PROPORTION TO WIDTH AND HEIGHT AND HAVE A RELATIVELY STRAIGHT TRUNK WITH A CENTRAL LEADER. THE CONTRACTOR SHALL PRUNE LOWER BRANCHES OF DECIDUOUS TREES TO 6 FEET ABOVE FINISH GRADE. ALL TREES, SHRUBS, AND GROUND COVERS SHALL BE INSTALLED PER PLANTING DETAILS. ALL PLANT MATERIAL SHALL BE INSPECTED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

PER SOILS ANALYSIS, ALL PLANTING AREAS SHALL BE AMENDED TO 1 CUBIC YARD PER 1000 SF OF WELL COMPOSTED AGED MANURE OR PREMIUM COMPOST. ALL AMENDED AREAS SHALL BE TILLED TO A DEPTH OF 6-8" PRIOR TO PLANTING. PLANT PIT BACKFILL PER DETAIL.

ALL SEEDED OR HYDROMULCHED AREAS SHALL DEMONSTRATE 95% GERMINATION PRIOR TO FINAL ACCEPTANCE.

ALL TREES, SHRUBS, AND GROUND COVERS SHALL BE IRRIGATED BY AN AUTOMATIC DRIP IRRIGATION SYSTEM EQUIPPED WITH A RAIN SENSOR SHUT-OFF DEVICE. ALL NEW TURF AREAS TO BE IRRIGATED BY UNDERGROUND, AUTOMATIC IRRIGATION SYSTEM ALSO EQUIPPED WITH A RAIN SENSOR SHUT-OFF DEVICE.

ALL PLANTING AREAS FOR TREES, SHRUBS, AND ORNAMENTAL GRASSES SHALL BE MULCHED TO A 4" DEPTH. MULCH SHALL BE FIBROUS IN NATURE, NOT CHIPPED OR IN CHUNKS, AND WATERED IN AFTER INSTALLATION.

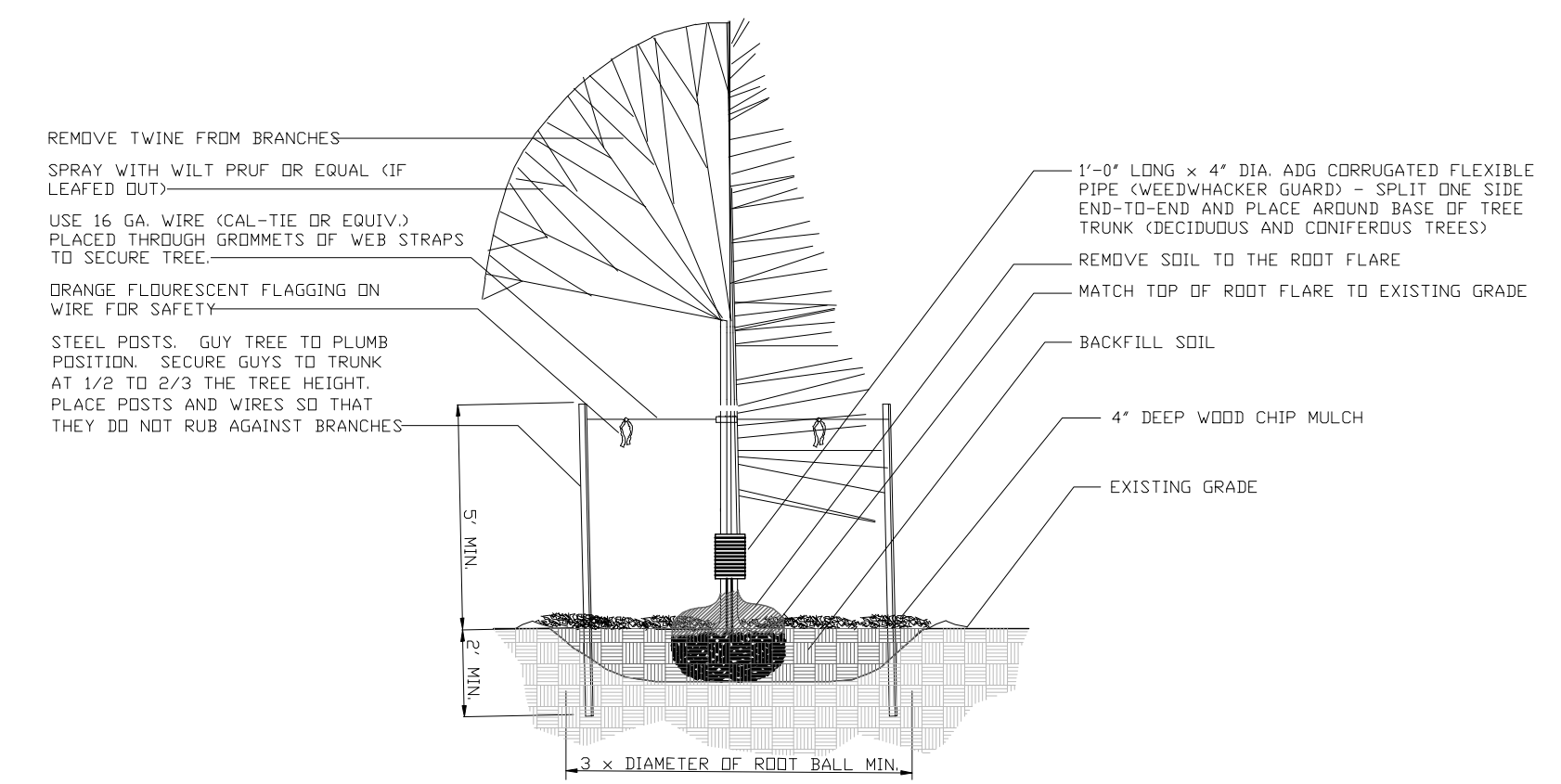
ALL EDGER SHALL BE 3/16" x 4" RYERSON DR PRO STEEL EDGER WITH 16" STAKES AT 30" O.C.. COLOR SHALL BE GREEN.

NOTIFICATION FOR IRRIGATION INSPECTION AFFIDAVIT SHALL BE GIVEN DURING CONSTRUCTION WHILE TRENCH IS OPEN AND AFTER COMPLETION OF SYSTEM INSTALLATION PRIOR TO SEEDING OR SODDING. THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO SEEKING CERTIFICATE OF OCCUPANCY FOR FINAL LANDSCAPE INSPECTION AFFIDAVIT.

ANY FIELD CHANGES OR DEVIATIONS TO THESE PLANS WITHOUT PRIOR CITY APPROVAL OF AN AMENDED DEVELOPMENT PLAN MAY RESULT IN A DELAY OF FINAL APPROVAL AND THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

SOIL TYPE: ACCORDING TO THE USDA, THE SOIL TYPE FOR THIS PROJECT SITE IS CHASEVILLE GRAVELLY SANDY LOAM, 1 TO 8 PERCENT SLOPES, 100% OF THE SITE.

MAINTENANCE OF ALL LANDSCAPE AREAS SHOWN ON THIS PLAN SHALL BE THE RESPONSIBILITY OF THE OWNER.



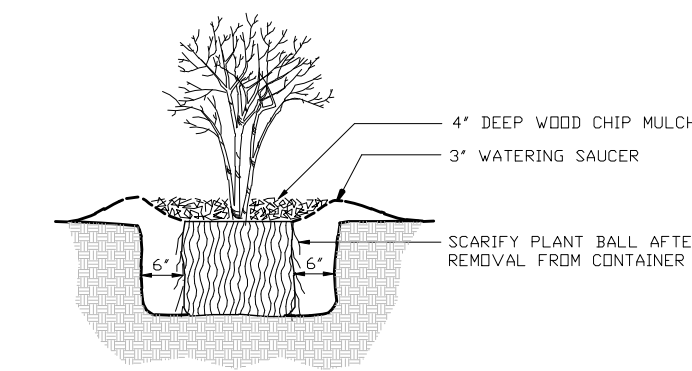
NOTES (PERTAINING TO BOTH DECIDUOUS AND CONIFEROUS TREES)

1. DIG PIT SO THAT TOP OF THE ROOT FLARE IS LEVEL WITH SURROUNDING GRADE. THE ROOT FLARE SHOULD DETERMINE THE DEPTH OF THE PIT. NOT THE TOP OF THE ROOT BALL.
2. THE BALL OF TREE SHOULD SET ON UNDISTURBED SOIL.
3. CUT BOTTOM OF BASKET. REMOVE ALL SOIL FROM ROOT BALL TO TOP OF ROOT FLARE. SET TREE AND REMOVE ENTIRE BASKET AFTER CORRECT PLACEMENT. REMOVE BURLAP FROM THE SIDES OF THE ROOT BALL. REMOVE ALL TWINE FROM AROUND THE TRUNK, AND BACKFILL.
4. PREPARE BACKFILL: 1/3 COMPOST-TYPE MIX WITH 2/3 TOPSOIL. REMOVE ANY BEERIS FROM TOPSOIL. BACKFILL AND SOAK BACKFILL IMMEDIATELY AFTER PLANTING.
5. USE HYDRATED SYNTHETIC POLYMER UNDER AND AROUND PLANTS IN NATIVE AREAS ONLY.

DECIDUOUS/CONIFEROUS TREE PLANTING DETAIL

SCALE: NO SCALE

TREEDTL.DWG



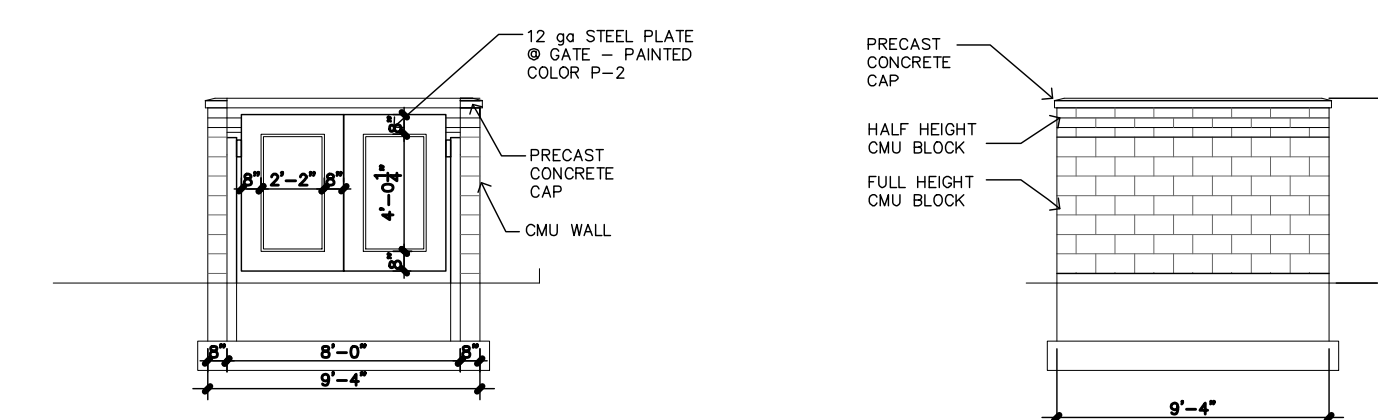
NOTES:

1. USE HYDRATED BRIGDALEAF P-4 SYNTHETIC POLYMER UNDER AND AROUND PLANTS.
2. BACKFILL IMMEDIATELY AFTER PLANTING.

ORNAMENTAL GRASS/SHRUB PLANTING DETAIL

SCALE: NO SCALE

SHRUBDTL.DWG



DUMPSTER ENCLOSURE DETAIL

SCALE: NO SCALE

DESIGNED BY:
 DRAWN BY: MIKE SHAFER
 DATE: SEPTEMBER 2009
 SCALE: AS SHOWN
 REVISIONS: JANUARY 2010



TITLE:
CONTRACTOR BUILDING 1
1070 TRANSIT DRIVE
 LANDSCAPE NOTES & DETAILS

LP-02

FILE NUMBER:
 CPC DP 09-082
 CPC ZC 09-081

Know what's below.
Call before you dig.
48 HOURS BEFORE YOU DIG, CALL UTILITY LOCATORS FOR LOCATING AND MARKING GAS, ELECTRIC, WATER AND WASTEWATER.

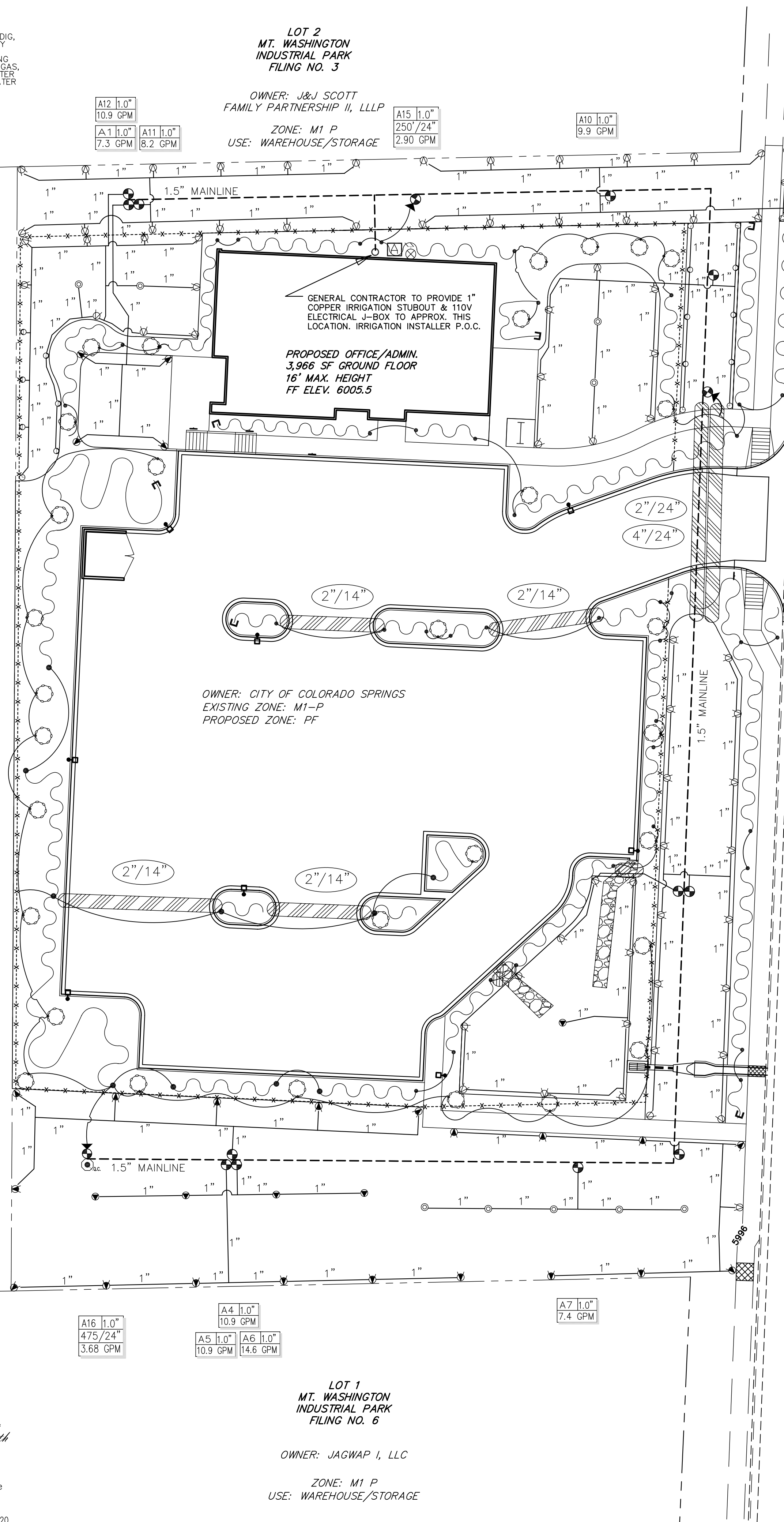
811

Determina lo que esta bajo tierra.
Llama antes de excavar.

**LOT 2
MT. WASHINGTON
INDUSTRIAL PARK
FILING NO. 2**

OWNER: HILLSIDE POINTE, LLLP

ZONE: R5 CU
USE: MULTI-FAMILY UNITS



hackworth consulting, inc

IRRIGATION DESIGN BY:
James Hackworth
c.i.d. #00062

jhjim@comcast.net
3544 Cape Romain Drive
(719) 599-3998 Ph
(719) 260-7725 Fax
Colorado Springs, CO 80920

**LOT 1
MT. WASHINGTON
INDUSTRIAL PARK
FILING NO. 6**

OWNER: JAGWAP I, LLC

ZONE: M1 P
USE: WAREHOUSE/STORAGE

**LOT 2
MT. WASHINGTON
INDUSTRIAL PARK
FILING NO. 4**

OWNER: CITY OF COLORADO SPRINGS

ZONE: PF
USE: POLITICAL SUBDIVISION

**LOT 29
MT. WASHINGTON
SUBDIVISION**

OWNER: CITY OF COLORADO SPRINGS

ZONE: PF
USE: POLITICAL SUBDIVISION

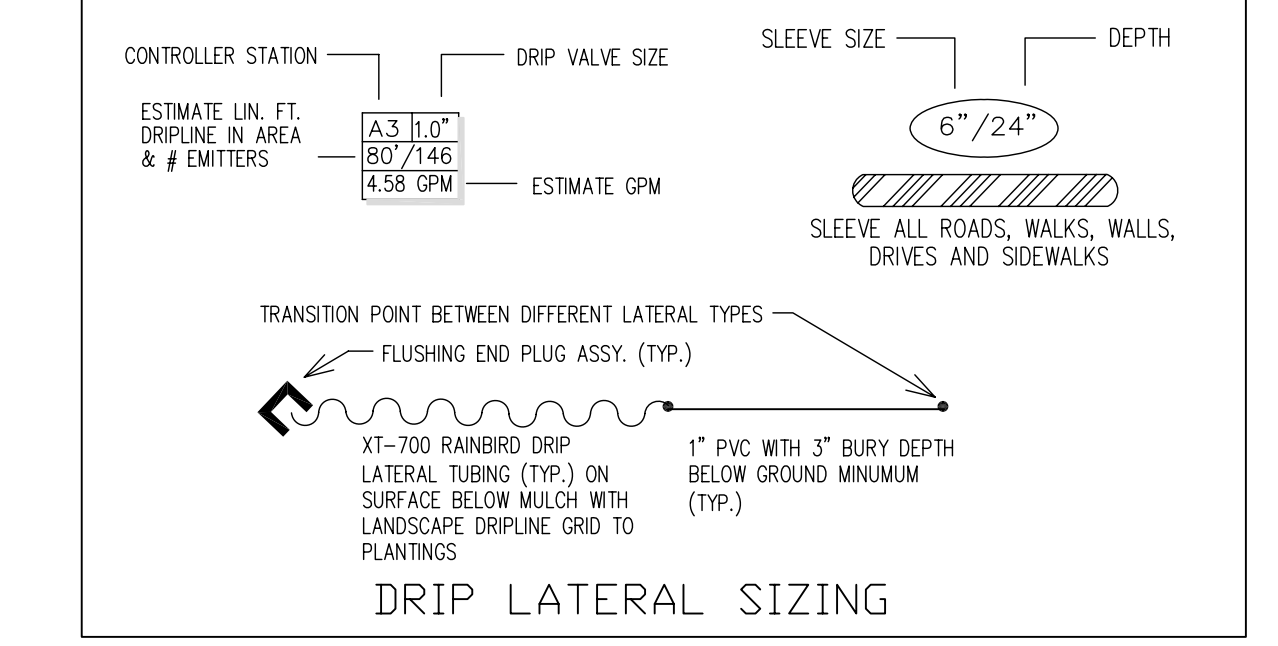
EQUIPMENT SCHEDULE

SYMBOL	MANUFACTURER	MODEL	NOZZLE	PSI	GPM	COVERAGE
	RAINBIRD	LD-09-24	LANDSCAPE DRIP LINE	30	1 GPH /PDR	5' DIA. TREE RING
	HUNTER	MPR40-04-CV	MP100090	40	0.37	14' RADIUS
	HUNTER	MPR40-04-CV	MPSS530	40	0.44	5'X30' STRIP
	HUNTER	MPR40-04-CV	MP2000360	40	1.47	38' DIA.
	HUNTER	MPR40-04-CV	MP200090	40	0.74	19' RADIUS
	HUNTER	MPR40-04-CV	MP3000360	40	3.64	60' DIA.
	HUNTER	MPR40-04-CV	MP300090	40	1.82	30' RADIUS
SYMBOL	MANUFACTURER	MODEL	SIZE	DESCRIPTION/REMARKS		
	HUNTER	ICC-1600PL	16 STATIONS	AUTOMATIC CONTROLLER "WALL MOUNT" CABINET		
	HUNTER	WRC	CONTROLLER MOUNT	WIRELESS MINI CLIK		
	FEBCO	825YA-1" (BY OTHERS)	1"	REDUCED PRESSURE BACKFLOW PREVENTOR		
	HUNTER	ICV-150G	15"	CONTROL VALVE ASSEMBLY		
	HUNTER	ICZ-101	1" Flows 0.3-15 GPM	DRIP CONTROL VALVE ASSEMBLY		
	HUNTER	#H044	1"	QUICK COUPLING VALVE		
	MATCO	#100-1	LINE SIZE	ISOLATION GATE VALVE		

NOTES

- USE ALL CLASS 200 BELLED ONE END SOLVENT WELD (BEE) PVC PIPE (1.5" SIZE UNLESS OTHERWISE NOTED) FOR MAINLINES.
- USE CLASS 200 BEE SOLVENT WELD PVC PIPE (1" SIZE UNLESS OTHERWISE NOTED) FOR LATERALS. UNUSED SECTIONS OF LATERALS BETWEEN TWO IDENTICALLY SIZED PIPE SIZING NOTATIONS SHALL BE CONSTRUCTED TO BE OF THE SAME NOMINAL SIZE AND NOT CONFUSED WITH THE DEFAULT PIPE SIZE NOTED ABOVE. USE ONLY STANDARD TEES, REDUCERS, COUPLINGS AND ELBOWS AS APPLICABLE. USE OF CROSS TYPE FITTINGS IS NOT PERMITTED. MAINTAIN A MINIMUM OF 4" SEPARATION AND CLEARANCE BETWEEN ALL UNCONNECTED PIPING AS REQUIRED. NO PIPING SHALL BE Laid INTO SAME TRENCH OR PIPE/WIRE SLEEVE.
- SLEEVE ALL WALKS, DRIVEWAYS AND/OR ROADWAYS WITH CLASS 200 PVC SIZED TWICE THE SIZE OF THE PIPE DIAMETER CARRIED. ALL WIRE CROSSING SHALL BE IN SEPARATE 2" PVC SLEEVE. INSTALL PARALLEL TO MAINLINE SLEEVE. COORDINATE INSTALLATION OF SLEEVING WITH OTHER TRADES TO INSURE PROPER NUMBER, PLACEMENT AND PROTECTION FROM DAMAGE PRIOR TO USE. ANY IRRIGATION PIPING AND/OR WIRING WHICH PASSES BENEATH EXISTING HARDSCAPE WHERE SLEEVING WAS NOT INSTALLED REQUIRES HORIZONTAL BORING AND CONDUITING. SLEEVE INSTALLER SHALL INDELBLY "STAMP OR STYK AN "S" AT EACH END OF HARDSCAPE CROSSED FOR EACH SLEEVE.
- ALL LOW VOLTAGE 14PE TWO-WIRE PATH SHALL BE DONE PER MANUFACTURERS SPECS. KING BROTHERS WIRE CONNECTORS SHALL BE USED FOR ALL UNDERGROUND WIRE CONNECTIONS. IT IS ESSENTIAL THAT INSTALLER INSURE ALL CONNECTIONS BE ABSOLUTELY WATERTIGHT WITH NO LEAKAGE TO GROUND NOR SHORTING BETWEEN CONDUCTORS.
- INSTALL TWO (2) SPARE CONTINUOUS LENGTH YELLOW #14" UNDERGROUND BURIAL "TRACES" WIRES ALONG ENTIRE LENGTH OF IRRIGATION MAINLINE INCLUDING MINIMUM OF 3' COILED LENGTH STORIED UP INTO EACH VALVE BOX OR SEPARATE VALVE BOX AT DEAD END MAINLINES WHERE NO SOLIDOOD VALVES EXIST.
- REFER TO SHEET #R-2 & R-3 FOR FURTHER "GENERAL NOTES", SCHEDULES & DETAILS.
- INSTALL 7/8"-3/4" MATCO MANUAL DRAIN VALVE AT ALL LOW POINTS ALONG MAINLINE (NOTE LOCATIONS ON AS-BUILT). MINIMUM OF ONE PER 300' MAINLINE.
- USE RAINBIRD PC-05 EMITTERS TO ALL PLANTINGS USING 2/SRUB (SEE DETAIL). USE RAINBIRD 700-CF-21 (SEE DETAIL) FOR END CLOSURES CAP AT THE ENDS OF ALL DRIP TUBING LATERAL (NOTE LOCATIONS ON AS-BUILT). INSTALL "TREE RINGS" FOR ALL TREES IN MULCHED AREAS PER DETAIL WHERE NOTED ON DRAWINGS.
- THIS DESIGN IS BASED ON OWNER PROVIDING EXTENDING EXISTING SYSTEM AND MAINLINE FROM APPROXIMATE P.O.C. LOCATION NOTED. ASSUMES MINIMUM OF 85 PSI STATIC AND A MAXIMUM FLOW THROUGH ANY AND ALL ZONE VALVES TO BE OPERATED INDEPENDENTLY OF 10 GPM WHICH WILL RESULT IN A MAXIMUM WATERING WINDOW OF 6.9 HOURS/NIGHT SIX DAYS PER.
- QUICK COUPLERS ARE INTENDED FOR SUPPLEMENTAL HAND WATERING ONLY.

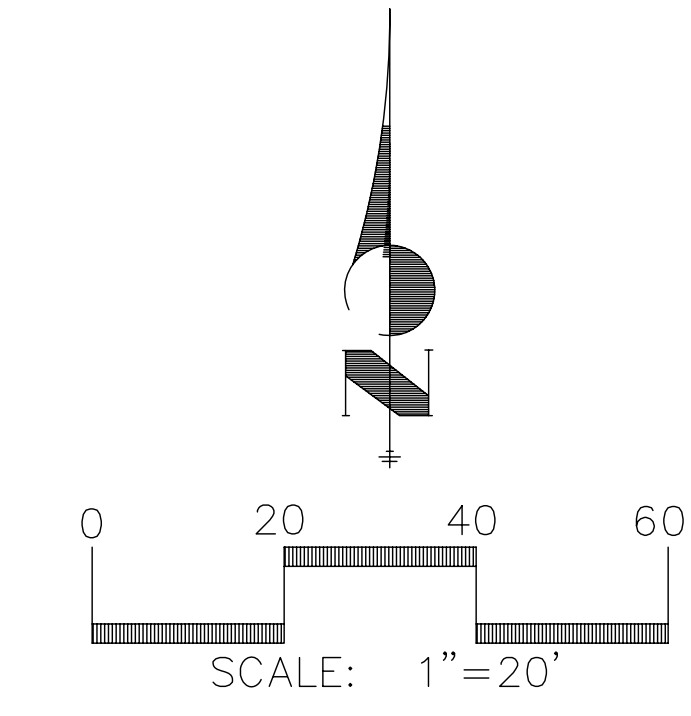
TYPICALS



Note: LOCATION OF ALL SLEEVING AND MAINLINE IS DIAGRAMMATIC ONLY. ROUTE ALL EQUIPMENT THROUGH LANDSCAPED AREAS AND SLEEVE UNDER ALL HARDSCAPE AS REQUIRED TO CONNECT LANDSCAPED AREAS.

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DESIGNED BY: JIM HACKWORTH
DRAWN BY: JIM HACKWORTH
DATE: MARCH 2010
SCALE: 1"=20'
REVISIONS:



TITLE:
CONTRACTOR BUILDING 1
1070 TRANSIT DRIVE
FINAL IRRIGATION PLAN

SHEET
IR-1

FILE NUMBER:
CPC DP 09-082
CPC ZC 09-081

C:\DOCUMENTS AND SETTINGS\ADMINISTRATOR\M\ADMINISTRATOR\BUREAU\NORTH\FINAL\HACKDOC_00

GENERAL NOTES:

- A. PLANS ARE DIAGRAMMATIC; PRECISE PLACEMENT OF EQUIPMENT MAY NOT BE POSSIBLE AS INDICATED. CONSULT PROJECT MANAGER PRIOR TO MAKING RANDOM FIELD CHANGES WHICH ALTER THE INTENT OF THE DESIGN.
- B. SCOPE OF WORK TO BE PROVIDED AND INSTALLED BY IRRIGATION SYSTEM CONTRACTOR TO INCLUDE BUT MAY NOT BE LIMITED TO:
 1. PROVISION AND INSTALLATION OF ALL EQUIPMENT REQUIRED PER THE DRAWINGS, EQUIPMENT SCHEDULE AND SPECIFICATIONS, INCLUDING ALL MISCELLANEOUS INCIDENTAL EQUIPMENT, WHETHER INDICATED OR NOT, BUT WHICH MAY BE REQUIRED TO RESULT IN A COMPLETE AND OPERABLE IRRIGATION SYSTEM (FROM P.O.C.)
 2. COORDINATION AND INSTALLATION OF ALL SUBSURFACE SLEEVES AS INDICATED ON THE DRAWINGS.
 3. FLAGGING OF ALL SPRINKLER HEAD AND CONTROL ZONE VALVE LOCATIONS, AND MARKING OF ALL MAINLINE AND LATERAL PIPELINE LOCATIONS FOR INSPECTION AND APPROVAL BY THE PROJECT MANAGER PRIOR TO TRENCHING AND EXCAVATING.
 4. TESTING FOR STATIC WATER PRESSURE AT POINT OF CONNECTION AND DETERMINING ADEQUACY FOR USE PRIOR TO COMMENCING WORK DOWNSTREAM OF POINT OF CONNECTION. INADEQUATE PRESSURE OF FLOW SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER AND DEFICIENCIES SHALL BE CORRECTED PRIOR TO COMMENCEMENT OF WORK DOWNSTREAM OF THE POINT OF CONNECTION. FAILURE TO TEST AND VERIFY ADEQUACY OF THE STATIC PRESSURE OR FLOW AND DETERMINING FEASIBILITY OF OPERATION AS INTENDED BY DESIGN PRIOR TO COMMENCEMENT OF WORK DOWNSTREAM OF THE POINT OF CONNECTION SHALL NOT PRECLUDE IRRIGATION CONTRACTOR'S RESPONSIBILITY TO PROVIDE OPTIMUM COVERAGE OF ALL IRRIGATED AREAS AS INTENDED BY DESIGN AT THE CONTRACTOR'S EXPENSE.
 5. PROVISION AND INSTALLATION OF ALL CONTROLLERS, CABINETS, PEDestal MOUNTINGS, CONCRETE PADS, WIRE CHASSES/SLEEVES, POWER SUPPLY (IF SPECIFIED), WATER TAP OR DOWNSTREAM OF P.O.C.) AND ANY OTHER CONTROLLER RELATED EQUIPMENT AS MAY BE REQUIRED BY THE DRAWINGS AND SPECIFICATIONS. INSTALLER IS RESPONSIBLE FOR MAKING ALL LOW VOLTAGE WIRING CONNECTIONS FROM THE REMOTE CONTROL VALVES TO ALL CONTROLLERS AND FOR CORRECT SEQUENCING OF ALL VALVE OPERATION INDICATED IN THE CONTROL ZONE VALVE SCHEDULE.
 6. ACTIVATION OF ALL IRRIGATION SYSTEMS AND ADJUSTMENT OF ALL FLOW CONTROLS AND NOZZLES FOR OPTIMUM PERFORMANCE AND COVERAGE AS INTENDED BY DESIGN WITH MINIMAL OVERLAP ROTATOR ONTO PAVEMENTS AND/OR STRUCTURES. INSTALLER IS RESPONSIBLE FOR ALL ADJUSTMENTS TO NOZZLES, RISERS, FLOW CONTROLS, ETC., PRIOR TO REQUEST FOR INSPECTION BY THE PROJECT MANAGER. ALL ZONES SHALL HAVE BEEN PROGRAMMED AND PERMITTED TO OPERATE AUTOMATICALLY VIA CONTROLLERS THROUGH AT LEAST TWO (2) COMPLETE CYCLES FOR A PERIOD OF NOT LESS THAN 24 HOURS PRIOR TO INSPECTION BY PROJECT MANAGER.
 7. DEMONSTRATION OF OPERATION OF SYSTEM IN AN AUTOMATIC MODE IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE, THE PROJECT MANAGER, AND THE INSTALLER SHALL BE GIVEN WITH NOT LESS THAN 24 HOURS NOTICE THAT AN INSPECTION FOR OPERATION IS REQUESTED. REQUESTS FOR INSPECTIONS SHALL BE ON A "PER TAP/CONTROLLER" BASIS. ACCEPTANCE FOR WORK AND COMMENCEMENT OF WARRANTIES SHALL BE GIVEN FROM COMPLETION, INSPECTION AND ACCEPTANCE OF ALL WORK REQUIRED PER THE DRAWINGS, SPECIFICATIONS AND CONTRACT DOCUMENTS.
 8. JOBSITE SHALL BE CLEANED DAILY OF ANY TRASH OR DEBRIS. COMPLETE CLEANUP OF ALL DIRT, UNUSED MATERIALS, AND OTHER DEBRIS SHALL BE PERFORMED BY INSTALLER PRIOR TO OWNER'S INSPECTION FOR FINAL ACCEPTANCE. PAVEMENTS AND WALKS WITHIN WORK AREAS SHALL BE SWEEP AND POWER WASHED WITH WATER AS MAY BE NECESSARY TO REMOVE DIRT AND DEBRIS. ALL IRRIGATION DITCHES SHALL BE COMPLETE, FLAGS REMOVED, AND FINE TUNING ADJUSTMENTS MADE PRIOR TO INSPECTION FOR FINAL ACCEPTANCE.
 9. AS-BUILT REPRODUCIBLE RECORD DRAWINGS, WRITTEN WARRANTIES, SEASONAL MAINTENANCE INSTRUCTIONS, OPERATIONAL GUIDELINES AND SPARE EQUIPMENT SHALL BE PROVIDED BY THE INSTALLER AT INSPECTION FOR FINAL ACCEPTANCE. SUBMITTALS SHALL BE IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS. FAILURE TO MAKE ALL PROJECT CLOSEOUT SUBMITTALS AT THE REQUIRED TIME IN THE REQUIRED FORMAT MAY RESULT IN DELAY OF FINAL ACCEPTANCE AND RELEASE OF APPLICABLE RETAINAGES BY THE OWNER.
- C. IRRIGATION INSTALLER SHALL BE RESPONSIBLE FOR PROVIDING A 30 DAY ON-SITE MAINTENANCE PROGRAM, TO INCLUDE BUT NOT LIMITED TO FINE TUNING OF NOZZLES, FLOW CONTROLS, AND OTHER EQUIPMENT INSTALLED UNDER THE CONTRACT TO MAINTAIN OPTIMUM OPERATION OF ALL SYSTEMS AT ALL TIMES. CONTROLLER PROGRAMMING SHALL BE COORDINATED WITH THE OWNER TO ESTABLISH AND PROMOTE GROWTH OF PLANTINGS MADE UNDER THE CONTRACT, AND TO SUSTAIN OPTIMUM PLANT APPEARANCE AT ALL TIMES AS SEASONALLY APPROPRIATE.
- D. IRRIGATION INSTALLER SHALL BE RESPONSIBLE FOR PERFORMANCE OF SEASONAL MAINTENANCE TO INCLUDE BUT NOT NECESSARILY LIMITED TO DEACTIVATION AND ACTIVATION OF ALL IRRIGATION SYSTEMS TO PREVENT FREEZE DAMAGE TO ALL EQUIPMENT. INSTALLER SHALL BE RESPONSIBLE FOR COORDINATION AND PERFORMANCE OF ALL SEASONAL MAINTENANCE PROCEDURES REQUIRED TO DEACTIVATE SYSTEMS ON OR BEFORE OCTOBER 15TH OF THE FIRST YEAR FOLLOWING DATE OF ACCEPTANCE, AND ACTIVATION OF IRRIGATION SYSTEMS SHALL BE PERFORMED ON OR BY APRIL 1ST OF THE YEAR FOLLOWING DEACTIVATION, IN THE EVENT THE INSPECTION FOR FINAL ACCEPTANCE OCCURS AFTER OCTOBER 15TH, REQUIRED SEASONAL MAINTENANCE SCHEDULE SHALL BE EXTENDED TO OCCUR THE YEAR FOLLOWING FINAL ACCEPTANCE OF WORK.
- E. A 2 YEAR CONDITIONAL WARRANTY SHALL BE EXTENDED BY THE INSTALLER TO COVER ALL MATERIAL AND WORKMANSHIP PROVIDED UNDER THE CONTRACT, DURING THE 2 YEAR WARRANTY PERIOD, ANY INSTALLATION WHICH BECOMES IN OPERABLE, OR WHICH DOES NOT OPERATE AS ORIGINALLY INTENDED (IE CONDITION AS OBSERVED AND ACCEPTED AT INSPECTION FOR FINAL ACCEPTANCE)] THE INSTALLER SHALL REPAIR AND/OR REPLACE ANY WORK WHICH CAN BE ATTRIBUTED TO DEFECTS REGARDING MATERIAL AND/OR WORKMANSHIP AT NO COST TO THE OWNER. DEFICIENCIES MAY INCLUDE BUT ARE NOT LIMITED TO LEAKS, SETTLEMENT OF TRENCHES OR VALVE BOXES GREATER THAN ONE INCH, FREEZE DAMAGE, AND EQUIPMENT DEFECTS, VANDALISM, IMPROPER USE AND/OR MAINTENANCE OF SYSTEMS BY OWNER RESULTING IN DEFICIENCIES SHALL NOT BE THE RESPONSIBILITY OF THE INSTALLER, AND REPAIR/REPLACEMENT MAY BE MADE AT EXTRA COST TO THE OWNER AS AGREED.
- F. ALL INSTALLATIONS SHALL BE MADE IN STRICT ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS, CONTRACT DOCUMENTS, AND STATE & LOCAL CODES AND ORDINANCES HAVING JURISDICTION OVER THE WORK. IN THE EVENT OF CONFLICT BETWEEN REQUIREMENTS, THE MOST STRINGENT REQUIREMENT WILL PREVAIL IN ANY CASE.
- G. QUANTITIES WHICH MAY BE STATED OR IMPLIED IN SCHEDULES, GENERAL NOTES, ETC., ARE PROVIDED FOR REFERENCE ONLY. IN THE EVENT OF CONFLICT, THAT QUANTITY WHICH IS REPRESENTED GRAPHICALLY PER THE DRAWINGS SHALL PREVAIL IN ANY CASE.
- H. ALL IRRIGATION WORK SHALL BE COORDINATED WITH GENERAL, OTHER SUBCONTRACTORS, OTHER SITESWORK, AND LANDSCAPING WORK TOWARDS PROMOTING A TEAM EFFORT. INSTALLER SHALL NOT WILLFULLY MAKE ANY DESIGN CHANGES TO FACILITATE OTHERS WORK YET INTERFERE WITH IRRIGATION SYSTEM OPERATION AND COVERAGE AS INTENDED BY DESIGNER. NOTIFY THE PROJECT MANAGER OF SUCH CONFLICTS AND RESOLVE THEM PRIOR TO PROCEEDING WITH WORK.
- I. ALTERNATE EQUIPMENT FROM THAT INDICATED ON THE DRAWINGS AND SPECIFICATIONS, WHICH WHEN INSTALLED WILL RESULT IN EQUAL OR IMPROVED PERFORMANCE, AND/OR CONSIDERABLE COST SAVINGS TO THE OWNER WITH EQUAL AND/OR IMPROVED PERFORMANCE TO THAT INDICATED MAY BE CONSIDERED BY THE OWNER. ALL PROPOSED ALTERNATE EQUIPMENT MUST BE PROPOSED TO AND APPROVED BY THE OWNER PRIOR TO SUBMITTAL OF BID PROPOSAL. ONLY THOSE ALTERNATE EQUIPMENT MANUFACTURERS AND EQUIPMENT LISTED IN THE SPECIFICATIONS WILL BE CONSIDERED. PROVISION/INSTALLATION OF ALTERNATE EQUIPMENT WITHOUT PRIOR APPROVAL BY THE OWNER MAY RESULT IN DELAY AND/OR REJECTION OF FINAL ACCEPTANCE OF WORK.
- J. UPON ENTERING INTO AN AGREEMENT TO PROVIDE LABOR AND MATERIALS TO COMPLETE ALL THE WORK REQUIRED UNDER THIS SECTION, THE INSTALLER HEREBY GUARANTEES TO THE OWNER THAT THE WORK WILL BE EXECUTED TO THE BEST OF THE INSTALLER'S ABILITY AND TO AT LEAST THE MINIMUM INDUSTRY STANDARDS AND/OR MANUFACTURER'S RECOMMENDATIONS, TIME IS OF THE ESSENCE AND PROGRESS TOWARDS FINAL ACCEPTANCE SHALL BE STEADY AND WITHOUT DELAY OR INTERRUPTION EXCEPT FOR UNREASONABLE WEATHER CONDITIONS. THE INSTALLER WILL NOT QUALIFY ANY TERM, CONDITION, OR REQUIREMENT STATED HEREIN AT ANY TIME DURING OR AFTER COMPLETION OF AGREEMENT TO PROVIDE WORK UNDER THIS SECTION. THE INSTALLER MAY HAVE CERTAIN RIGHTS PERTAINING TO THIS GUARANTEE AS MAY BE DESCRIBED IN THE GENERAL CONDITIONS OF THE AGREEMENT BETWEEN OWNER AND INSTALLER.
- K. IRRESPECTIVE OF ANY OTHER TERM IN THIS DOCUMENT, DESIGNER SHALL NOT CONTROL OR BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SCHEDULES, SEQUENCES OR PROCEDURES OR FOR THE CONSTRUCTION SAFETY OR ANY OTHER RELATED PROGRAMS, OR FOR ANOTHER PARTIES' ERRORS OR OMISSIONS OR FOR ANY ANOTHER PARTIES' FAILURE TO COMPLETE THEIR WORK OR SERVICES IN ACCORDANCE WITH DESIGNERS' DOCUMENTS. DUE TO VARYING CLIMATIC CONDITIONS AND/OR REASONS STATED ABOVE, THE DESIGNER SHALL NOT BE HELD RESPONSIBLE FOR QUALITY, QUANTITY, VITALITY, OR SURVIVAL OF ANY AND ALL LANDSCAPE PLANTINGS. SCHEDULING ON DOCUMENTS ARE RECOMMENDED GUIDELINES ONLY.

SHOULD COLORADO SPRINGS UTILITIES DESIGNATE A WATER SHORTAGE, THE IRRIGATION SCHEDULE SHALL BE ADJUSTED TO REFLECT THE DESIGNATED REQUIREMENTS. A TURF ESTABLISHMENT PERMIT MAY ALSO BE REQUIRED. IRRIGATIONS CONTRACTORS AND BUILDING OWNERS ARE ADVISED TO CONTACT CSU CUSTOMER SERVICE AT 448-4800.

NOTE: SHOULD COLORADO SPRINGS UTILITIES DESIGNATE A WATER SHORTAGE, TURF ESTABLISHMENT AND THE IRRIGATION SCHEDULE SHALL REFLECT THE DESIGNATED REQUIREMENTS.

WATER MANAGEMENT GUIDELINES:
 ALL CYCLES NOTED IN VALVE SCHEDULE TABLES ARE BASED ON 0.20"/APPLICATION.
 WATER BUDGET SETTINGS SHOULD BE ADJUSTED TO SETTINGS BELOW FOR OPTIMUM WATER CONSERVATION
 EARLY SPRING (MARCH & APRIL) 60%
 SPRING (MAY & JUNE) 80%
 SUMMER (JULY & AUGUST) 100%
 FALL (SEPTEMBER TILL NOVEMBER) 70%

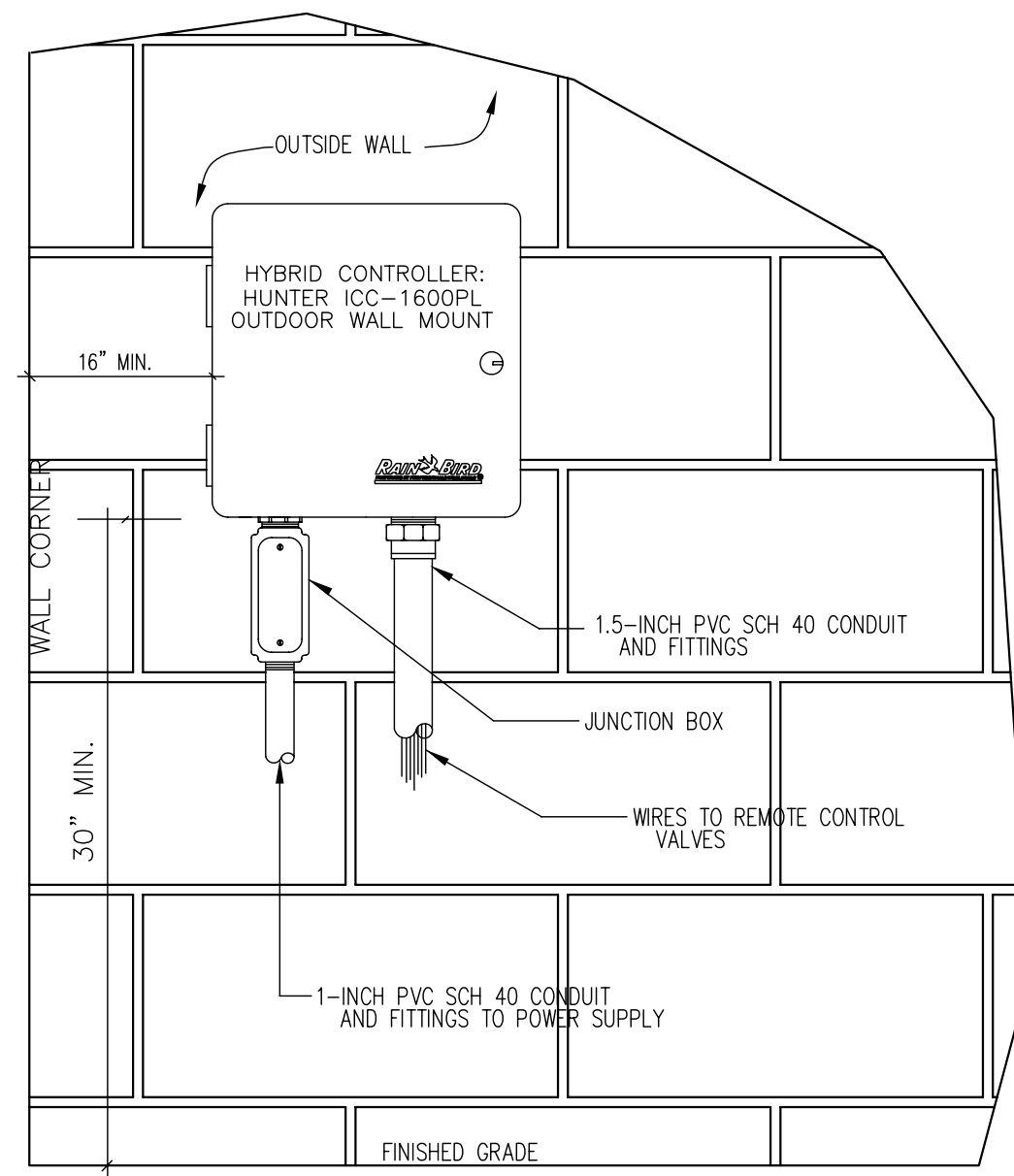
SCHEDULE SUPPLEMENTAL APPLICATIONS AS REQUIRED BY UNUSUAL CLIMATIC CONDITIONS.
SDD ESTABLISHMENT SETTINGS
 ALL CYCLES NOTED IN VALVE SCHEDULE TABLES ARE BASED ON 0.20"/APPLICATION.
 ALL CYCLE TIMES SHOULD BE CUT BACK BY ONE-THIRD WITH TYPICAL CYCLE APPLYING 0.20" EACH.
 THESE CYCLES PER DAY (4AM-12ND-4PM)
 TWO CYCLES PER DAY (4AM-12ND) NEXT 2-3 WEEKS
 SINGLE CYCLE RAISING RATE TO 0.20" EVERY 30 MONTHS
 ADJUST TIMER SETTING TO THESE LISTED IN VALVE SCHEDULE (SET WATER BUDGET PER ABOVE)

SCHEDULE SUPPLEMENTAL APPLICATIONS AS REQUIRED BY UNUSUAL CLIMATIC CONDITIONS.
SEED AREAS
 ALL CYCLES NOTED IN VALVE SCHEDULE TABLES ARE BASED ON 0.20"/APPLICATION.
 ALL CYCLE TIMES SHOULD BE CUT BACK BY ONE-THIRD WITH TYPICAL CYCLE APPLYING 0.10" EACH.
 SIX CYCLES PER DAY (EVERY FOUR HOURS) 1 MONTH
 FOUR CYCLES PER DAY (EVERY SIX HOURS) 2 MONTHS
 TWO CYCLES RAISING APPLICATION RATE TO 0.20" NEXT 35 MONTHS
 ADJUST TIMER SETTING TO THESE LISTED IN VALVE SCHEDULE (SET WATER BUDGET PER ABOVE)
 ALL GUIDELINES HAVE BEEN BASED ON THE RECOMMENDATIONS OF CSU & SEED GROWERS PERSONNEL INPUT. THEY ASSUME GOOD SOIL QUALITY, SPRING PLANTING, PROPER MOWING, FERTILIZATION & SPRINKLER MAINTENANCE.

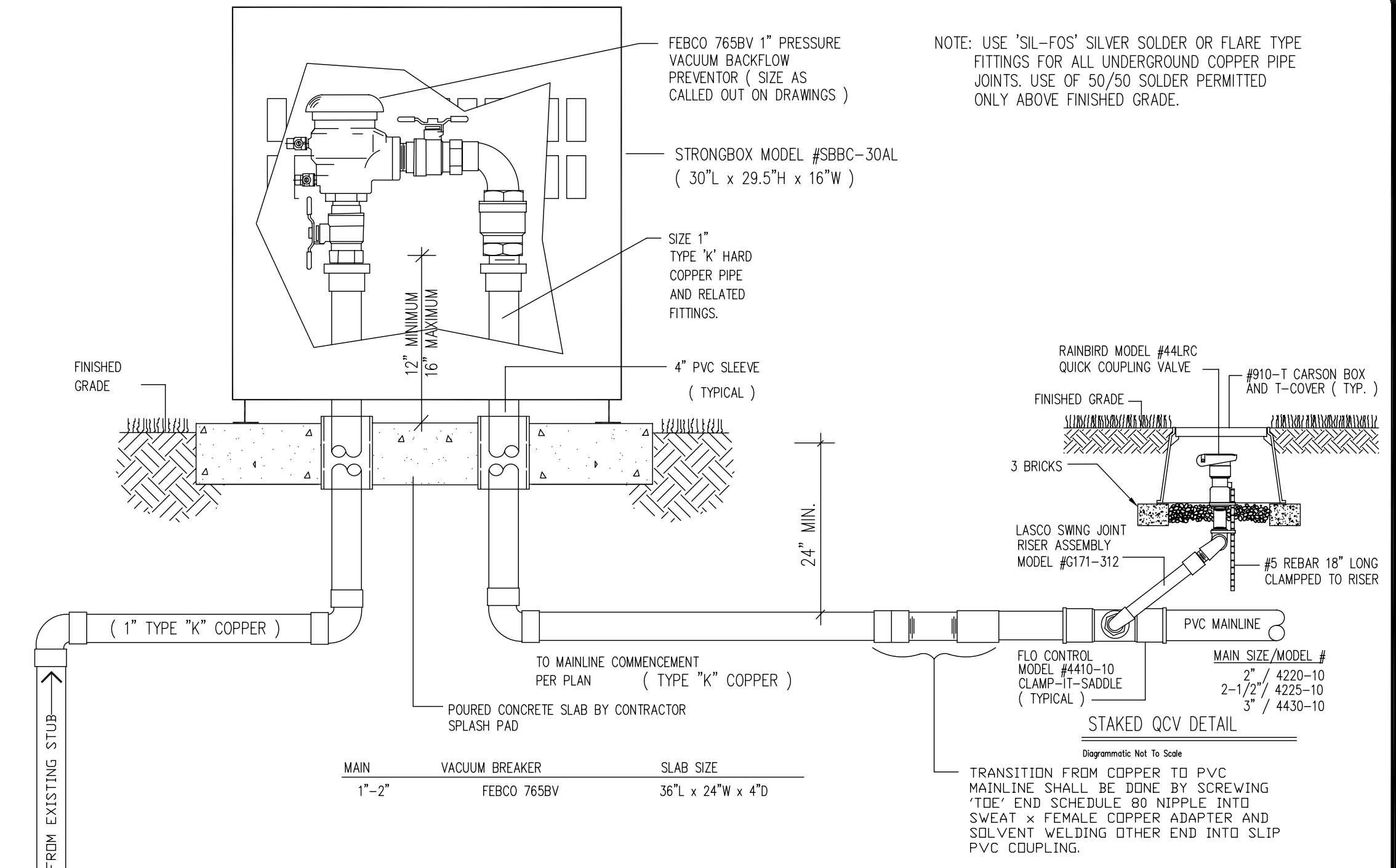
P.O.C./TAP #1 (EXISTING 1" SERVICE & 3/4" METER) VALVE SCHEDULE (CONTROLLER 'A')

VALVE NO.	EST. GPM	VALVE SIZE	MINS./APP.	HYDROZONE ZONE TYPE
A1	4.0	1.00"	43	"M" - MP ROTATORS; SOD
A2	4.5	1.00"	43	"M" - MP ROTATORS; SOD
A3	4.0	1.00"	30	"M" - MP ROTATORS; SOD
A4	4.5	1.00"	30	"L" - MP ROTATORS; NATIVE SEED
A5	4.0	1.00"	30	"L" - MP ROTATORS; NATIVE SEED
A6	4.5	1.00"	30	"L" - MP ROTATORS; NATIVE SEED
A7	4.0	1.00"	30	"L" - MP ROTATORS; NATIVE SEED
A8	4.5	1.00"	30	"L" - MP ROTATORS; NATIVE SEED
A9	4.0	1.00"	30	"L" - MP ROTATORS; NATIVE SEED
A10	4.5	1.00"	30	"L" - MP ROTATORS; NATIVE SEED
A11	4.0	1.00"	30	"L" - MP ROTATORS; NATIVE SEED
A12	4.5	1.00"	30	"L" - MP ROTATORS; NATIVE SEED
A13	SPARE	---	---	---
A14	SPARE	---	---	---
A15	2.90	1.00"	12	"L" - LANDSCAPE DRIPLINE; PLANTINGS
A16	3.68	1.00"	12	"L" - LANDSCAPE DRIPLINE; PLANTINGS

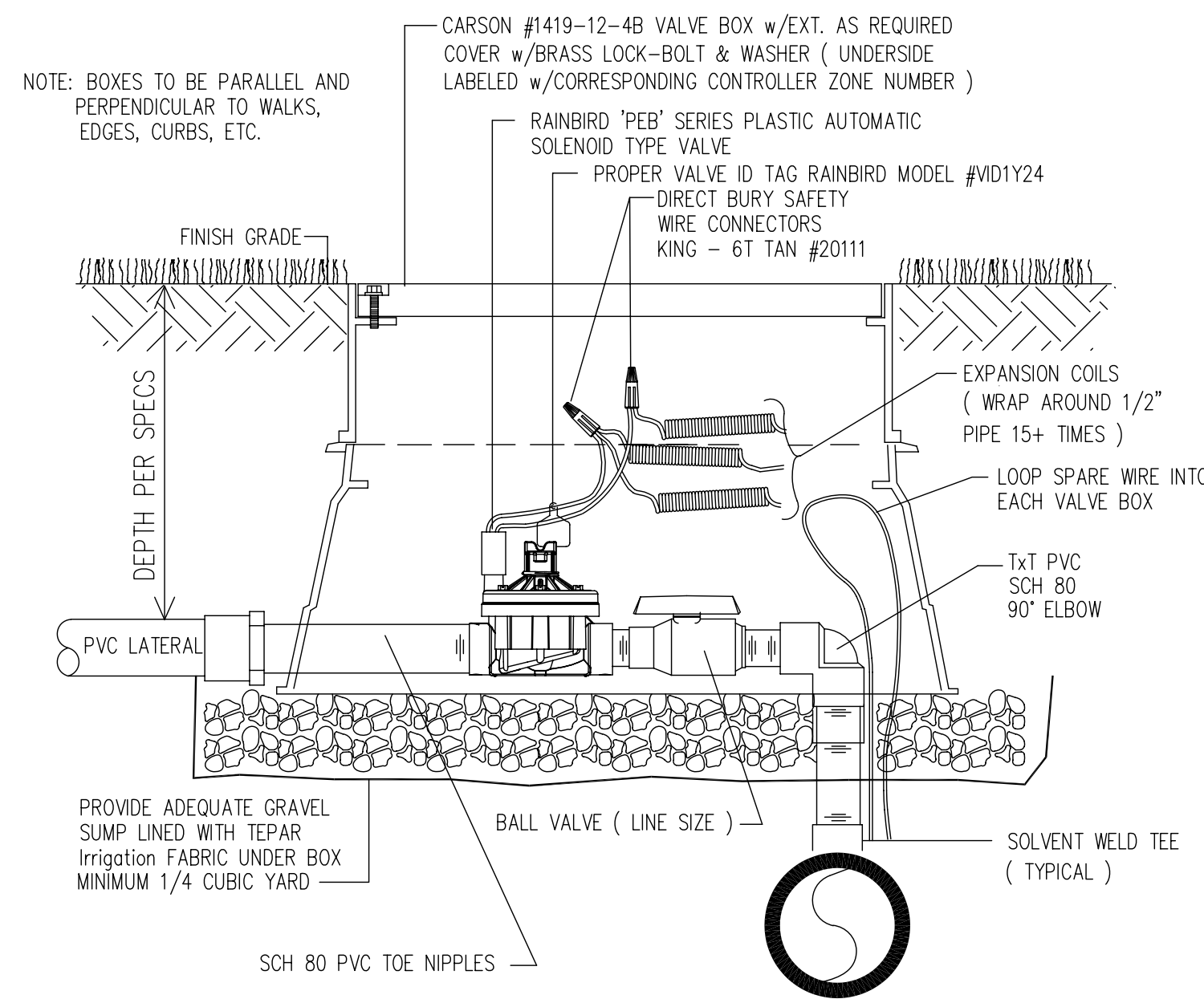
RUN TIMES CALCULATED TO APPLY 1.8"/WK SOD, 1.2"/WK NATIVE & 1.0"/WK PLANTINGS ASSUMING 6 DAYS/WK, RESULTING IN A 6.9 HOUR WATER WINDOW. GUIDELINE ONLY. OWNER TO ADJUST TIMES FOR VARYING CLIMATIC CONDITIONS.
 ASSUMES EXISTING 3/4" WATER SERVICE OFF SUPPLY TO LOCATIONS NOTED
 FLOW OF 15 GPM @ 85 STATIC PSI REQUIRED. TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.



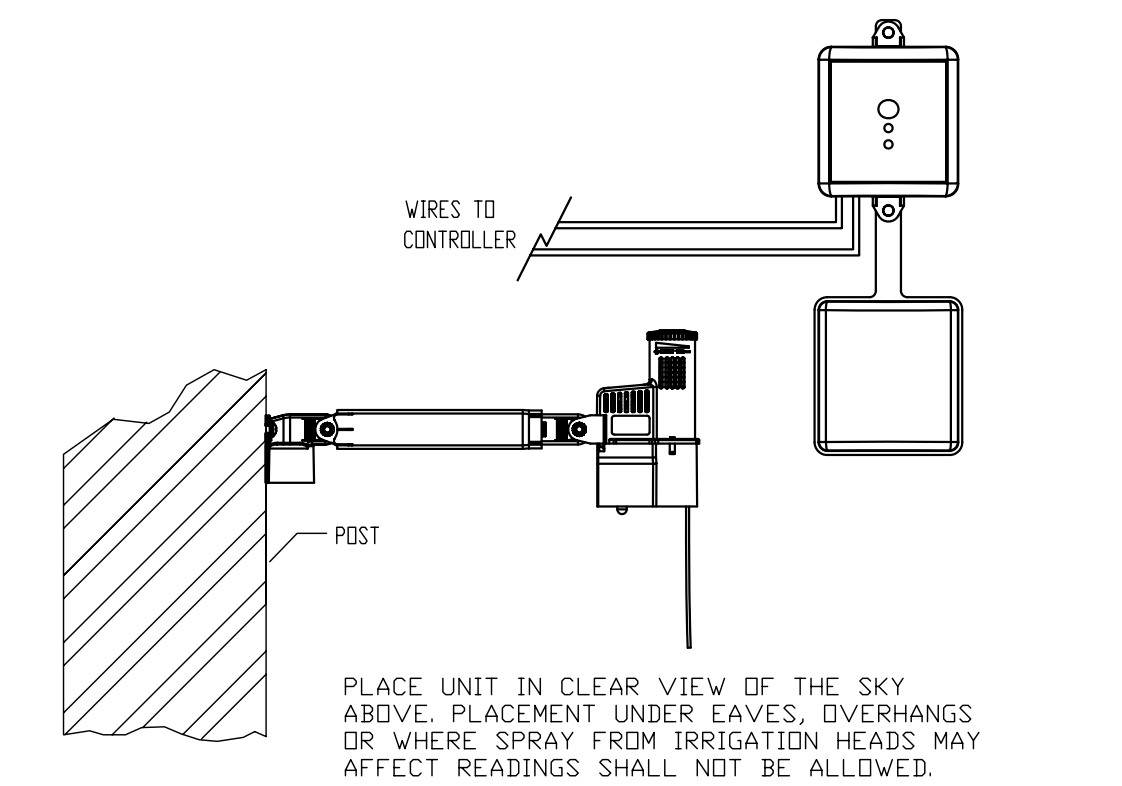
A CONTROLLER DETAIL
Diagrammatic Not To Scale



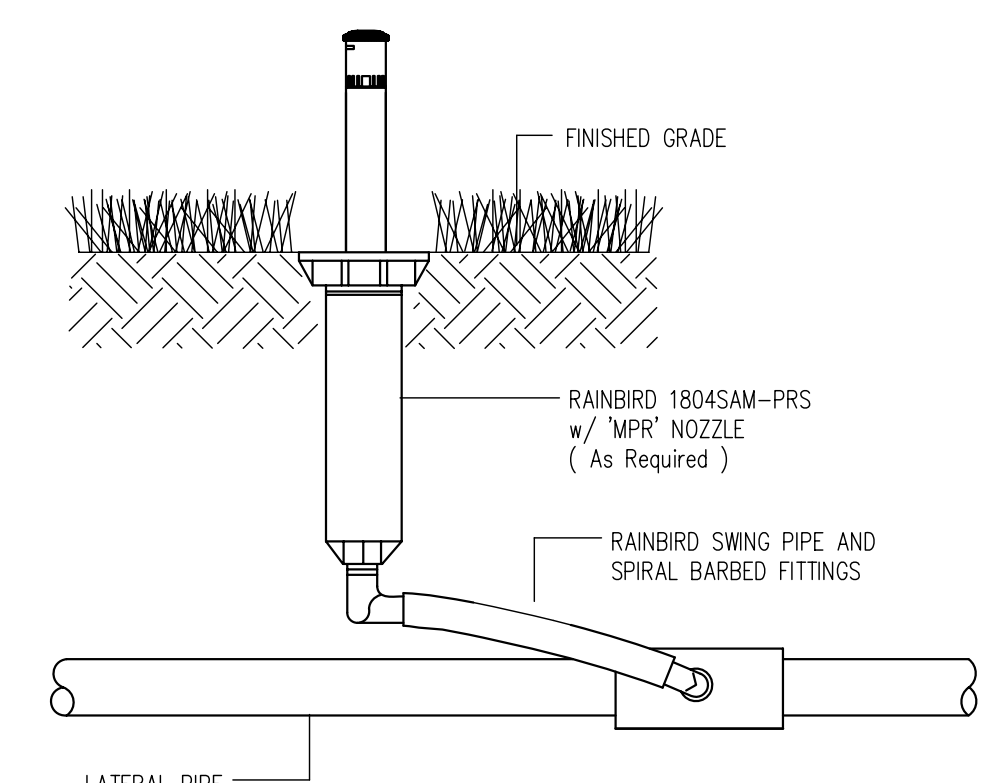
B 'PVB' BACKFLOW PREVENTION DETAIL
Diagrammatic Not To Scale



D SOLENOID VALVE DETAIL
Diagrammatic Not To Scale



C HUNTER WIRELESS RAIN-CLIK
Diagrammatic Not To Scale

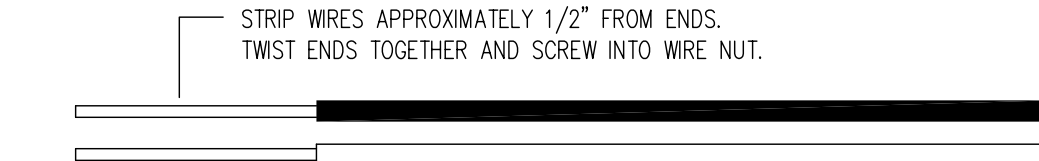


E MP ROTATOR POP-UP HEAD
Diagrammatic Not To Scale

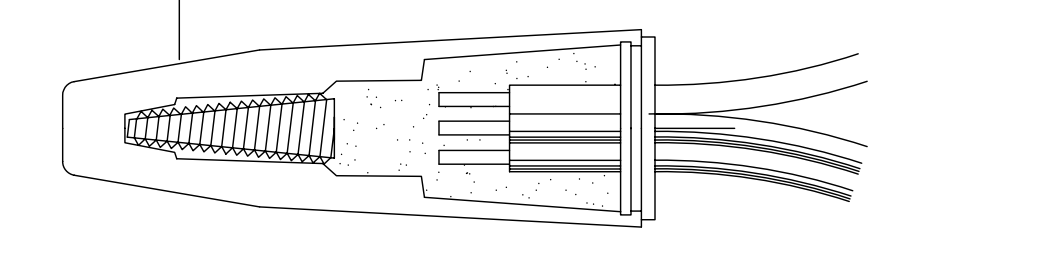
WORST CASE PSI LOSS - ZONE #A6 @ 14.6 GPM

PIPE/DEVICE	DISTANCE	EST. LOSS/CF	EST. PSI LOSS	TOTALS
1.5" CL200 MAINLINE	550'	0.52	2.9	2.9
765BV-1/825 1"	---	---	18.0	8.0
ICZ ZONE VALVE	---	---	2.5	2.5
LATERAL	VARIES	5% OF STATIC	5.0	5.0
3/4" METER	---	---	4.1	4.1
1" SERVICE LINE	100'	8.42	8.5	8.5
ELEVATION GAIN/LOSS	---	---	---	---
MPR-40-CV	---	---	40.0	40.0
TOTAL CALCULATED SYSTEM STATIC PSI REQUIRED	---	---	71.0	71.0
STATIC PSI AVAILABLE	---	---	85.0	85.0
RESIDUAL PSI AVAILABLE	---	---	14.0 PSI	14.0 PSI

DIRECT BURY/30V SINGLE CONDUCTOR TYPE
 FOR ALL UNDERGROUND CONNECTIONS LAWN IRRIGATION SYSTEMS
 NOTE: FOR DIRECT BURIAL SPLICES WITH WIRE SIZES No. 14, No. 12 AND NO. 10, MAXIMUM OF THREE WIRES PER CONNECTOR.



STEP 1
 1. ALIGN CONDUCTORS (PRE-TWISTING UNNECESSARY)
 2. PLACE STRIPPED WIRES WITH ENDS EVEN
 3. TWIST CONNECTOR ONTO WIRES PUSHING FIRMLY. (DO NOT OVER TORQUE)



STEP 2
 IMPORTANT: TURN OFF POWER BEFORE INSTALLING OR REMOVING CONNECTOR.

F WIRE CONNECTION DETAIL
Diagrammatic Not To Scale

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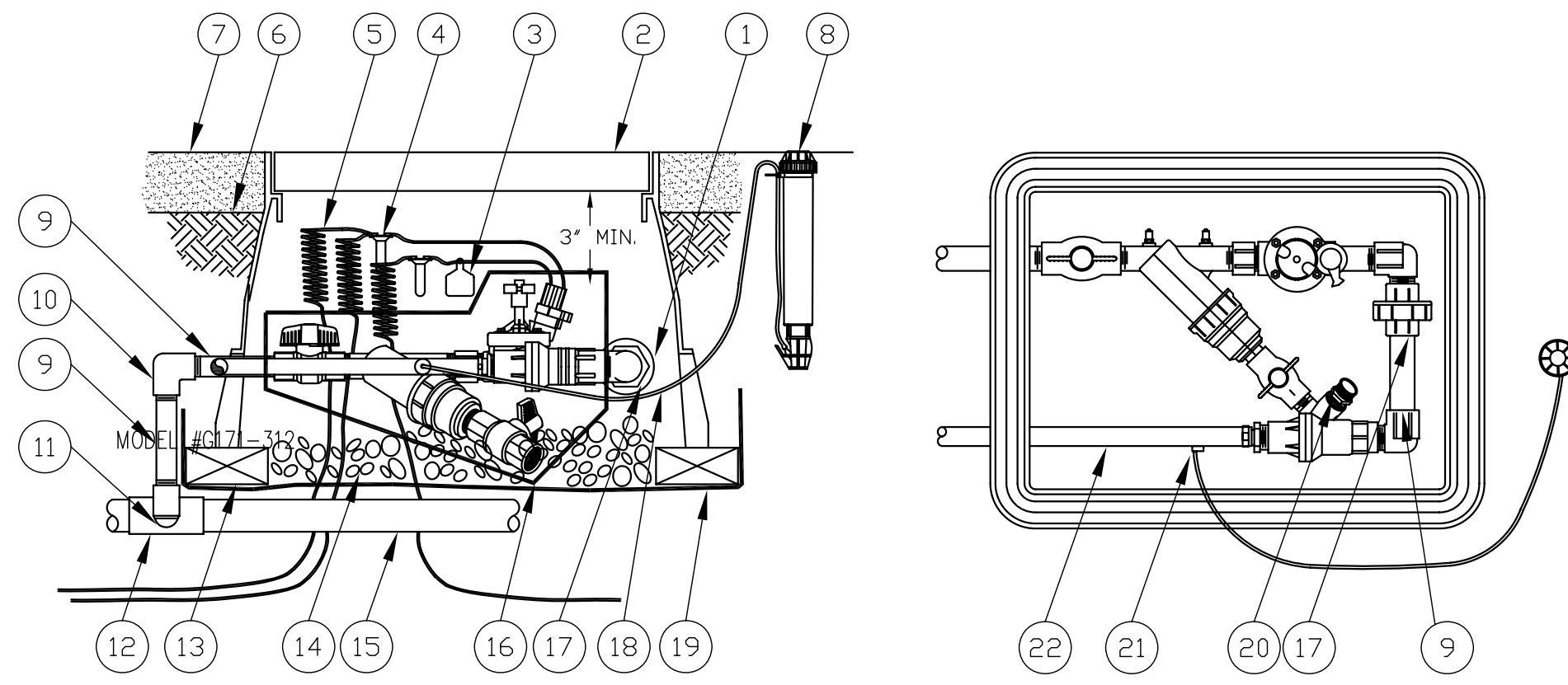
DESIGNED BY: JIM HACKWORTH
 DRAWN BY: JIM HACKWORTH
 DATE: MARCH 2010
 SCALE: AS NOTED
 REVISIONS:



TITLE:
CONTRACTOR BUILDING 1
1070 TRANSIT DRIVE
 FINAL IRRIGATION PLAN

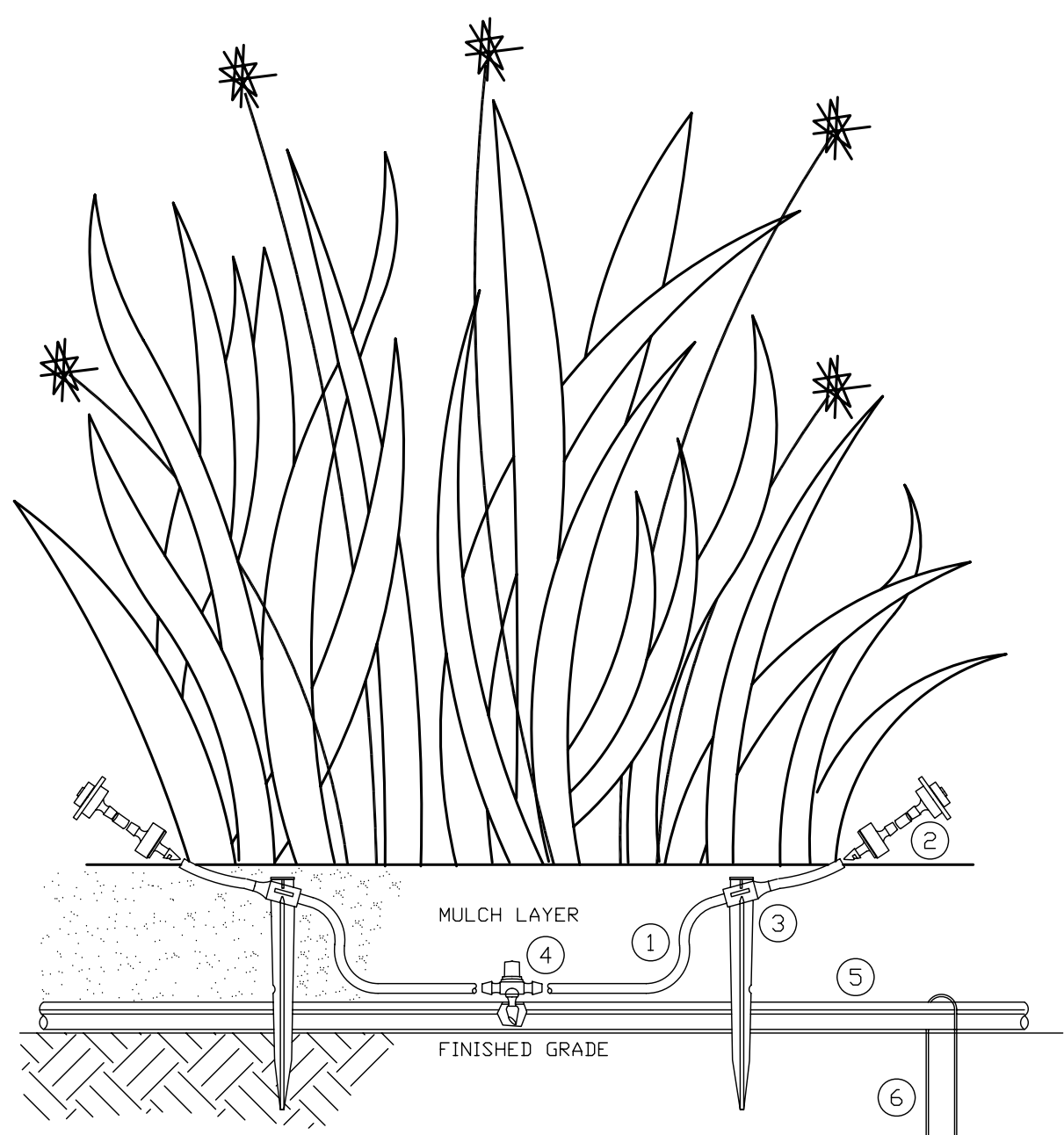
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FILE NUMBER:
 CPC DP 09-082
 CPC ZC 09-081



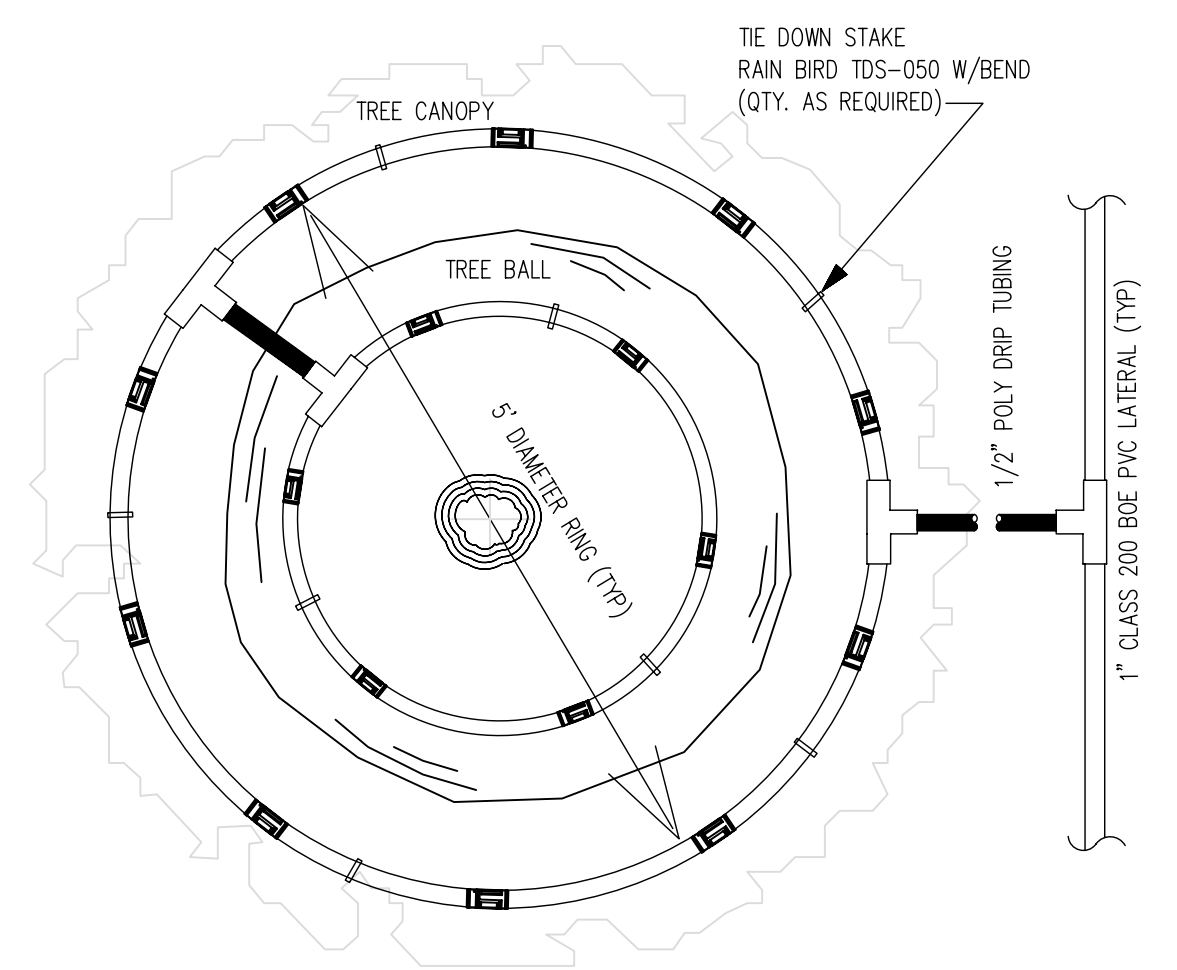
D DRIP VALVE ASSEMBLY
Diagrammatic Not To Scale

- | | |
|---|---|
| 1 PVC SCH 80 NIPPLE (CLOSE) | 12 PVC SCH 40 TEE OR ELL |
| 2 VALVE BOX WITH COVER 1324-39 CARSON JUMBO SERIES | 13 BRICK (1 DF 4) |
| 3 ID TAG: RAIN BIRD SERIES ID TAG | 14 3.0-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL |
| 4 WATER PROOF CONNECTION | 15 PVC MAINLINE |
| 5 30-INCH LINEAR LENGTH OF WIRE, COILED | 16 CONTROL ZONE KIT: RAINBIRD MODEL XCZ-100-B-COM |
| 6 FINISH GRADE | 17 PVC SCH 80 UNION FOR SERVICING ASSEMBLY |
| 7 TOP OF MULCH | 18 RAINBIRD DT-025 DISTRIBUTION TUBING |
| 8 RAIN BIRD XP-600X WITH SHUTOFF NOZZLE PAINT ORANGE FOR ZONE INDICATOR | 19 LANDSCAPE FABRIC WRAP |
| 9 PVC SCH 80 NIPPLE (LENGTH AS REQUIRED) | 20 3/4" BRASS MPTXHOSE TREAD ADAPTER |
| 10 PVC SCH 40 ELL | 21 1/4" SELF-PIERCING BARB CONNECTOR: RAIN BIRD SPB-025 |
| 11 PVC SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL | 22 1/2" POLYETHYLENE TUBING: RAIN BIRD XERI-TUBE 700 |

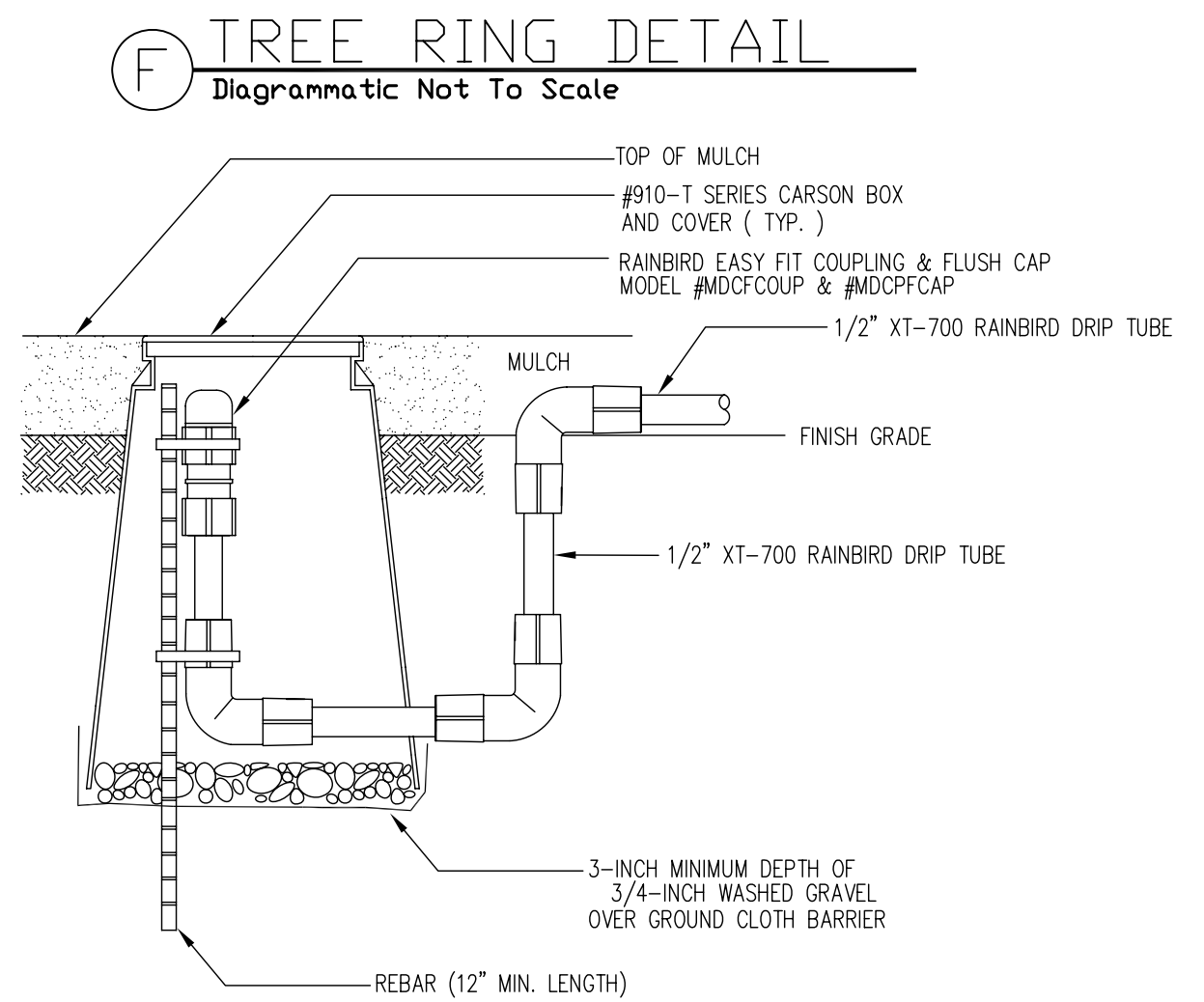


E POINT DRIP EMITTERS
Diagrammatic Not To Scale

- NOTE:
USE RAINBIRD XERIMAN TOOL MODEL #XM-TD01 TO INSERT CONNECTOR DIRECTLY INTO 1/2" POLYETHYLENE TUBING
- 1/2" RAINBIRD MODEL #XG POLY DISTRIBUTION TUBING (MAX. LENGTH OF 5' TRANSFER TEE TO EMITTER)
 - RAINBIRD PRESSURE COMPENSATING EMITTER MODEL #PC-05 W/ DIFFUSER CAP MODEL #DBC-025
 - 1/2" RAINBIRD TUBING STAKE MODEL #TS-025
 - 1/2" RAINBIRD BARB TRANSFER TEE MODEL #XBF3TEE
 - 1/2" RAINBIRD XBS BLACK STRIP POLYETHYLENE TUBING
 - RAINBIRD GALV. TIE DOWN STAKE MODEL #TDS-050 (EVERY 10' MIN)



F TREE RING DETAIL
Diagrammatic Not To Scale



G DRIP FLUSHING END VALVE DETAIL
Diagrammatic Not To Scale

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DESIGNED BY: JIM HACKWORTH
DRAWN BY: JIM HACKWORTH
DATE: MARCH 2010
SCALE: AS NOTED
REVISIONS:



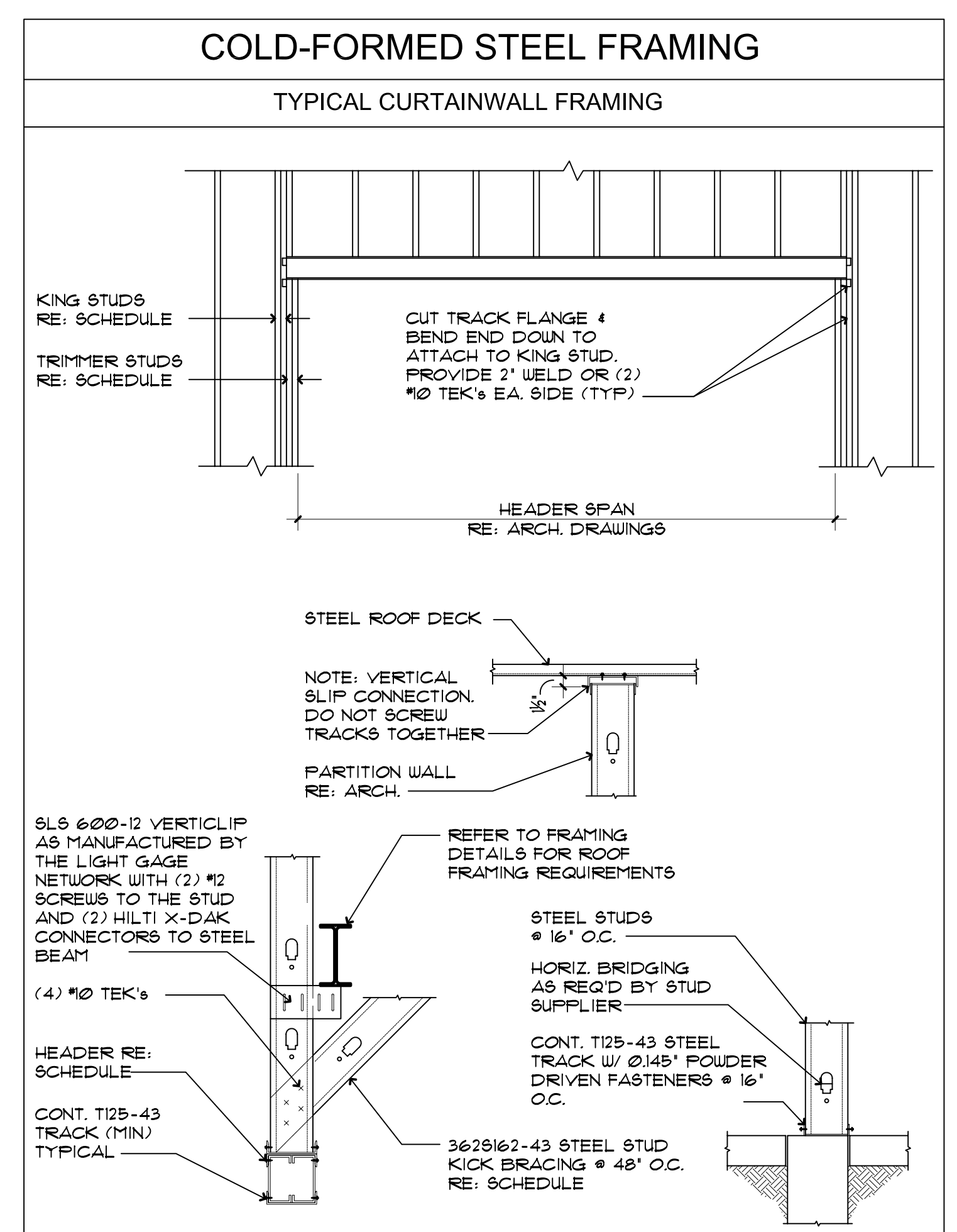
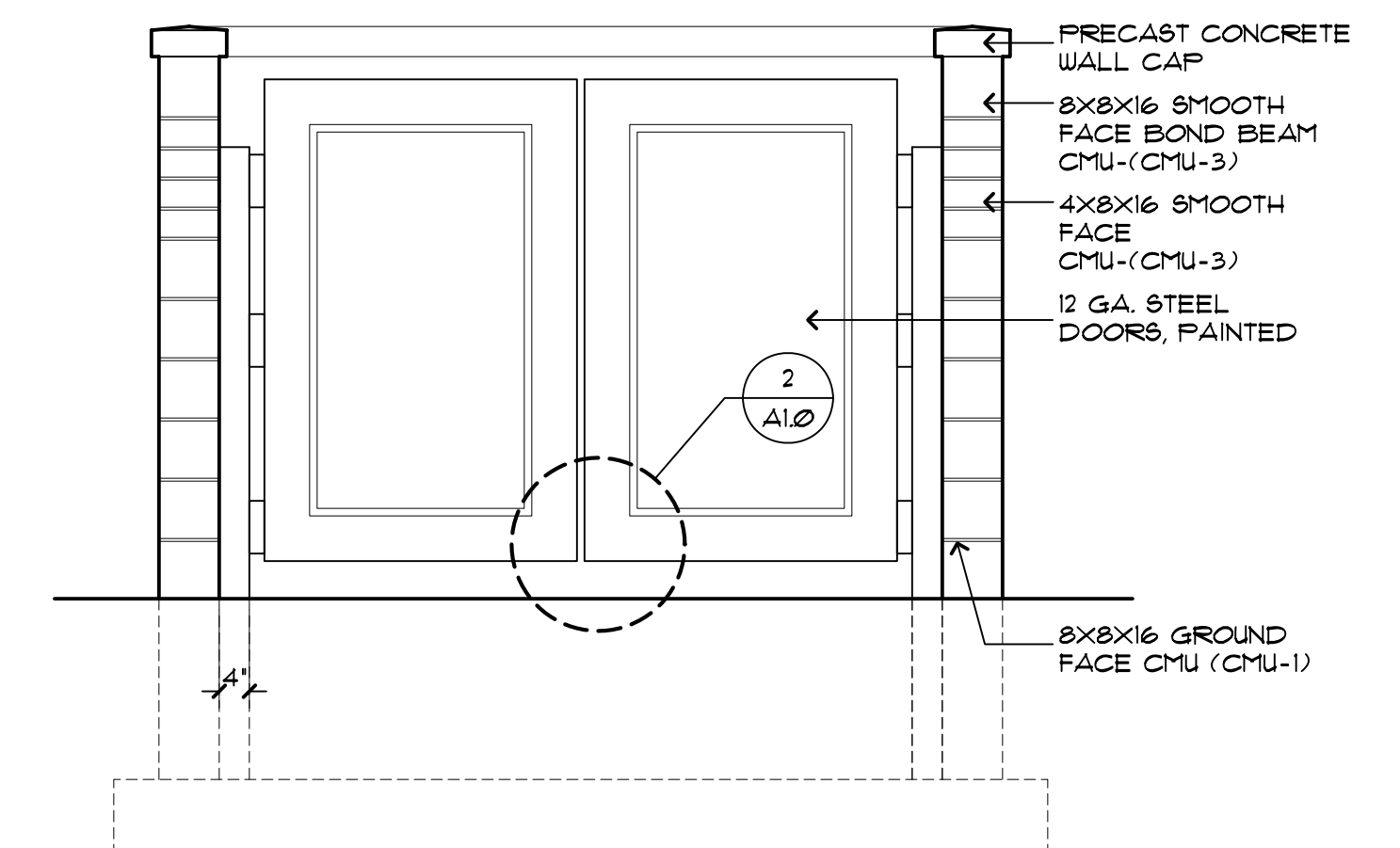
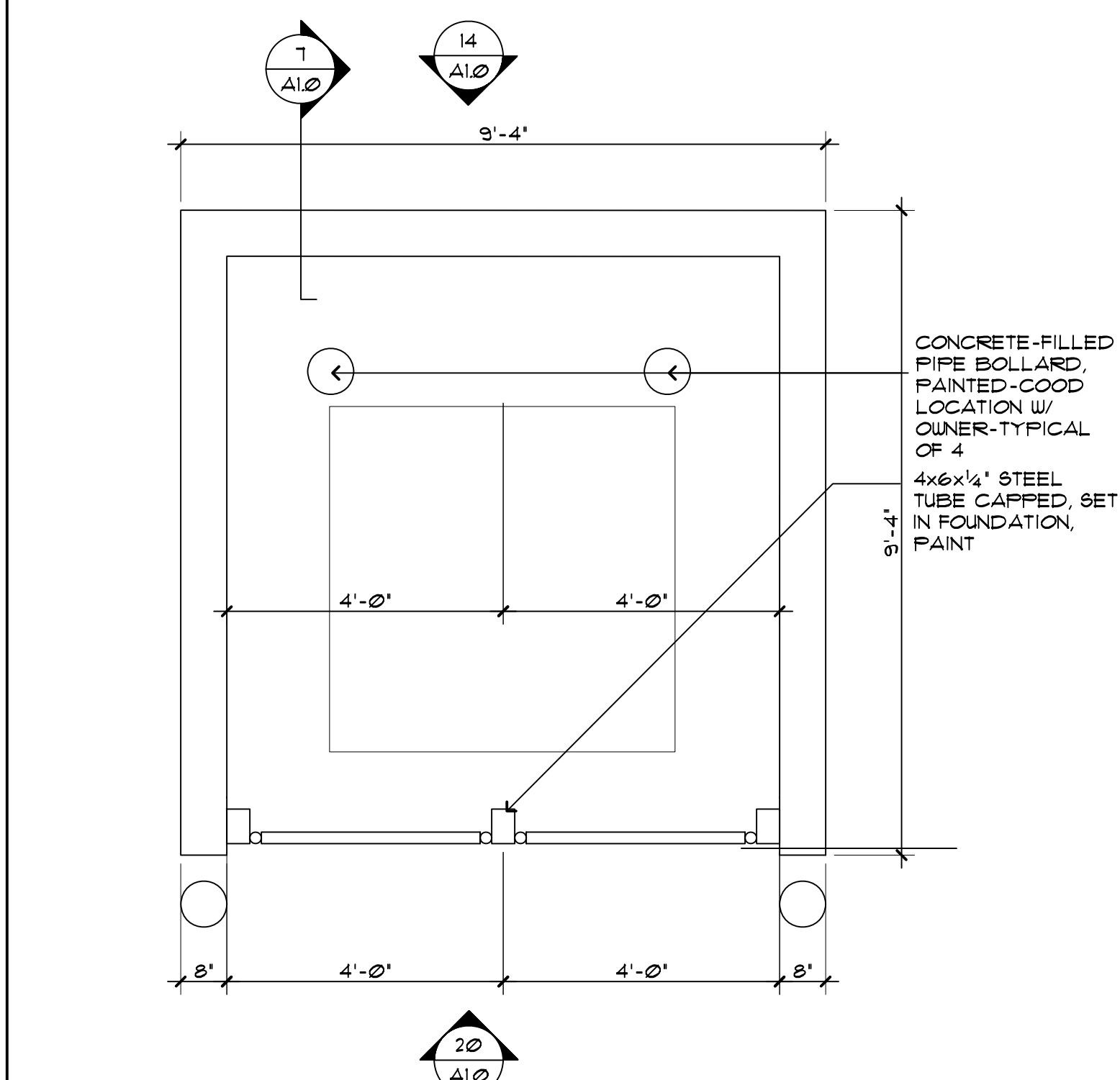
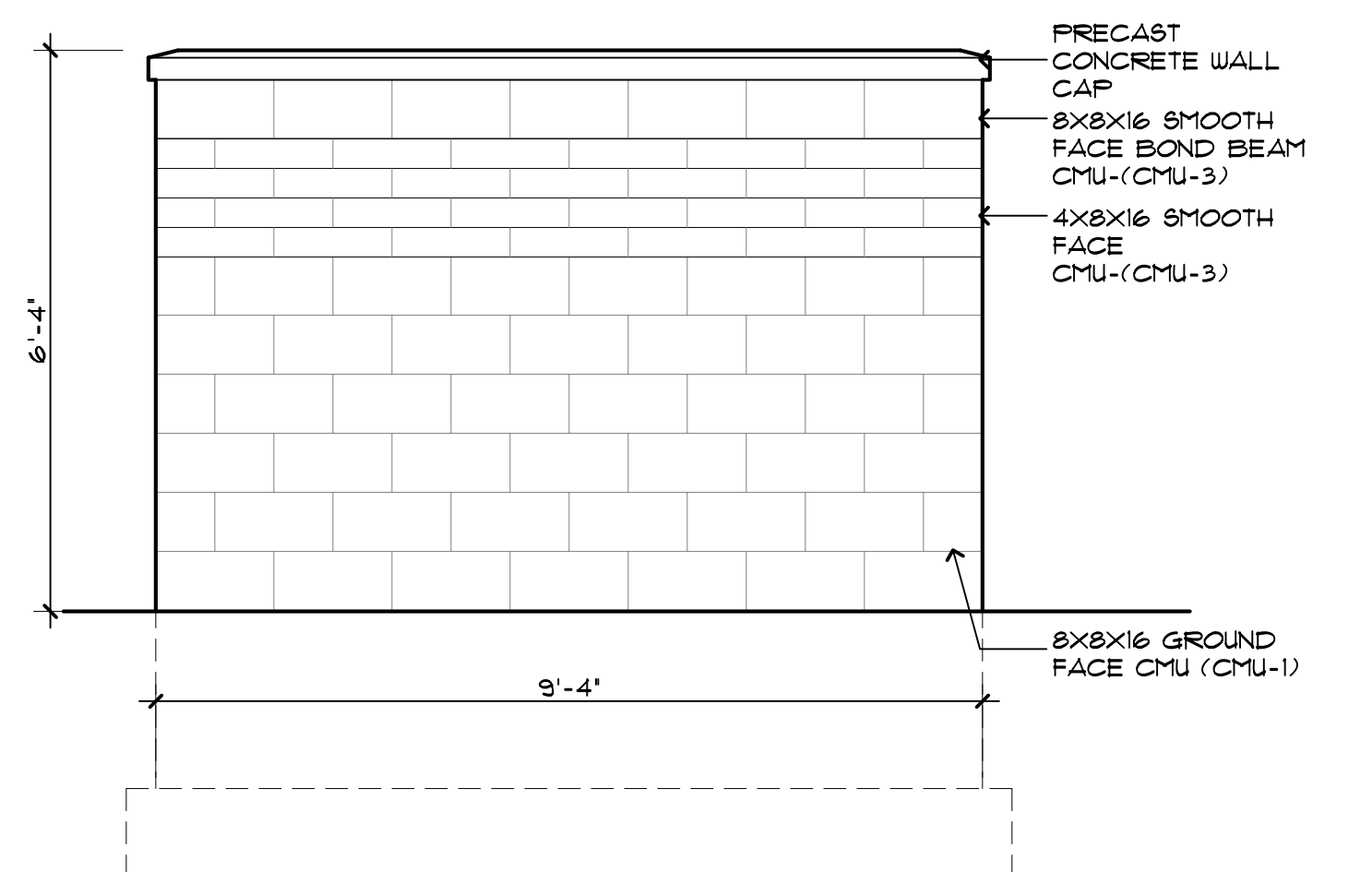
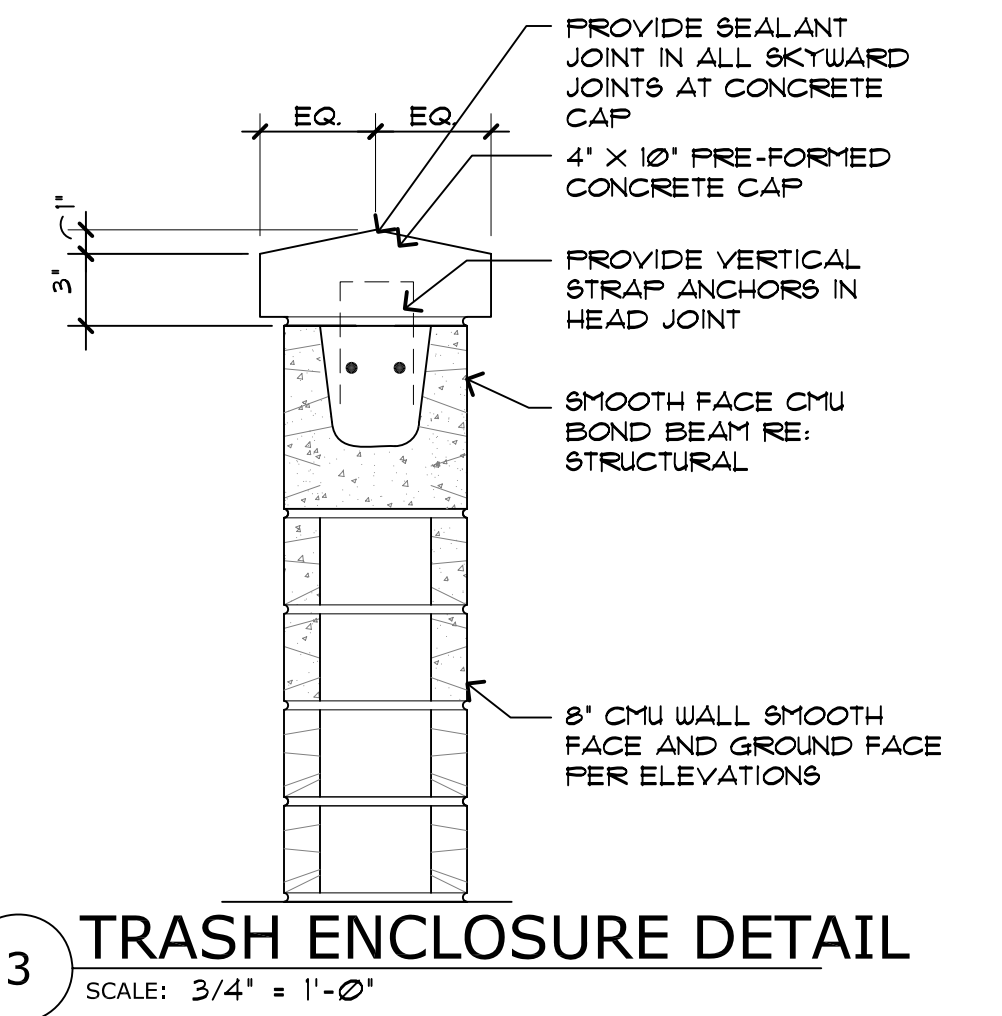
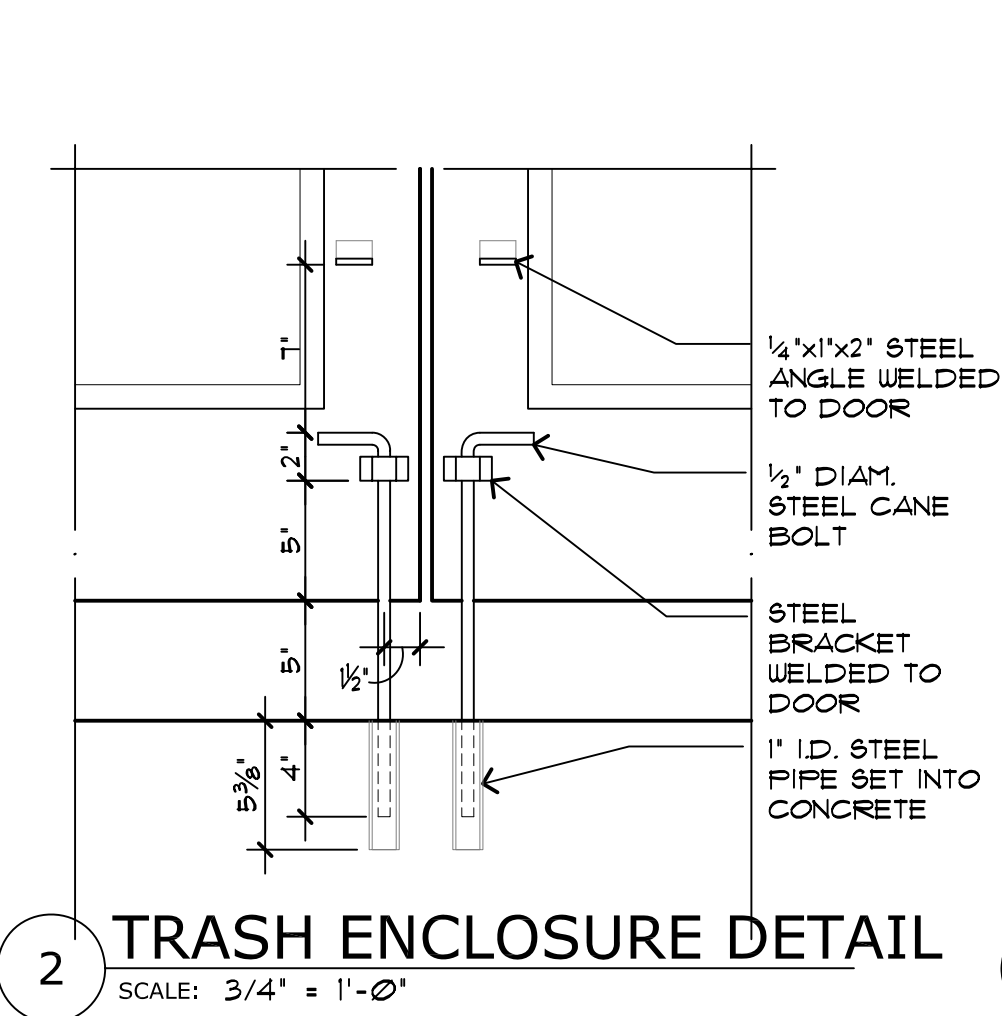
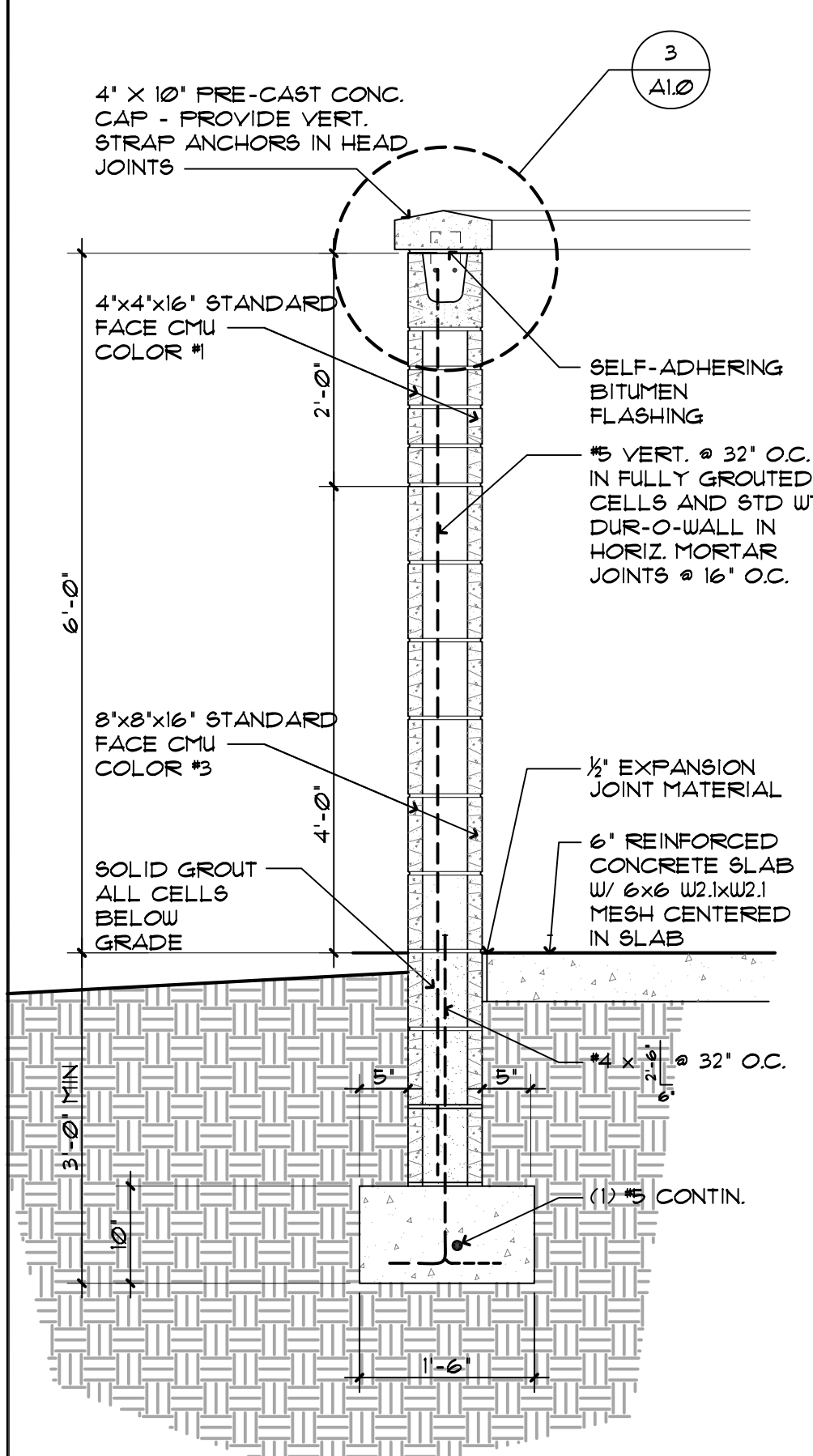
TITLE:
**CONTRACTOR BUILDING 1
1070 TRANSIT DRIVE
FINAL IRRIGATION PLAN**

SHEET
IR-3

FILE NUMBER:
CPC DP 09-082
CPC ZC 09-081

IRRIGATION DESIGN BY:
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(719) 599-3998 Ph
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Colorado Springs, CO 80920

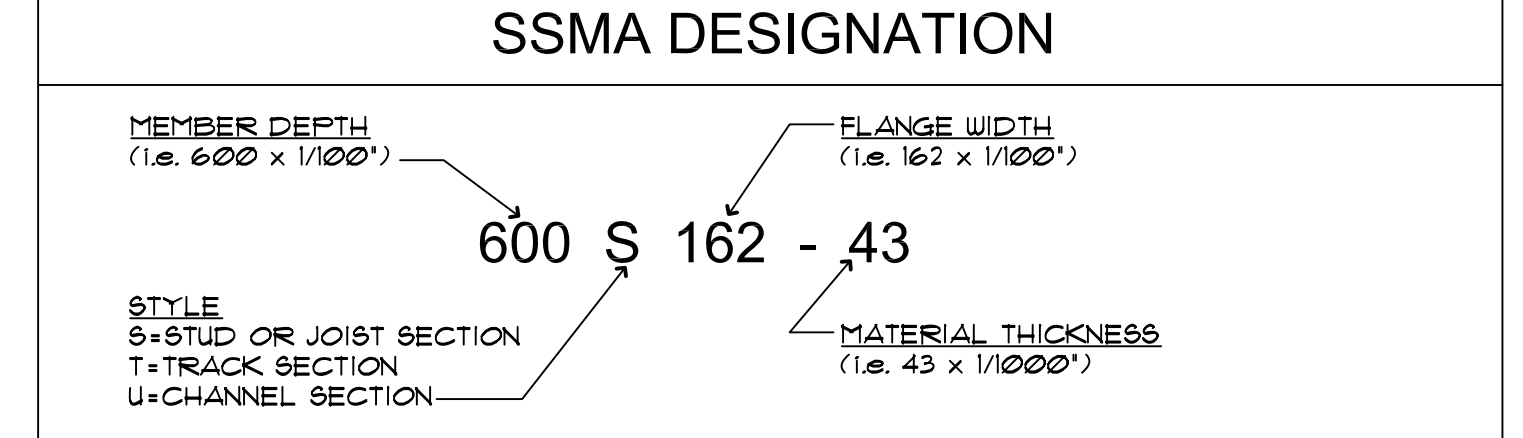
CITY FILE No.: AR DP 09-338



HEADER SCHEDULE

SPAN	HEADER SIZE (SSMA DESIGNATION)	TRIMMER STUDS	KING STUDS	BRACING REQ'D
UP TO 4'-0"	(2) 600S131-33 + (1) 600T125-33 TRACKS TOP AND BOTTOM	ONE	ONE	NO
4'-0" TO 8'-0"	(2) 600S131-43 + (1) 600T125-33 TRACKS TOP AND BOTTOM	ONE	TWO	NO
8'-0" TO 12'-0"	(2) 800S162-54 (50 ksi) + (1) 600T125-33 TRACKS TOP AND BOTTOM	TWO	TWO	YES
12'-0" TO 16'-0"	(2) 1000S250-54 (50 ksi) + (1) 600T125-33 TRACKS TOP AND BOTTOM	TWO	THREE	YES
16'-0" TO 20'-0"	(3) 1200S162-54 (50 ksi) + (1) 600T125-33 TRACKS TOP AND BOTTOM	THREE	THREE	YES

NOTES: 1. HEADER SIZES ABOVE ARE TO BE USED UNLESS NOTED OTHERWISE ON PLANS
 2. PROVIDE WEB STIFFENERS AT BEARING LOCATIONS
 3. ALL HEADER SECTIONS ARE TO BE UNPUNCHED
 4. PROVIDE MINIMUM BEARING LENGTH FOR WEB CRIPPLING



MINIMUM ALLOWABLE SECTIONS

STUD DEPTH	SSMA DESIGNATION	STUD DEPTH	SSMA DESIGNATION
3 5/8"	3629162-43	8"	800S162-43
4"	400S162-43	10"	1000S162-54 (50 ksi)
6"	600S162-43	12"	1200S162-54 (50 ksi)

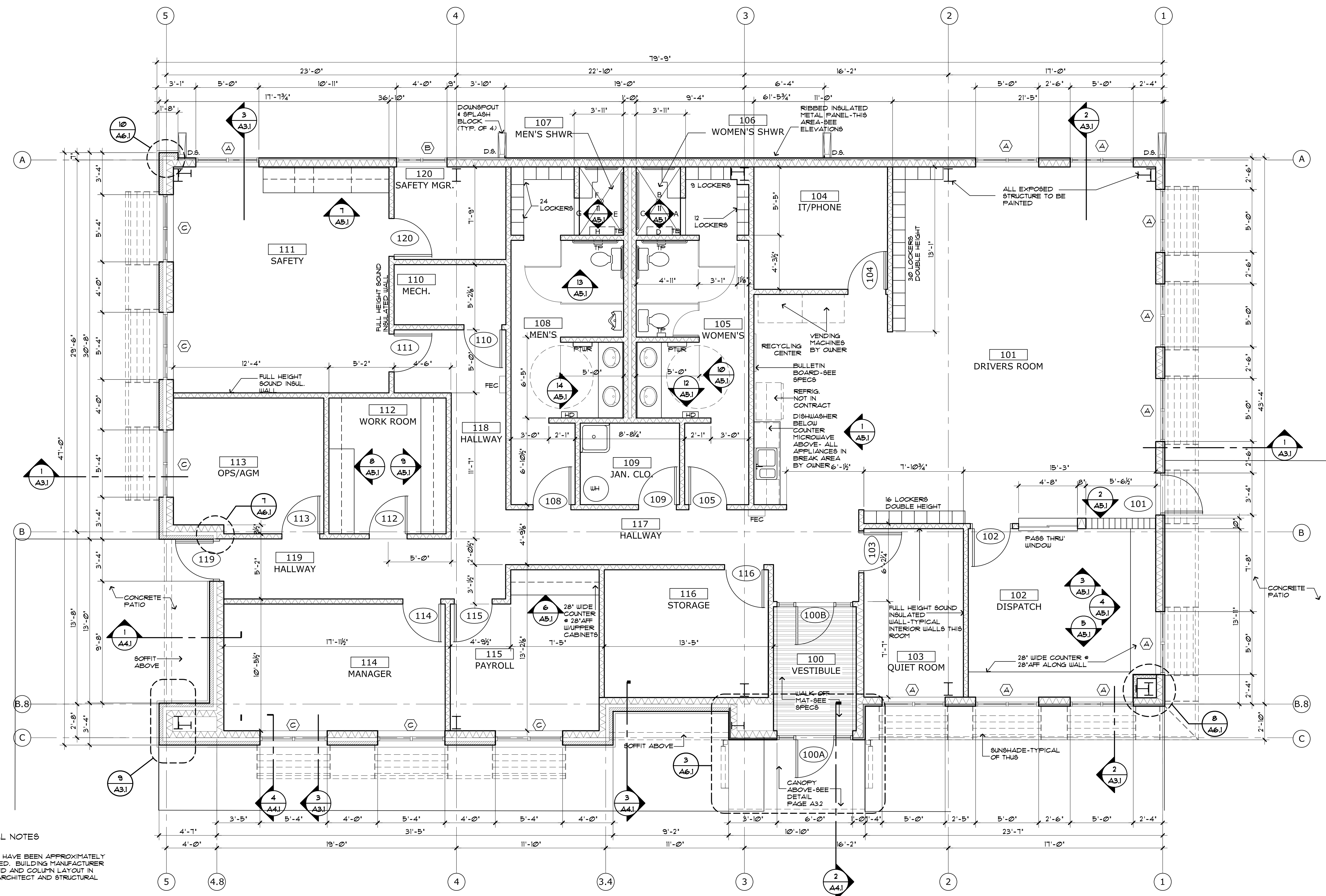
SERVICE CONTRACTOR FACILITY 1
 CITY OF COLORADO SPRINGS METRO TRANSIT
 1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

ISSUE DATES:
 ISSUED FOR BID 03/24/2010

PROJECT NO. 9016
 DRAWN BY: SGT
 CHECKED BY:
 DATE: 03/24/2010

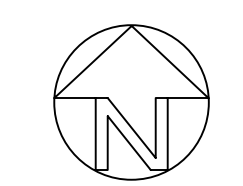
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 FLOOR PLAN

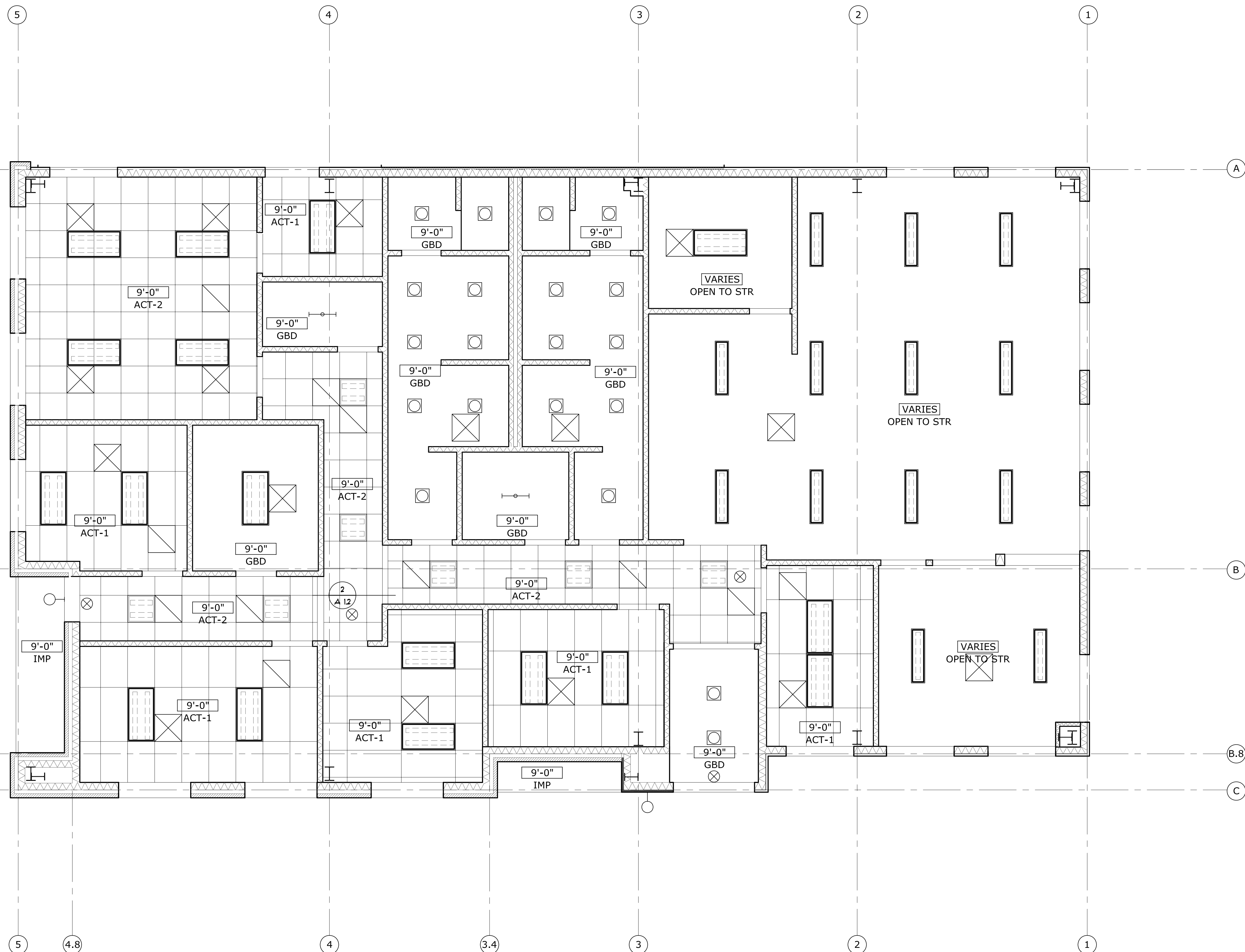
SHEET NO.
A1.1



- GENERAL NOTES**
1. COLUMNS AND GRID LINES HAVE BEEN APPROXIMATELY LOCATED AND DIMENSIONED. BUILDING MANUFACTURER WILL DETERMINE FINAL GRID AND COLUMN LAYOUT IN COORDINATION WITH THE ARCHITECT AND STRUCTURAL ENGINEER.
 2. FEC WILL BE LOCATED BASED ON FIRE DEPARTMENT REVIEW.
 3. ALL RESTROOM, QUIET ROOM, AND SAFETY ROOM PERIMETER WALLS WILL BE SOUND INSULATED.
 4. PROVIDE SOUND INSULATION IN CEILING AT RESTROOMS.

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

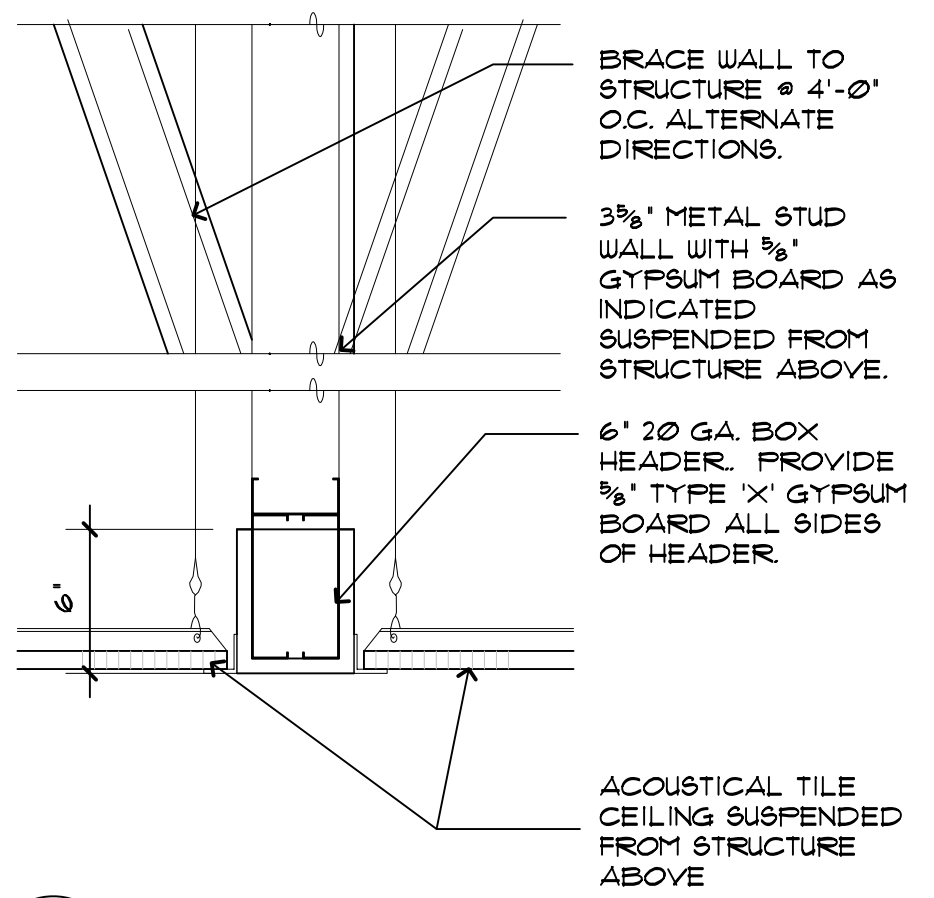




- NOTES**
- GYPSUM BOARD CEILINGS TO HAVE A LEVEL 4' GYPSUM BOARD FINISH, UNLESS OTHERWISE NOTED.
 - 9'-0" CEILING HEIGHT ACT
 - REFER TO FLOOR PLAN FOR WALL CONSTRUCTION.
 - WALL SCONCES SHOWN TO BE MOUNTED AT 9'-0" AFF. TO 4' OF MOUNTING OF FIXTURE UNLESS OTHERWISE NOTED.
 - REFER TO ELECTRICAL PLAN FOR ADDITIONAL LIGHTS THAT MAY NOT BE SHOWN IN THE REFLECTED CEILING PLAN.
 - COORDINATE LIGHT FIXTURE LOCATION WITH DUCTWORK. NOTIFY ARCHITECT OF ANY CONFLICTS PRIOR TO INSTALLATION.
 - GYPSUM BOARD CEILINGS INDICATED SHALL BE SUSPENDED PER SPECS OR ATTACHED TO CEILING STUDS TYPICALLY 3/8" @ 16" O.C.

LEGEND

	2x4' FLUORESCENT PANEL
	FLUORESCENT STRIP LIGHT VARYING LENGTHS
	EXIT SIGN
	RECESSED LIGHT FIXTURE
	WALL-MOUNTED LIGHT FIXTURE (SCONCE)
	LINEAR SCONCE LIGHTING-LENGTHS VARY
	SUPPLY GRILL
	RETURN AIR GRILL



1 REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

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

DESIGN EDGE
architecture interior design
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DRAWN BY: SGT
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SHEET TITLE:
REFLECTED CEILING PLAN

SHEET NO.
A1.2

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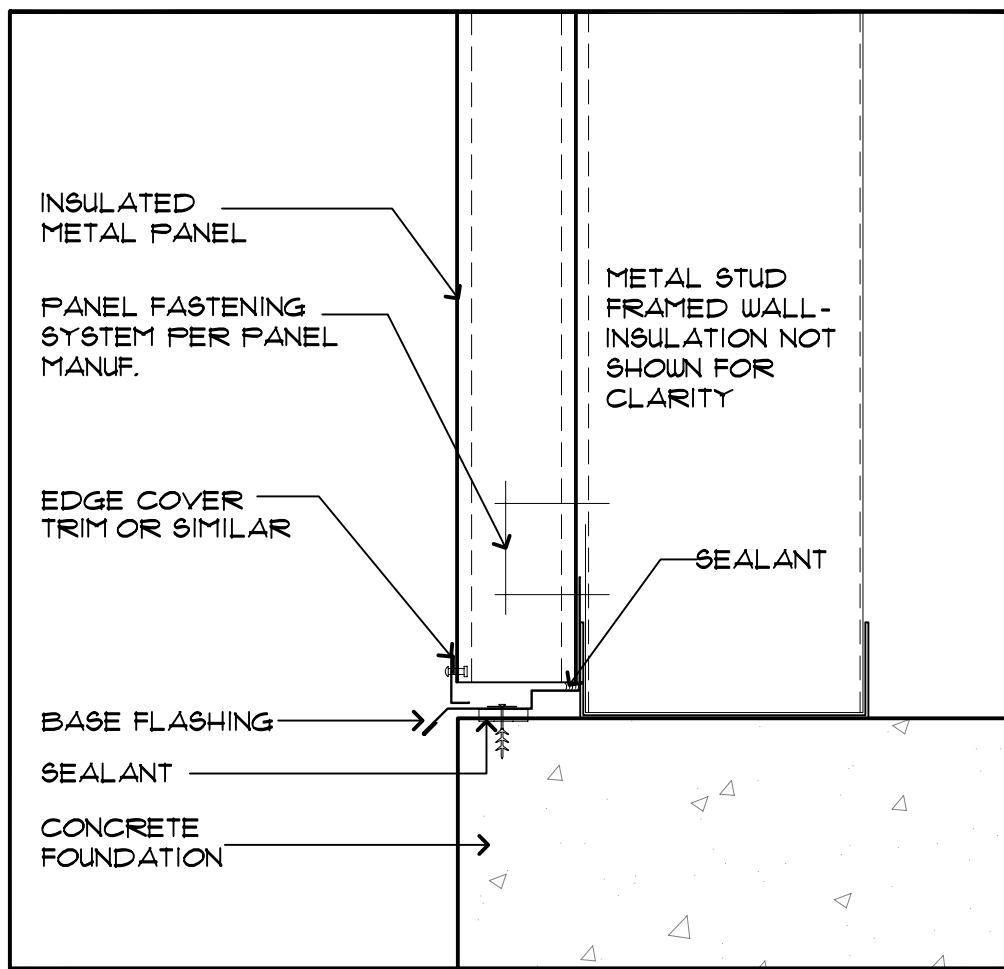
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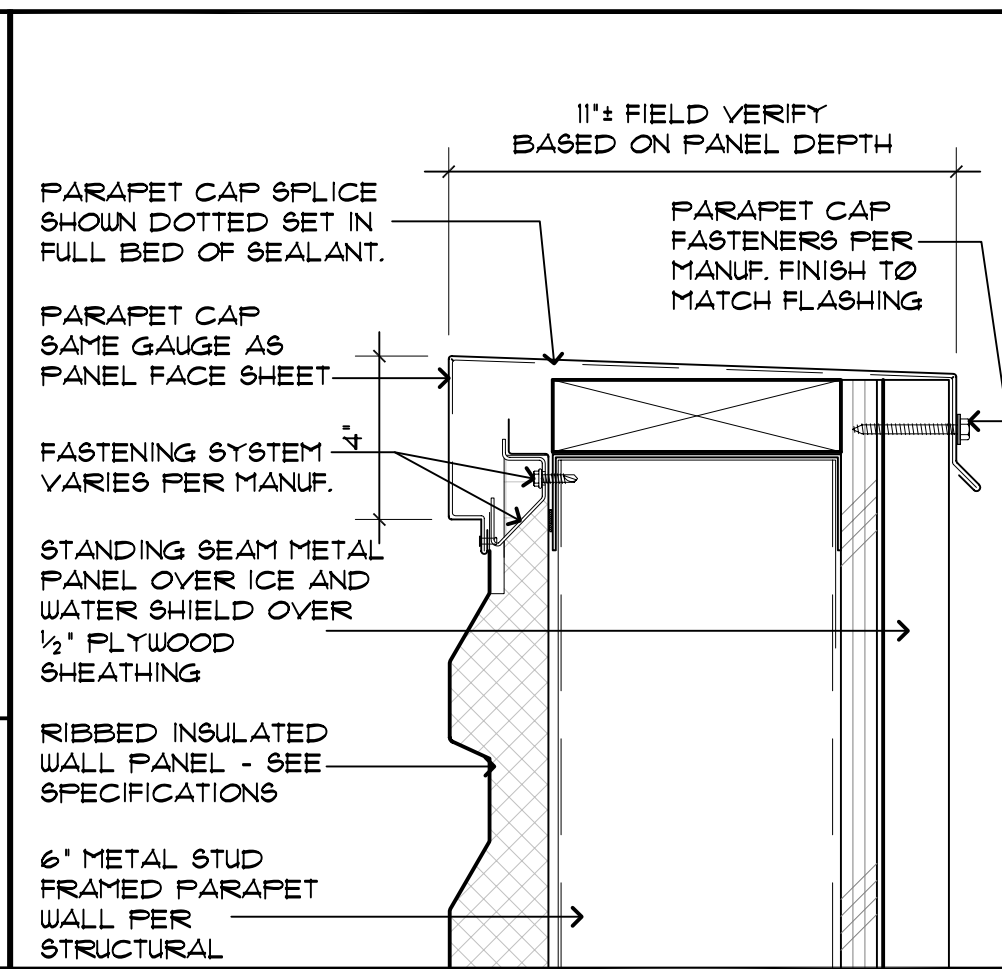
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 ROOF PLAN

SHEET NO.

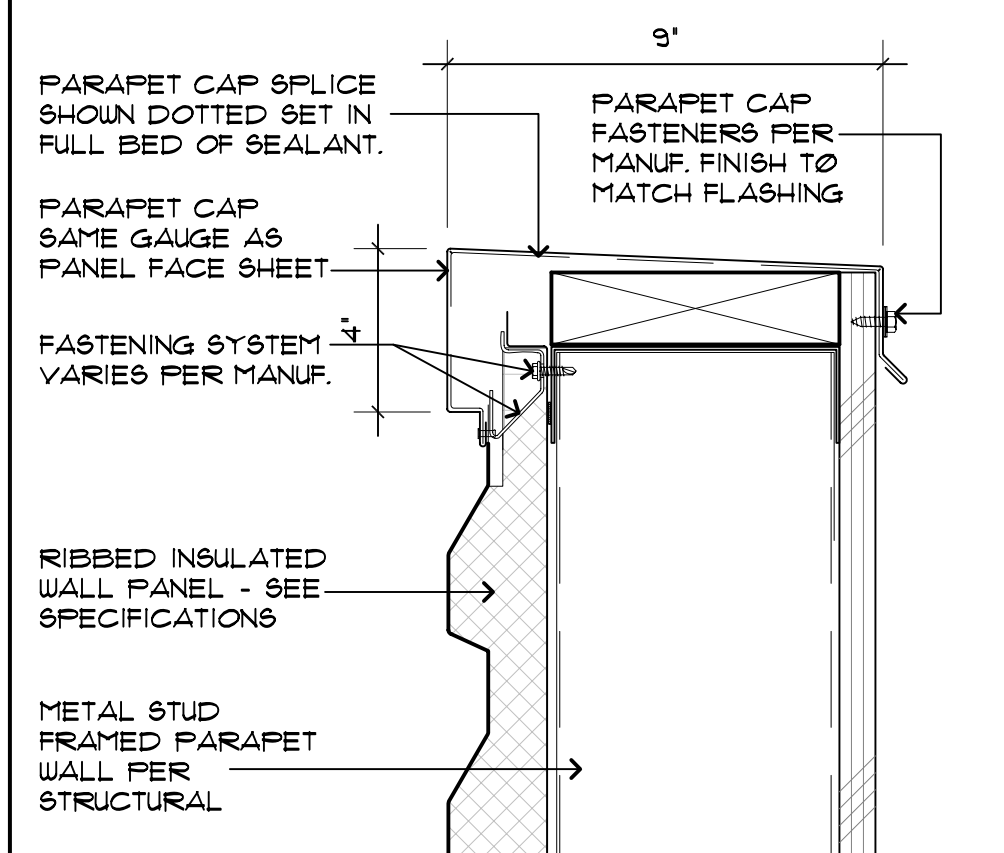
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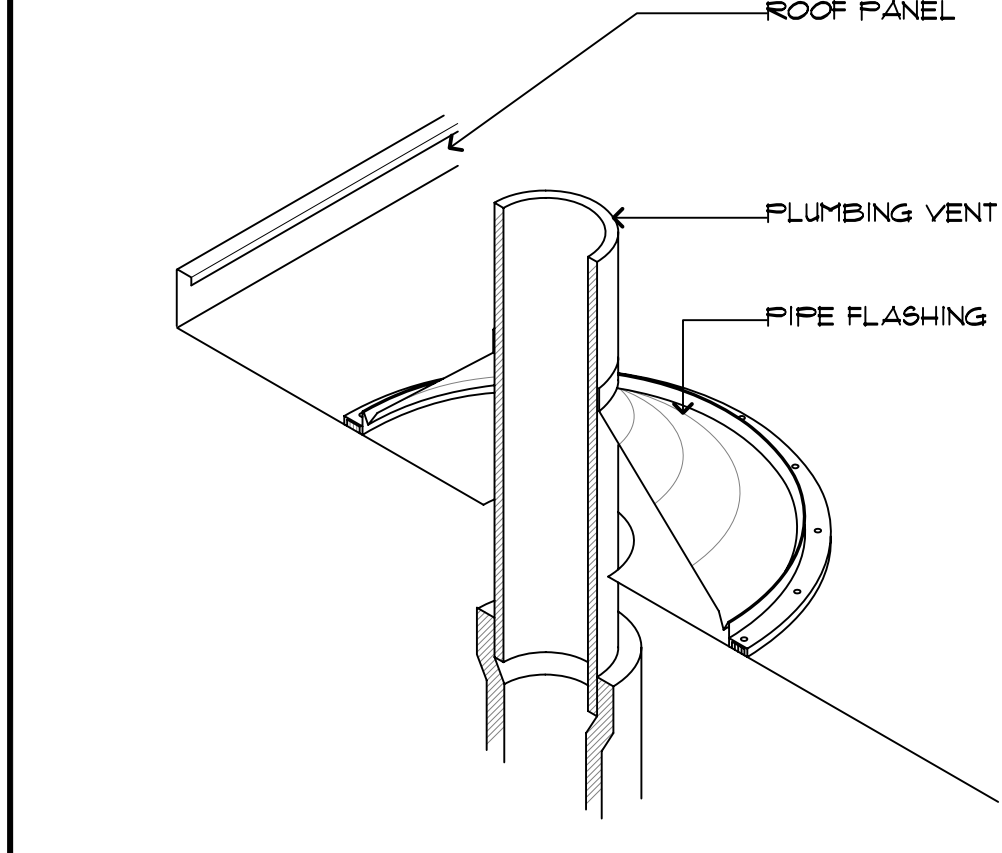
2 PANEL BASE DETAIL
 SCALE: 3" = 1'-0"



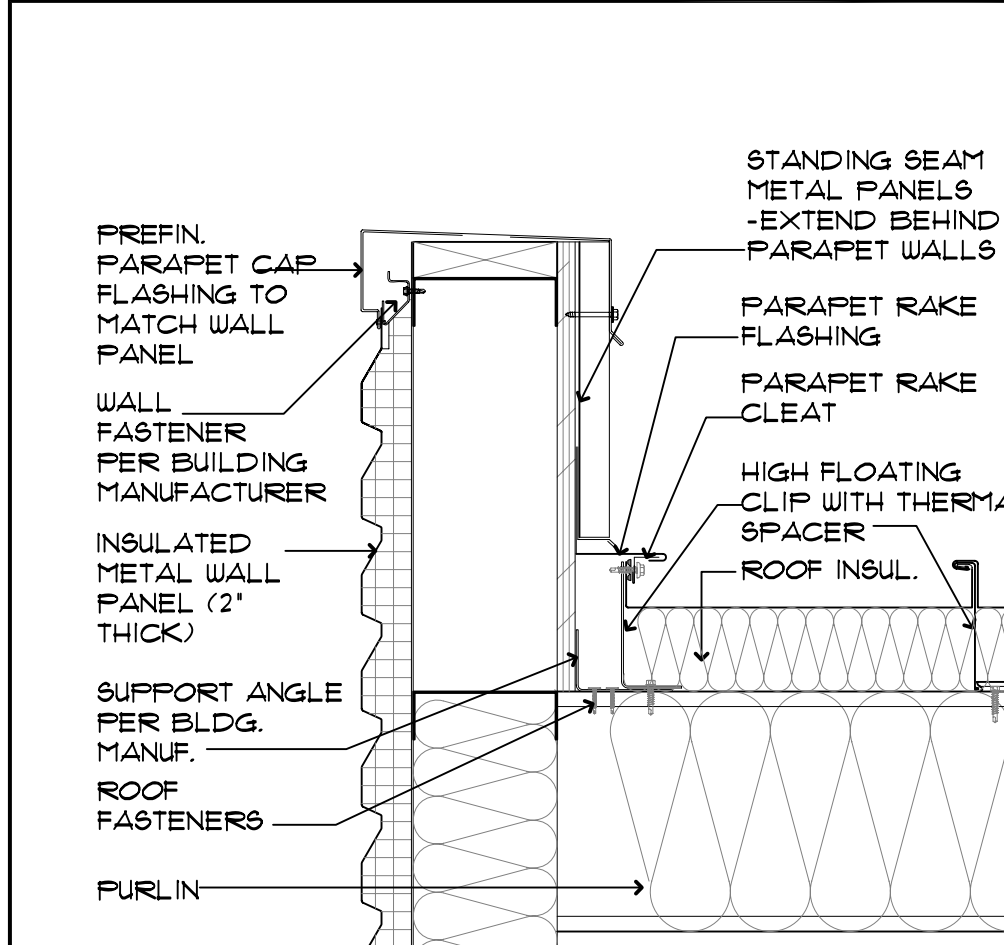
1 PARAPET DETAIL
 SCALE: 3" = 1'-0"



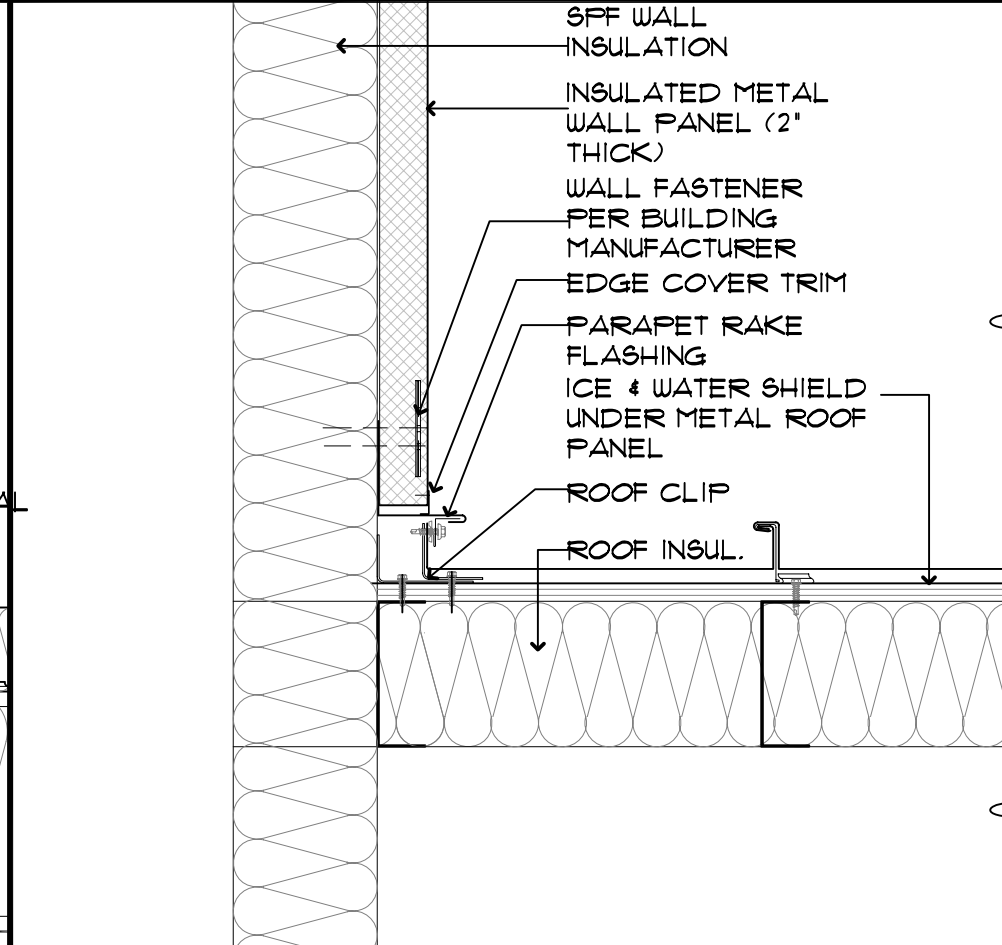
3 PARAPET CAP DETAIL
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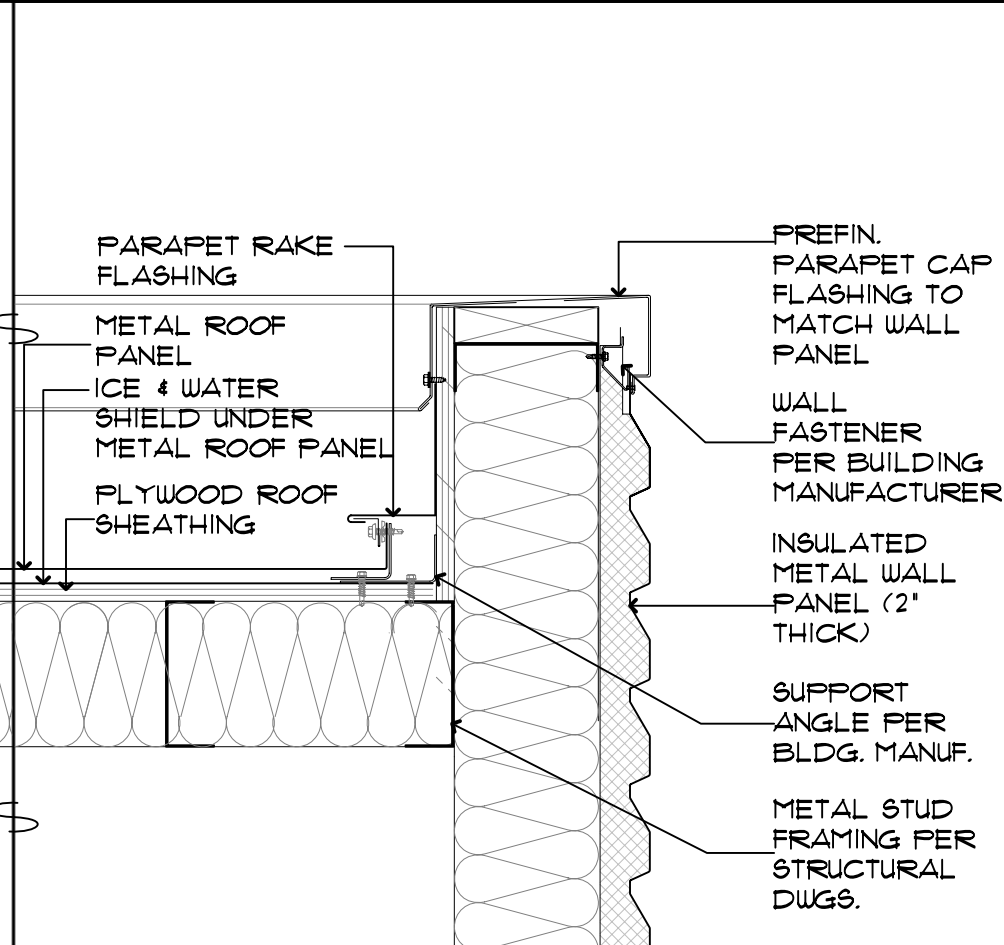
4 ROOF VENT/PIPE FLASHING
 SCALE: N.T.S.



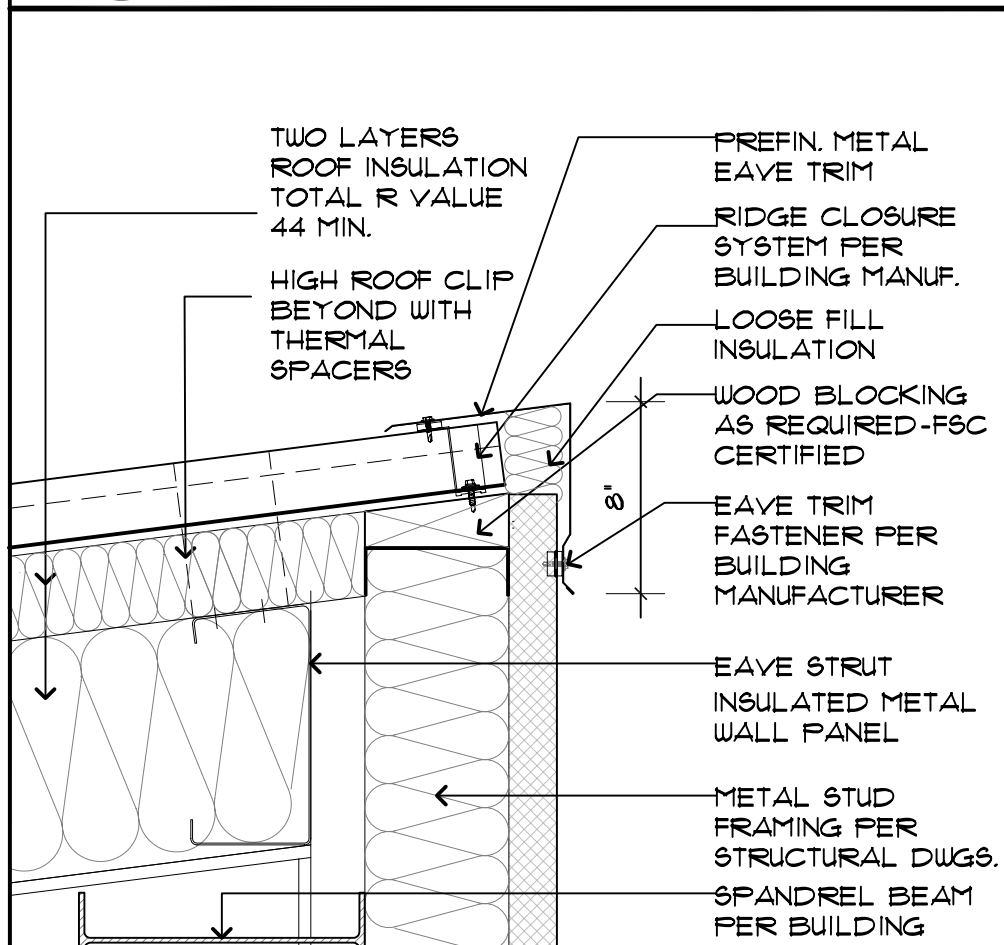
5 PARAPET DETAIL
 SCALE: 1 1/2" = 1'-0"



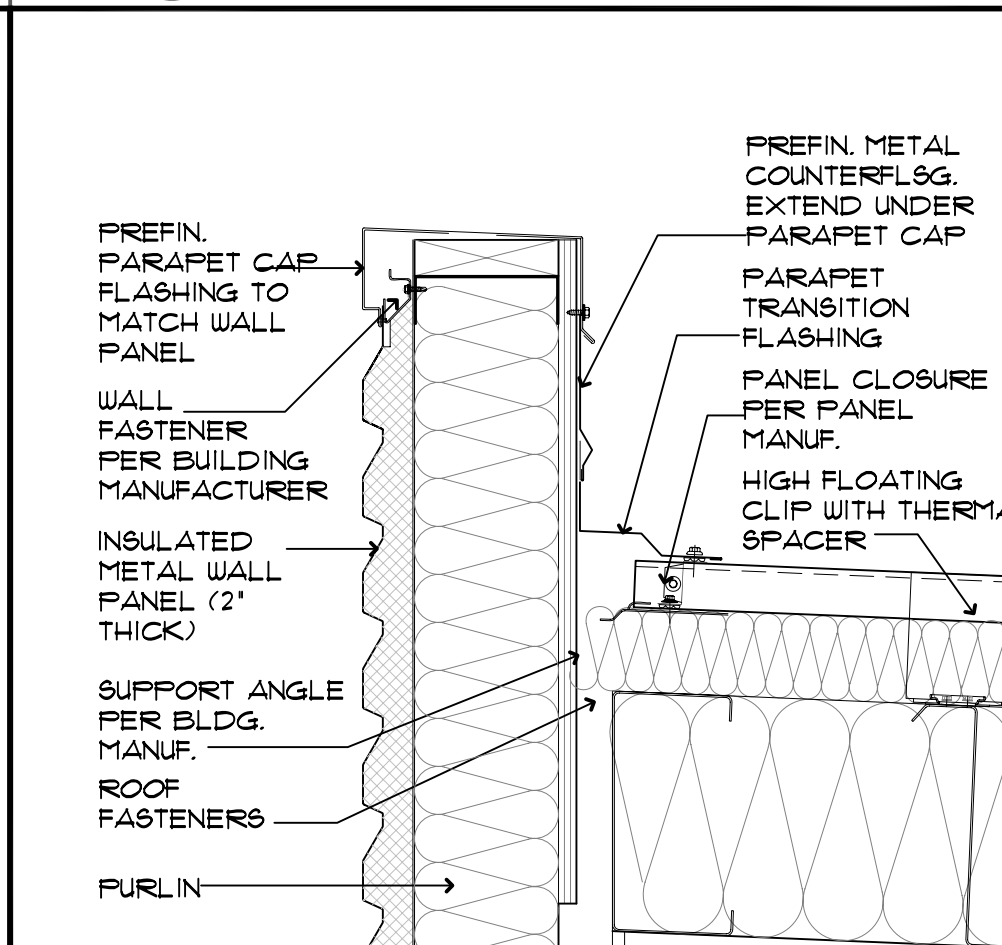
6 ENTRY ROOF DETAIL
 SCALE: 1 1/2" = 1'-0"



7 GUTTER DETAIL
 SCALE: 1 1/2" = 1'-0"

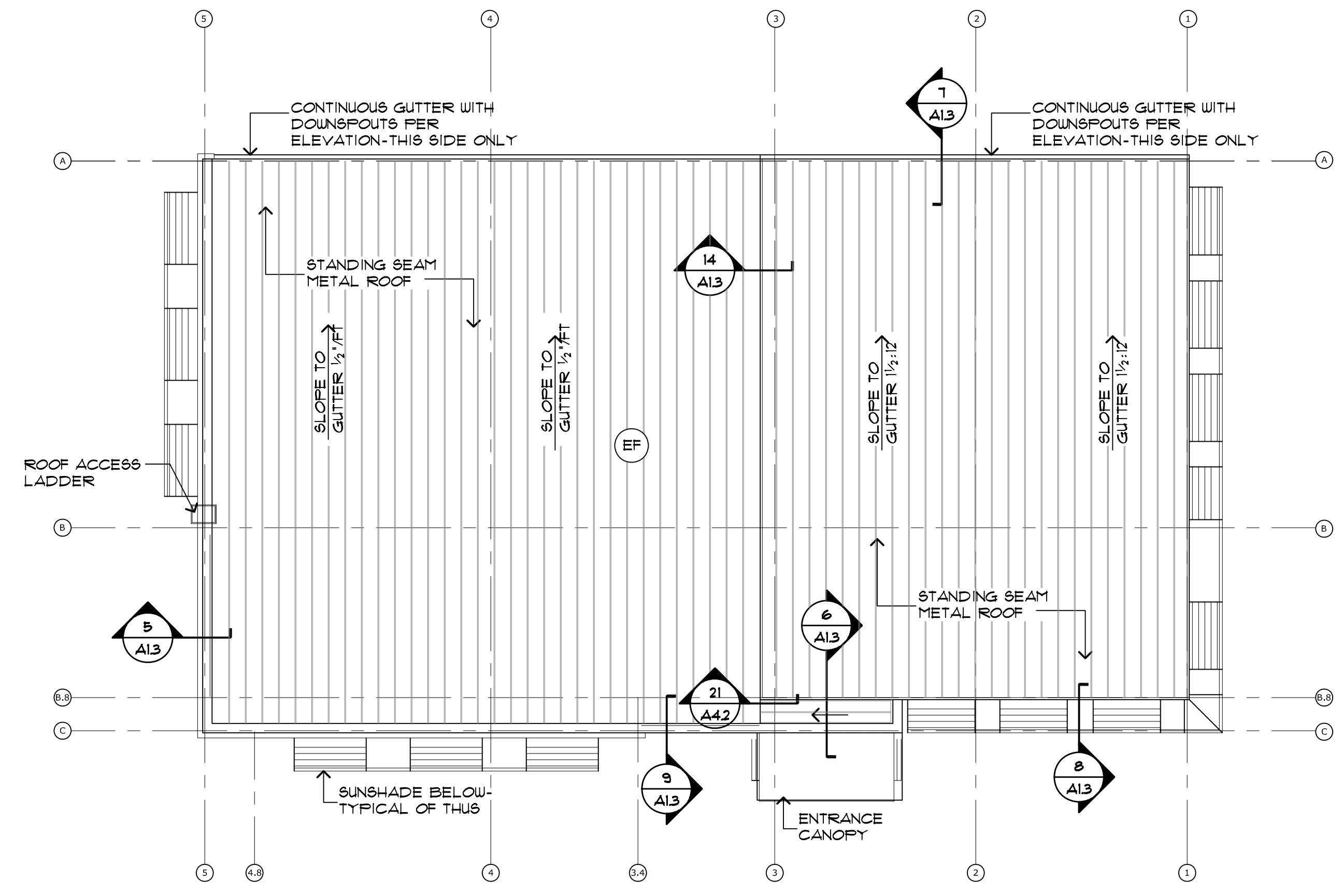


8 HIGH RAKE DETAIL
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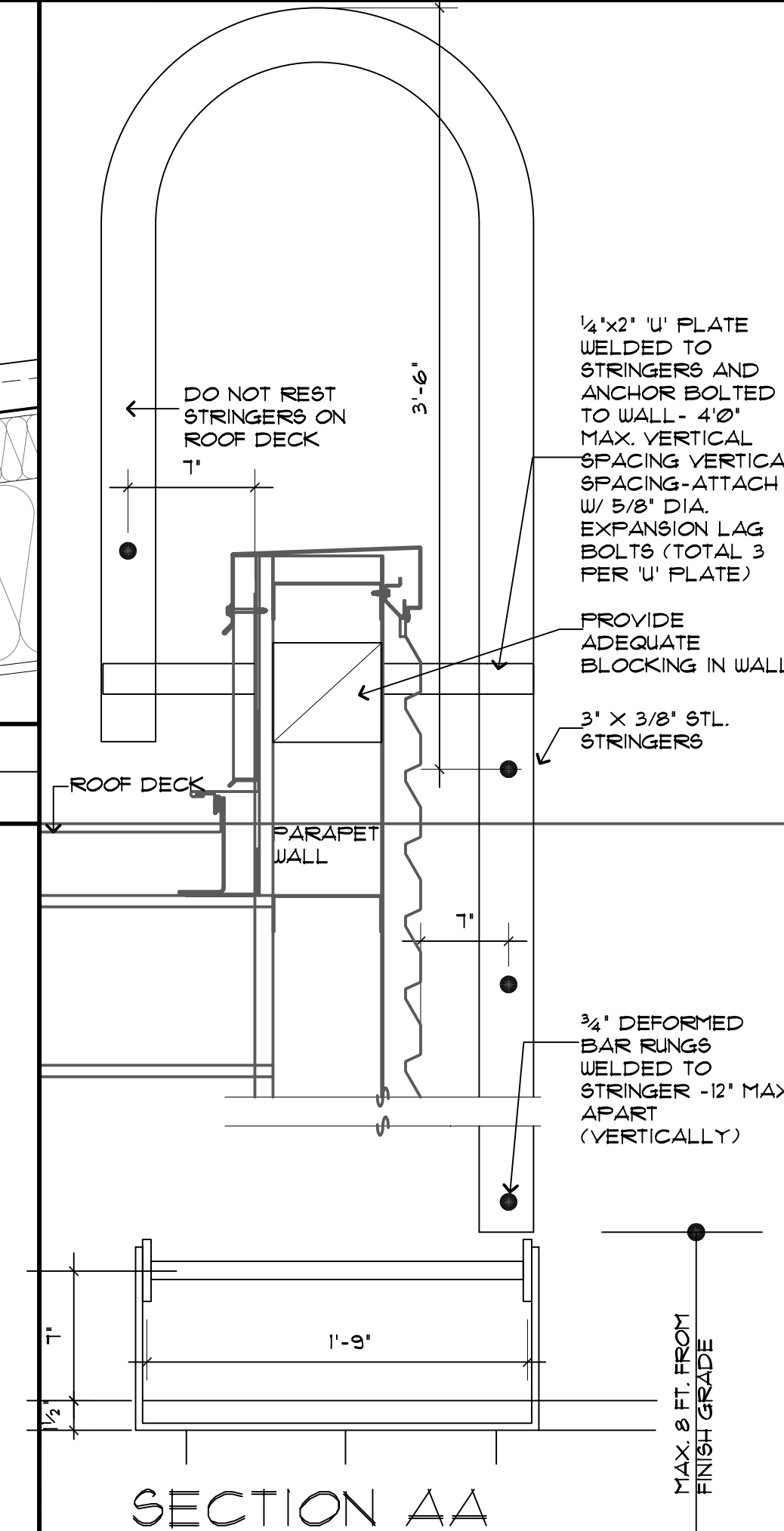


9 PARAPET DETAIL
 SCALE: 1 1/2" = 1'-0"

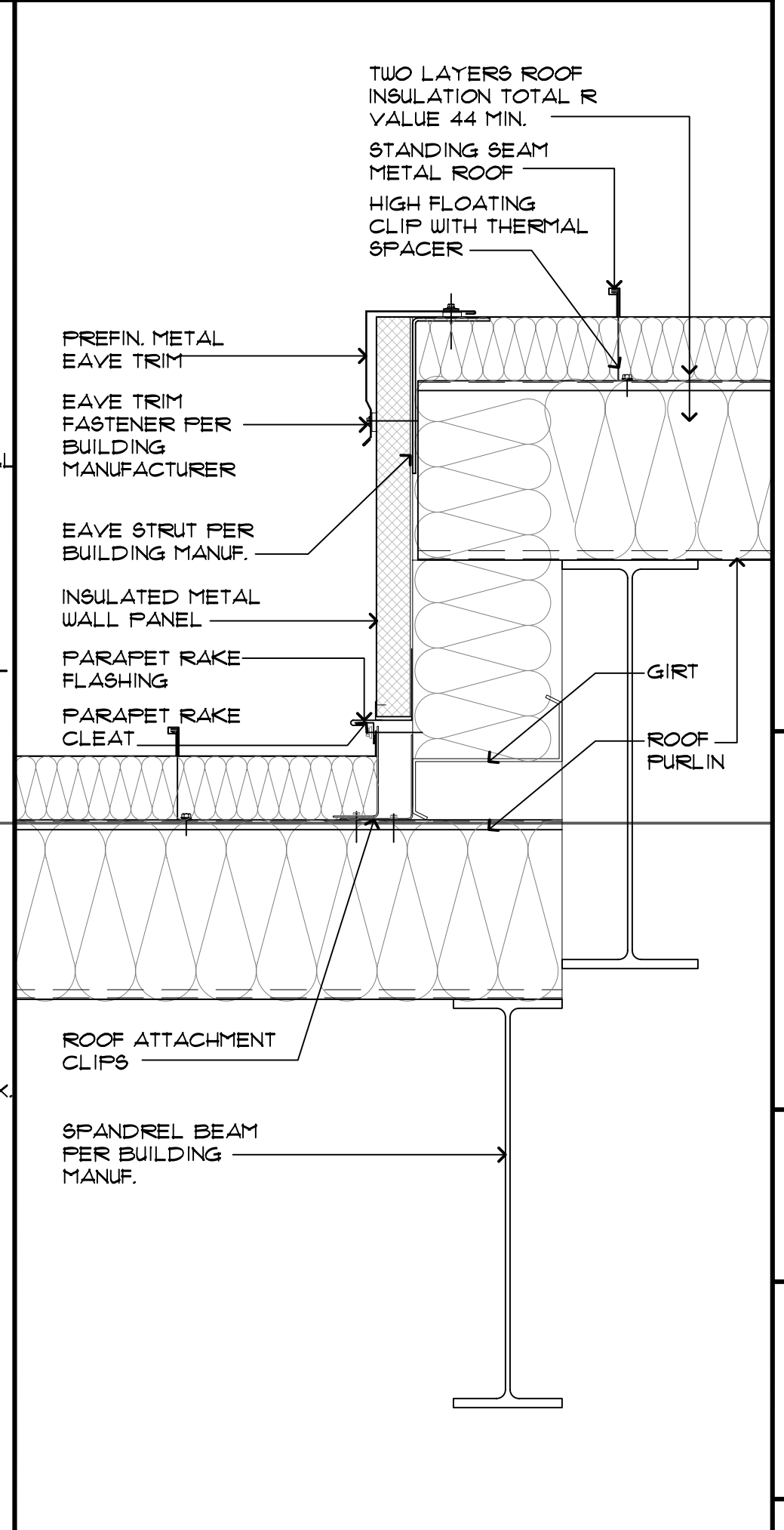
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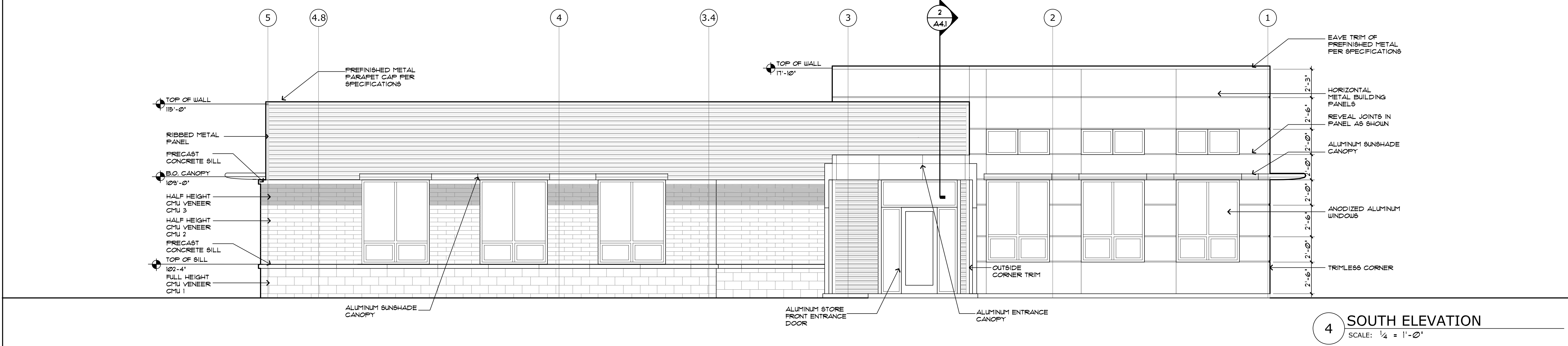
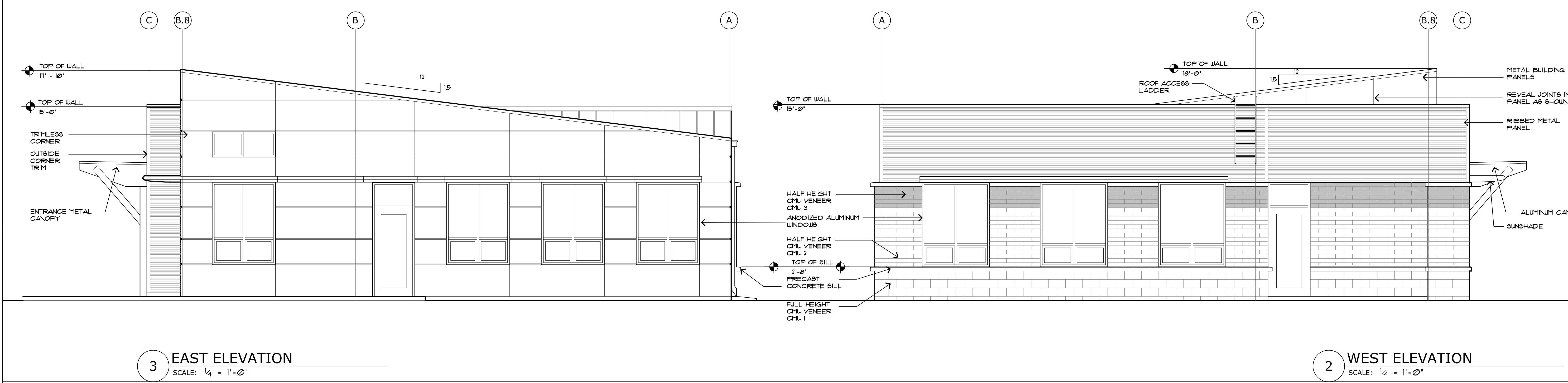
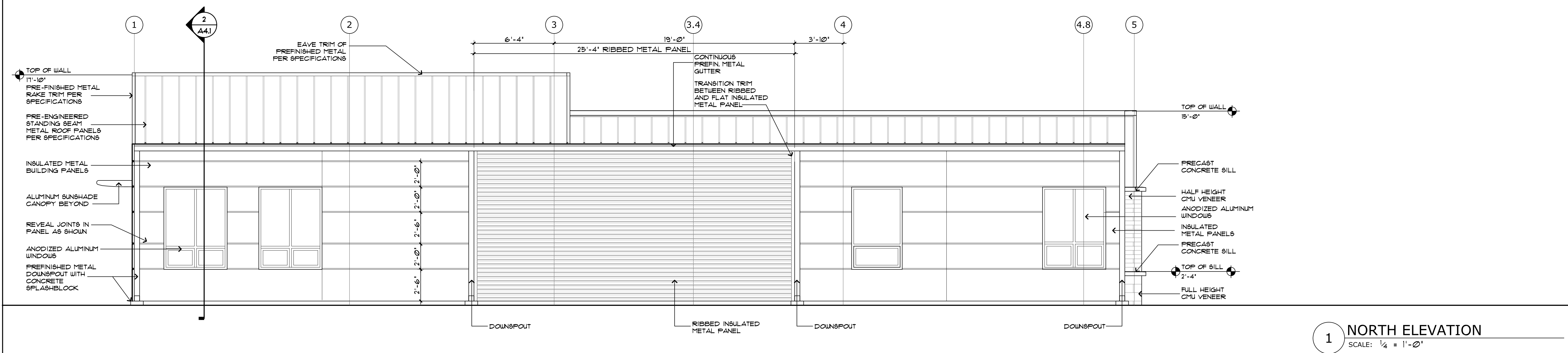
ROOF PLAN
 SCALE: 1/8" = 1'-0"

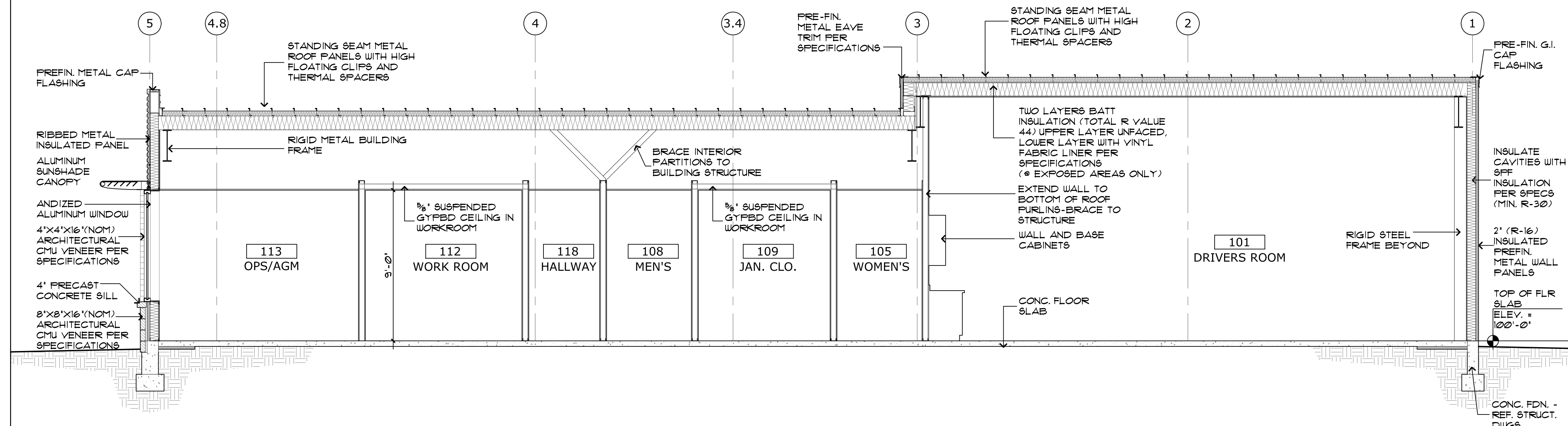


13 ROOF LADDER DETAIL
 SCALE: 1 1/2" = 1'-0"

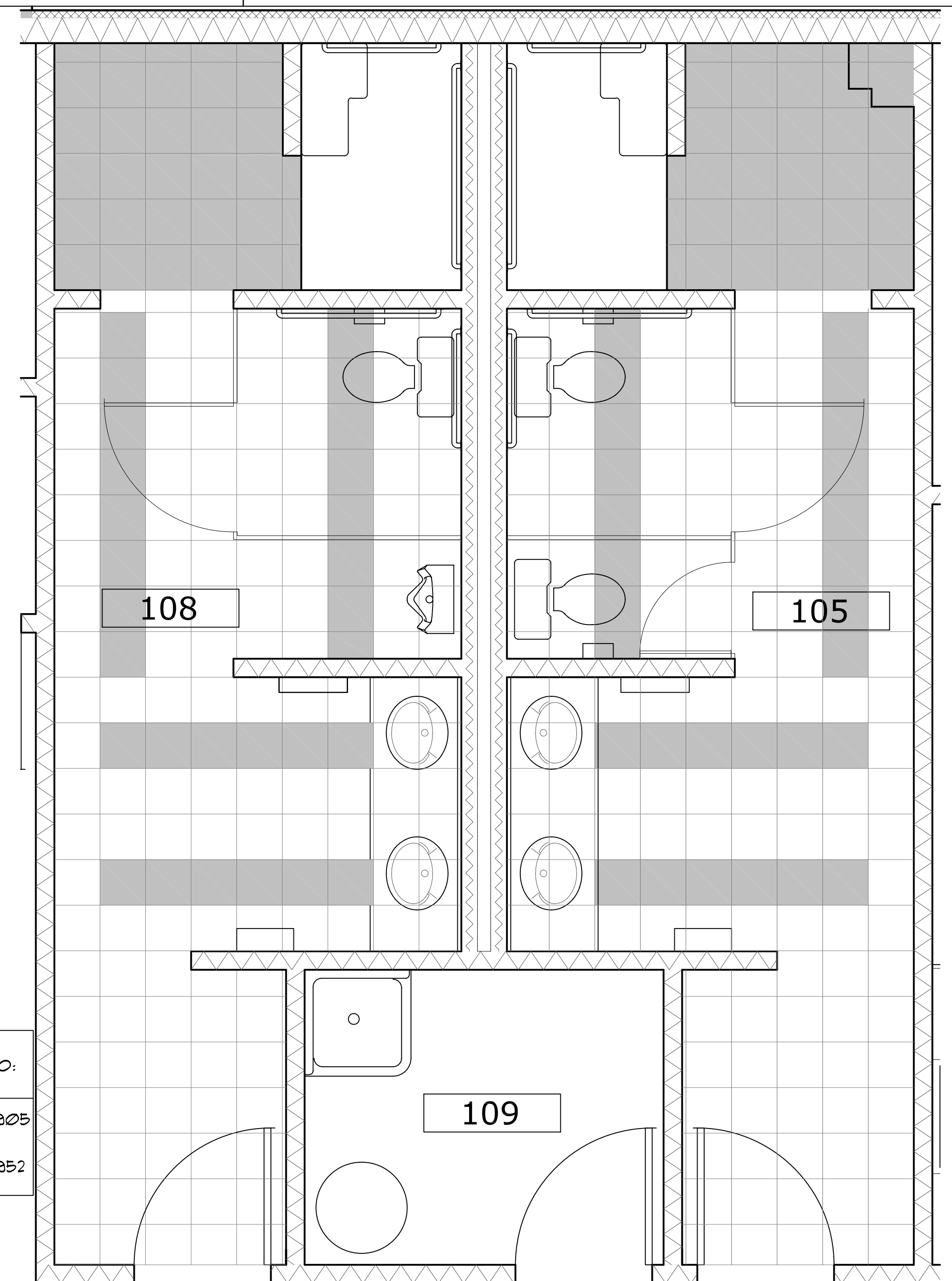


14 ROOF DETAIL
 SCALE: 1 1/2" = 1'-0"



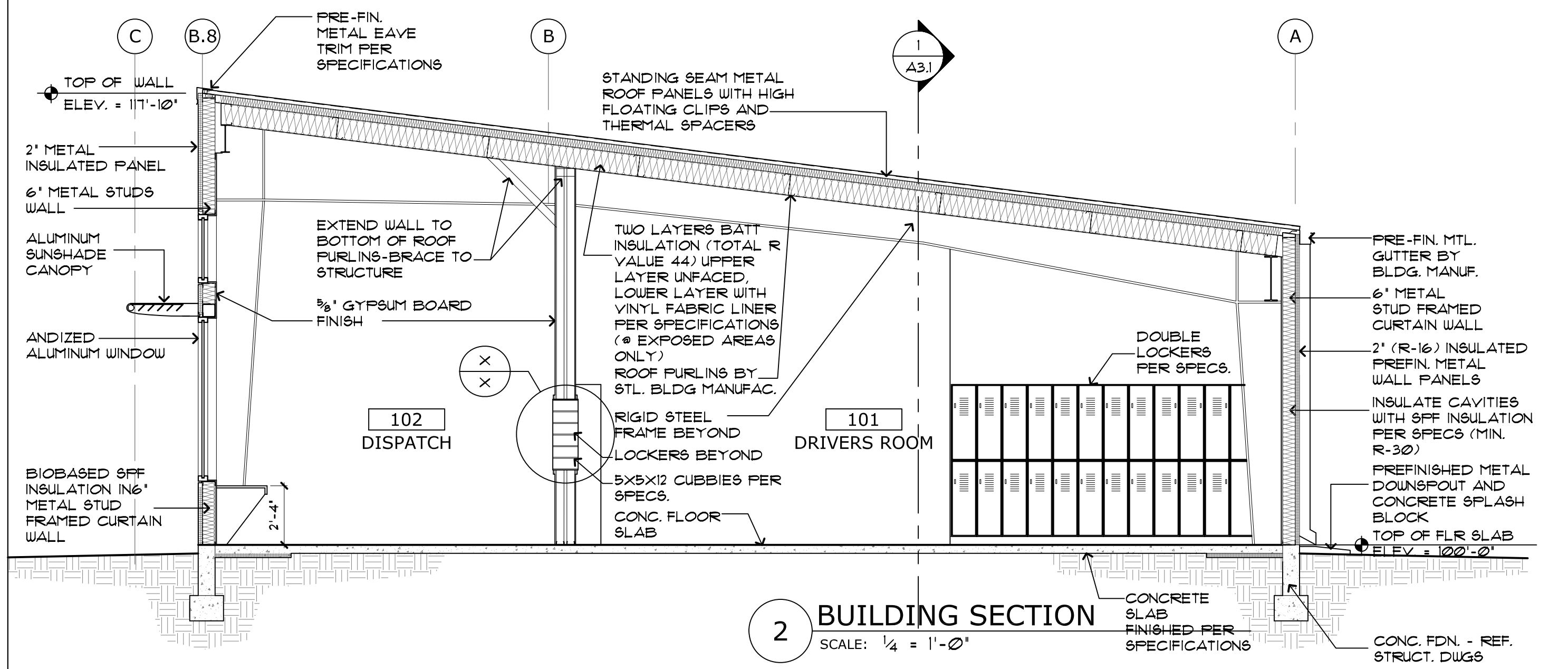


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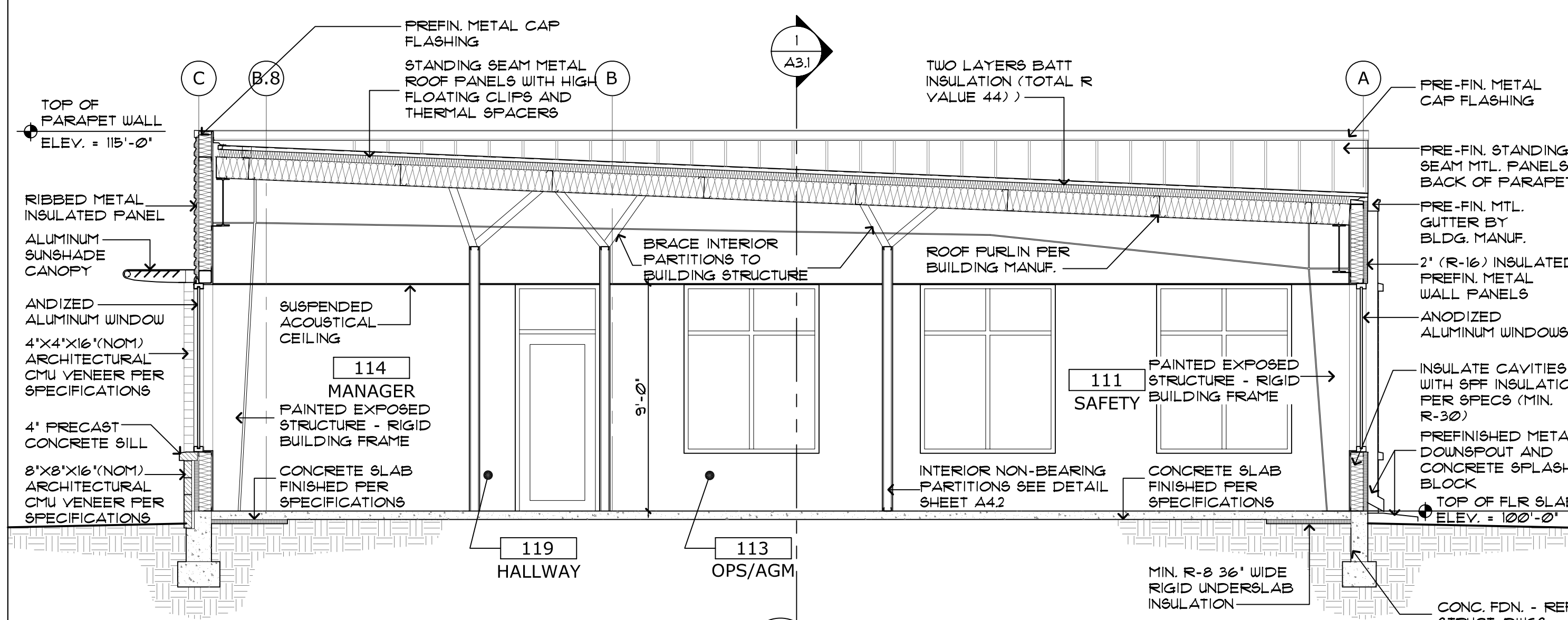


4 FLOOR TILE DETAIL
 SCALE: 1/2" = 1'-0"

TILES BY DAL TILE	COLOR	NO.
FIELD TILE	DAL TILE 'DESERT GRAY'	B305
ACCENT TILE	DAL-TILE 'GRAPPLE'	B952



2 BUILDING SECTION
 SCALE: 1/4" = 1'-0"



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

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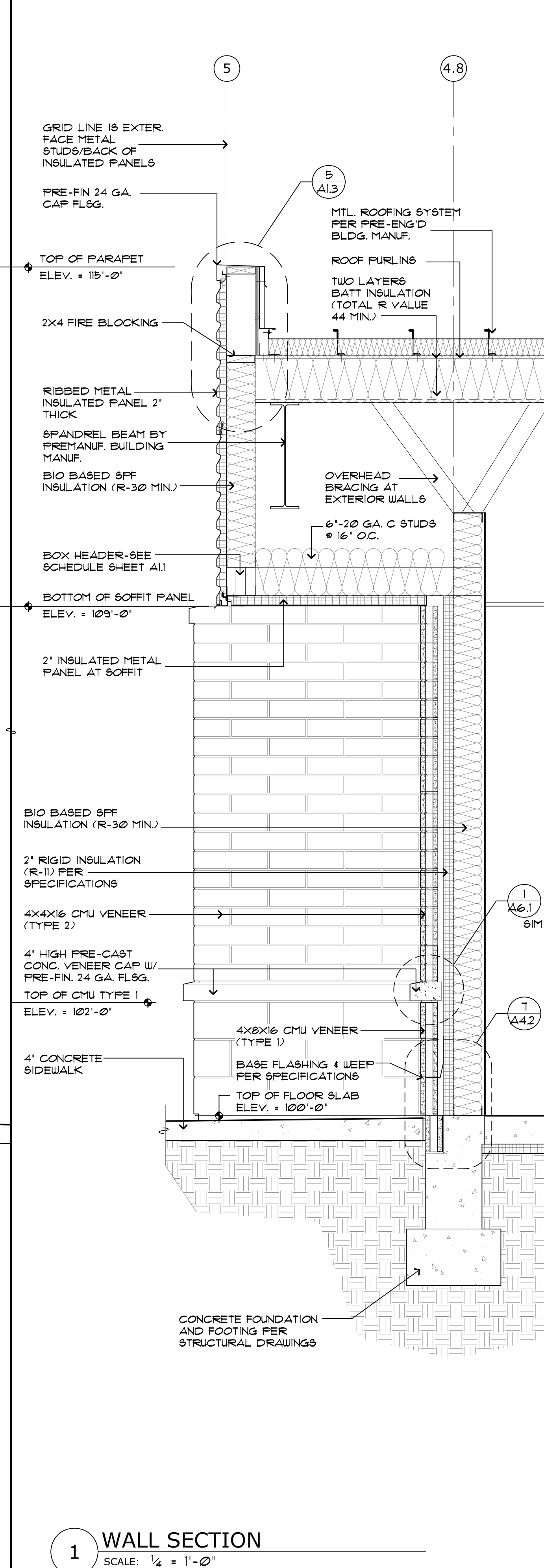
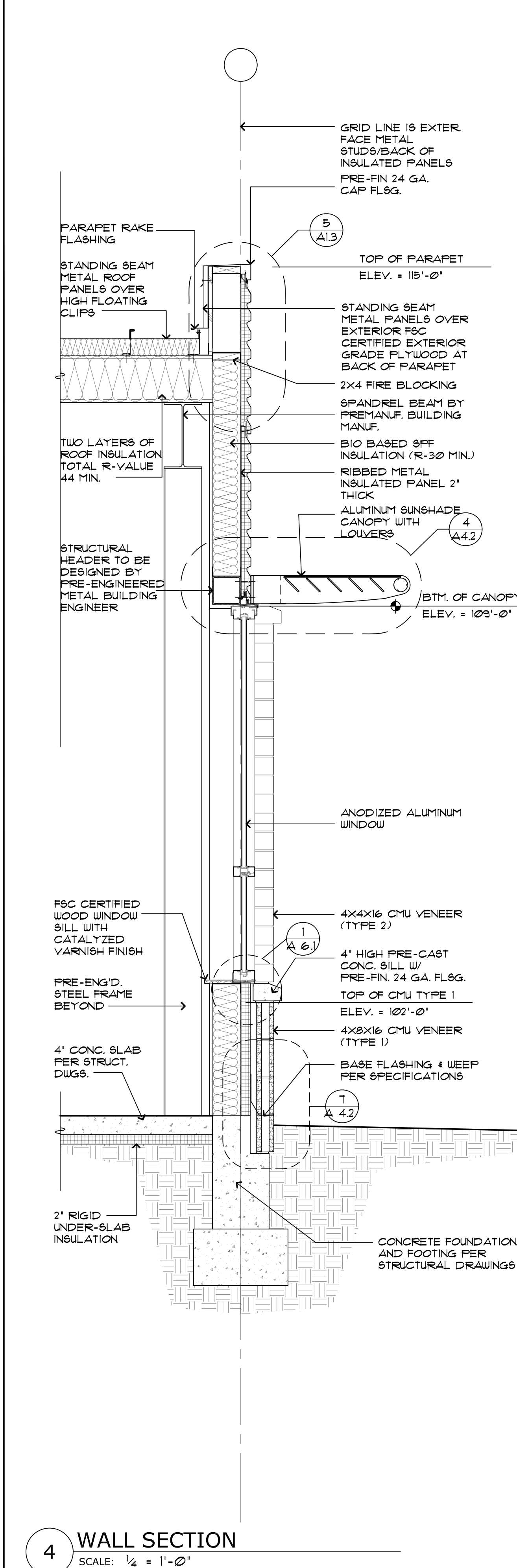
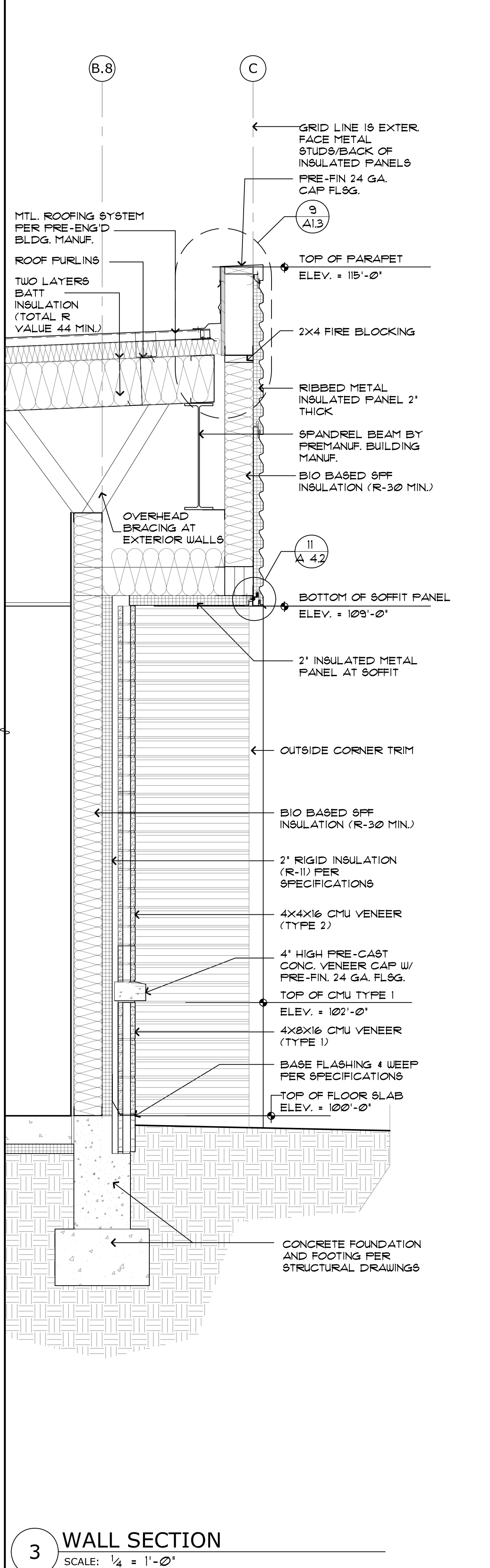
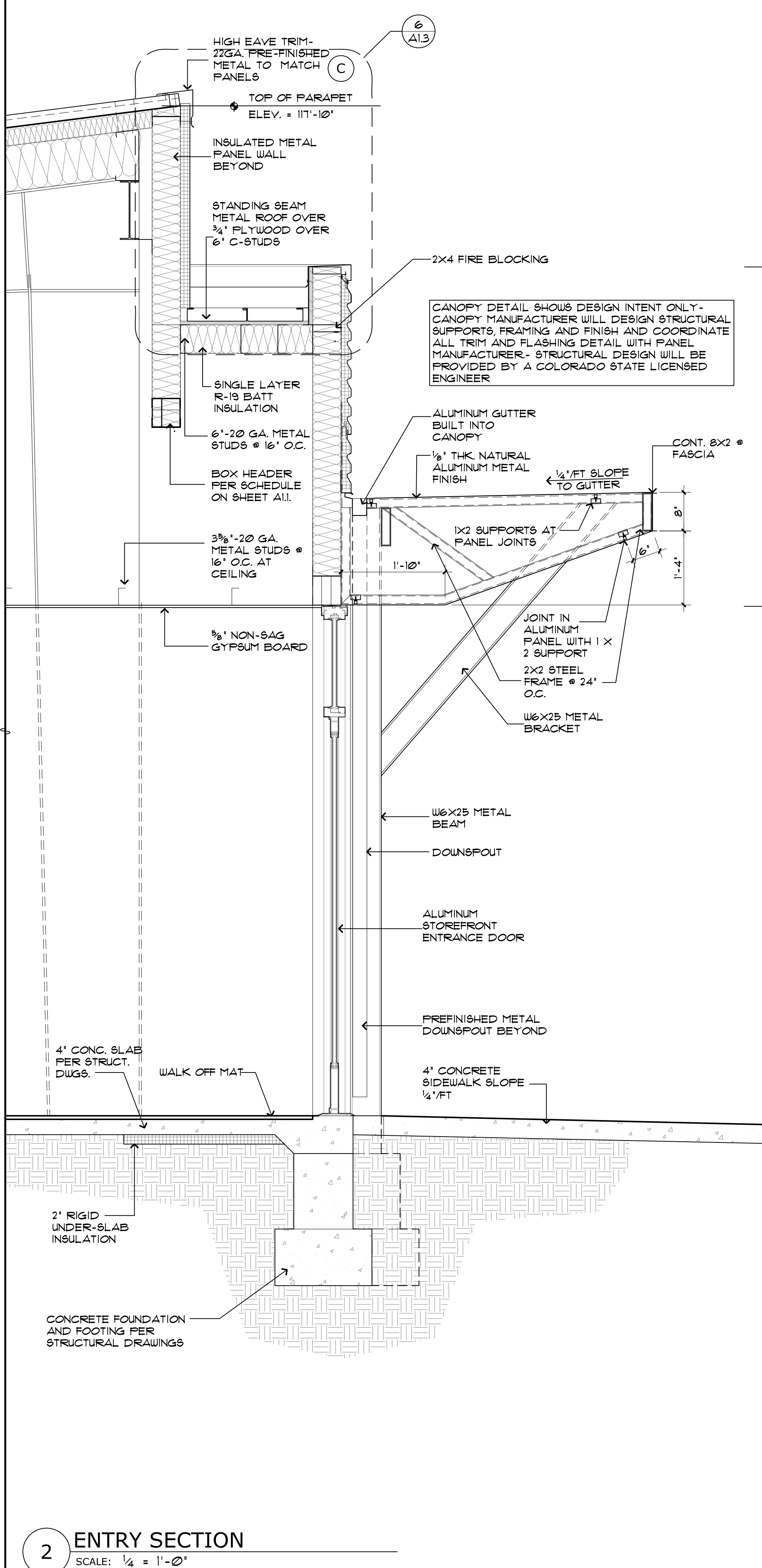
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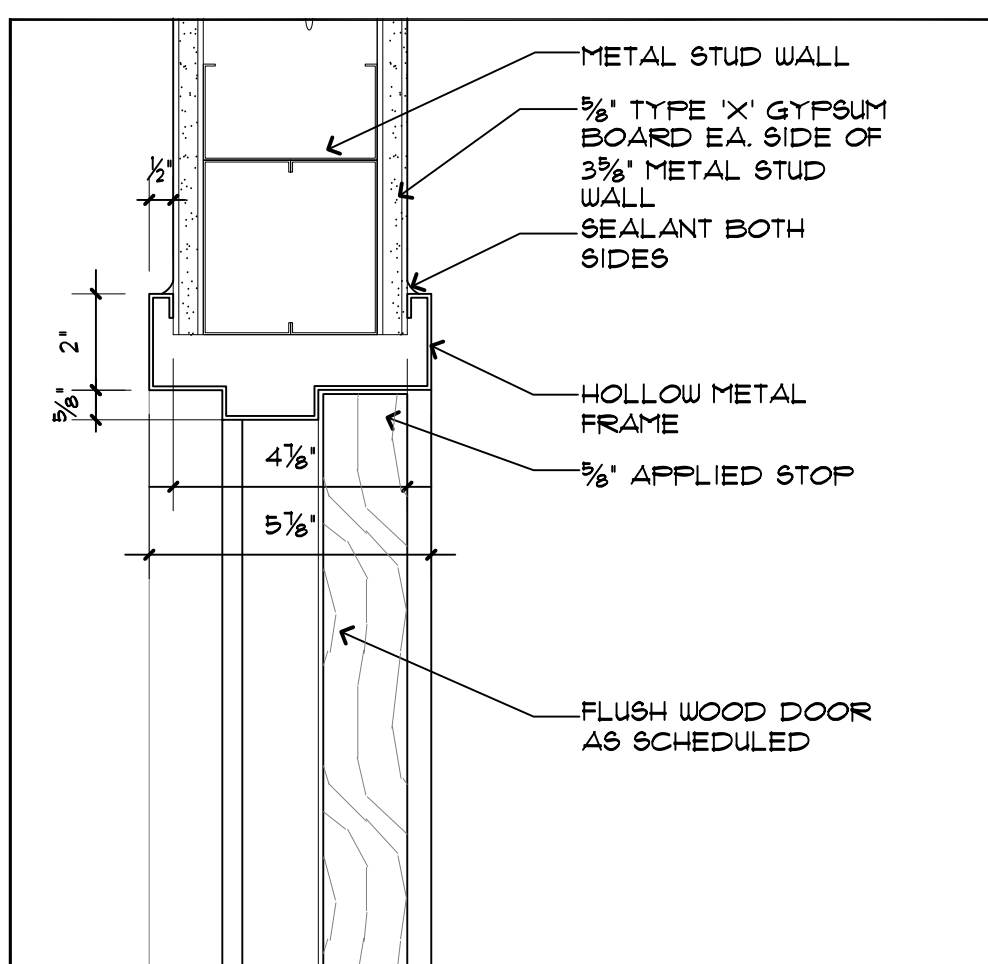
WALL SECTIONS

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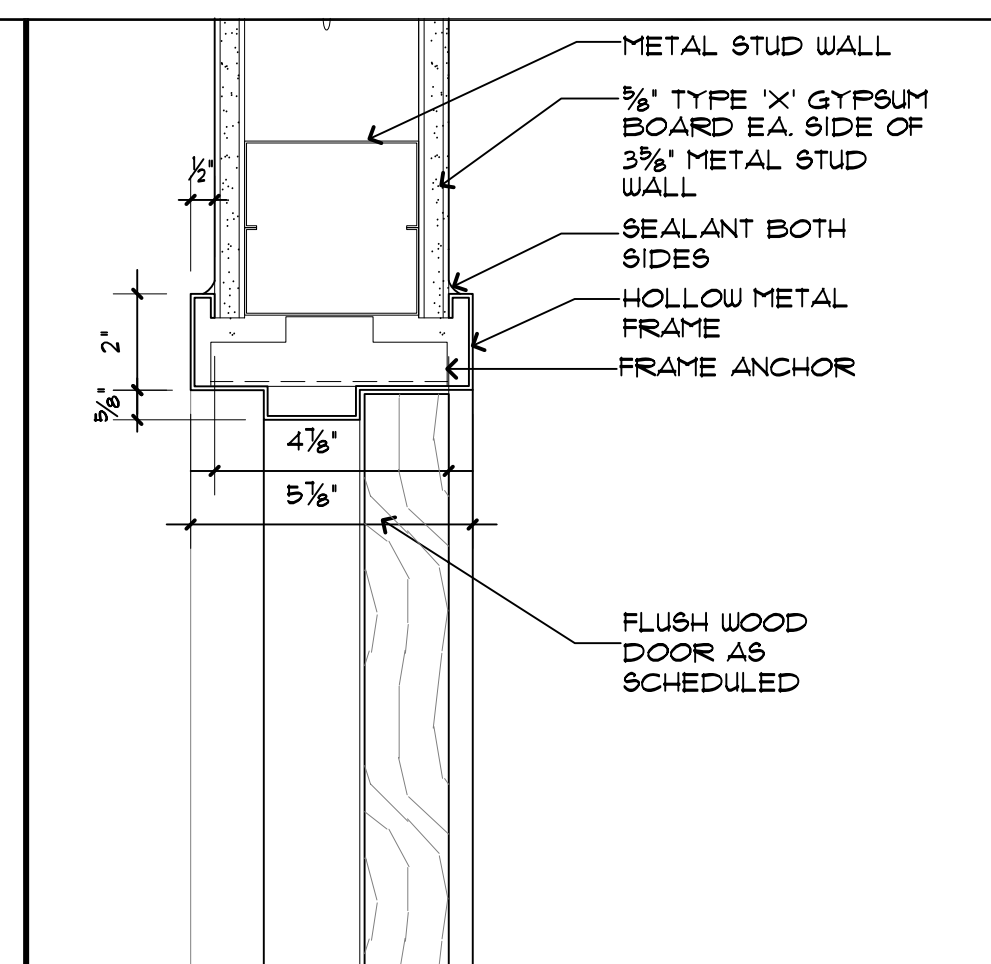
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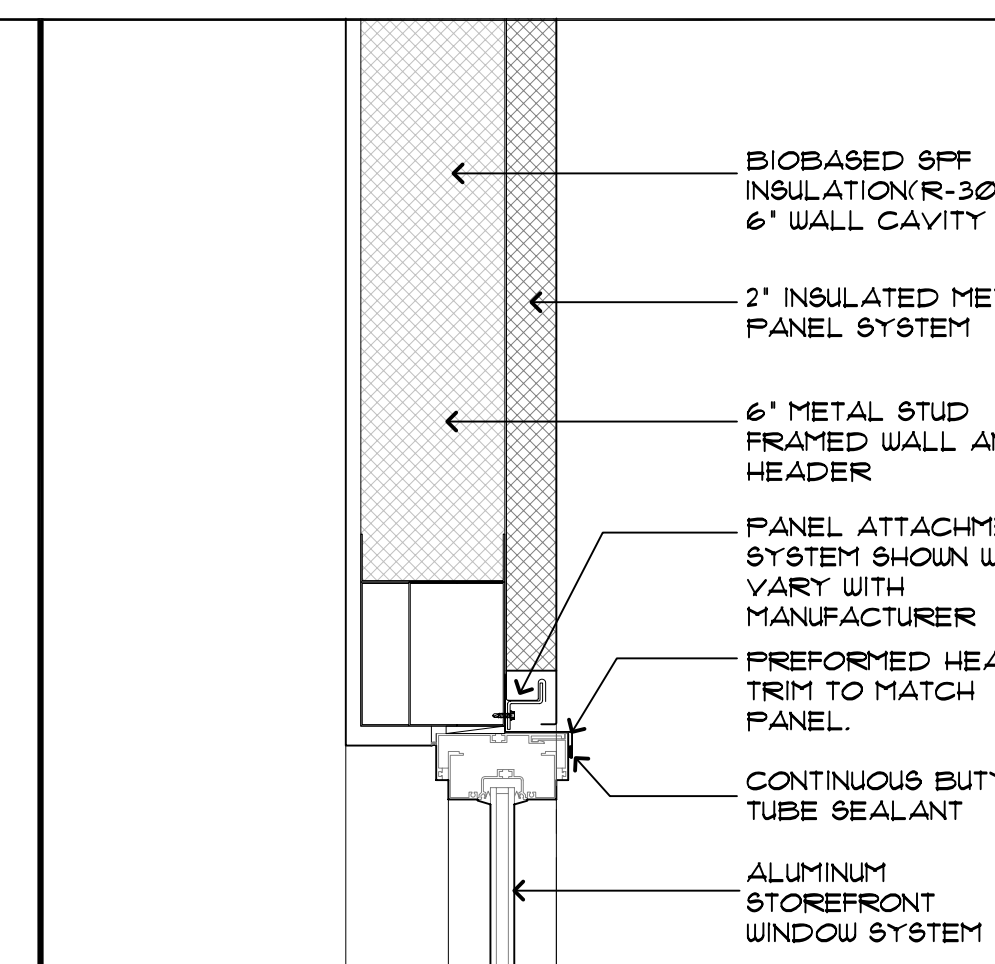
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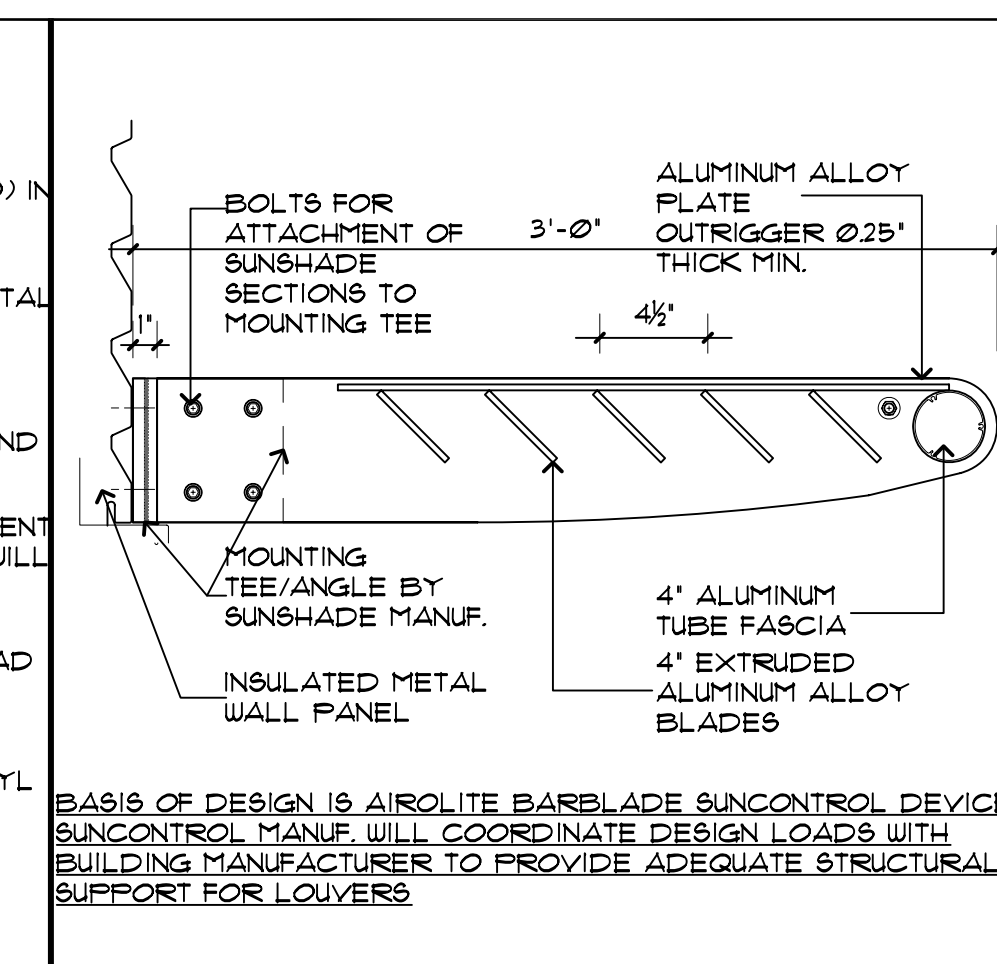
1 H.M. DOOR HEAD
SCALE: 3 = 1'-0"



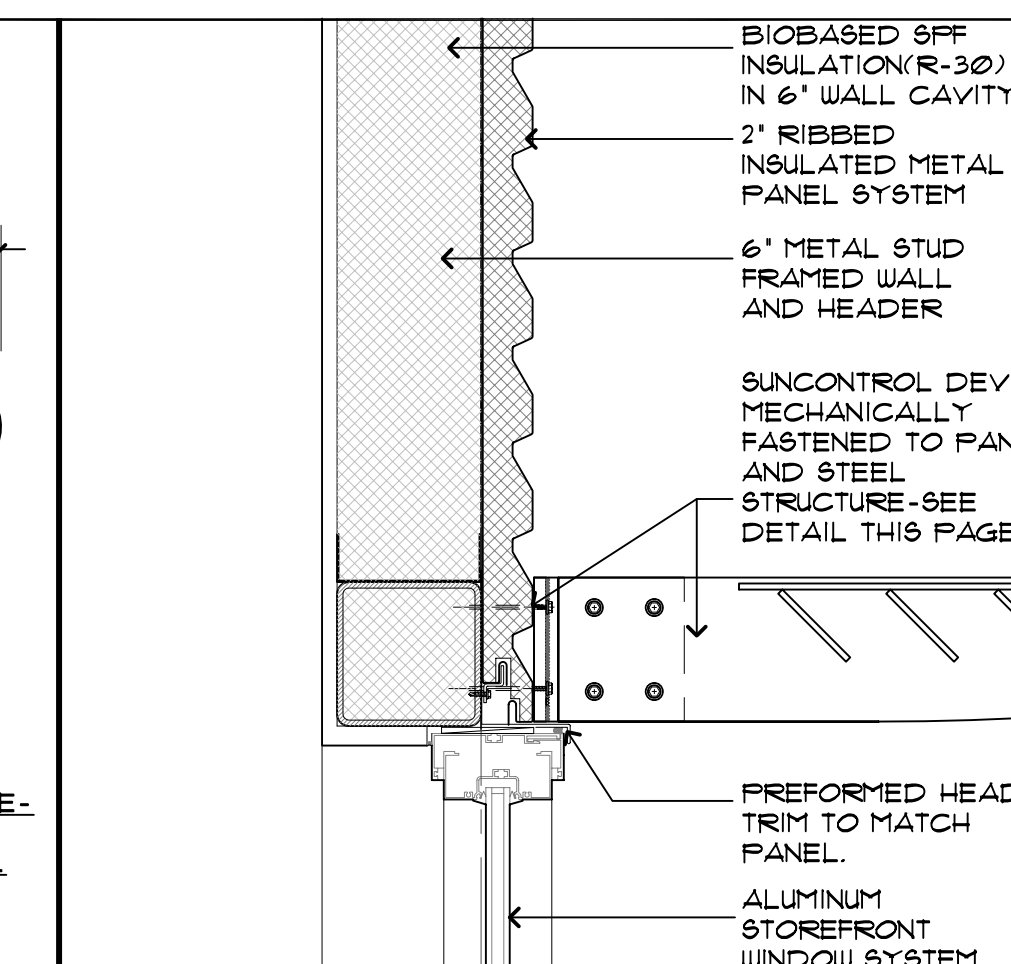
2 H.M. DOOR JAMB
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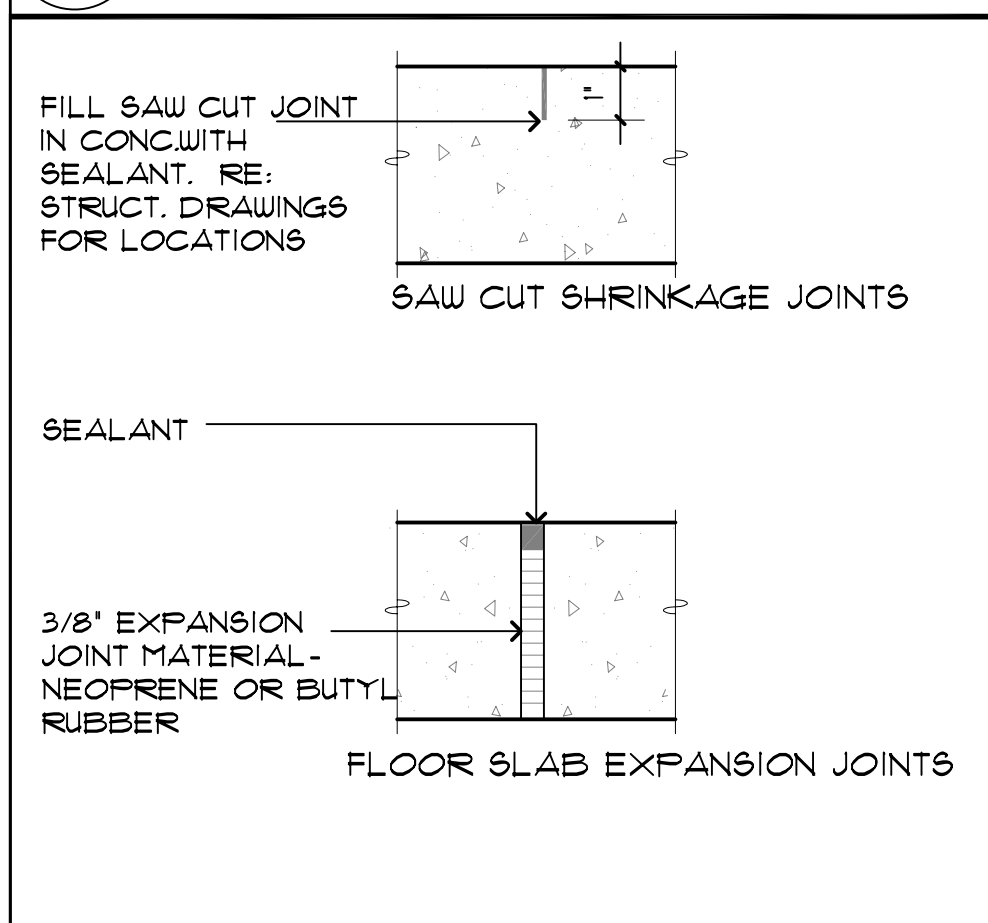
3 WINDOW HEAD @ PANEL WALL
SCALE: 1/2 = 1'-0"



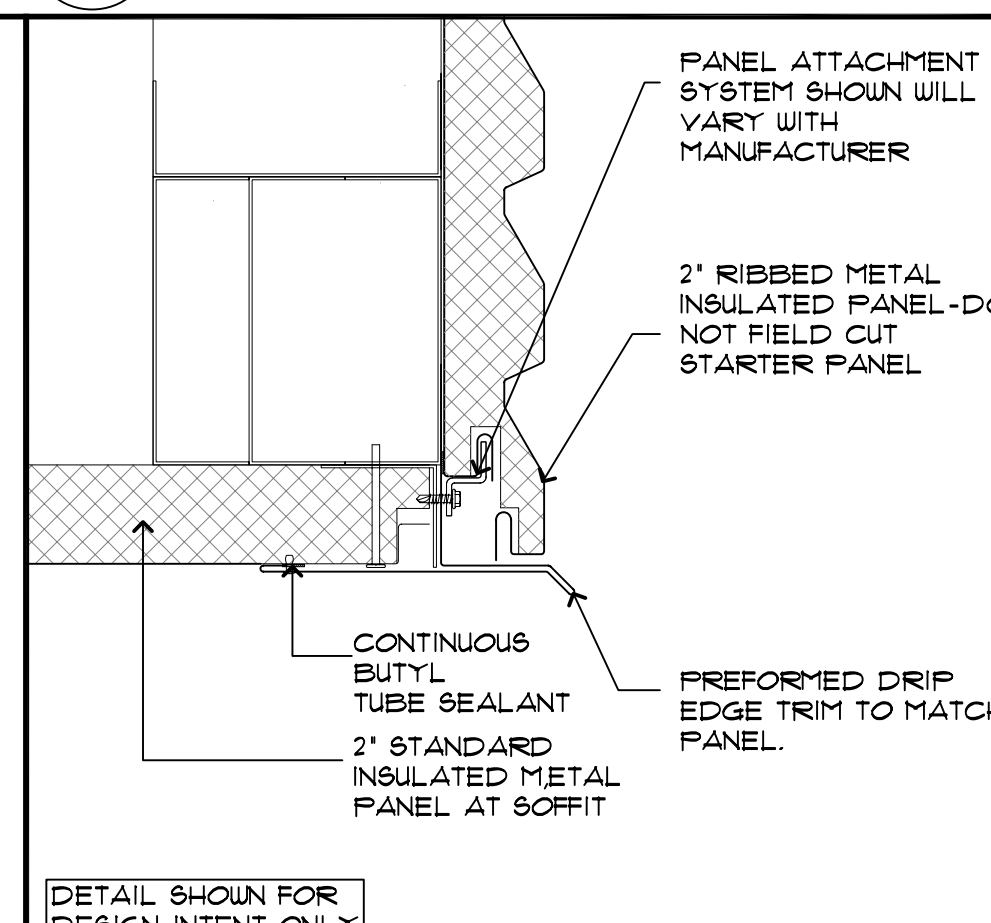
4 SUNSHADE DETAIL
SCALE: 1/2 = 1'-0"



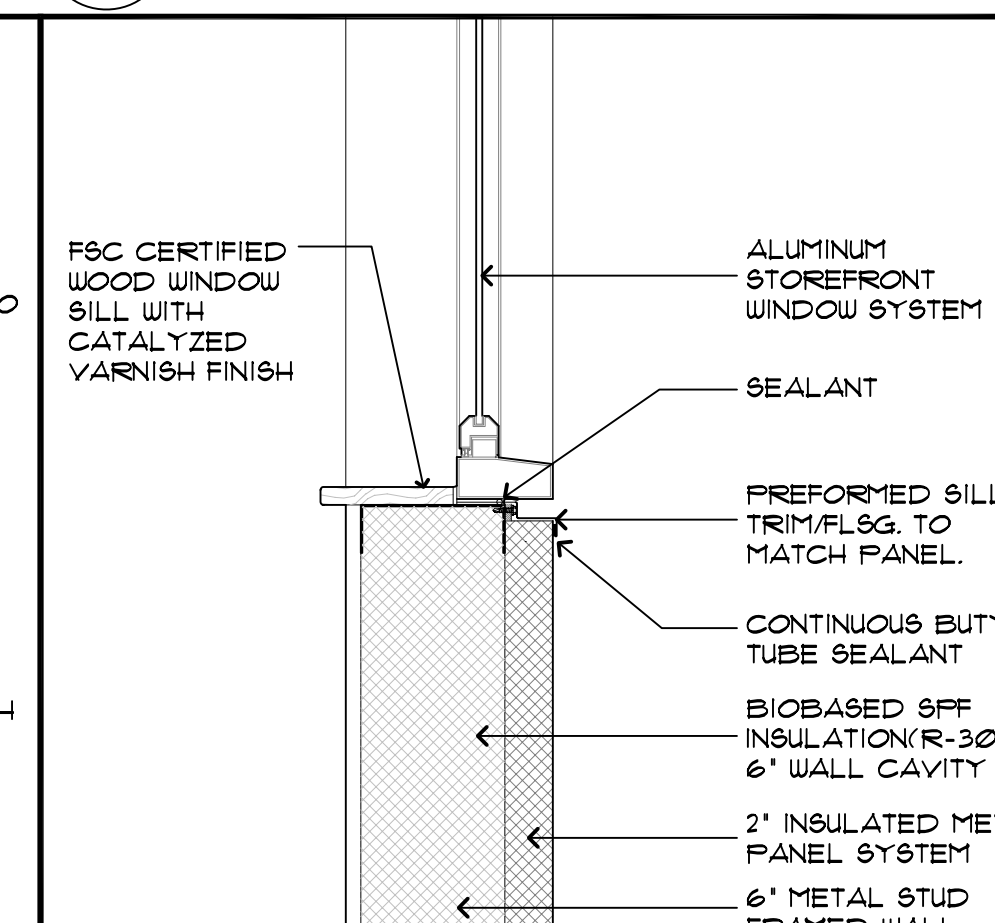
5 WINDOW HEAD @ SUNSHADE
SCALE: 1/2 = 1'-0"



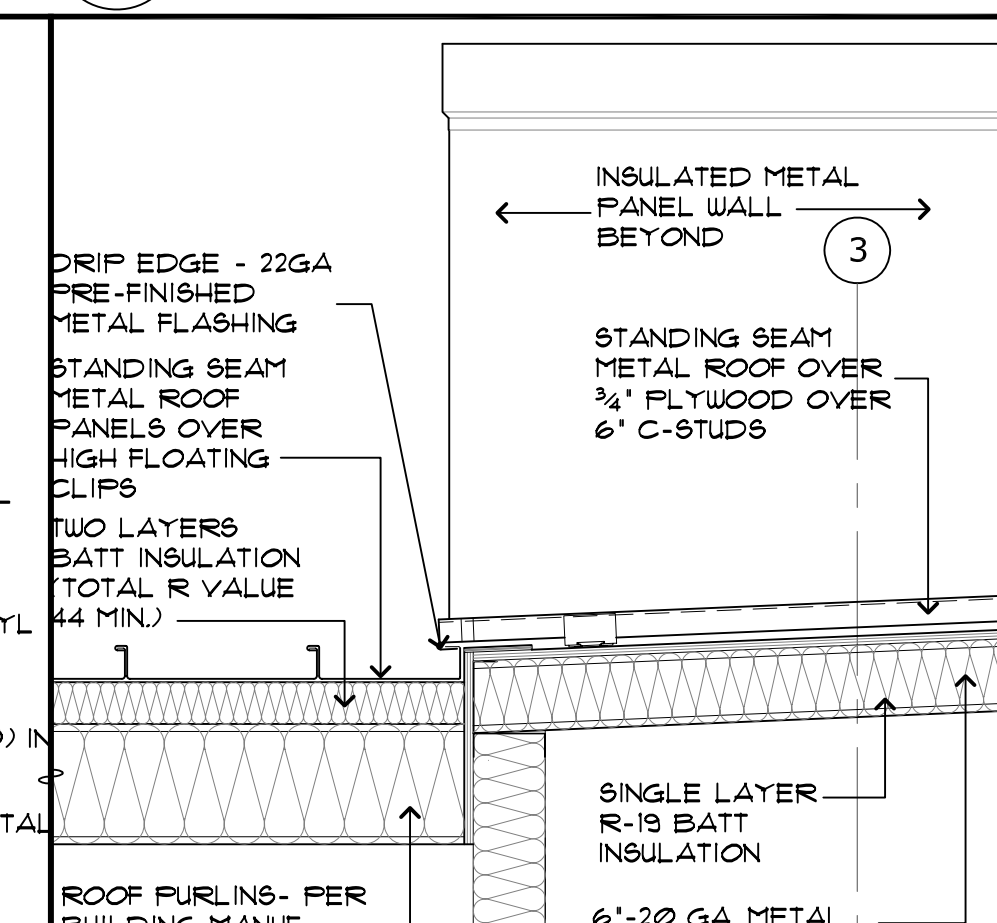
12 CONCRETE JOINT DETAIL
SCALE: 3 = 1'-0"



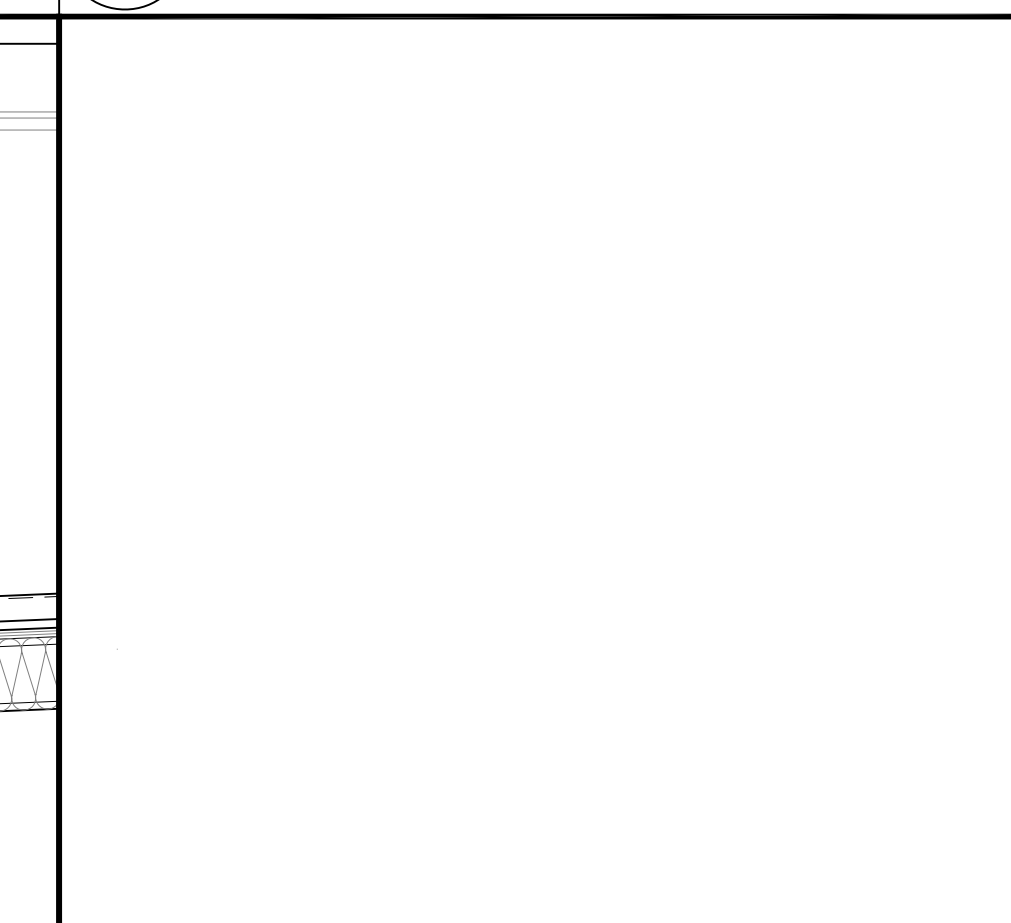
11 SOFFIT DETAIL
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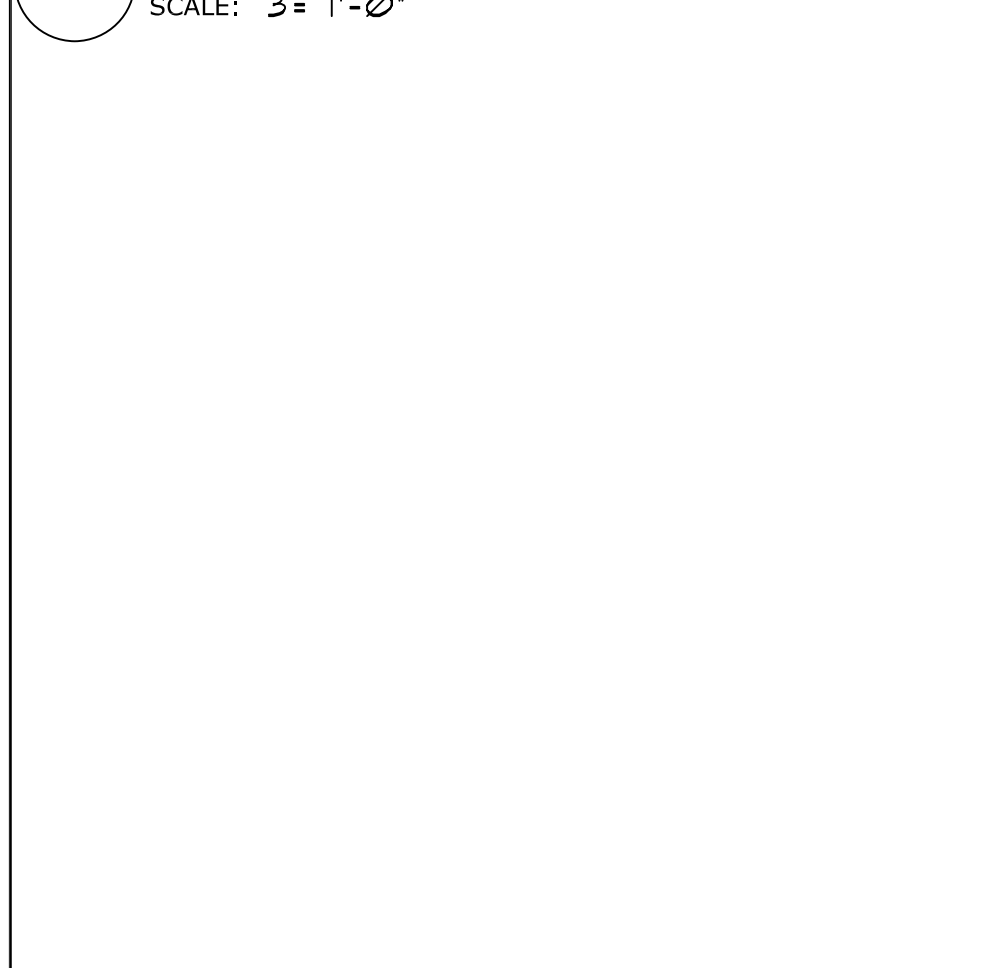
10 WINDOW SILL @ PANEL WALL
SCALE: 1/2 = 1'-0"



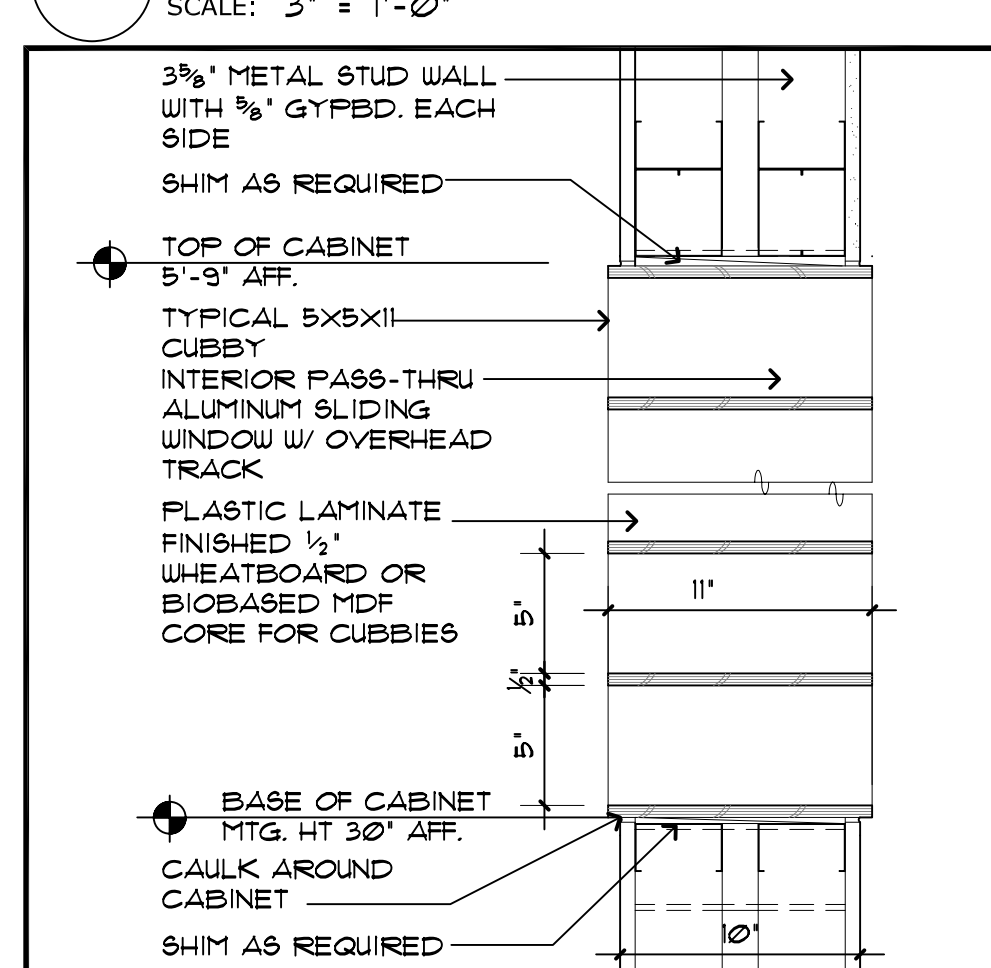
8 NOTUSED
SCALE:



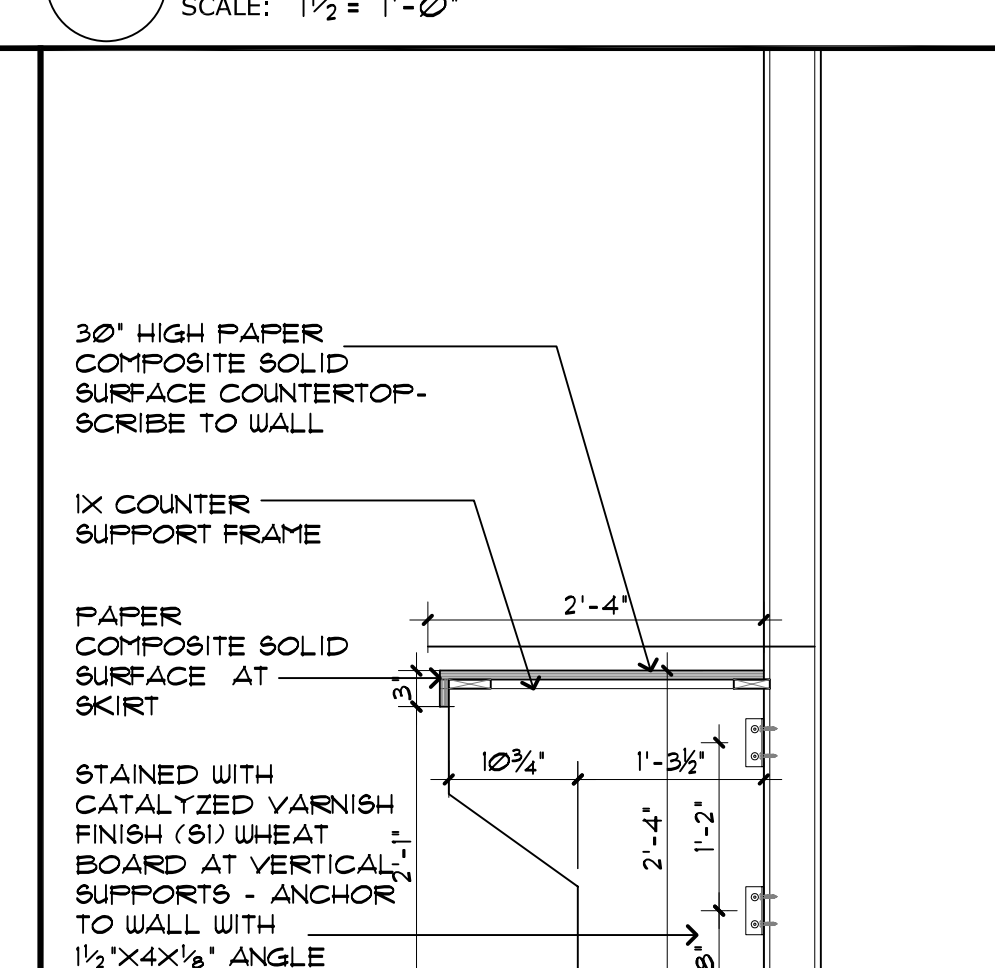
7 WALL BASE @ CMU VENEER
SCALE: 1/2 = 1'-0"



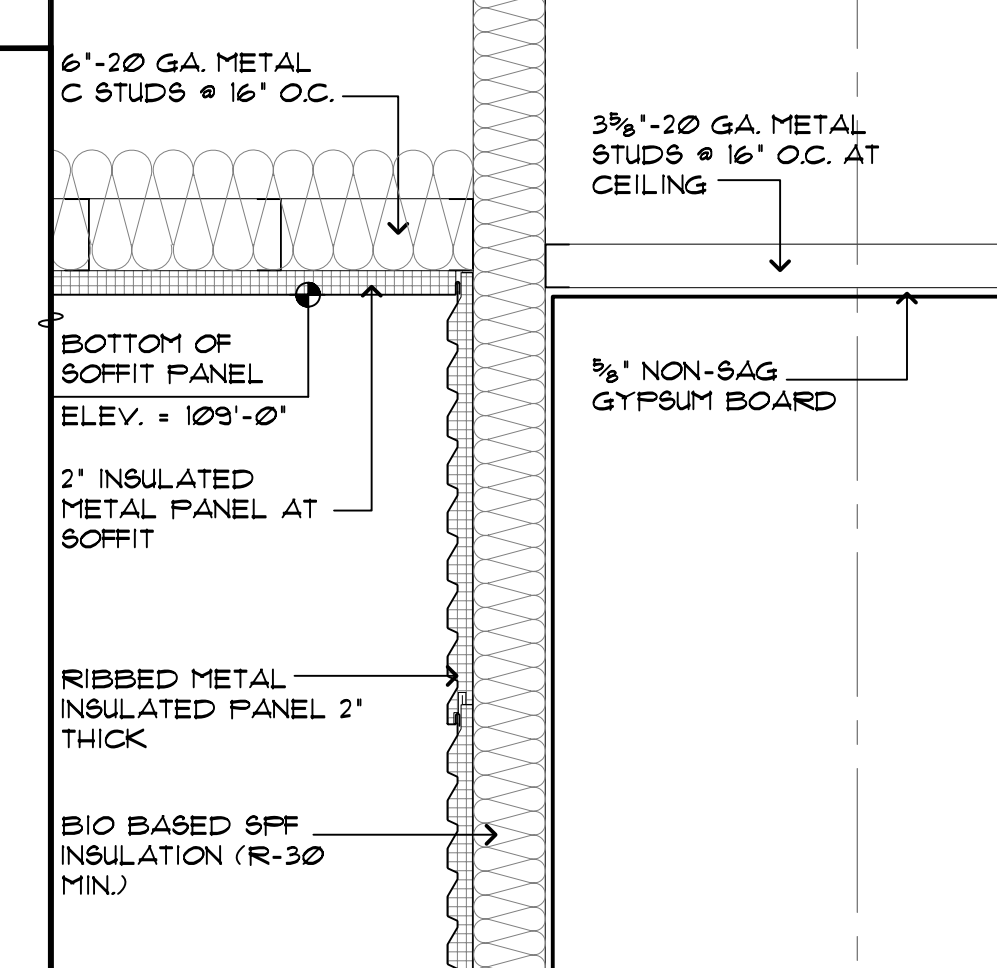
14 CUBBY WALL DETAIL
SCALE: 1/2 = 1'-0"



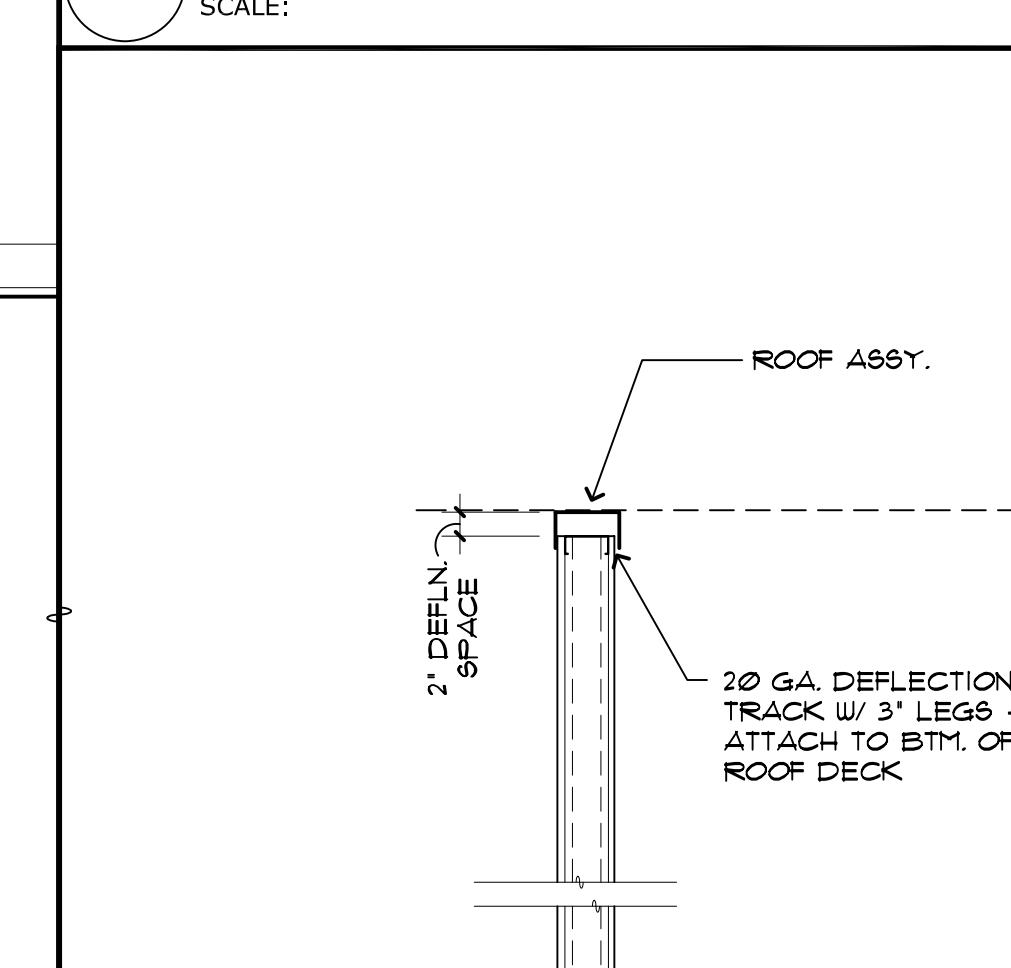
15 TYPICAL WORK COUNTER
SCALE: 3/4 = 1'-0"



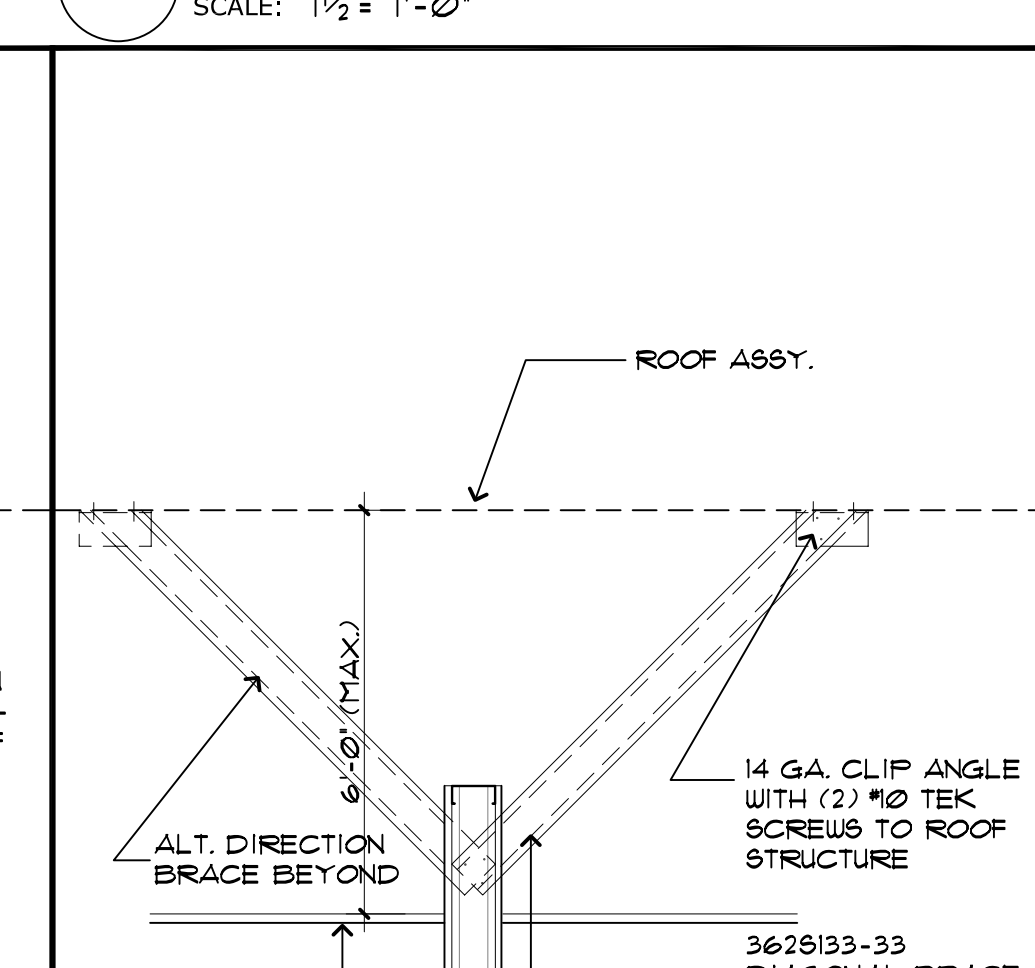
23 PASS-THRU WINDOW DETAIL
SCALE: 1/2 = 1'-0"



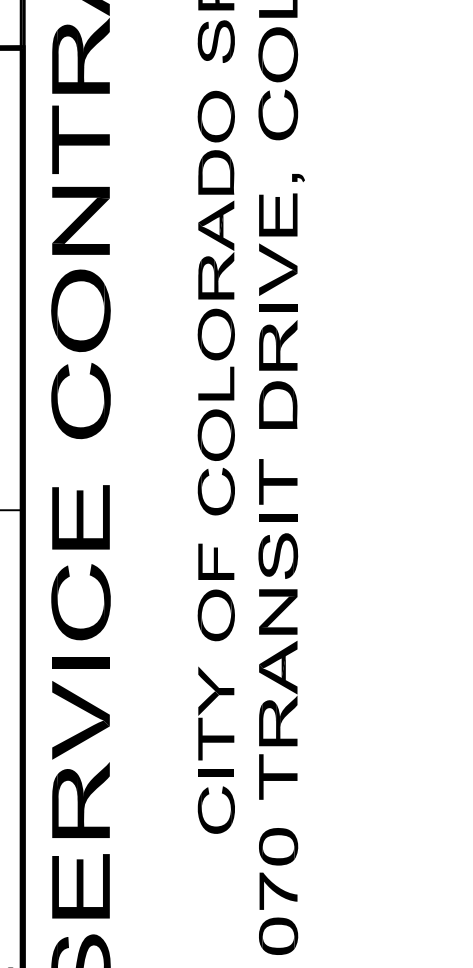
22 LAVATORY COUNTER
SCALE: 3/4 = 1'-0"



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



20 TYP. FULL HT. INTERIOR WALL
SCALE: 3/4 = 1'-0"



19 TYP. PARTIAL HT. INT. WALL
SCALE: 3/4 = 1'-0"

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DRAWN BY: SGT
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SHEET TITLE:
WALL SECTIONS

SHEET NO.

A4.2

REGISTRATION:

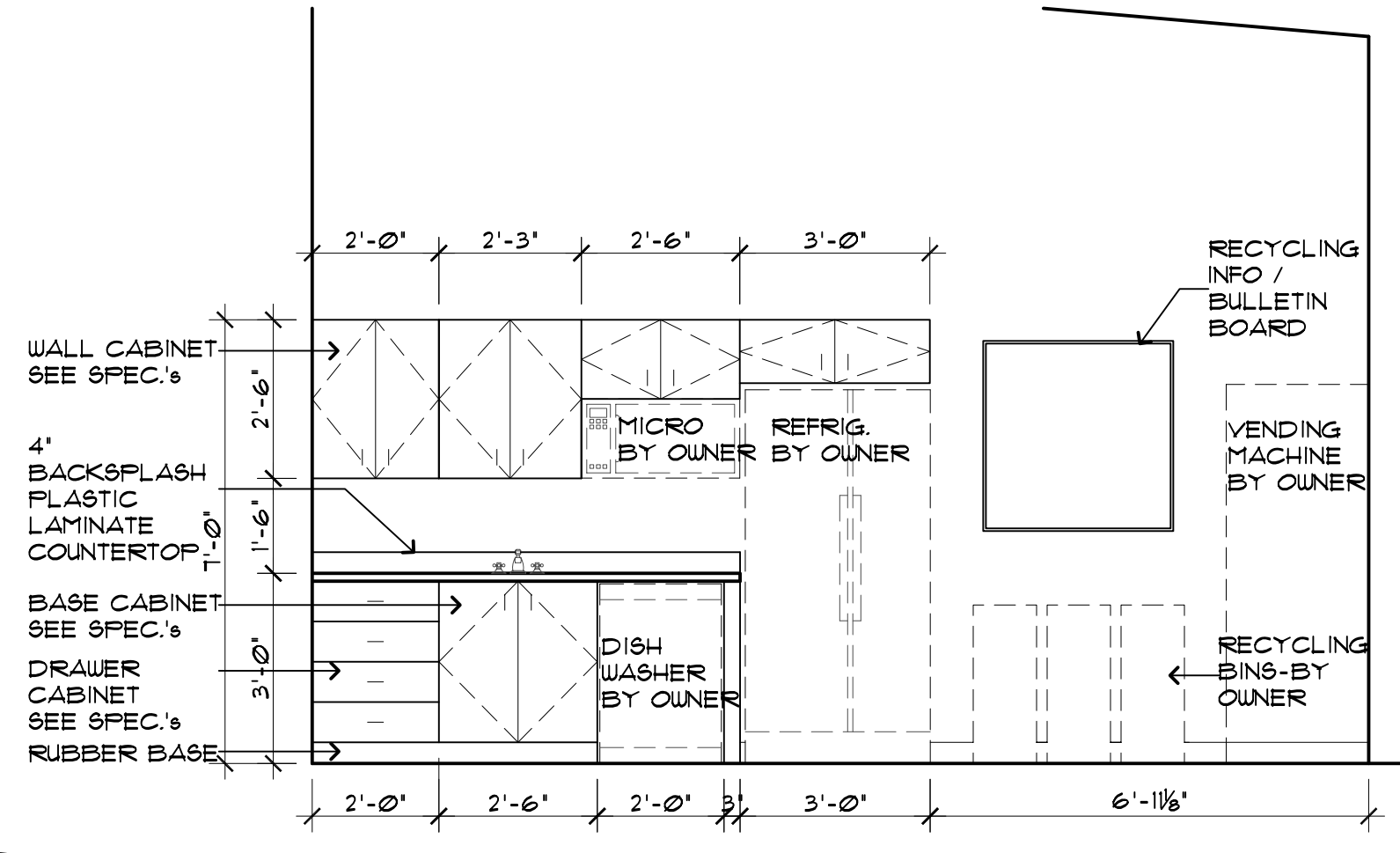
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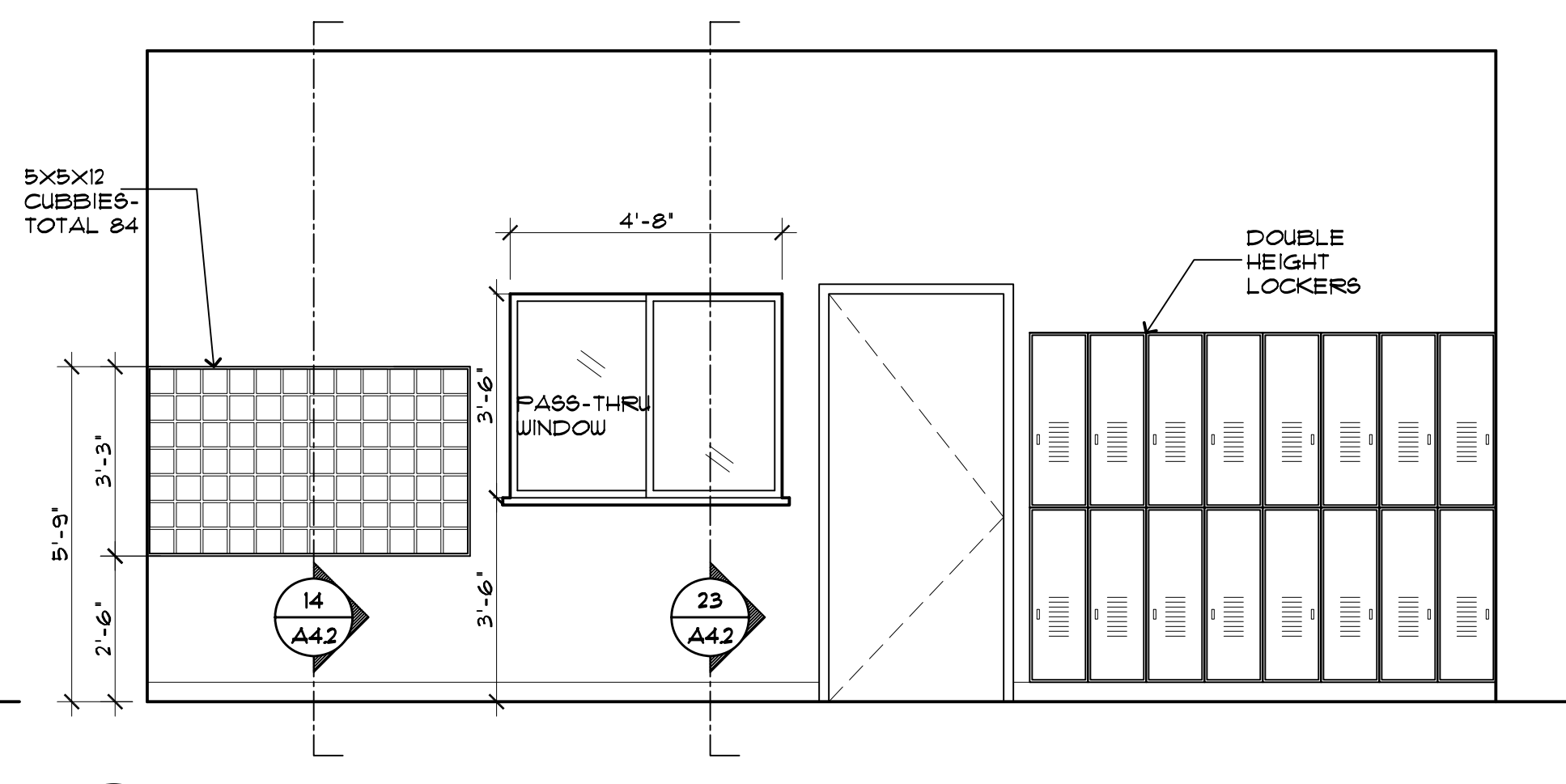
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SHEET TITLE:
 INTERIOR ELEVATIONS

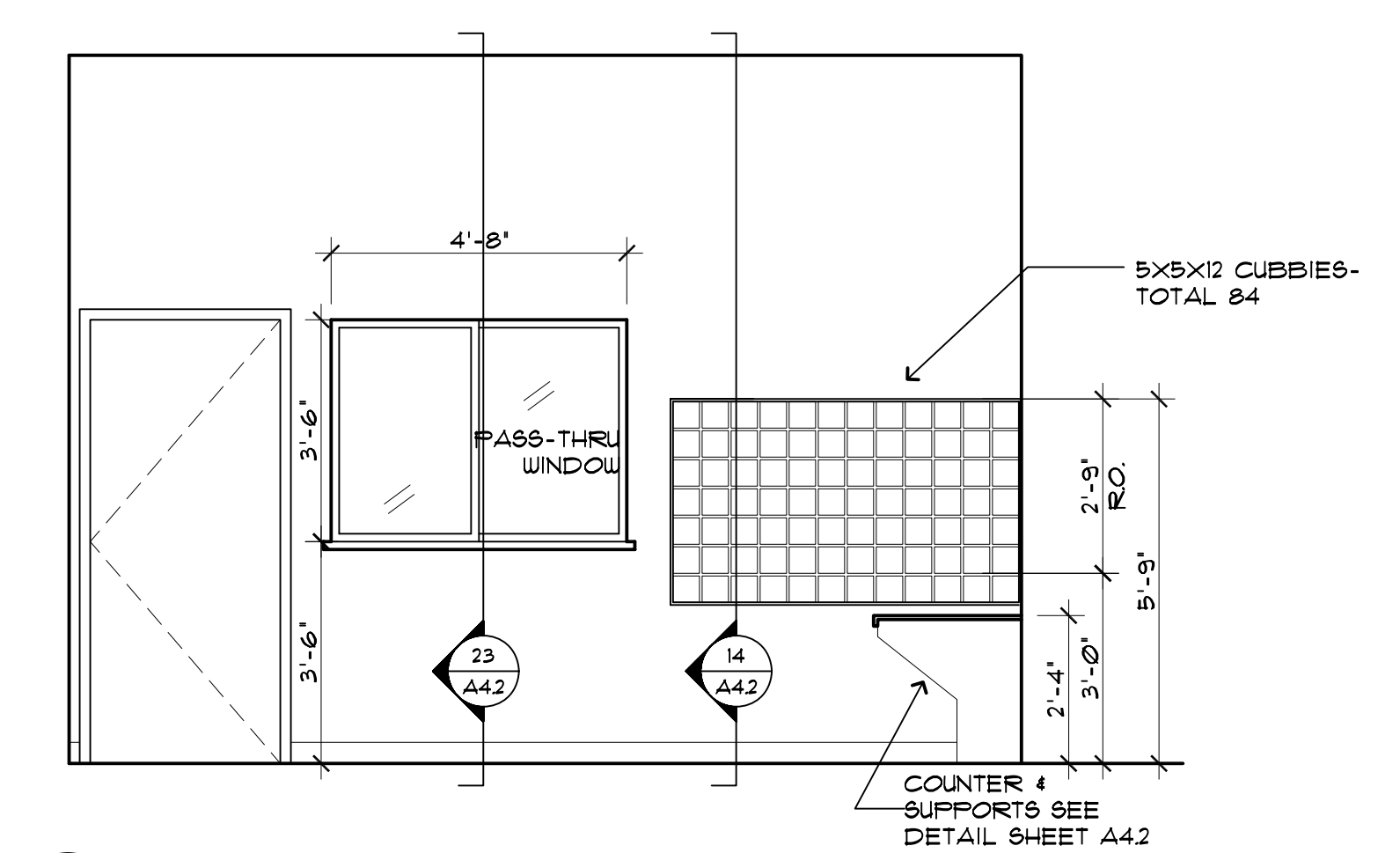
SHEET NO.
A5.1



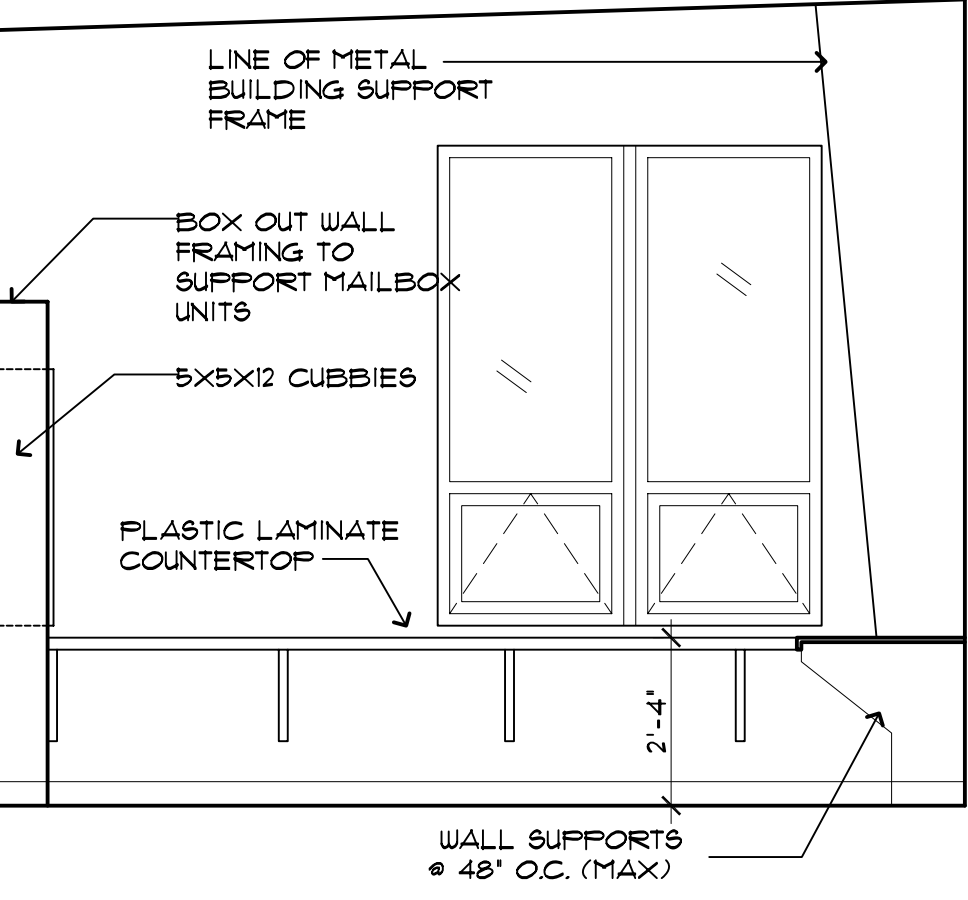
1 ELEV OF BREAK AREA
 SCALE: 3/8" = 1'-0"



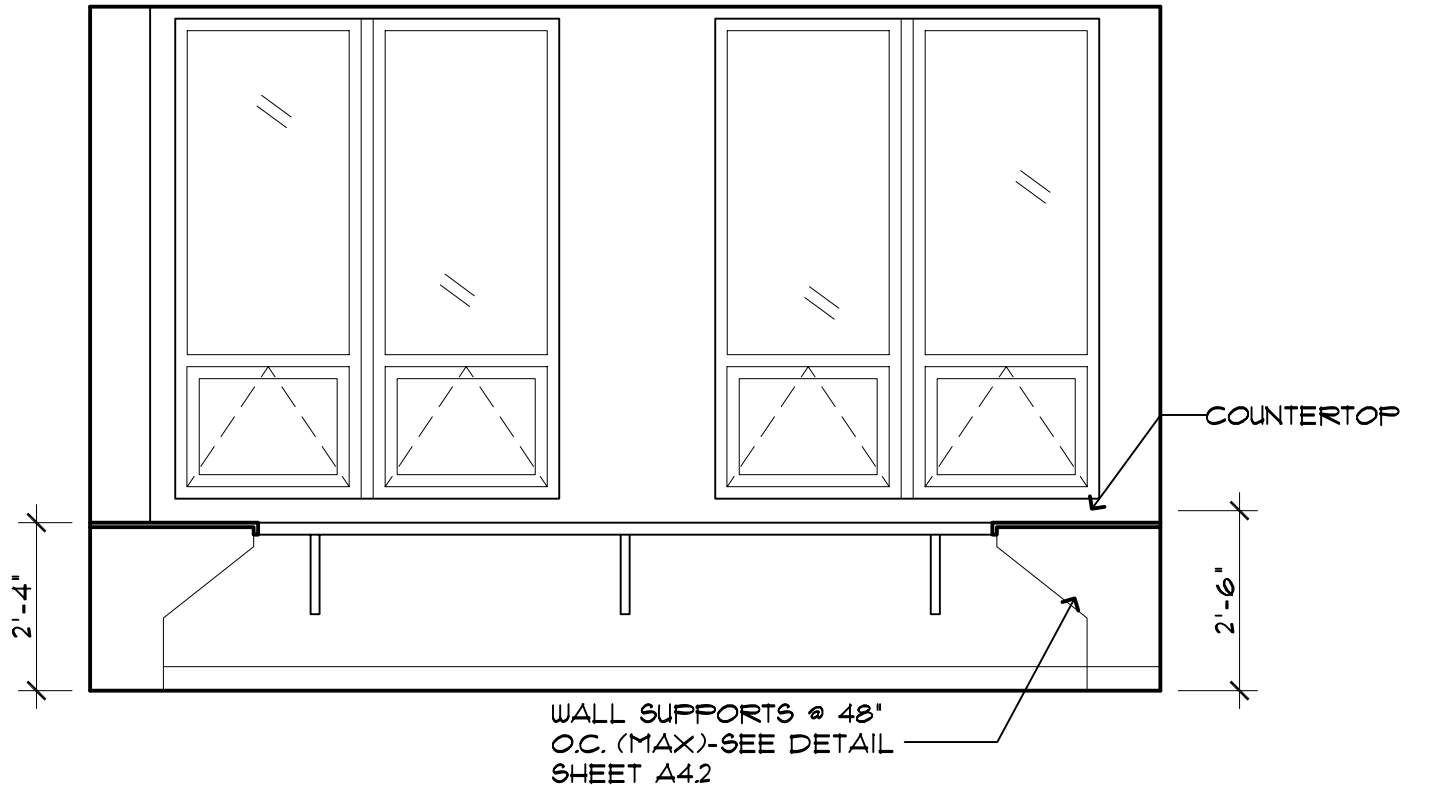
2 DRIVERS ROOM WALL ELEV
 SCALE: 3/8" = 1'-0"



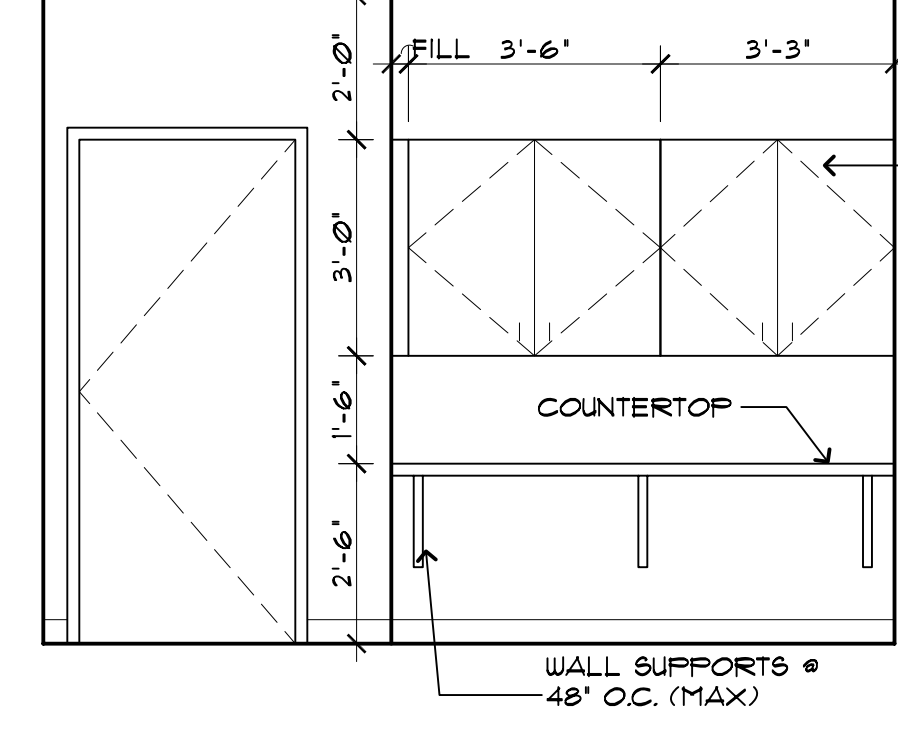
3 DISPATCH ROOM WALL ELEV
 SCALE: 3/8" = 1'-0"



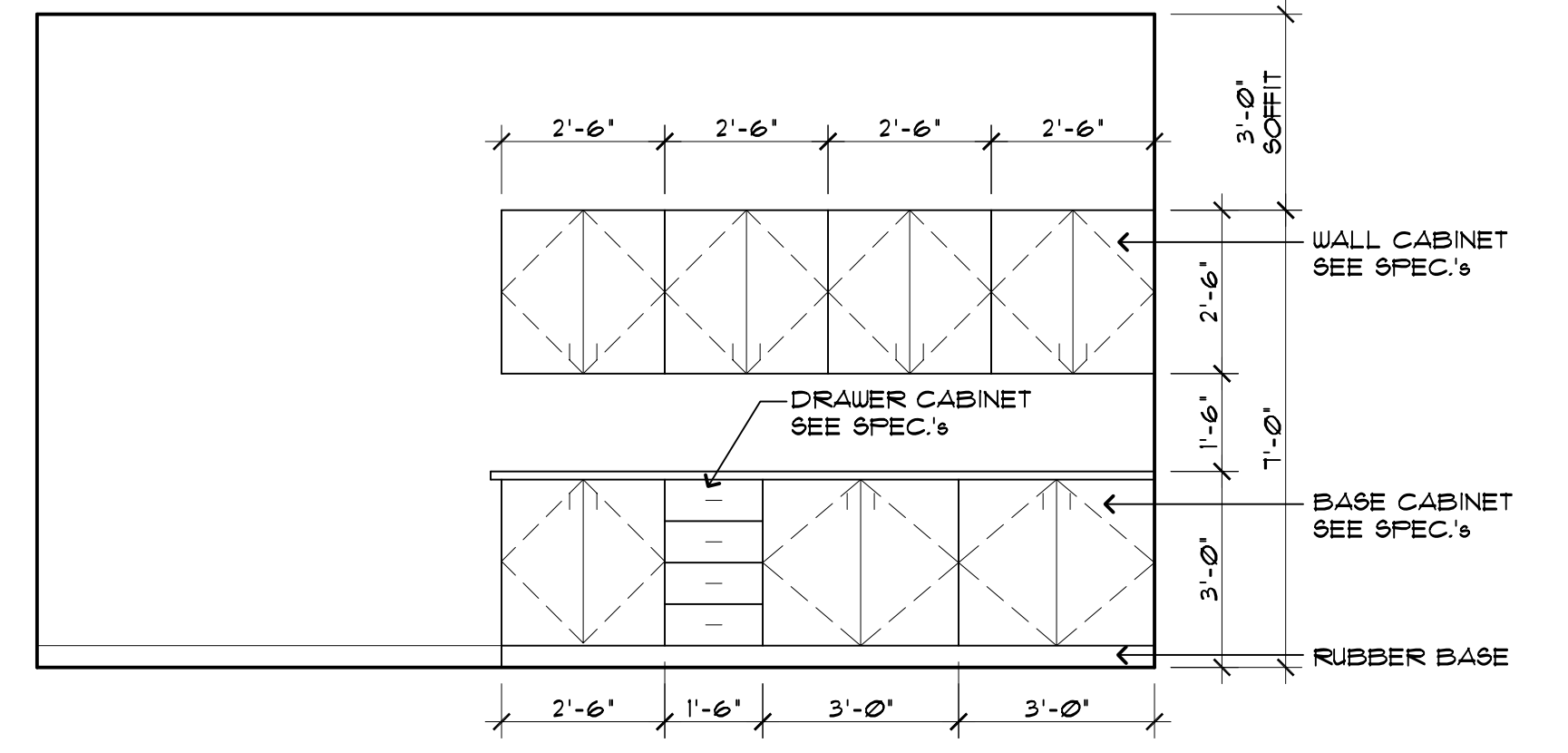
4 DISPATCH ROOM WALL ELEV
 SCALE: 3/8" = 1'-0"



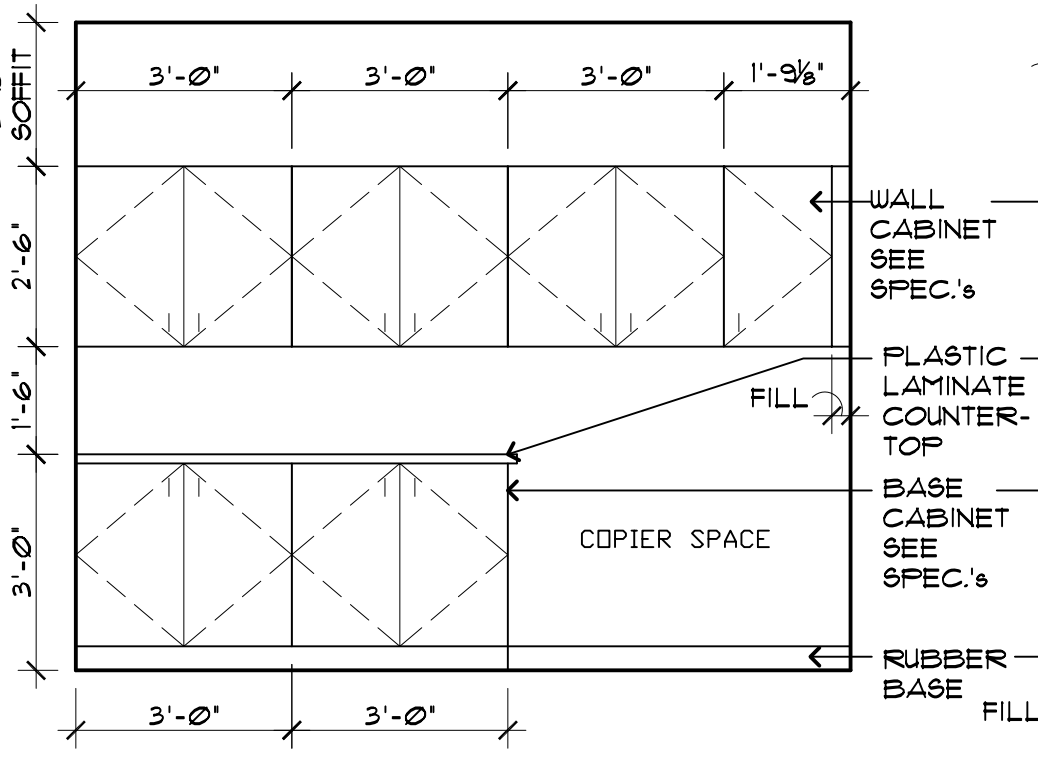
5 DISPATCH ROOM WALL ELEV
 SCALE: 3/8" = 1'-0"



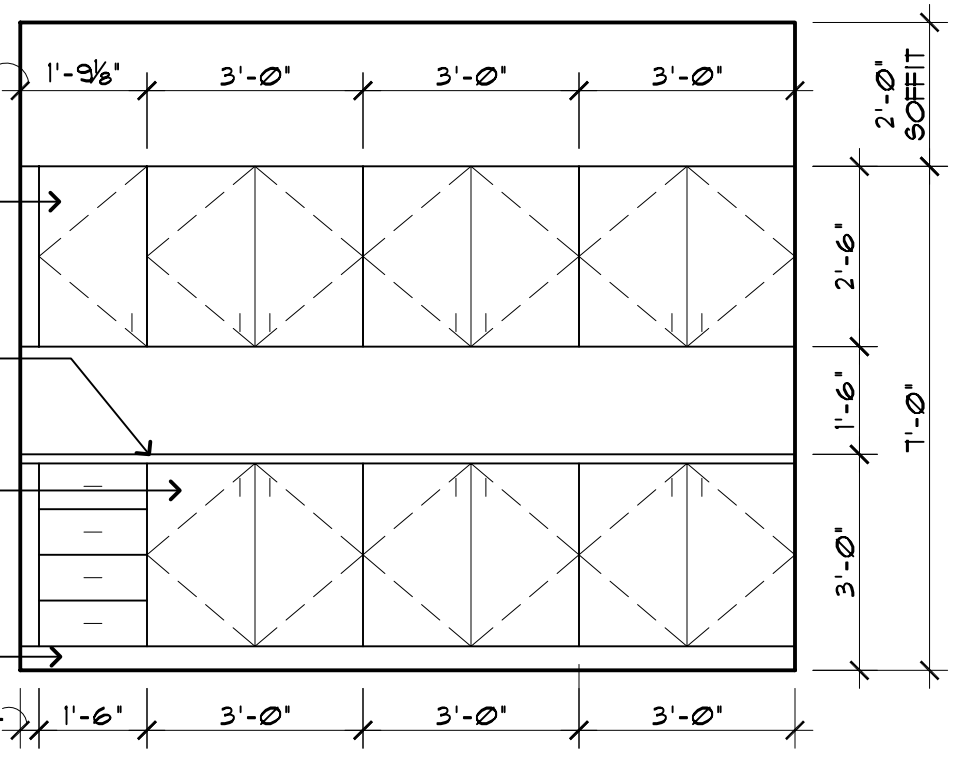
6 PAYROLL ROOM WALL ELEV
 SCALE: 3/8" = 1'-0"



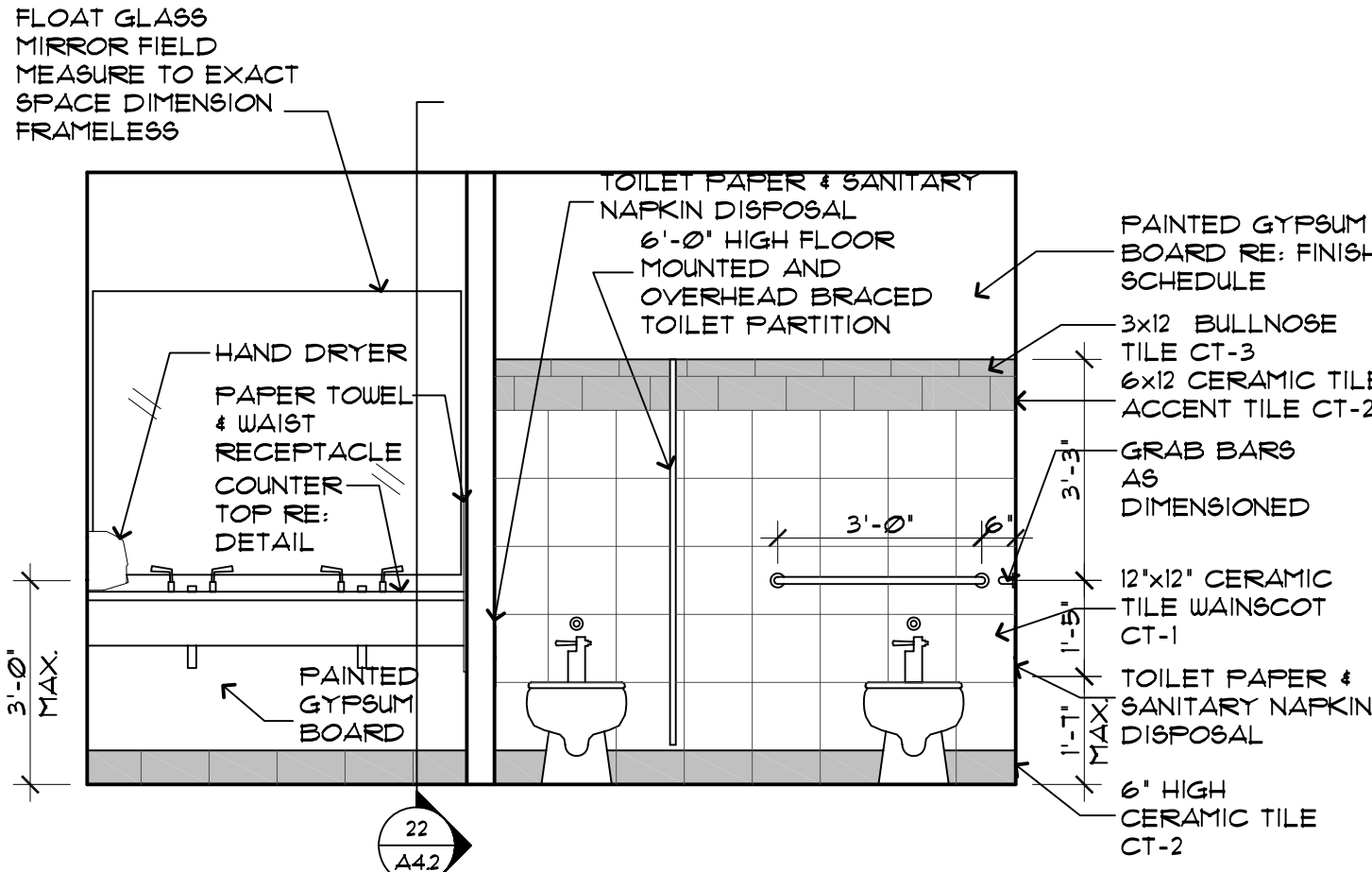
7 SAFETY ROOM WALL ELEV
 SCALE: 3/8" = 1'-0"



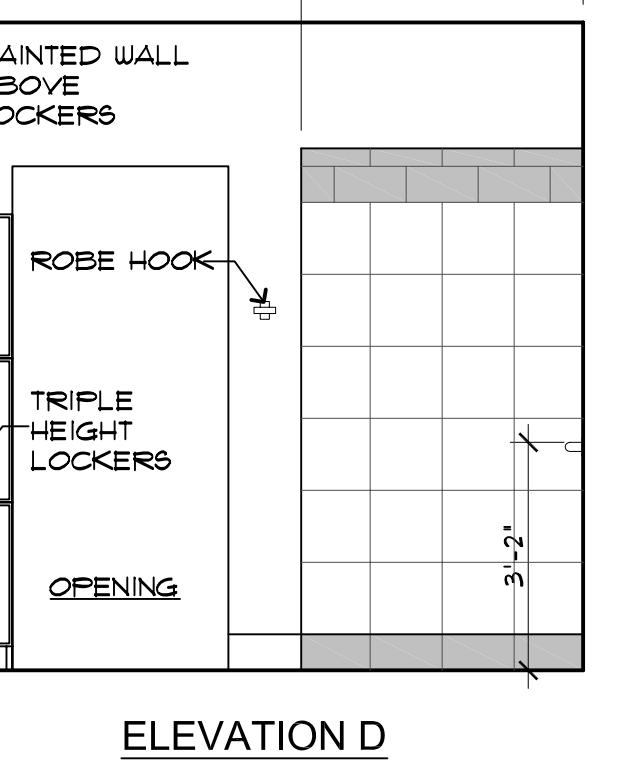
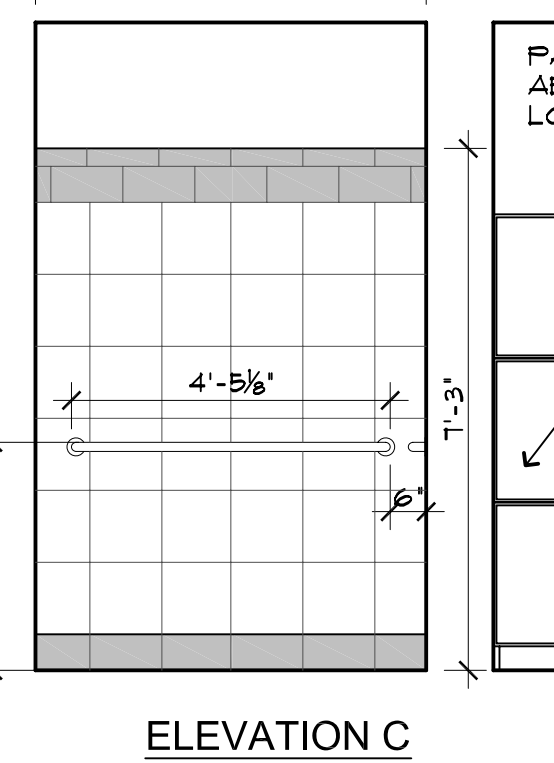
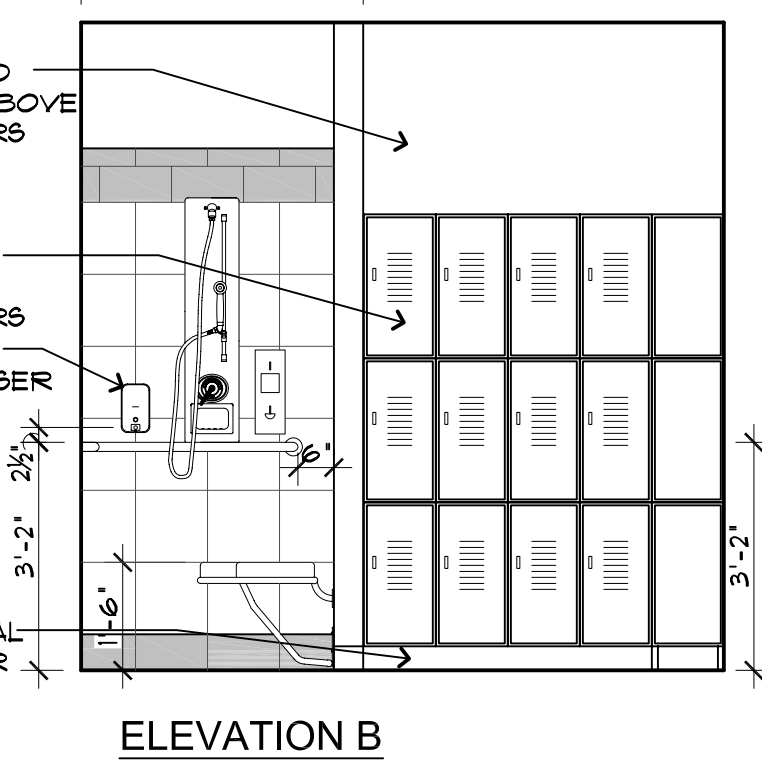
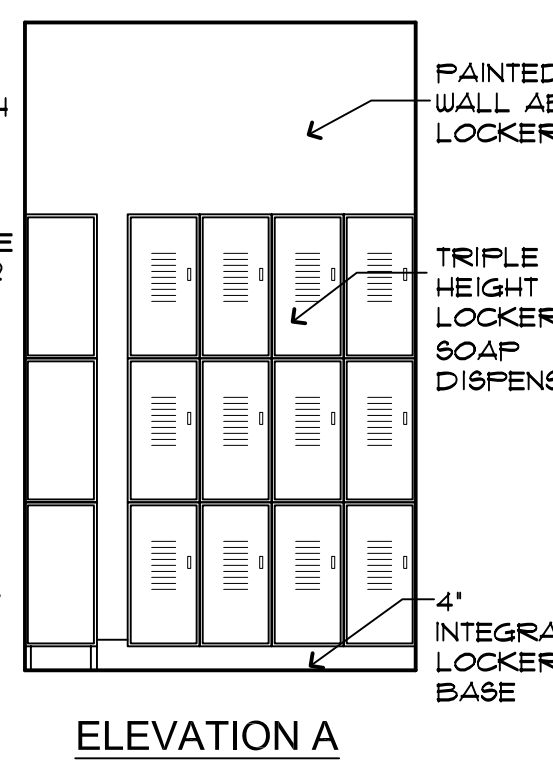
8 WORK ROOM WALL ELEV
 SCALE: 3/8" = 1'-0"



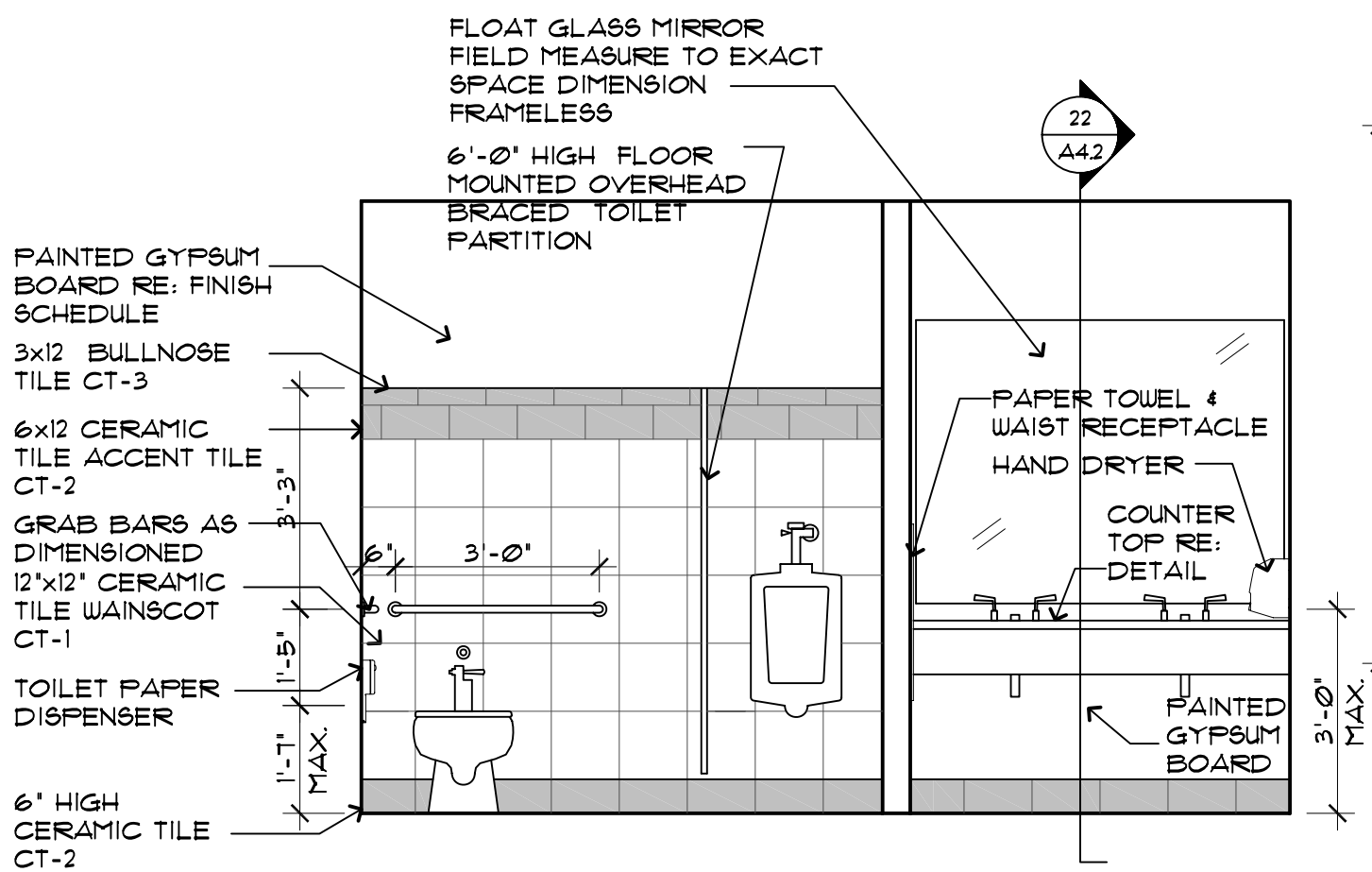
9 WORK ROOM WALL ELEV
 SCALE: 3/8" = 1'-0"



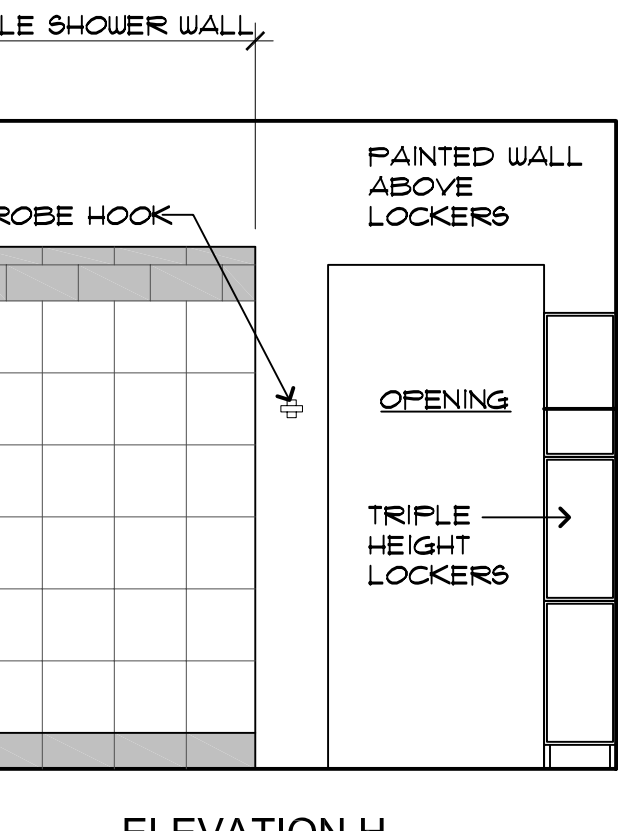
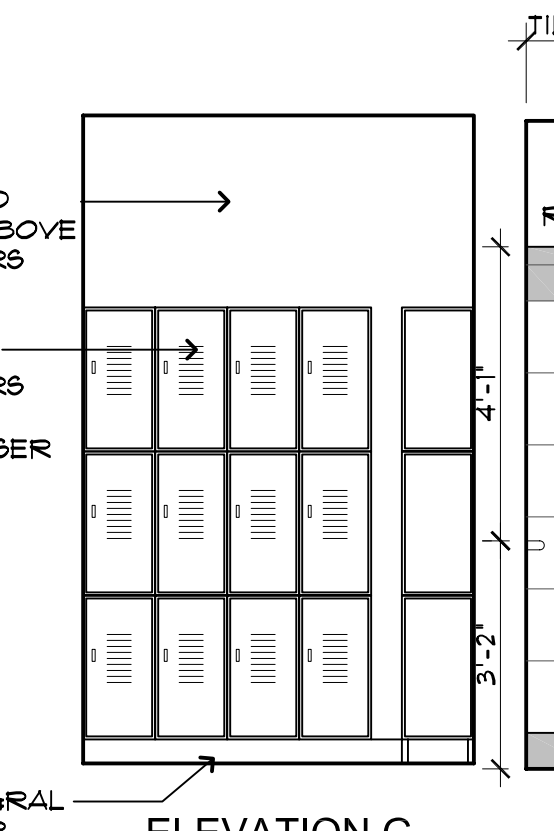
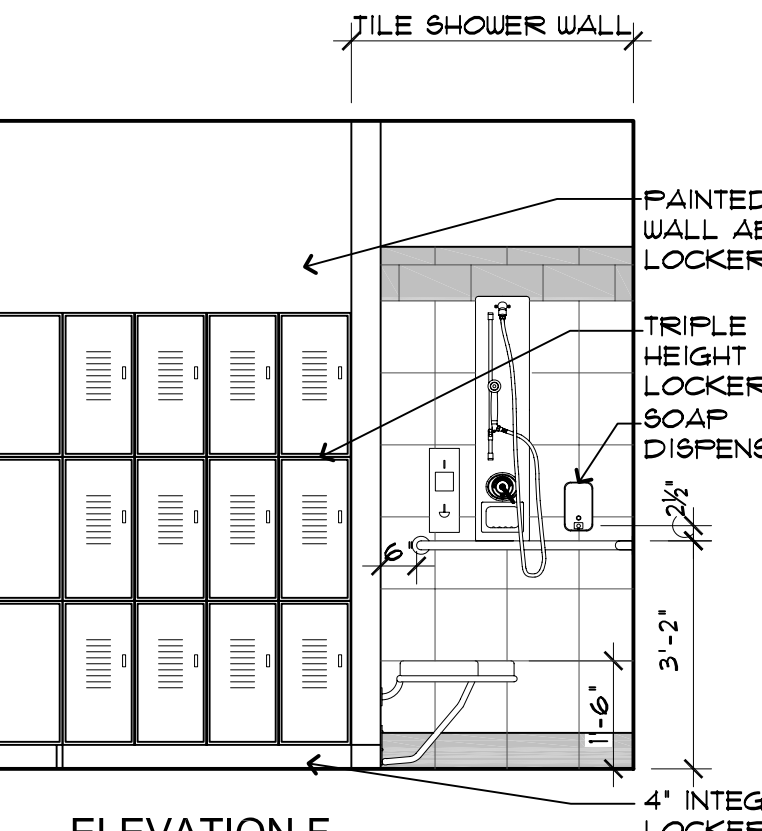
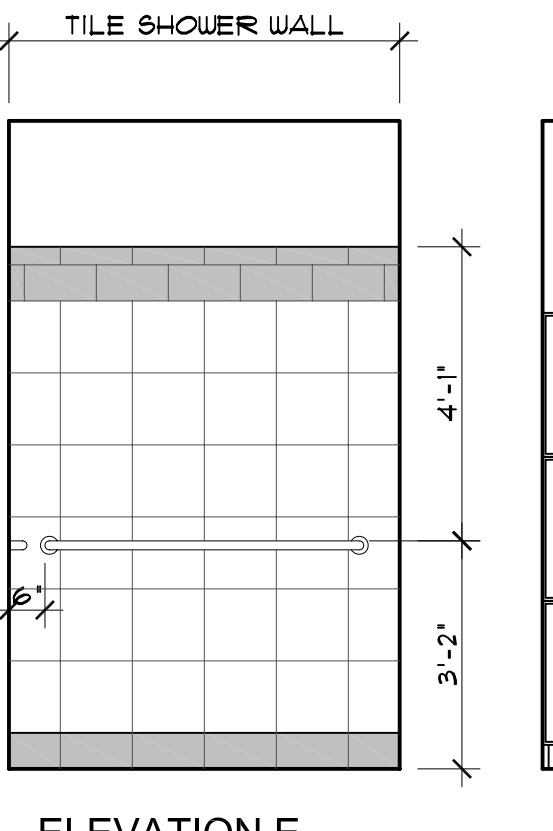
10 WOMEN'S RESTROOM WALL ELEV
 SCALE: 3/8" = 1'-0"



11 WOMEN'S SHOWER ROOM WALL ELEV
 SCALE: 3/8" = 1'-0"



14 MEN'S RESTROOM WALL ELEV
 SCALE: 3/8" = 1'-0"



15 MEN'S SHOWER ROOM WALL ELEV
 SCALE: 3/8" = 1'-0"

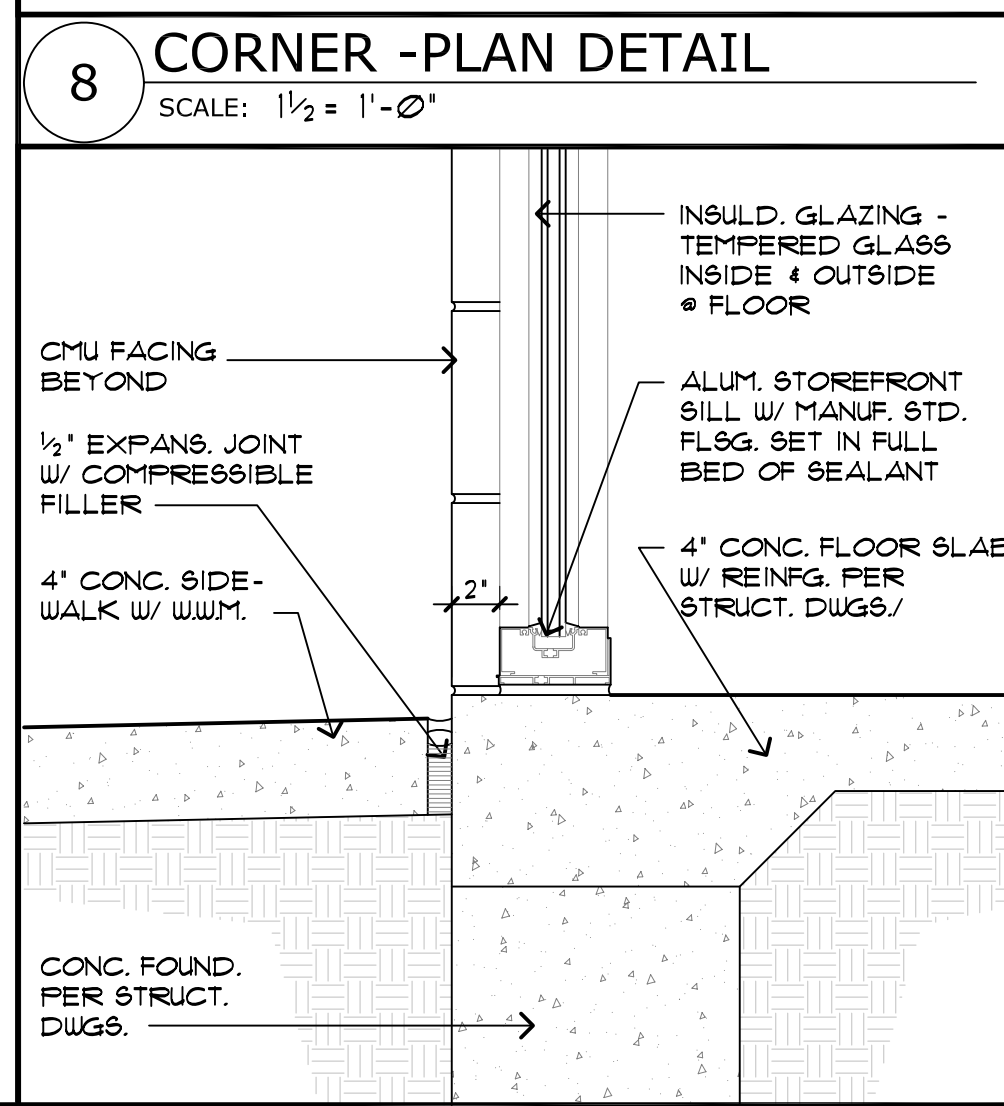
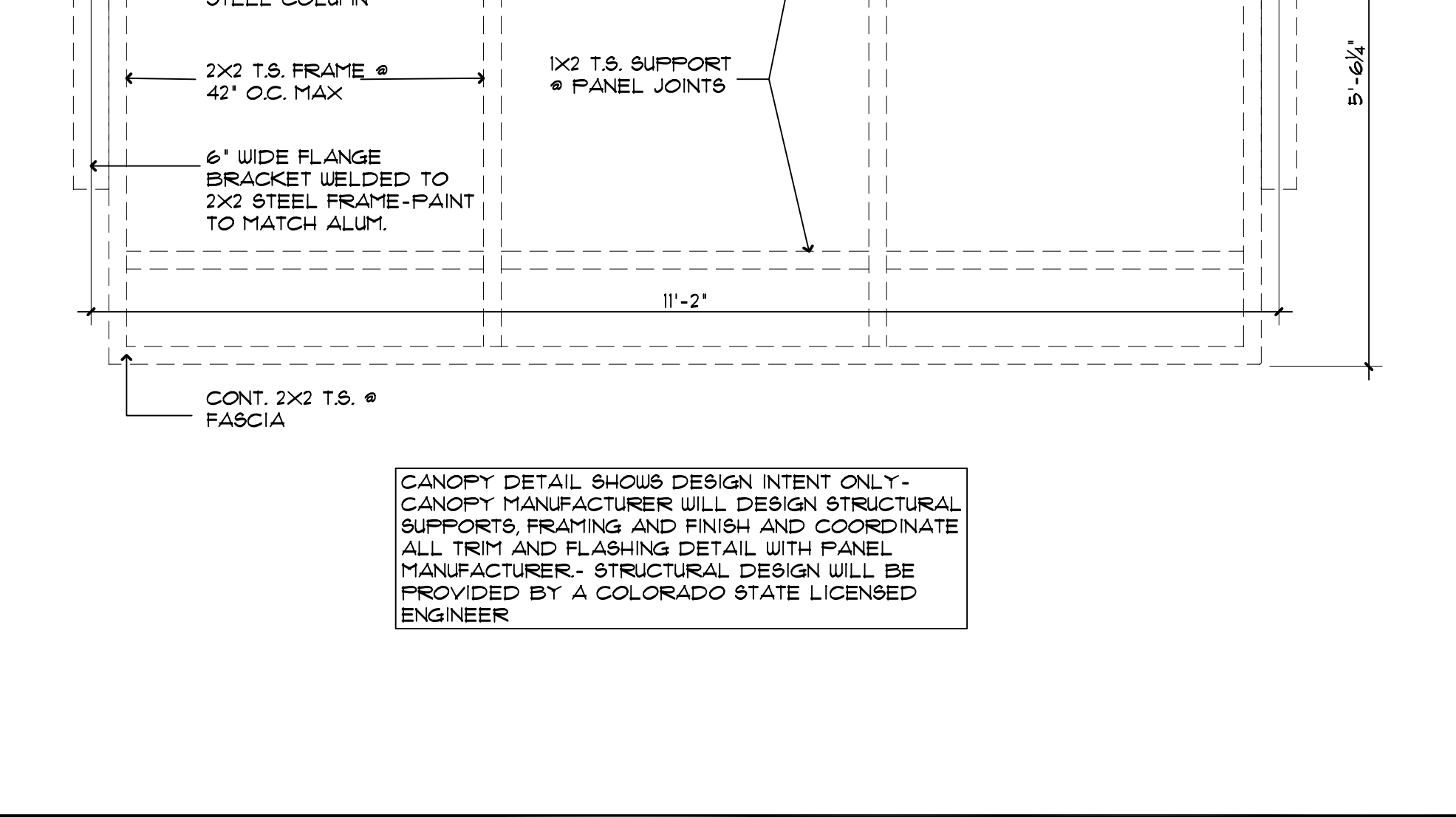
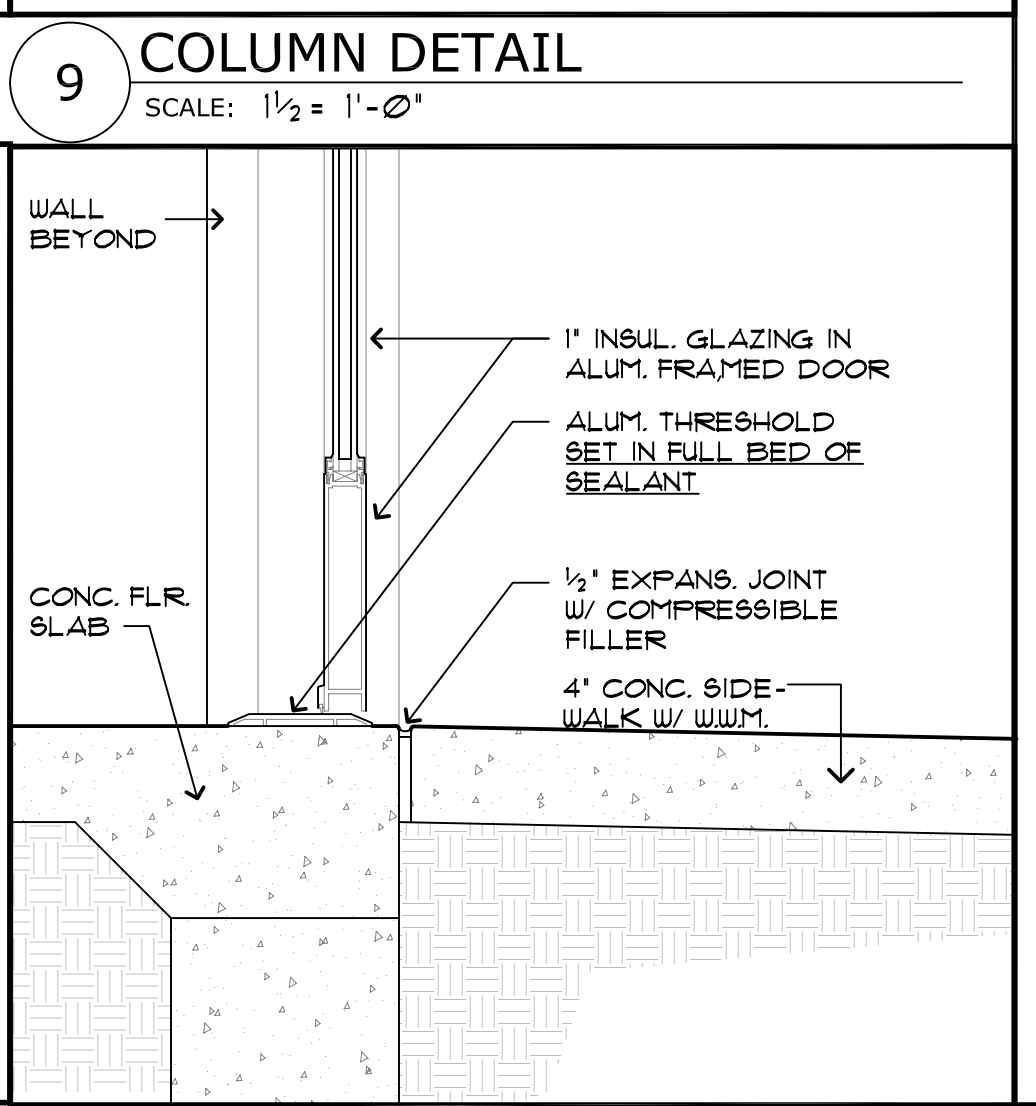
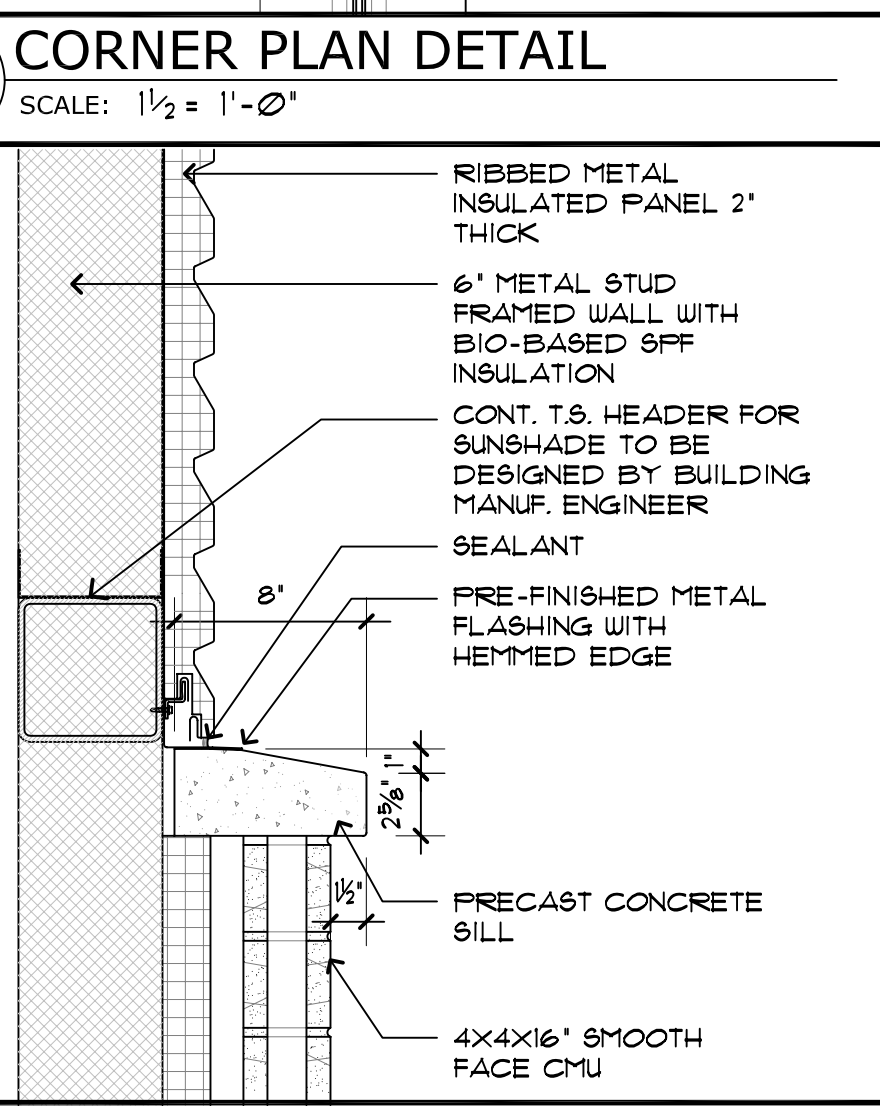
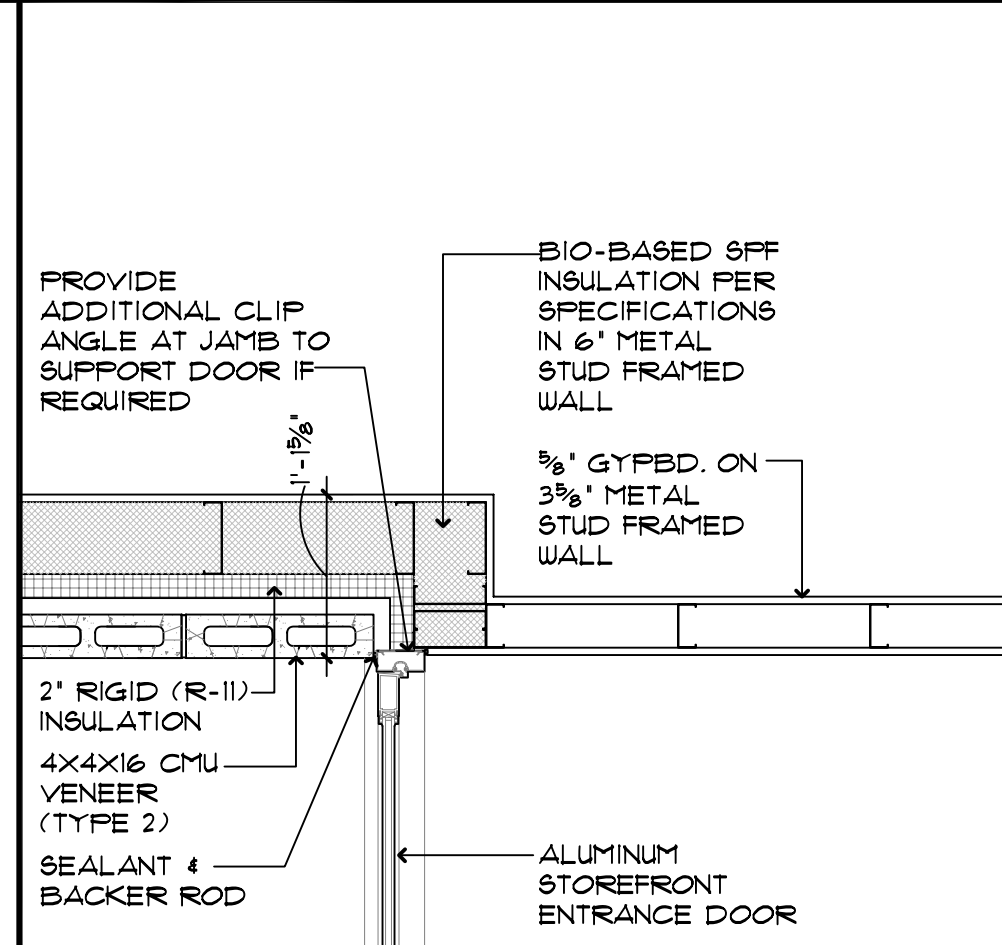
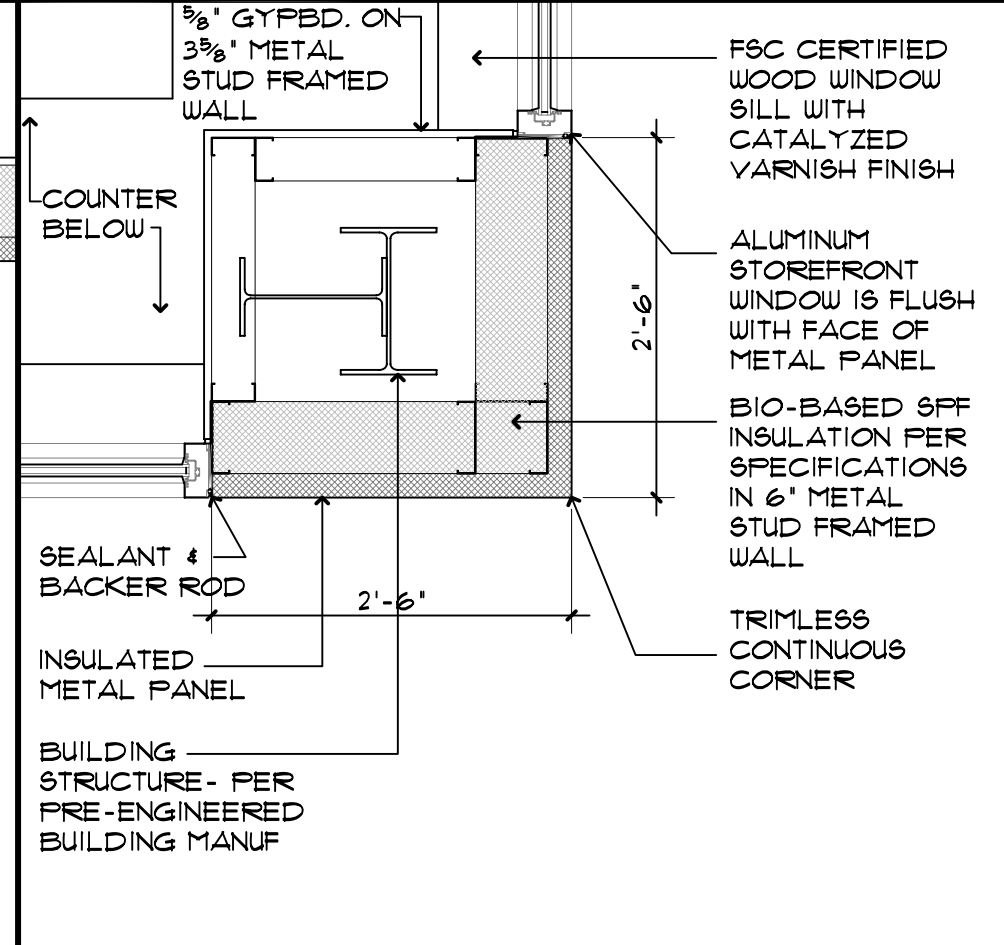
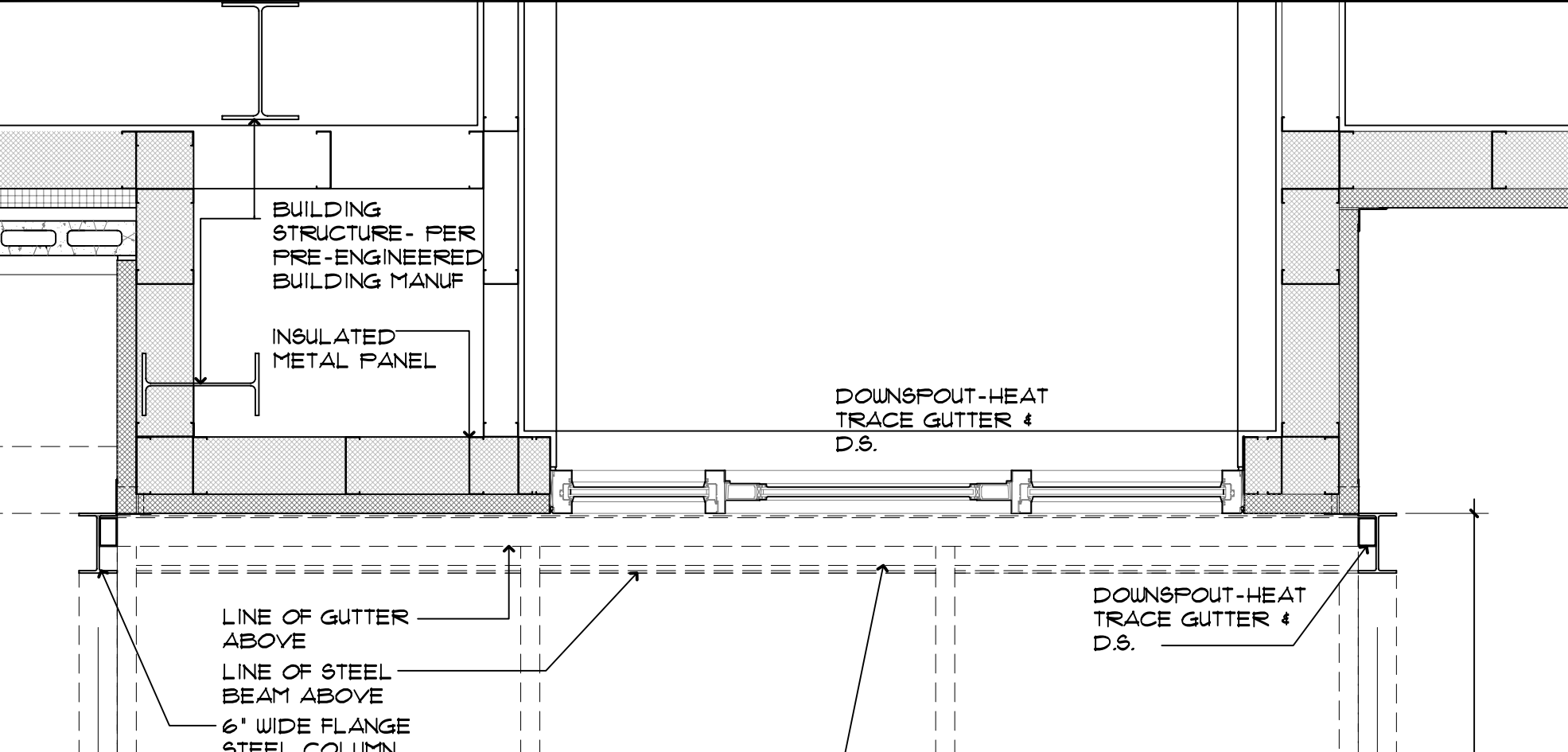
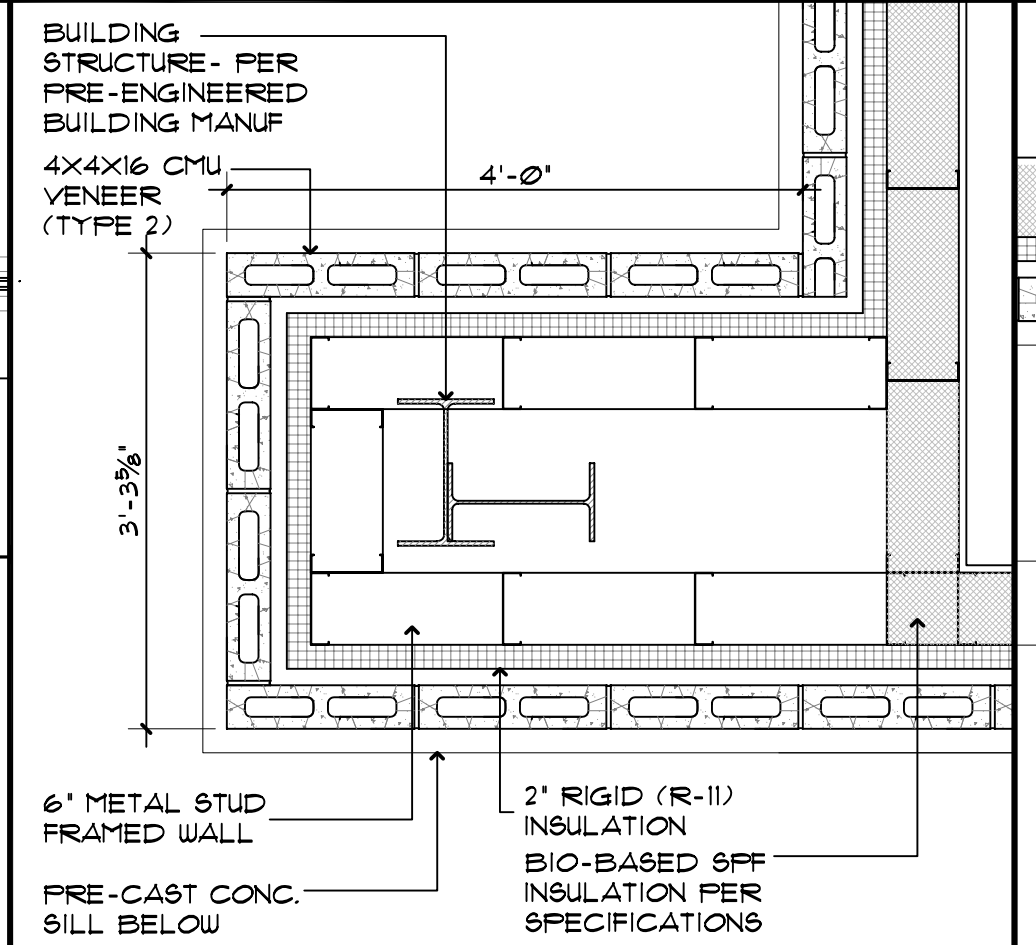
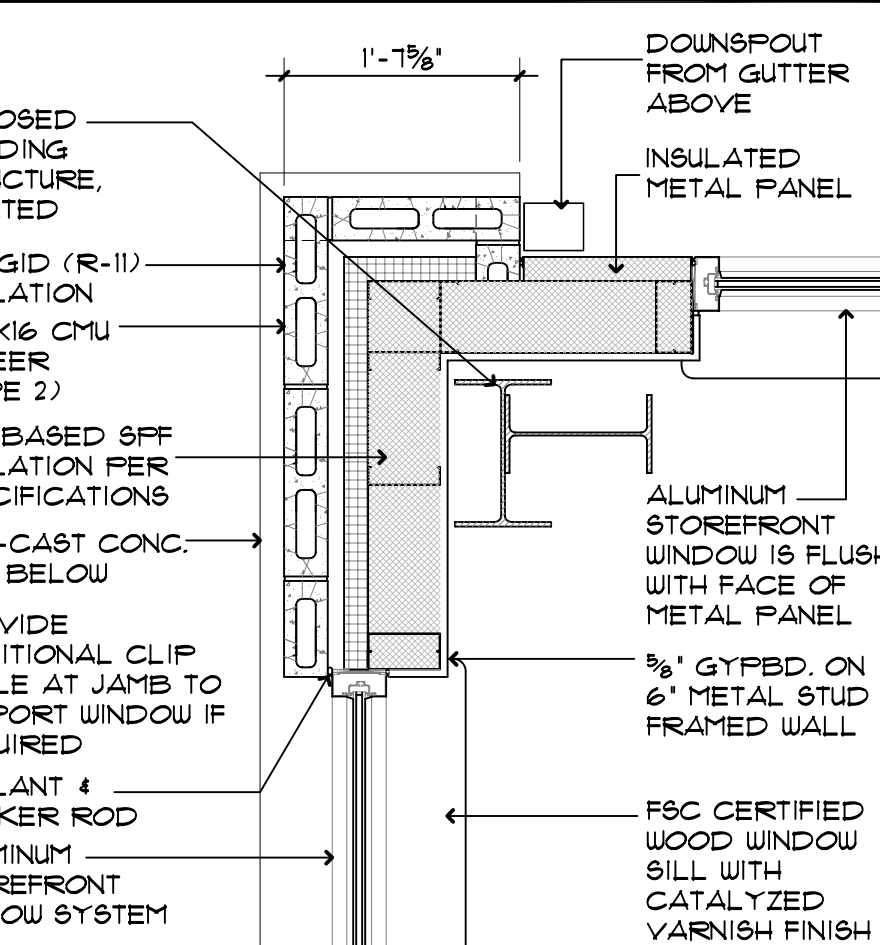
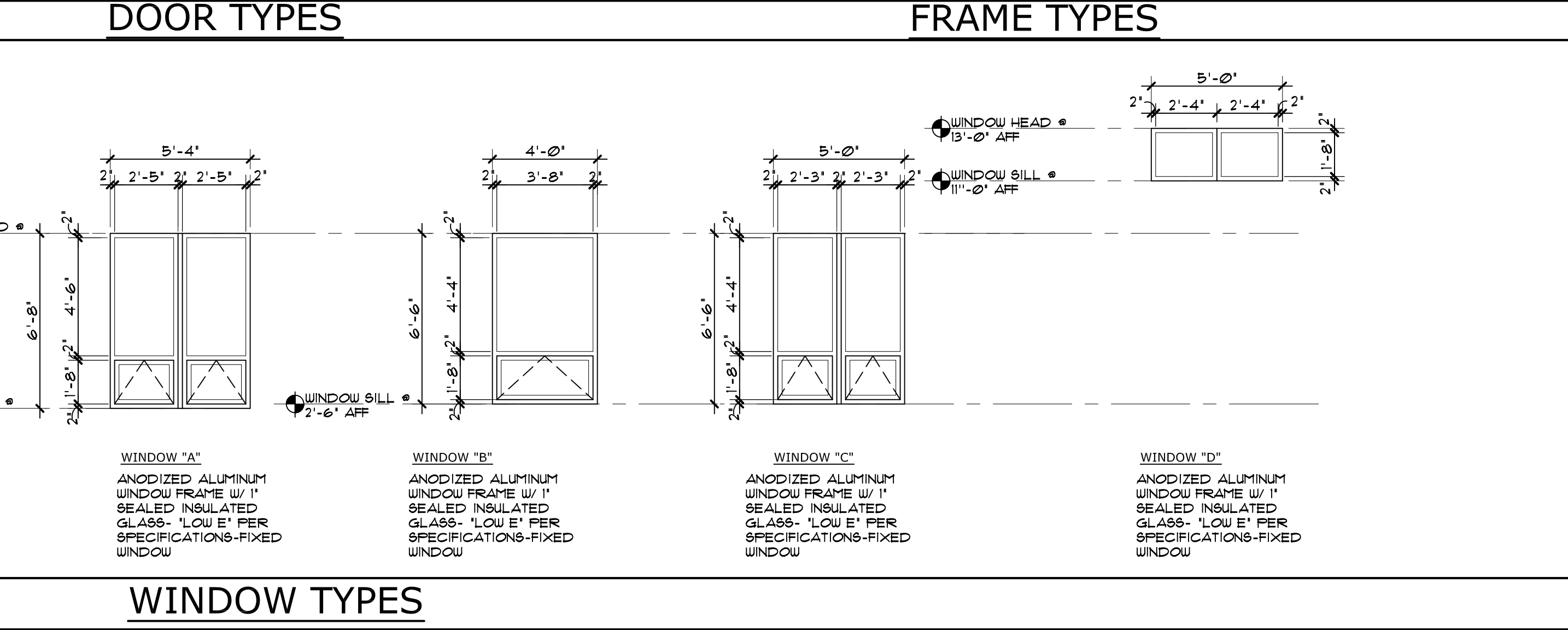
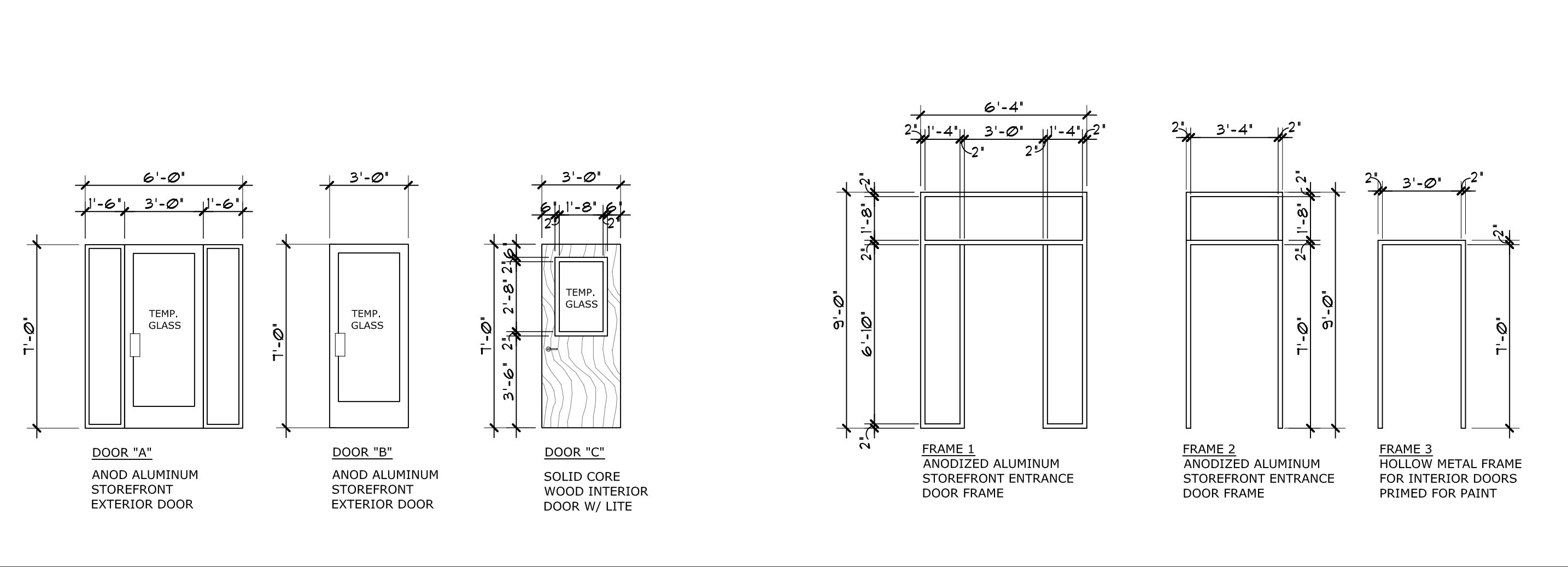
TILE LEGEND			
NO.	TILE COLOR	TILE NO.	TILE SIZE
CT-1	BISCUIT	B903	12X12
CT-2	DESSERT GRAY	B905	6X12
CT-3	DESSERT GRAY	B905	3X12
CT-4	DESSERT GRAY	B905	12X12
CT-5	GRAPPLE	B952	12X12

NOTE
 TILES BY DALTILE- "COLOUR
 SCHEME"

REGISTRATION:

DOOR SCHEDULE												
NO.	SIZE	DOOR		FRAME		HWDR	RAT'G	GL'G	REMARKS		NO.	
		TYPE	MAT'L FINISH	TYPE	MAT'L FINISH							
100A	3'-0" x 7'-0" x 2"	A	ALUM ANOD	1	ALUM ANOD	001		GL-1			100A	
100B	3'-0" x 7'-0" x 2"	A	ALUM ANOD	1	ALUM ANOD	002		GL-2			100B	
101	3'-0" x 7'-0" x 2"	B	ALUM ANOD	2	ALUM ANOD	003		GL-1			101	
102	3'-0" x 7'-0" x 1 1/4"	C	WD STAIN	3	HM PAINT	101					102	
103	3'-0" x 7'-0" x 1 1/4"	C	WD STAIN	3	HM PAINT	103					103	
104	3'-0" x 7'-0" x 1 1/4"	C	WD STAIN	3	HM PAINT	102					104	
105	3'-0" x 7'-0" x 1 1/4"	C	WD STAIN	3	HM PAINT	104					105	
106	3'-0" x 7'-0" x 1 1/4"	C	WD STAIN	3	HM PAINT	104					106	
107	3'-0" x 7'-0" x 1 1/4"	C	WD STAIN	3	HM PAINT	106					107	
110	3'-0" x 7'-0" x 1 1/4"	C	WD STAIN	3	HM PAINT	102					110	
111	3'-0" x 7'-0" x 1 1/4"	C	WD STAIN	3	HM PAINT	101					111	
112	3'-0" x 7'-0" x 1 1/4"	C	WD STAIN	3	HM PAINT	103					112	
113	3'-0" x 7'-0" x 1 1/4"	C	WD STAIN	3	HM PAINT	101					113	
114	3'-0" x 7'-0" x 1 1/4"	C	WD STAIN	3	HM PAINT	101					114	
115	3'-0" x 7'-0" x 1 1/4"	C	WD STAIN	3	HM PAINT	101					115	
116	3'-0" x 7'-0" x 1 1/4"	C	WD STAIN	3	HM PAINT	101					116	
119	3'-0" x 7'-0" x 2"	B	ALUM ANOD	2	ALUM ANOD	001		GL-1			119	
120	3'-0" x 7'-0" x 1 1/4"	C	WD STAIN	3	HM PAINT	101					120	

ROOM FINISH SCHEDULE										
ROOM NO.	ROOM NAME	FLOOR	BASE	NORTH WALL	EAST WALL	SOUTH WALL	WEST WALL	CEILING	REMARKS	
100	VESTIBULE	MT/MAT	RB	GWB	GWB	GWB	GWB	GBD	WALK OFF MAT RECESSED IN CONC.	
101	DRIVERS ROOM	MT	RB	GWB	GWB	GWB	GWB	OPEN TO STR	PAINT EXPOSED STRUCTURE AT WALLS & CEIL.	
102	DISPATCH	BBT	RB	GWB	GWB	GWB	GWB	OPEN TO STR	PAINT EXPOSED STRUCTURE AT WALLS & CEIL.	
103	QUIET ROOM	CARPET	RB	GWB	GWB	GWB	GWB	ACT-1	PAINT EXPOSED STRUCTURE	
104	IT/PHONE	BBT	RB	GWB	GWB	GWB	GWB	OPEN TO STR	PAINT EXPOSED STRUCTURE AT WALLS & CEIL.	
105	WOMEN'S RESTROOM	TILE	TILE	GWB/TILE	GWB/TILE	GWB/TILE	GWB/TILE	GBD	SEE INTERIOR ELEVATIONS FOR TILE DETAIL	
106	WOMEN'S SHOWER	TILE	TILE	GWB/TILE	GWB/TILE	GWB/TILE	GWB/TILE	GBD	SEE INTERIOR ELEVATIONS FOR TILE DETAIL	
107	MEN'S SHOWER	TILE	TILE	GWB/TILE	GWB/TILE	GWB/TILE	GWB/TILE	GBD	SEE INTERIOR ELEVATIONS FOR TILE DETAIL	
108	MEN'S RESTROOM	TILE	TILE	GWB/TILE	GWB/TILE	GWB/TILE	GWB/TILE	GBD	SEE INTERIOR ELEVATIONS FOR TILE DETAIL	
109	JANITOR CLOSET	BBT	RB	GWB/FBG	GWB	GWB	GWB/FBG	GBD	FIBERGLASS WAINSCOT - SEE INTERIOR ELEV	
110	MECH	BBT	-	GWB	GWB	GWB	GWB	GBD	PAINT ALL WALLS & CEIL.	
111	SAFETY	CARPET	RB	GWB	GWB	GWB	GWB	ACT-1	PAINT ALL WALLS & EXPOSED STRUCTURE	
112	WORK ROOM	BBT	RB	GWB	GWB	GWB	GWB	ACT-2	PAINT ALL WALLS	
113	OPS/AGM	CPT	RB	GWB	GWB	GWB	GWB	ACT-1	FLOOR TRANSITION STRIP - SEE DETAIL	
114	MANAGER	CARPET	RB	GWB	GWB	GWB	GWB	ACT-1	FLOOR TRANSITION STRIP - SEE DETAIL	
115	PAYROLL	CARPET	RB	GWB	GWB	GWB	GWB	ACT-1	FLOOR TRANSITION STRIP - SEE DETAIL	
116	STORAGE	BBT	RB	GWB	GWB	GWB	GWB	ACT-1		
117	HALLWAY	MT	RB	GWB	GWB	GWB	GWB	ACT-2	FLOOR TRANSITION STRIP AT DOORWAYS - SEE DETAIL	
118	HALLWAY	MT	RB	GWB	GWB	GWB	GWB	ACT-2	FLOOR TRANSITION STRIP AT DOORWAYS - SEE DETAIL	
119	HALLWAY	MT	RB	GWB	GWB	GWB	GWB	ACT-2	FLOOR TRANSITION STRIP AT DOORWAYS - SEE DETAIL	
120	SAFETY MANAGER	CARPET	RB	GWB	GWB	GWB	GWB	ACT-1	PAINT EXPOSED STRUCTURE	



CANOPY DETAIL SHOWS DESIGN INTENT ONLY - CANOPY MANUFACTURER WILL DESIGN STRUCTURAL SUPPORTS, FRAMING AND FINISH AND COORDINATE ALL TRIM AND FLASHING DETAIL WITH PANEL MANUFACTURER - STRUCTURAL DESIGN WILL BE PROVIDED BY A COLORADO STATE LICENSED ENGINEER

SERVICE CONTRACTOR FACILITY 1
 CITY OF COLORADO SPRINGS METRO TRANSIT
 1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

ISSUE DATES:
 ISSUED FOR BID 03/24/2010
 PROJECT NO. 9016
 DRAWN BY: SGT
 CHECKED BY: SGT
 DATE: 03/24/2010
 SHEET TITLE:
 BUILDING SCHEDULES
 SHEET NO.
A6.1

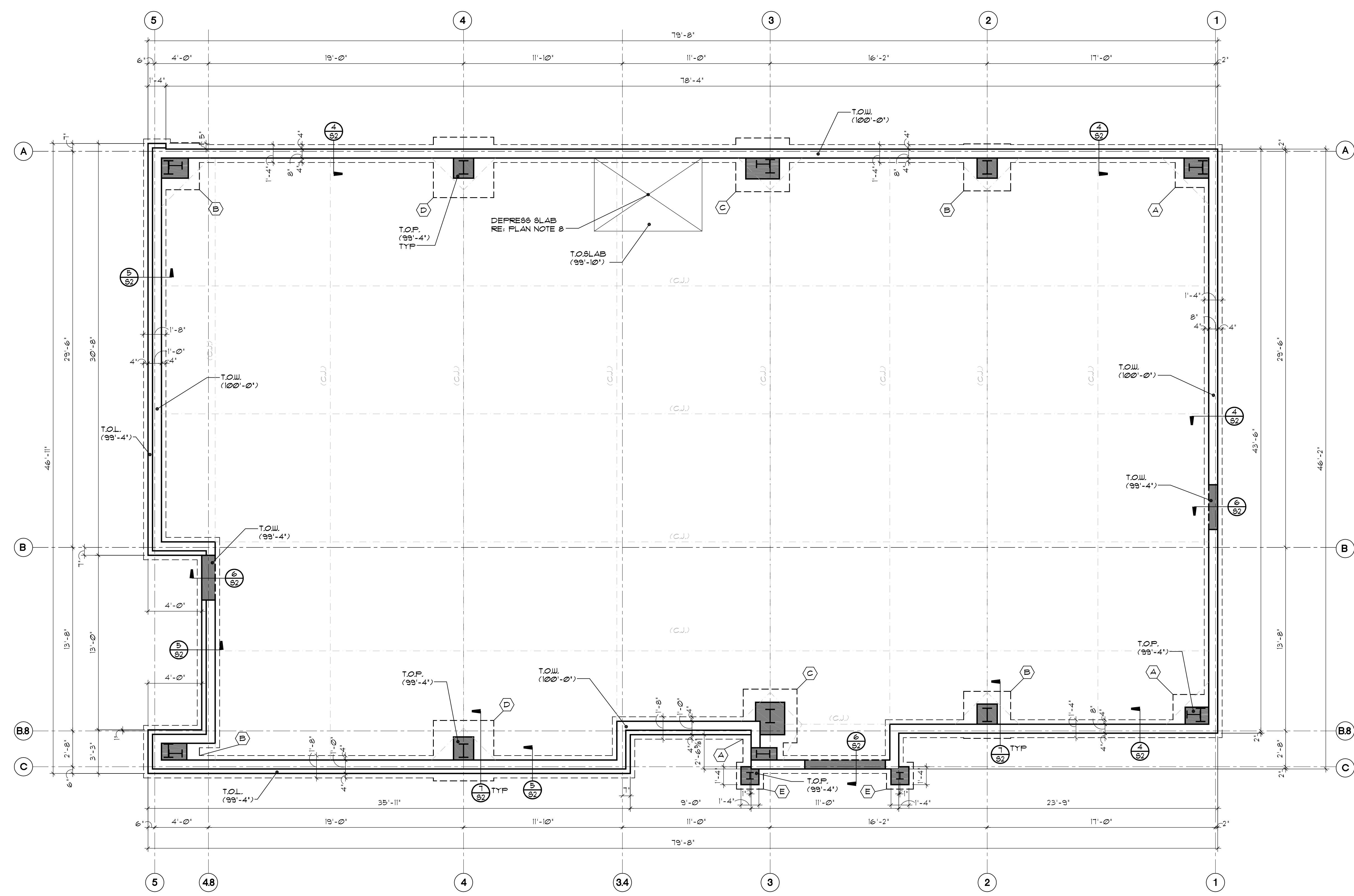
PRELIMINARY - NOT FOR CONSTRUCTION
SERVICE CONTRACTOR FACILITY 1
 CITY OF COLORADO SPRINGS METRO TRANSIT
 1070 TRANSIT DRIVE

ISSUE DATES:

RMG PROJECT NO. 123542
 ENGINEER: EJ
 DRAWN BY: CL
 CHECKED BY: MW
 DATE: 3-24-10

SHEET TITLE:
 FOUNDATION PLAN,
 PAD SCHEDULE AND
 NOTES

SHEET NO.



FOUNDATION PLAN NORTH
 SCALE: 1/4" = 1'-0"

SYM	SIZE	BOTTOM REINFORCING
(A)	3'-0" x 3'-0" x 1'-0"	(3) #5 x 2'-6" EA WAY
(B)	3'-6" x 3'-6" x 1'-0"	(3) #5 x 3'-0" EA WAY
(C)	4'-0" x 4'-0" x 1'-0"	(4) #5 x 3'-6" EA WAY
(D)	4'-6" x 4'-6" x 1'-0"	(5) #5 x 4'-0" EA WAY
(E)	5'-0" x 5'-0" x 1'-0"	(5) #5 x 4'-6" EA WAY
(F)	2'-0" x 2'-0" x 1'-0"	(3) #4 x 1'-6" EA WAY

FOUNDATION SHOWN IS FOR BID PURPOSES ONLY. FOUNDATION MUST BE VERIFIED ONCE PRE-ENGINEERED METAL BUILDING MANUFACTURER HAS BEEN SELECTED

- FOUNDATION PLAN NOTES**
- FLOOR IS 4" CONCRETE SLAB ON GRADE REINFORCED WITH CELLULOSE FIBER MESH REINFORCING
 - ELEVATION TOP OF SLAB = 100'-0", EXCEPT AS NOTED THUS: T.O.SLAB (XX'-X") REFER TO CIVIL DRAWINGS FOR ACTUAL ELEVATION
 - ELEVATION TOP OF CONCRETE FOUNDATION WALLS = 100'-0" EXCEPT AS NOTED THUS: T.O.W. (XX'-X")
 - ELEVATION TOP OF EXTERIOR FOOTINGS = 99'-4" EXCEPT AS NOTED THUS: T.O.F. (XX'-X")
 - ALL FOOTINGS ARE CENTERED BELOW PIERS COLUMNS OR WALLS
 - ALL CONTINUOUS FOOTINGS ARE 1'-0" DEEP AND 1'-4" WIDE UNO
 - FOR TYPICAL SLAB CONTROL JOINT DETAIL RE: 1/82 ALL CONTROL JOINTS (C.J.) TO BE VERIFIED BY CONTRACTOR
 - CONTRACTOR SHALL VERIFY W/ ARCHITECTURAL PLANS OR OTHERS FOR ALL DEPRESSED SLABS, FOUR THROUGH'S @ DOOR OPENINGS, BLOCKOUTS, SLOPES, AND CURBS PRIOR TO POURING CONCRETE
 - VERIFY ALL DIMENSIONS W/ ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION
 - COLUMN FOOTING TYPES DESIGNATED THUS: (X) RE: SCHEDULE THIS SHEET
 - PILASTER AND PIER TYPES ARE DESIGNATED THUS: (X) RE: X/SX
 - SHADE INDICATES DROP WALL 8" AT DOORS AND FOUR THICKENED SLAB THROUGH OPENING
 - FOR CORNER REINFORCING IN STEM WALLS RE: 2/82
 - FOR TOP OF WALL STEPS RE: 3/82
 - TOP OF BRICK LEDGE NOTED THUS: T.O.L. (XX'-X")

GENERAL STRUCTURAL NOTES

1. APPLICABLE CODES:

A. These general notes apply to all structural drawings. This project is designed in accordance with the International Building Code (IBC), 2003 Edition, and the Minimum Design Loads for Buildings and Other Structures (ASCE 7-02) and The Pikes Peak Regional Building Code (2005 Edition).
 B. All material and workmanship shall be in accordance with applicable provisions of the codes specified above.

2. LOADS USED IN DESIGN:

- A. Roof Live Load: Fr (Balanced) 30 psf
- Fg (Unbalanced) 20 psf
- (and/or drift) provisions ASCE 7-02, section 7.7
- Snow Load Importance Factor, I 1.0
- Snow Thermal Factor, Ct 1.0
- Snow Exposure Factor, Ce 1.0
- B. Wind: Base Wind Speed, Vb 100 mph
- Exposure 'C'
- Wind Importance Factor, I 1.0
- Building Category:
 - 1 - Other
- Internal Pressure Coefficient, Gcpl ±0.18 psf
- C. Seismic: Use Group:
 - 1 - Other
- Spectral Response Coefficients:
 - Sa 0.5% g
 - S1 5.9% g
 - Soil Site Class D (Assumed)
 - Seismic Design Category B

3. COORDINATION:

A. **DO NOT SCALE.** The layout shown is based solely on architectural plans and other written documentation by Design Edge, for Service Coordination Facility 1, last dated November 29, 2009, last received January 14, 2010 from contractor and/or client. Changes affecting the layout shown must be specific and clearly conveyed to RMG Engineers Group in written form as a change for inclusion into these plans. Contractor and/or client shall verify all dimensions and layout prior to construction. All dimensions on structural drawings shall be checked against architectural drawings and any discrepancies shall be brought to the attention of the Architect and Engineer immediately. Refer to mechanical, electrical and architectural drawings for openings not shown on structural drawings.
 B. Shop drawings shall be prepared by the fabricator. Copying of these construction documents for use as shop drawings will not be permitted.
 C. All temporary shoring shall be the responsibility of the contractor.
 D. Design is void after two years from original date of issue, unless updated to acceptable codes and practices at that time.
 E. A preconstruction meeting with personnel of RMG Engineers Group, the architect, contractor and appropriate subcontractors is strongly recommended prior to construction to discuss structural plans.

4. CONCRETE:

A. Concrete has been designed and shall be constructed in accordance with the American Concrete Institute 'Building Code Requirement Reinforced Concrete' and 'Specifications for Structural Concrete for Buildings' (ACI 318 and ACI 308) latest editions. Section 13 'Inspection' of ACI 318 is deleted in its entirety, see 'Field Observations' paragraph. All concrete shall be of stone aggregate, unless noted otherwise.
 B. **Concrete Mix:**
 See specifications for any additional durability requirements.
 Mix 'A' For interior slabs on grade:
 4,000 psi minimum compressive strength at age of 28 days.
 Type I/II Cement, minimum of 540 pounds per cubic yard.
 Fly ash not allowed.
 3/4" maximum aggregate size.
 3% Maximum air.
 4" (8" with superplasticizer) maximum slump.
 Water reducing agent.
 Use in accordance with manufacturer's recommendations.
 Mix 'B' For footings, grade beams, and miscellaneous concrete:
 3,000 psi minimum compressive strength at age of 28 days.
 Type I/II Cement, minimum of 410 pounds per cubic yard.
 3/4" maximum aggregate size.
 6% ± 1% Entrained air.
 4" (8" with superplasticizer) maximum slump.

C. Reinforcing is to be new billet steel ASTM A615, Grade-60, except ties and bars to be welded shall be Grade-40. Provide not less than (2) #5 around all sides of all openings in concrete and extend 2'-0" past edges of openings. No splices of reinforcement are permitted except as detailed or authorized by structural engineer. Where permitted, use contact lap splices, (36) bar diameters minimum. Welded Wire Fabric (W.W.F.) shall be in accordance with ASTM A185. Lap (1) full mesh minimum at splices. No welding of reinforcement permitted unless detailed.
 D. Placing of Reinforcement: Provide chairs, bolsters, additional reinforcement, and accessories necessary to support reinforcement at position shown on drawings. Support of reinforcement on form ties, wood, brick, brickbat or other unacceptable material, will not be permitted.
 E. Grout under base plates and bearing plates shall be non-shrink, non-metallic grout with a minimum compressive strength in 28 days of 1,500 psi.
 F. Reinforcement shall be placed so that the following minimum concrete protection is provided, unless noted otherwise:
 1) Concrete surfaces poured against ground 3" Clear
 2) Formed surfaces exposed to ground or weather:
 a) Bars #6 and larger 2" Clear
 b) Bars #5 and smaller 1 1/2" Clear
 3) Slabs at center (uno.)
 4) Concrete not exposed to earth or weather 3/4"
 5) Beams, Columns, Ties, Stirrups or spirals around primary reinforcement, or primary reinforcement with no ties, stirrups or spirals 1 1/2"

G. Foundation elements below grade shall have backfill placed equally on both sides until the required levels are reached. Walls shall be appropriately shored when backfill is placed on one side only.
 H. Additional (2) #5 bars (one each face) with a 2'-0" projection shall be placed diagonally across the corners of all openings and vertical steps in walls unless otherwise detailed on plans.
 I. The contractor is responsible for determining when it is safe to remove forms and/or shoring. Forms and shoring must not be removed until the walls are strong enough to carry their own weight, and any anticipated superimposed loads. For foundation walls, this typically requires at least 12 hours of cumulative curing time at a temperature of 50°F or more. Concrete must be adequately covered during cold periods to maintain this surface temperature. Due to varying weather conditions, alternative curing processes, and the use of Type I/II cement, RMG Engineers Group suggests forms remain in place a minimum of 3 days to assure this performance specification has been met. When forms are stripped there must be no excessive deflection or distortion or discoloration and no evidence of damage to the concrete. Adequate thermal protection of the concrete shall be continued after stripping for a cumulative period of 48 hours at 50°F or more, after the initial pour. See applicable notes for specifications on when to backfill foundation walls.

4. CONCRETE CONTINUED:

J. Field quality control:
 1) Reference standard: ACI 301 Chapters 16 and 17, latest edition.
 2) Slump tests: The general contractor shall provide necessary equipment and shall make test in conformity with ASTM C143. The contractor shall make slump tests on the first truck of each pour and as often as deemed necessary by the contractor to maintain the required slump tests when directed by the Architect or Engineer.
 3) Control tests:
 a. Control tests of concrete work shall be made on every 50 cubic yards or fraction thereof of concrete placed and, in any case, minimum of once during each day's pour.
 b. Each test shall consist of four standard 6" test cylinders cast and cured in accordance with ASTM C31 and ASTM C112.
 c. Sample concrete at point of placement.
 d. One cylinder shall be broken at end of seven days after placing, two cylinders shall be broken at end of 28 days after placing, and remaining cylinder shall be stored until its disposition is determined by Architect.
 e. In general, remaining cylinder will be broken only when previous test reports indicated unsatisfactory results.
 f. Tests on remaining cylinder shall be at expense of the contractor.
 g. Architect and/or Engineer reserves right to stop future concrete work when seven or 28 day tests indicate unsatisfactory results until, in the opinion of the Architect and/or the Engineer of Record, proper corrective measures have been taken to insure quality concrete in future work and corrections deemed necessary have been made.
 h. Tests shall be made at time control tests are taken and so stated in reports to determine slump, air content, unit weight and temperature of concrete.
 All tests shall be made in accordance with ASTM C138 or ASTM C231.
 4) Slab tolerances: Maintain surface flatness with maximum variation of 1/8 inch in 20 feet.

5. SPREAD FOOTING FOUNDATIONS:

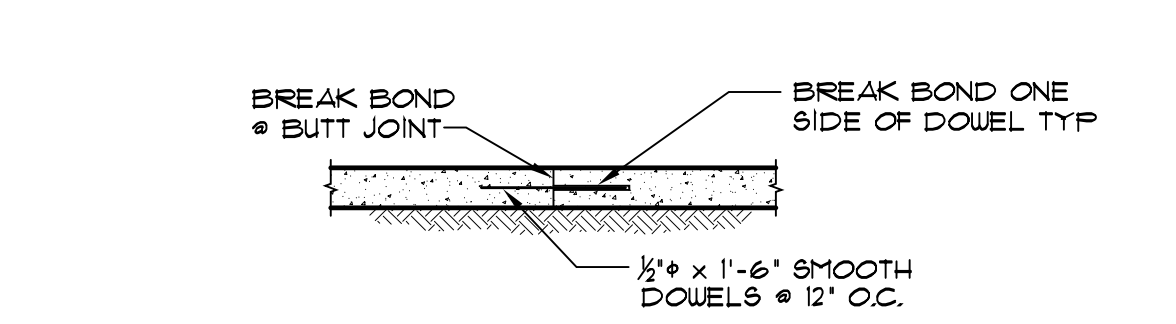
A. The foundation design has been completed in accordance with pertinent standards, recommended design soil parameters, accepted engineering design procedures, and is based on the best information available at the time of completion. The design is intended to minimize differential movement resulting from the heaving of expansive soil or settling of subsurface soils. It must be recognized that foundation components will undergo movement. It shall be the responsibility of the contractor and/or present owner to inform any subsequent owners of the soil condition and advised to maintain good practices in the future with regard to surface and subsurface drainage, framing of partitions above floor slabs, and finish work above the floor slabs, etc.
 B. Foundation Design parameters include an assumed allowable bearing pressure of 1500 psf with no minimum dead load requirement and with soil preparation per geotechnical engineer.
 C. A representative of the Geotechnical engineer shall observe the open excavation to determine that the soil type and conditions are consistent with the criteria, the foundation engineer shall be promptly notified so that the foundation design may be reviewed.
 D. The contractor shall be responsible to coordinate the location of mechanical openings, floor drains, inserts, depressions, buried cables and utilities, etc. with architectural, civil, mechanical and electrical drawings.
 E. Mechanically compact all interior and exterior backfill per Geotechnical engineers recommendations. It will also be necessary to adjust and maintain the grade immediately against foundations periodically to avoid the creation of a water trap as the backfill settles over time.
 F. Slope backfill away from the building a minimum of 10% for the first 10 feet (2% at paved areas) unless a more stringent requirement is specified by the Geotechnical engineer. Carry roof drains across the backfilled areas. Do not allow water to stand or pond near the building. Do not flood the backfill.
 G. Contact Geotechnical engineer for proper preparation of subgrade for placement of floor slabs.
 H. Floor slabs have a high probability of moving vertically. Floor slabs shall be separated from all structural portions of building with an expansion joint of minimum 1/2" thick Styrofoam or other approved joint material. A gap in non-bearing partitions, the non-rigid connections with the stairway construction and non-rigid construction of door jambs may be required by the Geotechnical engineer. If required, these items may also require reconstruction over the life of the structure to maintain the independent vertical movement of the floor slabs.

6. METAL BUILDING COORDINATION:

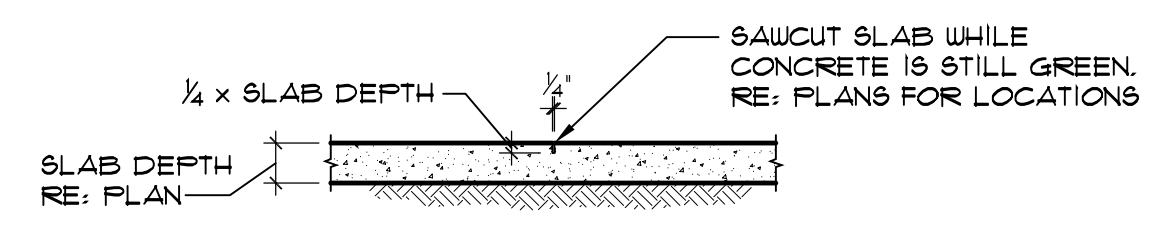
A. Metal building design drawings and load calculations are to be stamped by a Structural Engineer registered in the state of Colorado. Final stamped drawings are to be submitted to RMG Engineers Group prior to foundation placement for final review.
 B. The foundation design for the metal building is based on assumed loads. RMG Engineers Group must be notified to re-evaluate the foundation design for the specific metal building design. Any structural changes and/or revisions made by RMG Engineers Group due to column locations different metal building column locations shall be at the contractors expense.
 C. **DO NOT SCALE.** Schematic layout shown is based solely on architectural plans and other written documentation received from contractor and/or client. Changes affecting the layout and design shown on these plans must be specific and clearly conveyed to RMG Engineers Group in written form as a change for inclusion into these plans. Contractor and/or client shall verify all dimensions and layout prior to construction.

7. FIELD OBSERVATIONS:

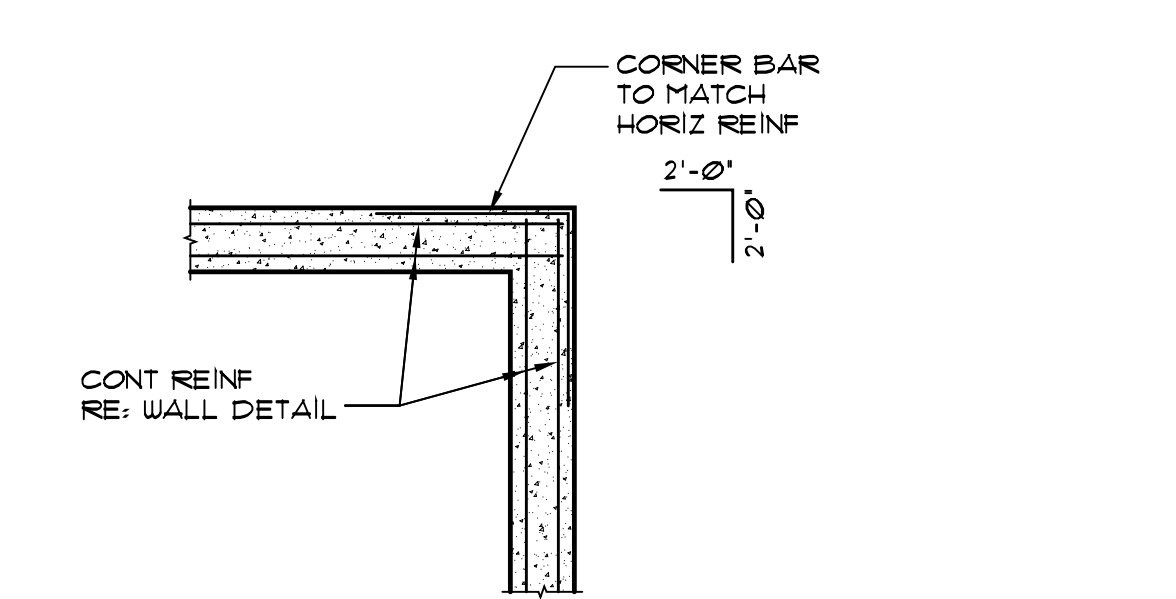
A. The Contractor shall inform the Engineer of Record at least 24 hours prior to casting any concrete so as to allow the Engineer of Record the opportunity to review the placement of reinforcing and/or embedded items. Contact RMG Engineers Group: (719) 548-0600.



OPTIONAL SLAB CONSTRUCTION JOINT DETAIL



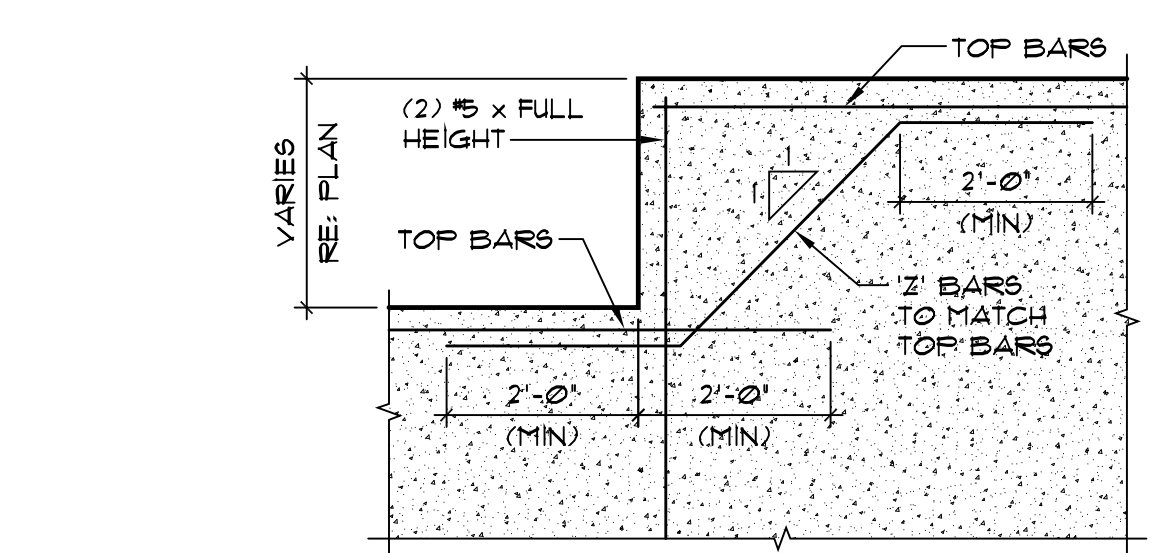
1 TYPICAL SLAB CONSTRUCTION JOINT DETAIL
S2 SCALE: 1/2" = 1'-0"



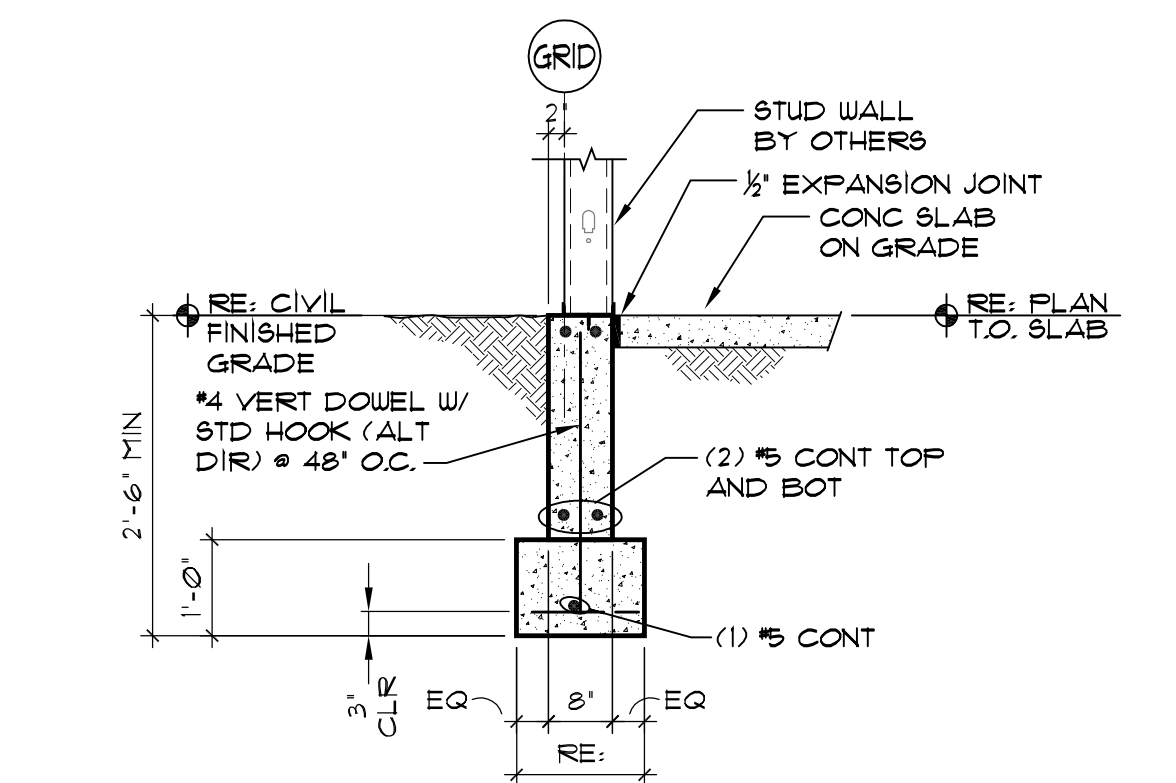
2 TYPICAL CORNER WALL REINFORCING DETAIL

1 TYPICAL SLAB CONSTRUCTION JOINT DETAIL
S2 SCALE: 1/2" = 1'-0"

2 TYPICAL CORNER WALL REINFORCING DETAIL
S2 SCALE: 1/2" = 1'-0"



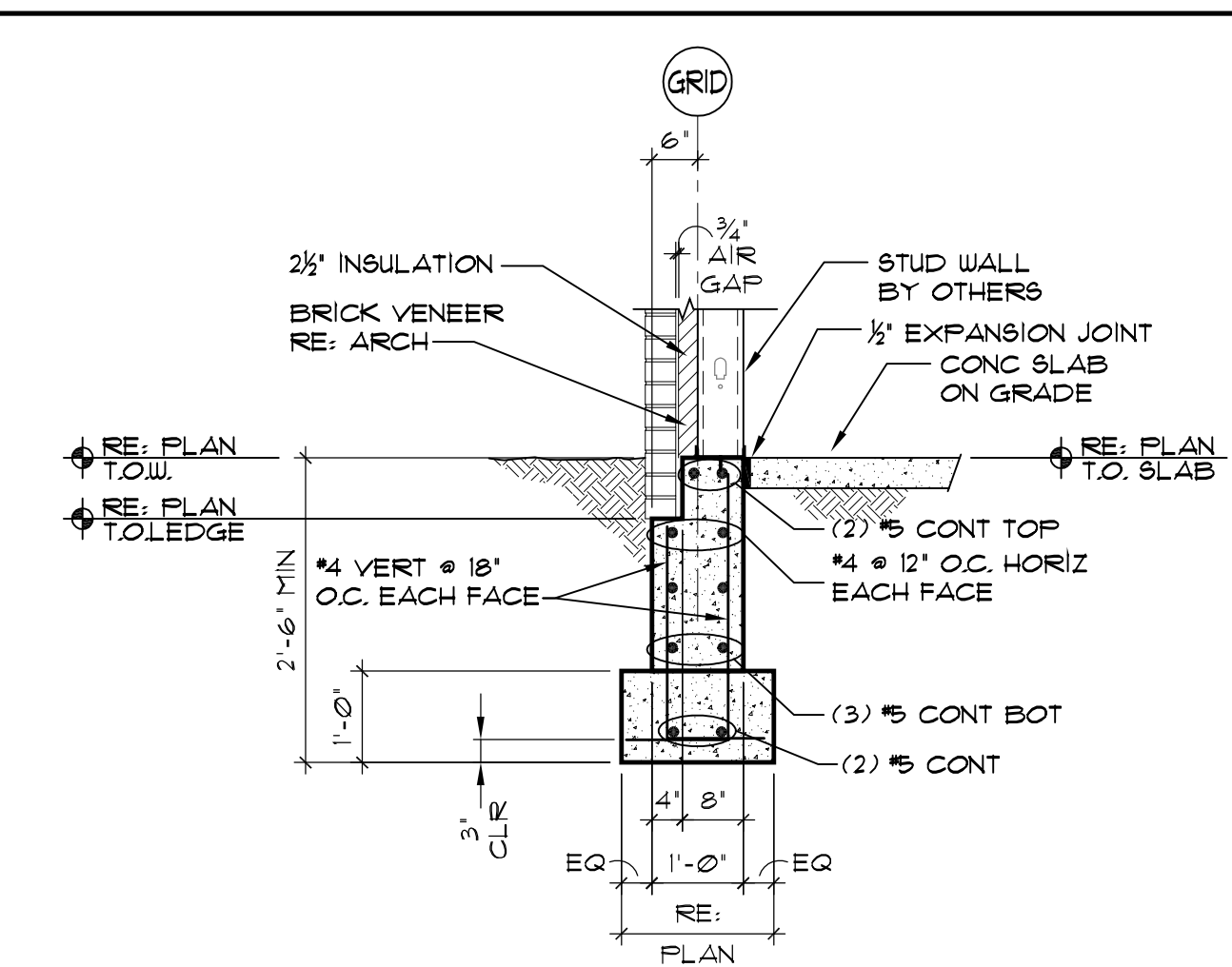
3 TYPICAL TOP OF WALL STEP
S2 SCALE: 1/2" = 1'-0"



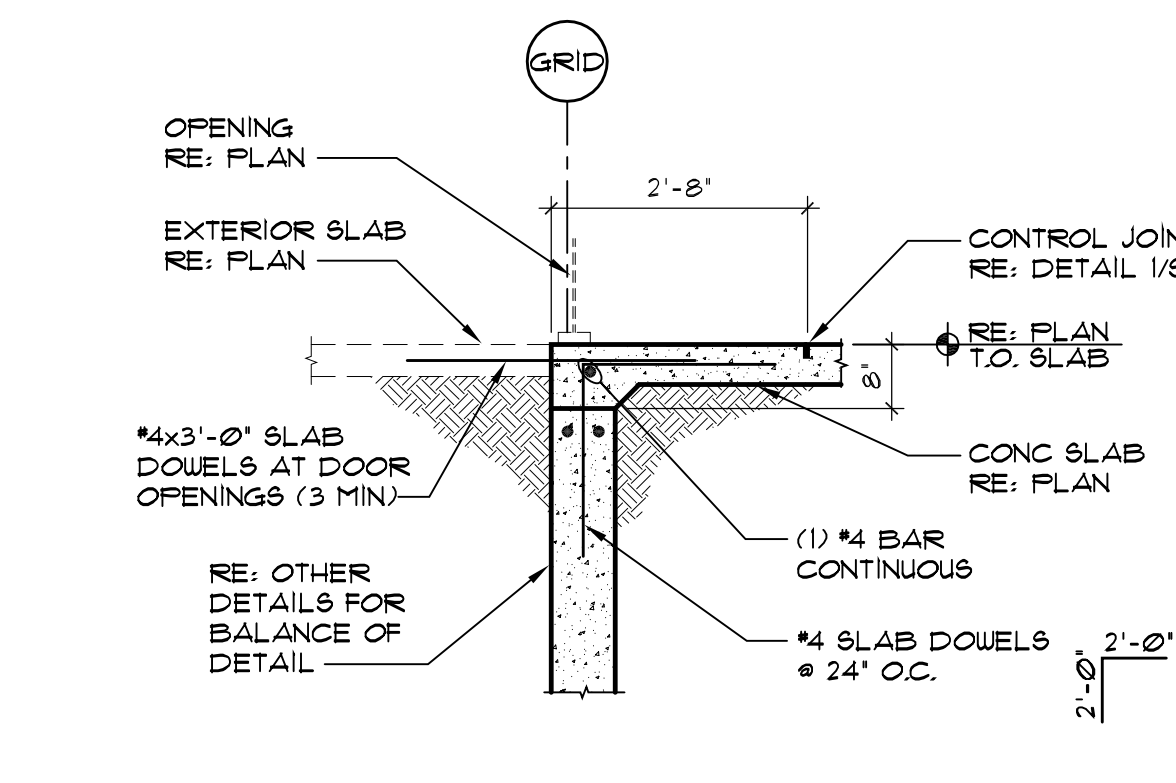
4 DETAIL
S2 SCALE: 1/2" = 1'-0"

3 TYPICAL TOP OF WALL STEP
S2 SCALE: 1/2" = 1'-0"

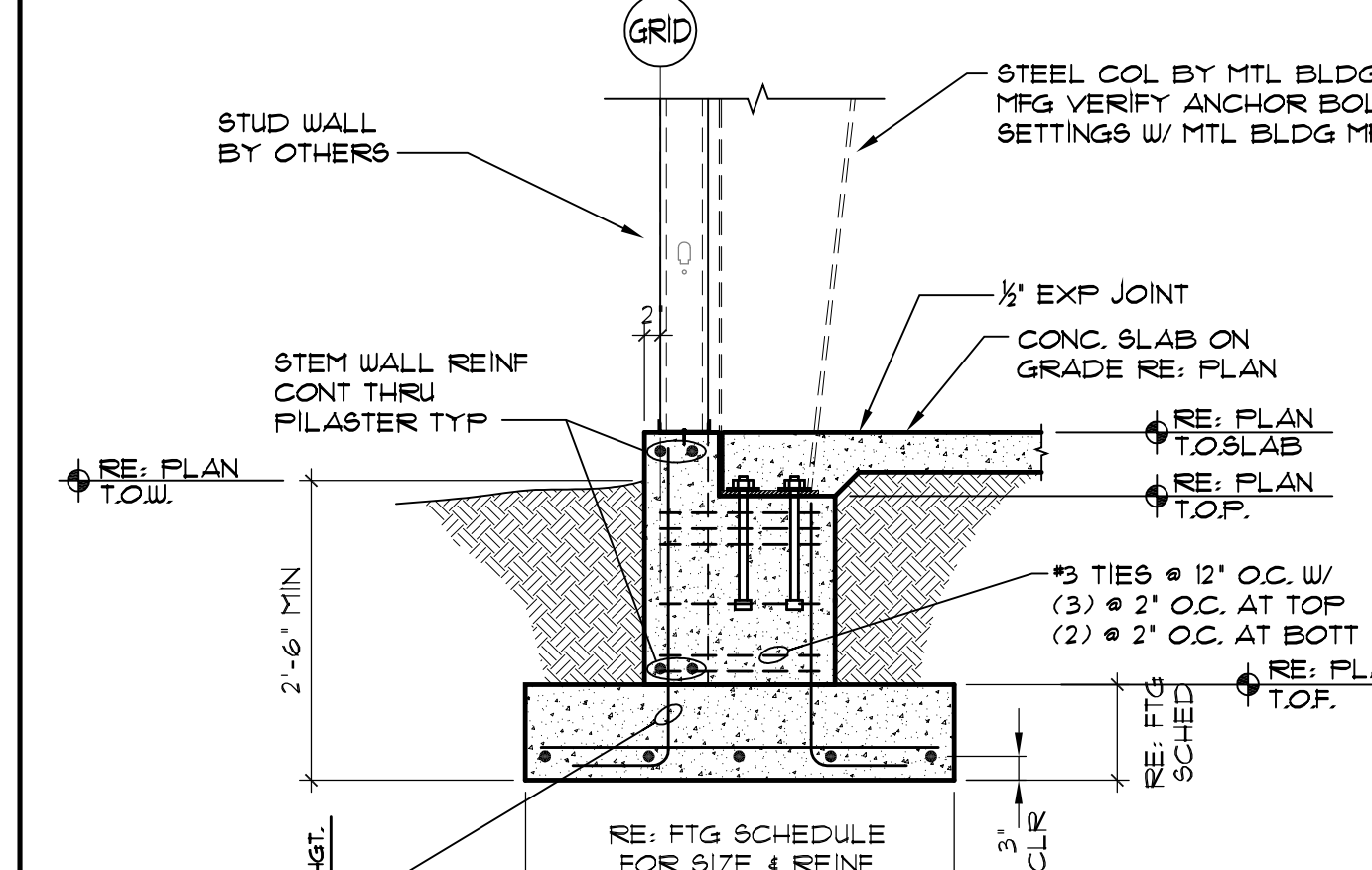
4 DETAIL
S2 SCALE: 1/2" = 1'-0"



5 DETAIL
S2 SCALE: 1/2" = 1'-0"



6 FOUNDATION DETAIL
S2 SCALE: 1/2" = 1'-0"



7 PIER SECTION
S2 SCALE: 1/2" = 1'-0"

PRELIMINARY - NOT FOR CONSTRUCTION
SERVICE CONTRACTOR FACILITY 1
 CITY OF COLORADO SPRINGS METRO TRANSIT
 1070 TRANSIT DRIVE

DESIGN EDGE
 architecture interior design
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REGISTRATION:

ISSUE DATES:	
RMG PROJECT NO.	123542
ENGINEER:	EJ
DRAWN BY:	CL
CHECKED BY:	MW
DATE:	3-24-10
SHEET TITLE:	FOUNDATION DETAILS AND GENERAL NOTES
SHEET NO.	S2

VENTILATION SUMMARY - FURN-1							
OUTSIDE AIR REQUIREMENTS							
AREA	OCCUPANCY CLASSIFICATION*	OCCUPANCY PER 1000 SQ. FT.	CFM REQUIRED PER PERSON	AREA OF OCCUPANCY	NUMBER OF PEOPLE	OUTSIDE AIR REQUIRED (CFM)	NOTES
DISPATCH 102	OFFICE	7	20	202	3	60	1
QUIET ROOM 103	OFFICE	7	20	101	1	20	
WORK ROOM 112	OFFICE	7	20	100	1	20	
MANAGER 114	OFFICE	7	20	178	1	20	1
PAYROLL 115	OFFICE	7	20	114	1	20	
STORAGE 116	STORAGE	N/A	0.15 CFM/SF	132	N/A	20	
* OCCUPANCY CLASSIFICATION PER TABLE 403.3, 2006 IMC. NOTE #1: NUMBER OF PEOPLE BASED ON ACTUAL OCCUPANCY.		TOTAL: 162 CFM					
OUTSIDE AIR SUPPLIED BY EQUIPMENT							
SYMBOL	TOTAL CFM	OUTSIDE AIR	O.A. % OF TOTAL	REMARKS			
FURN-1	1550	250	17%				
TOTAL OUTSIDE AIR SUPPLIED BY EQUIPMENT = 250 CFM > 160 CFM							

VENTILATION SUMMARY - FURN-2							
OUTSIDE AIR REQUIREMENTS							
AREA	OCCUPANCY CLASSIFICATION*	OCCUPANCY PER 1000 SQ. FT.	CFM REQUIRED PER PERSON	AREA OF OCCUPANCY	NUMBER OF PEOPLE	OUTSIDE AIR REQUIRED (CFM)	NOTES
DRIVER'S ROOM 101	LOBBIES	30	15	773	20	300	1
IT/PHONE 110	OFFICE	7	20	103	1	20	
* OCCUPANCY CLASSIFICATION PER TABLE 403.3, 2006 IMC. NOTE #1: NUMBER OF PEOPLE BASED ON ACTUAL OCCUPANCY.		TOTAL: 320 CFM					
OUTSIDE AIR SUPPLIED BY EQUIPMENT							
SYMBOL	TOTAL CFM	OUTSIDE AIR	O.A. % OF TOTAL	REMARKS			
FURN-2	1500	375	25%				
TOTAL OUTSIDE AIR SUPPLIED BY EQUIPMENT = 375 CFM > 320 CFM							

VENTILATION SUMMARY - FURN-3							
OUTSIDE AIR REQUIREMENTS							
AREA	OCCUPANCY CLASSIFICATION*	OCCUPANCY PER 1000 SQ. FT.	CFM REQUIRED PER PERSON	AREA OF OCCUPANCY	NUMBER OF PEOPLE	OUTSIDE AIR REQUIRED (CFM)	NOTES
SAFETY MGR, 120	OFFICE	7	20	61	1	20	
* OCCUPANCY CLASSIFICATION PER TABLE 403.3, 2006 IMC.		TOTAL: 20 CFM					
OUTSIDE AIR SUPPLIED BY EQUIPMENT							
SYMBOL	TOTAL CFM	OUTSIDE AIR	O.A. % OF TOTAL	REMARKS			
FURN-3	500	100	20%				
TOTAL OUTSIDE AIR SUPPLIED BY EQUIPMENT = 100 CFM > 20 CFM							

VENTILATION SUMMARY - FURN-4							
OUTSIDE AIR REQUIREMENTS							
AREA	OCCUPANCY CLASSIFICATION*	OCCUPANCY PER 1000 SQ. FT.	CFM REQUIRED PER PERSON	AREA OF OCCUPANCY	NUMBER OF PEOPLE	OUTSIDE AIR REQUIRED (CFM)	NOTES
SAFETY III	CLASSROOM	50	15	308	20	300	1
OPS/ADM 113	OFFICE	7	20	124	1	20	
* OCCUPANCY CLASSIFICATION PER TABLE 403.3, 2006 IMC. NOTE #1: NUMBER OF PEOPLE BASED ON ACTUAL OCCUPANCY.		TOTAL: 320 CFM					
OUTSIDE AIR SUPPLIED BY EQUIPMENT							
SYMBOL	TOTAL CFM	OUTSIDE AIR	O.A. % OF TOTAL	REMARKS			
FURN-4	1425	355	25%				
TOTAL OUTSIDE AIR SUPPLIED BY EQUIPMENT = 355 CFM > 320 CFM							

AIR DEVICE SCHEDULE							
SYMBOL	TYPE	MODEL	FRAME	MATERIAL	FINISH	DAMPER TYPE	REMARKS
CD-1	CEILING DIFFUSER	SCD	LAY-IN	STEEL	WHITE POWDER COAT	NONE	3-CORE (CONCENTRIC) 4-WAY PATTERN, 24x24 FACE NECK SIZE PER PLANS
CD-2	CEILING DIFFUSER	SCD	SURFACE	STEEL	WHITE POWDER COAT	BUTTERFLY VOLUME DAMPER	3-CORE (CONCENTRIC) 4-WAY PATTERN, 12x12 FACE NECK SIZE PER PLANS
CD-3	CEILING DIFFUSER	SCD	SURFACE	STEEL	WHITE POWDER COAT	BUTTERFLY VOLUME DAMPER	3-CORE (CONCENTRIC) 4-WAY PATTERN, 24x24 FACE NECK SIZE PER PLANS
56-1	SPIRAL DUCT GRILLE	SDGE	DUCT	ALUMINUM	WHITE POWDER COAT	AIRSCOOP	16x6 FACE, 0° DEFLECTION, ADJUSTABLE BLADES
T6-1	TRANSFER GRILLE	PDDR	LAY-IN	STEEL	WHITE POWDER COAT	NONE	PERFORATED 24x24 FACE NECK SIZE AS SPECIFIED
T6-2	TRANSFER GRILLE	530	SURFACE	STEEL	WHITE POWDER COAT	NONE	3/4" BLADE SPACING, 45° FIXED DEFLECTION, SIZE PER PLANS
R6-1	RETURN GRILLE	PDDR	LAY-IN	STEEL	WHITE POWDER COAT	NONE	PERFORATED 24x24 FACE NECK SIZE AS SPECIFIED
R6-2	RETURN GRILLE	510Z	SURFACE	STEEL	WHITE POWDER COAT	OPPOSED BLADE	3/4" BLADE SPACING, 0° FIXED DEFLECTION, 24x20 NECK SIZE
E6-1	EXHAUST GRILLE	510Z	SURFACE	STEEL	WHITE POWDER COAT	OPPOSED BLADE	3/4" BLADE SPACING, 0° FIXED DEFLECTION, 6x5 NECK SIZE
1. EQUIPMENT SCHEDULE BASED ON PRICE. ACCEPTABLE MANUFACTURERS: CARNES, KRUGER, METAL-AIRE AND TITUS. 2. MAX NC RATING 30.							

ELECTRIC WALL HEATER SCHEDULE							
SYMBOL	MODEL	ARRANGEMENT	RECESS DEPTH	KW	AMPS	ELEG	REMARKS
EHU-1	0F6222BIF	HALL RECESSED	4-3/8"	2.2	10.6	208-1	1, 2
EHU-2	0F6222BIF	HALL RECESSED	4-3/8"	2.2	10.6	208-1	1, 2
1. EQUIPMENT SCHEDULE BASED ON BERKO. 2. ACCEPTABLE MANUFACTURERS INCLUDE: BERKO, BRASCH, CHROMALOX, INDECO, MARKEL, G-MARK, AND RAYNALL. SEQUENCE OF OPERATION: UNIT MOUNTED THERMOSTAT SHALL CYCLE HEATING ELEMENT AND FAN TO MAINTAIN SPACE TEMPERATURE.							

FURNACE SCHEDULE																
SYMBOL	MODEL	SUPPLY FAN DATA						HEAT EXCHANGER DATA		COOLING COIL DATA			ELEG	FLA	MOCP	REMARKS
		CFM TOTAL @ 5000'	CFM OA @ 5000'	ESP IN INCH @ SL	DRIVE TYPE	SPEED SETTING	HP	RPM	HEH INLET @ SL	HEH OUTPUT @ 5000'	COIL MODEL	HEH TOTAL @ 5000'				
FURN-1	TUX1000A4H4B	1550	250	0.5	DIRECT	MED-HIGH	3/4	1100	100	74.4	4TXCC04B	48.0	120-1	12.4	20	1, 2, 3, 4, 5
FURN-2	TUX1000A4H4B	1500	375	0.5	DIRECT	MED-HIGH	3/4	1100	100	74.4	4TXCC04B	48.0	120-1	12.4	20	1, 2, 3, 4, 5
FURN-3	TUX1000A4H4B	500	100	0.5	DIRECT	LOW	1/2	1080	40	30.4	4TXCB01B	24.0	120-1	9.7	15	1, 2, 3, 4, 5
FURN-4	TUX1000A4H4B	1425	355	0.5	DIRECT	MED-HIGH	3/4	1100	100	74.4	4TXCC04B	48.0	120-1	12.4	20	1, 2, 3, 4, 5
1. EQUIPMENT SCHEDULE BASED ON TRANE. ACCEPTABLE MANUFACTURERS: CARRIER, LENOX, AND MCGUAY. 2. COOLING COIL CAPACITY BASED ON: 45 F AMBIENT AT CONDENSER. 3. BURNER SHALL BE DESIGNED TO FIRE ON NATURAL GAS, 6" WC, 807 BTU/CF. 4. PROVIDE WITH CONCENTRIC VENT KIT. 5. PROVIDE WITH 241T PROGRAMMABLE THERMOSTAT. SEQUENCE OF OPERATION: A. HEATING-OCCUPIED CYCLE (BELOW 55 F OUTSIDE AIR TEMPERATURE) ON DEMAND FOR HEATING, THE T-STAT SHALL CYCLE FAN AND HEATING SYSTEM TO MAINTAIN SPACE TEMPERATURE. B. COOLING-OCCUPIED CYCLE (ABOVE 55 F OUTSIDE AIR TEMPERATURE) ON DEMAND FOR COOLING, THE T-STAT SHALL CYCLE FAN AND REFRIGERATION SYSTEM TO MAINTAIN SPACE TEMPERATURE.																

AIR COOLED CONDENSING UNIT SCHEDULE											
SYMBOL	MATCHED SYSTEM COMPONENT	MODEL	AMB TEMP F	HEH @ SL	MIN CIRCUIT AMP	ELEG	NO COPPER	STEPS CAPACITY CONTROL	SEER	MIN AMB OPERATION F	REMARKS
CU-1	FURN-1	4TTZ048AI	45	48.0	26	208-1	2	2	16	0	1, 2, 3
CU-2	FURN-2	4TTZ048AI	45	48.0	26	208-1	2	2	16	0	1, 2, 3
CU-3	FURN-3	4TTZ024AI	45	24.0	14	208-1	2	2	16	0	1, 2, 3
CU-4	FURN-4	4TTZ048AI	45	48.0	26	208-1	2	2	16	0	1, 2, 3
1. EQUIPMENT SCHEDULE BASED ON TRANE. ACCEPTABLE MANUFACTURERS: CARRIER, LENOX, AND MCGUAY. 2. EQUIPMENT PROVIDED WITH LOW AMBIENT CONTROLS. 3. EQUIPMENT SHALL OPERATE ON R-410A REFRIGERANT.											

EXHAUST FAN SCHEDULE												
SYMBOL	MODEL	FAN TYPE	SERVICE	CFM @ 5000'	S.P. IN. W.C. @ SL	APPROX. RPM	HP/WATTS	ELEG	DRIVE TYPE	DAMPER TYPE	SCONES	REMARKS
EF-1	6B-081-6	CENTRIFUGAL ROOF	RESTROOMS	575	0.5	1725	1/6	120-1	BELT	GRAVITY B.D.	9.3	1, 2
EF-2	SP-B150	CEILING EXHAUST	WORK ROOM	150	0.38	1050	1/4	120-1	DIRECT	GRAVITY B.D.	4.4	1, 3
1. EQUIPMENT SCHEDULE BASED ON GREENECK. ACCEPTABLE MANUFACTURERS: ACME, CARNES, COOK, PENN AND THIN CITY. 2. UNIT SHALL BE PROVIDED WITH 14" HIGH ROOF CURB. 3. UNIT SHALL BE PROVIDED WITH INTEGRAL INLET GRILLE. SEQUENCE OF OPERATION: FAN SHALL BE CONTROLLED BY TIME-CLOCK. COORDINATE WITH E.G. FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED HOURS AND SHALL BE SHUT-OFF DURING UNOCCUPIED HOURS.												

FILTER SCHEDULE						
SYMBOL	MODEL NO	SERVICE	EFFICIENCY	SIZE (IN)	MEDIA SQ.FT.	REMARKS
F-1	DP1B-5TD4	FURN-1	MERV-13	16x25x4	18.3	1
F-2	DP1B-5TD4	FURN-2	MERV-13	16x20x4	14.6	1
F-3	DP1B-5TD4	FURN-3	MERV-13	12x24x4	12.4	1
F-4	DP1B-5TD4	FURN-4	MERV-13	16x20x4	14.6	1
F-5	DP1B-5TD4	OA DUCT	MERV-13	16x20x4	14.6	1
1. EQUIPMENT SCHEDULE BASED ON AIRGUARD. ACCEPTABLE MANUFACTURERS: AAF INTERNATIONAL, CANFIL FAR, FILTRATION GROUP, FLANDERS-PRECISIONAIRE, KOCH FILTER CORPORATION, PURAFIL INC.						

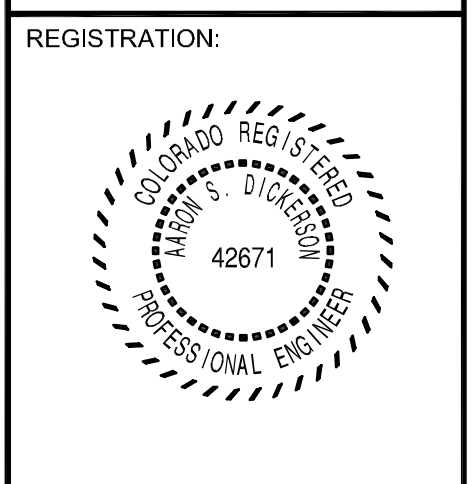
CONTRACTOR PRICING NOTE (LEED)

THIS PROJECT IS PURSUING LEED NC 3.0 GOLD CERTIFICATION THROUGH THE USGBC. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PRICING FOR CREDIT COMPLIANCE AND DOCUMENTATION TO ACHIEVE THIS. CONTRACTOR TO REVIEW CREDIT POINTS TO ENSURE ACCURATE BID. PROJECT WILL BE DESIGNED TO MEET ASHRAE STANDARDS 62.1-2007, 55-2007, AND 90.1-2007 ALONG WITH LOCAL ENERGY CODES. THIS PROJECT WILL HAVE COMMISSIONING DONE ON THE MECHANICAL, SERVICE WATER HEATING, AND LIGHTING CONTROL SYSTEMS.

DESIGN EDGE

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SERVICE CONTRACTOR FACILITY 1
 CITY OF COLORADO SPRINGS METRO TRANSIT
 1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

ISSUE DATES:

PROJECT NO. 10004
DRAWN BY: ASD
CHECKED BY: MAW
DATE: 3-24-10

SHEET TITLE:
HVAC SCHEDULES

SHEET NO.
M-1



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(W) 303.936.1633
(F) 303.934.3299
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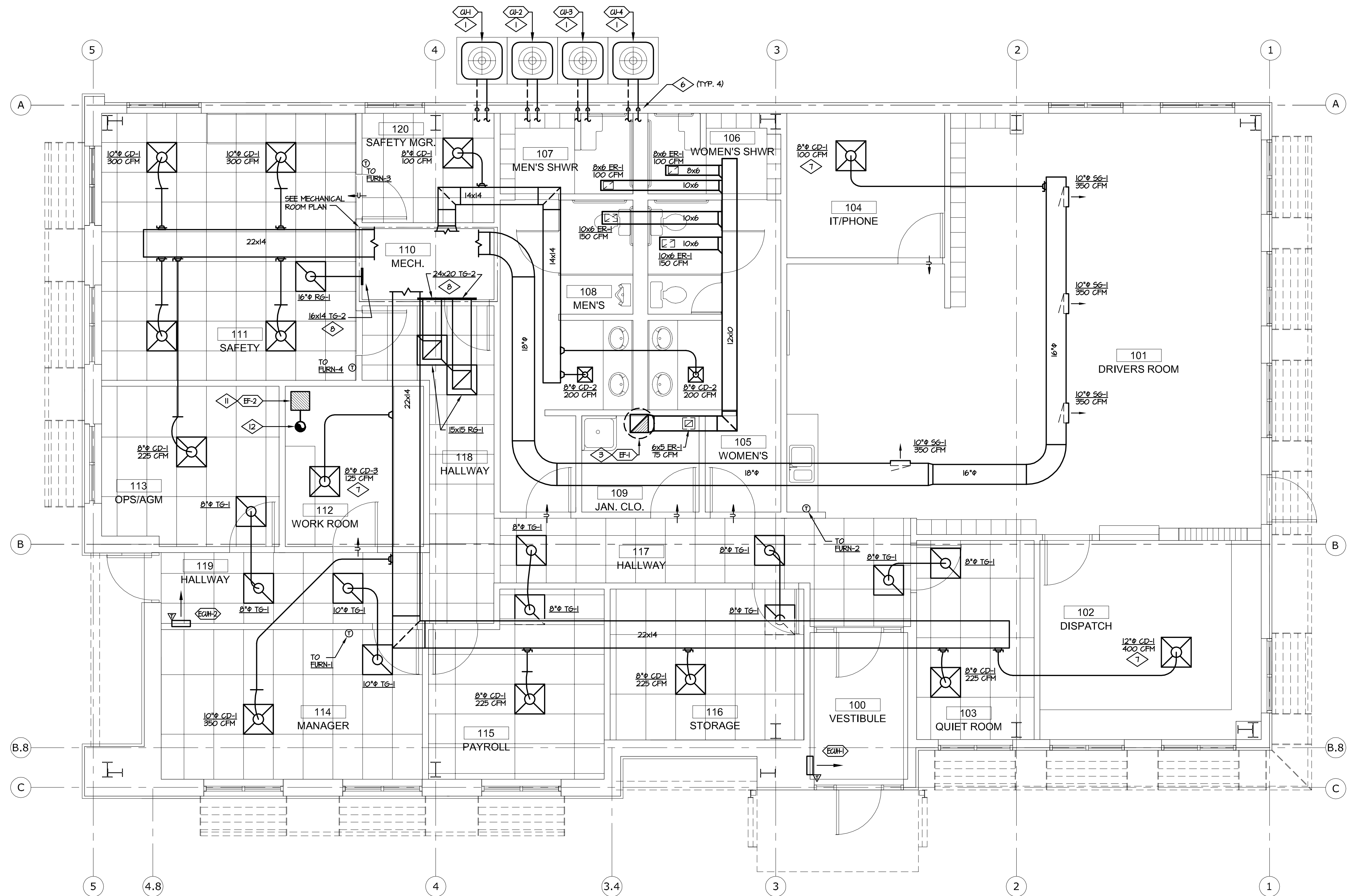
SERVICE CONTRACTOR FACILITY 1
 CITY OF COLORADO SPRINGS METRO TRANSIT
 1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

ISSUE DATES:

PROJECT NO. 10004
 DRAWN BY: ASD
 CHECKED BY: MAW
 DATE: 3-24-10

SHEET TITLE:
HVAC PLAN

SHEET NO.
M-2

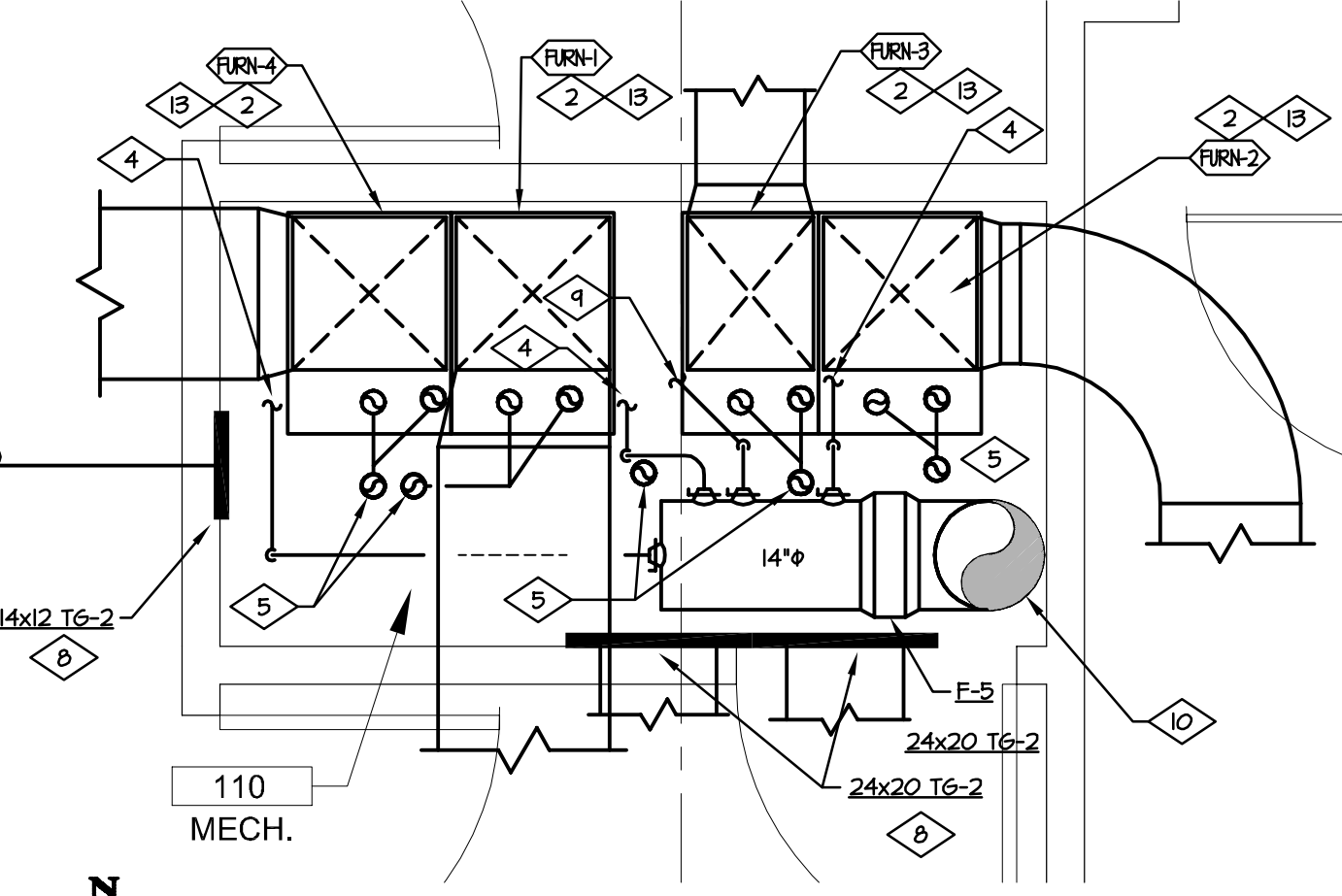


GENERAL NOTES

- THIS PROJECT IS PURSUING LEED NC 3.0 CERTIFICATION THROUGH THE USGBC. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PRICING FOR CREDIT COMPLIANCE AND DOCUMENTATION TO ACHIEVE THIS. CONTRACTOR TO REVIEW CREDIT POINTS TO ENSURE ACCURATE BID. PROJECT WILL BE DESIGNED TO MEET ASHRAE STANDARDS 62.1-2007, 95-2007, AND 90.1-2007 ALONG WITH LOCAL ENERGY CODES. THE PROJECT WILL HAVE FULL COMMISSIONING DONE ON THE MECHANICAL AND LIGHTING CONTROLS SYSTEMS.

DRAWING NOTES

- NEW CONDENSING UNIT ON GRADE. PROVIDE CONCRETE PAD, RE. DETAIL.
- NEW GAS FIRED FURNACE. PROVIDE RETURN AIR PEDESTAL. MAINTAIN 24" CLEAR IN FRONT OF UNIT FOR SERVICE ACCESS. RE. DETAIL.
- NEW EXHAUST FAN ON ROOF. PROVIDE 14" HIGH ROOF CURB. RE. DETAIL. PROVIDE DUCT TRANSITION FROM EXHAUST DUCT TO EQUIPMENT OPENING.
- PROVIDE 10" OUTSIDE AIR DUCT TO FURNACE. CONNECT DUCT TO SIDE OF PEDESTAL. SEAL CONNECTION AIR TIGHT. BALANCE AIRFLOW AS SHOWN IN FURNACE SCHEDULE.
- CONCENTRIC TERMINATION THRU ROOF. RE. DETAIL. 3" FLEXIBLE-RATED PVC FLUE AND COMBUSTION AIR. FLUE PIPING SHALL MAINTAIN MINIMUM 1/4" PER FOOT PITCHED UPWARD TO INSURE THAT CONDENSATE DRAINS BACK TO FURNACE. FLUE TERMINATION TO BE MINIMUM OF 2'-0" ABOVE ANY OUTSIDE AIR INTAKE WITHIN 10'-0" HORIZONTALLY.
- ROUTE R/L/S LINES UP IN WALL FROM CONDENSING UNIT (AT GRADE) TO FURNACE. SIZE PER MANUFACTURER'S RECOMMENDATIONS.
- SUPPORT SUPPLY DIFFUSER FROM STRUCTURE.
- MOUNT TRANSFER GRILLE AS HIGH AS POSSIBLE.
- PROVIDE 8" OUTSIDE AIR DUCT TO FURNACE. CONNECT DUCT TO SIDE OF PEDESTAL. SEAL CONNECTION AIR TIGHT. BALANCE AIRFLOW AS SHOWN IN FURNACE SCHEDULE.
- PROVIDE 14" OUTSIDE AIR DUCT UP THROUGH ROOF.
- NEW EXHAUST FAN MOUNTED IN CEILING. SUPPORT FROM STRUCTURE. RE. DETAIL.
- 8" EXHAUST DUCT UP THRU ROOF. RE. DETAIL.
- INSTALL FILTER ON FRONT OF PEDESTAL RETURN FOR ASSOCIATED FURNACE.

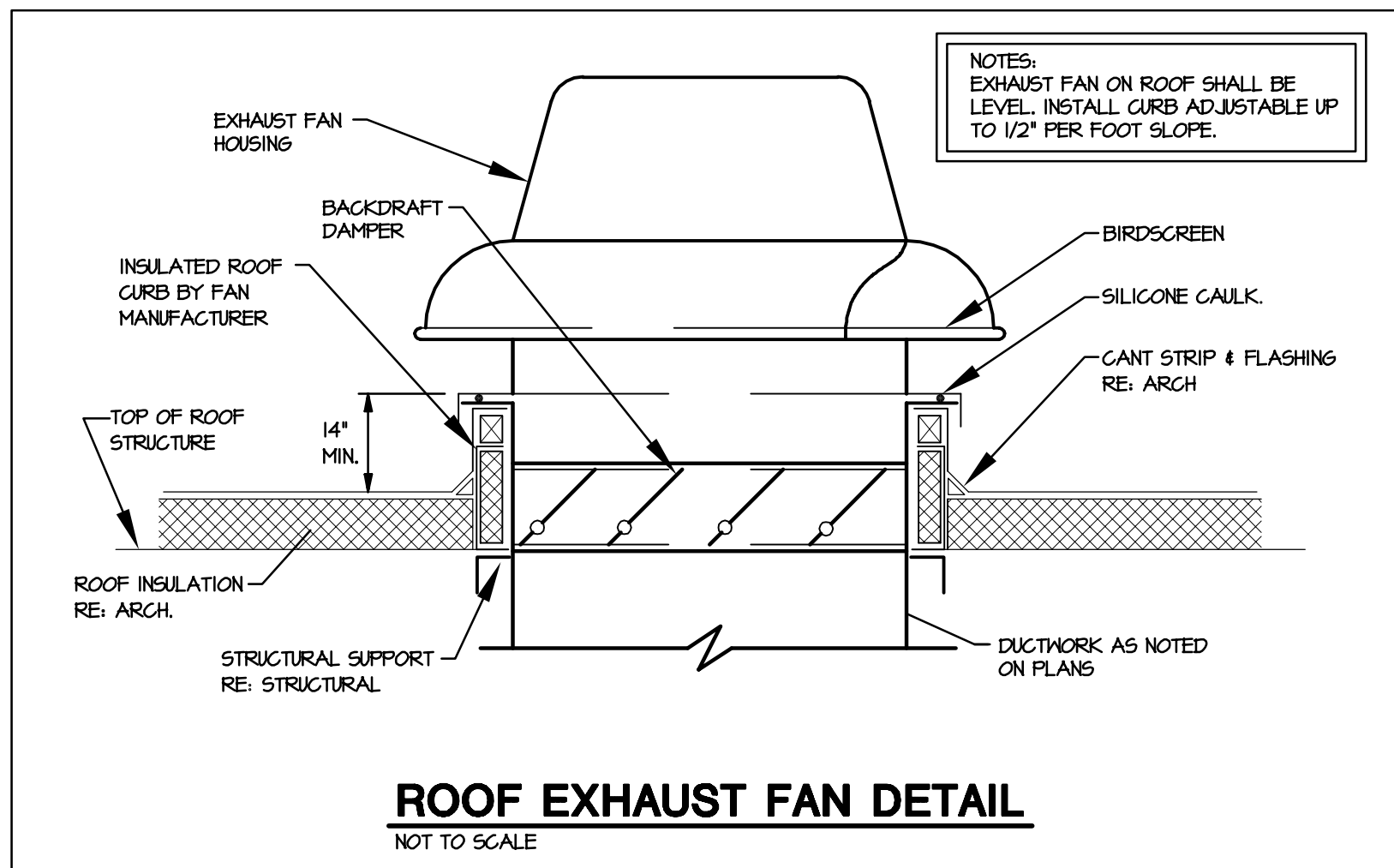
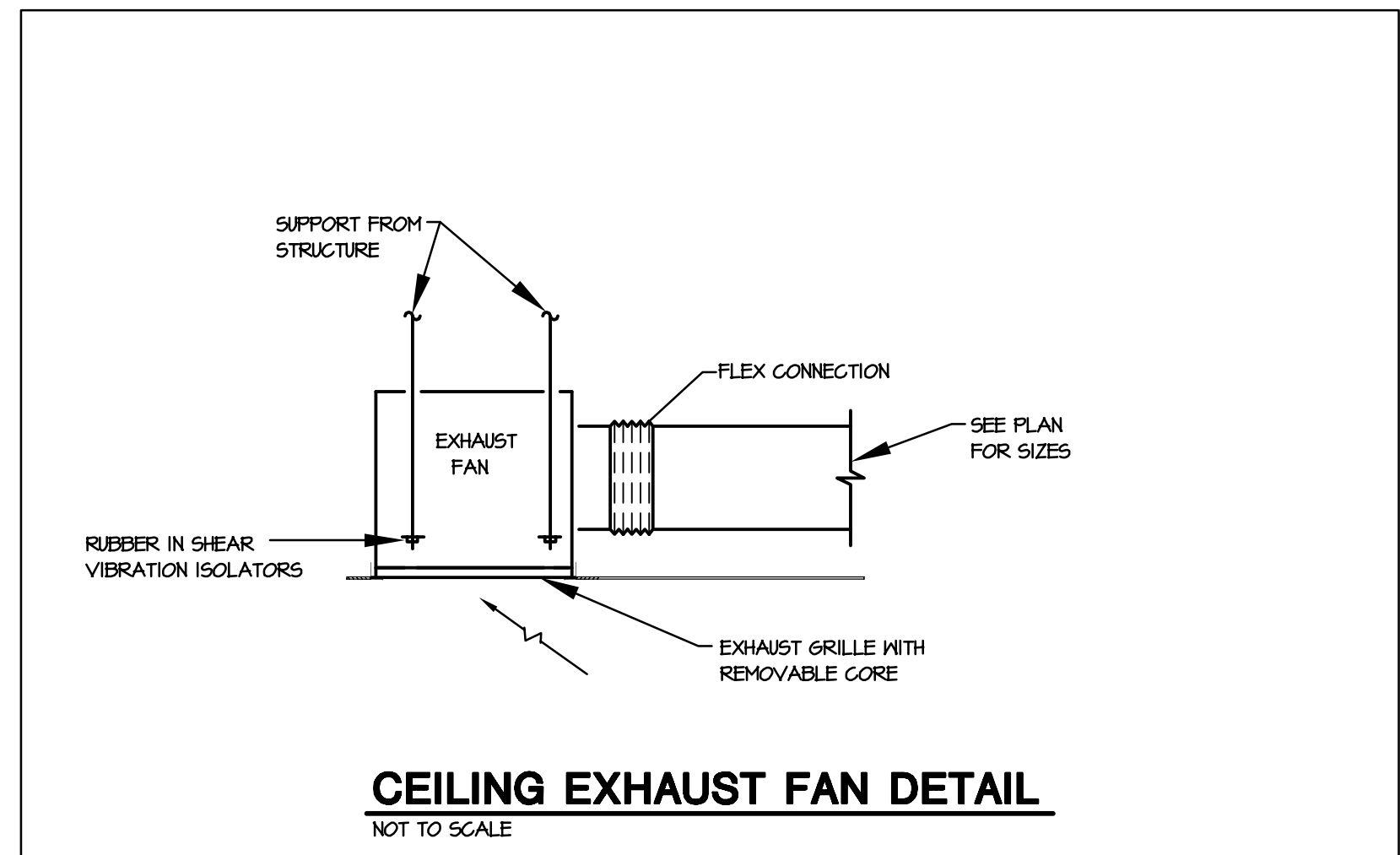
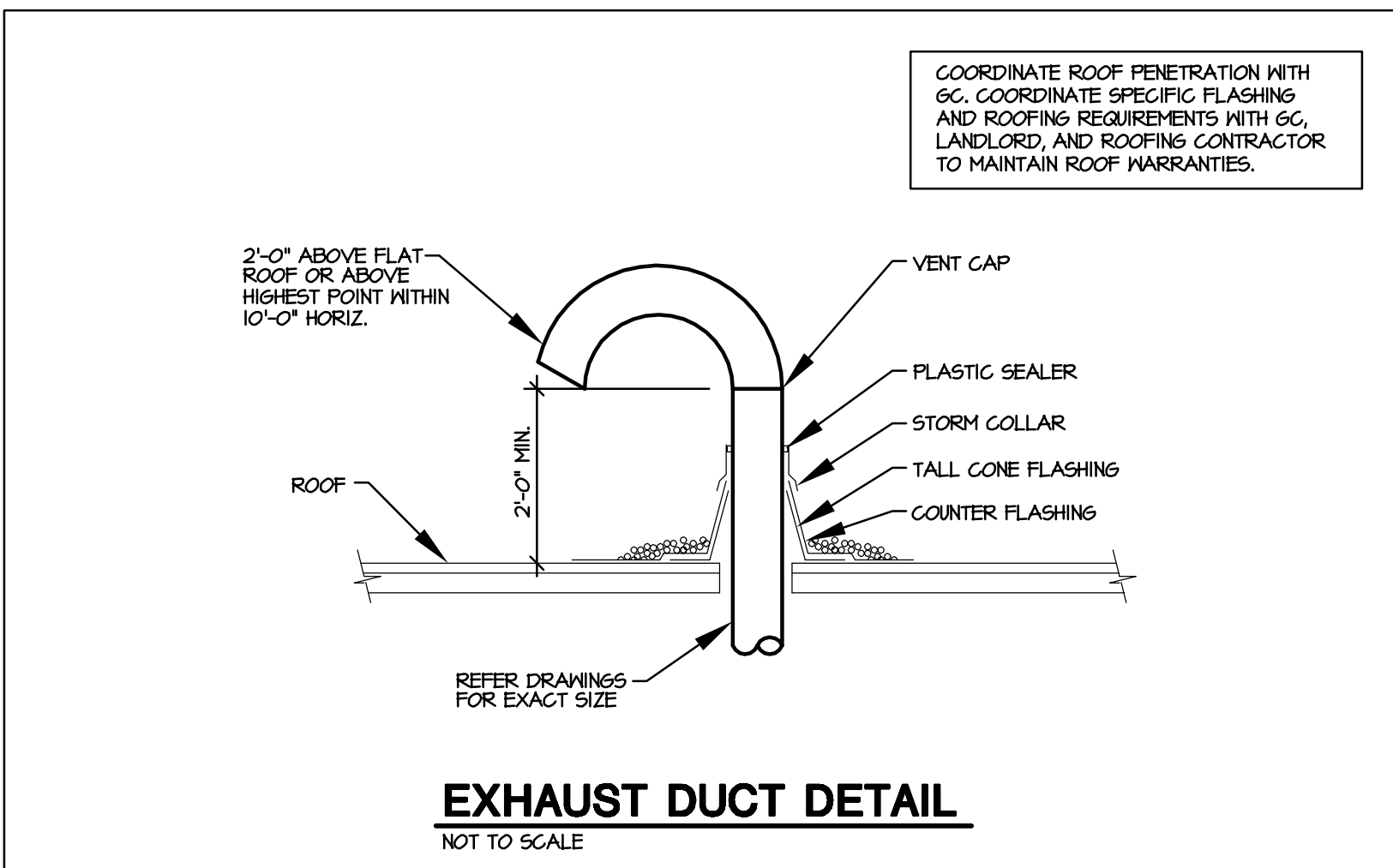
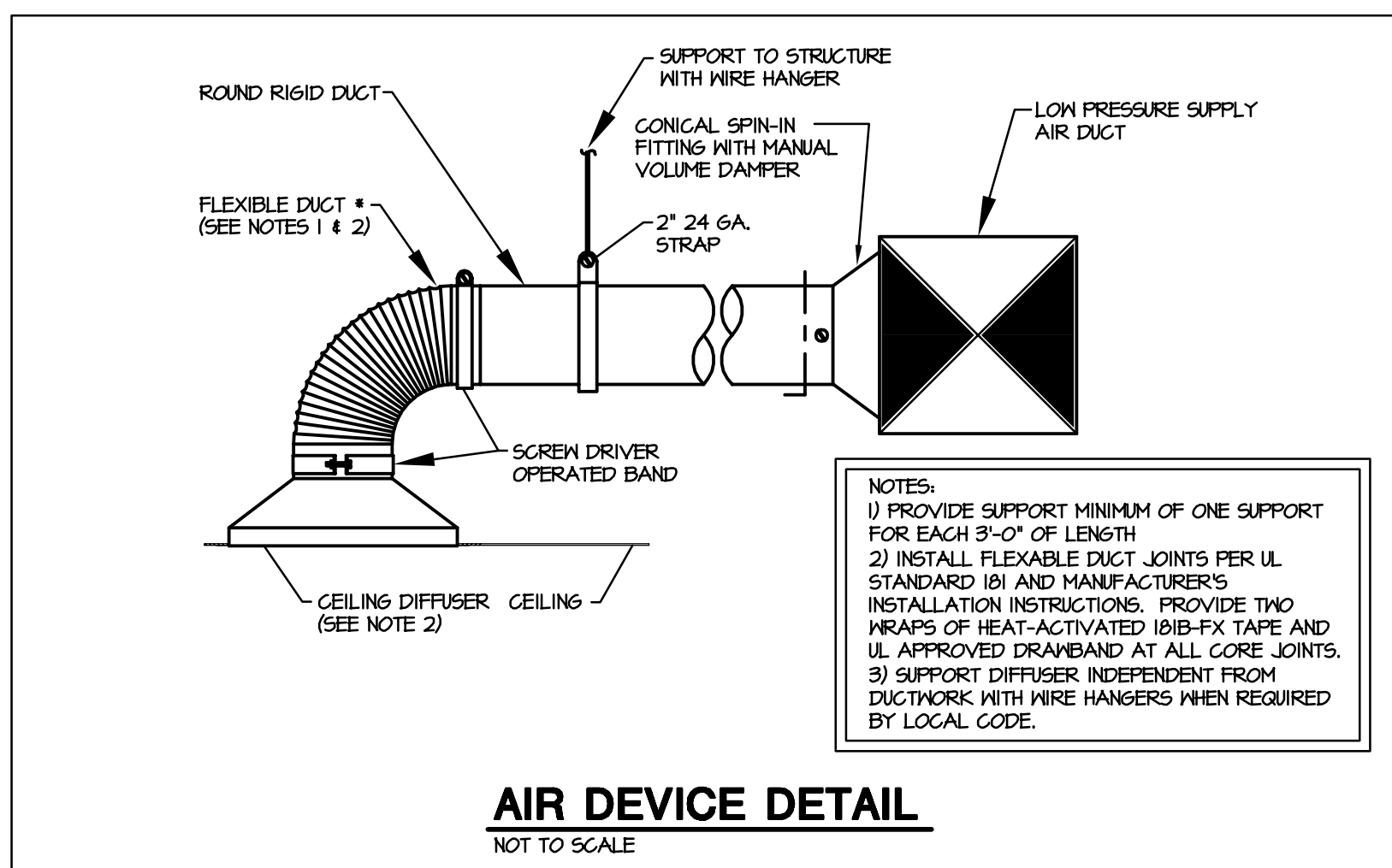
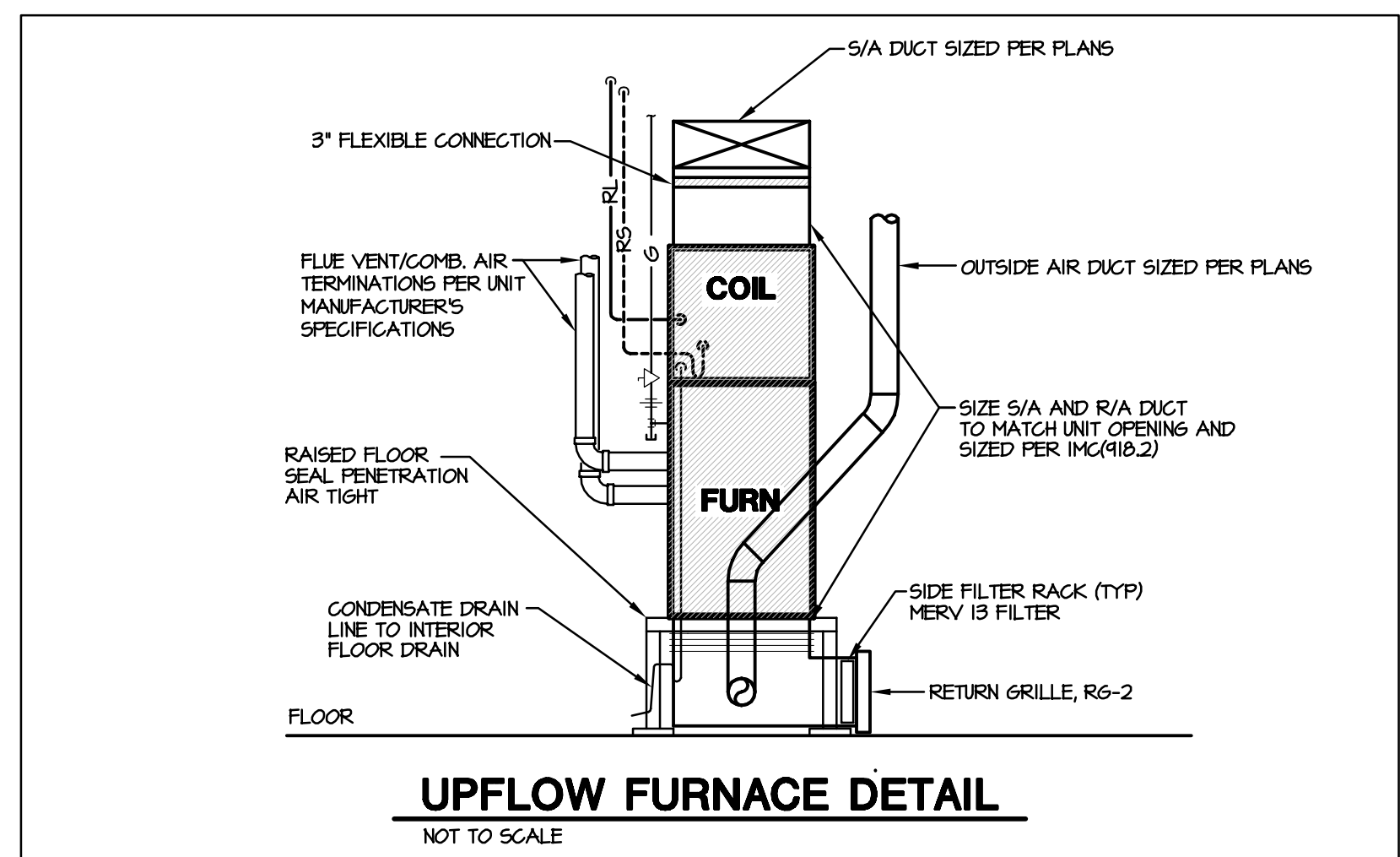
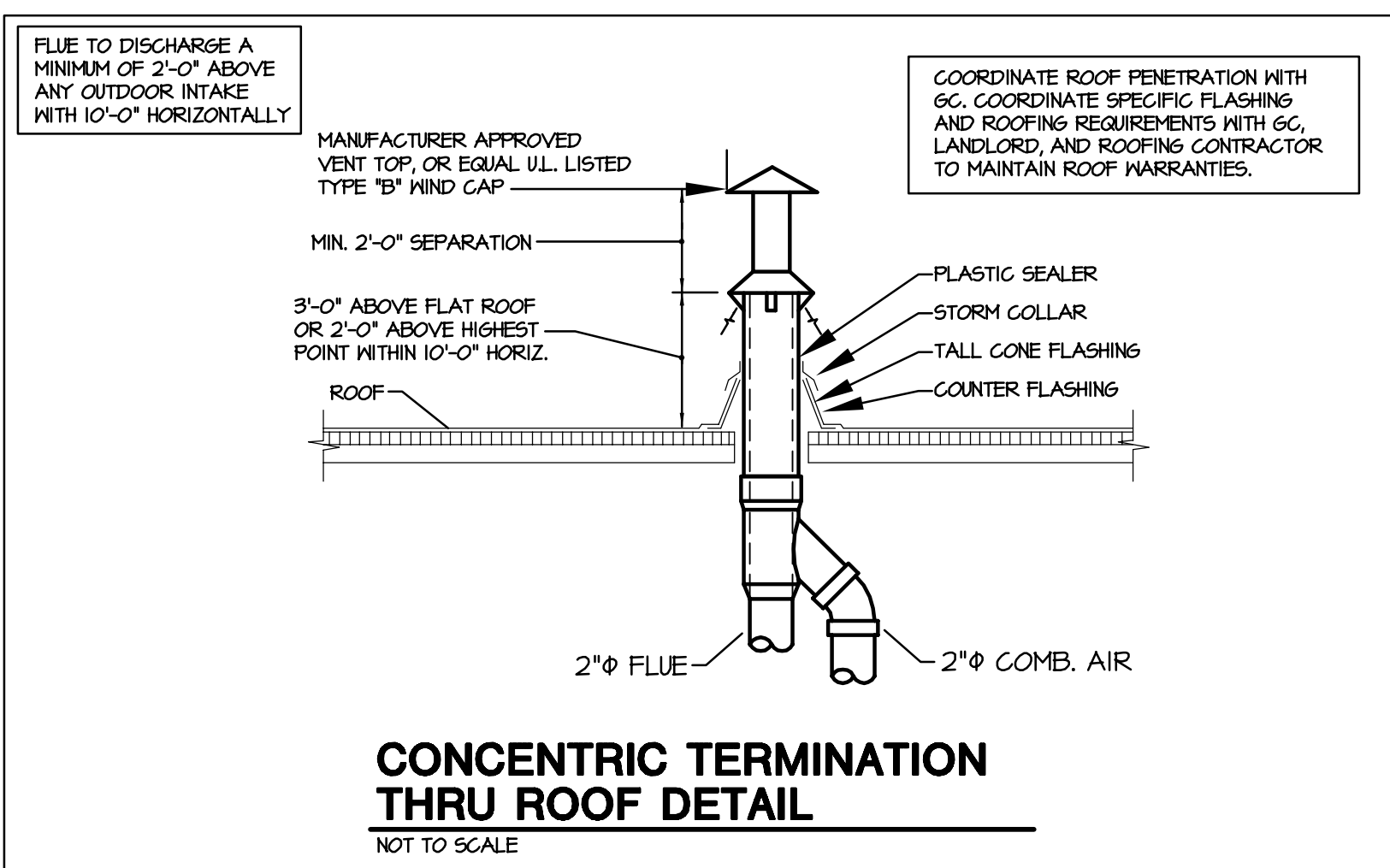
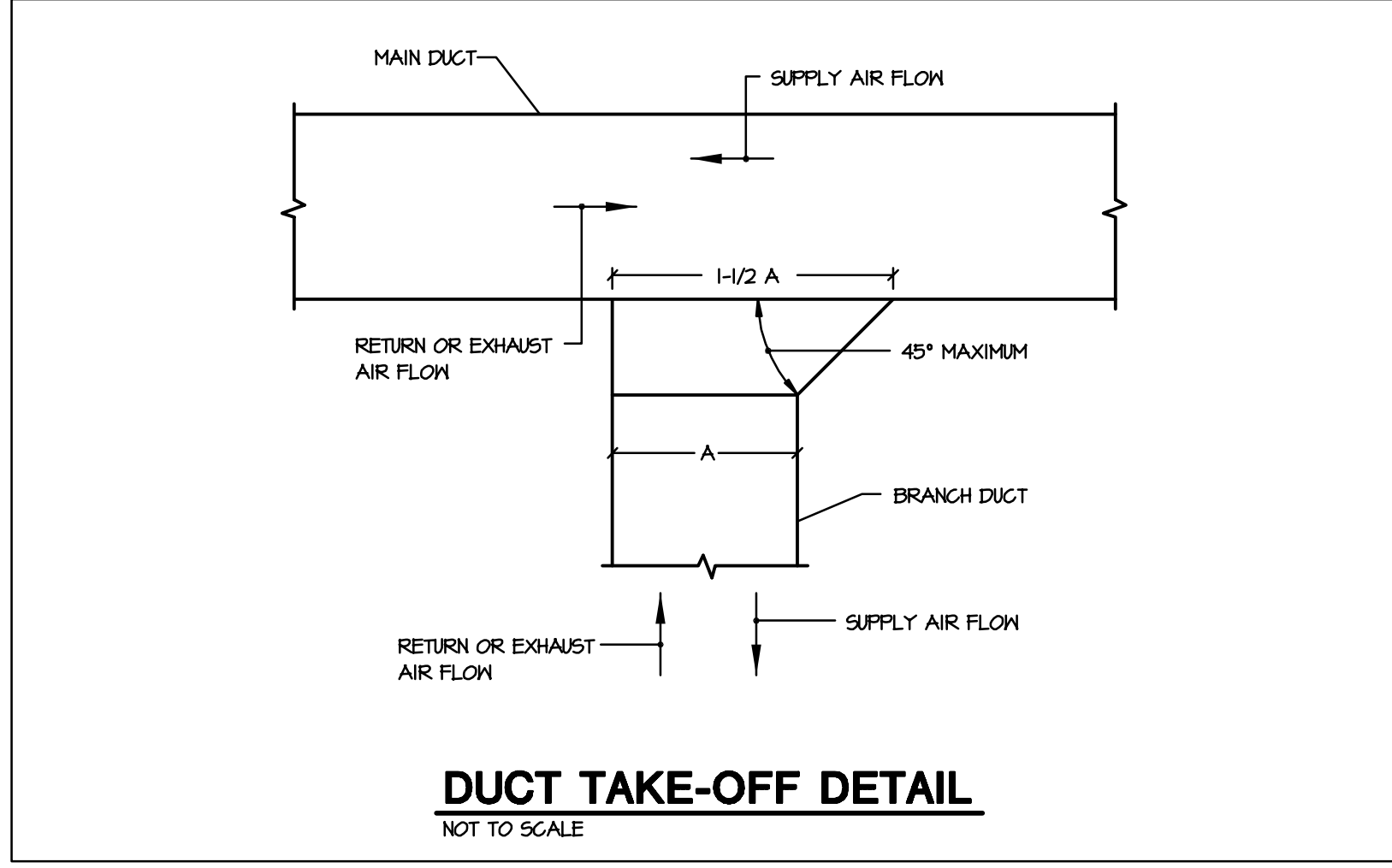
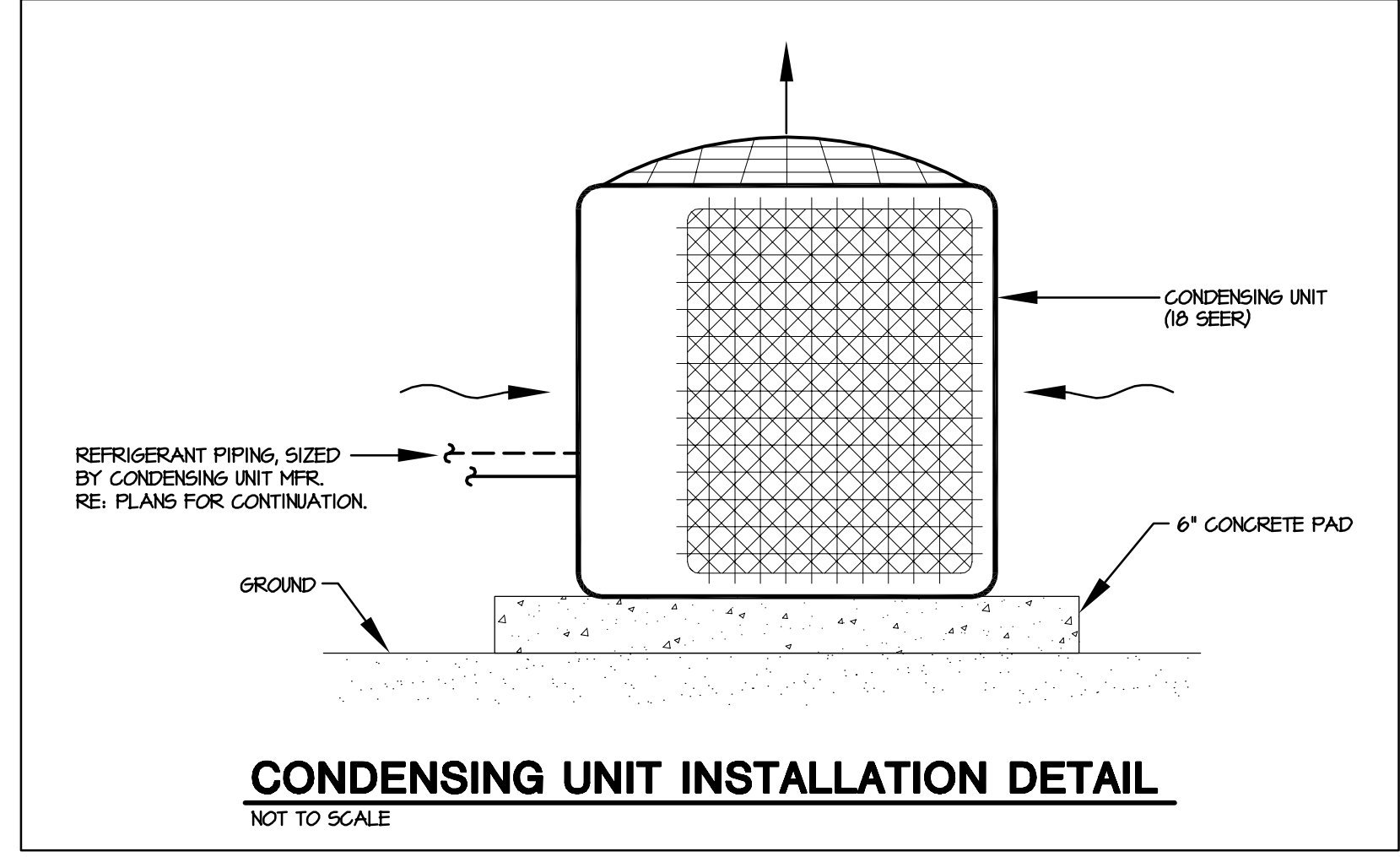
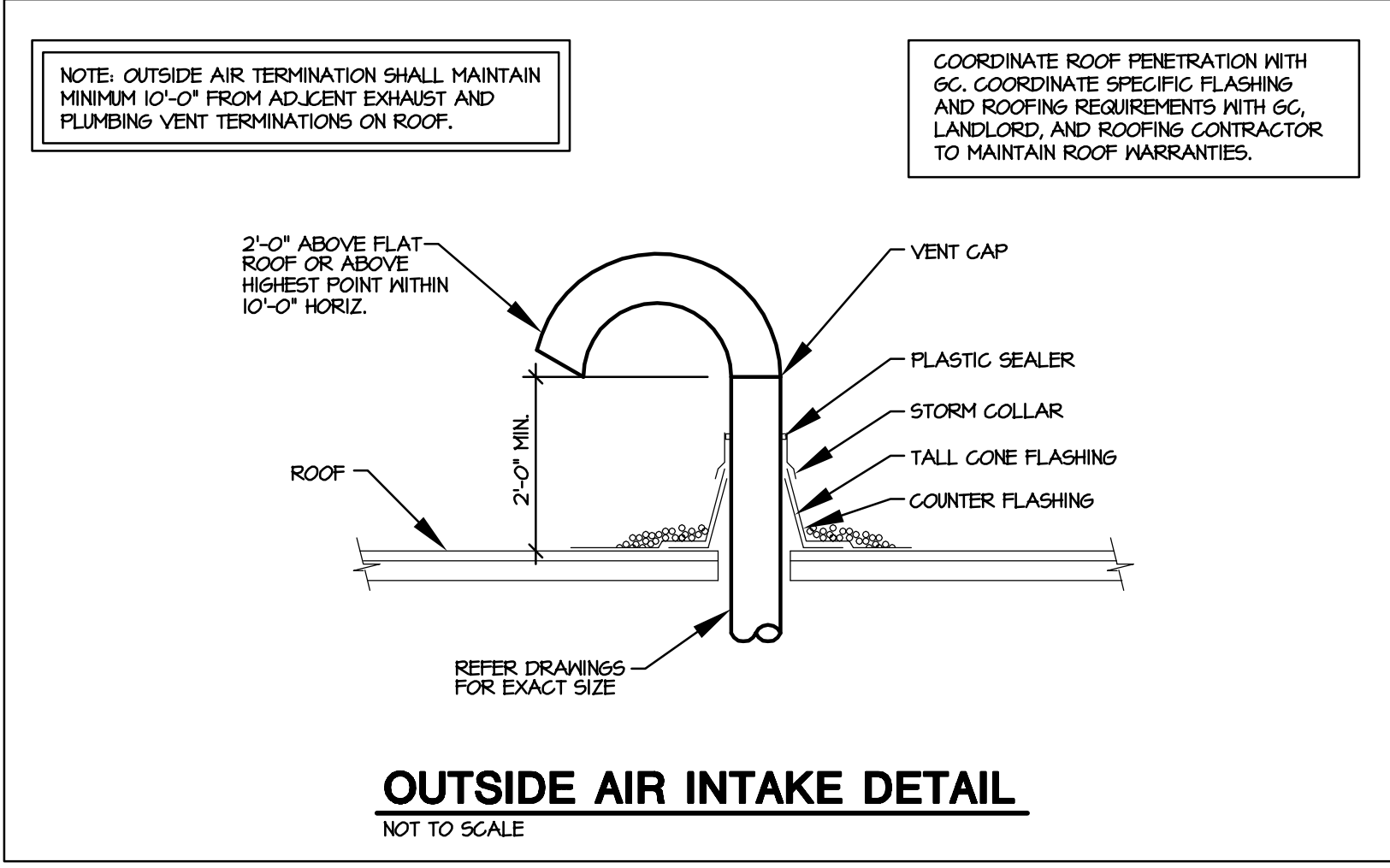


MECHANICAL ROOM PLAN
 SCALE: 1/2" = 1'-0"



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







SERVICE CONTRACTOR FACILITY 1
 CITY OF COLORADO SPRINGS METRO TRANSIT
 1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

ISSUE DATES:

PROJECT NO. 10004
 DRAWN BY: AXH
 CHECKED BY: PRR
 DATE: 3-24-10

SHEET TITLE:
PLUMBING SPECIFICATIONS AND LEGEND

SHEET NO.
P-1

PLUMBING LEGEND

NOT ALL ITEMS LISTED BELOW ARE USED ON THIS SET OF PLUMBING DRAWINGS

PLUMBING PIPING		PIPING SYMBOLS	
SYMBOL	ABBV. DESCRIPTION	SYMBOL	DESCRIPTION
—	CW DOMESTIC COLD WATER	—	WALL HYDRANT
—	HW DOMESTIC HOT WATER	—	HOSE BIBB
—	HWG DOMESTIC HOT WATER CIRCULATION	—	BALL VALVE
—180°	HW DOMESTIC HOT WATER AT TEMP. SHOWN	—	BALANCING VALVE/ FLOW MEASURING DEVICE
—T	T TEMPERED WATER	—	GATE VALVE
—TR	TR TEMPERED WATER CIRCULATION	—	CHECK VALVE
—W	W SOIL OR WASTE	—	SOLENOID VALVE
—GW	GW GREASE WASTE	—	PRESSURE REDUCING VALVE
—SOD	SOD SEDIMENT & OIL DRAIN	—	GAS VALVE
—BD	BD BUILDING DRAIN	—	PUMP
—BS	BS BUILDING SEWER	—	ATMOSPHERIC VACUUM BREAKER
—FD	FD PUMP DISCHARGE LINE	—	STRAINER
—D	D DRAIN	—	RELIEF VALVE
—V	V SANITARY VENT	—	DOWNSPOUT NOZZLE
—SD	SD STORM DRAIN	—	WATER HAMMER ARRESTER
—OD	OD OVERFLOW DRAIN	—	UNION
—SS	SS STORM SEWER	—	REDUCER
—F	F FIRE SPRINKLER	—	WATER METER
—FDG	FDG FIRE DEPT. CONNECTION	—	PRESSURE GAUGE
—G	NATURAL GAS LOW PRESSURE	—	THERMOMETER
—MPG	NATURAL GAS MEDIUM PRESSURE	—	FLOOR SINK
—LPG	PROPANE GAS	—	AREA/FLOOR DRAIN
—CA	COMPRESSED AIR	—	ROOF DRAIN OR OVERFLOW DRAIN

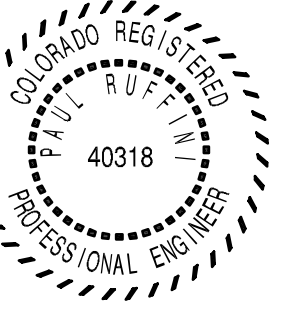
PLUMBING PIPING SYMBOLS	
SYMBOL	DESCRIPTION
—	ARROW IN LINE INDICATES DIRECTION OF FLOW
—XX—	INDICATES PIPE SLOPE DOWN
—XXXXXX—	REMOVE EXISTING
—	BOTTOM PIPE CONNECTION
—	PIPING UP
—	PIPING DOWN
—	FIXTURE TRAP OR DRAIN TRAP
—	PIPING CAP OR PLUG

ABBREVIATIONS			
AFB	ABOVE FINISHED FLOOR	FCO	FLOOR CLEAN OUT
AFG	ABOVE FINISHED GRADE	FPC	FIRE PROT. CONTRACTOR
AP	ACCESS PANEL	GC	GENERAL CONTRACTOR
BFP	BACKFLOW PREVENTER	IE	INVERT ELEVATION
DNZ	DOWNSPOUT NOZZLE	LCO	LINE CLEAN OUT
(E)	EXISTING	MC	MECHANICAL CONTRACTOR
EC	ELECTRICAL CONTRACTOR	MH	MANHOLE
EL	ELEVATION	(N)	NEW
		NC	NORMALLY CLOSED
		NIC	NOT IN CONTRACT
		NO	NORMALLY OPEN
		NTS	NOT TO SCALE
		SCO	SURFACE CLEAN OUT
		TYP	TYPICAL
		WCO	WALL CLEAN OUT
		VTR	VENT THROUGH ROOF

PLUMBING SHEET INDEX

P-1	PLUMBING SPECIFICATIONS AND LEGEND
P-2	PLUMBING SCHEDULES
P-3	UNDERGROUND PLUMBING PLAN
P-4	PLUMBING PLAN
P-5	ROOF PLUMBING PLAN
P-6	PLUMBING RISER DIAGRAMS
P-7	PLUMBING DETAILS





SERVICE CONTRACTOR FACILITY 1
CITY OF COLORADO SPRINGS METRO TRANSIT
1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

DOMESTIC EXPANSION TANK SCHEDULE

Table with columns: SYMBOL, MODEL, CAPACITY (GAL), DIAMETER (IN), HEIGHT (IN), OPERATING HEIGHT (LBS), SYSTEM CONNECTION (IN), ACCEPTANCE FACTOR, NOTES. Includes notes on equipment schedule and acceptable manufacturers.

DOMESTIC CIRCULATION PUMP SCHEDULE

Table with columns: SYMBOL, SERVICE, PUMP TYPE, MODEL, GPM, HEAD (FT MG), MIN HP, RPM, ELEC, SUCTION SIZE (IN), DISCH. SIZE (IN), NOTES. Includes notes on equipment schedule and acceptable manufacturers.

DOMESTIC WATER CALCULATION

Complex calculation table for domestic water, including fixture units, main to meter calculations, meter to building calculations, and building piping calculations.

PLUMBING FIXTURE SCHEDULE

Large table listing plumbing fixtures with columns: SYMBOL, TYPE, ADA, ACCESSORIES, FINISH, MANUFACTURER #, FAUCET TRIM, ACCEPTABLE MANUFACTURERS, REMARKS, and rough in connection sizing.

GAS FIRED DOMESTIC WATER HEATER SCHEDULE

Table listing gas fired domestic water heaters with columns: SYMBOL, MODEL, STORAGE TANK, MBH INPUT, MBH OUTPUT, INLET WATER TEMP, OUTLET WATER TEMP, RECOVERY RATE, FLUE SIZE, ELEC, DIAMETER, HEIGHT, OPERATING WEIGHT, NOTES.

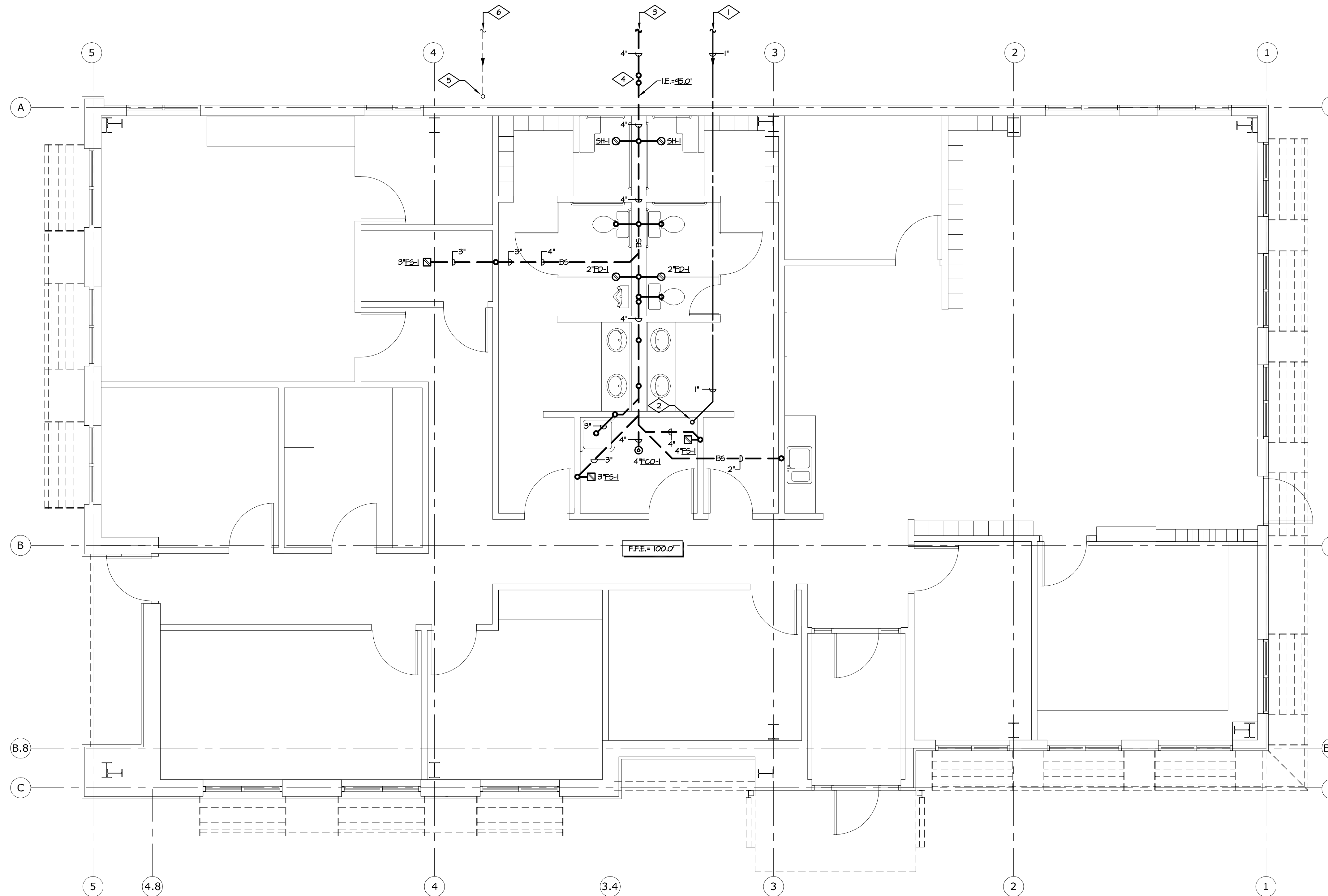
TOTAL CONNECTED GAS LOAD SCHEDULE

Table listing total connected gas loads for various equipment (FURN-1, FURN-2, FURN-3, FURN-4, GWH-1) with columns: EQUIPMENT, QTY., INPUT EACH, INPUT TOTAL, INLET PRESSURE, NOTES.



DRAWING NOTES

1. DOMESTIC COLD WATER FROM WATER METER. SEE CIVIL DRAWINGS FOR CONTINUATION.
2. DOMESTIC WATER UP FROM BELOW SLAB ON GRADE.
3. 4"BS TO SEWER MAIN. SEE CIVIL FOR CONTINUATION.
4. 4"BS DOWN FROM SURFACE CLEAN OUT.
5. NATURAL GAS LINE SUPPLY BELOW GRADE UP TO GAS METER. SEE PLUMBING PLAN P-4 FOR CONTINUATION.
6. NATURAL GAS SUPPLY MAIN BELOW GRADE. SEE CIVIL DRAWINGS FOR CONTINUATION.



UNDERGROUND PLUMBING PLAN
 SCALE: 1/4" = 1'-0"

SERVICE CONTRACTOR FACILITY 1
 CITY OF COLORADO SPRINGS METRO TRANSIT
 1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

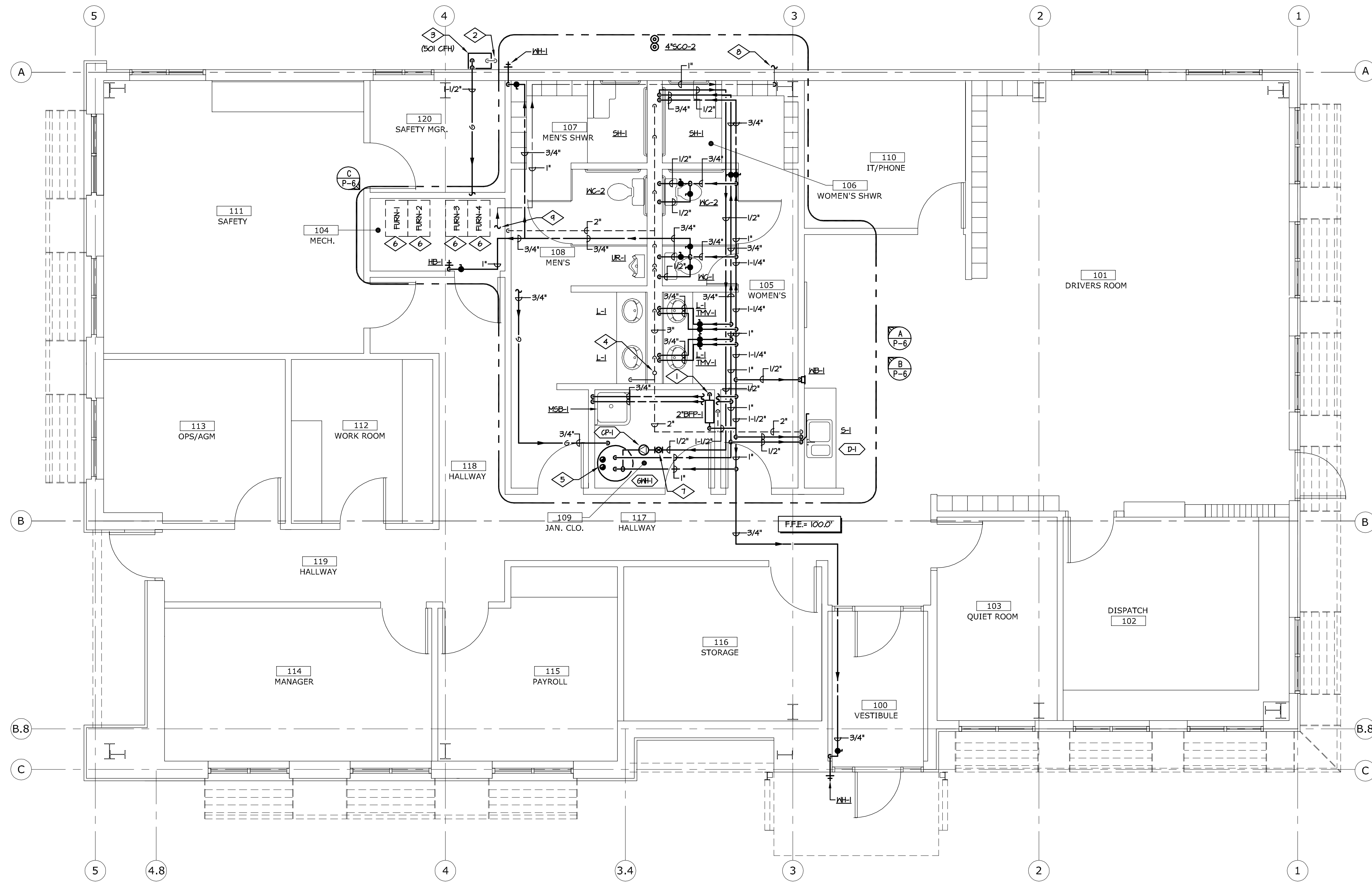
ISSUE DATES:


PROJECT NO. 10004
 DRAWN BY: AXH
 CHECKED BY: PRR
 DATE: 3-24-10

SHEET TITLE:
**UNDERGROUND
 PLUMBING
 PLAN**

SHEET NO.
P-3





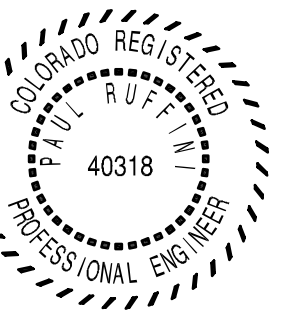

PLUMBING PLAN
 SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. REFER TO DOMESTIC WATER RISER DIAGRAM, SHEET P-6, FOR LOCATION OF ALL DOMESTIC WATER ISOLATION VALVES.

DRAWING NOTES

1. 1/2" COLD WATER SERVICE ENTRY DOWN FROM 2" BACKFLOW PREVENTER DEVICES TO BELOW SLAB ON GRADE. REFER TO PLUMBING SHEET P-3 FOR CONTINUATION, SEE DETAIL.
2. GAS SUPPLY LINE DOWN FROM GAS METER TO BELOW SLAB ON GRADE. REFER TO PLUMBING SHEET P-3 FOR CONTINUATION.
3. GAS METER LOCATION AND INSTALLATION BY COLORADO SPRINGS UTILITIES.
4. 3" VENT UP THRU ROOF TO 3" VIB.
5. 3" AIR-INTAKE AND FLUE UP INTO CONCENTRIC TERMINATION THRU ROOF, SEE DETAIL.
6. GAS FURNACE, REFER TO MECHANICAL PLANS FOR EQUIPMENT DETAILS AND INFORMATION. PROVIDE CONDENSATE NEUTRALIZER FOR MECH. EQUIPMENT FLUE CONDENSATION, SEE DETAIL.
7. PROVIDE 1/2" BALANCING VALVE, SET AT 2 GPM.
8. ROUTE 1" IRRIGATION LINE DOWN AND EXIT EXTERIOR WALL AT 12" ABOVE FINISHED GRADE. CONNECTION BY IRRIGATION CONTRACTOR. REFER TO IRRIGATION PLANS FOR CONTINUATION.
9. 1" IRRIGATION LINE FROM 1" BACKFLOW PREVENTER, BFP-1. SEE DETAIL.



SERVICE CONTRACTOR FACILITY 1
 CITY OF COLORADO SPRINGS METRO TRANSIT
 1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

ISSUE DATES:

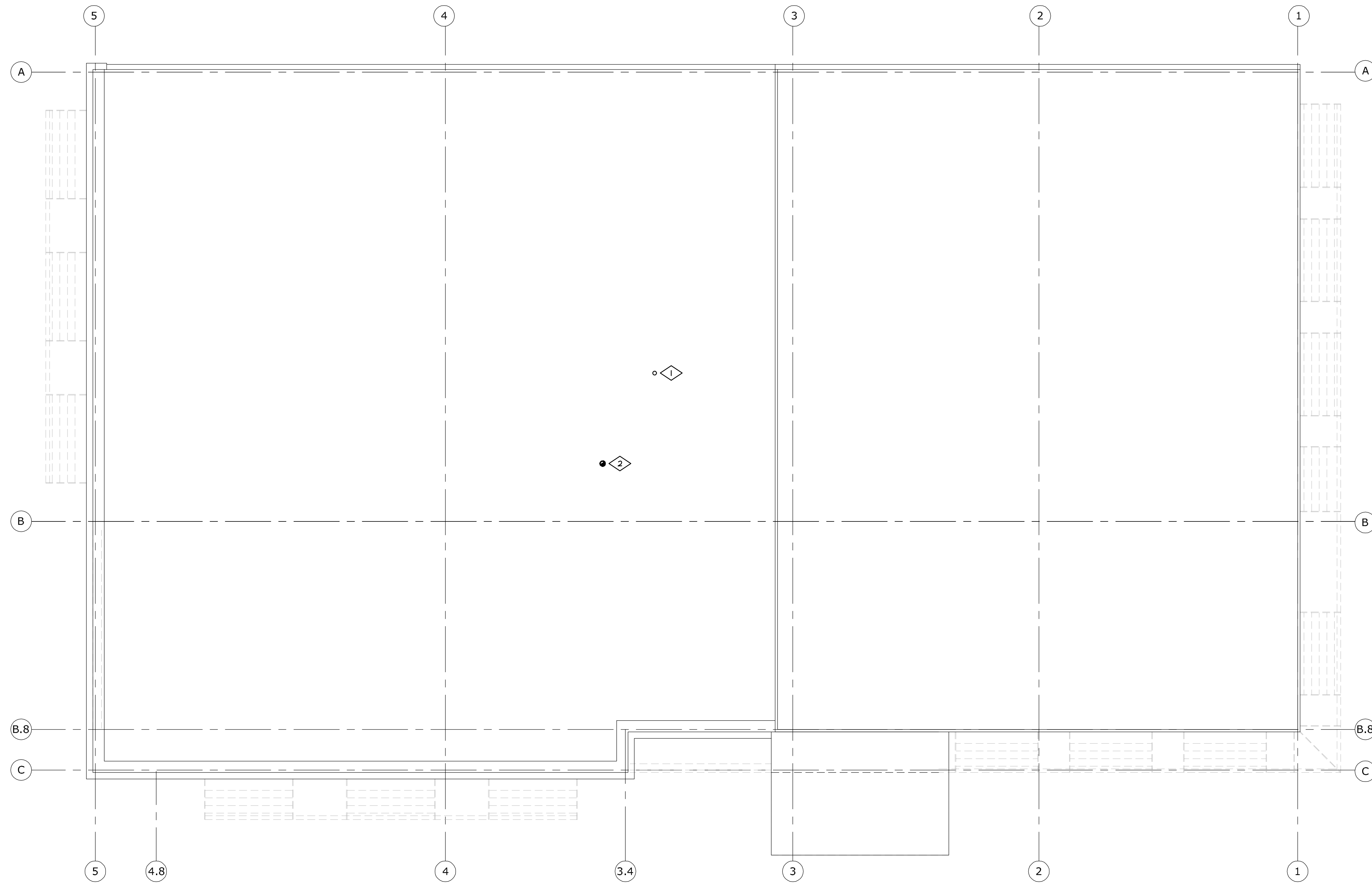
PROJECT NO. 10004
 DRAWN BY: AXH
 CHECKED BY: PRR
 DATE: 3-24-10

SHEET TITLE:
PLUMBING PLAN

SHEET NO.

P-4





ROOF PLUMBING PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. PROVIDE HEAT TRACE ON ALL STORM DRAIN GUTTERS AND DOWNSPOUTS. COORDINATE LENGTHS AND CONNECTIONS WITH ELECTRICAL, SEE DETAIL. HEAT TAPE AND INSULATE PIPING FOR ENTIRE LENGTH OF RUN WITH RAYCHEM #5XL-1, XL-TRACE SELF REGULATING PIPE HEATING OR APPROVED EQUAL. 5.0WATTS/FT. IIS-1. PIPING SHALL BE INSULATED FOR ENTIRE LENGTH. PROVIDE 0.016" SMOOTH ALUMINUM JACKET OVER ALL INSULATED PIPING WITH ALL OTHER JOINTS AND SEAMS SEALED. HEAT TRACE SYSTEM SHALL BE INSTALLED PER MANUFACTURERS' RECOMMENDATIONS ALONG WITH ALL NECESSARY COMPONENTS FOR A COMPLETE AND OPERATIONAL SYSTEM. PROVIDE NECESSARY POWER CONNECTION KIT.

DRAWING NOTES

1. 3" VIB. SEAL PENETRATION WEATHERTIGHT, REFER TO DETAILS.
2. 3" CONCENTRIC AIR-INTAKE AND FLUE TERMINATION SEAL PENETRATION WEATHERTIGHT, REFER TO DETAIL.

DESIGN EDGE

architecture interior design

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1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

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DRAWN BY: AXH
CHECKED BY: PRR
DATE: 3-24-10

SHEET TITLE:
ROOF PLUMBING PLAN

SHEET NO.
P-5



M.E.P. ENGINEERING
3565 S. Yosemite St. (W) 303.936.1633
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info@mep-eng.com www.mep-eng.com



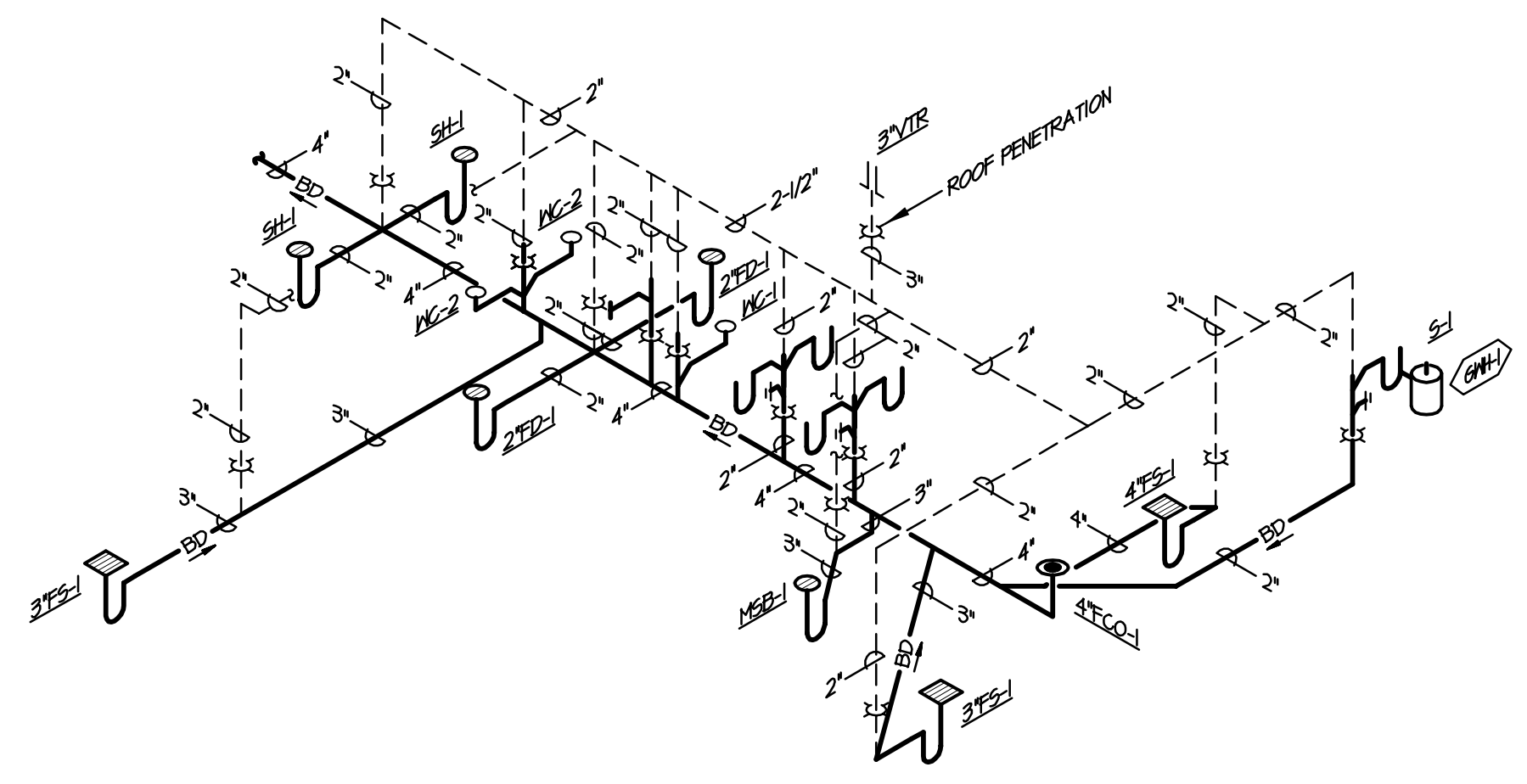
SERVICE CONTRACTOR FACILITY 1
 CITY OF COLORADO SPRINGS METRO TRANSIT
 1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

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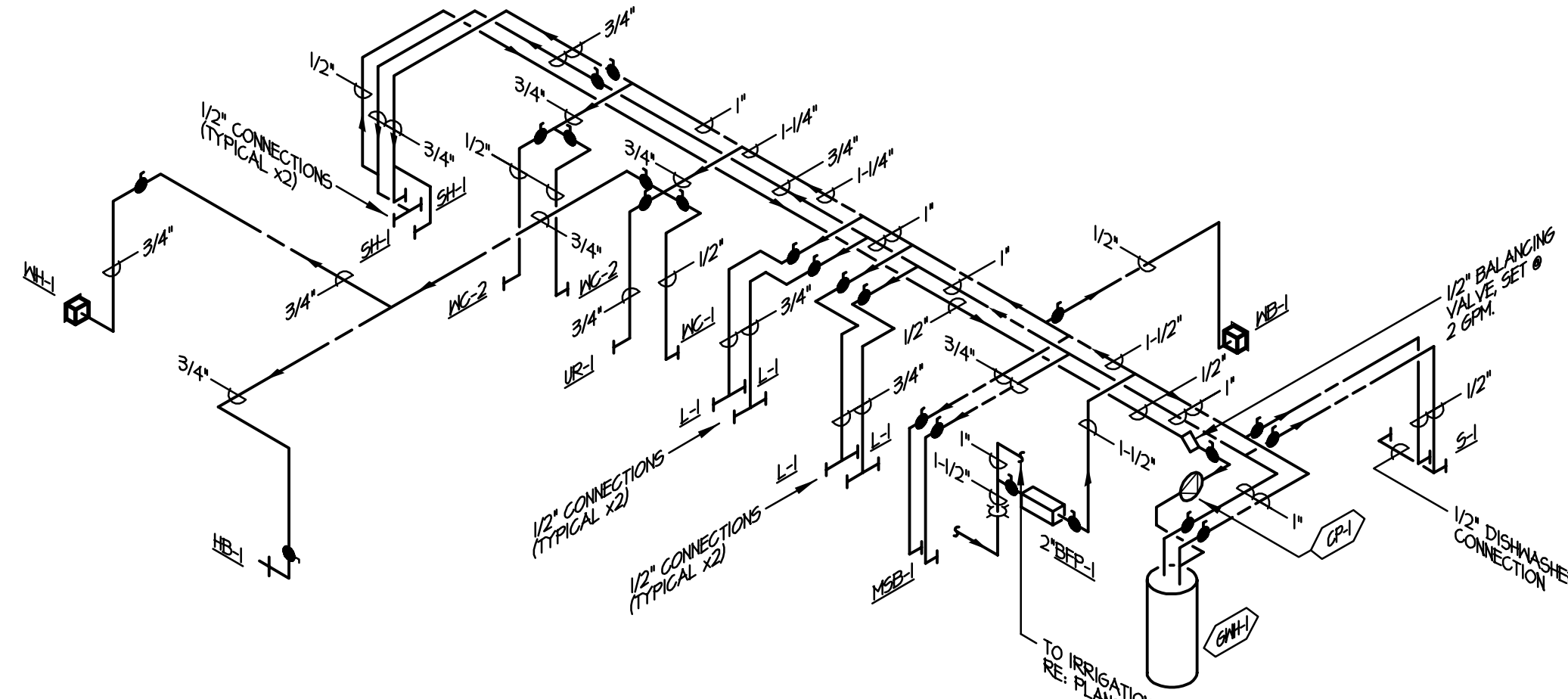
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 CHECKED BY: PRR
 DATE: 3-24-10

SHEET TITLE:
**PLUMBING
 RISER
 DIAGRAMS**

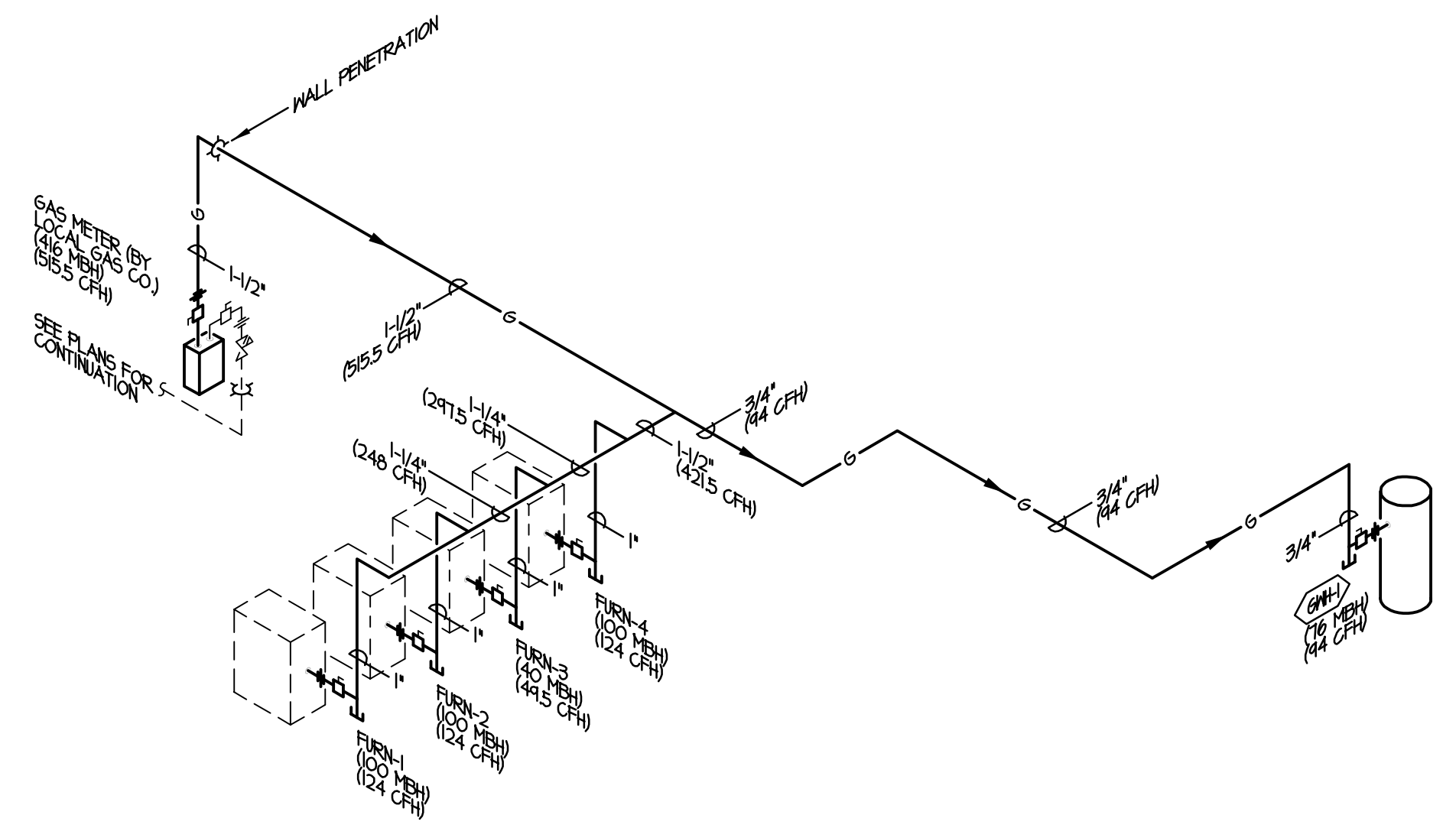
SHEET NO.
P-6



B WASTE AND VENT RISER DIAGRAM
 SCALE: NONE

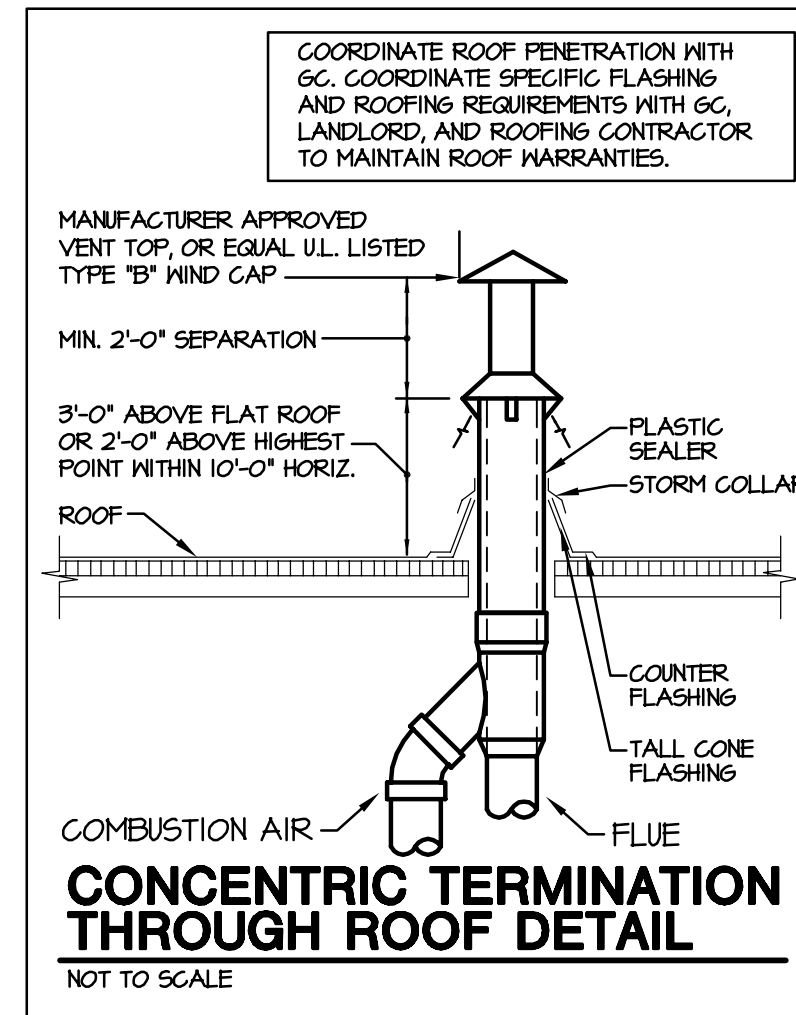
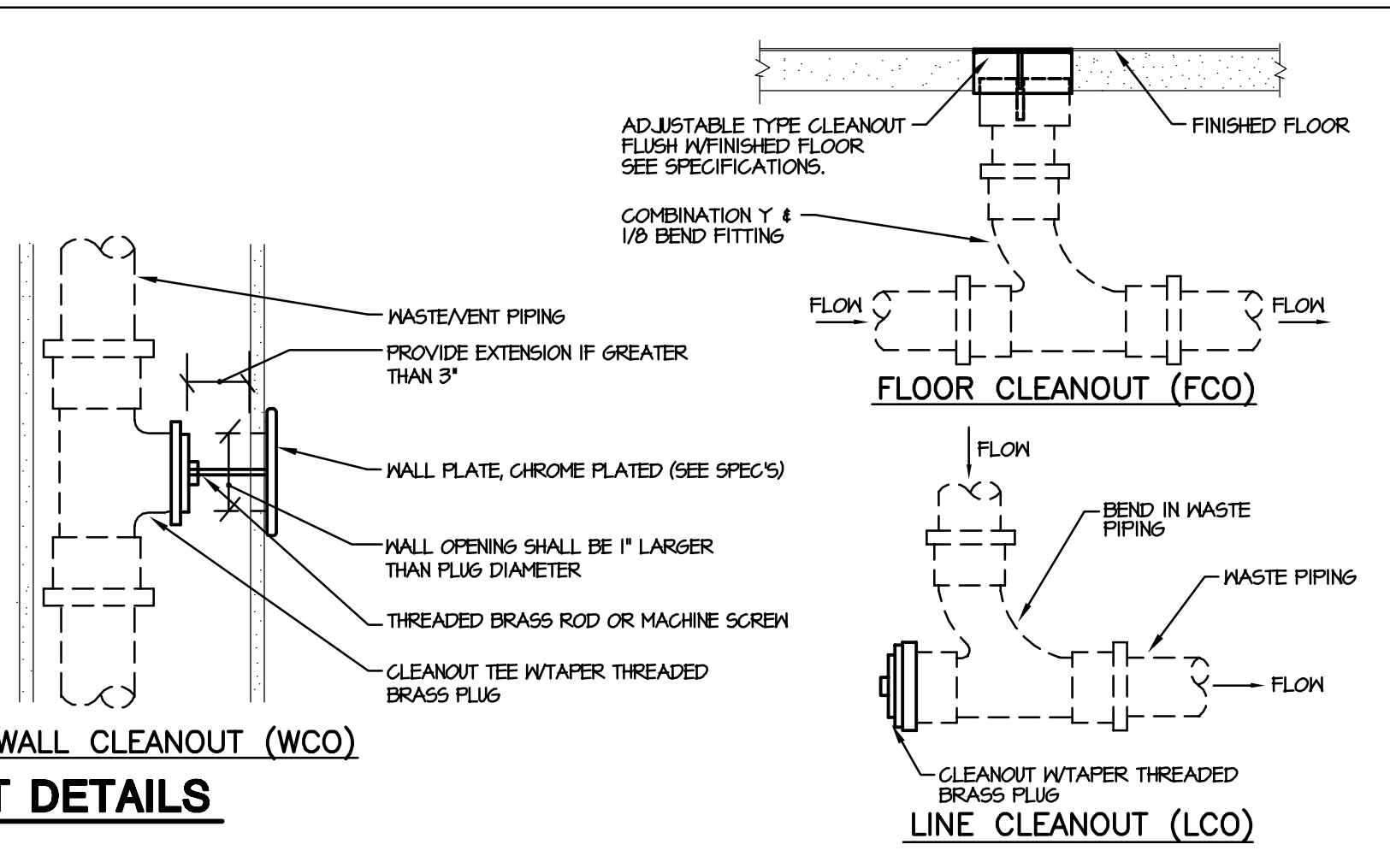
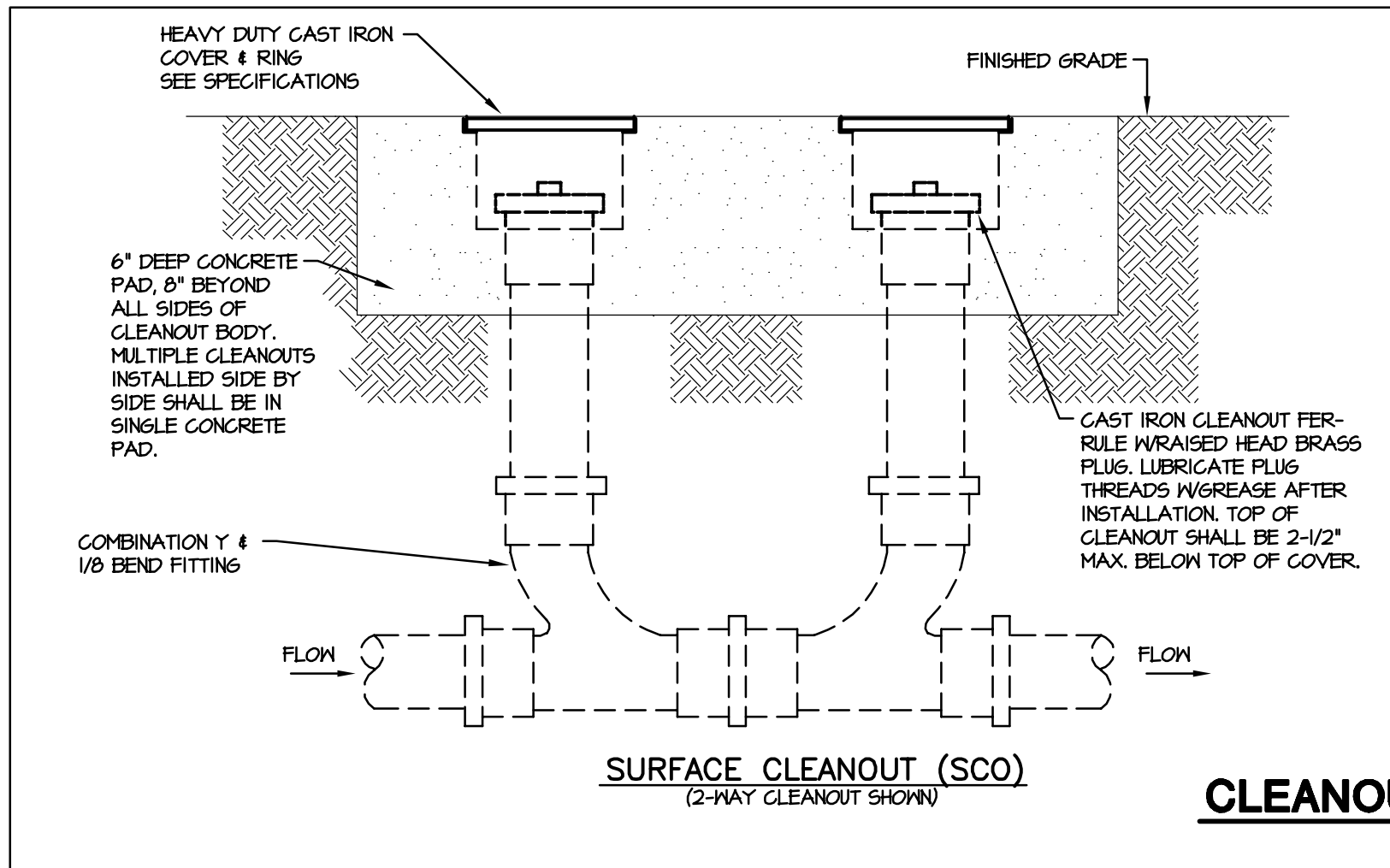
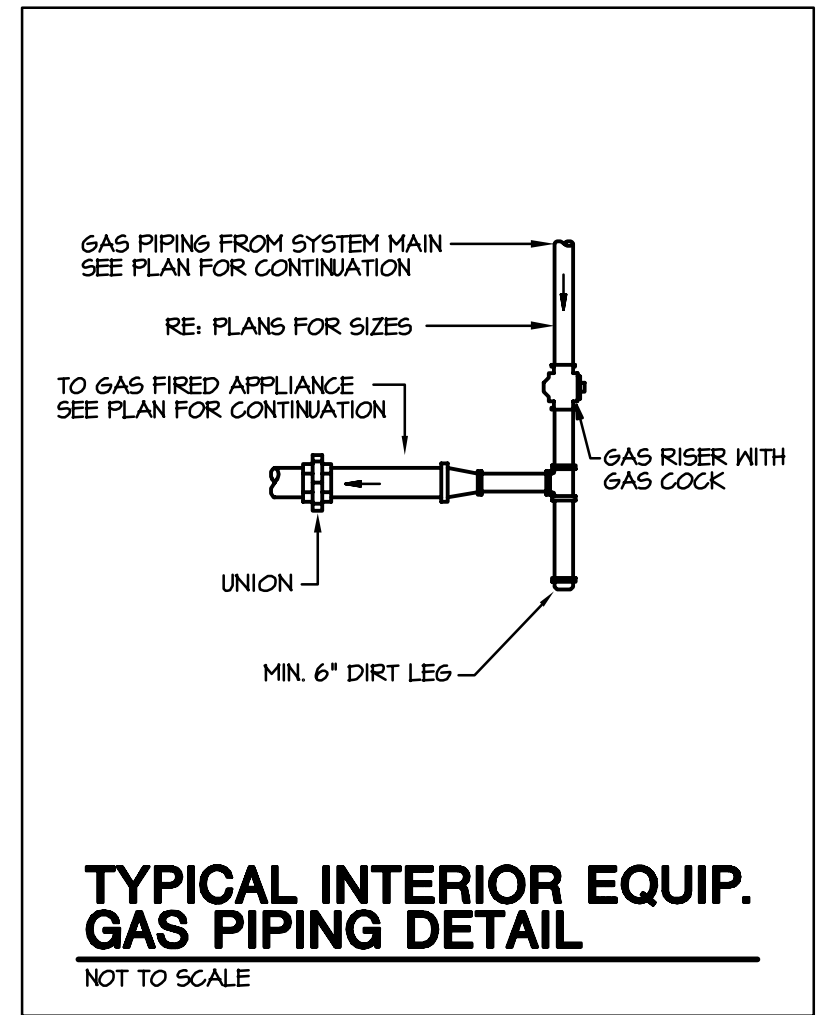
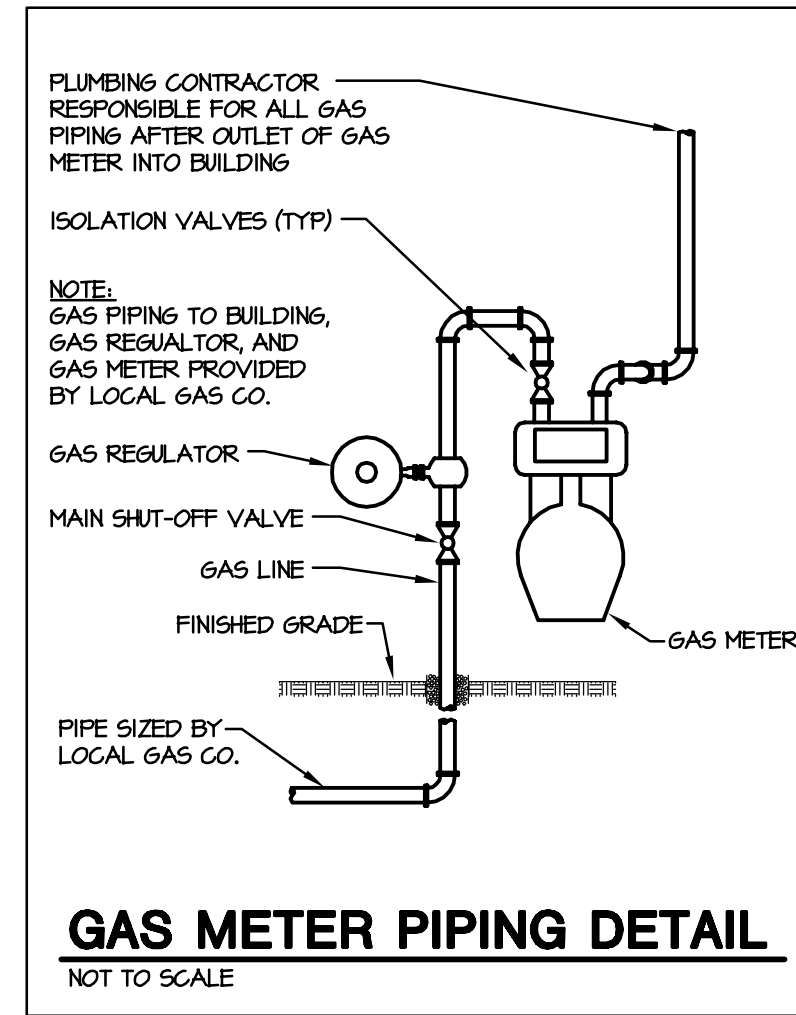
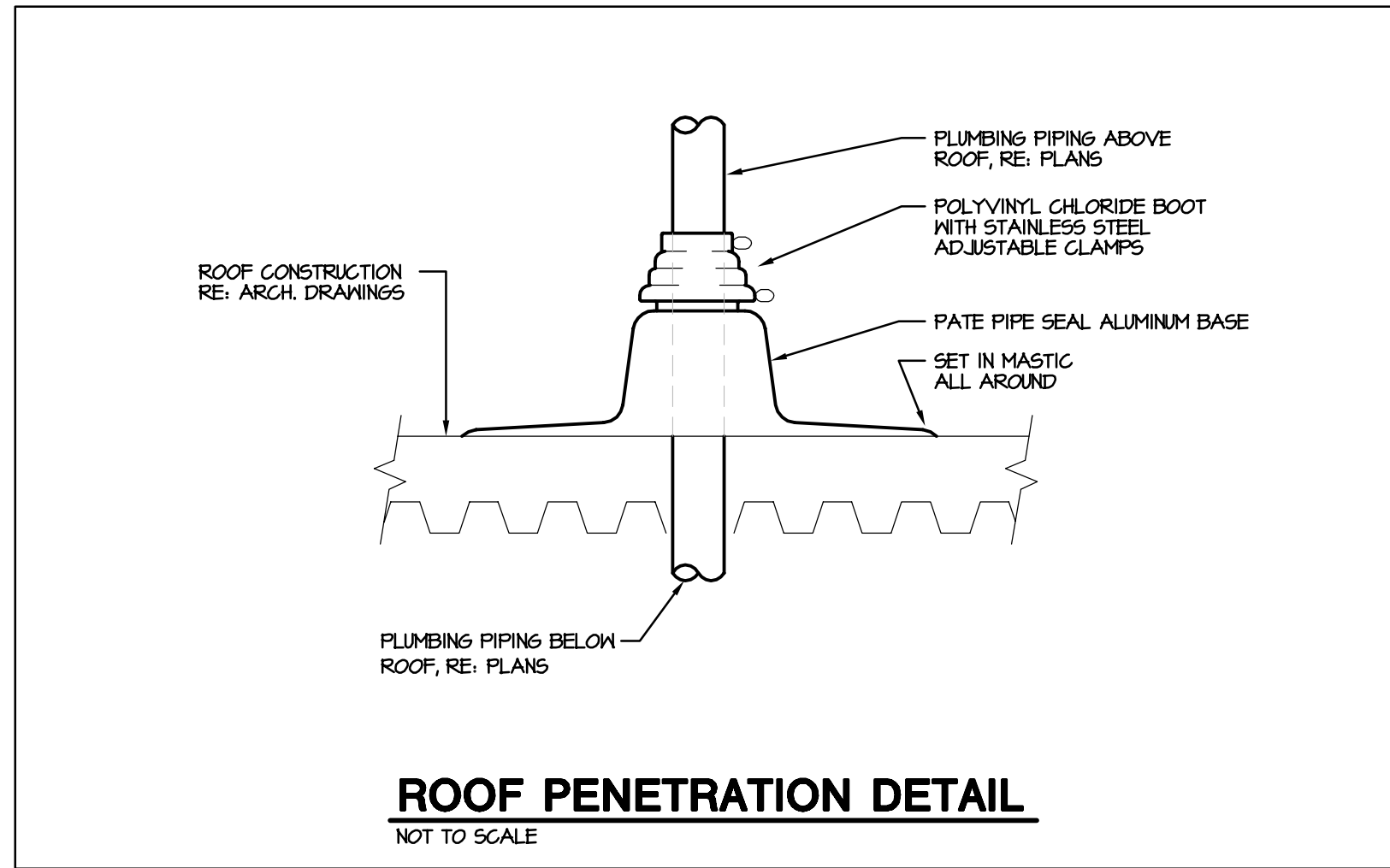
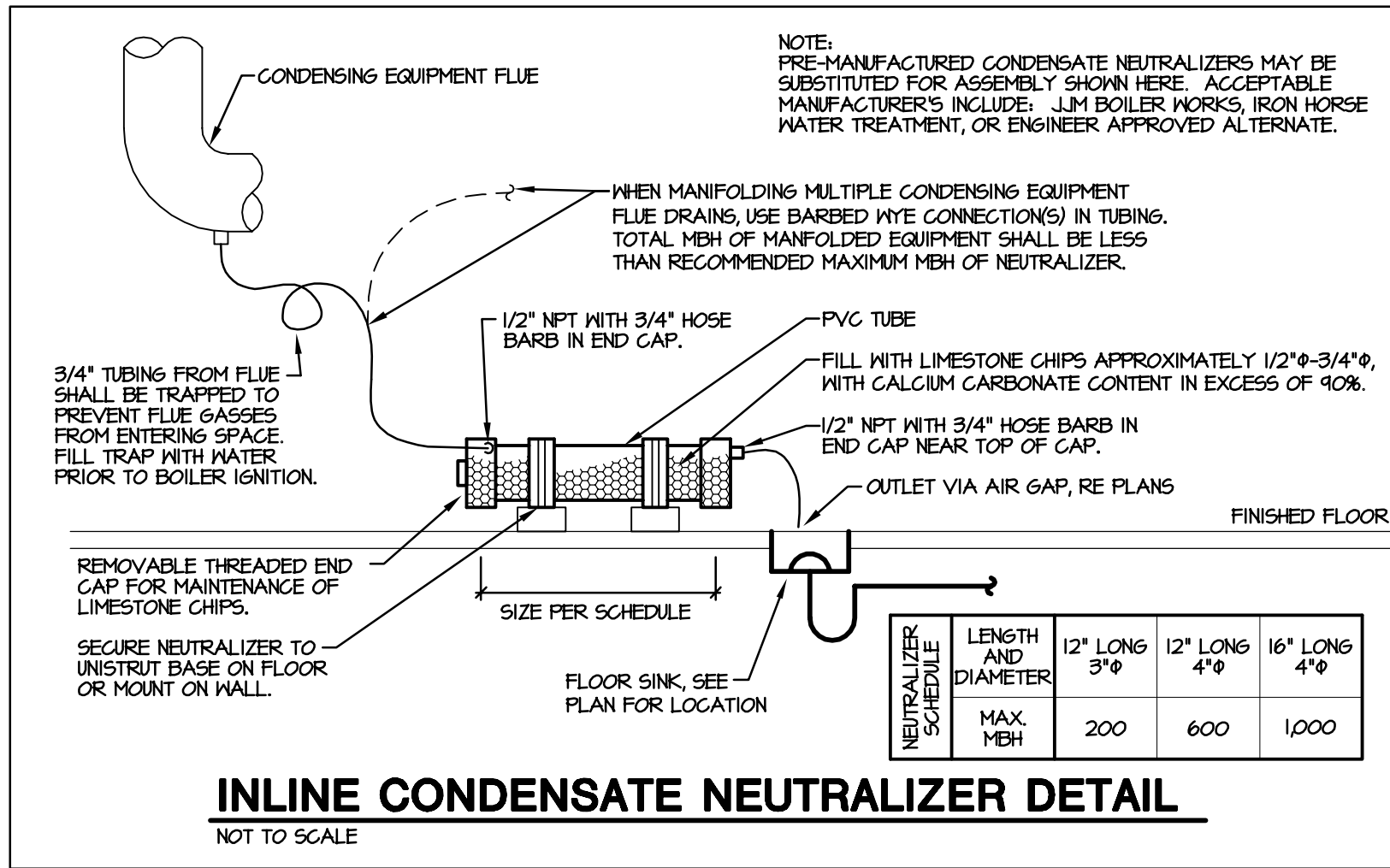
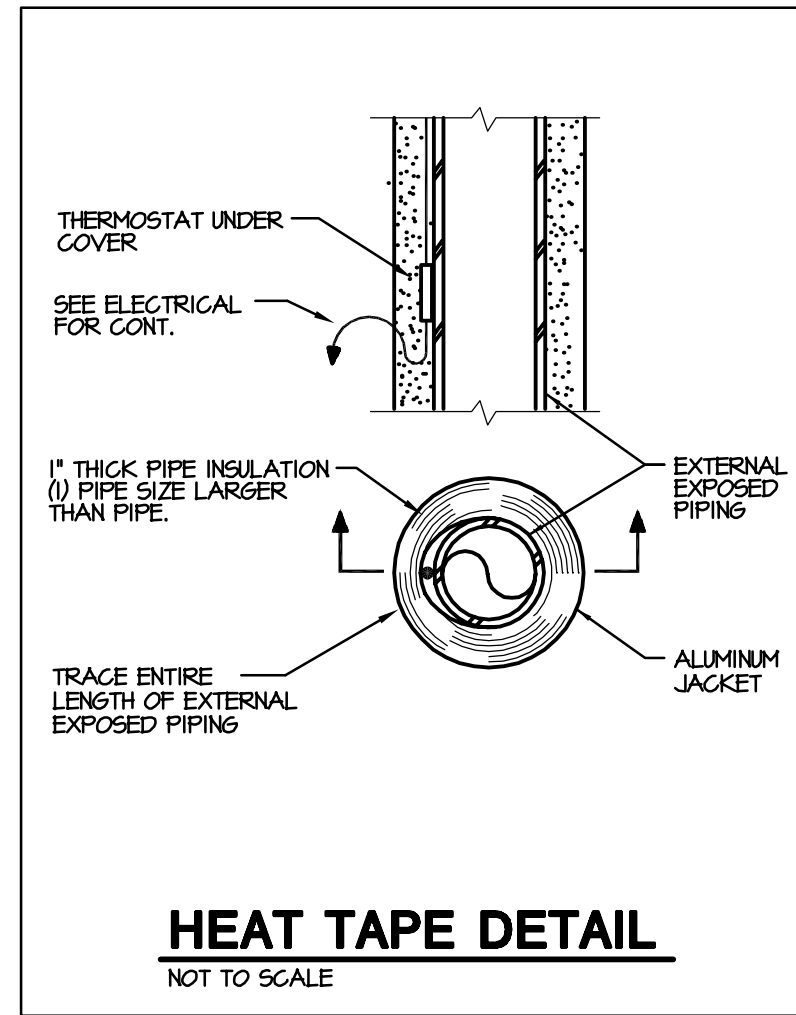
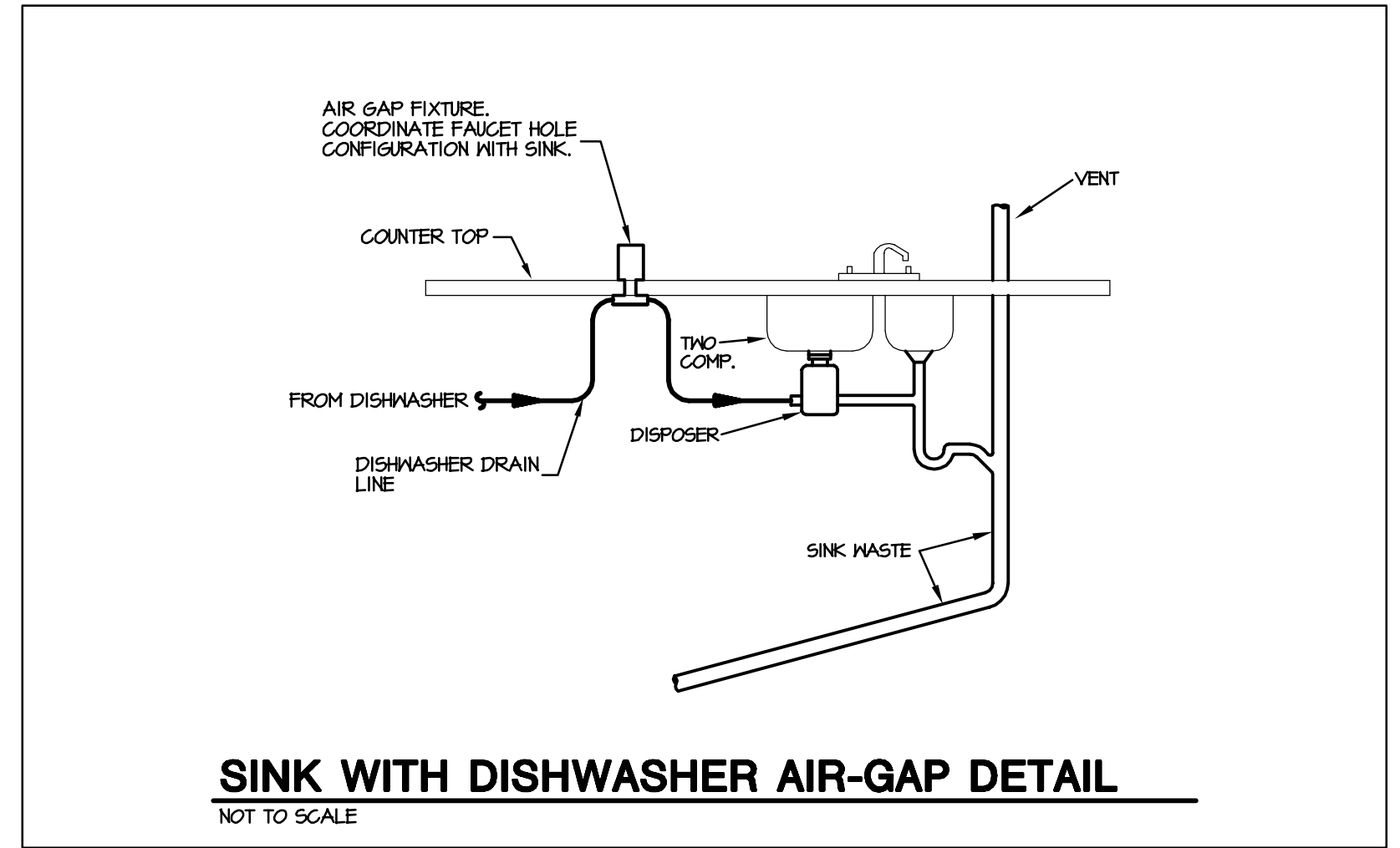
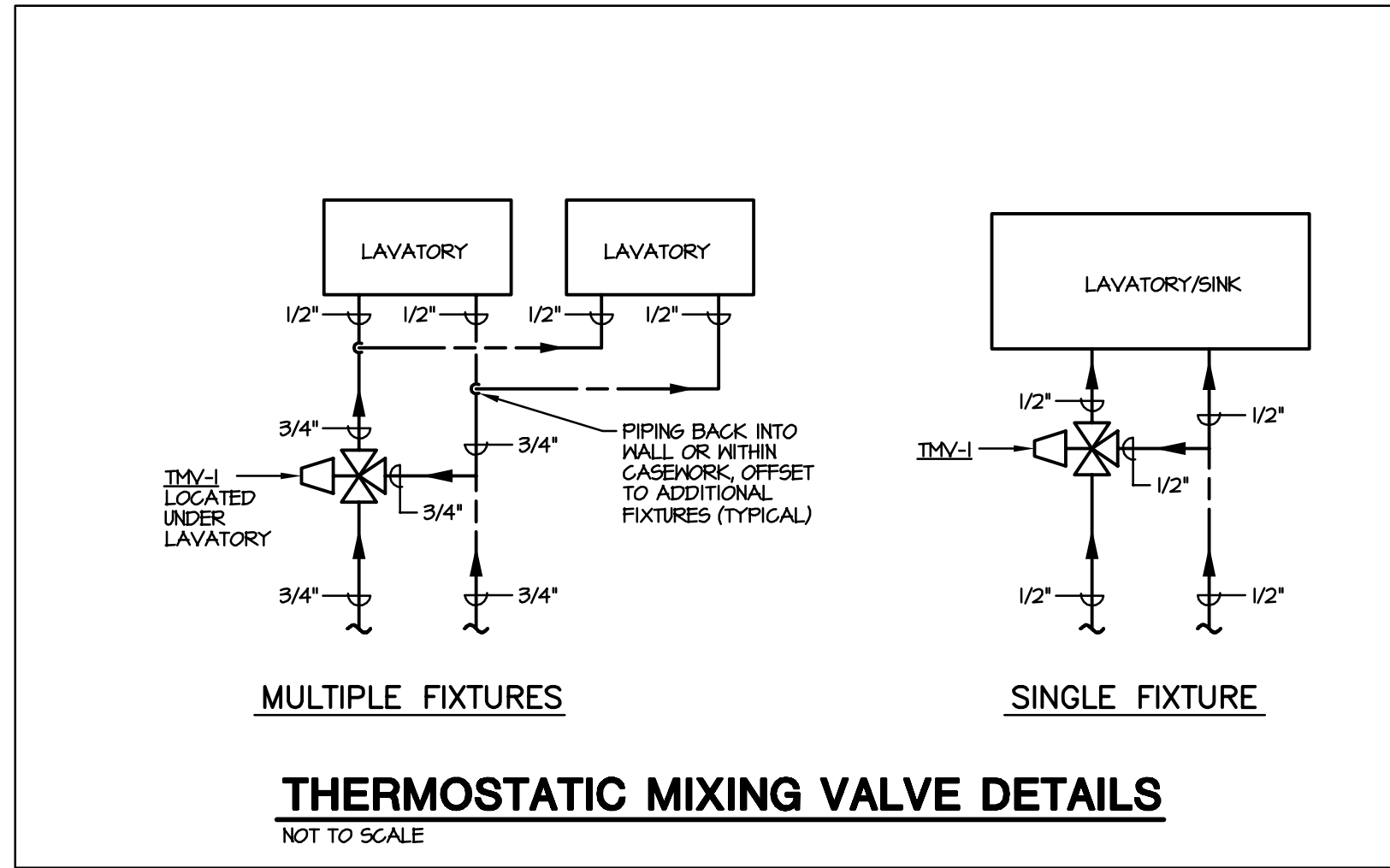
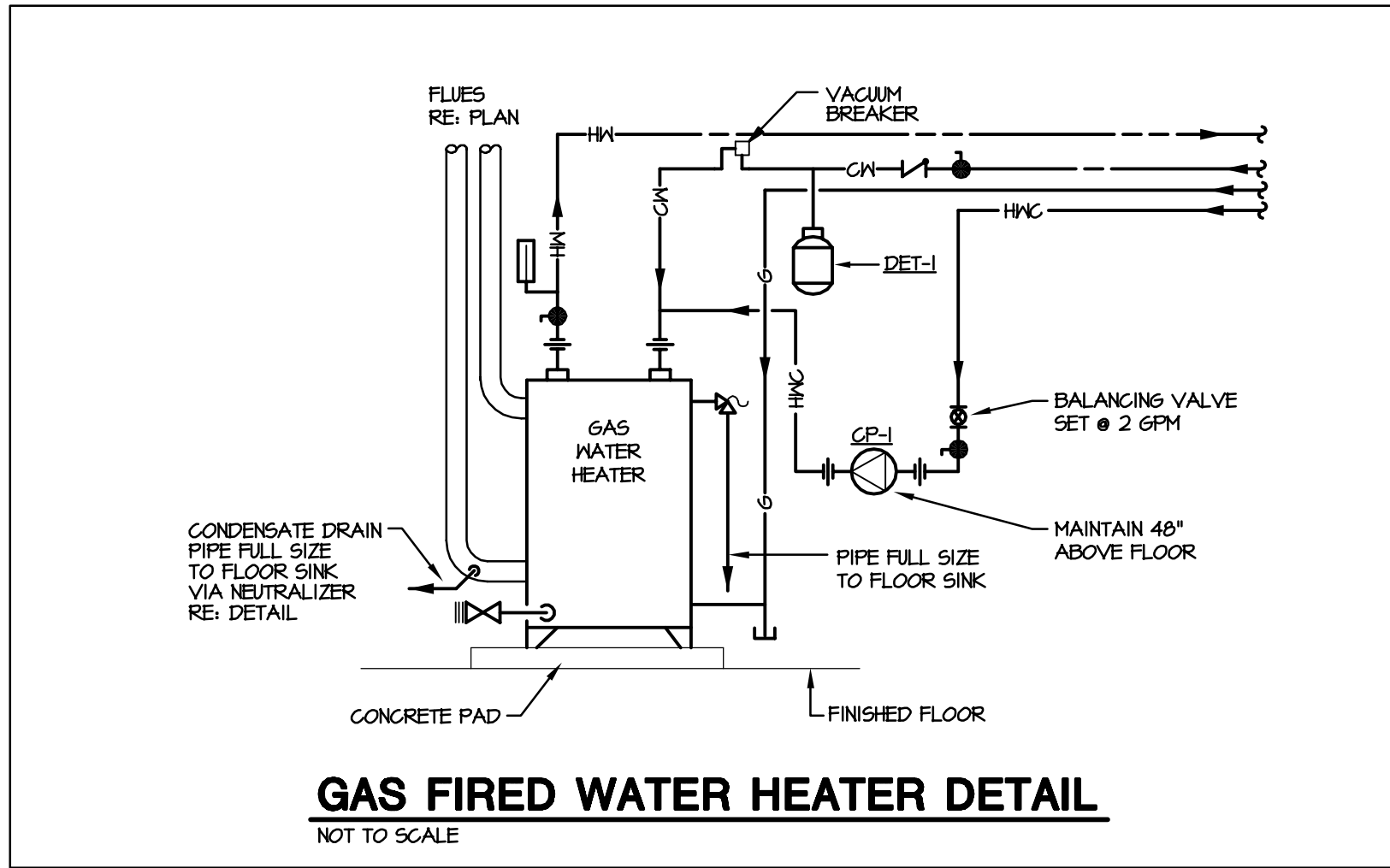
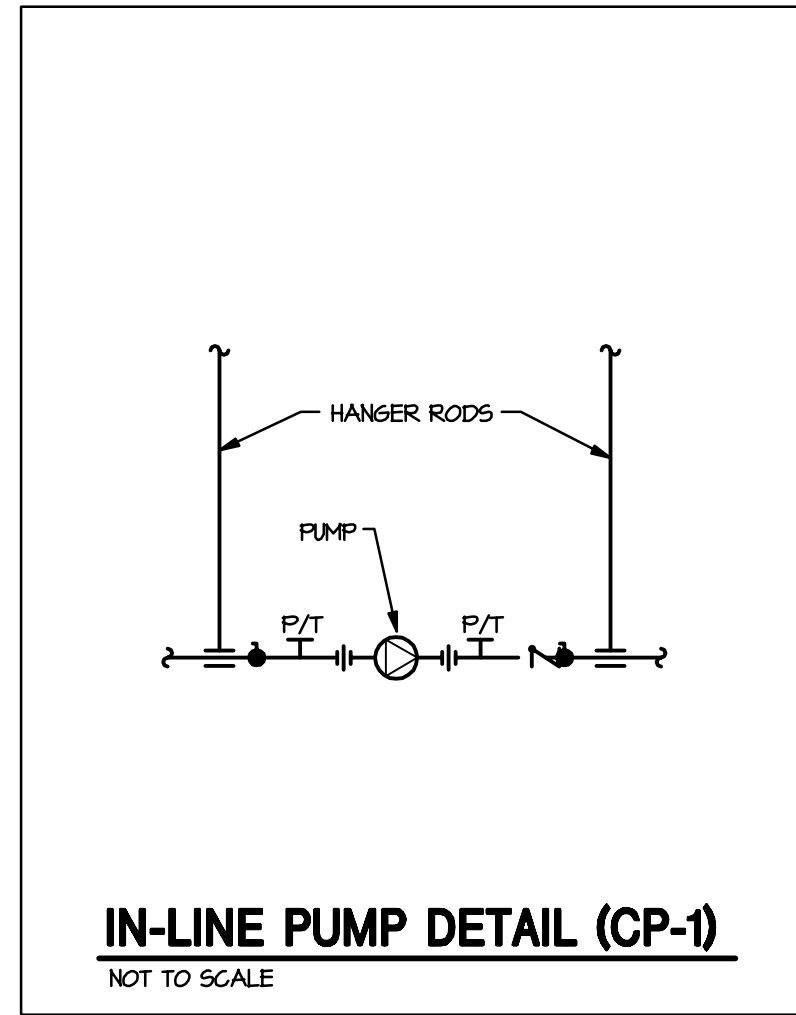
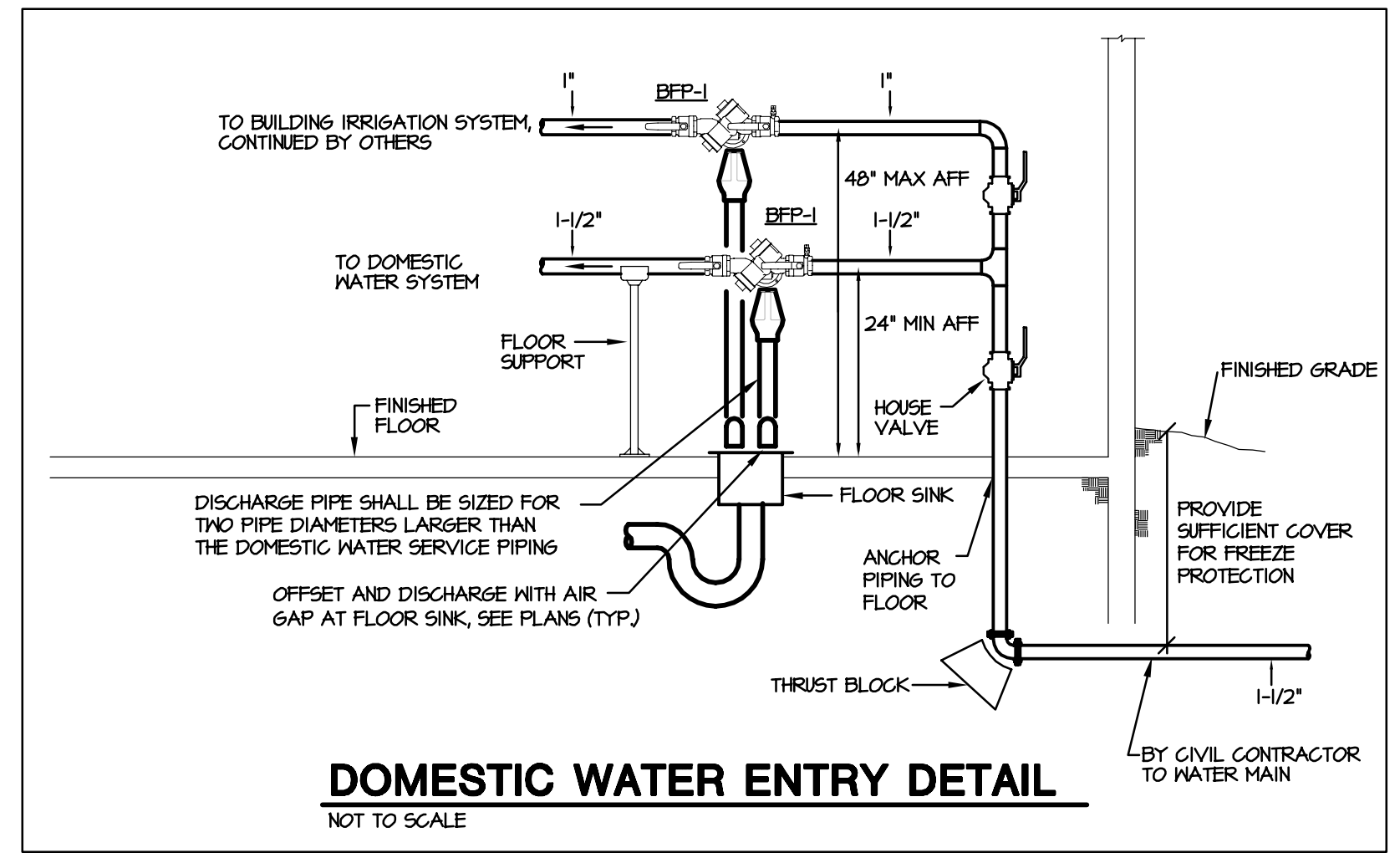
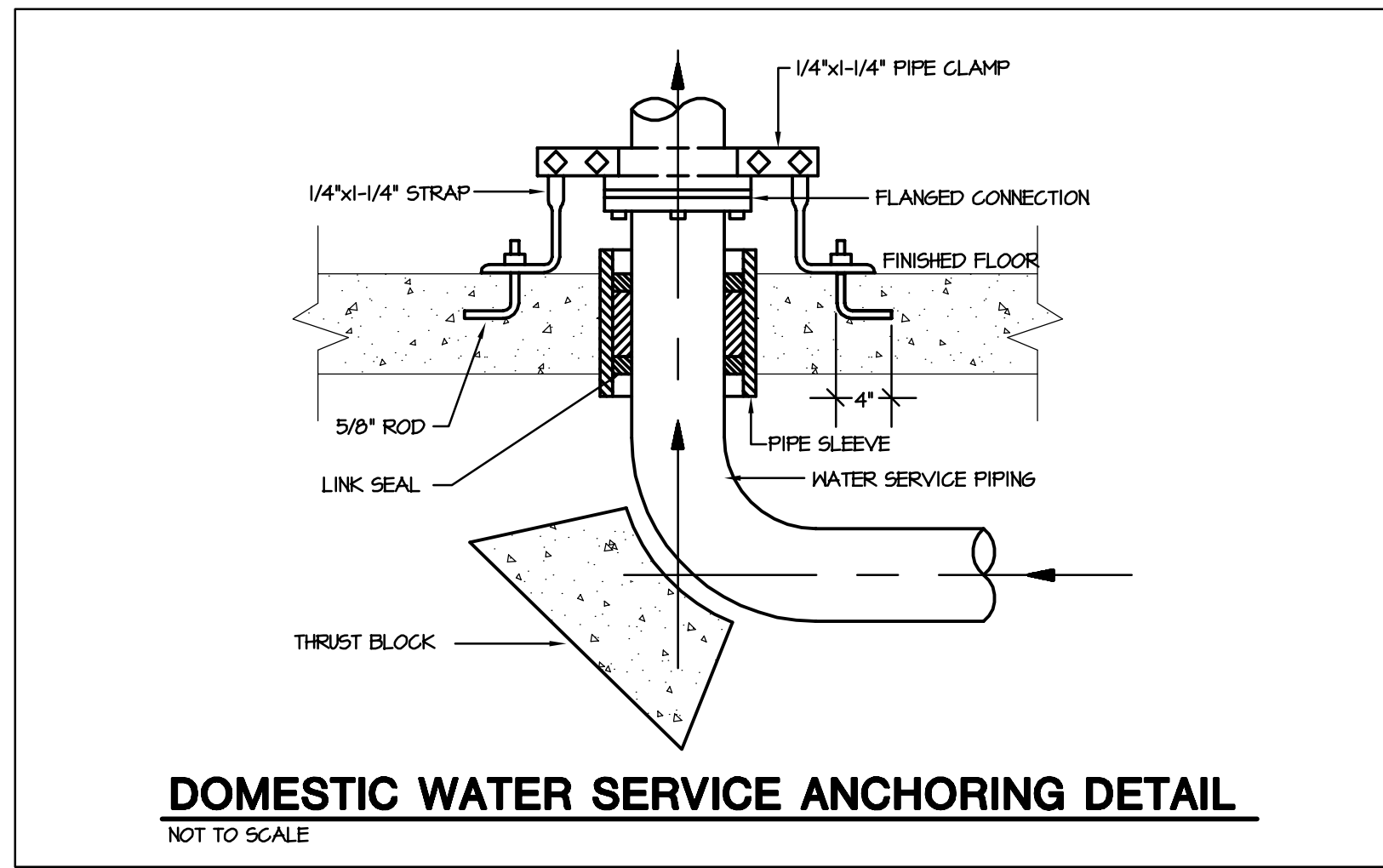
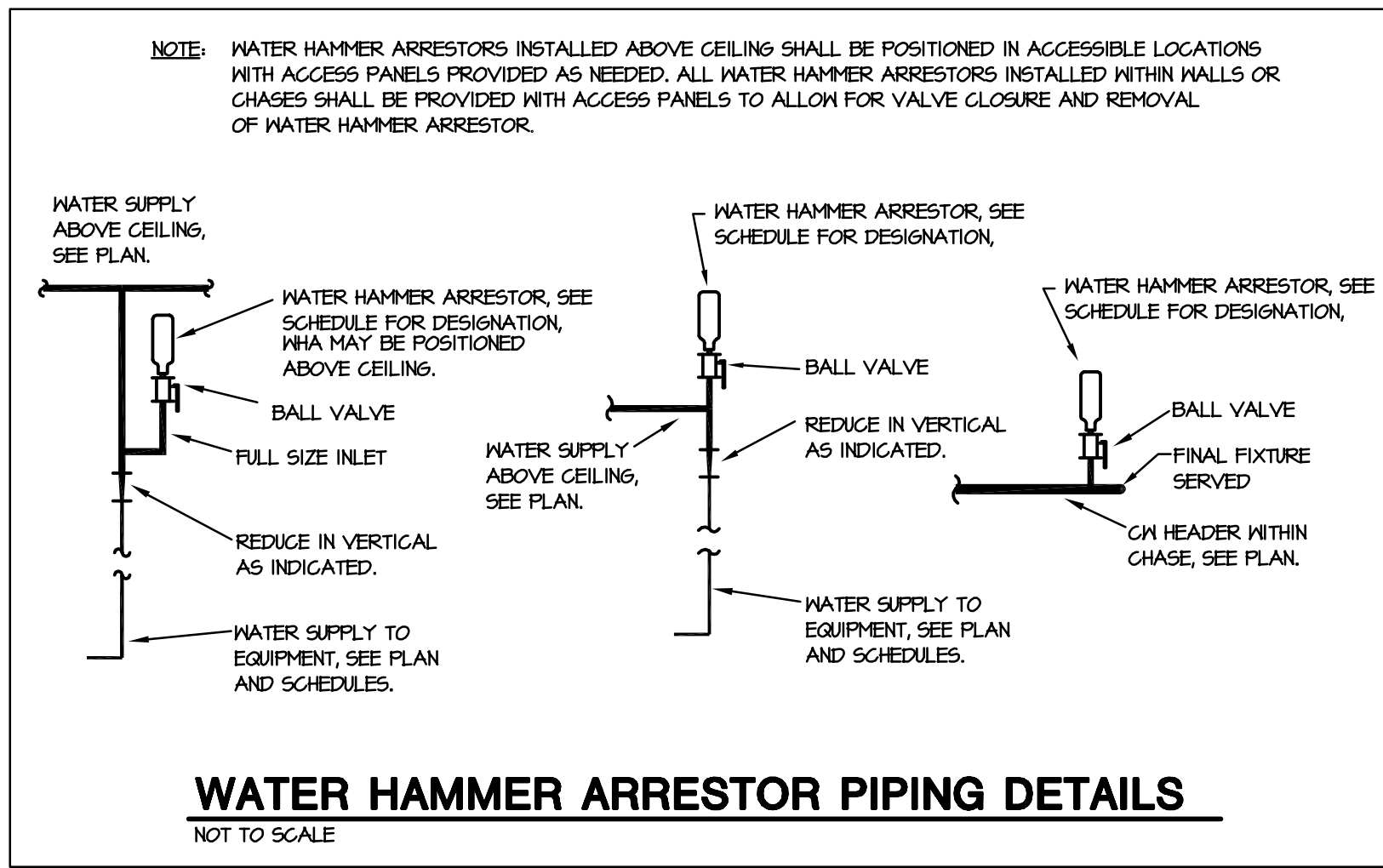
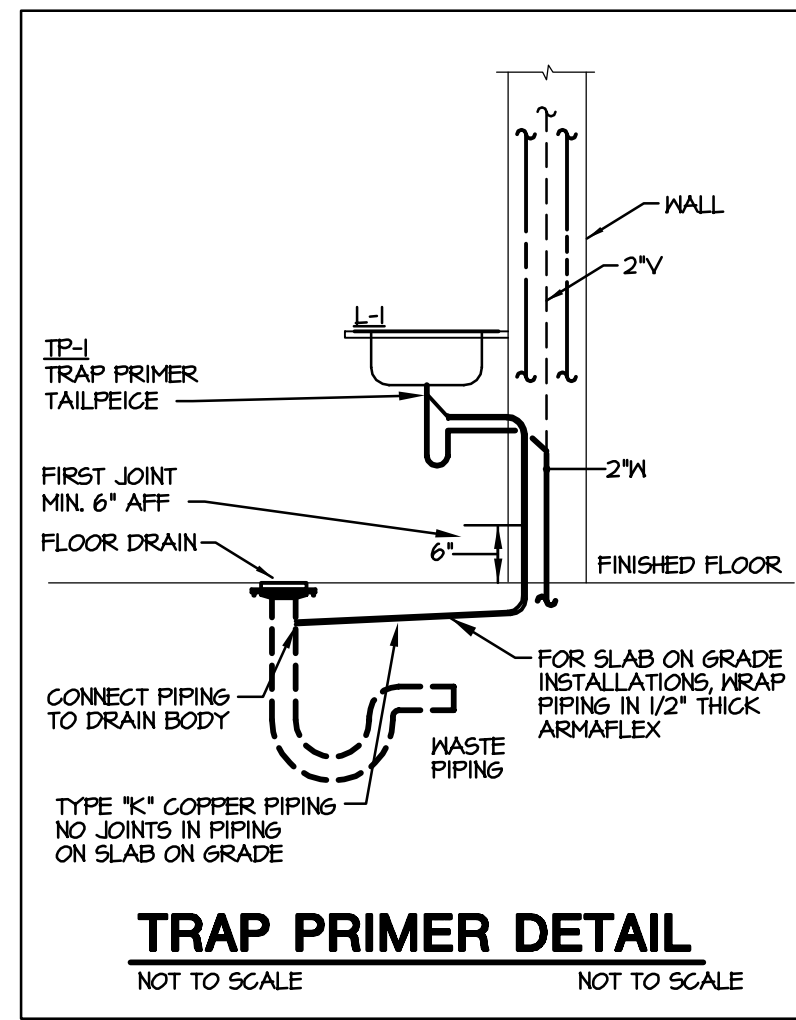


A DOMESTIC WATER RISER DIAGRAM
 SCALE: NONE



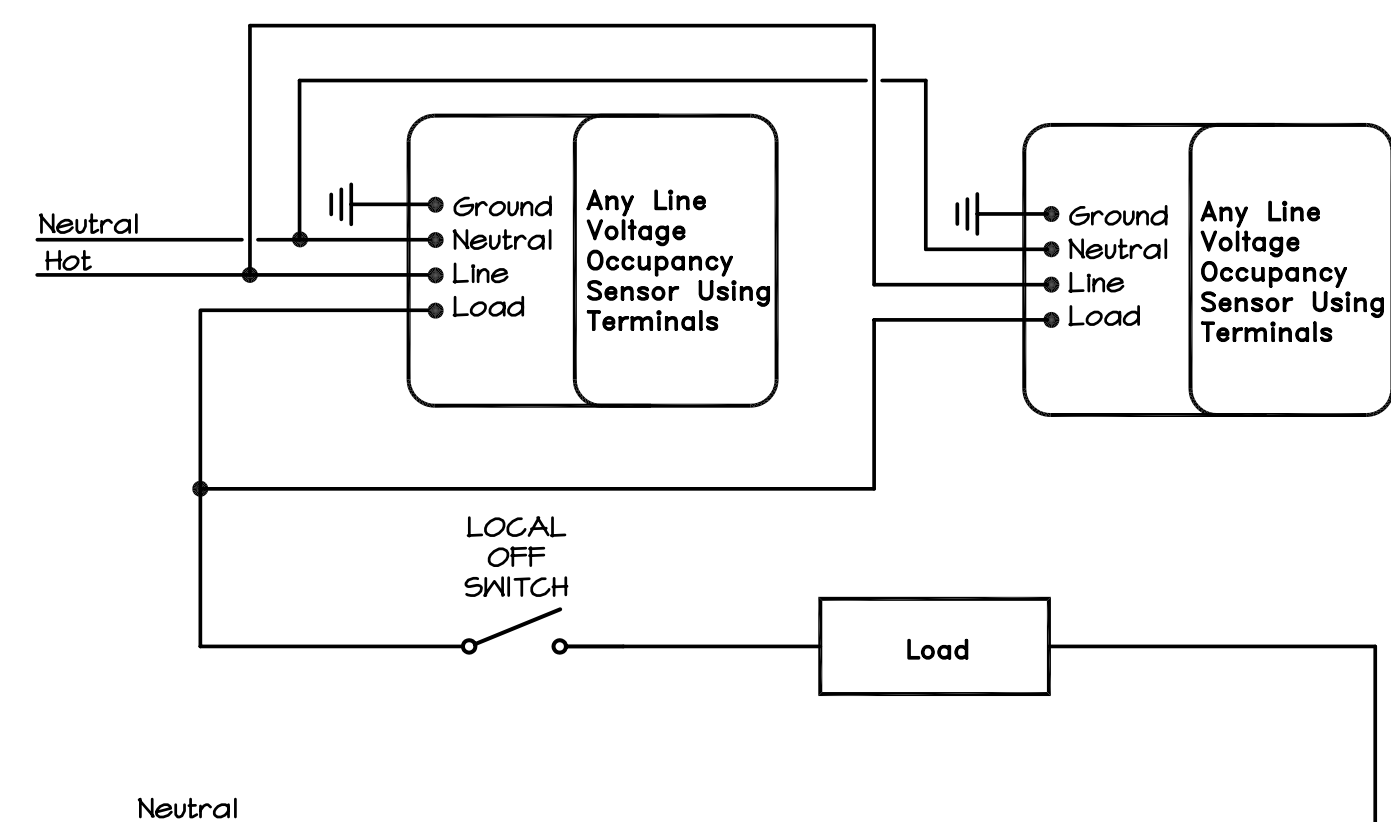
C DOMESTIC NATURAL GAS RISER DIAGRAM
 SCALE: NONE





CLEANOUT DETAILS





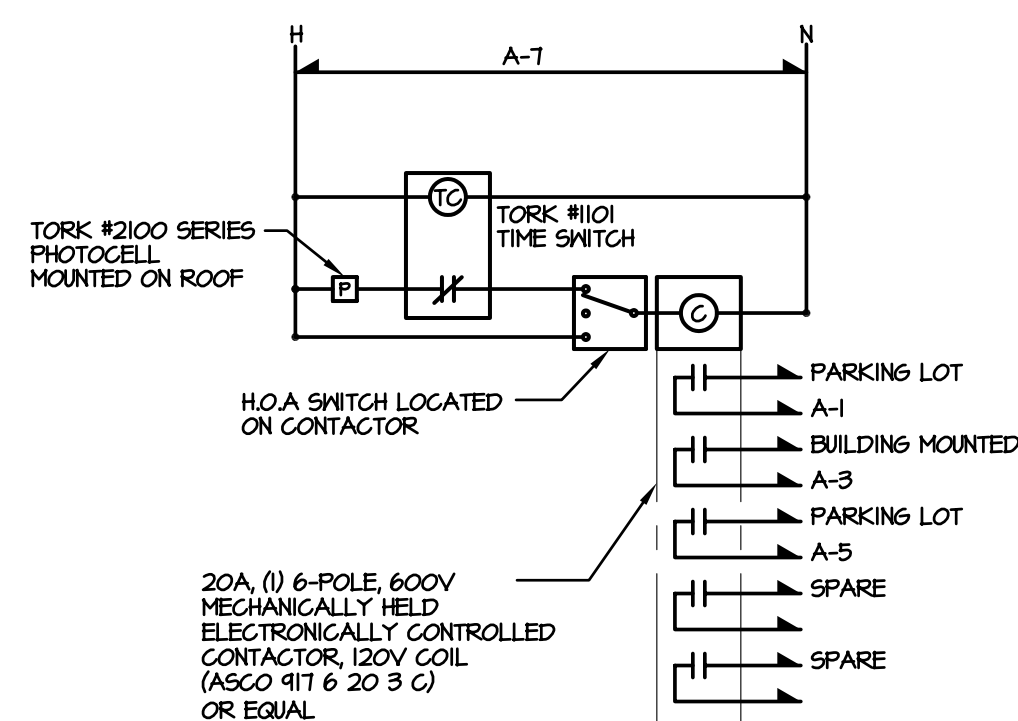
3-Way Application

*Note:
For wiring in a 3-way configuration consult with The Matt Stopper's Technical Department.

CI, DT And UT-355 Occupancy Sensor Standard Schematic

DRIVER'S ROOM 101 LIGHTING CONTROL DETAIL

SCALE: NONE



EXTERIOR LIGHTING CONTROL DETAIL

SCALE: NONE

ELECTRICAL SYMBOLS LEGEND

ALL SYMBOLS INDICATED IN THE LEGEND MAY NOT NECESSARILY BE USED ON PLANS.

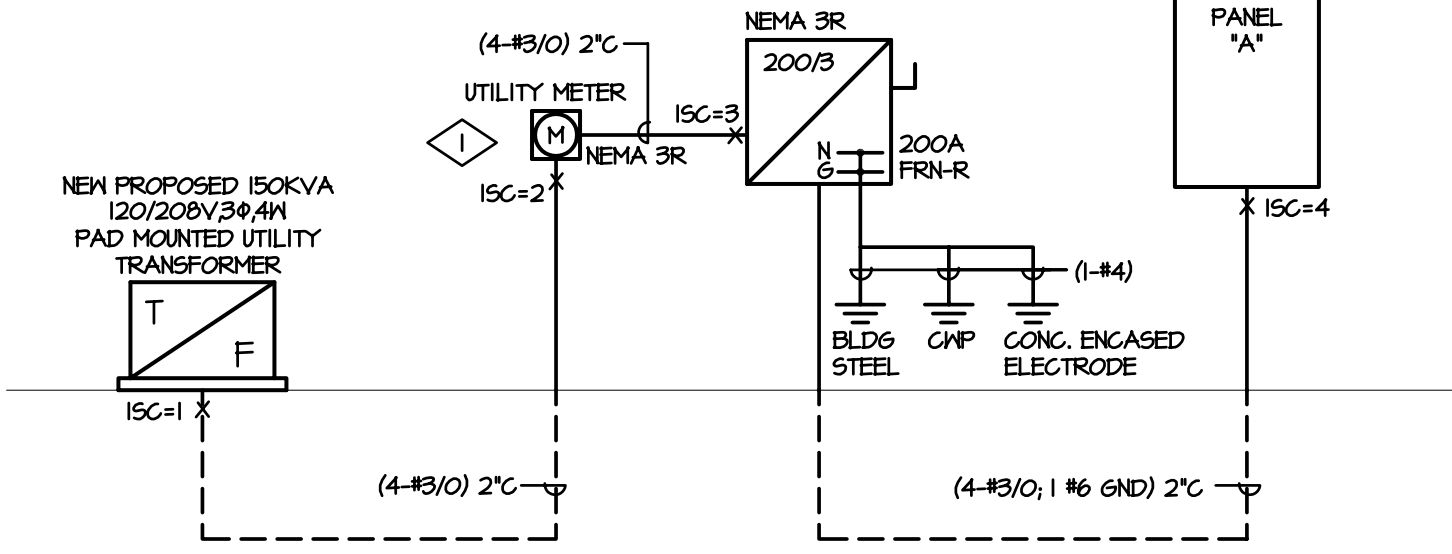
CIRCUITING		POWER SYMBOLS		LIGHTING SYMBOLS		FIRE ALARM SYMBOLS		ONE LINE DIAGRAM SYMBOLS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION		
	CIRCUITING DESIGNATION - OPEN STRIKED, SOLID 120/200V. CIRCUITING - RUN CONCEALED IN WALL OR CEILING. CIRCUITING - RUN CONCEALED IN FLOOR OR GRADE. CONDUIT RISER - TURNED UP, TURNED DOWN. CIRCUITING - CONTINUED AS DESIGNATED. CIRCUITING - END CAP.		FLOOR MOUNTED JUNCTION BOX JUNCTION BOX JUNCTION BOX W/ BLANK COVER SINGLEPLEX RECEPTACLE DUPLEX RECEPTACLE HALF SWITCHED DUPLEX RECEPTACLE DEDICATED DUPLEX RECEPTACLE CEILING MOUNTED DUPLEX RECEPTACLE FOURPLEX RECEPTACLE FOURPLEX RECEPTACLE Dedicated FOURPLEX RECEPTACLE CLG. MOUNTED FOURPLEX RECEPTACLE SPECIAL RECEPTACLE - SEE DRAWING NOTES FLOOR MOUNTED DEVICE FLUSH FLOOR COMBINATION FLOOR BOX NON FUSED DISCONNECT SWITCH FUSED DISCONNECT SWITCH MOTOR STARTER MOTOR ONE, TWO, and THREE BUTTON PUSH SWITCH POWER POLE TIME CLOCK CONTACTOR METER PANEL BOARD CLOCK FALLBOX CURRENT TRANSFORMER TRANSFORMER WATER HEATER		RECESS MOUNTED FLUORESCENT STRIP SURFACE MOUNTED FLUORESCENT STRIP SURFACE MOUNTED 1 x 4' FLUORESCENT SURFACE MOUNTED 2 x 4' FLUORESCENT SURFACE MOUNTED 2 x 2' FLUORESCENT RECESS MOUNTED 1 x 4' FLUORESCENT RECESS MOUNTED 2 x 4' FLUORESCENT RECESS MOUNTED 1 x 4' FLUORESCENT CEILING MOUNTED SINGLE FACE EXIT SIGN W/ TROG EYE CEILING MOUNTED EXIT SIGN HALL MOUNT (ANY FIXTURE TYPE) EMERGENCY BATTERY PACK, "TROG-EYE" EMERGENCY, REMOTE HEAD, SINGLE & DOUBLE DOWNLIGHT/PENDANT FIXTURE HALL MOUNTED EXIT SIGN PORCELAIN KEYLESS LAMPHOLDER TRACK LIGHTING BUILDING EXTERIOR HALL MOUNTED		CEILING MOUNTED FIRE SPEAKER/STROBE SURFACE MOUNTED FIRE SPEAKER/STROBE CEILING MOUNTED FIRE SPEAKER REMOTE INDICATOR LAMP MANUAL PULL STATION FLOOR SWITCH TAMPER SWITCH PRESSURE SWITCH CEILING/WALL MOUNTED STROBE FIRE HORN FIRE HORN WITH STROBE MAGNETIC DOOR HOLD OPEN FIRE ALARM CONTROL PANEL ANNUNCIATOR PANEL DUCT DETECTOR FIRE SMOKE DAMPER HEAT DETECTOR SMOKE DETECTOR FIREFIGHTERS PHONE JACK/ WALL PHONE		PANEL BOARD CURRENT TRANSFORMER ENCLOSURE FULL BOX FUSED DISCONNECT SWITCH NON-FUSED DISCONNECT SWITCH TRANSFORMER (PLAN VIEW) PAD MOUNTED TRANSFORMER (ONE-LINE) TRANSFER SWITCH OVERHEAD POLE MOUNTED TRANSFORMER BANK		FUSED DISCONNECT SWITCH WITHIN SWITCHBOARD SPARE SWITCH WITHIN SWITCHBOARD SPACE WITHIN SWITCHBOARD CIRCUIT BREAKER SERVICE HEATER HEAD CURRENT TRANSFORMER GROUNDING CONNECTION MOTOR GENERATOR METER
LINE TYPES AND LINEWEIGHTS		GENERAL		TELECOMMUNICATION SYMBOLS		MISCELLANEOUS SYMBOLS		ABBREVIATIONS			
NEW CIRCUITING - CONTINUOUS AND BOLD NEW CIRCUITING - UNDER FLOOR OR GRADE - LARGER DASHED AND BOLD EXISTING CIRCUITING - CONTINUOUS AND THIN DEMOLITION CIRCUITING - LARGER DASHED AND THIN NEW AND RELOCATED DEVICES AND FIXTURES - CONTINUOUS AND BOLD EXISTING DEVICES AND FIXTURES - CONTINUOUS AND THIN DEMOLITION DEVICES AND FIXTURES - SHALLER DASHED AND THIN		REVISION DELTA DRAWING NOTE MECHANICAL EQUIPMENT KITCHEN EQUIPMENT		TELEPHONE OUTLET, SINGLE GANG BOX, F CONDUIT STRIP TO ACCESSIBLE CEILING TELEPHONE/DATA OUTLET, DOUBLE GANG BOX, F CONDUIT STRIP TO ACCESSIBLE CEILING DATA OUTLET, SINGLE GANG BOX, F CONDUIT STRIP TO ACCESSIBLE CEILING FLOOR DATA OUTLET - (S) SURFACE, (F) FLUSH FLOOR TELEPHONE/DATA OUTLET - (S) SURFACE, (F) FLUSH CABLE TV OUTLET - (S) SURFACE, (F) FLUSH		CARD READER REMOTE TEST SWITCH TIME CLOCK PHOTOCELL MUSIC OR PAGING SPEAKER THERMOSTAT, LINE VOLTAGE SECURITY MOTION SENSOR, WALL MOUNTED SECURITY MOTION SENSOR, CEILING MOUNTED EMERGENCY POWER OFF BELL DOORBELL BUZZER TELEVISION CABLE OUTLET SECURITY CAMERA INTERCOM PUSH BUTTON MICROPHONE JACK COMBINATION CLOCK/SPEAKER BOX		AC ABOVE COUNTER AFF ABOVE FINISHED FLOOR AFCI ARC FAULT CIRCUIT INTERRUPTER BLDG BUILDING CLG. CEILING MOUNTED CWP COLD WATER PIPE EXISTING EPO EMERGENCY POWER OFF EH EMERGENCY POWER CIRCUIT ENC ELECTRIC WATER COOLER EWH ELECTRIC WATER HEATER FF FF FLOOR FINISH THROUGH FC GENERAL CONTRACTOR GND GROUND GFCI/GFI GROUND FAULT CIRCUIT INTERRUPTER IG ISOLATED GROUND DEVICE MC MECHANICAL CONTRACTOR NI NON NC NORMALLY CLOSED NG NOT IN CONTRACT NL NIGHT LIGHT NO NORMALLY OPEN NTS NOT TO SCALE (PART) PARTIAL CIRCUIT RL RELOCATED RTS REMOTE TEST SWITCH SH SURFACE MOUNT T&D TELEPHONE AND DATA OUTLET TYP TYPICAL UF UNDER FLOOR HP HEATER/PROOF - NEW BR MF WALL PHONE 654 AFF.			

DRAWING NOTES

- VERIFY WITH COLORADO SPRINGS UTILITIES IF COLD SEQUENCING IS REQUIRED PRIOR TO ROUGH-IN.

Isc CALCULATION - 3 PHASE

Point #1 - At The Utility Transformer $Isc = 34,800 \text{ 150 kVA}$
Point #2 - At Utility Meter $f = \frac{1.732 \times \text{length} \times Isc(\text{prev})}{\sqrt{3} \times \text{runs} \times \text{wire factor} \times \text{X voltage}}$ $f = \frac{1.732 \times 30 \times 34,800}{1 \times 12,843 \times 208} = 0.671$ $M = \frac{1}{1+f} = 0.596$ $Isc = Isc(\text{prev}) \times M = 20,753$
Point #3 - At Fused Disconnect $f = \frac{1.732 \times \text{length} \times Isc(\text{prev})}{\sqrt{3} \times \text{runs} \times \text{wire factor} \times \text{X voltage}}$ $f = \frac{1.732 \times 5 \times 20,753}{1 \times 12,843 \times 208} = 0.067$ $M = \frac{1}{1+f} = 0.937$ $Isc = Isc(\text{prev}) \times M = 19,445$
Point #4 - At 200A Panel $f = \frac{1.732 \times \text{length} \times Isc(\text{prev})}{\sqrt{3} \times \text{runs} \times \text{wire factor} \times \text{X voltage}}$ $f = \frac{1.732 \times 5 \times 19,445}{1 \times 24,336 \times 208} = 0.034$ $M = \frac{1}{1+f} = 0.968$ $Isc = Isc(\text{prev}) \times M = 18,813$



ONE-LINE DIAGRAM

SCALE: N.T.S.



SERVICE CONTRACTOR FACILITY 1
CITY OF COLORADO SPRINGS METRO TRANSIT
1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

ISSUE DATES:

PROJECT NO. 10004
DRAWN BY: KSP
CHECKED BY: RCC
DATE: 3-30-10

SHEET TITLE:
LEGEND, DETAILS AND ONE-LINE DIAGRAM

SHEET NO.





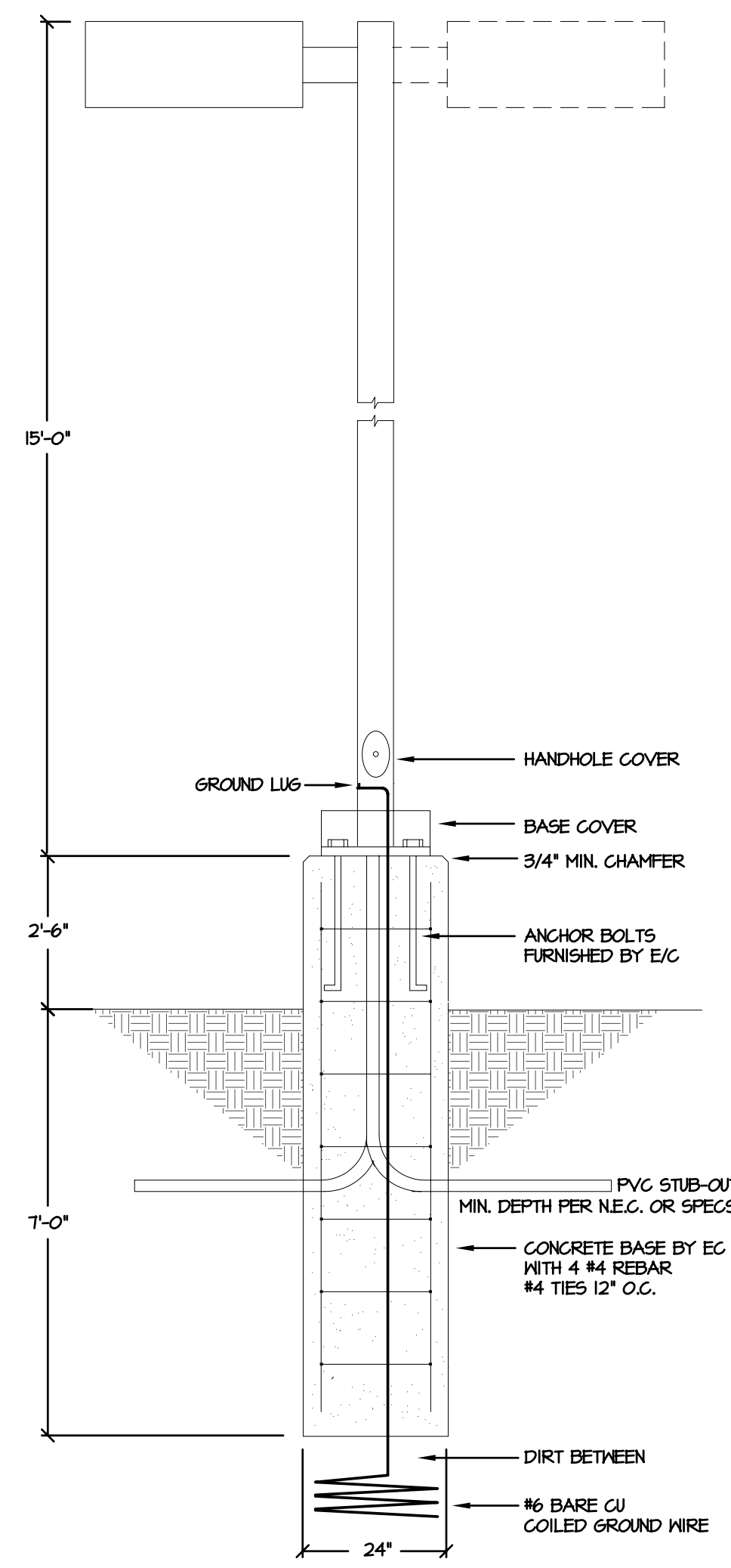
SERVICE CONTRACTOR FACILITY 1
CITY OF COLORADO SPRINGS METRO TRANSIT
1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

ISSUE DATES:

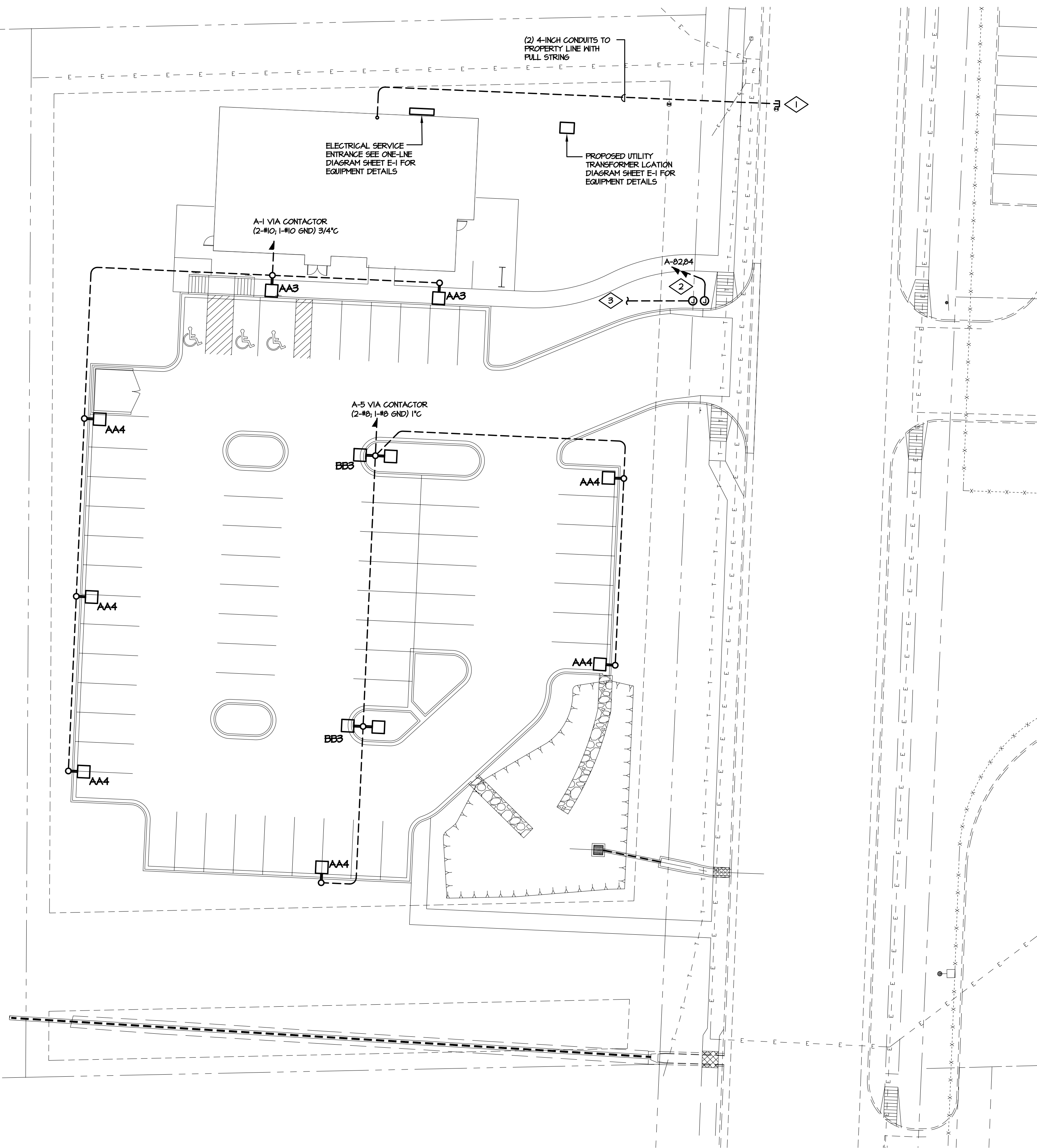
PROJECT NO. 10004
DRAWN BY: KSP
CHECKED BY: RCC
DATE: 3-30-10

SHEET TITLE:
ELECTRICAL
SITE PLAN

SHEET NO.
E-2



POLE BASE DETAIL
NOT TO SCALE

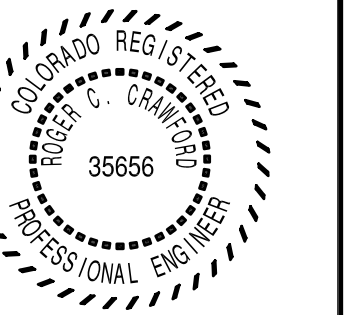


ELECTRICAL SITE PLAN
SCALE: 1" = 20'-0"

DRAWING NOTES

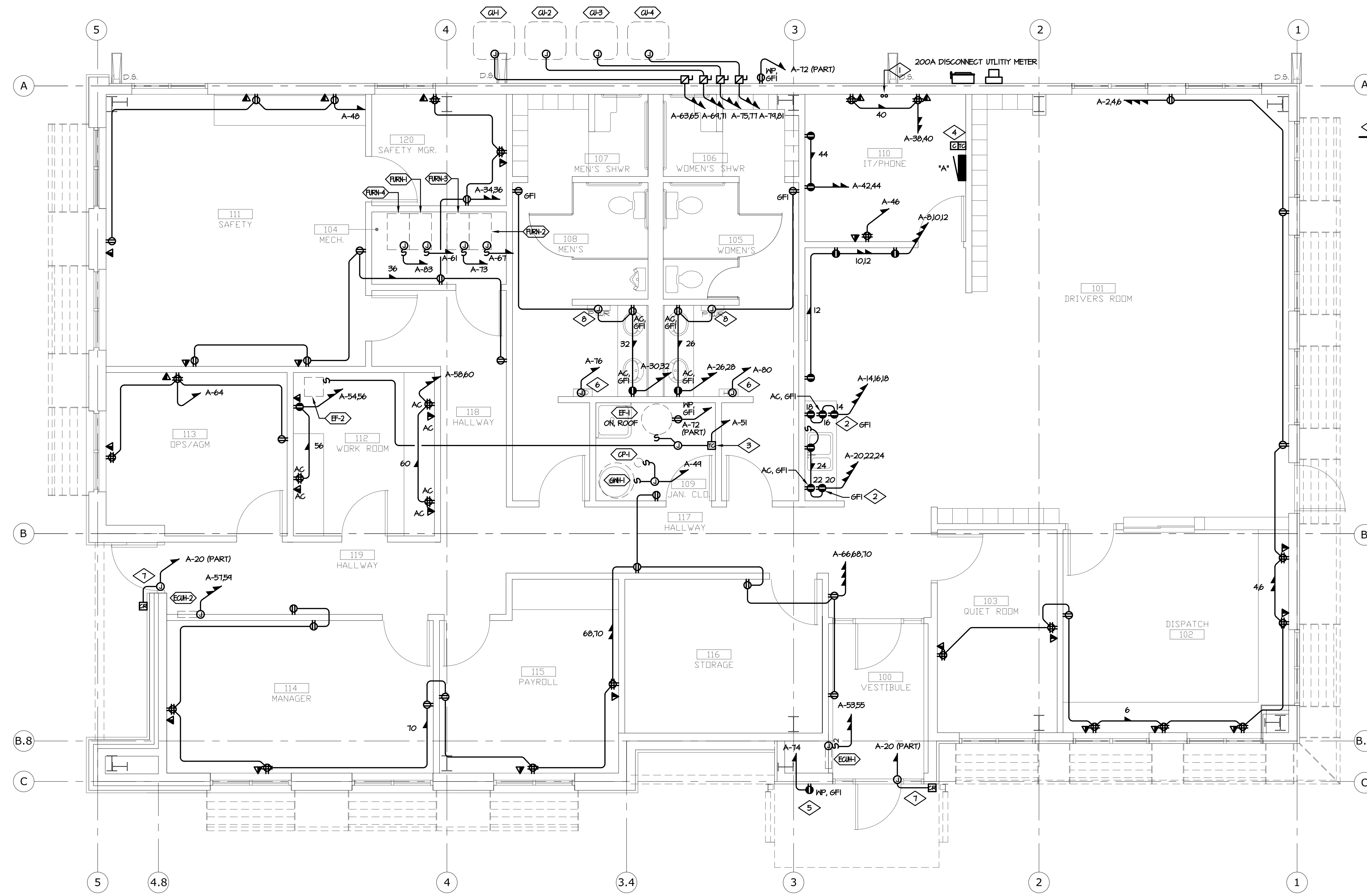
1. VERIFY TELEPHONE PEDESTAL LOCATION AND REQUIREMENTS WITH LOCAL UTILITY PRIOR TO ROUGH-IN.
2. PROVIDE CONNECTION TO SECURITY GATE. VERIFY EXACT LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO ROUGH-IN.
3. PROVIDE (1) 1" CONDUIT FOR SECURITY GATE CONTROL. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN. CONDUIT SHALL TERMINATE IN OWNER'S IT ROOM.





DRAWING NOTES

1. PROVIDE (2) TWO 4-INCH CONDUITS STUBBED INTO SPACE FOR TELEPHONE/DATA DEMARCATION POINT. EXTEND 4-INCH CONDUITS TO NEAREST TELEPHONE PEDESTAL AT THE PROPERTY LINE.
2. COORDINATE WITH ARCHITECTURAL ELEVATIONS FOR EXACT LOCATION FOR MICROWAVE RECEPTACLE.
3. PROVIDE 24 HOUR IN HALL TIMER FOR EXHAUST FAN CONTROL. TORQ CAT. NO. SET20A OR EQUAL.
4. PROVIDE TIME CLOCK AND CONTACTOR FOR EXTERIOR LIGHTING CONTROL. SEE EXTERIOR LIGHTING CONTROL DETAIL SHEET E-1 FOR MORE INFORMATION.
5. VERIFY EXACT LOCATION AND REQUIREMENTS FOR IRRIGATION CONTROL WITH IRRIGATION CONTRACTOR PRIOR TO ROUGH-IN.
6. PROVIDE CONNECTION TO HAND DRYERS. (2-#10; 1-#10 GND) 3/4". VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
7. PROVIDE CONNECTION TO OWNER SUPPLIED CARD READER AND ELECTRIC STRIKE. VERIFY EXACT REQUIREMENTS PRIOR TO ROUGH-IN.
8. PROVIDE 120V CONNECTION TO TOWEL DISPENSER. VERIFY EXACT LOCATION AND MOUNTING HEIGHTS WITH OWNER PRIOR TO ROUGH-IN.



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

SERVICE CONTRACTOR FACILITY 1
CITY OF COLORADO SPRINGS METRO TRANSIT
1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

ISSUE DATES:

PROJECT NO. 10004
DRAWN BY: KSP
CHECKED BY: RCC
DATE: 3-30-10

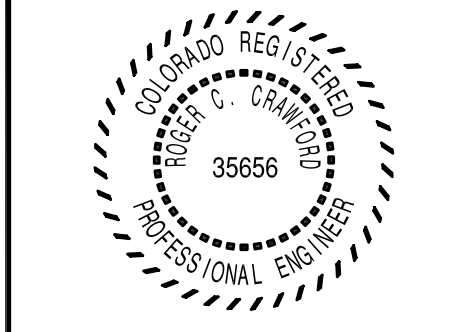
SHEET TITLE: POWER PLAN

SHEET NO.

E-3

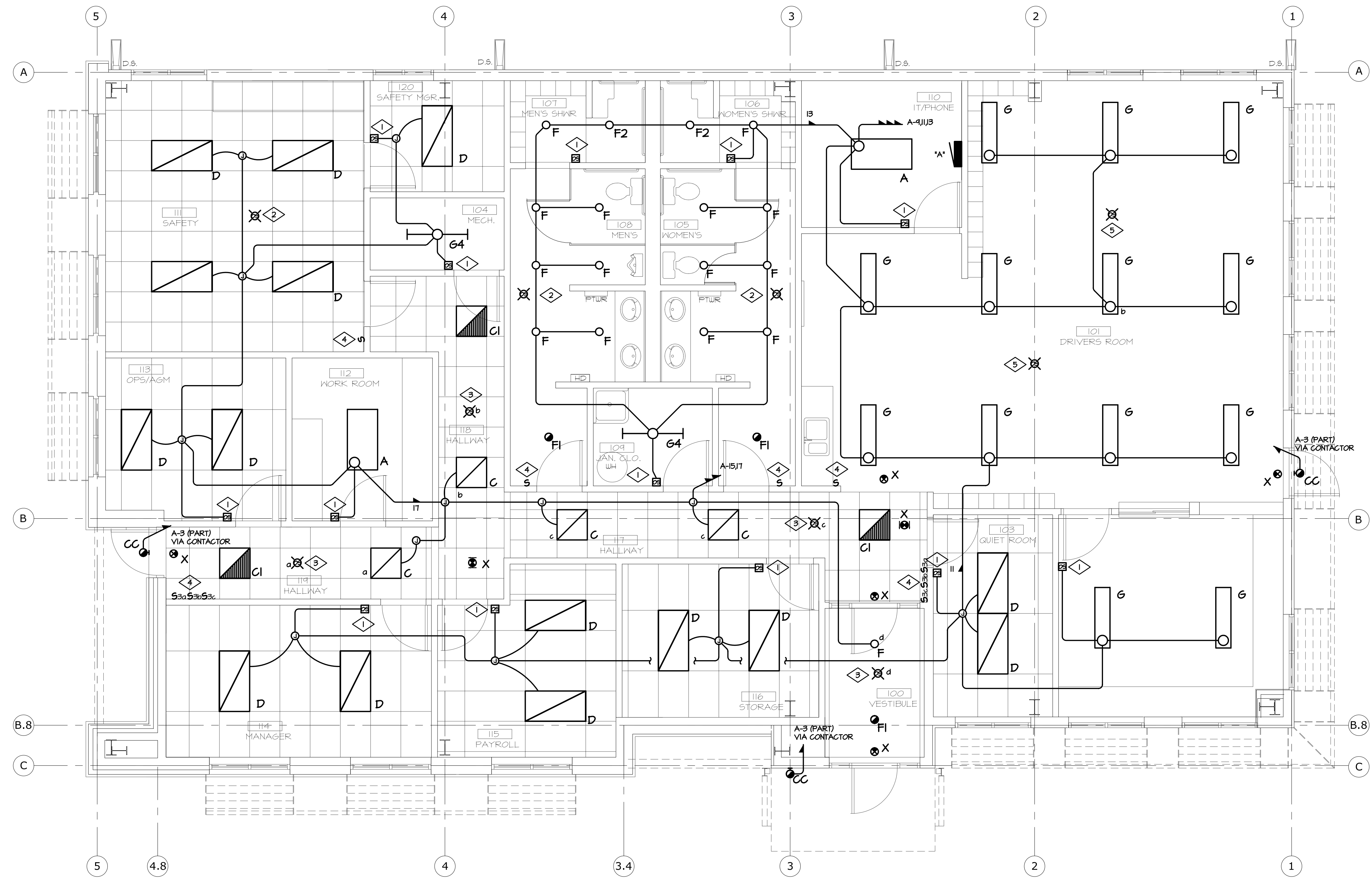


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DRAWING NOTES

1. PROVIDE WALL MOUNTED OCCUPANCY SENSOR. MATSTOPPER PW-100M OR EQUAL.
2. PROVIDE CEILING MOUNTED OCCUPANCY SENSOR. MATSTOPPER DT-355 OR EQUAL. PROVIDE SENSOR OVERRIDE SWITCHES AS SHOWN.
3. PROVIDE CEILING MOUNTED OCCUPANCY SENSOR. MATSTOPPER DT-355 OR EQUAL.
4. OCCUPANCY SENSOR OVERRIDE SWITCHES.
5. PROVIDE CEILING MOUNTED OCCUPANCY SENSOR. MATSTOPPER DT-355 OR EQUAL. SEE WIRING DIAGRAM SHEET E-1 FOR MORE INFORMATION.



LIGHTING PLAN

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

NOTE: ALL HALF SHADED FIXTURES AND EXIT SIGNS SHALL BE CONNECTED TO UNSWITCHED LEG OF THE LOCAL LIGHTING CIRCUIT.

SERVICE CONTRACTOR FACILITY 1
 CITY OF COLORADO SPRINGS METRO TRANSIT
 1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

ISSUE DATES:

PROJECT NO. 10004
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 CHECKED BY: RCC
 DATE: 3-30-10

SHEET TITLE:
LIGHTING PLAN

SHEET NO.

E-4



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2006 IECC

Section 1: Project Information

Project Type: New Construction
Project Title: Service Contractor Facility 1
Construction Site: 1070 Transit Drive, Colorado Springs, CO 80903
Owner/Agent: KSP
Designer/Contractor: M&P Engineering, Inc.

Section 2: General Information

Building Use Description: Office
Activity Type: Office
Area: 3200

Section 3: Requirements Checklist

- 1. Total proposed watts must be less than or equal to total allowed watts.
2. Master switch or only to individual panel cover.
3. Master switch or only to individual panel cover.
4. Individual lighting units separately metered.
5. Each space provided with a manual control to provide uniform light reduction by at least 50%.

Project Title: Service Contractor Facility 1
Date: 03/23/10
Page 1 of 3



2006 IECC

Section 1: Allowed Lighting Power Calculation

Table with columns: Area Category, Floor Area (sq ft), Allowed Watts (sq ft), Allowed Watts (sq ft). Office: 3200, 3200.

Section 2: Proposed Lighting Power Calculation

Table with columns: Fixture ID, Description, Lamp, Voltage, Wattage, Ballast, Lamp, # of Fixtures, Watt, (C X D). Total Proposed Watts = 3513.

Section 3: Compliance Calculation

If the Total Allowed Watts minus the Total Proposed Watts is greater than or equal to zero, this building complies.
Total Allowed Watts = 3200
Total Proposed Watts = 3513
Project Compliance = 887

Project Title: Service Contractor Facility 1
Date: 03/23/10
Page 3 of 3

Section 4: Compliance Statement

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other conditions submitted with this permit application. The proposed lighting system has been designed to meet the 2006 IECC requirements in COMcheck Version 3.6.1 and to comply with the mandatory requirements in the Requirements Checklist.

Name: Title Signature Date

Project Title: Service Contractor Facility 1
Date: 03/23/10
Page 2 of 3

Table with columns: PANEL, VOLTAGE, FLUSH SURFACE, MAIN BUS, MLO, FEED THRU, A.I.C., TYPE, DESCRIPTION, BKR, CIR, LOAD (VOLT AMPS) / PHASE, CIR, BKR, DESCRIPTION, TYPE. Includes sub-tables for LOAD TYPE and LEGEND.

BUILDING LUMINAIRE SCHEDULE table with columns: TYPE, MANUFACTURER, CATALOG NUMBER, DESCRIPTION, MOUNTING, LAMPS. Lists various lighting fixtures like COLUMBIA, FRESCOLITE, ALERA, DUALITE, LITHONIA.

MECHANICAL EQUIPMENT SCHEDULE table with columns: DESIGNATION, DESCRIPTION, VOLTAGE, PH, HP, KVA, FLA (MCA), CONDUCTORS, CONDUIT, SWITCH, FUSE SIZE/TYPER, REMARKS. Lists equipment like CIRCULATION PUMP, CONDENSING UNIT, CABINET HEATER, EXHAUST FAN, GAS FIRED FURNACE.



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REGISTRATION:



SERVICE CONTRACTOR FACILITY 1
CITY OF COLORADO SPRINGS METRO TRANSIT
1070 TRANSIT DRIVE, COLORADO SPRINGS CO 80903

ISSUE DATES:

PROJECT NO. 10004
DRAWN BY: KSP
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SHEET TITLE: SCHEDULES

SHEET NO. E-5



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