



CITY OF MADISON PARKING UTILITY CAPITOL EAST PARKING GARAGE

211 SOUTH LIVINGSTON STREET, MADISON WI 53703

PROJECT DESCRIPTION: NEW GARAGE AND COMMERCIAL
SPACE FOR THE EAST DISTRICT OF MADISON WISCONSIN

CITY CONTRACT NUMBER 7951 / MUNIS NUMBER 1627

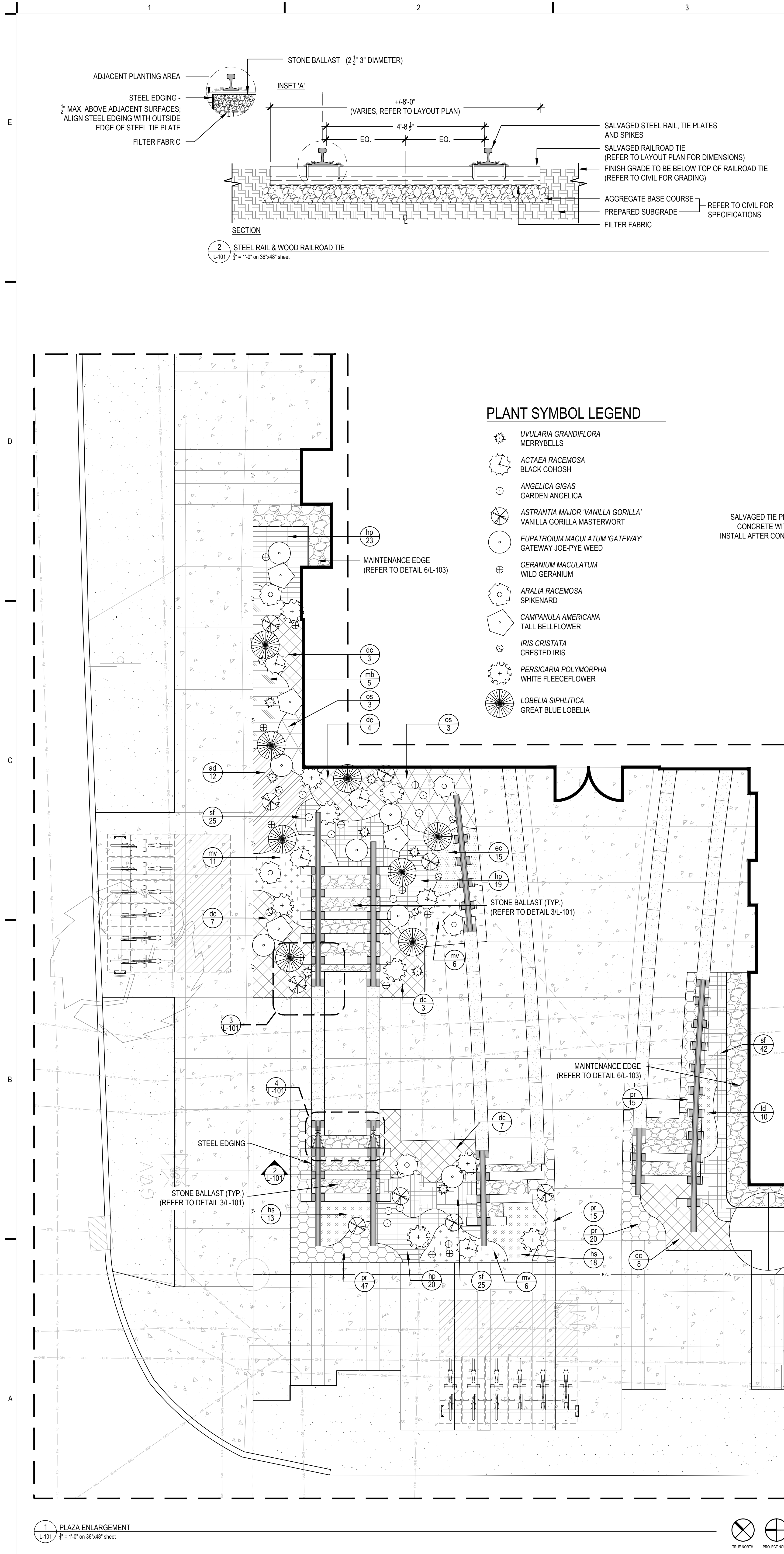
BID DOCUMENTS 06-30-2017



B | W | B | R

GRāEF

KEN SAIKI DESIGN
LANDSCAPE
ARCHITECTS



City of Madison, WI Landscape Worksheet
Madison Capitol East Parking Garage
211 South Livingston Street
28-Jun-17

Developed Lots		SF	Landscape Points Required	
Total Developed Area (Lot - Building Area)		18,680		311
Development Frontage (S. Livingston St.)		LF	*Overstory Trees Required	Shrubs Required
Total LF of Street Frontage Between Building & Street		275	9	45
Element	Point Value	Quantity Proposed	Quantity Existing	Points Achieved
Overstory Deciduous Tree	35	0	0	0
Evergreen Tree	35	0	0	0
Ornamental Tree	15	0	0	0
Upright Evergreen Shrub	10	0	0	0
Shrub, deciduous	3	40	0	120
Shrub, evergreen	4	15	0	60
Ornamental Grass / Perennial	2	564	0	1,128
Development Frontage Points Achieved				1,308
Development Frontage Points Deducted (0 of 9 required Overstory Trees)				-315
Development Frontage Points Total				993
Development Frontage (E. Main St.)		LF	*Overstory Trees Required	Shrubs Required
Total LF of Street Frontage Between Building & Street		152	5	25
Element	Point Value	Quantity Proposed	Quantity Existing	Points Achieved
Overstory Deciduous Tree	35	0	0	0
Evergreen Tree	35	0	0	0
Ornamental Tree	15	0	2	30
Upright Evergreen Shrub	10	0	0	0
Shrub, deciduous	3	0	0	0
Shrub, evergreen	4	0	0	0
Ornamental Grass / Perennial	2	38	0	76
Development Frontage Points Achieved				106
Development Frontage Points Deducted (0 of 5 required Overstory Trees & 0 of 25 Shrubs)				-250
Development Frontage Points Total				-144
General Site, Foundation, Screening				
Element	Point Value	Quantity Proposed	Quantity Existing	Points Achieved
Overstory Deciduous Tree	35	0	0	0
Tall Evergreen Tree	35	0	0	0
Ornamental Tree	15	0	0	0
Upright Evergreen Shrub	10	0	0	0
Shrub, deciduous	3	1	0	3
Shrub, evergreen	4	2	0	8
Ornamental Grass/Perennial	2	1,693	0	3,386
Ornamental/Decorative Fence or Wall (4 pts/10 LF)	4	40	0	160
General Site, Foundation, Screening Plantings Total				3,546
TOTAL LANDSCAPE POINTS				4,395
"In cases where development frontage landscaping cannot be provided due to site constraints, the zoning administrator may waive the requirement or substitute alternative screening methods for the required landscaping."				

*In cases where development frontage landscaping cannot be provided due to site constraints, the zoning administrator may waive the requirement or substitute alternative screening methods for the required landscaping.

PLANT LIST			Quantity	Size (Minimum)	Root	Comments	Nursery / Availability (Or other Suppliers)	Mature Size
Key	Botanical Name	Common Name						
Deciduous Shrubs								
ca	Ceanothus americanus	New Jersey Tea	29	2 Gal.	Cont.	Space as shown on plan	Johnson's Nursery, Inc.	36" HT. x 36" SPR.
co	Cornus obliqua Red Rover Powell Gardens	Red Rover Silky Dogwood	10	5 Gal., 18" HT.	Cont.	Space as shown on plan	Mariani Plants	18" HT. x 60" SPR.
cm	Corylus americana	American Hazelnut	2	#5, 36" HT.	Cont.	Space as shown on plan	Mariani Plants	8" HT. x 8" SPR.
Evergreen Shrubs								
jh	Juniperus horizontalis 'Plumosa Compacta'	Compact Andorra Juniper	13	5 Gal., 18" HT.	Cont.	Space as shown on plan	Mariani Plants	18" HT. x 60" SPR.
jc	Juniperus communis var. depressa	Oldfield Common Juniper	4	2 Gal.	Cont.	Space as shown on plan	Johnson's Nursery, Inc.	48" HT. x 84" SPR.
Perennials & Groundcovers								
	Actaea racemosa	Black Cohosh	10	1 Gal. or #1	Cont.	Space as shown on plan	Mariani Plants	48" HT. x 24" SPR.
	Angelica gigas	Garden Angelica	18	1 Quart	Cont.	Space as shown on plan	W. & E. Radtke, Inc.	36" HT. x 36" SPR.
	Aralia racemosa	Skipburr	7	2 Gal.	Cont.	Space as shown on plan	Johnson's Nursery, Inc.	60" HT. x 36" SPR.
ad	Aster divaricatus	White Woodland Aster	19	1 Quart	Cont.	Space 18" O.C.	W. & E. Radtke, Inc.	24" HT. x 36" SPR.
	Astrantia major 'Vanilla Gorilla'	Vanilla Gorilla Masterwort	17	1 Gal. or #1	Cont.	Space 24" O.C.	Mariani Plants	24" HT. x 24" SPR.
	Campanula americana	Tall Bellflower	8	3"	Cont.	Space as shown on plan	Prairie Nursery	48" HT. x 18" SPR.
ec	Eupatorium coelestinum	Midflower	15	3"	Cont.	Space 12" O.C.	Prairie Nursery	24" HT. x 24" SPR.
	Eupatorium maculatum 'Gateway'	Gateway Joe-Pye Weed	12	1 Gal. or #1	Cont.	Space as shown on plan	Mariani Plants	48" HT. x 48" SPR.
	Geranium maculatum	Wild Geranium	21	1 Quart	Cont.	Space as shown on plan	W. & E. Radtke, Inc.	18" HT. x 18" SPR.
hs	Helianthus stenosus	Woodland Sunflower	31	3"	Cont.	Space 12" O.C.	Prairie Nursery	60" HT. x 18" SPR.
iv	Heuchera villosa 'Autumn Bride'	Autumn Bride Coralbells	16	1 Gal. or #1	Cont.	Space 24" O.C.	Mariani Plants	24" HT. x 24" SPR.
	Iris cristata	Crested Iris	13	1 Quart	Cont.	Space as shown on plan	W. & E. Radtke, Inc.	4" HT. x 6" SPR.
	Lobelia spicata	Great Blue Lobelia	16	1 Gal. or #1	Cont.	Space as shown on plan	W. & E. Radtke, Inc.	18" HT. x 18" SPR.
mv	Mertensia virginica	Virginia Bluebells	23	1 Quart	Cont.	Space 18" O.C.	W. & E. Radtke, Inc.	15" HT. x 15" SPR.
mb	Monarda bradburiana	Eastern Beebalm	27	1 Quart	Cont.	Space 24" O.C.	W. & E. Radtke, Inc.	18" HT. x 36" SPR.
	Pasicalia polymorpha	White Fleecflower	16	1 Quart	Cont.	Space as shown on plan	W. & E. Radtke, Inc.	16" HT. x 12" SPR.
pr	Polemonium reptans	Creeping Jacob's Ladder	108	1 Quart	Cont.	Space 12" O.C.	W. & E. Radtke, Inc.	12" HT. x 18" SPR.
sf	Solidago flexicaulis	Zigzag Goldenrod	92	2 1/2"	Cont.	Space 12" O.C.	W. & E. Radtke, Inc.	36" HT. x 24" SPR.
td	Thalictrum dasycarpum	Purple Meadow Rue	10	1 Quart	Cont.	Space 24" O.C.	W. & E. Radtke, Inc.	50" HT. x 24" SPR.
	Uxialis grandiflora	Nemibells	15	1 Quart	Cont.	Space as shown on plan	W. & E. Radtke, Inc.	24" HT. x 12" SPR.
Grasses								
dc	Deschampsia cespitosa 'Goldtau'	Gold Dew Tufted Hair Grass	46	1 Gal. or #1	Cont.	Space 24" O.C.	W. & E. Radtke, Inc.	24" HT. x 24" SPR.
hp	Hystrix patula	Botchgrass	82	1 Quart	Cont.	Space 12" O.C.	W. & E. Radtke, Inc.	24" HT. x 12" SPR.
Ferns								
os	Onoclea sensibilis	Sensitive Fern	12	1 Gal. or #1	Cont.	Space 36" O.C.	Johnson's Nursery, Inc.	24" HT. x 36" SPR.
Prairie Plant Mix (Livingston Street)								
Forbs								
	Agastache foeniculum	Lavender Hyssop	23	2 1/2 Quart	Cont.		W. & E. Radtke, Inc.	24" HT. x 15" SPR.
	Aster novae-angliae	New England Aster	23	2 1/2"	Cont.		W. & E. Radtke, Inc.	60" HT. x 24" SPR.
	Baptisia australis	Blue False Indigo	23	2 1/2"	Cont.		W. & E. Radtke, Inc.	36" HT. x 24" SPR.
	Coreopsis lanceolata	Lanceleaf Tickseed	23	1 Quart	Cont.		W. & E. Radtke, Inc.	12" HT. x 18" SPR.
	Dalea purpurea	Purple Prairie Clover	23	2 1/2"	Cont.		W. & E. Radtke, Inc.	30" HT. x 18" SPR.
	Echinacea pallida	Pale Purple Coneflower	23	2 1/2"	Cont.		W. & E. Radtke, Inc.	12" HT. x 18" SPR.
	Echinacea purpurea	Purple Coneflower	23	2 1/2"	Cont.		W. & E. Radtke, Inc.	24" HT. x 18" SPR.
	Helioopsis helianthoides	Ox Eye Sunflower	23	1 Quart	Cont.		W. & E. Radtke, Inc.	36" HT. x 36" SPR.
	Liatris pycnostachya	Prairie Blazing-star	23	2 1/2"	Cont.	Install plugs and quarts @ 12" O.C.	W. & E. Radtke, Inc.	15" HT. x 15" SPR.
	Penselmon digitalis	Forget-me-not	23	2 1/2"	Cont.		W. & E. Radtke, Inc.	15" HT. x 15" SPR.
	Ratibida pinnata	Prairie Coneflower	23	2 1/2"	Cont.	Plant in groups of 3's, & 7.	W. & E. Radtke, Inc.	24" HT. x 18" SPR.
	Rudbeckia hirta	Black-eyed Susan	23	2 1/2"	Cont.		W. & E. Radtke, Inc.	24" HT. x 18" SPR.
	Rudbeckia subtomentosa	Sweet Coneflower	23	2 1/2"	Cont.		W. & E. Radtke, Inc.	24" HT. x 24" SPR.
	Rudbeckia triloba	Brown-eyed Susan	23	1 Quart	Cont.		W. & E. Radtke, Inc.	36" HT. x 24" SPR.
	Senna hebecarpa	Wild Senna	23	1 Quart	Cont.		W. & E. Radtke, Inc.	36" HT. x 24" SPR.
	Silphium laciniatum	Prairie Dock	23	1 Quart	Cont.		W. & E. Radtke, Inc.	18" HT. x 36" SPR.
	Solidago rigida	Stiff Goldenrod	23	2 1/2"	Cont.		W. & E. Radtke, Inc.	48" HT. x 30" SPR.
	Verbena hastata	Blue Vervain	23	2 1/2"	Cont.		W. & E. Radtke, Inc.	24" HT. x 24" SPR.
	Veronica virginica	Virginia Cullen's Root	23	2 1/2"	Cont.		W. & E. Radtke, Inc.	36" HT. x 36" SPR.
Grasses								
	Andropogon gerardii	Big Bluestem	43	1 Gal. or #1	Cont.	Space 30" O.C.	Johnson's Nursery, Inc.	48" HT. x 30" SPR.
	Bouteloua curtipendula	Side-oats Grama	10	2 1/2"	Cont.	Space 12" O.C.	W. & E. Radtke, Inc.	18" HT. x 24" SPR.
	Elymus canadensis	Canada Wild Rye	21	1 Gal. or #1	Cont.	Space 30" O.C.		
	Panicum virgatum	Switch Grass	10	2 1/2"	Cont.	Install plugs @ 12" O.C.	W. & E. Radtke, Inc.	60" HT. x 36" SPR.
	Schizanthus scoparium	Little Bluestem	33	2 1/2"	Cont.	Plant in groups of 3's, & 7's	W. & E. Radtke, Inc.	18" HT. x 18" SPR.
	Sorghastrum nutans	Indiangrass	33	1 Quart	Cont.	Space 24" O.C.	W. & E. Radtke, Inc.	60" HT. x 30" SPR.
Land Restoration Seed Mix								
Seed Mix #5047, Supplier: Prairie Nursery, P.O. Box 306, Westfield, WI 53984, 800.476.9453								
Bio-retention Plant Mix								
Forbs								
	Allium cernuum	Nodding Pink Onion	46	2 1/2"	Cont.		W. & E. Radtke, Inc.	12" HT. x 8" SPR.
	Asclepias incarnata	Swamp Milkweed	20	2 1/2"	Cont.		W. & E. Radtke, Inc.	36" HT. x 24" SPR.
	Aster novae-angliae	New England Aster	20	2 1/2"	Cont.		W. & E. Radtke, Inc.	60" HT. x 24" SPR.
	Senna hebecarpa	Wild Senna	45	1 Quart	Cont.		W. & E. Radtke, Inc.	36" HT. x 24" SPR.
	Eupatorium maculatum	Joe-pye Weed	20	2 1/2"	Cont.		W. & E. Radtke, Inc.	48" HT. x 36" SPR.
	Eupatorium perfoliatum	Common Bonset	20	2 1/2"	Cont.		W. & E. Radtke, Inc.	24" HT. x 36" SPR.
	Helianthus autumnalis	Autumn Goldenrod	45	1 Quart	Cont.		W. & E. Radtke, Inc.	30" HT. x 36" SPR.
	Helioopsis helianthoides	Ox Eye Sunflower	20	1 Quart	Cont.		W. & E. Radtke, Inc.	36" HT. x 36" SPR.
	Iris virginica	Virginia Flag Iris	45	2 1/2"	Cont.		W. & E. Radtke, Inc.	30" HT. x 24" SPR.
	Iris versicolor	Larger Blue Flag Iris	20	2 1/2"	Cont.		W. & E. Radtke, Inc.	24" HT. x 24" SPR.
	Liatris pycnostachya	Prairie Blazing-star	55	2 1/2"	Cont.		W. & E. Radtke, Inc.	15" HT. x 15" SPR.
	Lobelia spicata	Spike Blazing-star	26	2 1/2"	Cont.	Install plugs and quarts @ 12" O.C.	W. & E. Radtke, Inc.	24" HT. x 24" SPR.
	Lobelia spicata	Great Blue Lobelia	20	2 1/2"	Cont.		W. & E. Radtke, Inc.	18" HT. x 18" SPR.
	Monarda fistulosa	Wild Bergamot	20	2 1/2"	Cont.	Plant in groups of 3's, & 7.	W. & E. Radtke, Inc.	24" HT. x 36" SPR.
	Ratibida pinnata	Prairie Coneflower	20	2 1/2"	Cont.		W. & E. Radtke, Inc.	24" HT. x 18" SPR.
	Rudbeckia hirta	Black-eyed Susan	35	2 1/2"	Cont.		W. & E. Radtke, Inc.	24" HT. x 18" SPR.
	Rudbeckia subtomentosa	Sweet Coneflower	20	2 1/2"	Cont.		W. & E. Radtke, Inc.	24" HT. x 24" SPR.
	Rudbeckia triloba	Brown-eyed Susan	45	1 Quart	Cont.		W. & E. Radtke, Inc.	36" HT. x 24" SPR.
	Silphium laciniatum	Prairie Dock	20	1 Quart	Cont.		W. & E. Radtke, Inc.	18" HT. x 36" SPR.
	Solidago canadensis	Ohio Goldenrod	35	2 1/2"	Cont.		W. & E. Radtke, Inc.	36" HT. x 30" SPR.
	Solidago rigida	Stiff Goldenrod	20	2 1/2"	Cont.		W. & E. Radtke, Inc.	48" HT. x 30" SPR.
	Verbena hastata	Blue Vervain	20	2 1/2"	Cont.		W. & E. Radtke, Inc.	24" HT. x 24" SPR.
	Vernonia fasciculata	Indiangrass	35	2 1/2"	Cont.		W. & E. Radtke, Inc.	36" HT. x 18" SPR.
	Zizia aurea	Golden Alexander	55	1 Quart	Cont.		W. & E. Radtke, Inc.	24" HT. x 48" SPR.
Grasses, Sedges, & Bulrushes								
	Andropogon gerardii	Big Bluestem	79	1 Gal. or #1	Cont.	Space 30" O.C.	Johnson's Nursery, Inc.	48" HT. x 30" SPR.
	Carex bichenellii	Prairie Sedge	18	2 1/2"	Cont.		W. & E. Radtke, Inc.	24" HT. x 24" SPR.
	Carex grisea	Morning Star Sedge	18	2 1/2"	Cont.		W. & E. Radtke, Inc.	30" HT. x 24" SPR.
	Carex hystrix	Bottomland Sedge	10	2 1/2"	Cont.	Install plugs @ 12" O.C.	W. & E. Radtke, Inc.	30" HT. x 24" SPR.
	Carex pensylvanica	Pennsylvania Sedge	41	2 1/2"	Cont.	Plant in groups of 3's, & 7.	W. & E. Radtke, Inc.	8" HT. x 15" SPR.
	Carex vulpinoidea	Fox Sedge	18	2 1/2"	Cont.		W. & E. Radtke, Inc.	36" HT. x 24" SPR.
	Elymus canadensis	Canada Wild Rye	20	1 Gal. or #1	Cont.	Space 30" O.C.		60" HT. x 30" SPR.
	Panicum virgatum	Switch Grass (PLS.)	71	2 1/2"	Cont.	Install plugs @ 12" O.C.	W. & E. Radtke, Inc.	60" HT. x 36" SPR.
	Sporus ahoviensis	Dark-green Bulrush	15	2 1/2"	Cont.	Plant in groups of 3's, & 7.	Prairie Moon Nursery	48" HT. x 36" SPR.
	Sorghastrum nutans	Indiangrass	62	1 Quart	Cont.	Space 24" O.C.	W. & E. Radtke, Inc.	60" HT. x 30" SPR.
Fescue Seed Mix								
Bluggins, Linn., Seed Mix 'A' (or visit nursery) "Our Turfgrass Mix" is accordance with City of Madison Bluegrass Specifications, Article 207 for material quality and mix composition.								
Seed mixture shall be composed of seeds of the purity, germination and proportions, by weight, as given below:								
Composition								
% by weight								
Dawson Red Fescue 30%								
Puccinella Distans 30%								
GERM400 Kentucky Bluegrass 30%								
SR14000 Perennial Ryegrass 10%								
No-Mow Fescue Lawn - Seed Mix "B": mix a 50/50 blend of the following two seed mixes: Bruiser Tall Fescue Blend & Meadow Fine Fescue Blend - both by Heritage Seed Company, 25324 Avenue Road, Madison, WI 53718; 1.855.248.3237, 608.661.0794, or approved ecv.								
Bruiser Tall Fescue Blend								
Composition								
% by weight								
Tallgrass Tall Fescue 30%								
Darlington Tall Fescue 30%								
Tahoe Tall Fescue 30%								
Crown Kentucky Bluegrass 10%								
Meadow Fine Fescue Blend								
Composition								
% by weight								
Quatro Sheeps Fescue 10%								
Sea Fire Fireweed Creeping Red Fescue 10%								
Kent Lustrous Creeping Red Fescue 20%								
Jennetstone IV Creeping Fescue 20%								
Shadow II Creeping Fescue 15%								
Sword / Heavy Hard Fescue 15%								
Aurea / Rhino Hard Fescue 10%								

3'-0"

7'-0"

(WIDTH OF SIDEWALK)

11"

1'-2"

11"

CENTERLINE OF COLUMN

3 CONCRETE BAND ENLARGEMENT

L-103

$\frac{3}{8}$ " = 1'-0" on 36"x48" sheet

ALIGN W/ EDGE OF ARCHITECTURE

(6) EQUAL PANELS

(7) EQUAL PANELS

(4) EQUAL PANELS

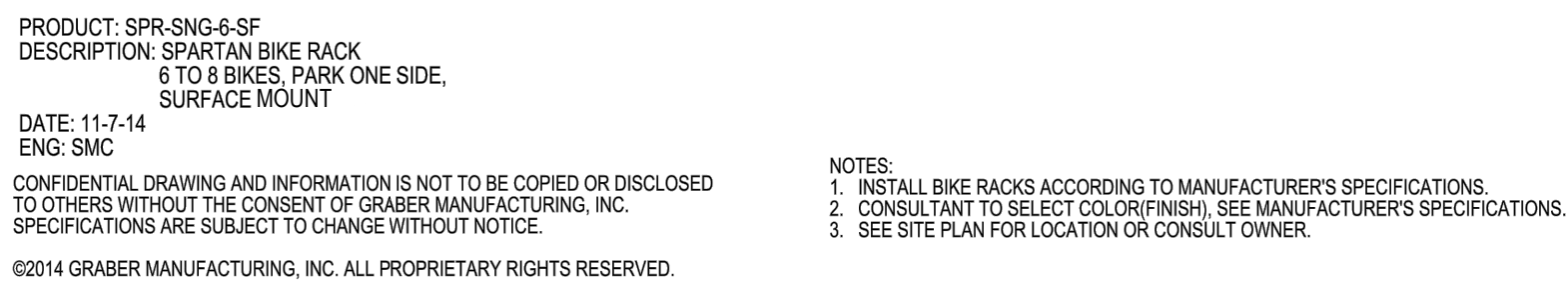
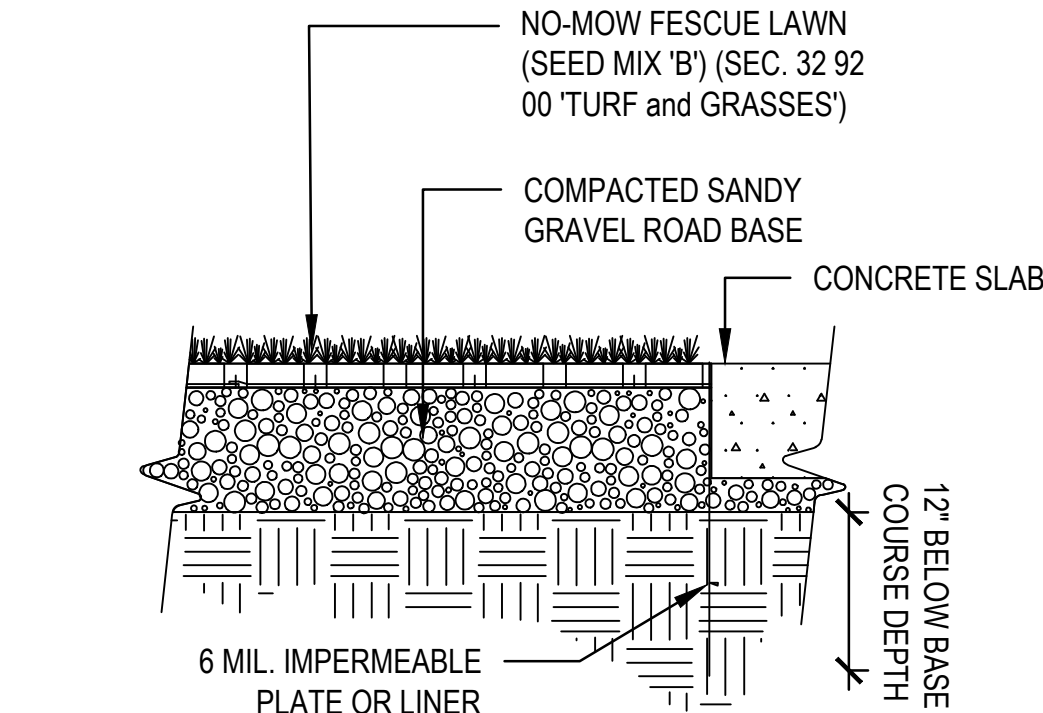
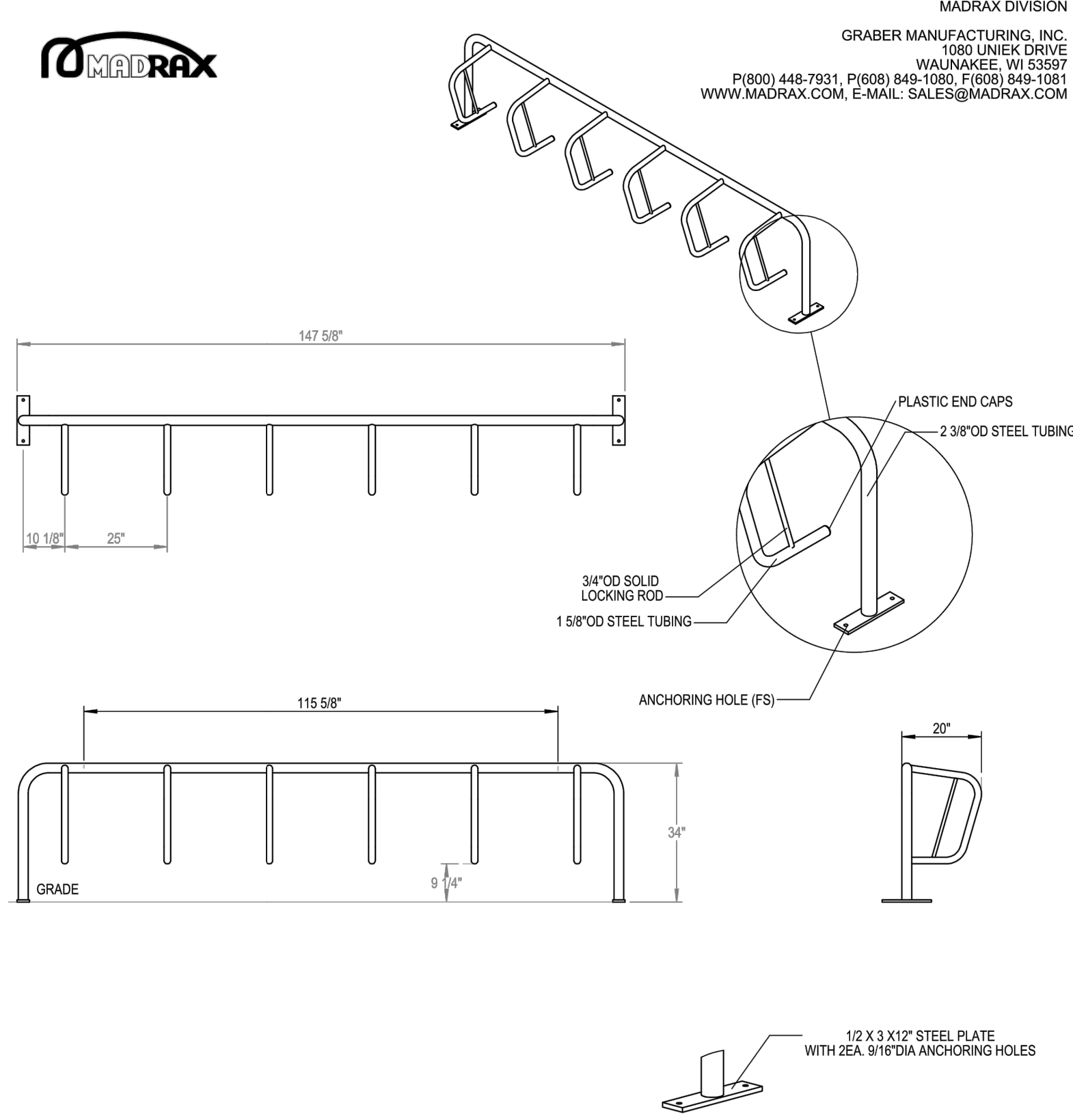
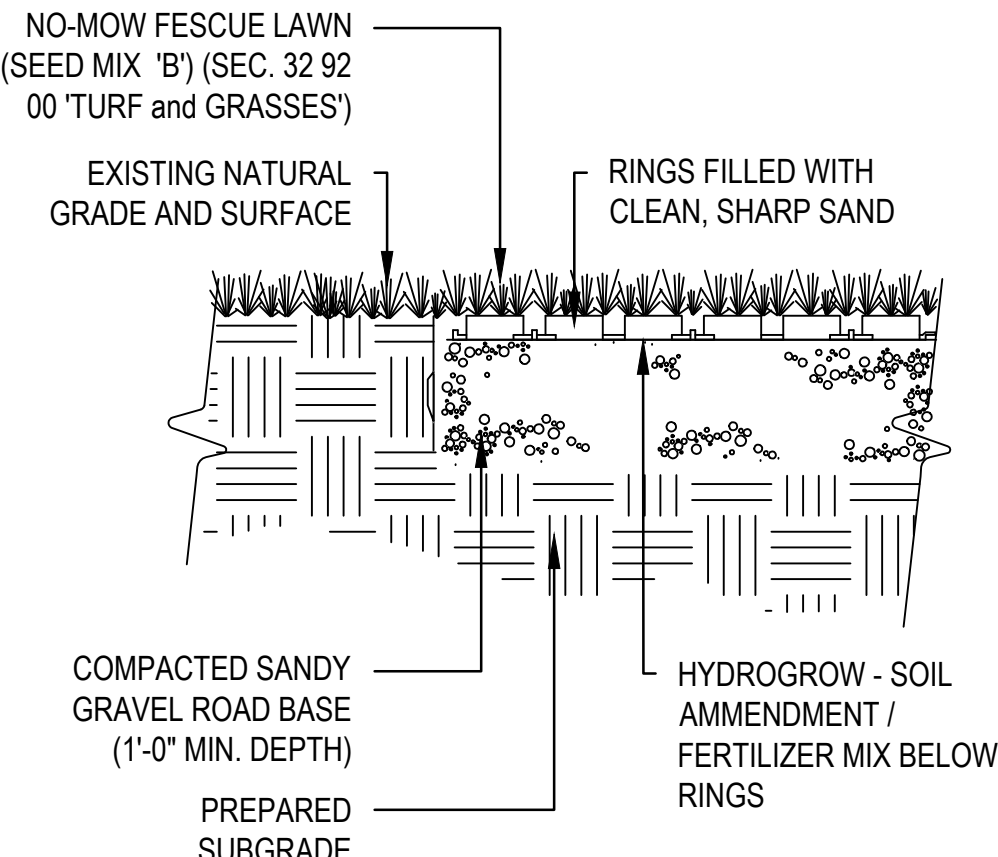
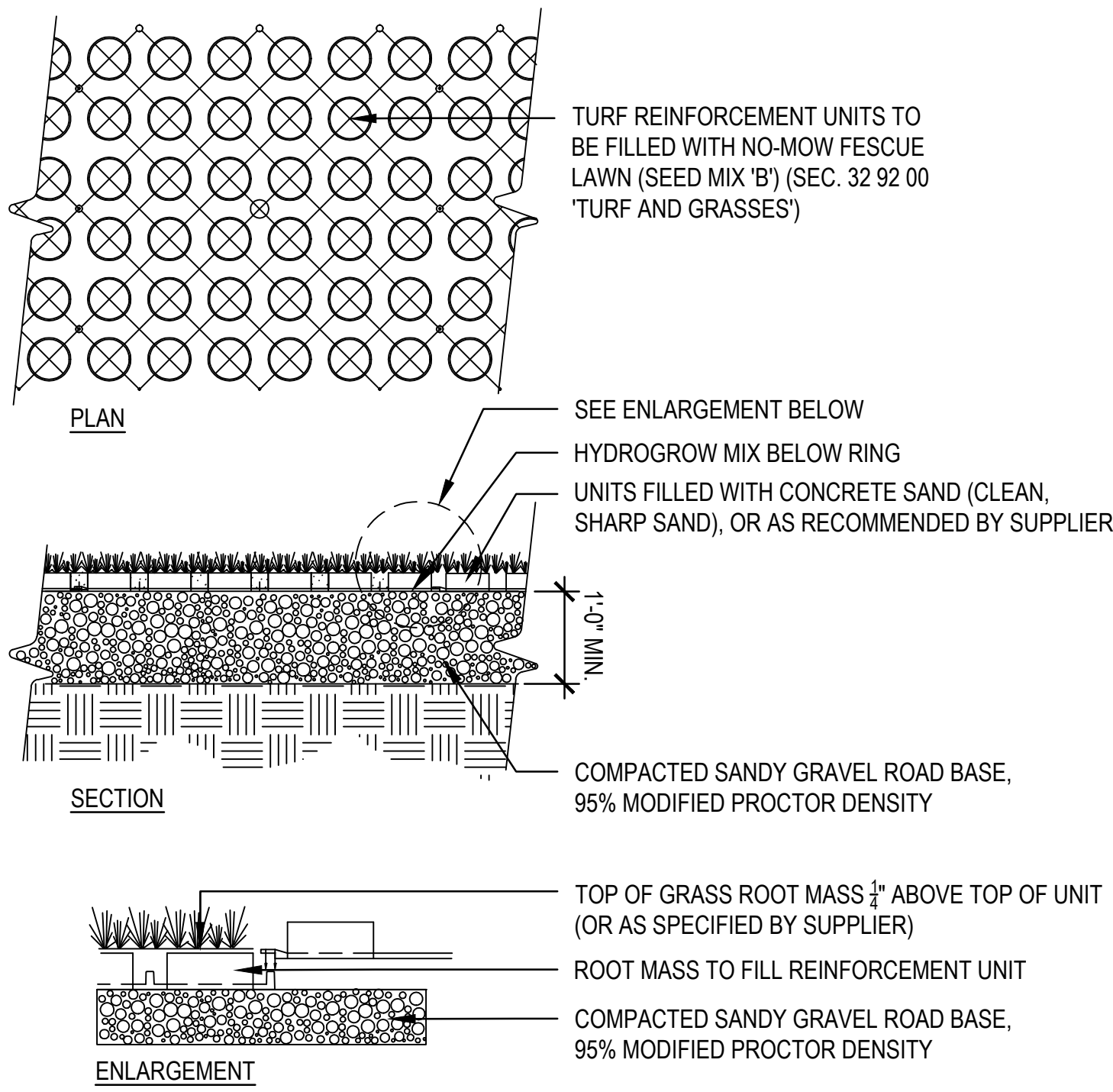
(2) EQUAL PANELS

MATCH GRADE OF EXISTING SIDEWALK (REFER TO CIVIL FOR GRADING)

WIND

1 2 3 4 5 6 7

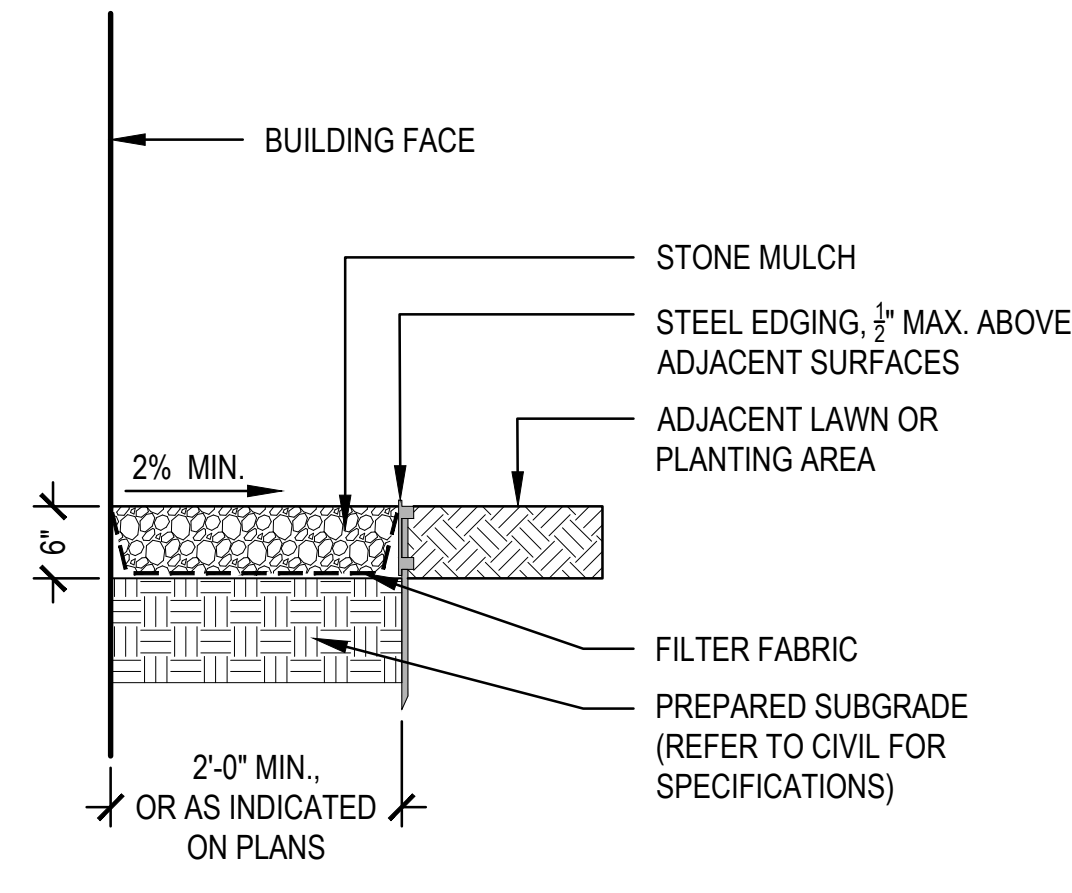
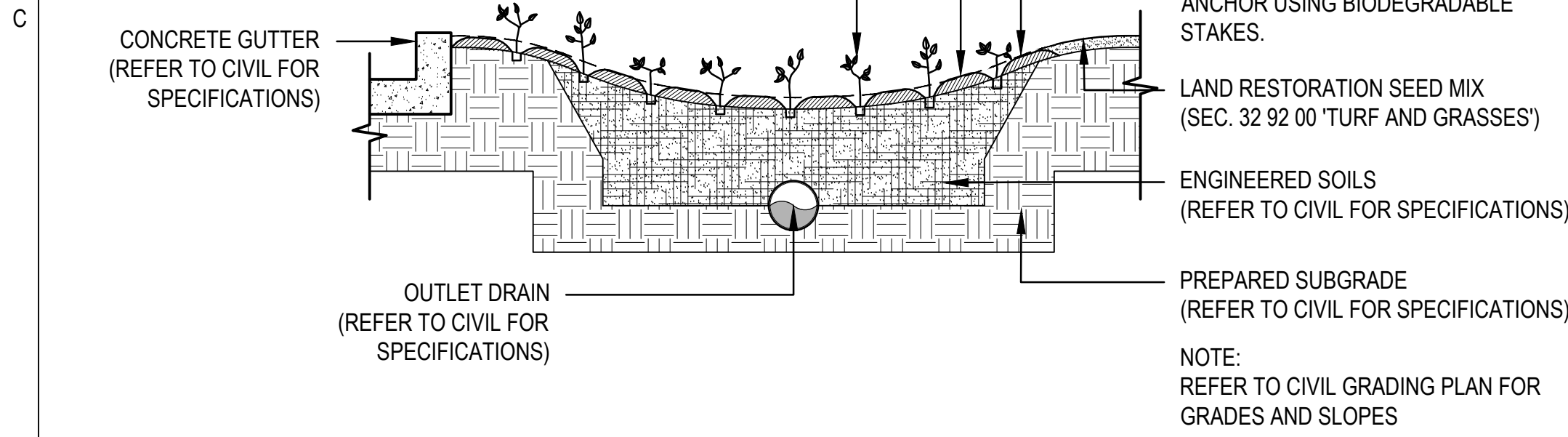
E



1 TYPICAL POROUS FLEXIBLE PAVING DETAIL
1/2" = 1'-0" on 30"x48" sheet

3 POROUS FLEX. PAVING/CONC.
1/2" = 1'-0" on 30"x48" sheet

4 SURFACE MOUNTED BIKE RACK
N.T.S.



5 BIO-RETENTION BASIN
1/2" = 1'-0" on 30"x48" sheet

6 MAINTENANCE EDGE
1/2" = 1'-0" on 30"x48" sheet

GRÄEF

5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CONSULTANTS:

KEN SAIKI DESIGN INC.
303 S. Paterson Street
Suite 1
Madison, WI 53703
608 / 251 3600
ksd-la.com

PROJECT TITLE:
CAPITOL EAST PARKING GARAGE
211 SOUTH EDWINSTON STREET, MADISON, WI 53703
WISCONSIN 1527
CONTRACT NUMBER 7961

CLIENT:
CITY OF MADISON PARKING UTILITY
715 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53701-2086



ISSUE:

NO DATE DESCRIPTION

C

B

A

PROJECT INFORMATION:
PROJECT NUMBER: 2016-5051
DATE: 06/30/2017
DRAWN BY: JS
CHECKED BY: NS
APPROVED BY: KS
SCALE: AS NOTED
SET TYPE: BD

SHEET TITLE:
LANDSCAPE DETAILS

SHEET NUMBER:

L-103

C-100

LEGEND

	FOUND 1/2" REBAR
	FOUND IRON PIPE SIZE NOTED
	FOUND 3/4" REBAR
	OUT CROSS SET
	1" REBAR SET
	SIGN
	SANITARY MANHOLE
	GAS VALVE
	FIRE HYDRANT
	WATER VALVE
	STORM MANHOLE
	STORM BOX
	STORM INLET
	LIGHTPOLE
	RAIL SIGN WITH LIGHTS
	ELECTRICAL TRANSFORMER
	UTILITY POLE
	MOSE MANHOLE
	ELECTRIC BOX
	UNKNOWN MANHOLE
	COMMUNICATION MANHOLE
	DECIDUOUS TREE
	CONIFEROUS TREE
	PROPERTY LINE
	PLATTED LINE
	RIGHT-OF-WAY LINE
	CENTERLINE
	EASEMENT LINE
	BUILDING FOOTPRINT
	EDGE OF CONCRETE
	EDGE OF ASPHALT
	CHAIN LINK FENCE LINE UNLESS NOTED
	SANITARY SEWER
	WATER MAIN
	STORM SEWER
	NATURAL GAS LINE
	COMMUNICATION LINE
	ELECTRIC LINE
	ATC TRANSMISSION LINE
	OVERHEAD ELECTRIC LINE
	OVERHEAD GUY WIRE
	FIBER OPTIC LINE
	LAKE WATER INTAKE LINE
	GRAVEL
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	CONTOUR MAJOR
	CONTOUR MINOR

BENCHMARK TABLE	
BM - #	ELEVATION
BM - 1	882.45
BM - 2	883.15
BM - 3	883.75

GENERAL NOTES

- FIELD WORK PERFORMED BY WYSER ENGINEERING, LLC. ON SEPTEMBER 15TH, 16TH, AND OCTOBER 7TH, 2016.
- ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- NORTH REFERENCE FOR THIS EXISTING CONDITIONS SURVEY AND MAP ARE BASED ON THE WISCONSIN COORDINATE REFERENCE SYSTEM, NAD 83 (2011) WISCONS DANE, GRID NORTH. THE NORTHWESTERLY RIGHT-OF-WAY LINE OF MAIN STREET BEARS N 46°07' 48" W.
- SUBSURFACE UTILITIES AND FIXTURES SHOWN ON THIS MAP HAVE BEEN APPROXIMATED BY LOCATING SURFACE FEATURES AND ACCESSORIES, DIGGERS HOTLINE FIELD MARKINGS AND EXISTING MAPS AND RECORDS.
- BEFORE EXCAVATION, APPROPRIATE UTILITY COMPANIES SHOULD BE CONTACTED. FOR EXACT LOCATION OF UNDERGROUND UTILITIES, CONTACT DIGGERS HOTLINE, AT 1.800.242.8511 OR 811.
- THIS PARCEL IS SUBJECT TO ALL EASEMENTS AND AGREEMENTS, BOTH RECORDED AND UNRECORDED.
- FEATURES HAVE BEEN LOCATED BY SURVEYOR IN FIELD THAT MAY HAVE ADVERSE TITLE ELEMENTS. AS TO WHICH ELEMENT- ENCROACHMENT, CLAIM OF UNRECORDED EASEMENT, PRESCRIPTIVE EASEMENT, AND SO FORTH CAN NOT BE DETERMINED BY SURVEYOR.

C-120

LEGEND

	ASPHALT PAVEMENT REMOVAL
	CONCRETE PAVEMENT REMOVAL
	GRAVEL PAVEMENT REMOVAL
	BUILDING CANOPY REMOVAL
	SAWCUT
	FENCE REMOVAL
	RETAINING WALL REMOVAL
	UTILITY ABANDONMENT/REMOVAL
	TREE AND BOLLARD REMOVAL
	SITE LIGHT REMOVAL
	REMOVE UTILITY STRUCTURE
	STONE CONSTRUCTION ENTRANCE (E6/C-900)
	EROSION MATTING
	SILT FENCE (E1/C-900)
	INLET PROTECTION (D6/C-900)

REMOVAL NOTES

- EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AND DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO COMMENCING WORK.
- CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LINES NOTED FOR ABANDONMENT OR REMOVAL. EXISTING UTILITIES THAT ARE TO BE ABANDONED OR REMOVED SHALL BE RESPECTIVELY ABANDONED OR REMOVED TO THE LOCATIONS INDICATED ON THIS PLAN. ALL UTILITY STRUCTURES LOCATED ALONG REMOVED UTILITY LINES SHALL BE REMOVED IN THEIR ENTIRETY.
- ASPHALT PAVEMENT NOTED FOR REMOVAL SHALL BE SAW CUT TO FULL DEPTH PRIOR TO REMOVAL.
- CONCRETE CURB AND GUTTER AND SIDEWALK NOTED FOR REMOVAL SHALL BE REMOVED AT THE NEAREST JOINT.
- REMOVAL OF VEGETATION SHALL INCLUDE ALL BRUSH, TREES AND STUMPS.
- ITEMS SCHEDULED FOR REMOVAL AND EXCESS EXCAVATED MATERIALS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ANY APPLICABLE REGULATIONS.
- CONTRACTOR IS RESPONSIBLE FOR SECURING THE JOB SITE TO PROTECT THE PUBLIC.
- CONTRACTOR SHALL COMPLY WITH LOCAL, STATE, AND FEDERAL CODES, RULES AND REGULATIONS APPLICABLE TO DEMOLITION WORK INCLUDING BUT NOT LIMITED TO EROSION CONTROL, AIR POLLUTION, NOISE POLLUTION, AND WASTE DISPOSAL.
- CONTRACTOR SHALL REPLACE PAVEMENT, CURB AND GUTTER, TREES, LAWN AREA, ANY ABOVE GROUND APPURTENANCES, OR ANY OTHER ITEM THAT WAS DAMAGED AS A RESULT OF CONSTRUCTION RELATED ACTIVITIES AS DEEMED BY OWNERS REPRESENTATIVE THAT WAS NOT CALLED OUT FOR REMOVAL OR REPLACEMENT. CONTRACTOR SHALL REPLACE/REPAIR DAMAGED ITEM TO THE SATISFACTION OF OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.
- TREE PROTECTION FENCING LOCATIONS SHOWN ARE APPROXIMATE. ALL EXISTING TREES OUTSIDE OF GRADING LIMITS ARE INTENDED TO REMAIN. FINAL LOCATIONS OF FENCING SHALL BE DETERMINED IN THE FIELD AND AS IDENTIFIED ON CONSTRUCTION DETAILS. ADDITIONAL FENCING MAY BE REQUIRED. COORDINATE WITH OWNER'S REPRESENTATIVE. TREE PROTECTION FENCE SHALL REMAIN IN PLACE THROUGHOUT CONSTRUCTION.

C-110

LEGEND

	STONE CONSTRUCTION ENTRANCE (E6/C-900)
	EROSION MATTING
	SILT FENCE (E1/C-900)
	RIP-RAP
	INLET PROTECTION (D6/C-900)
	EROSION BALES

EROSION CONTROL NOTES

- CONSTRUCTION SITE EROSION CONTROL AND SEDIMENTATION CONTROL SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF MADISON, AND SHALL EMPLOY EROSION CONTROL METHODS AS SHOWN AND SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) "CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS".
- ALL EROSION CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE SITE.
- ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATION AFTER A RAINFALL OF 0.5 INCHES OR MORE, BUT NO LESS THAN ONCE EVERY WEEK. MAINTENANCE OF ALL EROSION CONTROL STRUCTURES SHALL BE PROVIDED TO INSURE INTENDED PURPOSE IS ACCOMPLISHED. REPAIRS AND MAINTENANCE SHALL BE COMPLETED WITHIN 24 HOURS OF INSPECTION. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND REMOVAL OF ALL SEDIMENT WHEN LEAVING PROPERTY. EROSION CONTROL MEASURES MUST BE IN WORKING CONDITION AT END OF EACH WORK DAY.
- SILT FENCE SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS. SEDIMENT DEPOSITS WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN DEPOSITS REACH A DEPTH OF 6 INCHES. THE SILT FENCE WILL BE REPAIRED OR REPLACED AS NECESSARY TO MAINTAIN A BARRIER.
- FILTER FABRIC SHALL BE INSTALLED BENEATH INLET COVERS TO TRAP SEDIMENT AS PER INLET PROTECTION DETAIL IN THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS.
- CRUSHED STONE ENTRANCE SHALL BE MAINTAINED BY TURNING OVER THE STONE OR BY PLACING NEW STONE ONCE THE SURFACE BECOMES CLOGGED WITH SEDIMENT.
- EROSION CONTROL MEASURES SHALL BE MAINTAINED ON A CONTINUING BASIS UNTIL SITE IS FULLY STABILIZED.
- PERIODIC STREET SWEEPING SHALL BE COMPLETED TO MAINTAIN THE PUBLIC STREET FREE OF DUST AND DIRT.
- SILT FENCE SHALL BE INSTALLED IN HORSESHOE FASHION AROUND ALL TOPSOIL AND FILL STOCKPILES. NOTIFY CITY OF MADISON OF ANY NEW STOCKPILE LOCATIONS.
- CONSTRUCTION SEQUENCE FOR EROSION CONTROL INCLUDES:
 1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
 2. INSTALL SILT FENCE AND INLET PROTECTION.
 3. STRIP TOPSOIL FROM SITE.
 4. PERFORM ROUGH GRADING AND BUILDING EXCAVATION.
 5. INSTALL UTILITIES. INSTALL INLET PROTECTION ON NEW INLETS. INSTALL RIPRAP AT NEW OUTFALLS.
 6. CONSTRUCT BUILDING.
 7. INSTALL PAVEMENTS.
 8. INSTALL LANDSCAPING ON COMPLETED SITE WITHIN 7 DAYS OF COMPLETING CONSTRUCTION.
 9. REMOVE EROSION CONTROL MEASURES ONLY WHEN SITE IS FULLY STABILIZED.
- CONTRACTOR TO FOLLOW CITY OF MADISON SOIL MANAGEMENT PLAN WHEN ENCOUNTERING HAZARDOUS SOIL ON PROJECT SITE. IN ADDITION REFER TO SPECIFICATION SECTION 02 32 00 GEOTECHNICAL INVESTIGATION, SECTION 31 25 15 EXCAVATION, BACKFILL AND COMPACTION FOR BUILDINGS, AND SECTION 31 23 17 SITE EXCAVATION, BACKFILL AND COMPACTION.
- SITE DEWATERING. WATER PUMPED FROM THE SITE SHALL BE TREATED IN ACCORDANCE WITH SPECIFICATION SECTION 31 23 22 UNDER THE JURISDICTION OF THE CITY OF MADISON AND THE MADISON METROPOLITAN SEWERAGE DISTRICT (MMSD), AND SHALL UTILIZE APPROPRIATE BEST MANAGEMENT PRACTICES SPECIFIED BY THOSE HAVING JURISDICTION AND PER THE WDNR "CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS". WATER SHALL NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE, ADJACENT SITES, OR RECEIVING CHANNELS.
- WASTE AND MATERIAL DISPOSAL. ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
- TRACKING. EACH SITE SHALL HAVE GRAVELED ROADS, ACCESS DRIVES AND PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH TO PREVENT SEDIMENT FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY STREET CLEANING, TO THE SATISFACTION OF THE CITY, BEFORE THE END OF EACH WORKDAY. FLUSHING MAY NOT BE USED UNLESS SEDIMENT WILL BE CONTROLLED BY A SEDIMENT BASIN OR OTHER APPROPRIATE BEST MANAGEMENT PRACTICE SPECIFIED IN THE WDNR "CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS". NOTIFY CITY OF MADISON FOR CHANGES IN STABILIZED CONSTRUCTION ENTRANCE LOCATION.
- SEDIMENT CLEANUP. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF A STORM EVENT SHALL BE CLEANED UP BY THE END OF THE NEXT WORK DAY. ALL OTHER OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE CLEANED UP BY THE END OF THE WORK DAY.
- ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN OR MORE DAYS SHALL BE STABILIZED BY TEMPORARY OR PERMANENT SEEDING, AND MULCHING SODDING, COVERING WITH TARP, OR EQUIVALENT BEST MANAGEMENT PRACTICES. IF TEMPORARY SEEDING IS USED, A PERMANENT COVER SHALL ALSO BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION. SEEDING OR SODDING SHALL BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION.
- PERMANENT SEEDING SHALL BE ESTABLISHED NO LATER THAN SEPTEMBER 15TH. IF PERMANENT SEEDING IS NOT ESTABLISHED, TEMPORARY SEEDING SHALL BE ESTABLISHED NO LATER THAN OCTOBER 15TH. ALL SEEDED AREAS MUST BE MULCHED AT A RATE OF 1.5 TO 2 TONS PER ACRE AND ANCHORED BY EITHER CRIMPING OR BY APPLYING A TACKIFIER.
- PERMANENT SEED MIX SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 32 92 00.
- USE ANNUAL RYE SEED MIX AT 100 POUNDS PER ACRE AS A TEMPORARY SEED MIX. PERMANENT SEEDING SHALL FOLLOW WITHIN ONE YEAR. IF TEMPORARY SEEDING IS NOT ESTABLISHED BY OCTOBER 15TH, USE CLASS I TYPE B MATTING ON ALL SLOPES 4:1 OR STEEPER.
- TEMPORARY SOIL OR DIRT STORAGE PILES SHALL BE LOCATED A MINIMUM OF TWENTY-FIVE FEET FROM ANY DOWNSLOPE ROAD, LAKE, STREAM, WETLAND, OR DRAINAGE CHANNEL. STRAW BALE OR FILTER FABRIC FENCES SHALL BE PLACED ON THE DOWN SLOPE SIDE OF THE PILE. IF REMAINING FOR MORE THAN THIRTY DAYS, PILES SHALL BE STABILIZED BY MULCHING, VEGETATIVE COVER, TARPS, OR OTHER MEANS.
- WHEN THE DISTURBED AREA HAS BEEN STABILIZED BY PERMANENT VEGETATION OR OTHER MEANS, TEMPORARY BEST MANAGEMENT PRACTICES SUCH AS FILTER FABRIC FENCES, STRAW BALES, SEDIMENT AND SEDIMENT TRAPS SHALL BE REMOVED.
- NOTIFY THE CITY WITHIN TWO WORKING DAYS OF COMMENCING ANY LAND DEVELOPMENT OR LAND DISTURBING ACTIVITY.
- NOTIFY THE CITY OF COMPLETION OF ANY BEST MANAGEMENT PRACTICES WITHIN THE NEXT WORKING DAY AFTER THEIR INSTALLATION.
- OBTAIN PERMISSION IN WRITING FROM THE CITY OF MADISON ENGINEERING DEPARTMENT PRIOR TO MODIFYING THE EROSION CONTROL PLAN. NOTIFY WDNR AT LEAST FIVE WORKING DAYS PRIOR TO IMPLEMENTING CHANGES TO THE EROSION CONTROL PLAN.
- REPAIR ANY SILTATION OR EROSION DAMAGE TO ADJOINING SURFACES AND DRAINAGE WAYS RESULTING FROM LAND DEVELOPMENT OR LAND DISTURBING ACTIVITIES.
- KEEP A COPY OF THE EROSION CONTROL PLAN ON SITE.

C-200

LEGEND

	PROPOSED ASPHALT PAVEMENT (C5/C-901)
	PROPOSED CONCRETE SIDEWALK (E2/C-901)
	PROPOSED CONCRETE PAVEMENT (E1/C-901)
	PROPOSED VERTICAL CURB
	PROPOSED ADA RAMP WITH TRUNCATED DOMES (A3/C-901)

LAYOUT NOTES

- THE BUILDING OUTLINES SHOWN ARE FOR REFERENCE PURPOSES ONLY AND SHALL NOT BE USED FOR STAKING PURPOSES. THE CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT AND STRUCTURAL ENGINEER ON THE STAKING OF THE BUILDING.
- SITE LIGHTS ARE SHOWN FOR REFERENCE PURPOSES ONLY AND THE CONTRACTOR SHALL REFER TO THE ELECTRICAL PLANS FOR DETAIL DESIGN INFORMATION. CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL ENGINEER ON STAKING OF THE SITE LIGHTS.
- ALL DIMENSIONS SHOWN ARE TO THE EDGE OF PAVEMENT OR FACE OF CURB WHERE CONCRETE CURB IS SHOWN.
- STANDARD CURB RADIUS IS 3' UNLESS INDICATED OTHERWISE.
- ALL PAVEMENT STRIPING SHALL BE WHITE IN COLOR.
- REFER TO LANDSCAPING PLANS FOR SITE RESTORATION INFORMATION AND DETAILS.
- CONTRACTOR SHALL SUBMIT A CONCRETE JOINTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO COMMENCING CONSTRUCTION. JOINTING PLAN SHALL INDICATE: FOUR SEQUENCE, LOCATION OF CONSTRUCTION, ISOLATION, CONTRACTION JOINTS, AND TYPE OF REINFORCEMENT.

GENERAL NOTES

- CONTRACTOR SHALL VERIFY LOCATION OF WORK AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCING WORK.

C-300

LEGEND

	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED VERTICAL CURB
	PROPOSED MANHOLE
	PROPOSED CATCH BASIN
	PROPOSED ADA RAMP WITH TRUNCATED DOMES

GRADING NOTES

- ADA REGULATIONS REQUIRE A MAXIMUM SLOPE OF 1:20 (5%) ALONG THE LENGTH OF THE ACCESSIBLE ROUTE AND A MAXIMUM SLOPE OF 1:50 (2%) ACROSS THE WIDTH OF THE ACCESSIBLE ROUTE. ADA REGULATIONS REQUIRE A MAXIMUM SLOPE OF 1:50 (2%) IN ALL DIRECTIONS WITHIN AN ADA PARKING STALL AND ADJACENT UNLOADING ZONE.
- RIM ELEVATIONS IN CURB AND GUTTER ARE FLANGE GRADES.
- CONTRACTOR TO FOLLOW CITY OF MADISON SOIL MANAGEMENT PLAN WHEN ENCOUNTERING HAZARDOUS SOIL ON PROJECT SITE.

C-400

LEGEND

	PROPOSED STORM SEWER
	PROPOSED SANITARY SEWER
	PROPOSED WATER MAIN
	PROPOSED ELECTRICAL
	PROPOSED UTILITY EASEMENT
	PROPOSED MANHOLE
	PROPOSED CATCH BASIN
	PROPOSED CLEANOUT
	PROPOSED GATE VALVE
	PROPOSED HYDRANT
	PROPOSED UTILITY PLUG

UTILITY NOTES

- MUNICIPAL UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPW), INCLUDING PART V - SEWERS AND SEWER STRUCTURES, AND PART VII - WATER MAINS AND SERVICE LATERALS.
- BUILDING LATERALS SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL AND STATE PLUMBING CODES. SITE UTILITY CONTRACTOR SHALL STUB LATERAL TO 5 FEET OUTSIDE BUILDING. SEE INTERIOR PLUMBING PLANS FOR CONTINUATION OF PIPING INTO BUILDING BY BUILDING PLUMBING CONTRACTOR.
- CONTRACTOR SHALL VERIFY ELEVATION OF EXISTING INVERTS PRIOR TO INSTALLATION OF PROPOSED UTILITIES.
- CONTRACTOR SHALL CENTER ONE FULL LENGTH OF WATER PIPE ON SEWER AT WATER MAIN CROSSINGS, THAT BOTH JOINTS WILL BE AS FAR FROM SEWER AS POSSIBLE.
- THE NEW WATER SERVICE SHALL BE A CUT-IN CONNECTION TO THE EXISTING WATER MAIN IN ACCORDANCE WITH SSPW 703.7 (1) 2. THE CONTRACTOR MAY UPON REQUEST TO THE ENGINEER CONNECT THE NEW WATER SERVICE AS A LIVE TAP TO THE EXISTING WATER MAIN IN ACCORDANCE WITH SSPW 703.7 (1) 3. THE CONTRACTOR SHALL CONTACT AND PAY THE CITY OF MADISON WATER UTILITY ALL COSTS ASSOCIATED WITH THE CITY PERFORMING THE LIVE TAP PROCEDURE.
- GENERAL CONTRACTOR SHALL COORDINATE WITH LOCAL GAS, TELEPHONE, AND ELECTRICAL UTILITIES FOR EXACT LOCATION, SIZE AND DEPTH OF NEW SERVICE.
- CONTRACTOR SHALL PROVIDE DRAIN TILE AT ALL PROPOSED CATCH BASINS. SEE PLAN VIEW FOR DETAIL DESIGN INFORMATION.
- RIM ELEVATIONS IN CURB AND GUTTER ARE FLANGE GRADES.
- PIPE LENGTHS AND INVERTS ARE TO CENTER OF STRUCTURES.
- CRUSHED STONE BACKFILL SHALL BE USED UNDER AND WITHIN 5' OF ALL PAVED AREAS.
- SUBSURFACE UTILITIES SHOWN AS EXISTING CONDITIONS HAVE BEEN APPROXIMATED BY LOCATING SURFACE FEATURES AND ACCESSORIES, DIGGERS HOTLINE FIELD MARKINGS AND EXISTING MAPS AND RECORDS. ACTUAL DEPTHS ARE UNKNOWN AND SHALL BE DETERMINED BY HYDRO-EXCAVATION OR OTHER MEANS PRIOR TO STARTING OF UTILITY INSTALLATION. NOTIFY THE ENGINEER OF DISCREPANCIES THAT REQUIRE REDESIGN OF PROPOSED UTILITIES.
- CONTRACTOR TO COORDINATE WITH ADAM BRECKLIN, SENIOR ENGINEER, AMERICAN TRANSMISSION COMPANY ASSET PLANNING AND ENGINEERING (PHONE: 608-877-3692) TO PROTECT ATC UTILITY LINES DURING CONSTRUCTION.

GRÄEF

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CONSULTANTS:

PROJECT TITLE:

CAPITOL EAST PARKING RAMP

211 SOUTH LIVINGSTON STREET, MADISON WI 53703
MUNIS NUMBER 1627
CONTRACT NUMBER 7951

CLIENT:

CITY OF MADISON PARKING UTILITY

215 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53701-2986



ISSUE:

NO DATE DESCRIPTION

PROJECT INFORMATION:

PROJECT NUMBER: 2016-5051

DATE: 06/30/17

DRAWN BY: SRK

CHECKED BY: JAL

APPROVED BY: JAL

SCALE: AS NOTED

SET TYPE: BD

SHEET TITLE:

CIVIL ENGINEERING NOTES,
LEGENDS AND SHEET INDEX

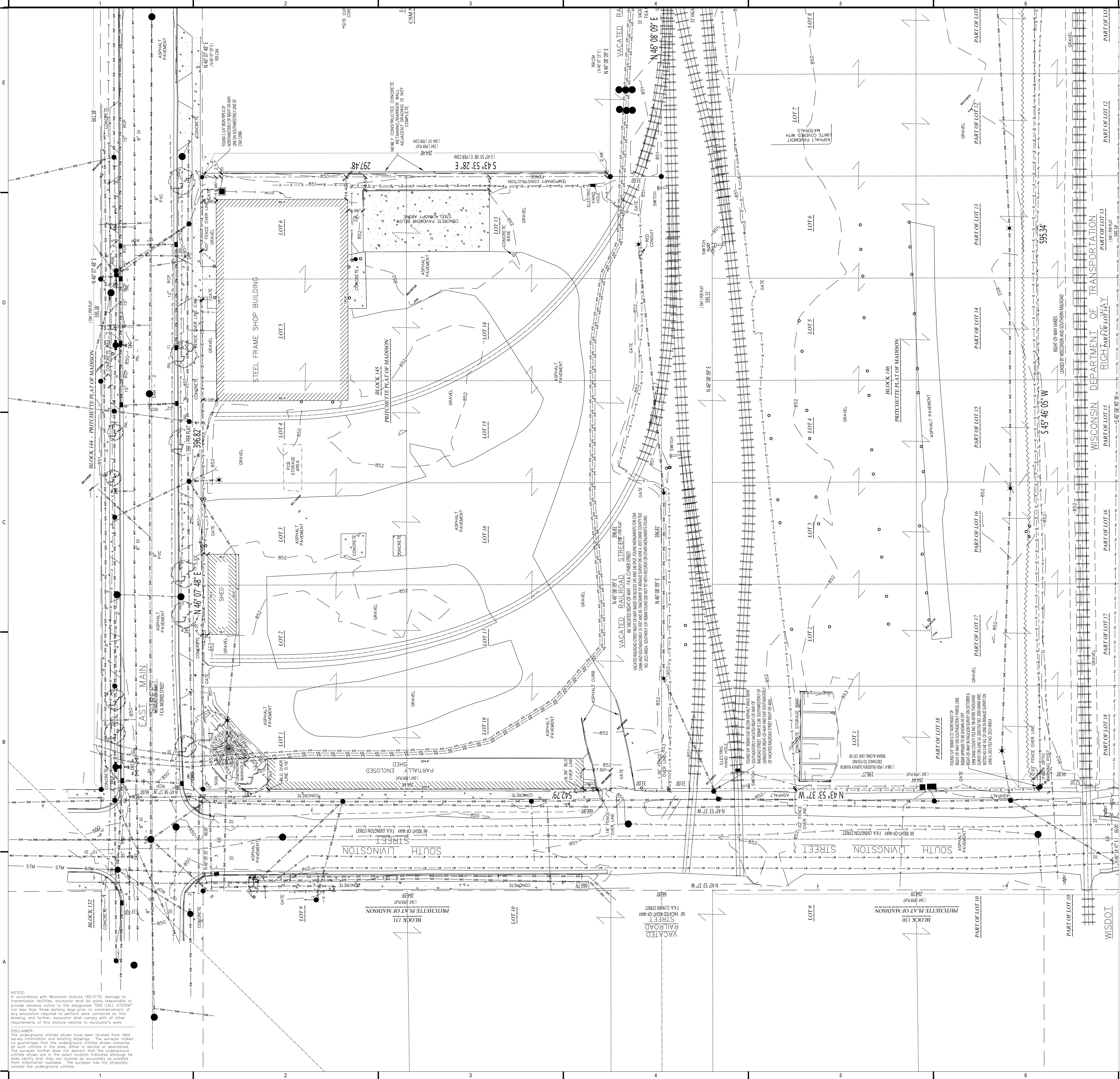
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C-001

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NOTICE:
In accordance with Wisconsin statute 192.0175, damage to transmission facilities, excavator shall be solely responsible to provide advance notice to the designated "TOL CALL SYSTEM" not less than three working days prior to commencement of any excavation required to perform work contained on this drawing, and further, excavator shall comply with all other requirements of this statute relative to excavator's work.

DISCLAIMER:
The underground utilities shown have been located from field survey information and existing drawings. The surveyor makes no guarantee that the underground utilities shown comprise all utilities in the area, either in or above the ground. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although he does certify that they are located as accurately as possible from information available. The surveyor has not physically located the underground utilities.



SANITARY SEWER STRUCTURE TABLE					
STRUCT.	IN	MM	ELEV	IN V DIR	ELEV. PIPE SIZE PIPE MATERIAL
SAN-1	850.37	NW	843.08	8"	PVC
		NE	843.13	8"	PVC
		SW	843.13	8"	PVC
		S	843.4	4"	-
		E	843.4	4"	-
SAN-2	850.56	SW	844.44	8"	PVC
		N	844.49	8"	PVC
		NE	844.49	8"	PVC

STORM SEWER STRUCTURE TABLE					
STRUCT.	IN	MM	ELEV	IN V DIR	ELEV. PIPE SIZE PIPE MATERIAL
STM-1	850.01	NW	847.16	15"	RCP
		S	846.9*	15"	RCP
		NE	846.9*	15"	RCP
		SW	846.9*	12"	RCP
		SE	846.9*	12"	RCP
STM-2	850.55	N	847.2*	15"	RCP
		SW	847.2*	12"	RCP
		SUMP	845.13	-	-

STORM SEWER INLET TABLE					
STRUCT.	IN	MM	ELEV	IN V DIR	ELEV. PIPE SIZE PIPE MATERIAL
INL-1	849.44	SW	847.24	15"	RCP
		SE	847.44	12"	RCP
INL-2	849.58	NW	847.63	12"	RCP
		NE	847.57	6"	PVC
INL-3	849.70	NW	847.95	12"	RCP
		NE	847.34	12"	RCP
INL-4	849.48	NE	847.0*	12"	RCP
		SW	847.0*	12"	RCP
INL-5	850.21	NE	846.91	15"	RCP
		SW	847.00	15"	RCP
INL-6	849.92	NE	847.02	15"	RCP
		SW	847.24	15"	RCP
INL-7	849.70	NE	847.12	15"	RCP
		SW	847.12	15"	RCP
INL-8	849.97	NE	847.70	6"	PVC
		SE	847.4*	12"	RCP
INL-9	850.20	NW	-	12"	RCP
		SW	848.0*	12"	RCP
INL-10	850.34	NW	848.0*	12"	RCP
		SW	848.0*	12"	RCP
INL-11	850.38	NE	848.1*	12"	RCP
		NE	848.1*	12"	RCP

* PER CITY OF MADISON RECORD, NOT VISIBLE IN WINTER CONDITIONS

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CONSULTANTS:

PROJECT TITLE:

CAPITOL EAST PARKING RAMP

211 SOUTH LIVINGSTON STREET, MADISON WI 53703
PLANS NUMBER 1027
CONTRACT NUMBER 7951

CLIENT:

CITY OF MADISON PARKING UTILITY

215 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53703-2986



ISSUE:

NO DATE DESCRIPTION

PROJECT INFORMATION:

PROJECT NUMBER: 2016-5051

DATE: 06/30/17

DRAWN BY: SRK

CHECKED BY: JAL

APPROVED BY: JAL

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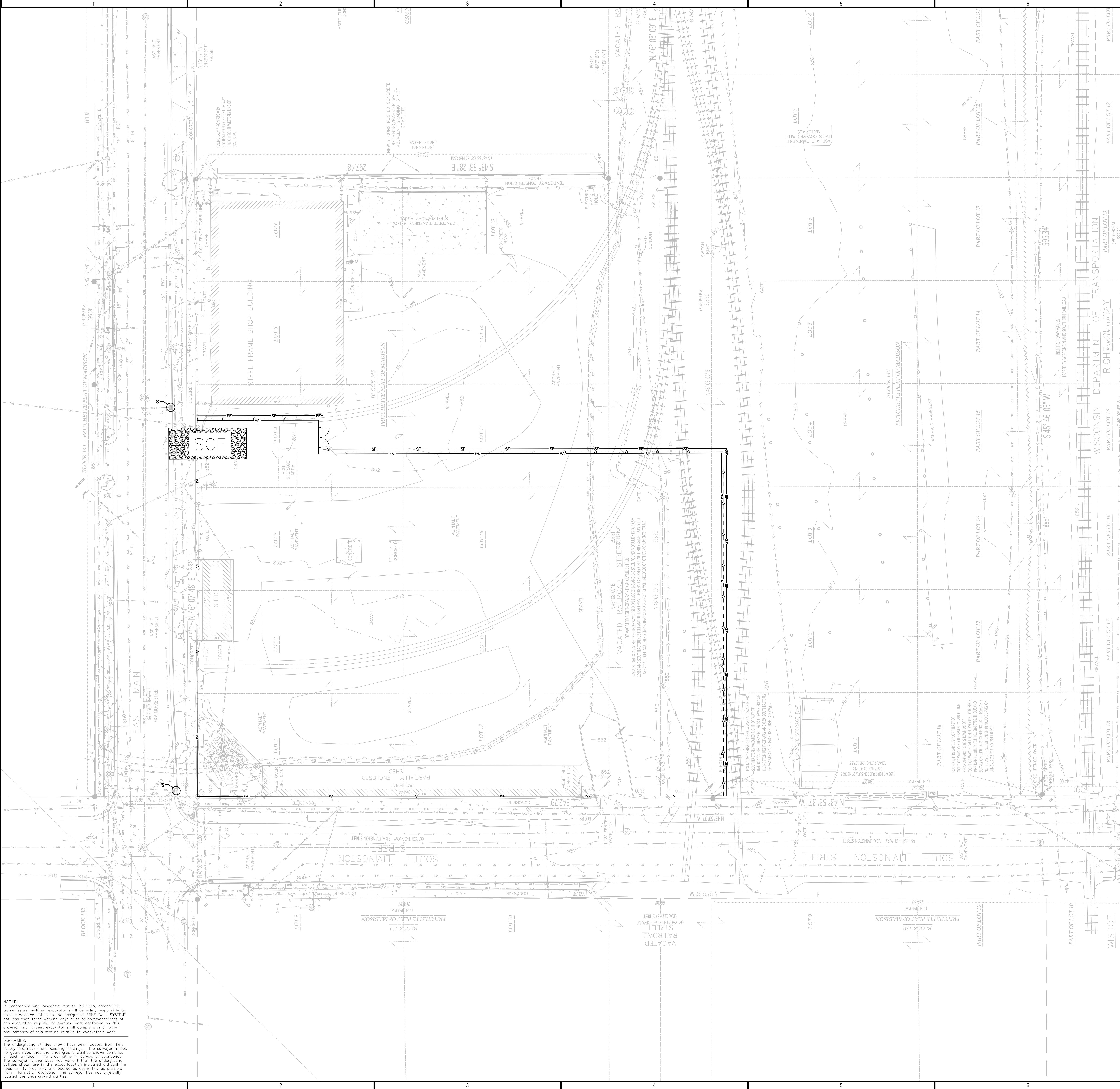
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EXISTING SITE CONDITIONS

SHEET NUMBER:

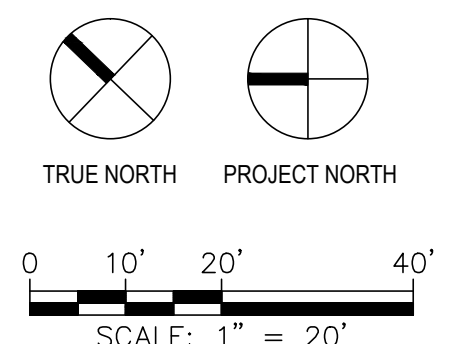
C-100

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NOTICE:
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CONSULTANTS:

PROJECT TITLE:
CAPITOL EAST PARKING RAMP

211 SOUTH LIVINGSTON STREET, MADISON WI 53703
MAINS NUMBER 1927
CONTRACT NUMBER 7951

CLIENT:
CITY OF MADISON PARKING UTILITY

215 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53701-2996



ISSUE:

NO DATE DESCRIPTION

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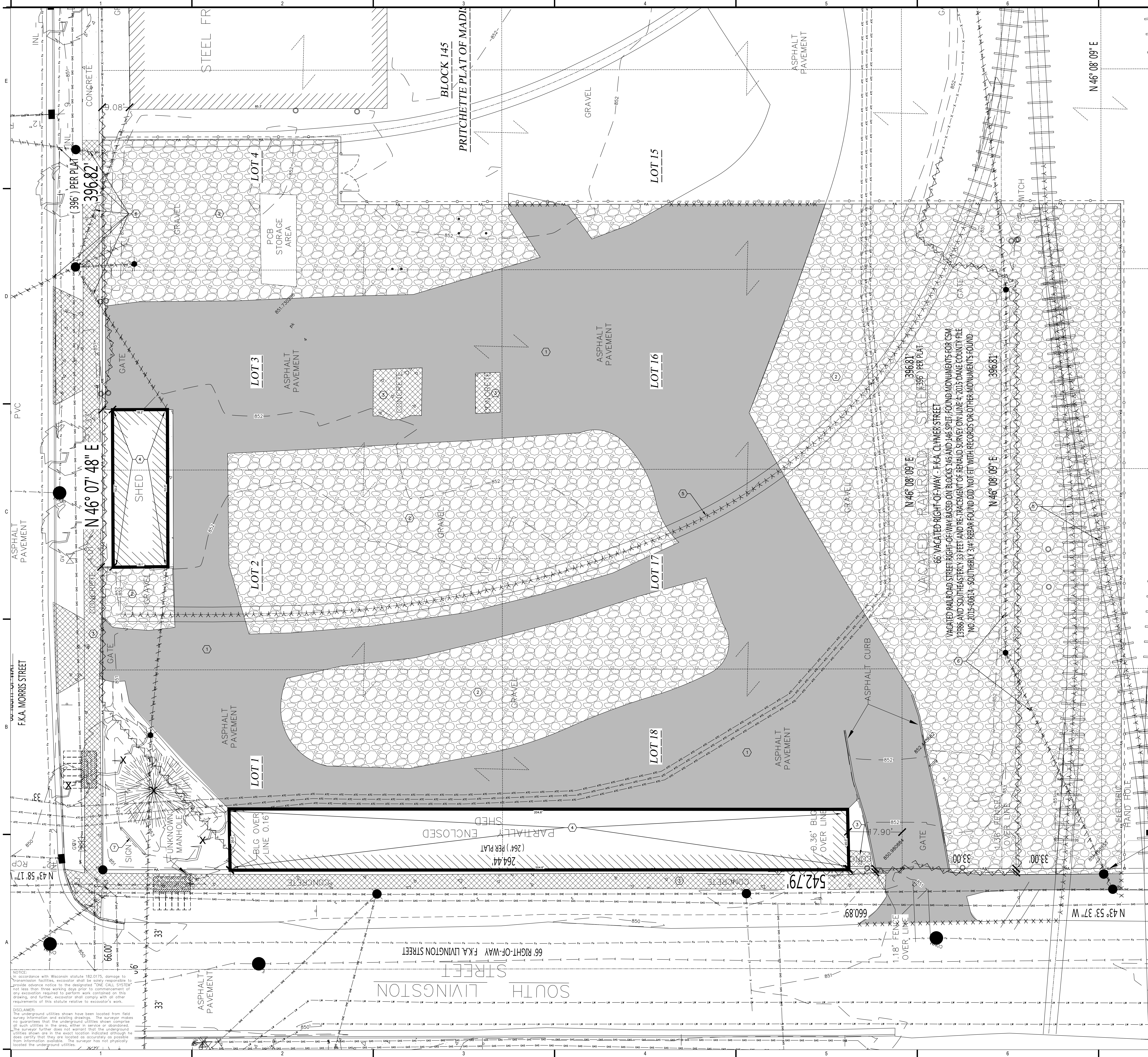
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SCALE: AS NOTED
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SHEET TITLE:

EROSION CONTROL PLAN

SHEET NUMBER:

C-110



KEY NOTES

- 1 ASPHALT PAVEMENT REMOVAL
- 2 GRAVEL REMOVAL
- 3 CONCRETE PAVEMENT REMOVAL
- 4 REMOVE BUILDING STRUCTURE
- 5 REMOVE RAILROAD RAILS AND TIES
- 6 CONTRACTOR TO COORDINATE UTILITY REMOVAL WITH MADISON GAS AND ELECTRIC
- 7 REMOVE SIGN

GRÄEF

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CONSULTANTS:

PROJECT TITLE:
CAPITOL EAST PARKING RAMP

211 SOUTH LIVINGSTON STREET, MADISON WI 53703
MANS NUMBER 1027
CONTRACT NUMBER 7951

CLIENT:
CITY OF MADISON PARKING UTILITY

215 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53701-2986



ISSUE:

NO DATE DESCRIPTION

PROJECT INFORMATION:

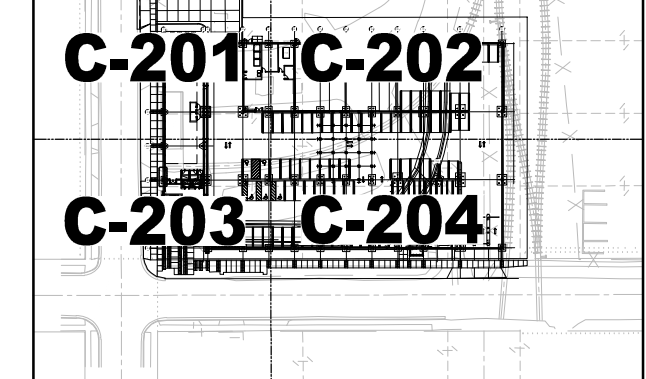
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DATE: 06/30/17
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SHEET TITLE:

SITE DEMOLITION PLAN

SHEET NUMBER:

C-120



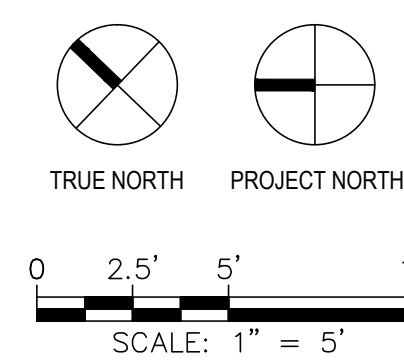
KEY NOTES

- (1) CONCRETE CURB AND GUTTER, TYPE A (A1/C-901)
- (2) CONCRETE DRIVEWAY (C1/C-901)
- (3) CONCRETE SIDEWALK (E2/C-901)
- (4) CONCRETE PAVEMENT (E1/C-901)
- (5) UTILITY TRENCH PAVEMENT RESTORATION (C5/C-901)
- (6) BIKE RACK AREA
- (7) BOLLARD (C6/C-900)
- (8) LAWN/LANDSCAPE AREA
- (9) LANDSCAPE STONE

- (10) CHAIN-LINK FENCE - NOT IN THIS CONTRACT (BY OTHERS)
- (11) CHAIN-LINK FENCE - INSTALLED IN THIS CONTRACT (D1/C-900)
- (12) 12" SWINGING GATE ENTRANCE (D4/C-900)
- (13) 4" SWINGING GATE ENTRANCE (D3/C-900)
- (14) CONCRETE BUILDING STOOP (SEE STRUCTURAL DRAWINGS)

NOTICE:
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MATCH LINE - SEE SHEET C-202

MATCH LINE - SEE SHEET C-203

LOT 3

SHED

PRITCHETT

851.730296
pk

2

852

852

15.2'

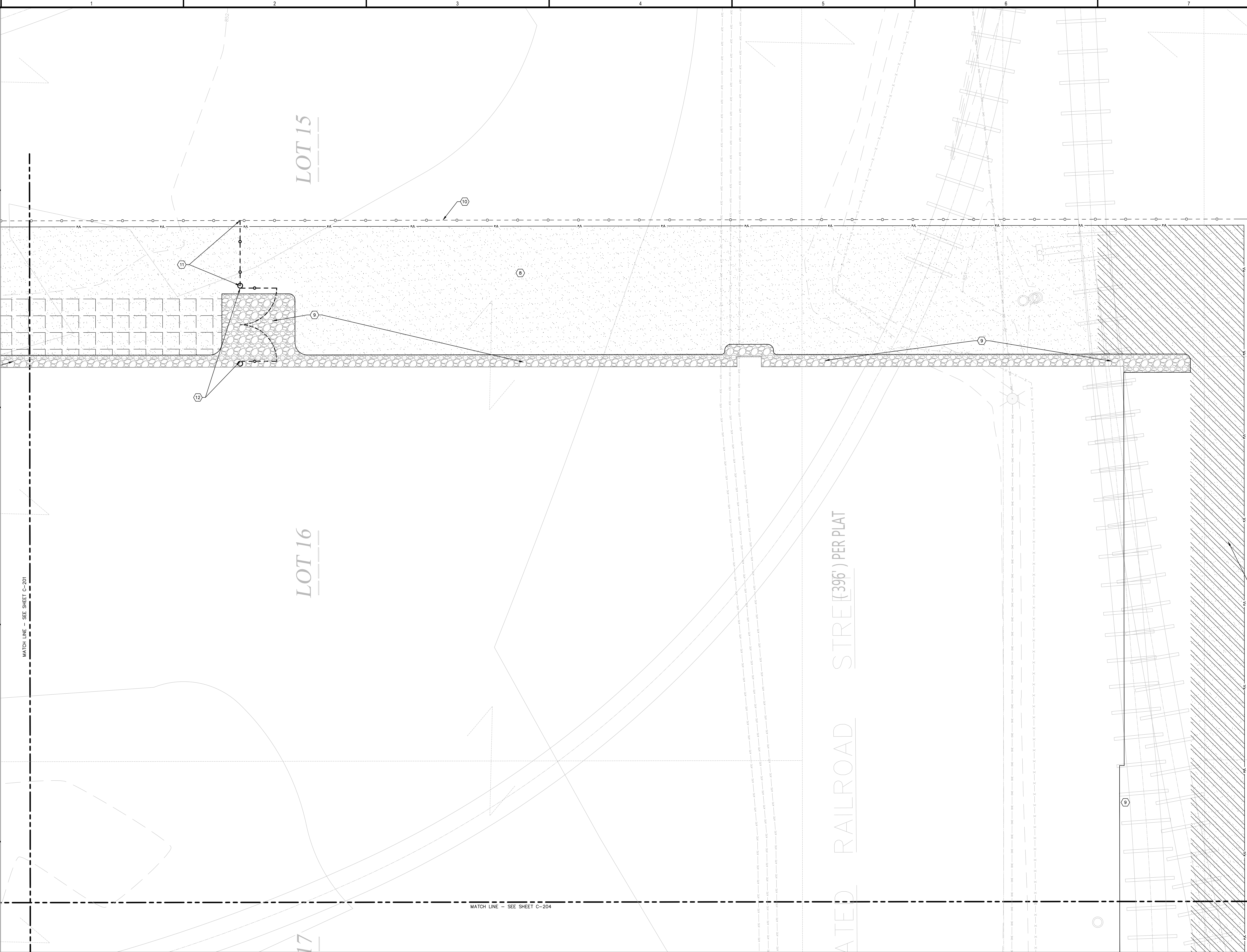
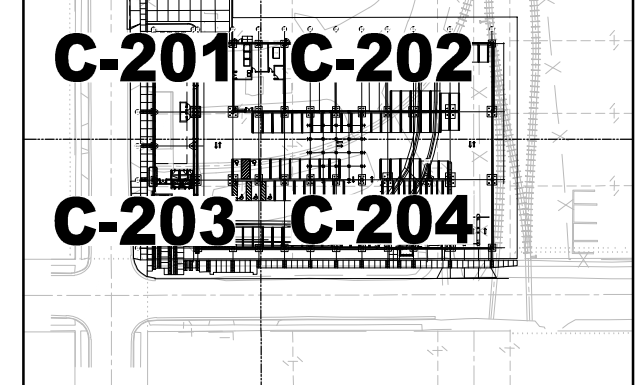
38.81'

8" PVC

8" DI

INL

RCP



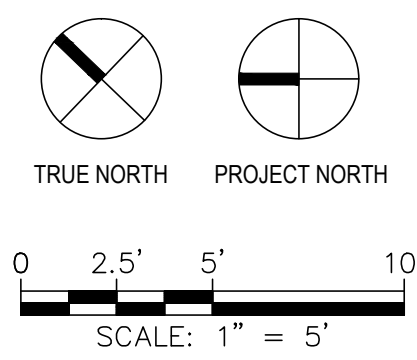
KEY NOTES

- CONCRETE CURB AND GUTTER, TYPE A (A1/C-901)
- CONCRETE DRIVEWAY (C1/C-901)
- CONCRETE SIDEWALK (E2/C-901)
- CONCRETE PAVEMENT (E1/C-901)
- UTILITY TRENCH PAVEMENT RESTORATION (C5/C-901)
- BIKE RACK AREA
- BOLLARD (C6/C-900)
- LAWN/LANDSCAPE AREA
- LANDSCAPE STONE

- CHAIN-LINK FENCE - NOT IN THIS CONTRACT (BY OTHERS)
- CHAIN-LINK FENCE - INSTALLED IN THIS CONTRACT (D1/C-900)
- 12' SWINGING GATE ENTRANCE (D4/C-900)
- 4' SWINGING GATE ENTRANCE (D3/C-900)
- CONCRETE BUILDING STOOP (SEE STRUCTURAL DRAWINGS)

NOTICE:
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MATCH LINE - SEE SHEET C-201

MATCH LINE - SEE SHEET C-204



MATCH LINE - SEE SHEET C-201

LOT 2

LOT 1

SHED
ALLY
ENCLOSED

MATCH LINE - SEE SHEET C-204

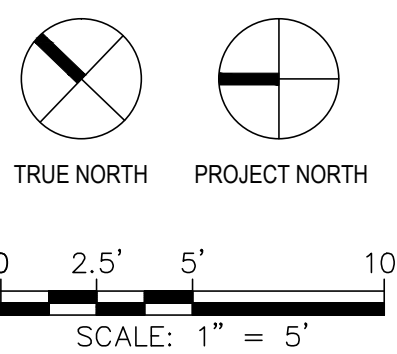
KEY NOTES

- CONCRETE CURB AND GUTTER, TYPE A (A1/C-901)
- CONCRETE DRIVEWAY (C1/C-901)
- CONCRETE SIDEWALK (E2/C-901)
- CONCRETE PAVEMENT (E1/C-901)
- UTILITY TRENCH PAVEMENT RESTORATION (C5/C-901)
- BIKE RACK AREA
- BOLLARD (C6/C-900)
- LAWN/LANDSCAPE AREA
- LANDSCAPE STONE

- CHAIN-LINK FENCE - NOT IN THIS CONTRACT (BY OTHERS)
- CHAIN-LINK FENCE - INSTALLED IN THIS CONTRACT (D1/C-900)
- 12' SWINGING GATE ENTRANCE (D4/C-900)
- 4' SWINGING GATE ENTRANCE (D3/C-900)
- CONCRETE BUILDING STOOP (SEE STRUCTURAL DRAWINGS)

NOTICE:
In accordance with Wisconsin statute 192.0175, damage to transmission facilities, excavator shall be solely responsible to provide advance notice to the designated "TIE CALL SYSTEM" not less than three working days prior to commencement of any excavation required to perform work contained on this drawing, and further, excavator shall comply with all other requirements of this statute relative to excavator's work.

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MATCH LINE - SEE SHEET C-202

LOT 17

LOT 18

VACATED

SCALE: 1" = 5'

0 2.5' 5'

MATCH LINE - SEE SHEET C-203

PARTIAL

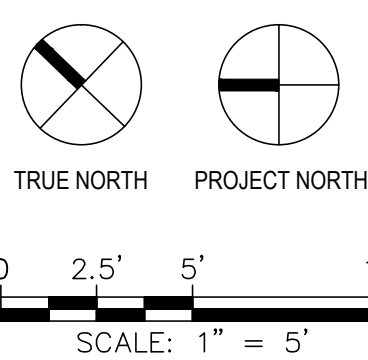
KEY NOTES

- ① CONCRETE CURB AND GUTTER, TYPE A (A1/C-901)
- ② CONCRETE DRIVEWAY (C1/C-901)
- ③ CONCRETE SIDEWALK (E2/C-901)
- ④ CONCRETE PAVEMENT (E1/C-901)
- ⑤ UTILITY TRENCH PAVEMENT RESTORATION (C5/C-901)
- ⑥ BIKE RACK AREA
- ⑦ BOLLARD (C6/C-900)
- ⑧ LAWN/LANDSCAPE AREA
- ⑨ LANDSCAPE STONE

- ⑩ CHAIN-LINK FENCE - NOT IN THIS CONTRACT (BY OTHERS)
- ⑪ CHAIN-LINK FENCE - INSTALLED IN THIS CONTRACT (D1/C-900)
- ⑫ 12' SWINGING GATE ENTRANCE (D4/C-900)
- ⑬ 4' SWINGING GATE ENTRANCE (D3/C-900)
- ⑭ CONCRETE BUILDING STOOP (SEE STRUCTURAL DRAWINGS)

NOTICE:
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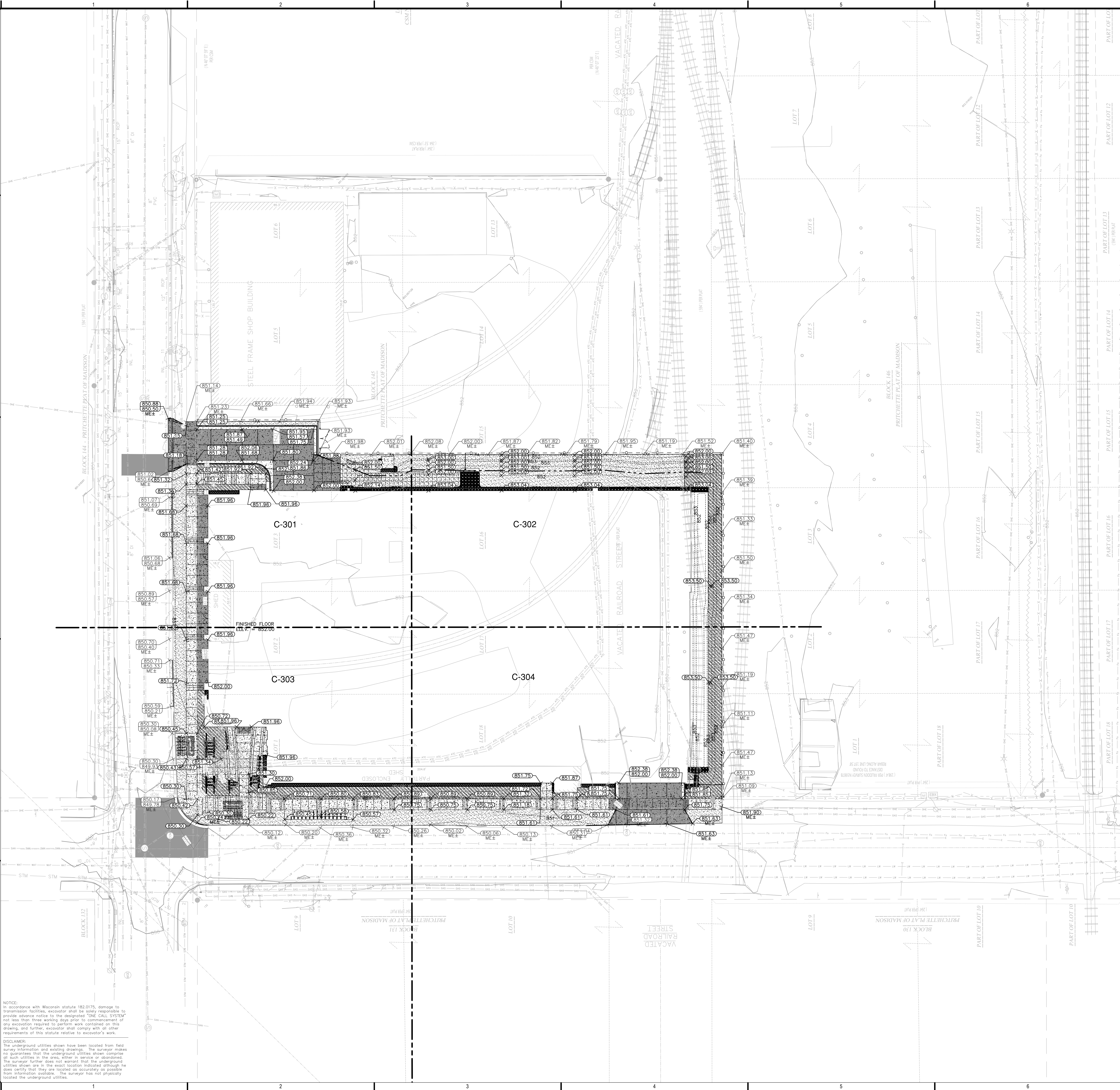
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TRUE NORTH PROJECT NORTH

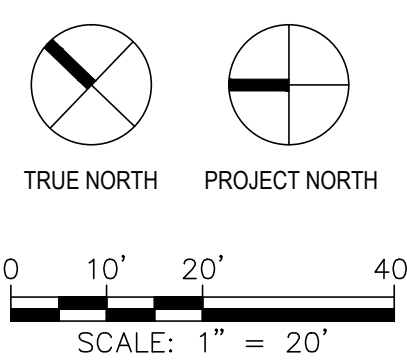
0 2.5' 5' 10'

SCALE: 1" = 5'



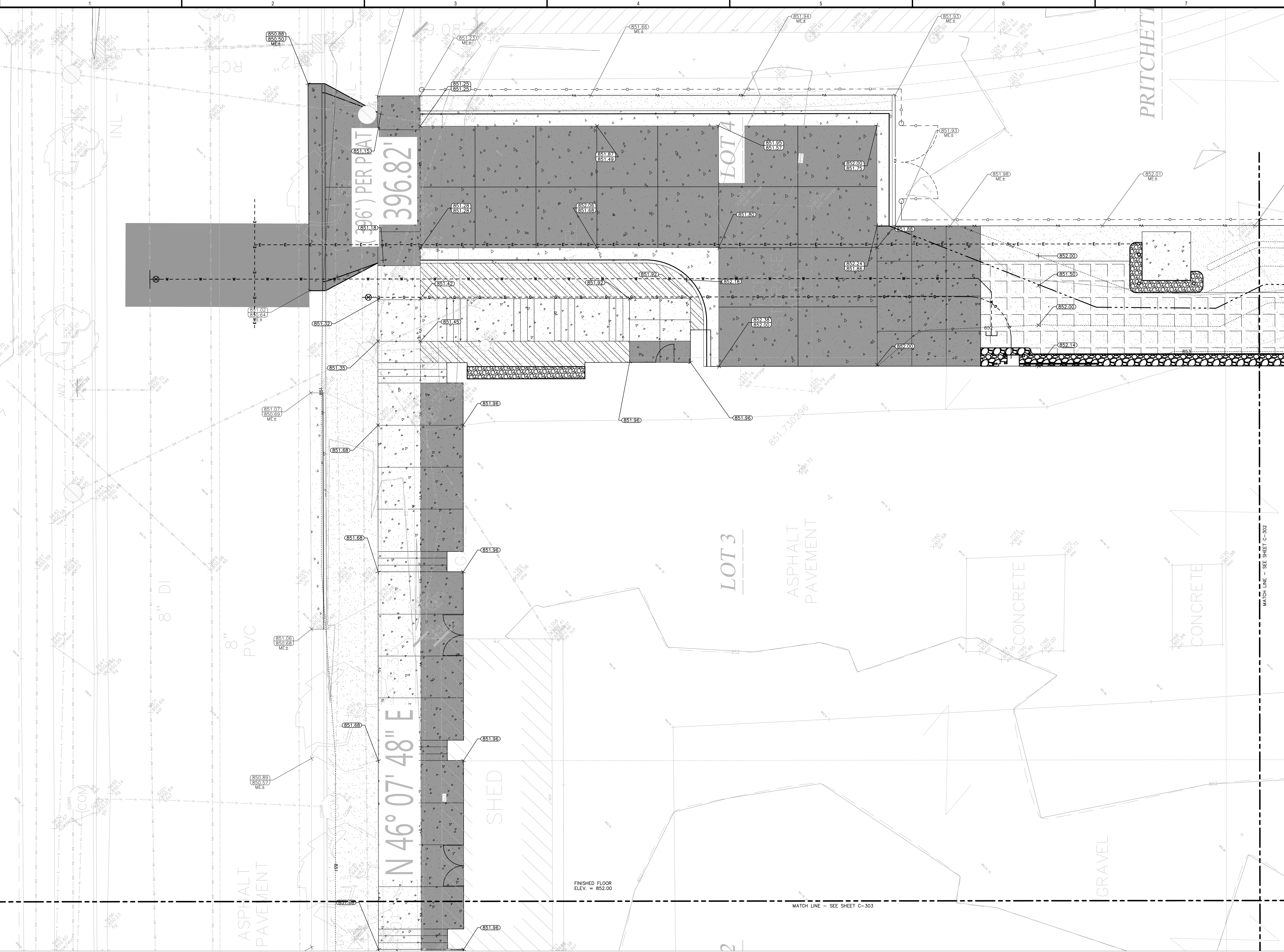
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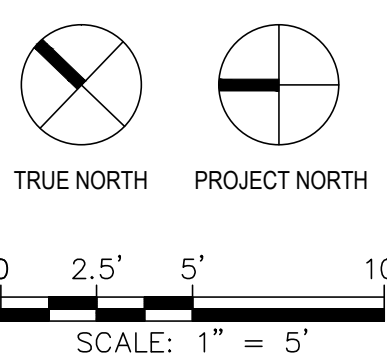


C-301 C-302
C-303 C-304



NOTICE:
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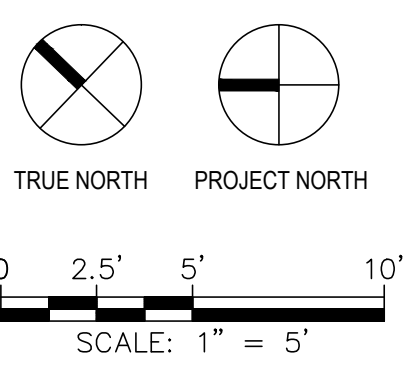
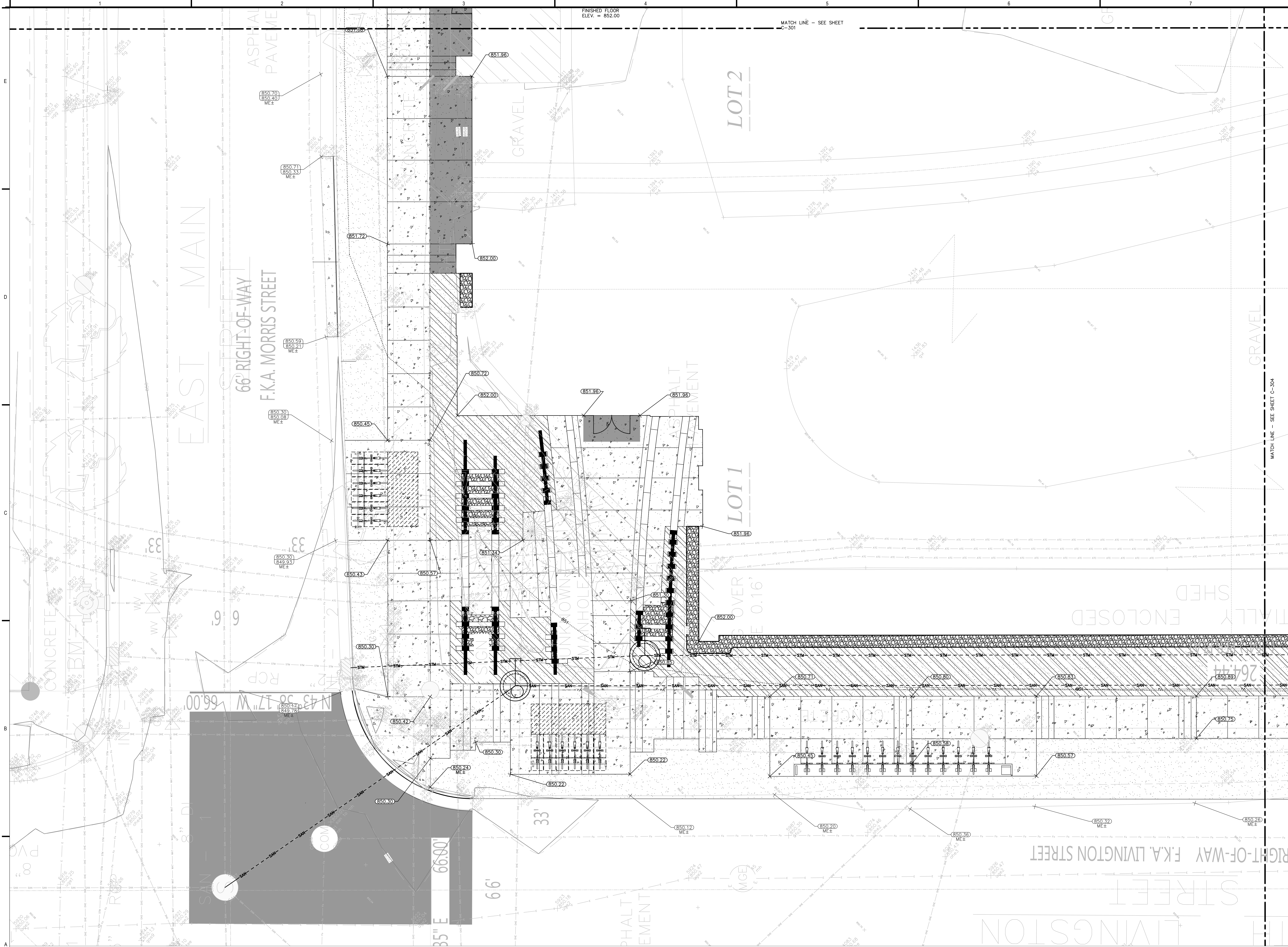
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X:\IND\2016\20160511\CAD\Std\dwg\00C_00_C301-304_GradingDetailPlan_5051
6/27/2017 4:15 PM

NOTICE:
In accordance with Wisconsin statute 192.0175, damage to transmission facilities, excavator shall be solely responsible to provide advance notice to the designated "TNE CALL 313330" not less than three working days prior to commencement of any excavation required to perform work contained on this drawing, and further, excavator shall comply with all other requirements of this statute relative to excavator's work.

DISCLAIMER:
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GRÄEF

5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CONSULTANTS:

PROJECT TITLE:
CAPITOL EAST PARKING RAMP

211 SOUTH LIVINGSTON STREET, MADISON WI 53703
MAINS NUMBER 1927
CONTRACT NUMBER 7951

CLIENT:

CITY OF MADISON PARKING UTILITY
215 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53701-2986



ISSUE:

NO DATE DESCRIPTION

C-301 C-302
C-303 C-304

KEY PLAN

PROJECT INFORMATION:

PROJECT NUMBER: 2016-5051
DATE: 06/30/17
DRAWN BY: SRK
CHECKED BY: JAL
APPROVED BY: JAL
SCALE: AS NOTED
SET TYPE: BD

SHEET TITLE:

GRADING DETAIL PLAN (SHEET 3 OF 4)

SHEET NUMBER:

C-303



MATCH LINE - SEE SHEET C-302

LOT 17

LOT 18

ASPHALT
PAVEMENT

ASPHALT CURB

VACATED

66' VACATE

VACATED RAILROAD STREET RIGHT-OF-W

13986 AND SOUTHEASTERLY 33 FEET AND

NO. 2015-00614. SOUTHERLY 3/4" REB

MATCH LINE - SEE SHEET C-303

GRAVEL

A

B

C

D

E

66' RIGHT

PARTIAL

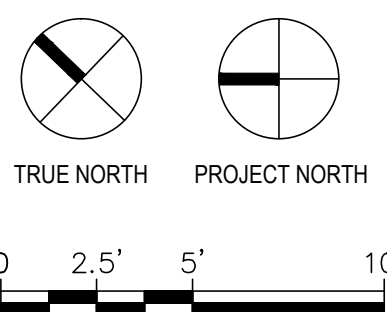
MATCH LINE - SEE SHEET C-302

MATCH LINE - SEE SHEET C-301

MATCH LINE - SEE SHEET C-300

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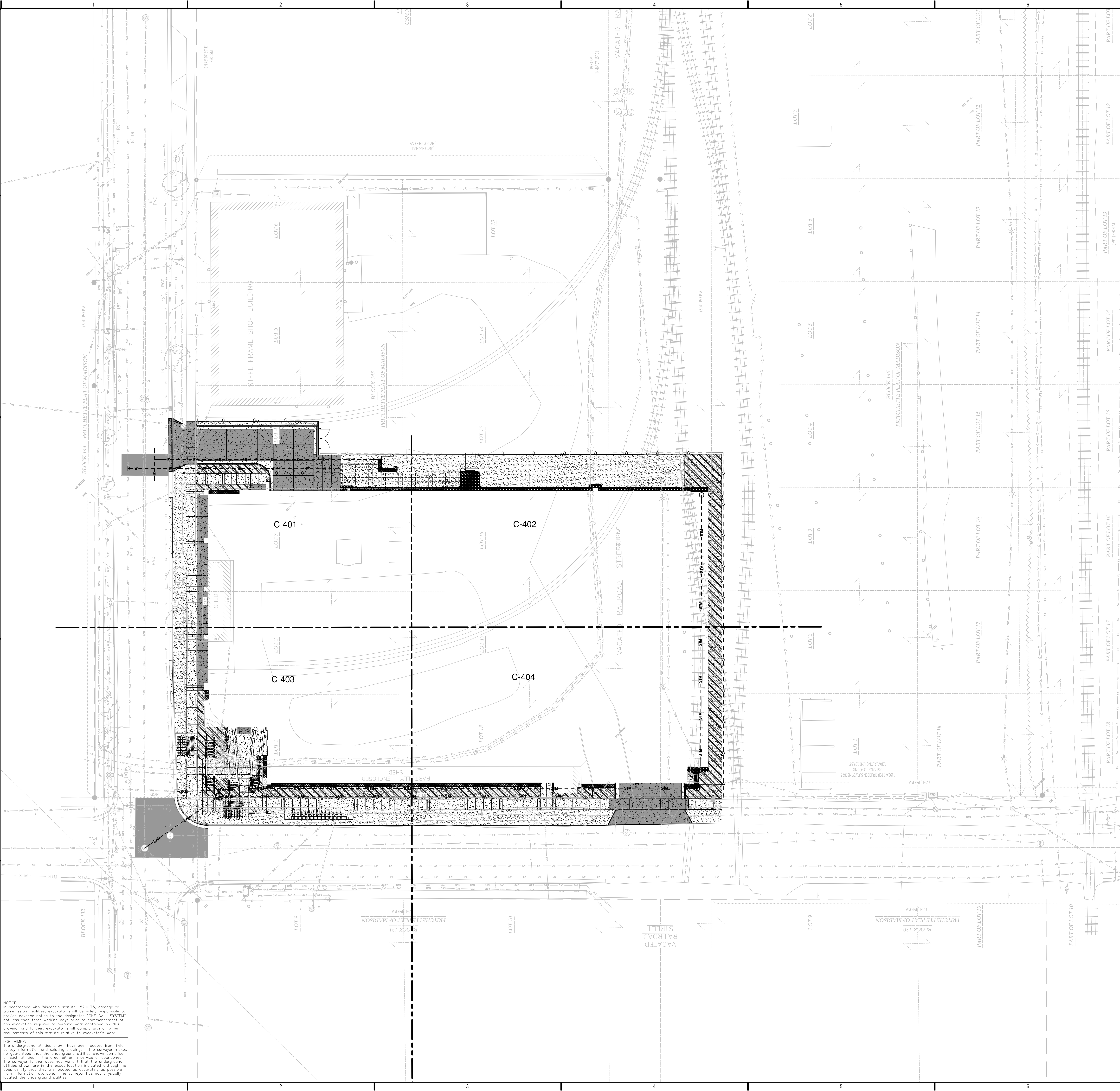
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TRUE NORTH PROJECT NORTH

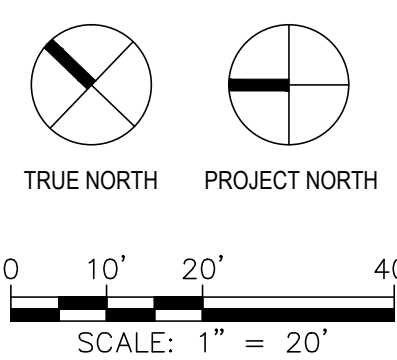
0 2.5' 5' 10'

SCALE: 1" = 5'

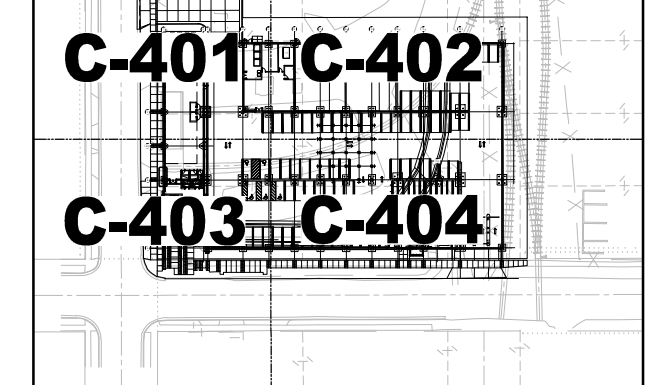


NOTICE:
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TRUE NORTH PROJECT NORTH
0 10' 20' 40'
SCALE: 1" = 20'



CONNECT TO EXISTING MG&E
ELECTRIC DUCTBANK (SEE
ELECTRICAL DRAWINGS)

EX. 8" SAN I.E. 844.24

CONNECT TO EXISTING 8-INCH
DUCTILE IRON WATER MAIN (CUT-IN
CONNECTION INCLUDING TEE AND
GATE VALVE IN ACCORDANCE WITH
SSPW 703.7 (1) 2.)
EX. 8" I.E. 845.96
PR. 6" I.E. 845.64

CONNECT TO EXISTING STEEL
NATURAL GAS MAIN (SEE
MECHANICAL DRAWINGS)

136 L.F. - 6" D.I.P. @ S.=0.0050'/'

PROPOSED NATURAL GAS
SERVICE (SEE MECHANICAL
DRAWINGS)

PR. 6" BUILDING WATER
SERVICE CONNECTION
I.E. 846.50

PROPOSED NATURAL GAS
METER (SEE MECHANICAL
DRAWINGS)

PROPOSED ELECTRIC SERVICE
(SEE ELECTRICAL DRAWINGS)

PROPOSED ELECTRIC
TRANSFORMER AND
CONCRETE PAD (SEE
ELECTRICAL DRAWINGS)

6"X45" BEND
I.E. 846.32
3.11 L.F. - 6" D.I.P. @ S.=0.0172'/'

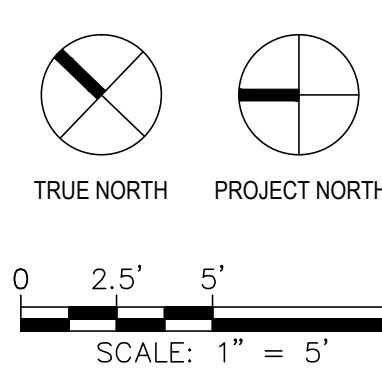
6"X45" BEND
I.E. 846.38
7.21 L.F. - 6" D.I.P. @ S.=0.0172'/'

KEY NOTES

- EXISTING UTILITY- CONTRACTOR SHALL HYDRO-EXCAVATE TO EXISTING UTILITY TO CONFIRM ELEVATION PRIOR TO INSTALLING NEW UTILITIES.
- NEW UTILITY- CONTRACTOR SHALL CONFIRM WITH UTILITY OWNER EXACT DIMENSIONS AND DEPTH OF NEW UTILITY PRIOR TO INSTALLING NEW UTILITIES.

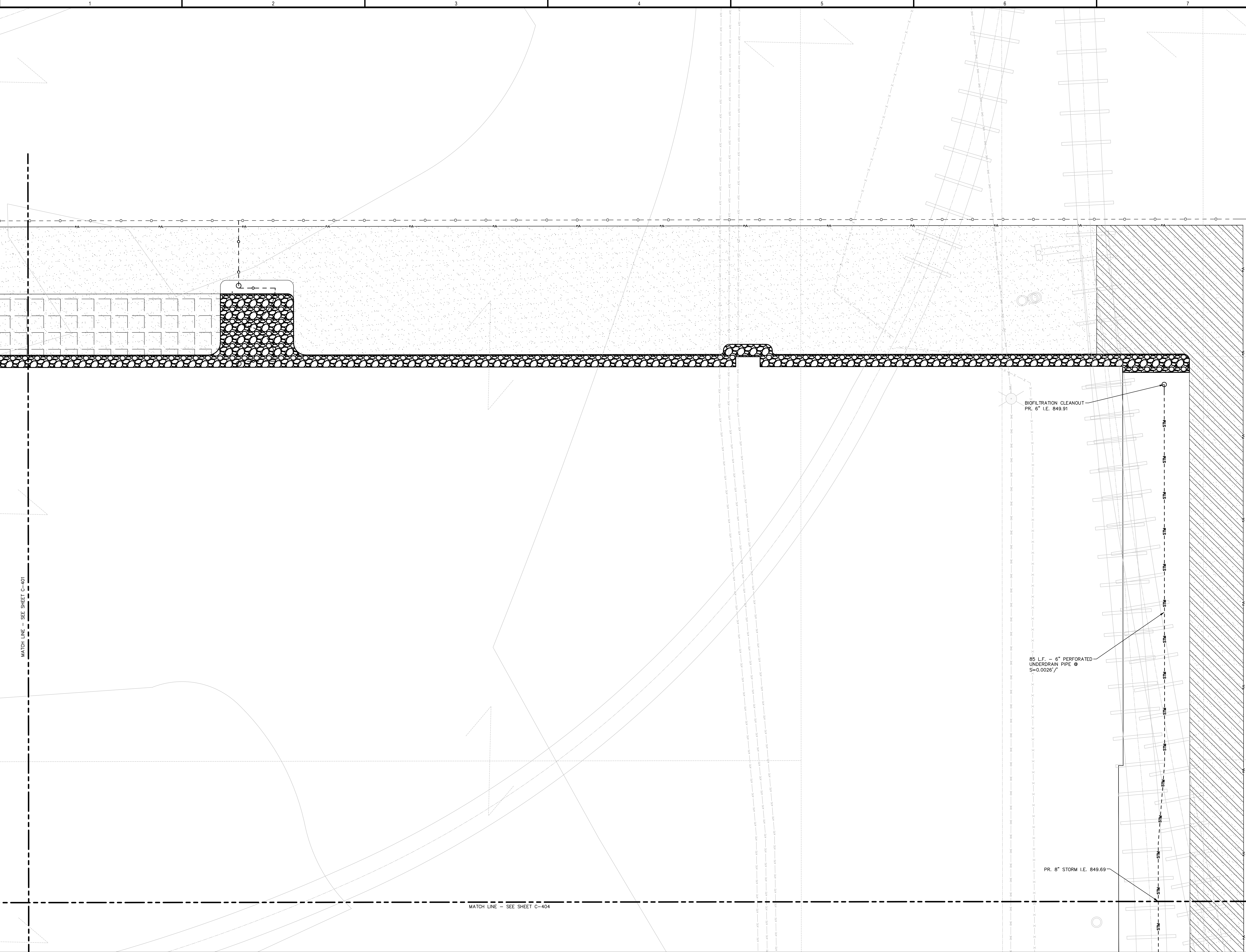
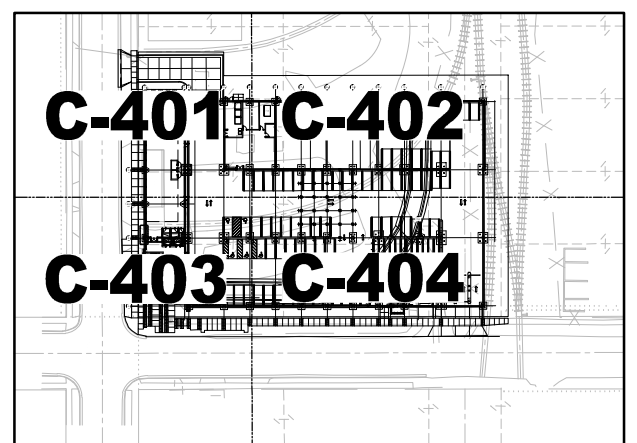
NOTICE:
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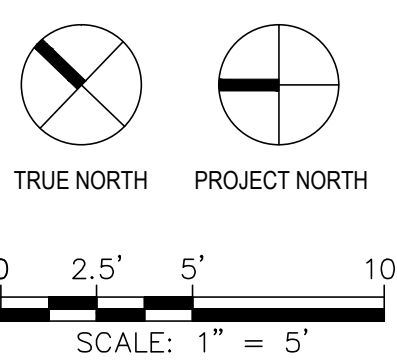
MATCH LINE - SEE SHEET C-402

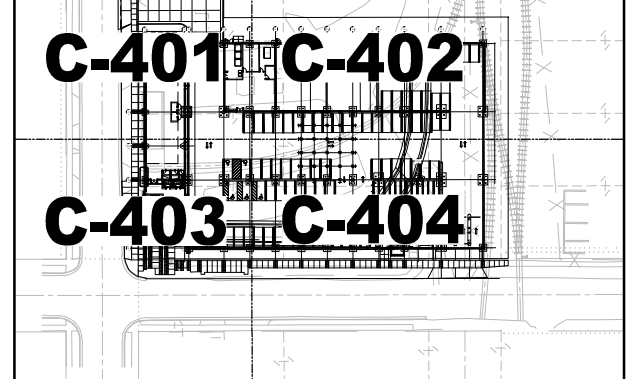
MATCH LINE - SEE SHEET C-403



NOTICE:
In accordance with Wisconsin statute 192.0175, damage to transmission facilities, excavator shall be solely responsible to provide advance notice to the designated "ONE CALL SYSTEM" not less than three working days prior to commencement of any excavation required to perform work contained on this drawing, and further, excavator shall comply with all other requirements of this statute relative to excavator's work.

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MATCH LINE - SEE SHEET C-401

MATCH LINE - SEE SHEET C-404

EX. STORM MH
RIM EL. 850.37
EX. 12" RCP N I.E. 847.63
PR. 12" PVC S I.E. 847.63

49 L.F. - PR. 12-INCH PVC
STORM LATERAL S=0.0052'/

CONNECT TO BUILDING
SANITARY SEWER (SEE
PLUMBING DRAWINGS)
PR. 6" I.E. 848.72

PR. STORM MH #STM01
48" DIAMETER
NEENAH R-1661 FRAME AND COVER
RIM EL. 851.50
PR. 12" N I.E. 844.88
PR. 15" E I.E. 847.88
PR. 6" S I.E. 847.88

103 L.F. - PR. 8-INCH PVC
STORM LATERAL S=0.0052'/

124 L.F. - PR. 6-INCH PVC
SANITARY LATERAL S=0.0104'/

PR. 6" SAN I.E. 848.42

PR. 6" SAN I.E. 845.56

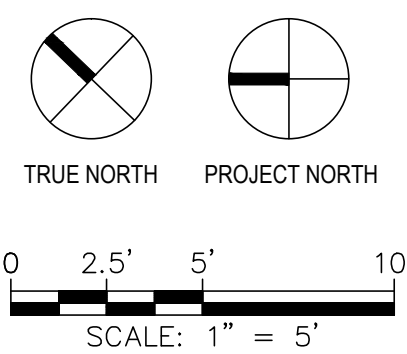
PR. SANITARY MH #SAN01
48" DIAMETER
NEENAH R-1661 FRAME AND COVER
RIM EL. 851.50
PR. 6" NW I.E. 844.02
PR. 6" E I.E. 844.27
PR. 6" E I.E. 846.70 (DROP)
PR. 6" S I.E. 844.27

EX. SANITARY MH
RIM EL. 850.37
EX. 8" PVC N I.E. 843.08
EX. 8" PVC E I.E. 843.13
EX. 8" PVC W I.E. 843.13
EX. 4" SW I.E. 843.40
EX. 4" SE I.E. 843.40
PR. 6" PVC SE I.E. 843.40

59 L.F. - PR. 6-INCH PVC
SANITARY LATERAL S=0.0104'/

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MATCH LINE - SEE SHEET C-402

PR. 8" STORM I.E. 849.69

104 L.F. - 6" PERFORATED
UNDERDRAIN PIPE @
S=0.0026'/'

CONNECT TO BUILDING
STORM SEWER. (SEE
PLUMBING DRAWINGS)
PR. 6" I.E. 849.27

PR. 8" STORM I.E. 849.17

PR. 6" SANITARY CLEANOUT
I.E. 846.77

CONNECT TO BUILDING
SANITARY SEWER. (SEE
PLUMBING DRAWINGS)
PR. 6" I.E. 846.81

184 L.F. - PR. 8-INCH PVC
STORM LATERAL @ S= 0.0052'/'

116 L.F. - PR. 6-INCH PVC
SANITARY LATERAL @ S=0.0104'/'

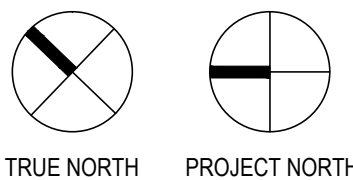
PR. 8" STORM I.E. 848.42

PR. 6" SAN I.E. 845.56

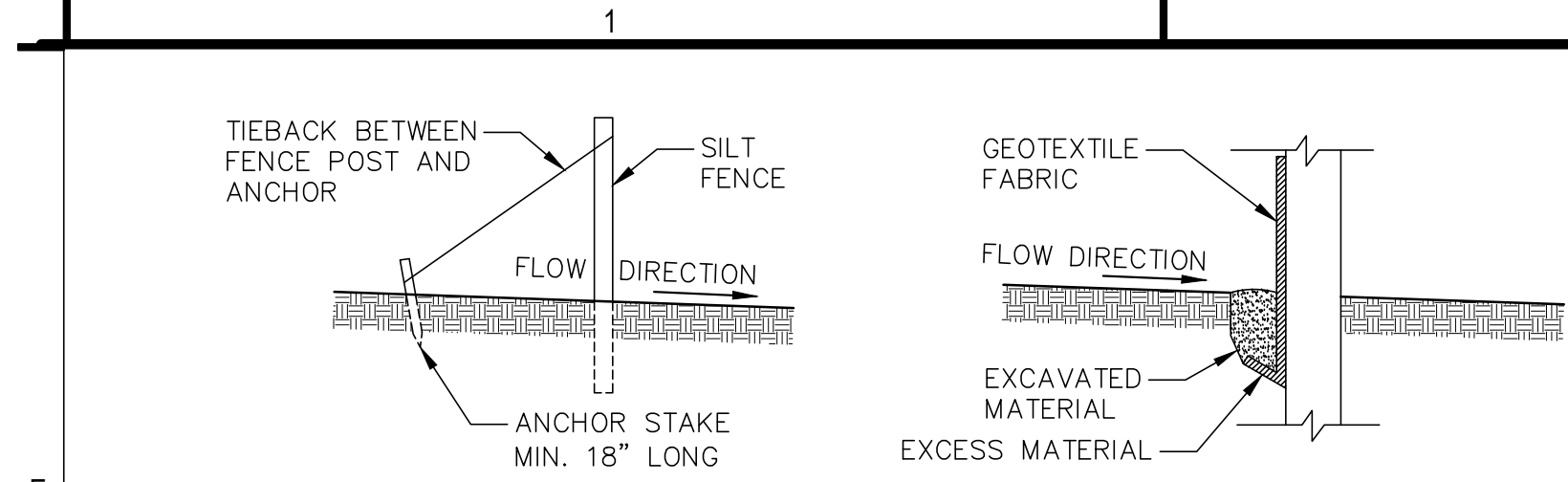
PR. STORM MH #STM02
42" DIAMETER
NEENAH R-1661 FRAME AND COVER
RIM EL. 851.50
PR. 8" N I.E. 849.38
PR. 6" E I.E. 849.42

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0 2.5' 5' 10'
SCALE: 1" = 5'



SILT FENCE TIE BACK

N.T.S.

GENERAL NOTES:

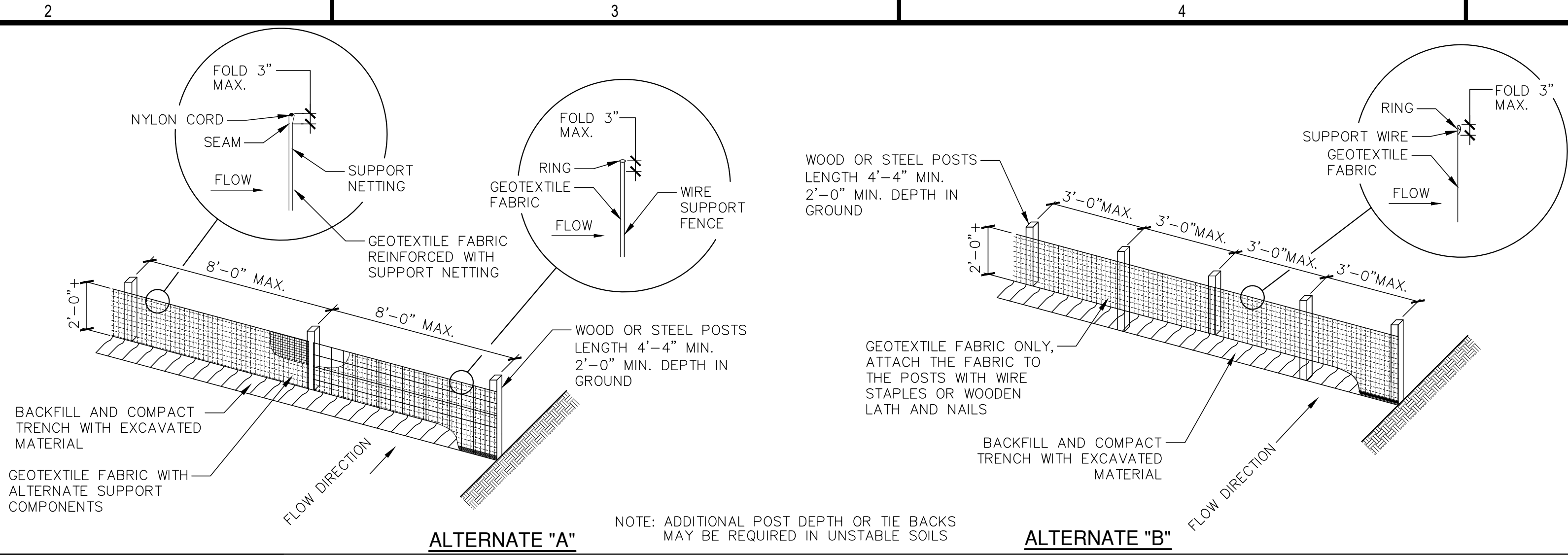
DETAIL OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN DNR CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK.

WHEN POSSIBLE THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR HORSE SHOE SHAPE, WITH THE ENDS POINTING UP SLOPE TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.

EXCAVATE A TRENCH A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

TRENCH DETAIL

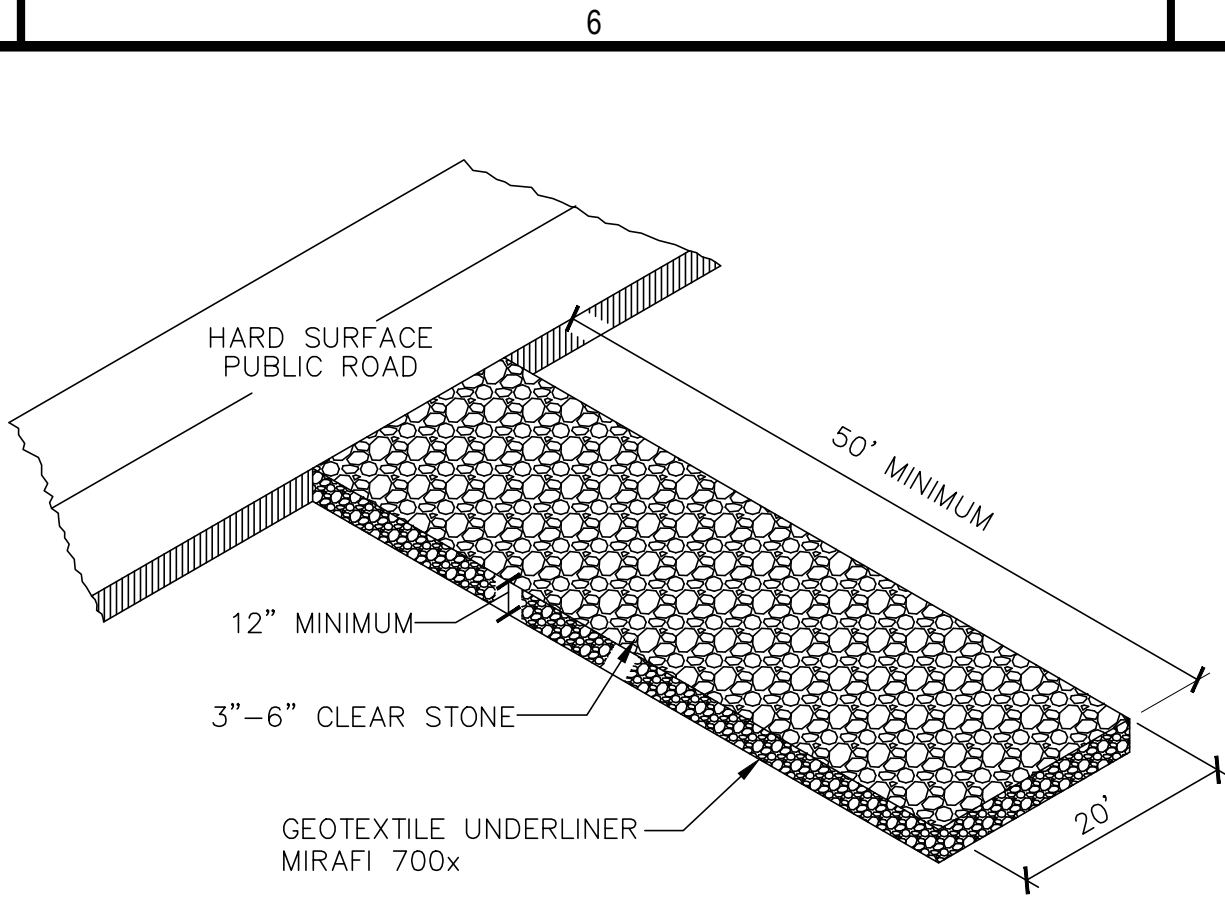
N.T.S.



ALTERNATE "A"

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

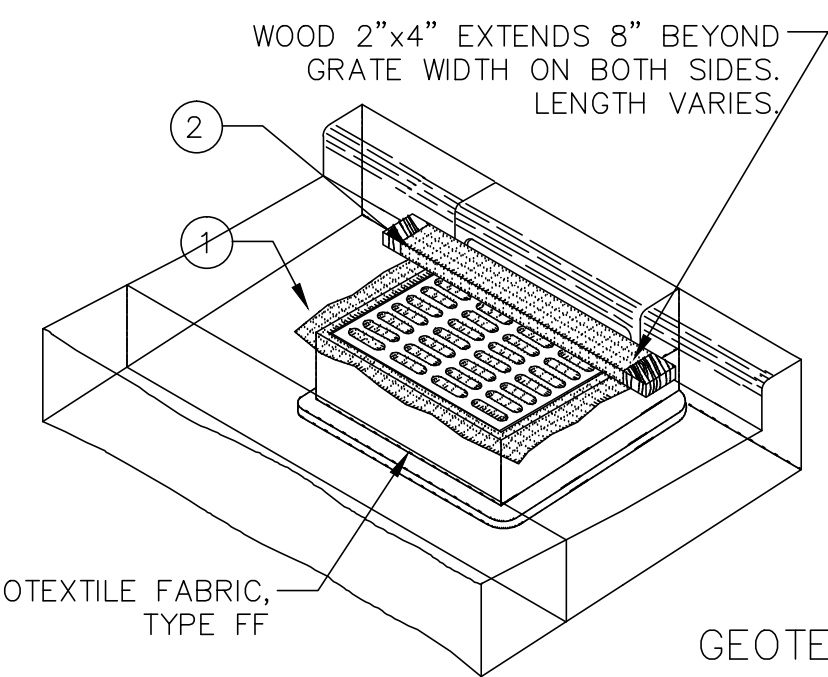
ALTERNATE "B"



STONE CONSTRUCTION ENTRANCE

N.T.S.

E6



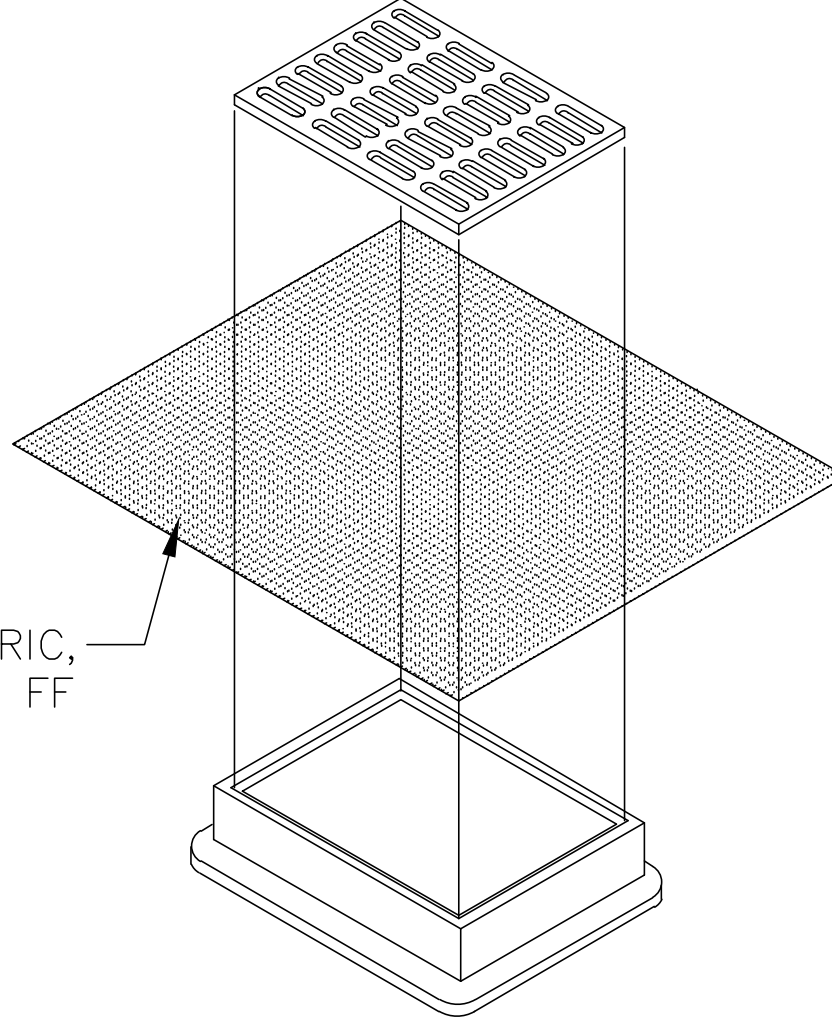
- 1 FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- 2 FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

INLET PROTECTION TYPE C

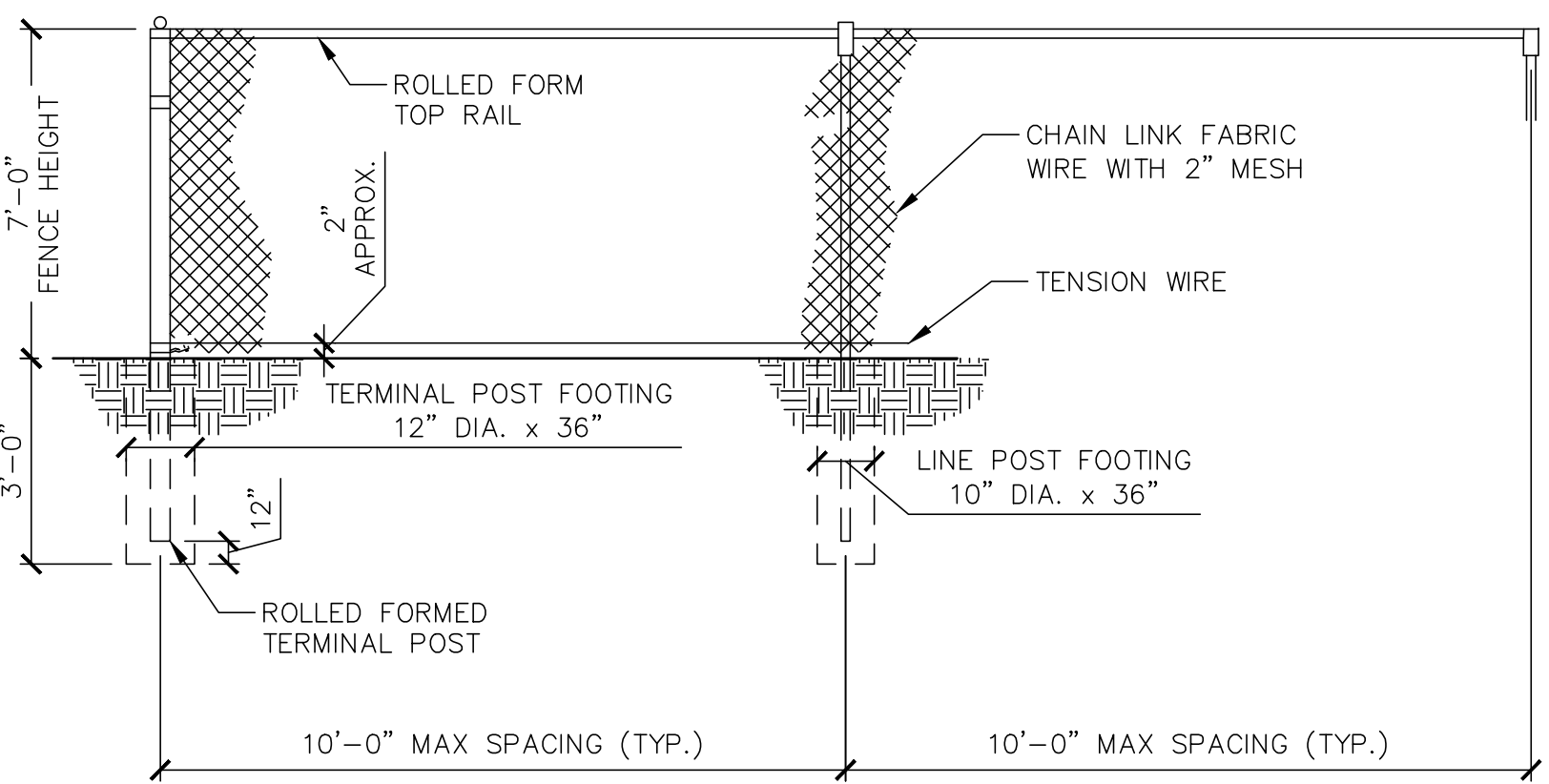
INLET GRATE SCREEN

N.T.S.

D6



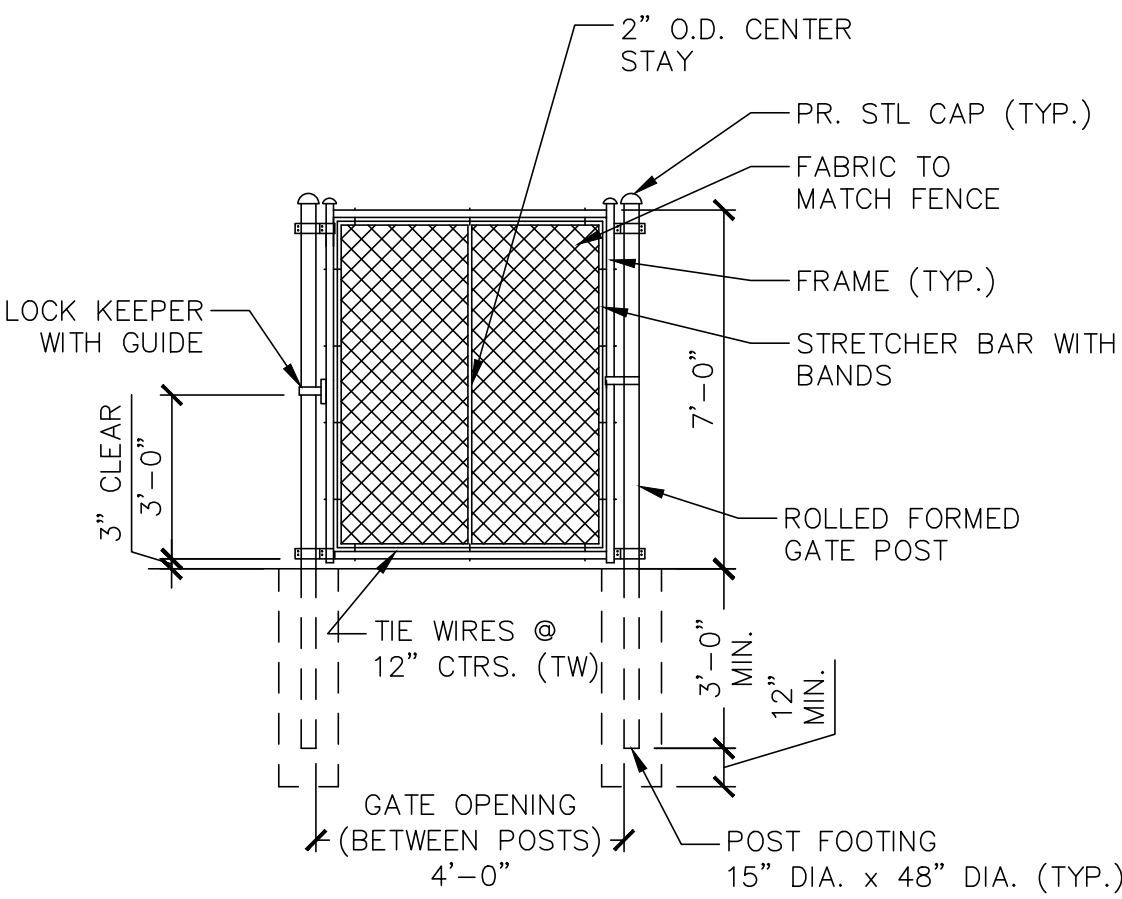
INLET PROTECTION TYPE B



CHAIN LINK FENCE

N.T.S.

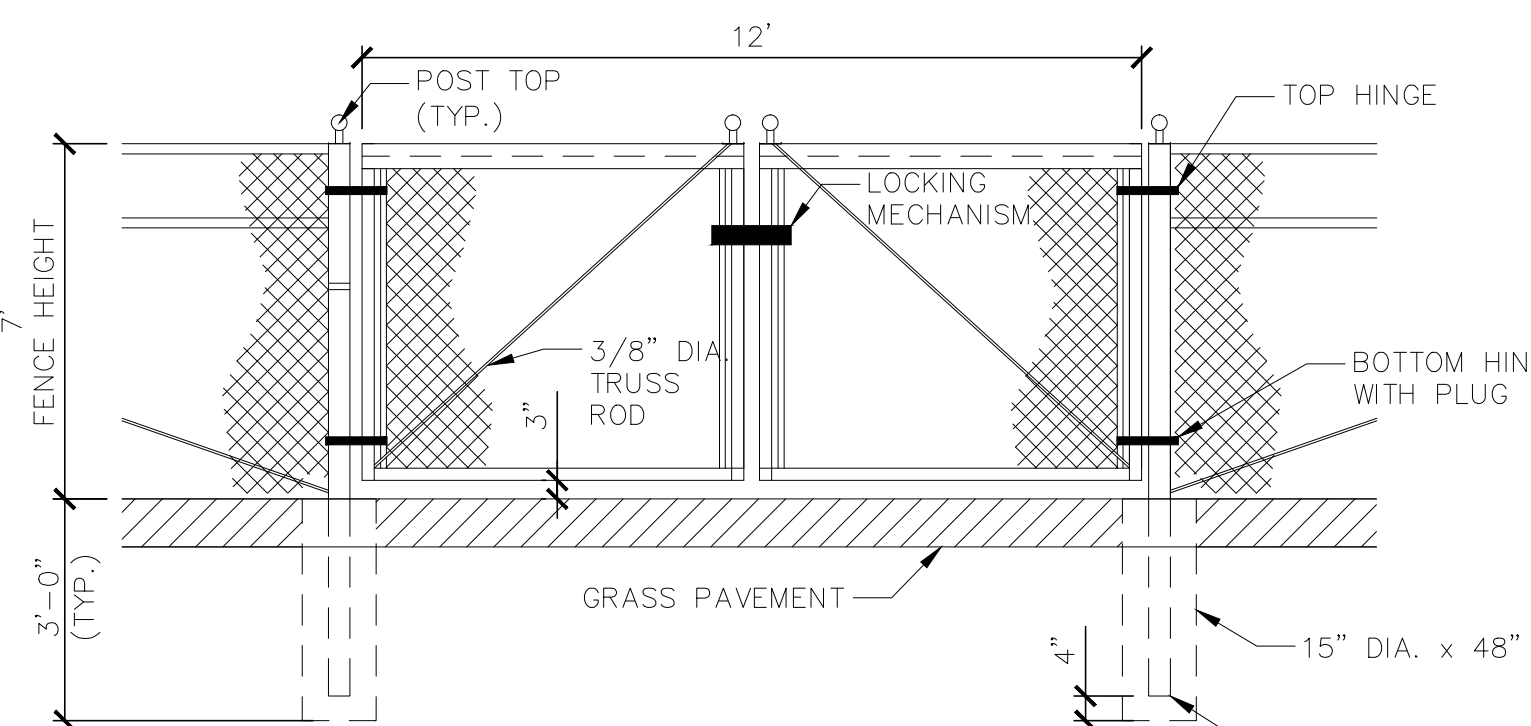
D1



4' SWINGING GATE ENTRANCE

N.T.S.

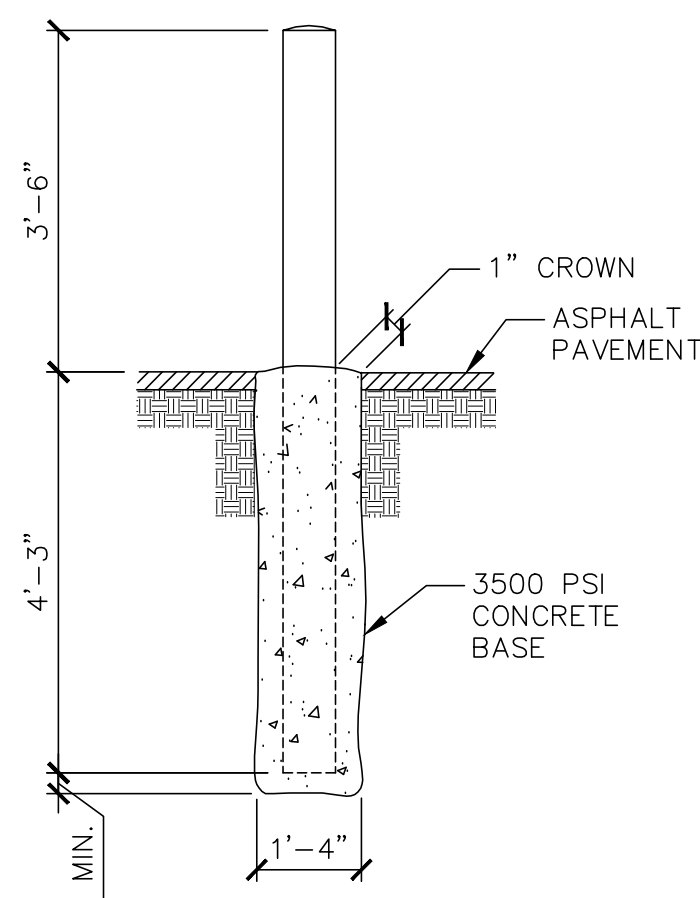
D3



12' SWINGING GATE ENTRANCE

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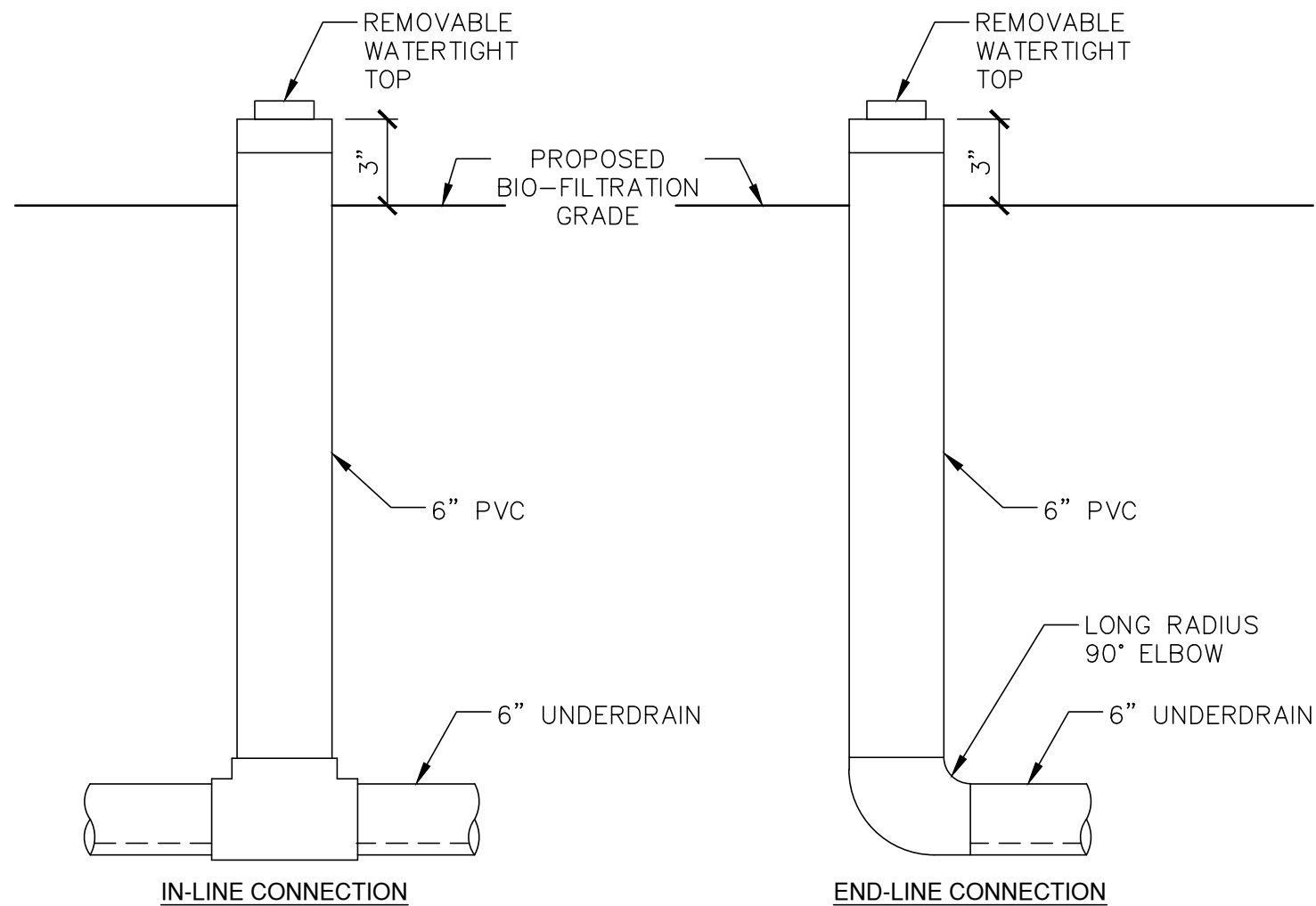
D4



STEEL BOLLARD

N.T.S.

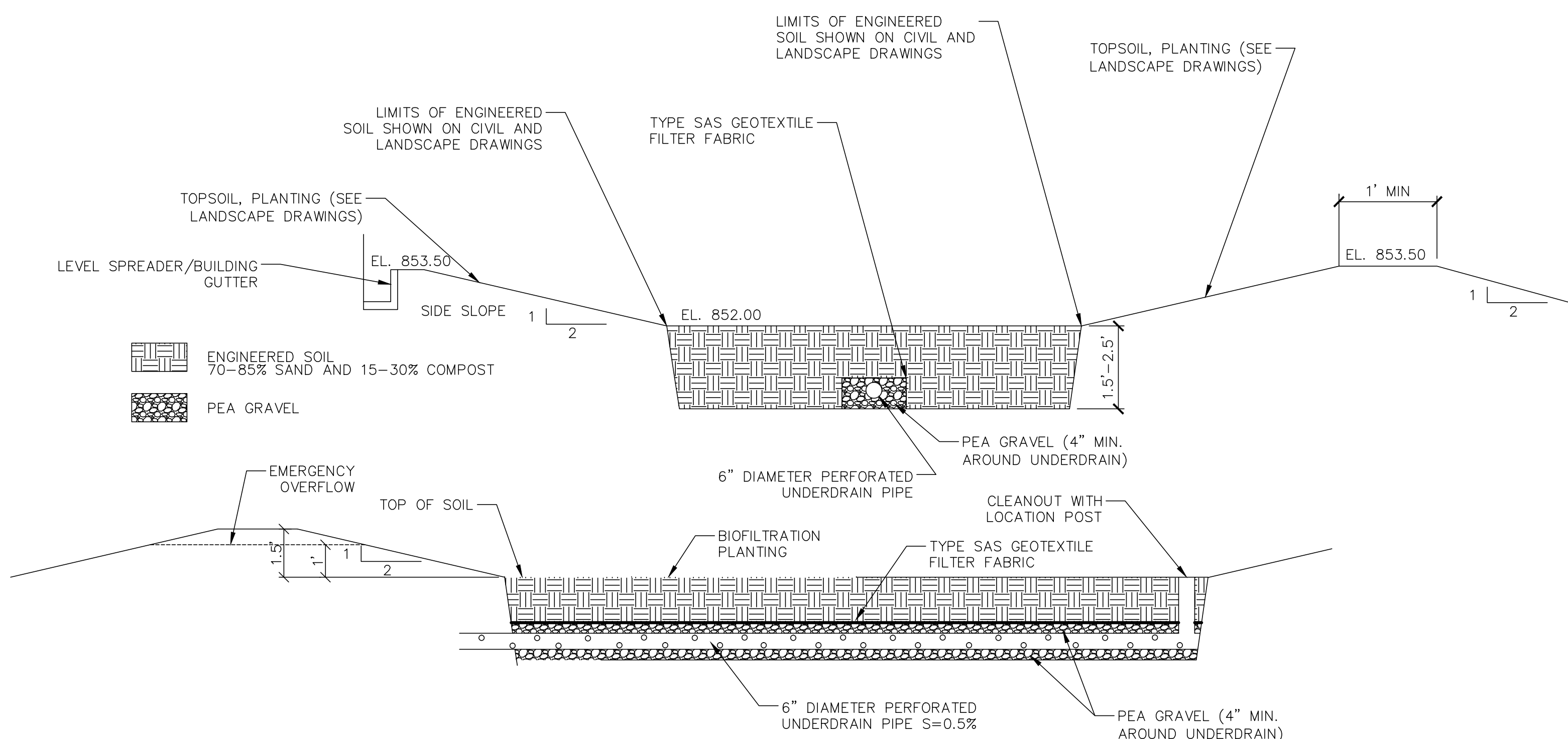
C6



BIOFILTRATION BASIN CLEANOUT DETAIL

N.T.S.

A3



BIOFILTRATION BASIN NOTES:

BIOFILTRATION BASIN SHALL BE CONSTRUCTED IN CONFORMANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARD 1004 BIORETENTION FOR INFILTRATION. ENGINEERED SOIL SHALL BE 70-85% SAND AND 15-30% COMPOST BY VOLUME.

BIOFILTRATION BASIN

N.T.S.

A5

Gräef

5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CONSULTANTS:

PROJECT TITLE:

CAPITOL EAST PARKING RAMP

211 SOUTH LIVINGSTON STREET, MADISON WI 53703
MAINS NUMBER 1627
CONTRACT NUMBER 7951

CLIENT:

CITY OF MADISON PARKING UTILITY

215 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53701-2986



ISSUE:

NO DATE DESCRIPTION

PROJECT INFORMATION:

PROJECT NUMBER: 2016-5051

DATE: 06/30/17

DRAWN BY: SRK

CHECKED BY: JAL

APPROVED BY: JAL

SCALE: AS NOTED

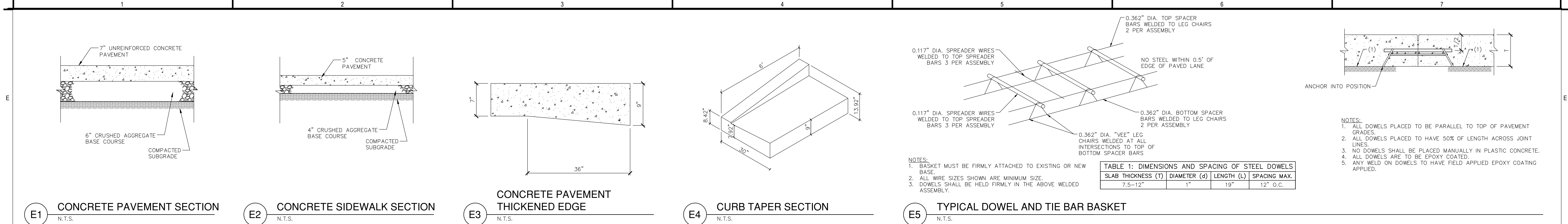
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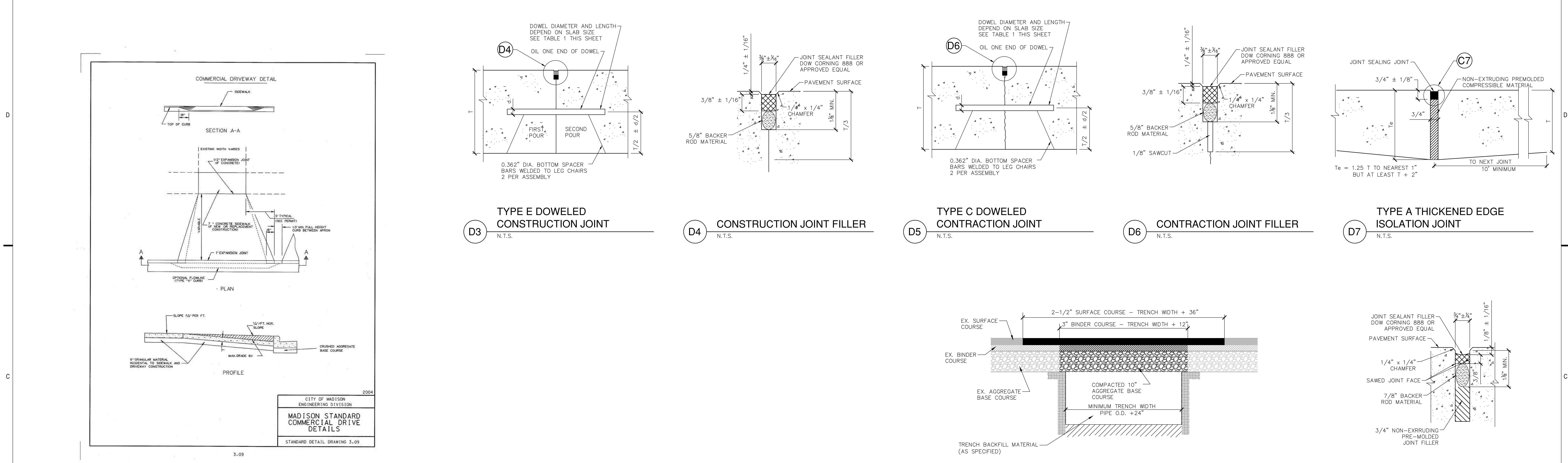
CONSTRUCTION DETAILS

SHEET NUMBER:

C-900



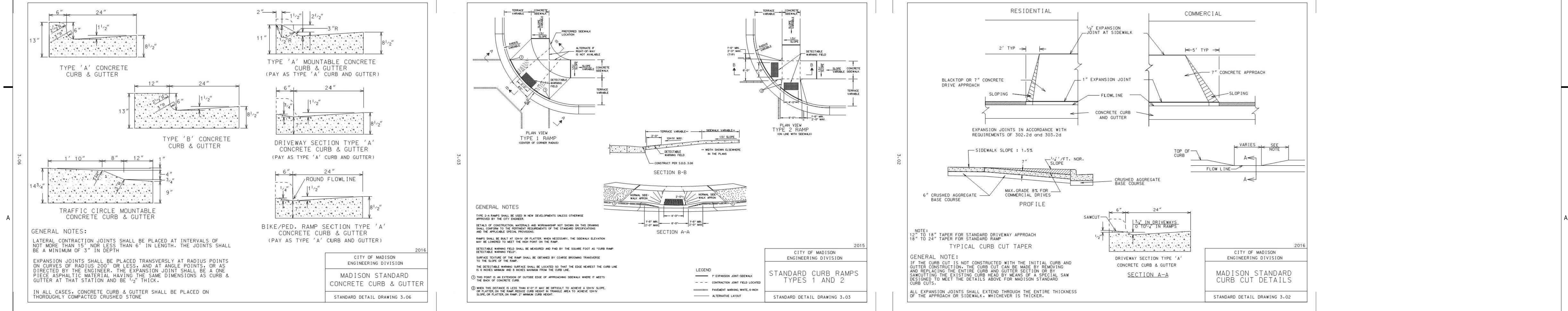
E1 CONCRETE PAVEMENT SECTION N.T.S. E2 CONCRETE SIDEWALK SECTION N.T.S. E3 CONCRETE PAVEMENT THICKENED EDGE N.T.S. E4 CURB TAPER SECTION N.T.S. E5 TYPICAL DOWEL AND TIE BAR BASKET N.T.S.



D3 TYPE E DOWELED CONSTRUCTION JOINT N.T.S. D4 CONSTRUCTION JOINT FILLER N.T.S. D5 TYPE C DOWELED CONTRACTION JOINT N.T.S. D6 CONTRACTION JOINT FILLER N.T.S. D7 TYPE A THICKENED EDGE ISOLATION JOINT N.T.S.



C1 MADISON STANDARD COMMERCIAL DRIVE DETAILS N.T.S.



A1 MADISON STANDARD CONCRETE CURB AND GUTTER N.T.S. A3 MADISON STANDARD CURB RAMPS TYPE 1 AND 2 N.T.S. A5 MADISON STANDARD CURB CUT DETAILS N.T.S.

5126 West Terrace Drive,
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Madison, WI 53718-8346
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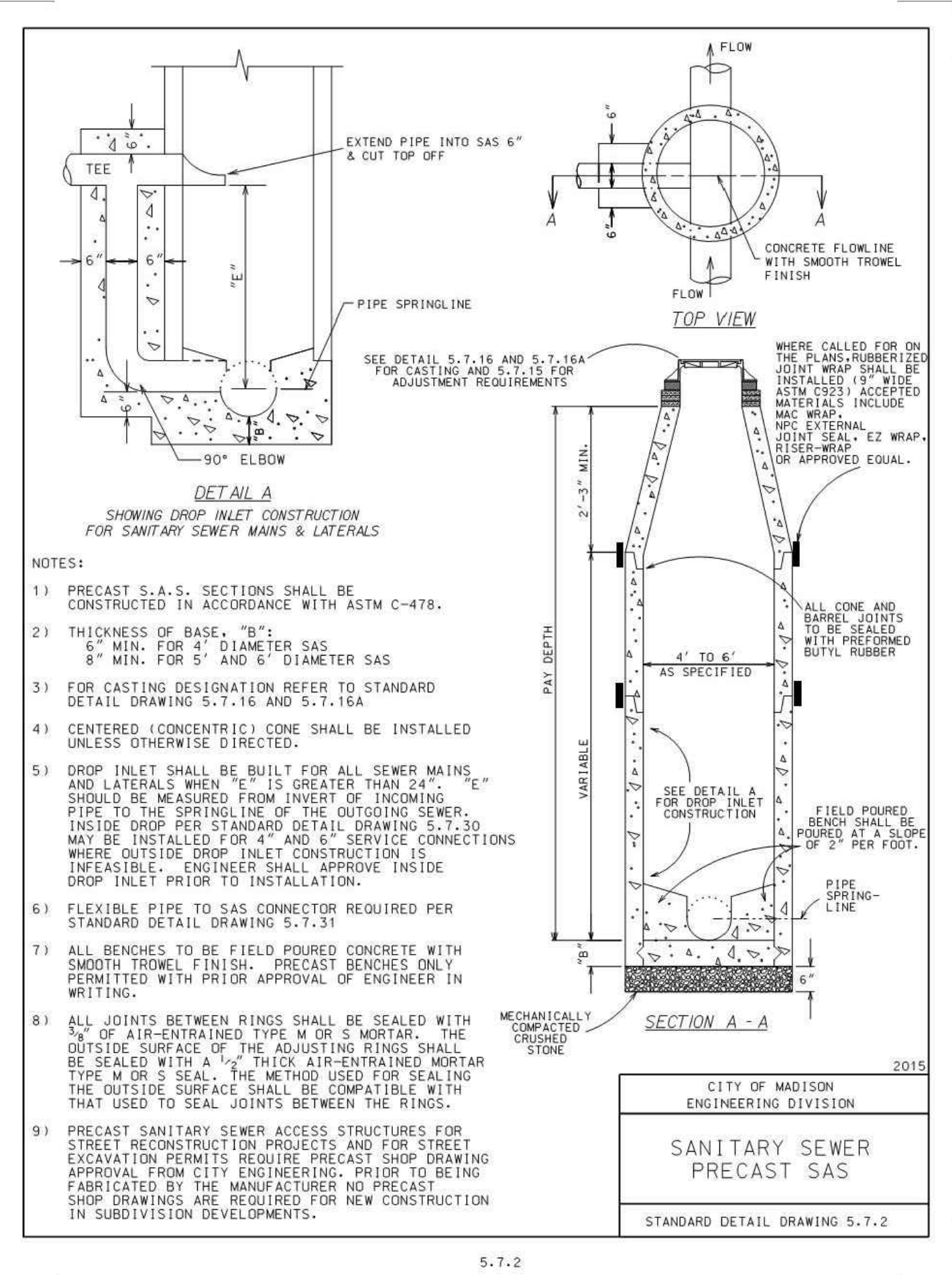
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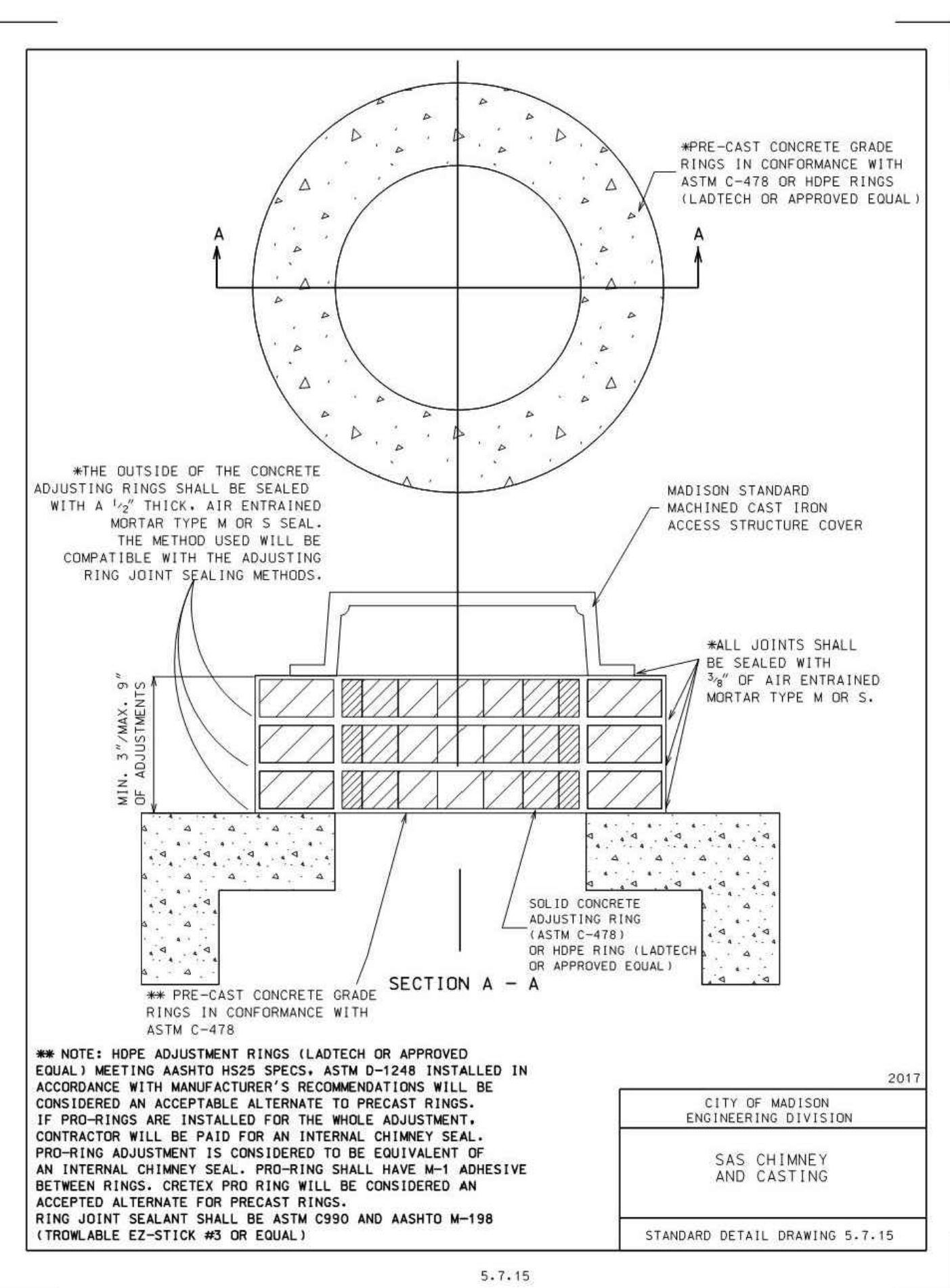
C-901

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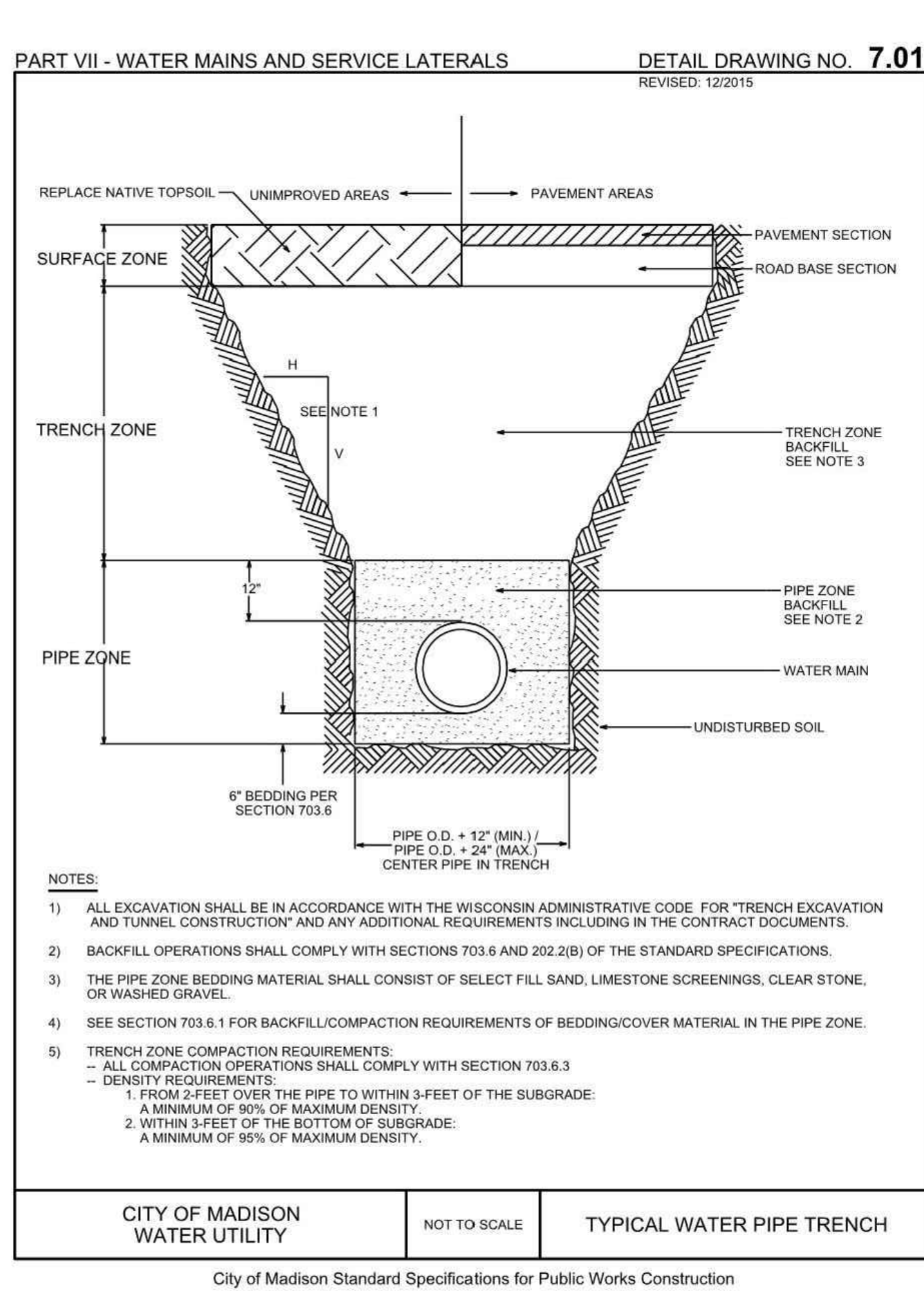
D1 MADISON SANITARY SEWER PRECAST SAS

N.T.S.



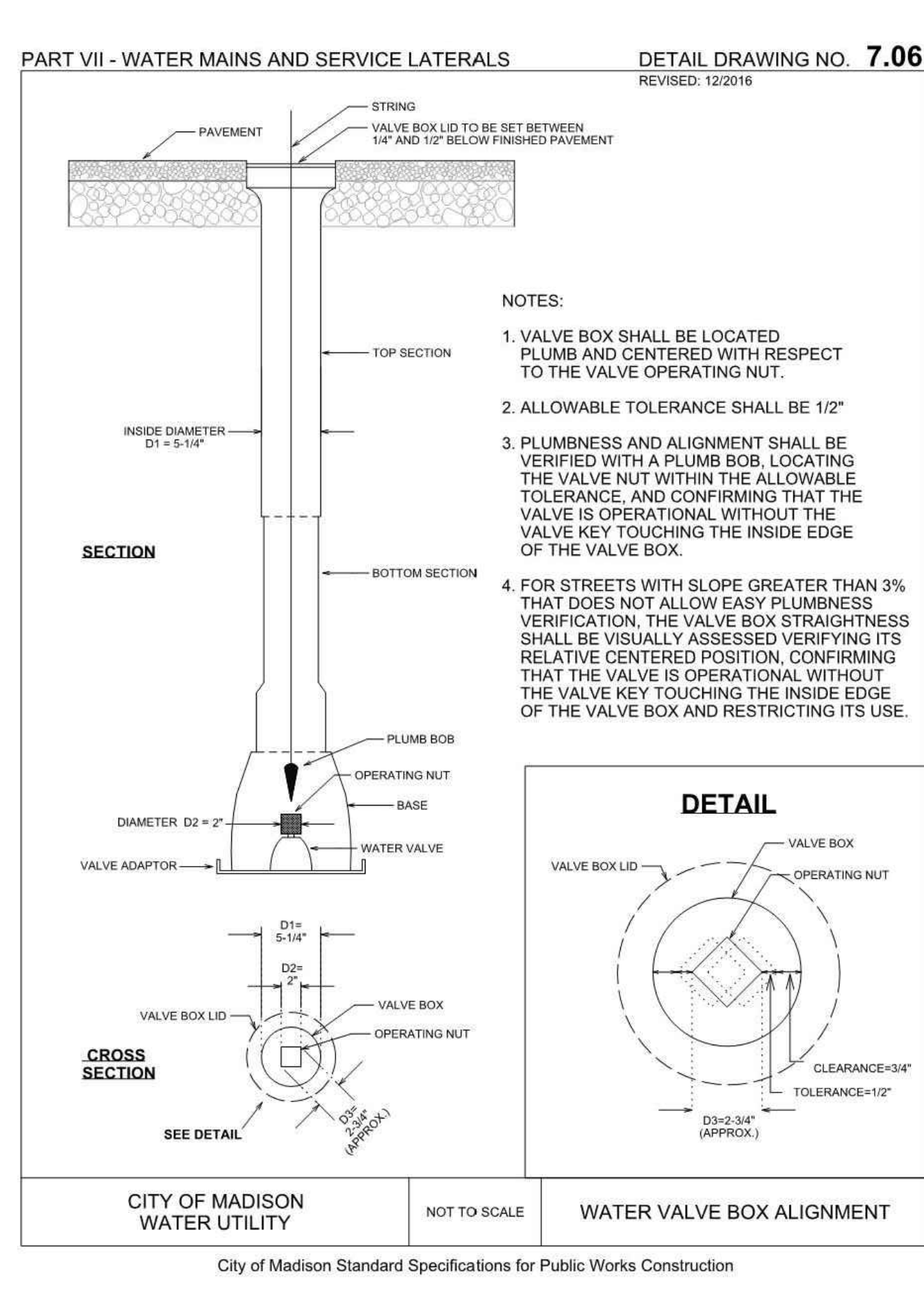
D3 MADISON SAS CHIMNEY AND CASTING

N.T.S.



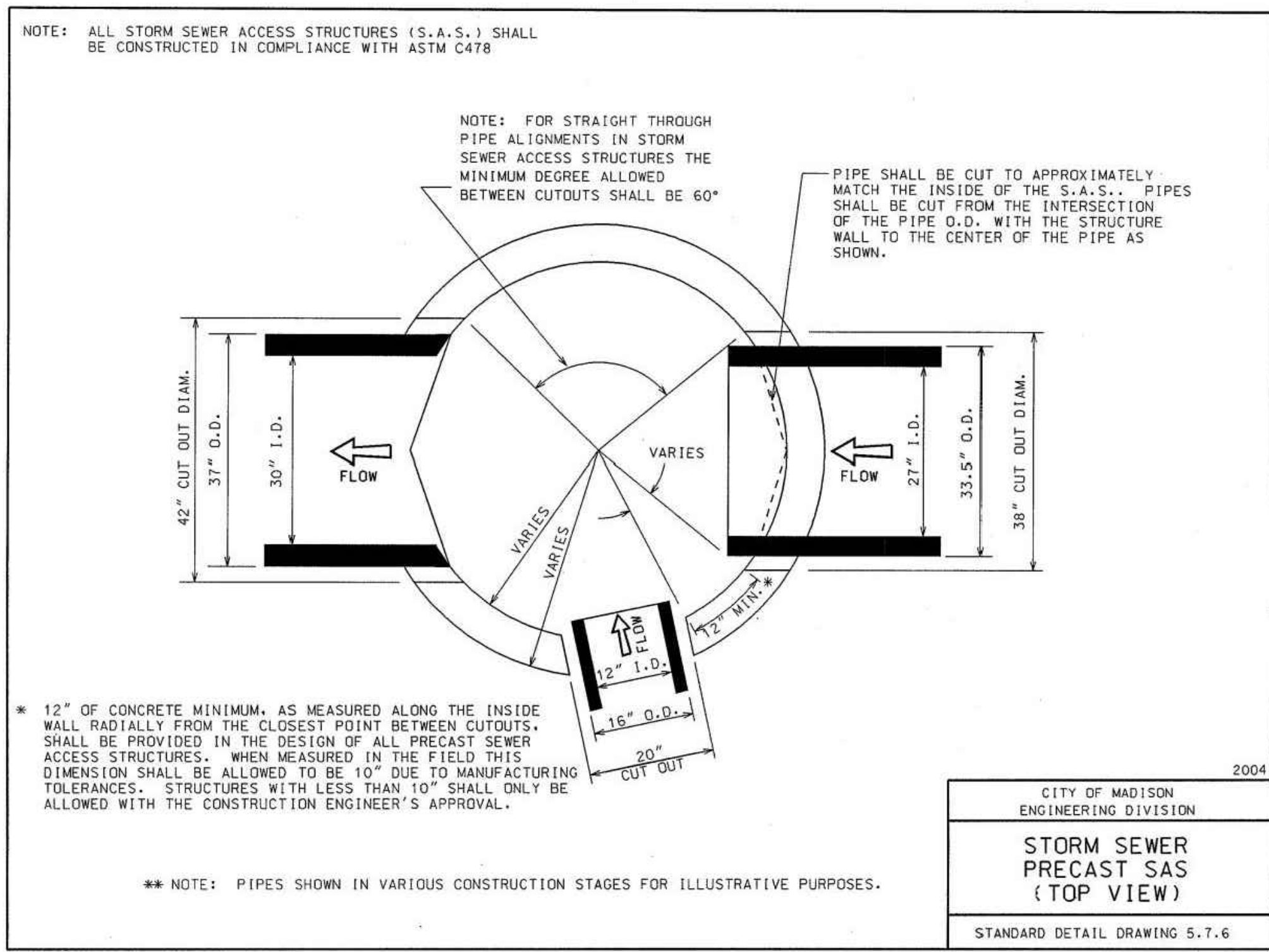
D4 MADISON TYPICAL WATER PIPE TRENCH

N.T.S.



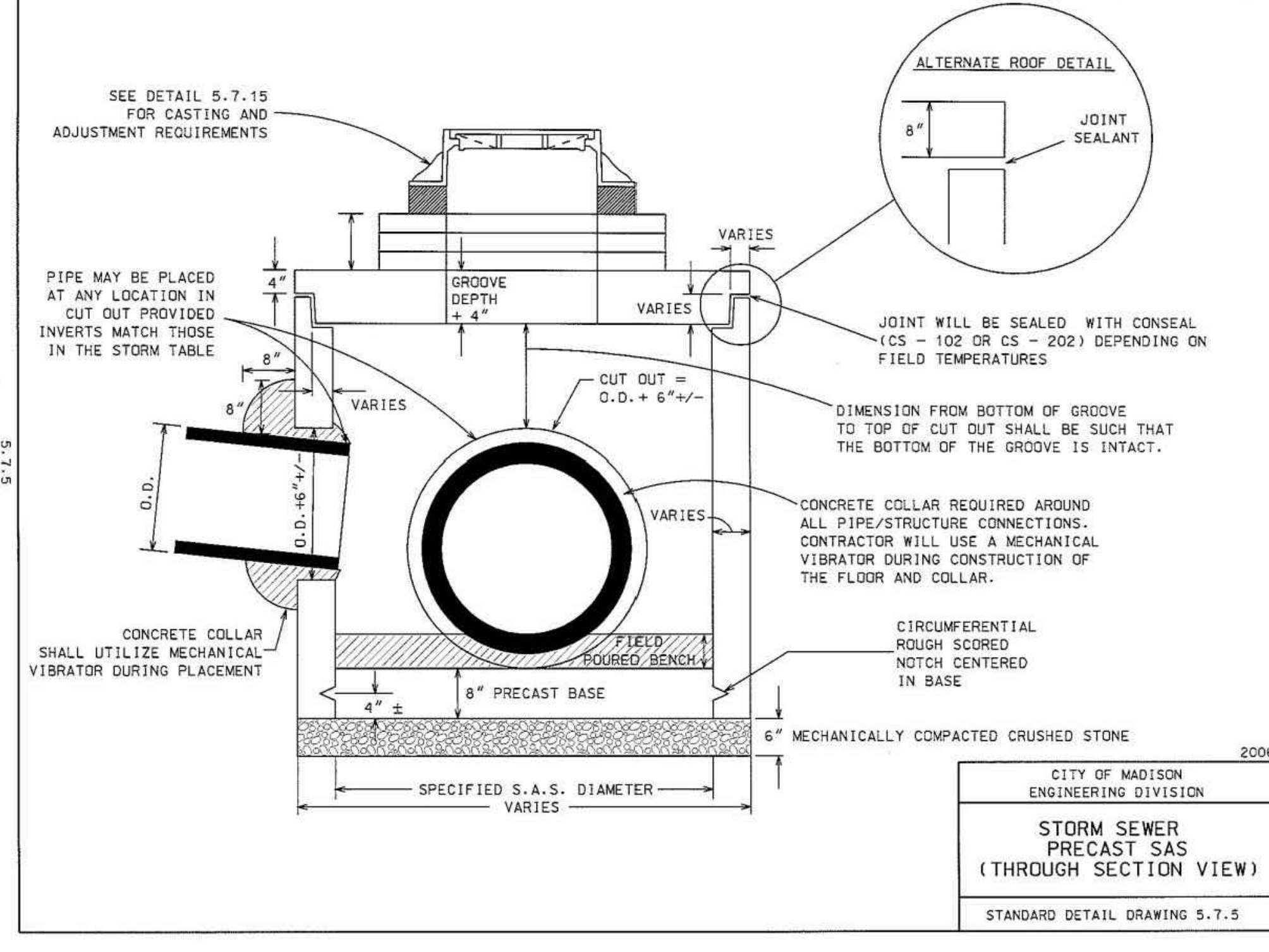
D6 MADISON WATER VALVE BOX ALIGNMENT

N.T.S.



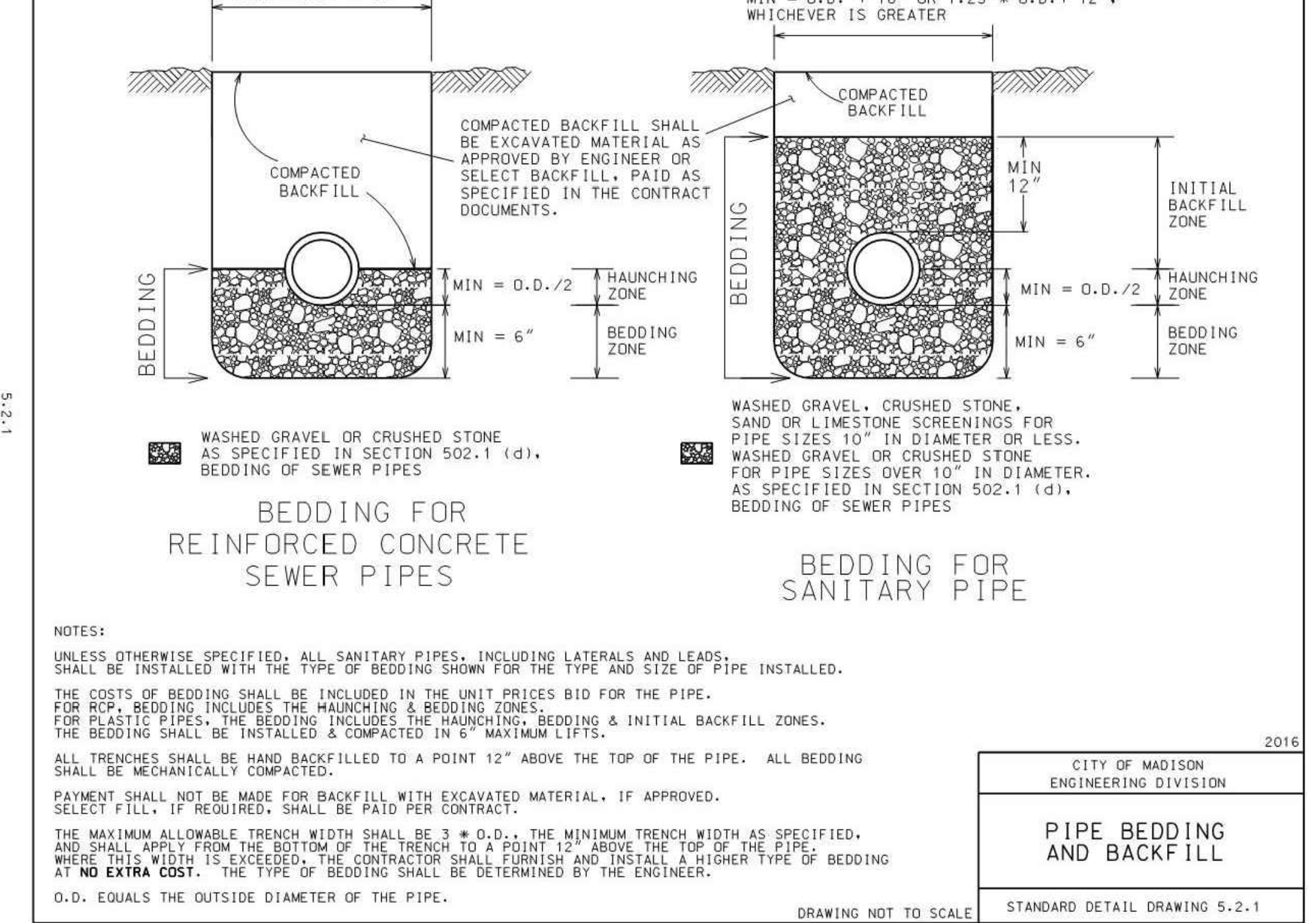
B1 MADISON STORM SEWER PRECAST SAS (TOP VIEW)

N.T.S.



B3 MADISON STORM SEWER PRECAST SAS (SECTION VIEW)

N.T.S.



B5 MADISON PIPE BEDDING AND BACKFILL

N.T.S.

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DESIGN SPECIFICATIONS

- DESIGN IS IN ACCORDANCE WITH THE STATE OF WISCONSIN AND THE 2009 INTERNATIONAL BUILDING CODE.
- MINIMUM 28 DAY CONCRETE CYLINDER STRENGTH SHALL BE:
 - PIPE FILL 3000 PSI
 - PILE CAPS 4000 PSI
 - GRADE BEAMS 4000 PSI
 - SLABS ON GROUND 3000 PSI
 - COLUMNS 6000 PSI
 - SHEAR WALLS 6000 PSI
 - JOISTS AND BEAMS 6000 PSI
 - STRUCTURAL SLAB SYSTEMS 6000 PSI
- REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60.
- POST-TENSIONING STEEL SHALL CONFORM TO ASTM A416.
- CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 TYPE I NORMAL WEIGHT UNITS.
- CONCRETE MASONRY BRICK SHALL CONFORM TO ASTM C36 GRADE SW.
- MORTAR SHALL CONFORM TO ASTM C270 TYPE S.
- MASONRY GROUT SHALL CONFORM TO ASTM C476. MINIMUM COMPRESSIVE STRENGTH SHALL BE $f_c = 3000$ PSI.
- MINIMUM COMPRESSIVE STRENGTH OF UNREINFORCED CONCRETE MASONRY CONSTRUCTION SHALL BE $f_m = 2000$ PSI.
- MINIMUM COMPRESSIVE STRENGTH OF REINFORCED CONCRETE MASONRY CONSTRUCTION SHALL BE $f_m = 2000$ PSI.
- STRUCTURAL STEEL W SHAPES SHALL CONFORM TO ASTM A992 GRADE 50.
- STRUCTURAL STEEL PLATES, ANGLES, CHANNELS, AND OTHER ROLLED MEMBERS SHALL CONFORM TO ASTM A36.
- RECTANGULAR OR SQUARE I/SS MEMBERS SHALL CONFORM TO ASTM A500 GRADE B.
- ROUND I/SS MEMBERS SHALL CONFORM TO ASTM A500 GRADE B.
- STEEL PIPE SHALL CONFORM TO ASTM A33 GRADE B.
- OIL FIELD PIPE SHALL CONFORM TO ASTM A232, GRADE 3.
- STRUCTURAL STEEL HP SHAPES SHALL CONFORM TO ASTM A572 GRADE 50.
- PILE CAPACITY IS LISTED BELOW, BASED UPON SOILS REPORT DATED DECEMBER 15, 2016 AS PREPARED BY CGC, INC.

FILE	SERVICE LOAD	ESTIMATED DRIVEN DEPTH
9.5" OD x 0.395" OIL FIELD PIPE	40 TONS	30 TO 40 FEET
HP 10x42	40 TONS	35 TO 45 FEET

DESIGN LOADS:

FLOOR LIVE LOADS (BC 2009)	40 PSF
PARKING	100 PSF
STAIRWAYS	100 PSF
LOBBIES	100 PSF
CORRIDORS (ON "AT GRADE" LEVELS)	100 PSF
CORRIDORS (ON OTHER LEVELS)	100 PSF
COMMERCIAL BUILDING FLOORS	100 PSF
MECHANICAL ROOMS	100 PSF
MINIMUM ROOF LIVE LOAD	20 PSF

LIVE LOAD REDUCTION PER BC 2009 SECTION 1607.9 IS INCLUDED

ROOF SNOW LOAD (ASCE 7-50)

OCCUPANCY CATEGORY	II
IMPORTANCE FACTOR	$I_p = 1.0$
GROUND SNOW LOAD	$P_g = 30$ PSF
FLAT ROOF SNOW LOAD	$P_s = 25.2$ PSF
EXPOSURE FACTOR	$C_e = 1.0$
THERMAL FACTOR	$C_t = 1.2$

WIND LOAD (ASCE 7-50)	II
OCCUPANCY CATEGORY	$I_p = 1.0$
IMPORTANCE FACTOR	$I_p = 1.0$
BASIC WIND SPEED	$V = 90$ MPH
EXPOSURE	C
INTERNAL PRESSURE COEFFICIENT	$C_{pi} = +0.18$
COMPONENTS AND CLADDING	REFER TO TABLE THIS SHEET

SEISMIC LOAD (BC 2009) (PARKING GARAGE)	II
OCCUPANCY CATEGORY	$I_p = 1.0$
IMPORTANCE FACTOR	$I_p = 0.085$
SPECTRAL RESPONSE ACCELERATIONS	$S_1 = 0.046$
SPECTRAL RESPONSE COEFFICIENTS	$S_2 = 0.091$
SEISMIC RESPONSE COEFFICIENT	$S_{ps} = 0.074$
RESPONSE MODIFICATION FACTOR	$C_s = 0.01$
SOIL SITE CLASS	$C_e = 3$
SEISMIC DESIGN CATEGORY	A
BASIC SEISMIC FORCE RESISTING SYSTEM	ORDINARY REINFORCED CONCRETE
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE
DESIGN BASE SHEAR	270 KIPS

SEISMIC LOAD (BC 2009) (COMMERCIAL GARAGE)	II
OCCUPANCY CATEGORY	$I_p = 1.0$
IMPORTANCE FACTOR	$I_p = 0.085$
SPECTRAL RESPONSE ACCELERATIONS	$S_1 = 0.046$
SPECTRAL RESPONSE COEFFICIENTS	$S_2 = 0.091$
SEISMIC RESPONSE COEFFICIENT	$S_{ps} = 0.074$
RESPONSE MODIFICATION FACTOR	$C_s = 0.01$
SOIL SITE CLASS	$C_e = 3$
SEISMIC DESIGN CATEGORY	A
BASIC SEISMIC FORCE RESISTING SYSTEM	ORDINARY REINFORCED CONCRETE
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE
DESIGN BASE SHEAR	50 KIPS

- RESISTANCE TO LATERAL LOADS ON STRUCTURE IS PROVIDED BY FLOOR DIAPHRAGMS, AND ROOF DIAPHRAGMS. CONTRACTOR SHALL PROVIDE SUFFICIENT TEMPORARY BRACING UNTIL ALL LATERAL SUPPORT SYSTEMS ARE IN PLACE AND FUNCTIONAL.
- ALL STRUCTURAL FRAMING AND CONNECTIONS HAVE BEEN DESIGNED FOR THE FINAL COMPLETED CONDITION AND HAVE NOT BEEN INVESTIGATED FOR POTENTIAL LOADINGS ENCOUNTERED DURING ERECTION AND CONSTRUCTION. ANY INVESTIGATION OF THE STRUCTURAL FRAMING AND CONNECTIONS FOR ADEQUACY DURING THE ERECTION AND CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION AND JOB SITE SAFETY.
- PROVISIONS ARE INCLUDED FOR THE FOLLOWING FUTURE ADDITIONS:

- FUTURE SOLAR PANELS ADDED ABOVE 5TH LEVEL OF PARKING GARAGE.
 - A. COLUMNS TO SUPPORT TRIBUTARY AREA OF SOLAR PANELS OF 18 PSF DEAD AND 26 PSF SNOW SERVICE LOADS.
 - B. 5TH LEVEL DIAPHRAGM TO SUPPORT ADDITIONAL SERVICE WIND LOAD FROM SOLAR PANELS OF 8 KIPS IN PLAN EAST WEST DIRECTION AND 38 KIPS IN PLAN NORTH - SOUTH DIRECTION.
- FUTURE MEZZANINES ADDED AT COMMERCIAL SPACE AT LEVEL 2 PARKING ELEVATION.
 - A. INTERIOR COLUMNS AT COMMERCIAL SPACE ARE DESIGNED TO SUPPORT ADDITIONAL SERVICE DL = 78 KIPS AND LL = 26 KIPS AT LEVEL 2 PARKING ELEVATION.
 - B. EXTERIOR COLUMNS AT COMMERCIAL SPACE ARE DESIGNED TO SUPPORT ADDITIONAL SERVICE DL = 40 KIPS AND LL = 28 KIPS AT LEVEL 2 PARKING ELEVATION.

GENERAL NOTES

EARTHWORK

- FOOTINGS SHALL BE CAST ON UNDISTURBED SUBSOIL. IF DESIGN CAPACITY IS NOT QUANTIFIED AT THE ELEVATIONS SHOWN, FOOTINGS MUST BE LOWERED. CONSULT ENGINEER BEFORE PROCEEDING.
- NO HOLES, TRENCHES OR DISTURBANCES OF THE SOIL SHALL BE ALLOWED WITHIN THE VOLUME DESCRIBED BY AS DEGREE LINES SLOPING FROM THE BOTTOM EDGE OF THE FOOTING. IF SUCH ARE REQUIRED, FOOTINGS MUST BE LOWERED.
- BACKFILL EVENLY ON EACH SIDE OF FOUNDATION WALLS AND RETAINING WALLS.
- DO NOT BACKFILL AGAINST BASEMENT WALLS UNTIL FLOOR SYSTEM IS IN PLACE AND FASTENED OR UNTIL WALLS ARE ADEQUATELY BRACED. BRACING SHALL BE DESIGNED BY THE CONTRACTOR.
- TOPSOIL AND FILL BELOW SLABS ON GROUND SHALL BE REMOVED. AGGREGATE BASE COURSE UNDER SLABS ON GROUND SHALL BE AS SPECIFIED. EXCEPT WHERE LOOSE FILL IS INDICATED ON DRAWINGS.
- BACKFILL AGAINST INTERIOR FOUNDATION WALLS SHALL BE AS SPECIFIED COMPACTED TO MAXIMUM 4-INCH LAYERS.
- BACKFILL AGAINST EXTERIOR FOUNDATION WALLS SHALL BE AS SPECIFIED COMPACTED TO MAXIMUM 6-INCH LAYERS.
- PROVIDE MINIMUM 24 INCHES OF FREE DRAINING AGGREGATE AS SPECIFIED OVER ALL DRAIN TILES AND 4 INCHES BELOW UNLESS OTHERWISE OTHERWISE.

CONCRETE

- FORMWORK SHALL BE DESIGNED IN ACCORDANCE WITH THE ACI "MANUAL OF CONCRETE PRACTICE", LATEST EDITION.
- REINFORCING STEEL SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH THE ACI "MANUAL OF CONCRETE PRACTICE", LATEST EDITION, UNLESS OTHERWISE NOTED.
- LAP ALL WALL BARS 30 DIAMETERS WITH CLASS B SPLICES UNLESS OTHERWISE DETAILED. LAP WELDED WIRE MESH 6 INCHES.
- PROVIDE COLUMN AND WALL DOWELS OF THE SAME SIZE AND NUMBER AS THE RESPECTIVE COLUMN AND WALL REINFORCING UNLESS OTHERWISE DETAIL.
- PROVIDE TWO #4 BARS AS STIRRUP CARRY BARS WHERE NO TOP STEEL IS AVAILABLE TO HOLD STIRRUPS.
- WHEREVER AN APPROVED PIPE OR CONDUIT EXTENDS THROUGH A BEAM, PROVIDE ONE ADDITIONAL STIRRUP ON EACH SIDE OF THE OPENING.
- CONCRETE PROTECTION FOR REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 308-08.
- SLABS ON GRADE SHALL BE CAST ALLOWING A SUFFICIENT NUMBER OF JOINTS TO ADEQUATELY CONTROL SHRINKAGE CRACKING. SAWCUTTING SHALL BE DONE AS SOON AS SAWCUT WILL NOT RAVEL. CONCRETE OR WITHIN 24 HOURS MAXIMUM OF INITIAL POURING OPERATION. MAXIMUM SIZE OF PANELS SHALL BE 12 FEET BY 12 FEET. GENERALLY, JOINTS SHALL OCCUR ON COLUMN CENTERLINES.
- INTERIOR SLABS ON GRADE SHALL BE 6 INCHES THICK AND REINFORCED WITH 3.5 LB PER CUBIC YARD MACRO FIBERS.
- ALLOW AT LEAST 24 HOURS BEFORE POURING ADJACENT WALL BE SECTIONS BETWEEN CONSTRUCTION JOINTS. MAXIMUM LENGTH OF POUR TO BE 4 FEET, UNLESS CRACK INDUCERS ARE USED AS DETAILED ON THE DRAWINGS.
- CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 24 HOURS PRIOR TO PLACING CONCRETE.
- CONSTRUCTION JOINTS IN BEAMS, JOISTS OR SLABS TO BE LOCATED BETWEEN THE 1/4 POINT AND CENTERLINE OF SPAN OR AS DIRECTED BY THE ENGINEER.
- DO NOT PLACE OR CUT HOLES IN CONCRETE SLABS, BEAMS, WALLS OR COLUMNS WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- EXTERIOR EXPOSED CONCRETE SHALL BE AIR-ENTRAINED. AIR CONTENT SHALL BE 6 PERCENT (+/- 1.2 PERCENT).
- CAMBER CONCRETE MEMBERS FOR DEAD LOAD DEFLECTION BY ADJUSTING FORMS.
- PIPES AND CONDUITS EMBEDDED IN OR PASSING THROUGH STRUCTURAL MEMBERS MUST BE APPROVED BY THE STRUCTURAL ENGINEER. PIPE AND CONDUITS EMBEDDED IN CONCRETE SHALL NOT BE LARGER THAN 2 INCHES IN OUTSIDE DIAMETER AT THEIR WIDEST POINT OR FITTING OR 1/3 OF THE THICKNESS OF THE SLAB, BEAM OR WALL.
- ELECTRICAL CONDUIT OR PIPES EMBEDDED IN OR PASSING THROUGH SLABS, BEAMS OR WALLS SHALL BE LOCATED AND SPACED SO THAT:
 - THEY ARE NOT CLOSER THAN THREE DIAMETERS ON CENTER.
 - THE CONCRETE COVER IS NOT LESS THAN 2 INCHES.
 - THEY RUN BETWEEN REINFORCING AND DO NOT DISPLACE IT IN ANY MANNER.
- ALUMINUM CONDUITS SHALL NOT BE PLACED IN CONCRETE.
- CHAMFER ALL EXPOSED CONCRETE CORNERS. SEE ARCHITECTURAL/STRUCTURAL DRAWINGS FOR REQUIREMENTS.
- CONCRETE SHALL BE TESTED BY OWNERS TESTING LAB. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
- PROPER CURING PROCEDURES SHALL BE USED FOR SLAB ON GRADE TO PREVENT CURLING.
- CALCIUM CHLORIDE SHALL NOT BE USED IN CONCRETE MIXES.
- PROVIDE WATERSTOPS AT ALL CONSTRUCTION JOINTS BELOW THE WATER TABLE AND AS SHOWN ON DRAWINGS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

COMPONENT	REQUIRED COVER
FOOTINGS	3"
BEAMS (BOTTOM)	1 1/2"
BEAMS (TOP)	2"
SLABS (BOTTOM)	2"
SLABS (TOP)	2"
WALLS (EXTERIOR FACE)	2"
COLUMN TIES	2"

NOTE: ALL REBAR IN ALL CONCRETE MEMBERS SHALL BE EPOXY COATED, EXCEPT THE FOLLOWING: PILE CAPS, WALL FOOTINGS, AND BELOW GRADE WALLS. REINFORCING STEEL AT THE COMMERCIAL BUILDING SLABS, WALLS, COLUMNS, AND BEAMS IS NOT REQUIRED TO BE EPOXY COATED UNLESS NOTED OTHERWISE.

- COORDINATE WITH MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR SIZE AND LOCATION OF HOUSE KEEPING PADS.
- POST-TENSIONING CABLES SHALL BE LOW RELAXATION 7-WIRE STRAND WITH ULTIMATE TENSILE CAPACITY OF 270 KIPS.
- ACTUAL LOSSES SHALL BE COMPUTED BY TENDON SUPPLIER AND FURNISHED TO THE ENGINEER FOR RECORD PURPOSES ONLY.
- DEAD STRESSING ENDS IN A SLAB SHALL BE ANCHORED AT MID-DEPTH.
- TENDONS SHALL BE DRAPPED ON A PARABOLIC PROFILE WITH LOW POINTS AND HIGH POINTS AS DETAILED ON THE DRAWINGS. TENDON ADJACEMENT SHALL NOT VARY VERTICALLY BY MORE THAN 1/8-INCH.
- PARTIAL STRANDS NEEDED IN ADDITION TO FULL LENGTH STRANDS SHALL BE ANCHORED AT THE 1/4 POINT OF THE ADJACENT SPAN.
- PROVIDE MINIMUM OF TWO #4 BARS BEHIND ALL POST-TENSIONING ANCHORAGES. BARS SHALL BE CONTINUOUS FOR SLABS AND AS DETAILED FOR BEAMS.
- A MINIMUM OF THREE 1/2-INCH DIAMETER OR TWO 3/8-INCH DIAMETER CABLES SHALL PASS THROUGH ALL COLUMNS IN EACH DIRECTION FOR SLAB SYSTEM CONSTRUCTION.
- ALL ANCHORAGE HARDWARE SHALL MEET THE REQUIREMENTS OF PCI AND ANCHORS SHALL BE DESIGNED FOR 3750 PSI CONCRETE STRENGTH. SUBMIT ALL CALCULATIONS TO THE ENGINEER.
- THE GENERAL CONTRACTOR SHALL COORDINATE THE FINAL LOCATIONS OF CONSTRUCTION JOINTS WITH THE POST-TENSIONING SUPPLIER AND TO SUBMIT POURING AND STRESSING SEQUENCE TO THE ENGINEER DURING POST-TENSIONING SHOP DRAWING SUBMITTALS.
- MAXIMUM LENGTH OF TENDONS WHICH CAN BE PULLED FROM ONE END TO BE 125 FEET. JACKING FROM BOTH ENDS SHALL BE PERFORMED WHEN THERE IS EXCESSIVE FRICTIONAL LOSSES ANTICIPATED. POST-TENSIONING SUPPLIER TO SUBMIT ALL CALCULATIONS SHOWING POST-TENSION LOSSES TO THE ENGINEER.
- INSERTS AND FASTENING DEVICES DO OTHER WORK. INSERTS MAY BE USED ONLY IN AREAS WHERE THERE WILL BE NO INTERFERENCE WITH POST-TENSIONING TENDONS AND OR ANCHORAGES. IN NO CASE MAY EMBEDDED ITEMS BE ATTACHED TO POST-TENSIONING STEEL, AND CARE SHALL BE TAKEN SO AS NOT TO HAVE THE TENDONS OUT OF THEIR DESIGNED POSITIONS. POWDER-DRIVEN OR DRILLED-IN INSERTS WILL NOT BE PERMITTED, UNLESS OTHERWISE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER. AT A MINIMUM, POST-TENSIONING TENDONS NEED TO BE LOCATED PRIOR TO DRILLING IN POST-TENSIONED CONCRETE SLABS, BEAMS, OR GIRDERS.

COMPONENT	REQUIRED COVER
EXTERIOR BEAM (BOTTOM)	2 1/2"
EXTERIOR BEAM (TOP)	2 1/2"
INTERIOR BEAMS (BOTTOM)	1 3/4"
INTERIOR BEAMS (TOP)	1 3/4"
UNRESTRAINED SLABS (BOTTOM)	1 1/2"
UNRESTRAINED SLABS (TOP)	2"

ALL TENDONS TO BE ENCAPSULATED PER ACI 362 AND PTI SPECIFICATIONS.

POST-TENSIONING

- CONCRETE COVER REQUIREMENTS FOR MILD REINFORCEMENT (MINIMUM)

COMPONENT	REQUIRED COVER
EXTERIOR BEAM (BOTTOM)	2 1/2"
EXTERIOR BEAM (TOP)	2 1/2"
INTERIOR BEAMS (BOTTOM)	1 3/4"
INTERIOR BEAMS (TOP)	1 3/4"
UNRESTRAINED SLABS (BOTTOM)	1 1/2"
UNRESTRAINED SLABS (TOP)	2"

- ALL TENDONS TO BE ENCAPSULATED PER ACI 362 AND PTI SPECIFICATIONS.
- CONCRETE COVER REQUIREMENTS FOR POST-TENSIONED TENDONS

COMPONENT	REQUIRED COVER
EXTERIOR BEAM (BOTTOM)	2 1/2"
EXTERIOR BEAM (TOP)	2 1/2"
INTERIOR BEAMS (BOTTOM)	1 3/4"
INTERIOR BEAMS (TOP)	1 3/4"
UNRESTRAINED SLABS (BOTTOM)	1 1/2"
UNRESTRAINED SLABS (TOP)	2"

ALL TENDONS TO BE ENCAPSULATED PER ACI 362 AND PTI SPECIFICATIONS.

PRECAST CONCRETE

- PRECAST CONCRETE MEMBERS SHALL BE DESIGNED IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 318-08.
- PRECAST CONCRETE SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE ACI "MANUAL OF CONCRETE PRACTICE", LATEST EDITION, AND THE INFORMATIONED CONCRETE PROVISIONS.
- PRECAST CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DESIGN AND REINFORCING OF PRECAST CONCRETE FOR HANDLING AND ERECTION STRESSES.
- PRECAST MEMBERS SHALL BE ATTACHED AND SUPPORTED BY THE STRUCTURE AS INDICATED ON THE DRAWINGS.
- PRECAST MEMBERS SHALL BE DESIGNED AND REINFORCED FOR SELF-WEIGHT AND ALL SUPERIMPOSED LOADS SHOWN ON THE DRAWINGS.
- PRECAST MEMBERS SHALL BE CAPABLE OF SAFELY SUPPORTING ANY CONCENTRATED LOADS INDICATED BY THE STRUCTURAL, MECHANICAL, AND ARCHITECTURAL DRAWINGS.
- PRECAST CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS (HANGERS, CLIPS, PLATES, HEADERS, ANCHORAGES, ETC.) WHICH MUST BE PRECAST INTO THE CONCRETE UNLESS OTHERWISE NOTED OR REQUIRED FOR CONNECTION OF PRECAST TO STRUCTURE.
- CONTRACTOR SHALL COORDINATE LOCATIONS OF ALL HOLES OR OPENINGS WITH RESPECTIVE TRADES BEFORE FABRICATION. ANY DEVIATION FROM THESE LOCATIONS OR ADDITIONAL OPENINGS MUST BE APPROVED BY THE FABRICATOR.
- FIRE RATING OF PRECAST FLOOR PLANK SHALL BE 2 HOUR.
- GROUT IN PRECAST MEMBER KEYWAYS SHALL BE SAND-CEMENT GROUT. MINIMUM COMPRESSIVE STRENGTH SHALL BE 3000 PSI.
- FIRE RATING OF PRECAST WALL PANELS SHALL BE 2 HOUR.
- WALL PANEL JOINTS SHALL BE FILLED WITH APPROVED FIRE STOP MATERIAL AND POLYURETHANE JOINT SEALANT.
- PROVIDE (2) NOT DIPPED GALVANIZED LIFTING PLATES ON TOP OF EACH PRECAST PLANK TO FACILITATE REMOVAL.

STRUCTURAL STEEL

- STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE AISC "STEEL CONSTRUCTION MANUAL", THIRTEENTH EDITION, AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", MARCH 18, 2005 EDITION.
- WHERE INDICATED ON DRAWINGS, STRUCTURAL AND MISCELLANEOUS STEEL WHICH SHALL REMAIN EXPOSED TO VIEW SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC "SPECIFICATION FOR ARCHITECTURALLY EXPOSED STRUCTURAL STEEL", LATEST EDITION, WITHOUT GAPS OR OPEN JOINTS.
- STEEL DECK FABRICATION AND ERECTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE STEEL DECK INSTITUTE.
- ALL WELDING SHALL COMPLY WITH AWS D1.1 USING E70XX ELECTRODES. ALL WELDING TO BE DONE BY AWS PREQUALIFIED WELDERS. CERTIFIED FOR WELDS MADE. PROVIDE CONTINUOUS MINIMUM SIZE WELDS PER AISC REQUIREMENTS, UNLESS NOTED OTHERWISE.
- THE MINIMUM SIZE OF FILLET WELDS SHALL BE AS SPECIFIED IN TABLE J2.4 IN THE AISC "STEEL CONSTRUCTION MANUAL".
- BOLTED CONNECTIONS SHALL BE MADE WITH ASTM A325 HIGH STRENGTH BOLTS (MINIMUM 3/4-INCH DIAMETER).
- BEAM TO COLUMN AND BEAM TO BEAM CONNECTIONS SHALL BE MADE WITH DOUBLE ANGLES UNLESS OTHERWISE DETAILED.
- MINIMUM NUMBER OF BOLTS FOR END SHEAR REACTIONS ARE AS FOLLOWS:
 - 1 W6, W10 OR W12: 2
 - 2 W6, W10 OR W12: 3
 - 3 W6, W10 OR W12: 4
 - 4 W6, W10 OR W12: 5
 - 5 W6, W10 OR W12: 6
 - 6 W6, W10 OR W12: 7
- BEAMS SHALL BE EQUALLY SPACED IN A BAY UNLESS NOTED OTHERWISE ON PLAN.
- ALL STRUTS, HANGERS, AND BRACES SHALL HAVE CONNECTIONS DESIGNED TO DEVELOP THE FULL ALLOWABLE TENSILE STRENGTH OF THE MEMBER UNLESS THE DESIGN FORCE IS INDICATED ON THE DRAWINGS, IN WHICH CASE THE CONNECTIONS SHALL BE DESIGNED FOR THE FORCE INDICATED.
- COLUMN BASE PLATES SHALL HAVE OVERLAPPED HOLES WITH PLATE WASHERS (MINIMUM 3/8-INCH THICK) PROVIDED WITH ANCHOR RODS.
- GROUT UNDER BASE PLATES IN ACCORDANCE WITH THE "AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", MARCH 18, 2005 EDITION.
- STEEL ROOF DECK SHALL BE WIDE RIB PROFILE, 1 1/2-INCH DEEP AND 18 GAGE THICKNESS UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
- DECK END LAPS SHALL BE 2-INCH MINIMUM AND SHALL OCCUR AT SUPPORTS. LOCATE AT VALLEYS AND RIDGES.
- WHERE CONTINUOUS DIAPHRAGM CHORD ANGLES ARE INDICATED, PROVIDE A FULL PENETRATION WELD AT THE SPLICE LOCATIONS.
- CLEAN, PREPARE, AND SHOP PRIME EXTERIOR EXPOSED STRUCTURAL STEEL MEMBERS IN ACCORDANCE WITH SSPC STANDARDS SP-1 AND SP-6.
- CLEAN, PREPARE, AND SHOP PRIME INTERIOR EXPOSED STRUCTURAL STEEL MEMBERS IN ACCORDANCE WITH SSPC STANDARDS SP-1 AND SP-3.
- WHILE THE DESIGN DOCUMENTS MAY REFERENCE OSHA, THEY ARE NOT INTENDED TO SPECIFICALLY IDENTIFY ALL APPLICABLE OSHA REQUIREMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND COMPLY WITH ALL APPLICABLE OSHA REQUIREMENTS.
- ALL STRUCTURAL STEEL PERMANENTLY EXPOSED TO THE WEATHER, INCLUDING MASONRY SHELF ANGLES, SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 OR STAINLESS STEEL UNLESS OTHERWISE NOTED.
- REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL MISCELLANEOUS STEEL.

CONCRETE MASONRY

- PRODUCTION AND CONSTRUCTION OF CONCRETE MASONRY SHALL BE IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES", ACI 530-08, AND THE ACI "TEK MANUAL FOR CONCRETE MASONRY DESIGN AND CONSTRUCTION", LATEST EDITION.
- HOT AND COLD WEATHER CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE IMAC INTERNATIONAL MASONRY INDUSTRY COUNCIL'S RECOMMENDED PRACTICES AND GUIDE SPECIFICATIONS FOR HOT AND COLD WEATHER MASONRY AND CONSTRUCTION.
- CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.
- MASONRY WALLS SHALL BE ADEQUATELY BRACED TO RESIST WIND FORCES UNTIL PERMANENT DESIGN SUPPORTS ARE IN PLACE AND FUNCTIONAL. BRACING SHALL BE DESIGNED BY THE CONTRACTOR.
- PROVIDE DOWELS INTO FOUNDATION THE SAME SIZE AND NUMBER AS WALL REINFORCING.
- LAP REINFORCING BARS 48 DIAMETERS.
- CONCRETE MASONRY WALLS SHALL BE REINFORCED AT EVERY OTHER BED JOINT WITH 9 GAGE LARGER TYPE JOINT REINFORCEMENT.
- VERTICAL BARS SHOWN ON THE DESIGN DRAWINGS SHALL BE PLACED IN A CONSTRUCTION UNOBSERVED CELL OF NOT LESS THAN 3 INCHES BY 4 INCHES.
- ALL BOND BEAMS AND PLASTER SHALL BE REINFORCED AS SHOWN ON THE DESIGN DRAWINGS AND FILLED WITH GROUT.
- ALL DOOR AND WINDOW JAMBS SHALL BE GROUTED SOLID 8 INCHES WIDE UNLESS SHOWN OTHERWISE.
- WHERE NOT SHOWN OTHERWISE, MINIMUM SOLID GROUTED MASONRY BELOW BEAM REACTIONS SHALL BE 16 INCHES DEEP BY 52 INCHES LONG.
- WHERE NOT SHOWN OTHERWISE, MINIMUM SOLID GROUTED MASONRY BELOW LINTEL REACTIONS SHALL BE 16 INCHES DEEP BY 16 INCHES LONG.
- STRENGTH OF CONCRETE MASONRY SHOWN IS BASED ON NET AREA OF UNIT.
- PROVIDE LINTELS AND VENEER SHELF ANGLES ABOVE ALL WALL OPENINGS. SEE PLANS AND ARCHITECTURAL PLANS FOR LOCATIONS.
- COORDINATE WITH ELECTRICAL CONTRACTOR GROUTING OF CONDUIT IN CORES.
- ALL CORES CONTAINING REINFORCEMENT SHALL BE GROUTED SOLID.
- ALL NON LOAD BEARING CMU WALLS SHALL BE 8" CMU REINFORCED WITH #5@48" OC. CMU TO BE SUPPORTED BY THICKENED SLAB UNO. SEE GENERAL DETAILS AND ARCHITECTURAL FOR WALL LOCATIONS.

RAMMED AGGREGATE PIERS

- RAMMED AGGREGATE PIERS TO BE DESIGNED BY INSTALLER. INSTALLER SHALL SUBMIT DESIGN CALCULATIONS, INCLUDING SLAB ON GRADE FRICTION ELEMENT ANALYSIS, AND CONDUIT JOINT LOCATIONS PRIOR TO CONSTRUCTIONS. CALCULATIONS SHALL BE SEALED BY A PROFESSIONAL ENGINEER EXPERIENCED IN THIS WORK AND REGISTERED IN WISCONSIN.
- A DETAILED EXPLANATION OF DESIGN PARAMETERS FOR SETTLEMENT CALCULATIONS SHALL BE INCLUDED IN SUBMITTALS.
- DESIGN AGGREGATE PIER ELEMENTS TO SUPPORT SLAB ON GRADE WITHOUT CRACKING.
- DESIGN AGGREGATE PIERS FOR LOADING AS SHOWN ON PLANS. REFER TO "FIRST LEVEL LOADING DIAGRAM" THIS SHEET FOR DESIGN LOADS.
- DESIGN SHALL MEET THE FOLLOWING CRITERIA:
 1. MAXIMUM ALLOWABLE BEARING PRESSURE FOR AGGREGATE PIER REINFORCED SOILS: 800 PSF.
 2. MINIMUM AGGREGATE PIER COVERAGE: GREATER THAN 30 PERCENT.
 3. MINIMUM FACTOR OF SAFETY: 1.5 (UNREINFORCED) SLAB MODULUS OF RUPTURE.
 4. MAXIMUM TOTAL LONG TERM SETTLEMENT: 1 INCH.
 5. MAXIMUM LONG TERM DIFFERENTIAL SETTLEMENT: 1/2 INCH.

COLD-FORMED STEEL FRAMING

- DESIGN, FABRICATION, AND ERECTION OF COLD-FORMED STEEL FRAMING SHALL BE IN ACCORDANCE WITH THE AISC "COLD-FORMED STEEL DESIGN MANUAL", LATEST EDITION, ALL FRAMING MEMBERS SHOWN ON PLANS ARE SCHEMATIC AND ARE SHOWN FOR INTENT ONLY. DESIGN AND CALCULATIONS WILL BE REVIEWED BY GRAEF.
- STEEL STUD CURTAIN WALL AND CONNECTIONS TO BE DESIGNED BY SUPPLIER. STEEL STUD CURTAIN WALL AND CONNECTION DESIGN SHALL BE SEALED BY PROFESSIONAL ENGINEER EXPERIENCED IN THIS WORK AND REGISTERED IN THE STATE OF WISCONSIN.
- LIVE LOAD DEFLECTION CRITERIA FOR COMPONENTS SHALL BE AS FOLLOWS:
 - EXTERIOR WALL STUDS: LOAD NOT TO EXCEED 1/400 INCH AT METAL PANELS UNO FOR BRICK VENEER.
- MINIMUM DESIGN THICKNESS OF STUDS AND TRACK AT EXTERIOR OF BUILDING SHALL BE 0.045 INCHES (18 GAGE).
- NON-LOAD BEARING STUDS SHALL TRANSFER LATERAL LOADS TO STRUCTURE BY MEANS OF SLICE CLIPS TO ALLOW FOR VERTICAL MOVEMENT OF PRIMARY STRUCTURAL MEMBERS.
- SPLICES IN AXIALLY LOADED STUDS ARE NOT PERMITTED.
- STUDS, TRACK, AND ACCESSORIES SHALL BE GALVANIZED WITH A MINIMUM G90 COATING PER ASTM A653.
- STUDS SHALL BE PLUMBED, ALIGNED, AND SECURELY ATTACHED TO FLANGES OR WEBS OF LOWER TRACK. STUDS SHALL BE SEATED TIGHT TO TRACK WEBS PRIOR TO ATTACHMENT.
- REFER TO ARCHITECTURAL WALL SECTIONS AND DETAILS FOR ADDITIONAL INFORMATION.
- ALL MEMBERS 0.056-INCH MINIMUM THICKNESS OR THICKER (18 GAGE OR LOWER) SHALL BE OF MINIMUM 50 KSI STEEL. ALL MEMBERS OF 0.045-INCH MINIMUM THICKNESS OR THINNER (18 GAGE OR HIGHER) AND ALL ACCESSORIES SHALL BE OF MINIMUM 30 KSI STEEL.
- STEEL STUD ERECTOR SHALL CONSTRUCT ALL LIGHTGAUGE FRAMING IN A MANNER WHICH PROTECTS LATERAL STABILITY OF THE STRUCTURE.
- ALL WELDS PERFORMED ON GALVANIZED LIGHTGAUGE COMPONENTS SHALL BE COATED WITH ZINC RICH PAINT FOR CORROSION PROTECTION IN ACCORDANCE WITH ASTM A780. CONTRACTOR SHALL NOTIFY THE ENGINEER TO ALLOW ADEQUATE TIME FOR WELDS TO BE REVIEWED BEFORE SYSTEMS ARE ENCLOSED.
- STEEL STUDS SHALL BE DESIGNED AND CONSTRUCTED TO PROVIDE REQUIRED CAPACITIES TO CARRY CONSTRUCTION LOADS. CONTRACTOR SHALL PROVIDE NECESSARY BRACING OR ATTACHMENT TO WALL SHEATHING BEFORE STRUCTURAL COMPONENTS ARE LOADED.

MISCELLANEOUS

- DIMENSIONS OF EXISTING CONSTRUCTION OR CONSTRUCTION IN PROGRESS SHALL BE VERIFIED AND COORDINATED PRIOR TO FABRICATION OF STRUCTURAL COMPONENTS.
- VERIFY AND COORDINATE WITH ALL CONTRACTORS, THE LOCATION OF ALL ARCHITECTURAL AND MECHANICAL APERTUREANCES AND OPENINGS.
- EXPANSION ANCHORS SHALL BE HLTI K1WK BOLT TZ.
- ADHESIVE ANCHORS SHALL BE HLTI HT-HY 200.
- SLEEVE ANCHORS SHALL BE HLTI KLC.
- WITHIN PARKING RAMP EXTENTS PROVIDE STAINLESS STEEL MESH COVERS AT OPEN PENETRATIONS AND LEDGES TO PREVENT BIRD NESTS, DEBRIS, ETC.

- NEGATIVE PRESSURES ACT AWAY FROM COMPONENT SURFACE. POSITIVE PRESSURES ACT TOWARD COMPONENT SURFACES.

WIND PROVISIONS FOR COMPONENTS AND CLADDING TABLE

DESIGN WIND PRESSURE, PSF	1	2	3	4	5	6	7	8	9	10	11	12	13
EFFECTIVE WIND AREA, SF	10	20	50	100	>500								
ZONE	1	2	3	4	5	6	7	8	9	10	11	12	13
1	-28.8	-28.2	-27.5	-26.9	-26.9								
2	-43.6	-39.7	-34.5	-30.6	-30.6								
3	-43.6	-39.7	-34.5	-30.6	-30.6								
4 (+)	26.9	26.0	24.9	24.0	24.0								
5 (-)	-28.6	-27.7	-26.5	-25.6	-23.6								
6 (+)	26.9	26.0	24.9	24.0	24.0								
7 (-)	-33.6	-31.8	-29.5	-27.7	-27.6								

FLAT ROOF BUILDING

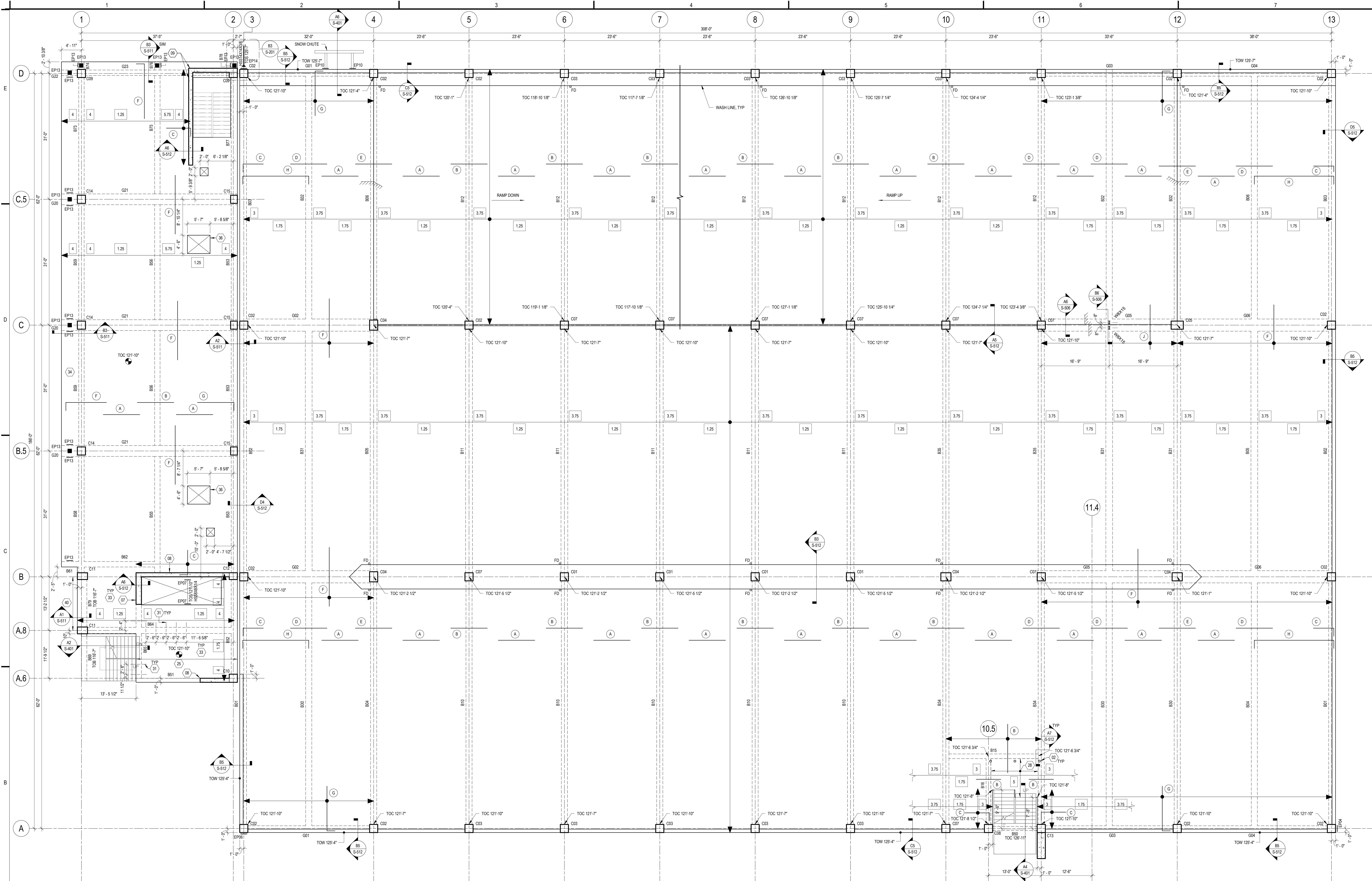
- DESIGN WIND PRESSURE, PSF

DESIGN WIND PRESSURE, PSF	1	2	3	4	5	6	7	8	9	10	11	12	13
EFFECTIVE WIND AREA, SF	10	20	50	100	>500								
ZONE	1	2	3	4	5	6	7	8	9	10	11	12	13
1	-28.8	-28.2	-27.5	-26.9	-26.9								
2	-43.6	-39.7	-34.5	-30.6	-30.6								
3	-43.6	-39.7	-34.5	-30.6	-30.6								
4 (+)	26.9	26.0	24.9	24.0	24.0								
5 (-)	-28.6	-27.7	-26.5	-25.6	-23.6								
6 (+)	26.9	26.0	24.9	24.0	24.0								
7 (-)	-33.6	-31.8	-29.5	-27.7	-27.6								

CONCRETE COVER REQUIREMENTS FOR MILD REINFORCEMENT (MINIMUM)

COMP





THIRD LEVEL PARKING - SECOND FLOOR COMMERCIAL PLAN

GENERAL SHEET NOTES

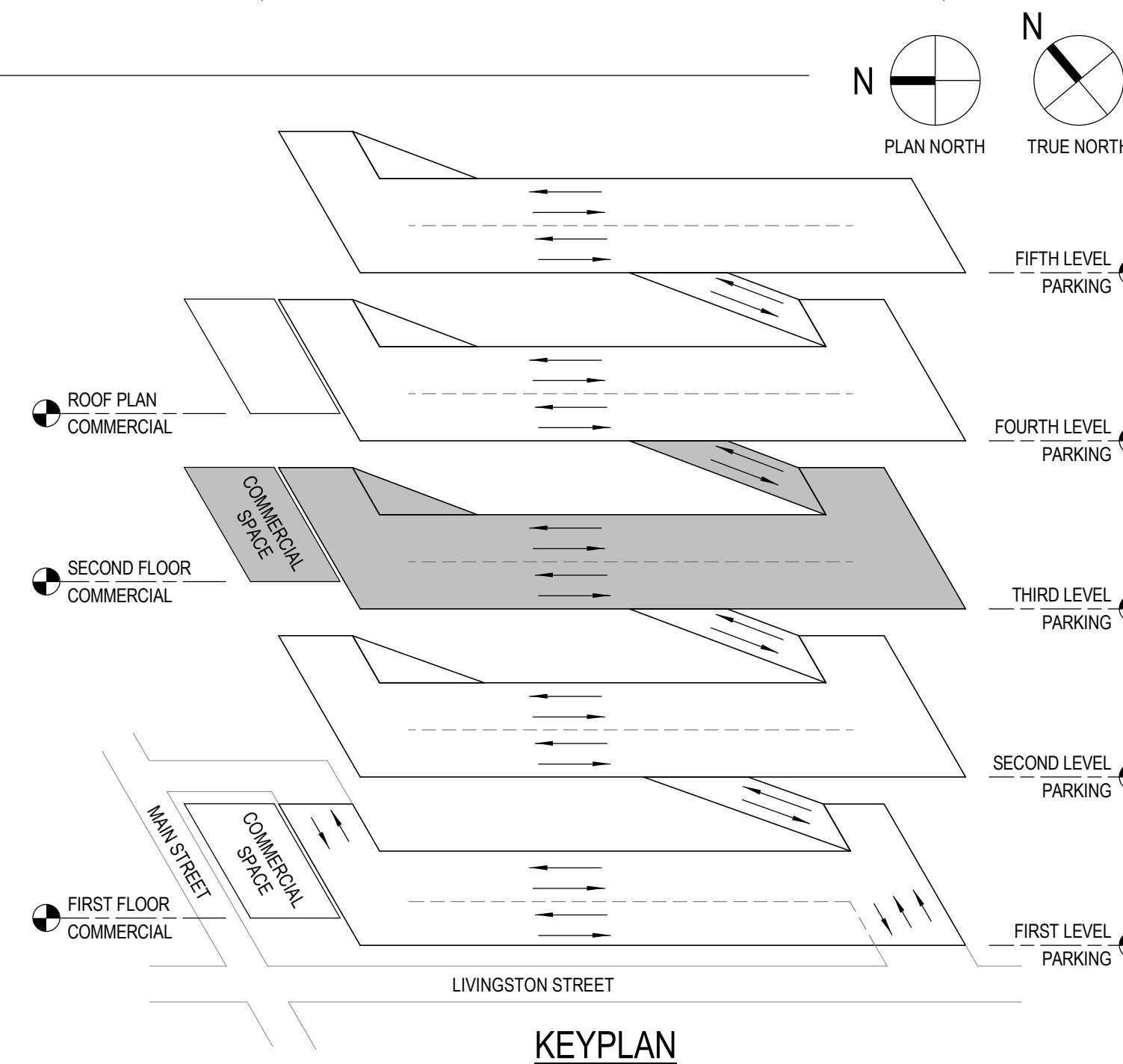
- TYPICAL FLOOR - AT PARKING RAMP FLOORS PROVIDE 6" NOMINAL SLAB THICKNESS AND AT COMMERCIAL SPACE FLOORS PROVIDE 8" NOMINAL SLAB THICKNESS THROUGHOUT UNLESS NOTED OTHERWISE. ADDITIONAL THICKNESS REQUIRED AT DRAINAGE CHUTES. REQUIRED FORCE IN SLAB TENDONS EQUALS 18 KIPS PER FOOT OF SLAB WIDTH AT PARKING RAMP. REQUIRED FORCE IN SLAB TENDONS EQUALS 17 KIPS PER FOOT OF SLAB WIDTH AT COMMERCIAL SPACE. TOP OF CONCRETE SLAB NOTED TOC X-Y ON PLAN. TOP OF BEAM IS AT TOP OF SLAB (TOC) UNLESS NOTED OTHERWISE.
- POST TENSION SEQUENCE:
 - POST TENSION SLABS
 - POST TENSION BEAMS
 - POST TENSION GRIDDERS
- DO NOT RELEASE FORMS UNTIL CRASH BARRIERS ARE POURED AND HARDENED.
- FOR FLOOR ELEVATIONS BETWEEN POINTS INDICATED USE STRAIGHT LINE INTERPOLATION.
- SEE "SCHEDULES" SHEET FOR POST TENSIONED CONCRETE BEAMS.
- PROVIDE EPOXY COATED REINFORCEMENT IN ACCORDANCE WITH ASTM A775 PER NOTES ON GENERAL NOTES SHEET.
- SEE "POST TENSION DETAILS" SHEETS FOR POST TENSION DETAILS.
- SEE POST TENSIONED DETAILS SHEETS AND STRUCTURAL DETAIL SHEETS FOR SEALANT DETAILS REQUIRED AND TEMPERATURE AND SHRINKAGE TENDON LAYOUT.
- SEE ELECTRICAL, PLUMBING, FIRE PROTECTION, HVAC AND ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATIONS OF SLAB OPENINGS AND PIPE SLEEVES. PROVIDE SLEEVES WITH DIAMETER 1" LARGER THAN CONDUIT. ALL SLEEVES TO BE SCHEDULE 40 STEEL PIPE.
- NO RECESSED AREAS IN SLAB ARE ALLOWED WITHOUT PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER.
- THE GENERAL CONTRACTOR IS TO COORDINATE THE FINAL LOCATIONS OF CONSTRUCTION JOINTS WITH POST TENSION SUPPLIER AND TO SUBMIT POURING AND STRESSING SEQUENCE TO ENGINEER DURING POST TENSIONING SHOP DRAWING SUBMITTAL.
- HOOK SHEAR WALL HORIZONTAL BARS INTO COLUMNS WHERE APPLICABLE.

SHEET KEYNOTES

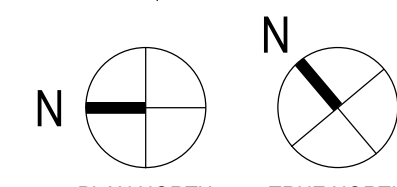
- BOLLARD LOCATION: SEE ARCHITECTURAL FOR ALL LOCATIONS AND REFERENCE STRUCTURAL DETAILS CALLED OUT ON PLAN.
- 16" SHEAR WALL REINFORCED WITH (2) CURTAINS OF #5@12" OC VERTICALS AND #5@12" OC HORIZONTALS.
- 12" SHEAR WALL REINFORCED WITH (2) CURTAINS OF #5@12" OC VERTICALS AND #4@12" OC HORIZONTALS.
- 12" SHEAR WALL REINFORCED WITH (2) CURTAINS OF #5@12" OC VERTICALS AND #4@12" OC HORIZONTALS.
- DRAPED TEMPERATURE AND SHRINKAGE POST TENSION TENDONS AS SHOWN, THIS BAY ONLY.
- 10" SLAB AT STAIRS WITHIN THIS BAY.
- FOR 6" DIAMETER MECHANICAL PENETRATIONS, CENTER THE OPENING AT 11" FROM THE BOTTOM OF BEAM. SEE "BEAM PENETRATION REINFORCEMENT DETAIL" ON SCHEDULES SHEET. VERIFY PENETRATION SIZES AND LOCATIONS WITH MECHANICAL.
- PROVIDE #4 BARS AT 12" OC TOP AND BOTTOM EACH WAY WITH STANDARD 90 DEGREE HOOKS AT ENDS FOR 8" SLAB AT ELEVATOR CORE, WEST OF GRID LINE B.
- PROVIDE (1) TEMPERATURE AND SHRINKAGE TENDON TENSIONED AT 26.7 KIPS, 30" FROM EDGE OF CANTILEVER.
- FUTURE MECHANICAL OPENING, REINFORCE PER "TYPICAL OPENINGS IN POST TENSION SLABS" DETAIL ON TYPICAL POST TENSION DETAILS SHEET. PROVIDE #4@12" OC BOTTOM EACH WAY THROUGHOUT FUTURE OPENING. EXTEND BARS 20" PAST EDGE OF FUTURE OPENING.
- PROVIDE EMBED PLATE EPT 11 AT 2'-0" MAX SPACING FOR THIS LOCATION.

POST-TENSIONED ONE-WAY SLAB MILD REINFORCEMENT SCHEDULE		
MARK	REINFORCING	NOTES
(A)	#4 x 11'-0" @ 16" OC BOT.	(1)
(B)	#4 x 11'-0" @ 16" OC TOP	
(C)	#4 x 5'-0" + HOOK @ 16" OC TOP	
(D)	#4 x 11'-0" @ 10" OC TOP	
(E)	#4 x 11'-0" @ 5" OC TOP	(2)
(F)	#4 x 12'-0" @ 10" OC TOP	
(G)	#4 x 6'-0" + HOOK @ 10" OC TOP	
(H)	#4 x CONT @ 10" OC BOTTOM	
(J)	#4 x 12'-0" @ 10" OC TOP	(3)

- GENERAL NOTES:
- ALL SLAB REINFORCEMENT TO BE EPOXY-COATED, SEE S001.
 - EXTENT OF MILD REINFORCEMENT IS FOR FULL WIDTH OF BUILDING UNLESS OTHERWISE NOTED.
 - BAR SCHEDULE CONTAINS MILD STEEL FOR SPAN CONDITIONS ONLY. REFER TO DETAILS FOR ADDITIONAL SLAB REINFORCING REQUIRED.
 - A CLASS B LAP MUST BE PROVIDED AT ALL SPACES IN REINFORCEMENT MARKED AS "CONT."
 - FOR ALL BAYS CONTAINING A POUR STRIP, PROVIDE #4 X CONT. @ 10" O.C. TOP AND BOTTOM.
- EXTEND EVERY THIRD BAR FULL SPAN, EXTEND INTO SUPPORT 6"
 - BEND BARS TO MATCH SLOPE.
 - BEND BARS TO MATCH SLAB STEP MATCH SLOPE.



KEYPLAN



FIFTH LEVEL PARKING

FOURTH LEVEL PARKING

THIRD LEVEL PARKING

SECOND LEVEL PARKING

FIRST LEVEL PARKING

ROOF PLAN COMMERCIAL

SECOND FLOOR COMMERCIAL

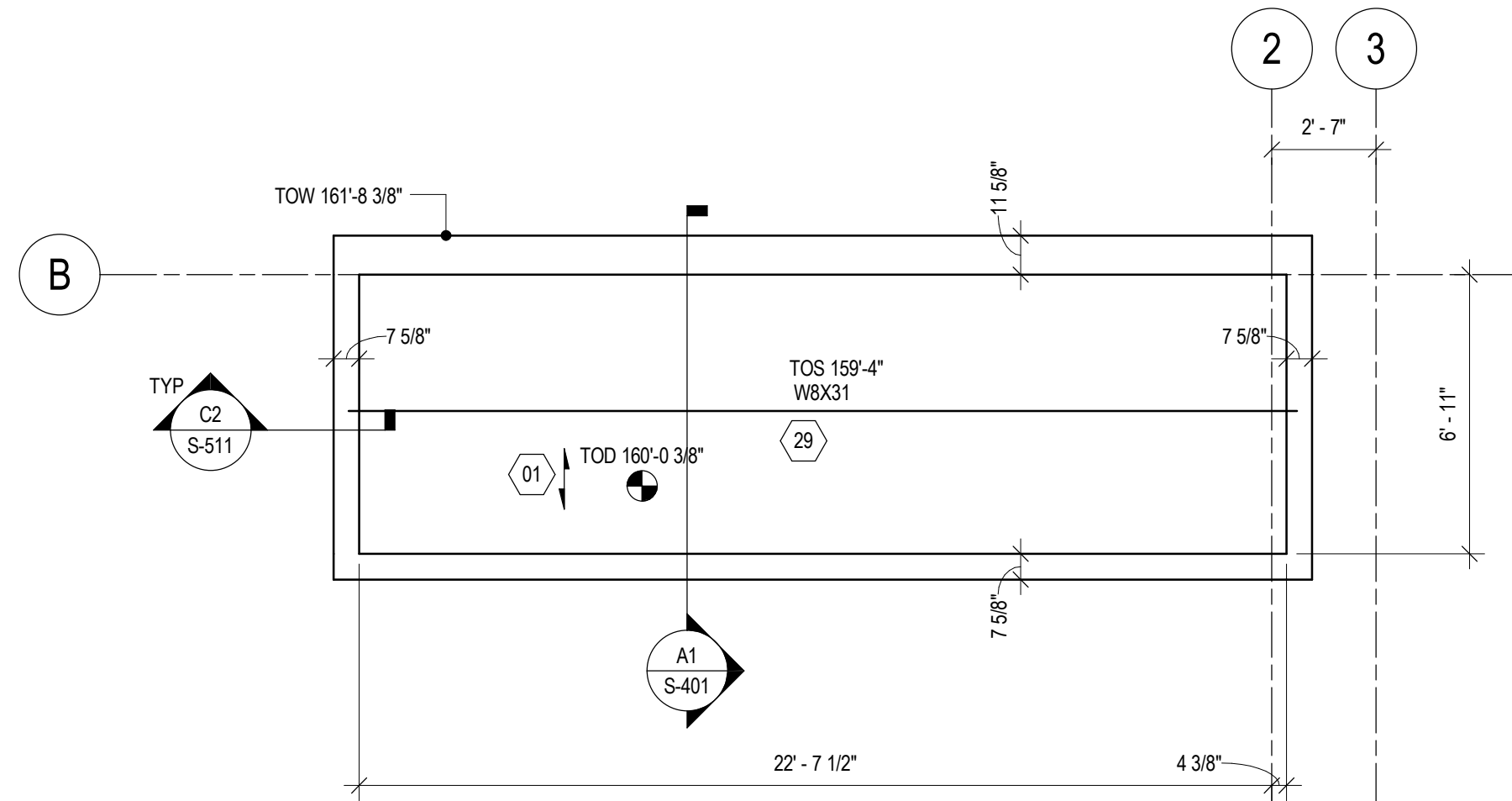
FIRST FLOOR COMMERCIAL

LIVINGSTON STREET

KEYPLAN

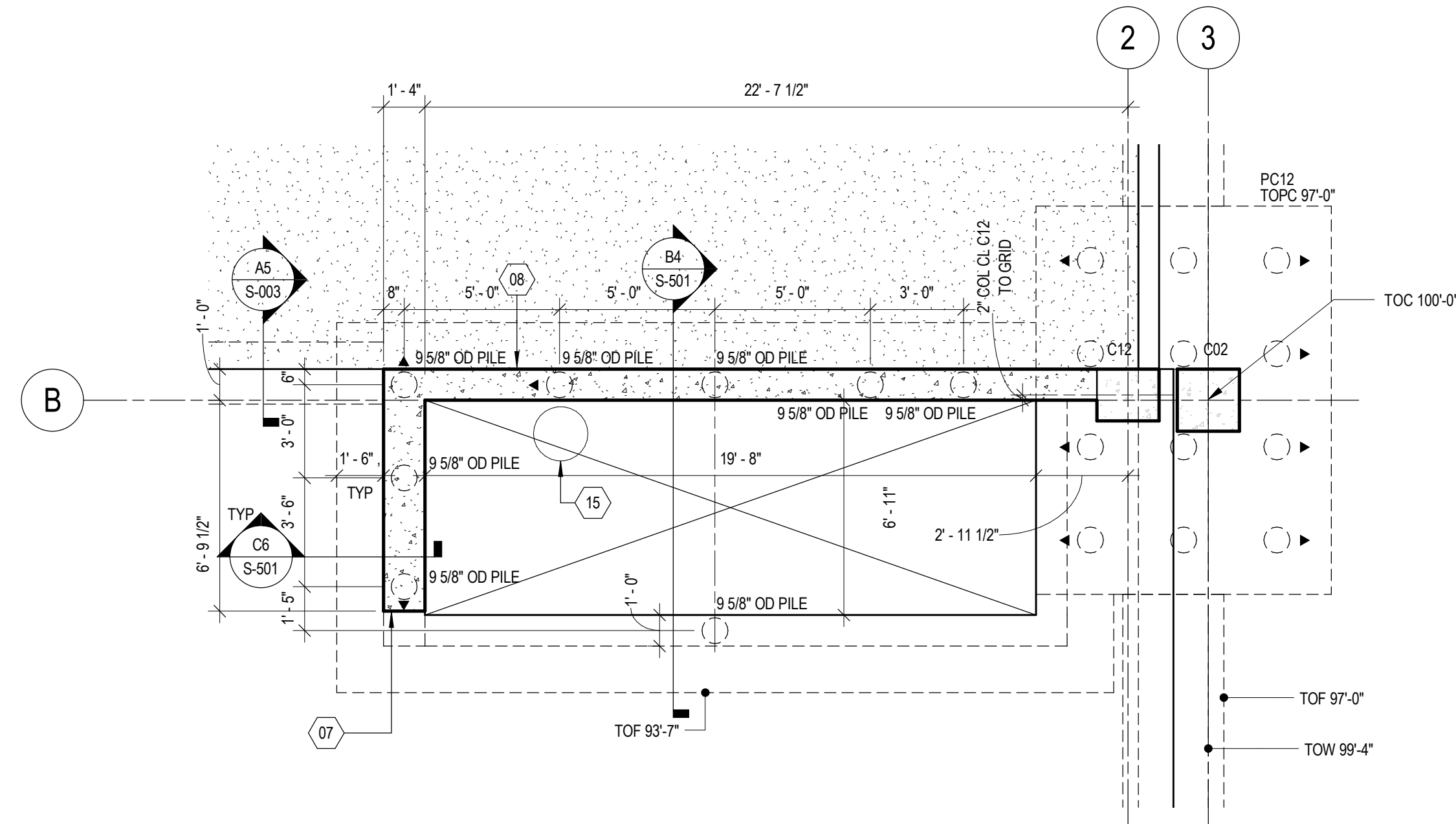






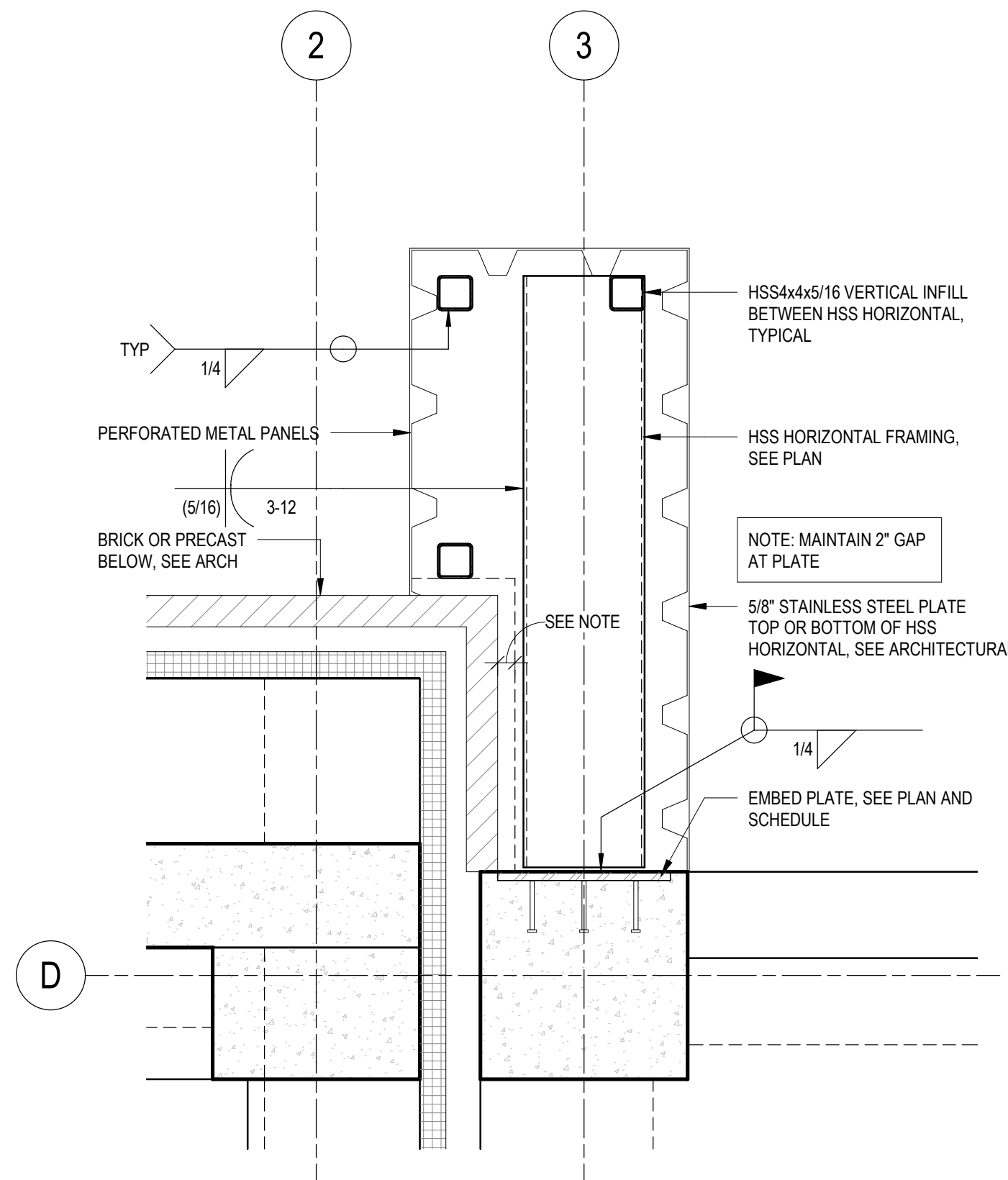
D3 ELEVATOR ROOF FRAMING PLAN

1/4\"/>



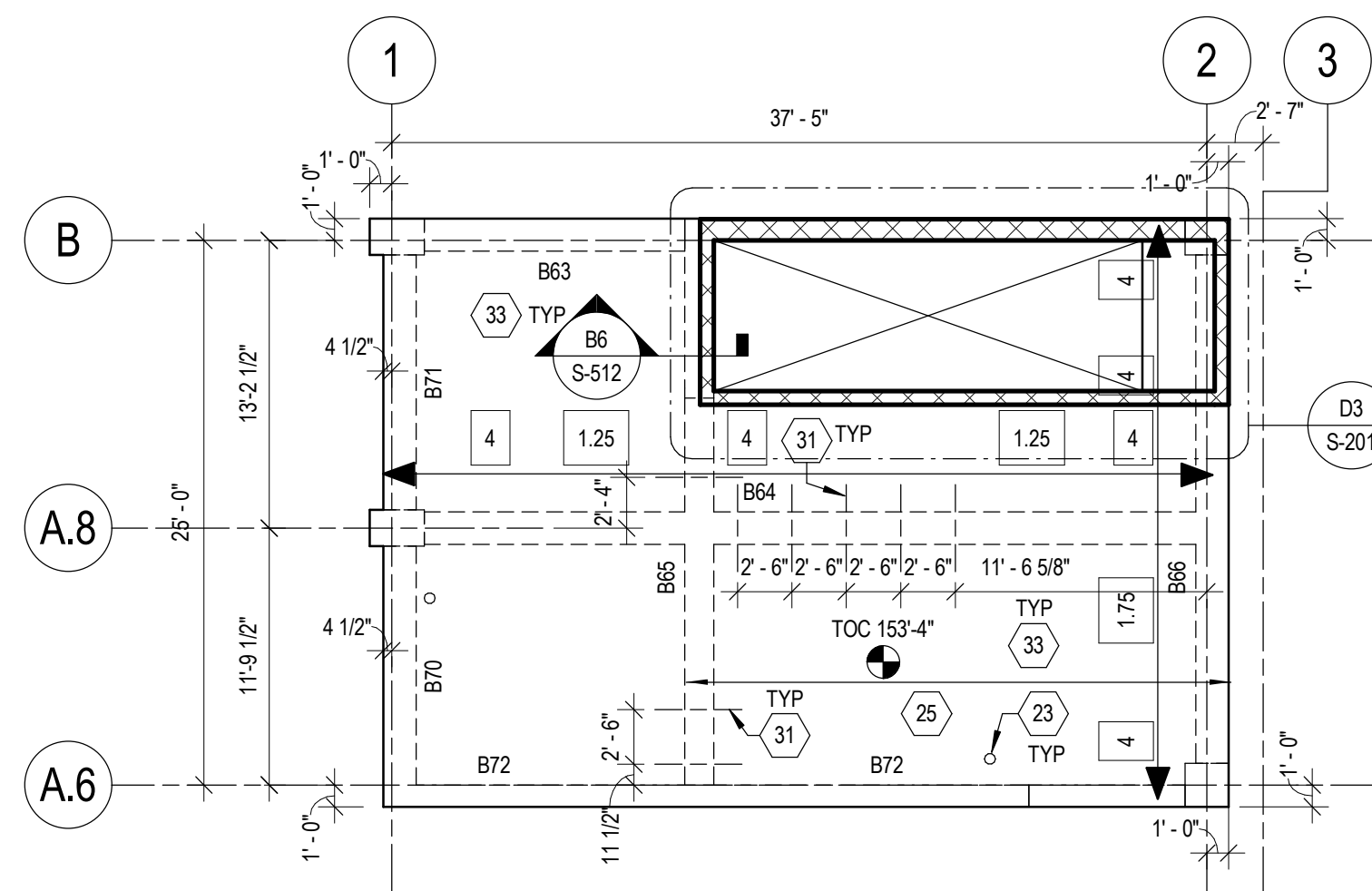
D5 ELEVATOR FOUNDATION PLAN

1/4\"/>



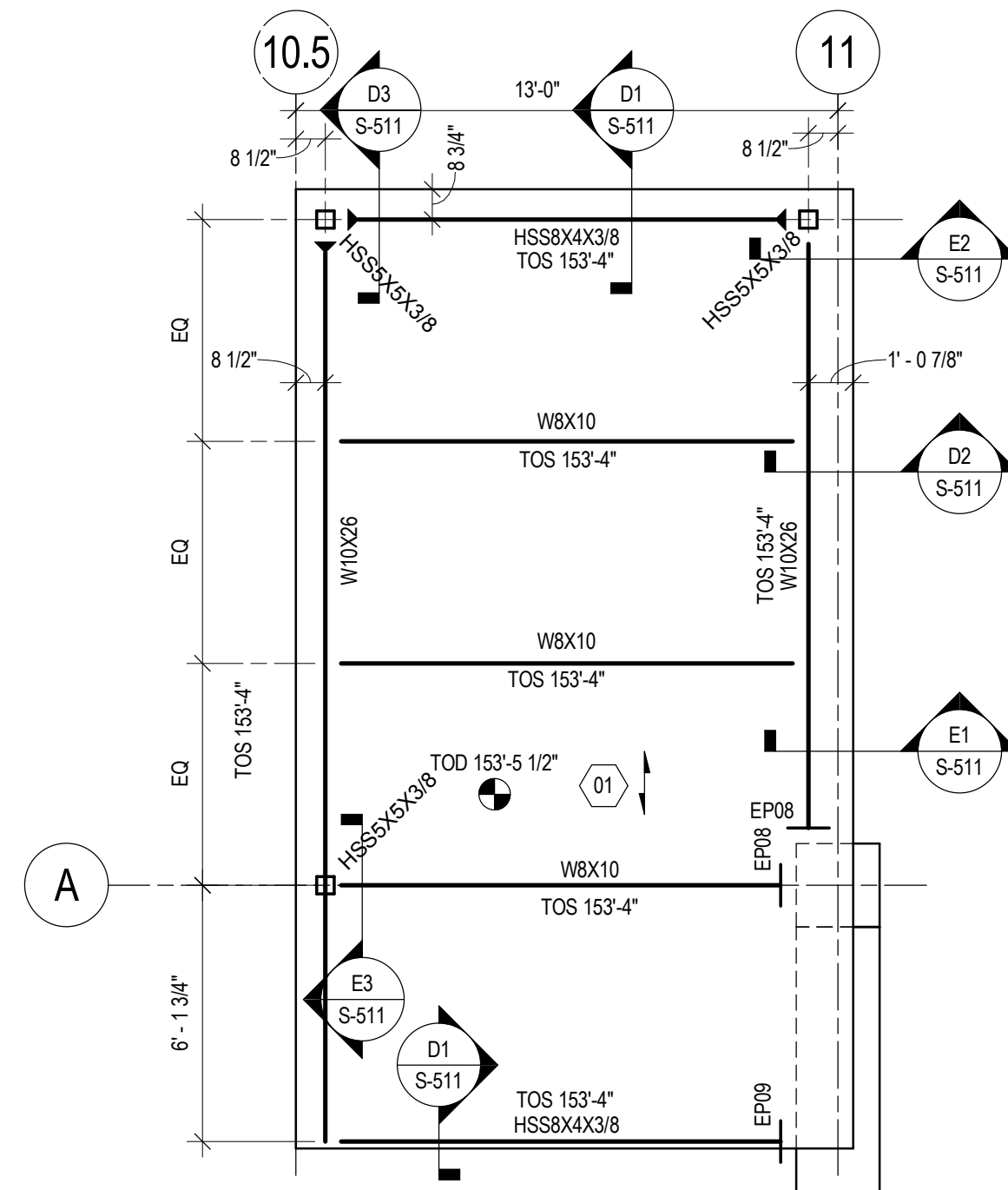
B3 ENLARGED PLAN DETAIL AT SCREEN WALL

3/4\"/>



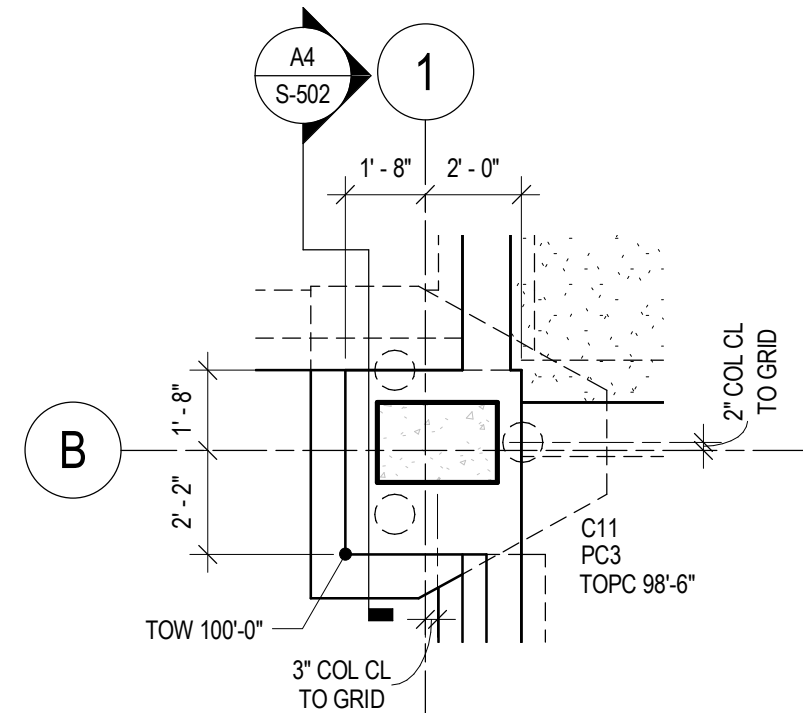
B4 STAIR ROOF FRAMING PLAN

1/8\"/>



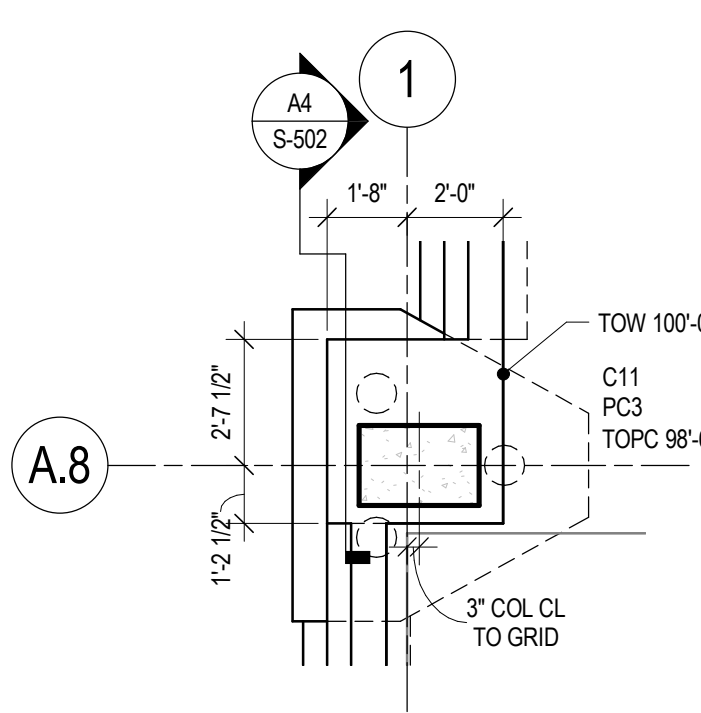
B6 STAIR ROOF FRAMING PLAN

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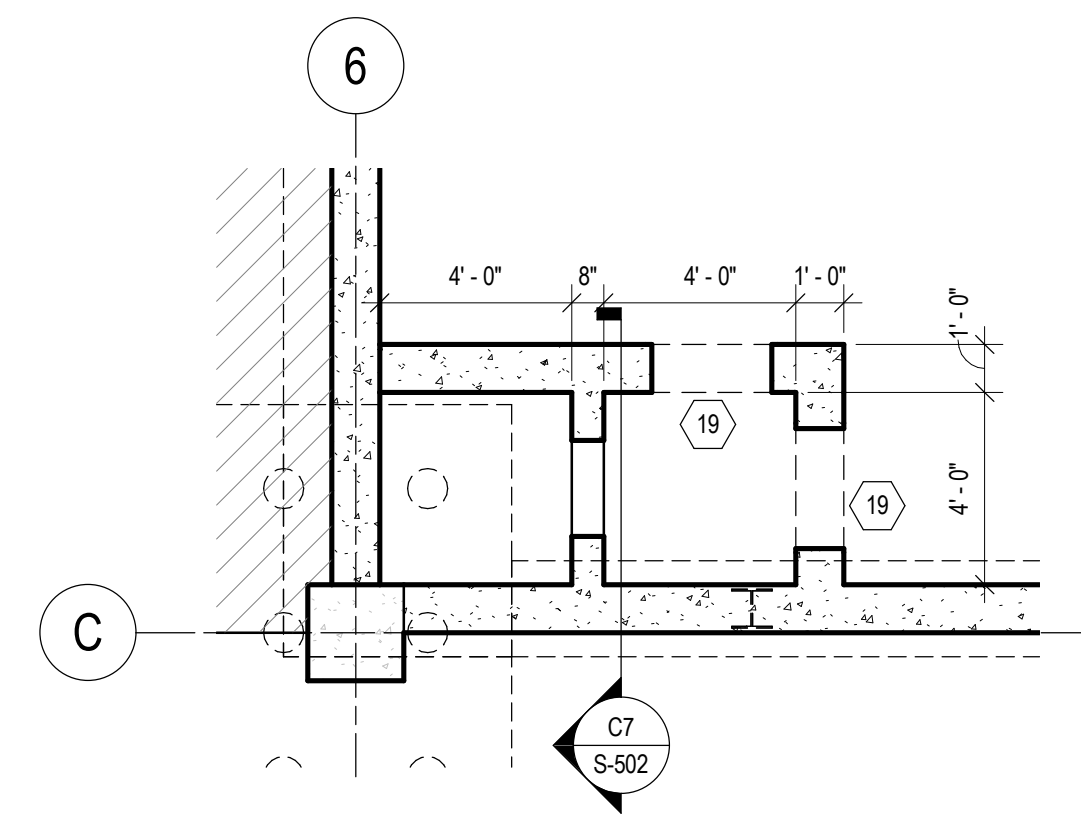
A4 ENLARGED PLAN

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A5 ENLARGED PLAN

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A6 ENLARGED PLAN

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GENERAL SHEET NOTES

FOUNDATION NOTES

- TYPICAL FLOOR = 8" CONCRETE SLAB ON GRADE REINFORCED WITH 4 LB/CU YARD WR GRACE STRUX 3040 FIBER REINFORCEMENT OR AS AN ALTERNATE #6-W2.5WVW. TOP OF CONCRETE SLAB ELEVATION VARIES. SEE PLAN.
- TYPICAL TOP OF PILE CAP ELEVATION (TOPC) TO BE NOTED ON PLAN.
- FOR FLOOR ELEVATIONS BETWEEN POINTS INDICATED USE STRAIGHT LINE INTERPOLATION.
- LEAD CONTRACTOR TO COORDINATE DRAIN TILE LATERAL CONNECTIONS THROUGH FOUNDATION WALLS. SEE PLUMBING.
- TOP OF FOUNDATION WALL/GRADE BEAM NOTED TOW X-X" ON PLAN.
- SEE "SCHEDULES" SHEET(S) FOR PILE CAP FOOTINGS AND CONCRETE COLUMN SCHEDULES.
- SEE "GENERAL DETAILS" SHEET(S) FOR THE FOLLOWING DETAILS:
 - OPENING REINFORCEMENT
 - SLAB ON GRADE CONTROL AND CONSTRUCTION JOINT
 - WALL CONTROL AND CONSTRUCTION JOINT
 - WALL CORNER
 - WALL INTERSECTION
 - FOOTING STEP
 - SLAB ON GRADE DEPRESSION
 - CMU WALL ON SLAB ON GRADE
 - INTERIOR COLUMN ISOLATION JOINT
 - EXTERIOR COLUMN ISOLATION JOINT
 - FLOOR DRAIN AT SLAB ON GRADE
- HOOK SHEAR WALL HORIZONTAL BARS INTO COLUMNS WHERE APPLICABLE.
- = DIRECTION OF BATTERED PILE. SLOPE 1:4.

POST TENSION NOTES

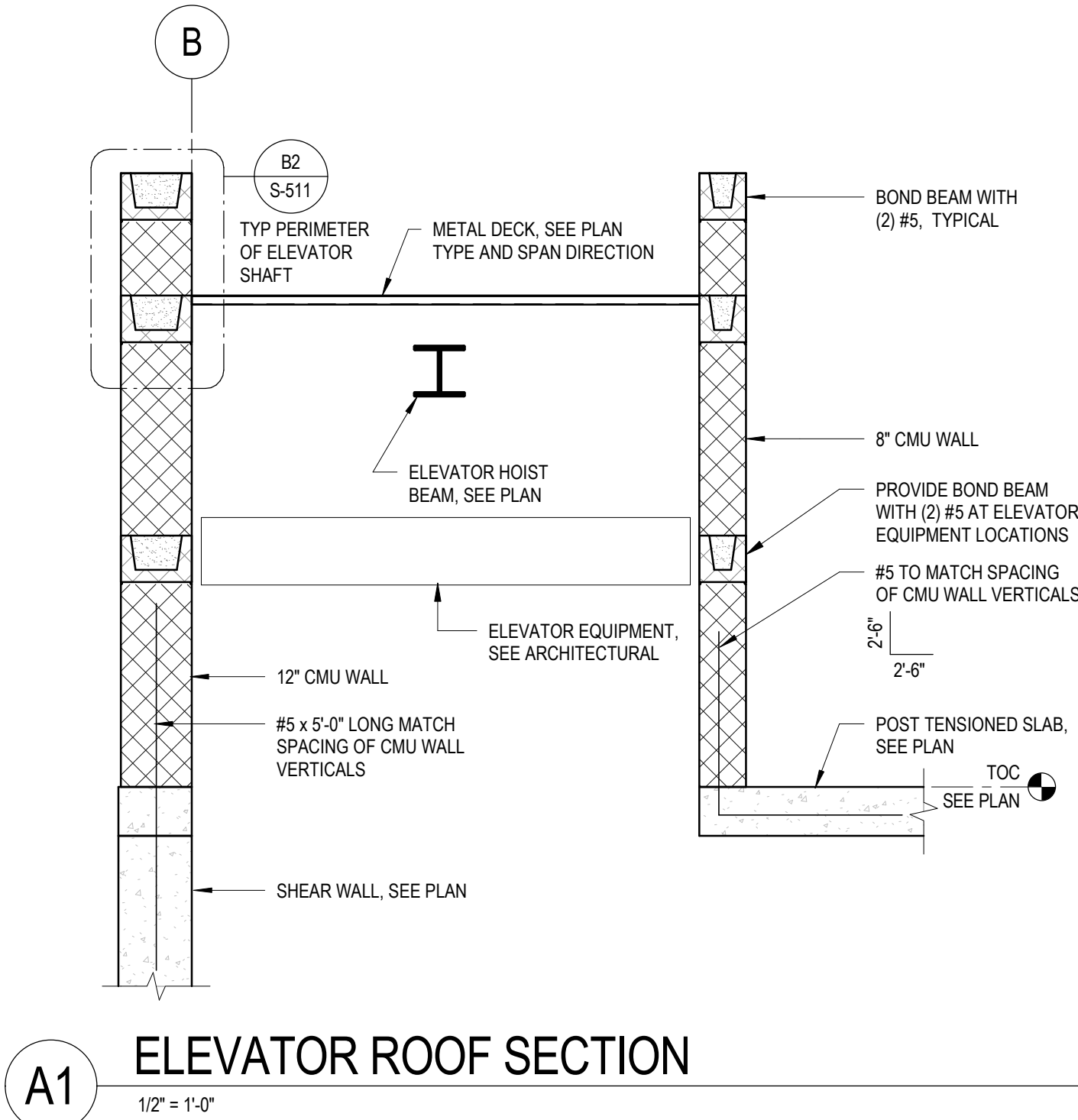
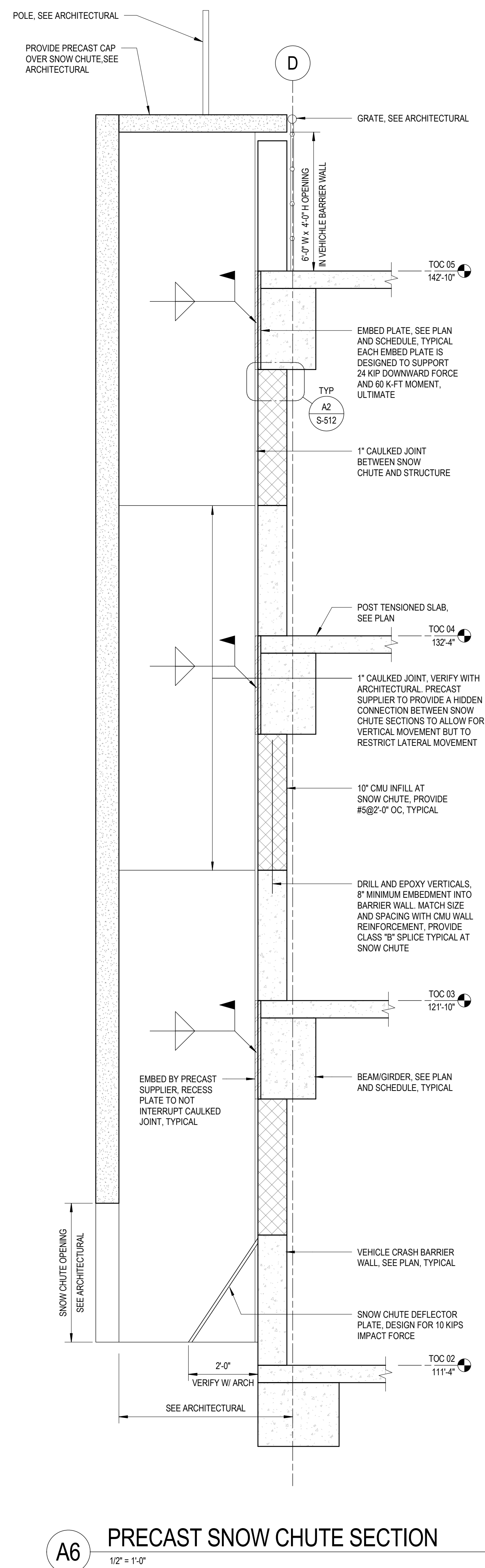
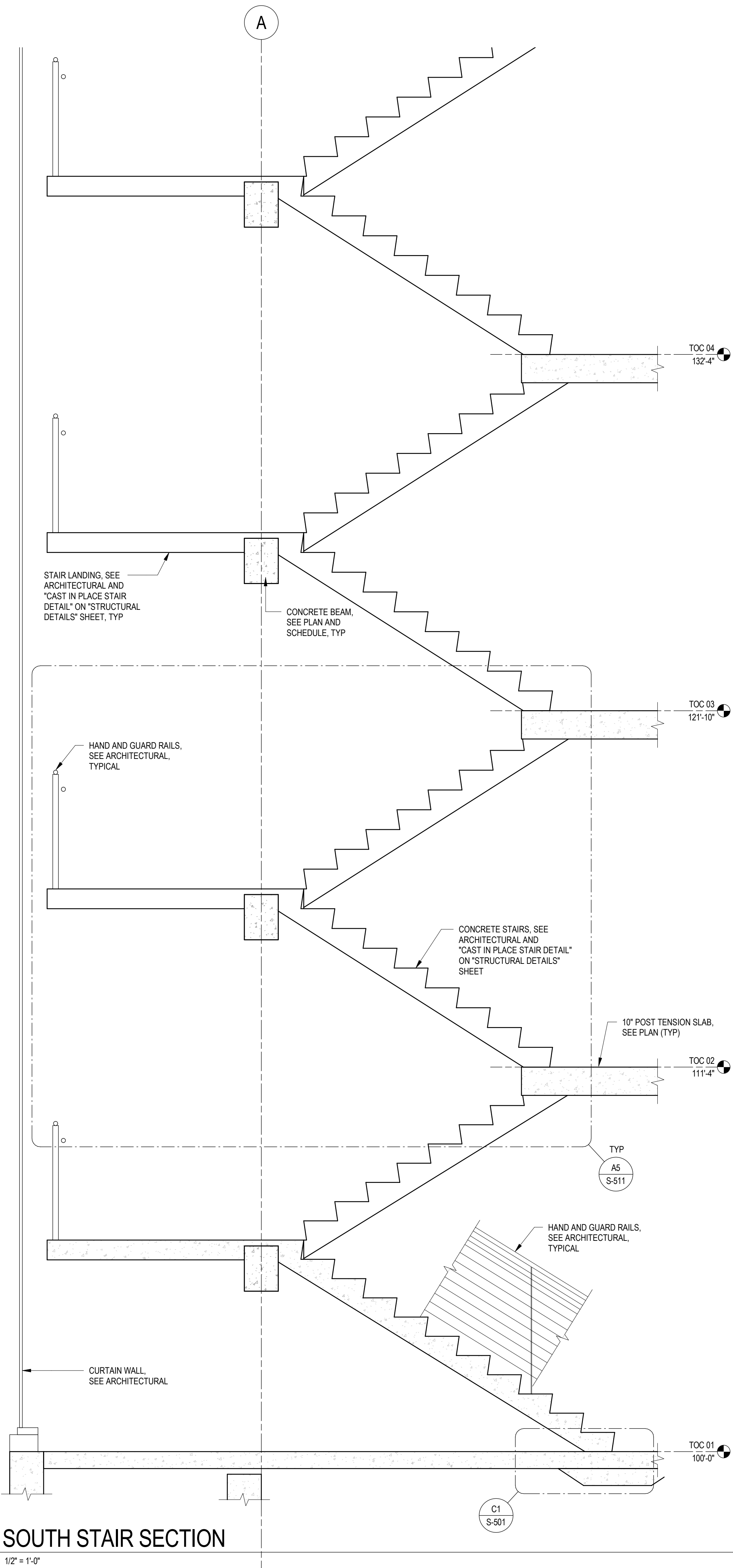
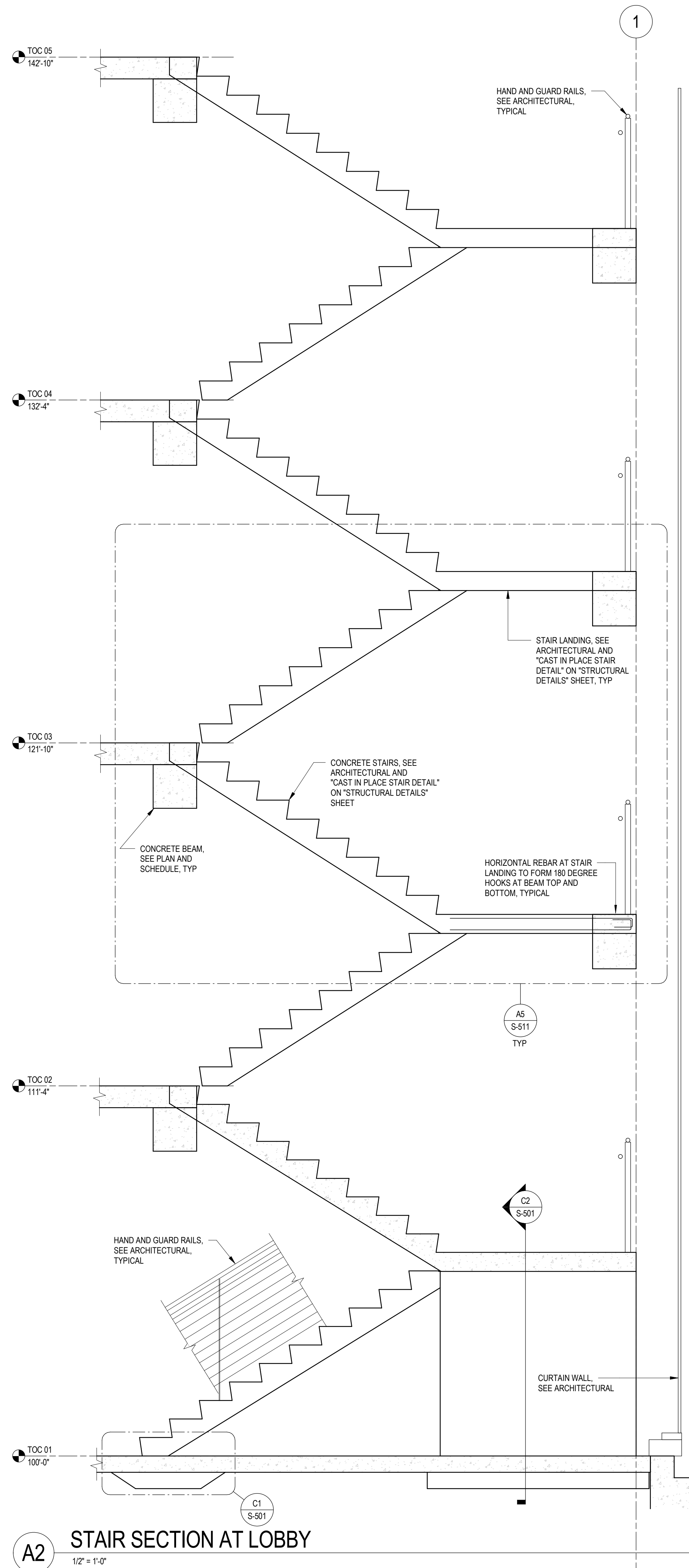
- TYPICAL FLOOR = AT PARKING RAMP FLOORS PROVIDE 8" NOMINAL SLAB THICKNESS AND AT COMMERCIAL SPACE FLOORS PROVIDE 8" NOMINAL SLAB THICKNESS THROUGHOUT UNLESS NOTED OTHERWISE. ADDITIONAL THICKNESS REQUIRED AT DRAINAGE SADDLES. REQUIRED FORCE IN SLAB TENDONS EQUALS 19 KIPS PER FOOT OF SLAB WIDTH AT PARKING RAMP. REQUIRED FORCE IN SLAB TENDONS EQUALS 17 KIPS PER FOOT OF SLAB WIDTH AT COMMERCIAL SPACE. TOP OF CONCRETE SLAB NOTED TOC X-X" ON PLAN. TOP OF BEAM IS AT TOP OF SLAB (TOC) UNLESS NOTED OTHERWISE.
- POST TENSION SEQUENCE:
 1. POST TENSION SLABS
 2. POST TENSION BEAMS
 3. POST TENSION GIRDERS
- DO NOT RELEASE FORMS UNTIL CRASH BARRIERS ARE POURED AND HARDENED.
- FOR FLOOR ELEVATIONS BETWEEN POINTS INDICATED USE STRAIGHT LINE INTERPOLATION.
- SEE "SCHEDULES" SHEET FOR POST TENSIONED CONCRETE BEAMS.
- PROVIDE EPOXY COATED REINFORCEMENT IN ACCORDANCE WITH ASTM A775 PER NOTES ON GENERAL NOTES SHEET.
- SEE "POST TENSION DETAILS" SHEETS FOR POST TENSION DETAILS.
- SEE POST TENSIONED DETAILS SHEETS AND STRUCTURAL DETAIL SHEETS FOR SEALANT DETAILS REQUIRED AND TEMPERATURE AND SHRINKAGE TENDON LAYOUT.
- SEE ELECTRICAL, PLUMBING, FIRE PROTECTION, HVAC AND ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATIONS OF SLAB OPENINGS AND PIPE SLEEVES. PROVIDE SLEEVES WITH DIAMETER 1" LARGER THAN CONDUIT. ALL SLEEVES TO BE SCHEDULE 40 STEEL PIPE.
- NO RECESSED AREAS IN SLAB ARE ALLOWED WITHOUT PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER.
- THE GENERAL CONTRACTOR IS TO COORDINATE THE FINAL LOCATIONS OF CONSTRUCTION JOINTS WITH POST TENSION SUPPLIER AND TO SUBMIT POURING AND STRESSING SEQUENCE TO ENGINEER DURING POST-TENSIONING SHOP DRAWING SUBMITTAL.

ROOF DECK NOTES

- TOP OF STEEL ELEVATION = NOTED ON PLAN.
- TYPICAL ROOF = 1 1/2" x 18 GAGE METAL ROOF DECK.
- REFER TO PLUMBING DRAWINGS FOR ROOF DRAIN LOCATIONS.
- PROVIDE MECHANICAL SUBFRAME FOR ALL DUCT PENETRATIONS THROUGH ROOF. COORDINATE SIZE AND LOCATION WITH MECHANICAL CONTRACTOR.
- BEAMS SHALL BE EQUALLY SPACED IN A BAY UNLESS NOTED OTHERWISE ON PLAN.
- SEE "GENERAL DETAILS" SHEET(S) FOR THE FOLLOWING DETAILS:
 - ROOF DRAIN SUBFRAME
 - MECHANICAL SUBFRAME
 - ROOF PERIMETER EDGE ANGLE OR BENT PLATE SPUCE
 - EDGE CONDITION AT DECK OPENING OR EDGES

SHEET KEYNOTES

- 01 1 1/2" x 18 GAGE ROOF DECK.
- 07 16" SHEAR WALL REINFORCED WITH (2) CURTAINS OF #5@12" OC VERTICALS AND #5@12" OC HORIZONTALS.
- 08 12" SHEAR WALL REINFORCED WITH (2) CURTAINS OF #5@12" OC VERTICALS AND #4@12" OC HORIZONTALS.
- 15 SUMP PIT FOR ELEVATOR. COORDINATE LOCATION WITH ELEVATOR PROVIDER AND PLUMBING. SEE "SUMP PIT DETAIL" ON FOUNDATION DETAILS SHEET.
- 19 2'-6" WIDE 2'-0" HIGH OPENING AT BOTTOM OF BATTLE WALL.
- 23 PREFABRICATED ROOF ANCHOR/DWIT. COORDINATE WITH OWNER'S VENDOR.
- 25 DRAPE TEMPERATURE AND SHRINKAGE POST TENSION TENDONS AS SHOWN. THIS BAY ONLY.
- 29 ELEVATOR HOST BEAM. COORDINATE WITH ELEVATOR SUPPLIER.
- 31 10" DIA MECHANICAL PENETRATIONS. CENTER THE OPENING AT 11" FROM THE BOTTOM OF BEAM. SEE "BEAM PENETRATION REINFORCEMENT DETAIL" ON SCHEDULES SHEET. VERIFY PENETRATION SIZES AND LOCATIONS WITH MECHANICAL.
- 33 PROVIDE #4 BARS AT 12" OC TOP AND BOTTOM EACH WAY WITH STANDARD 90 DEGREE HOOKS AT ENDS FOR 8" SLAB AT ELEVATOR CORE. WEST OF GRID LINE B.





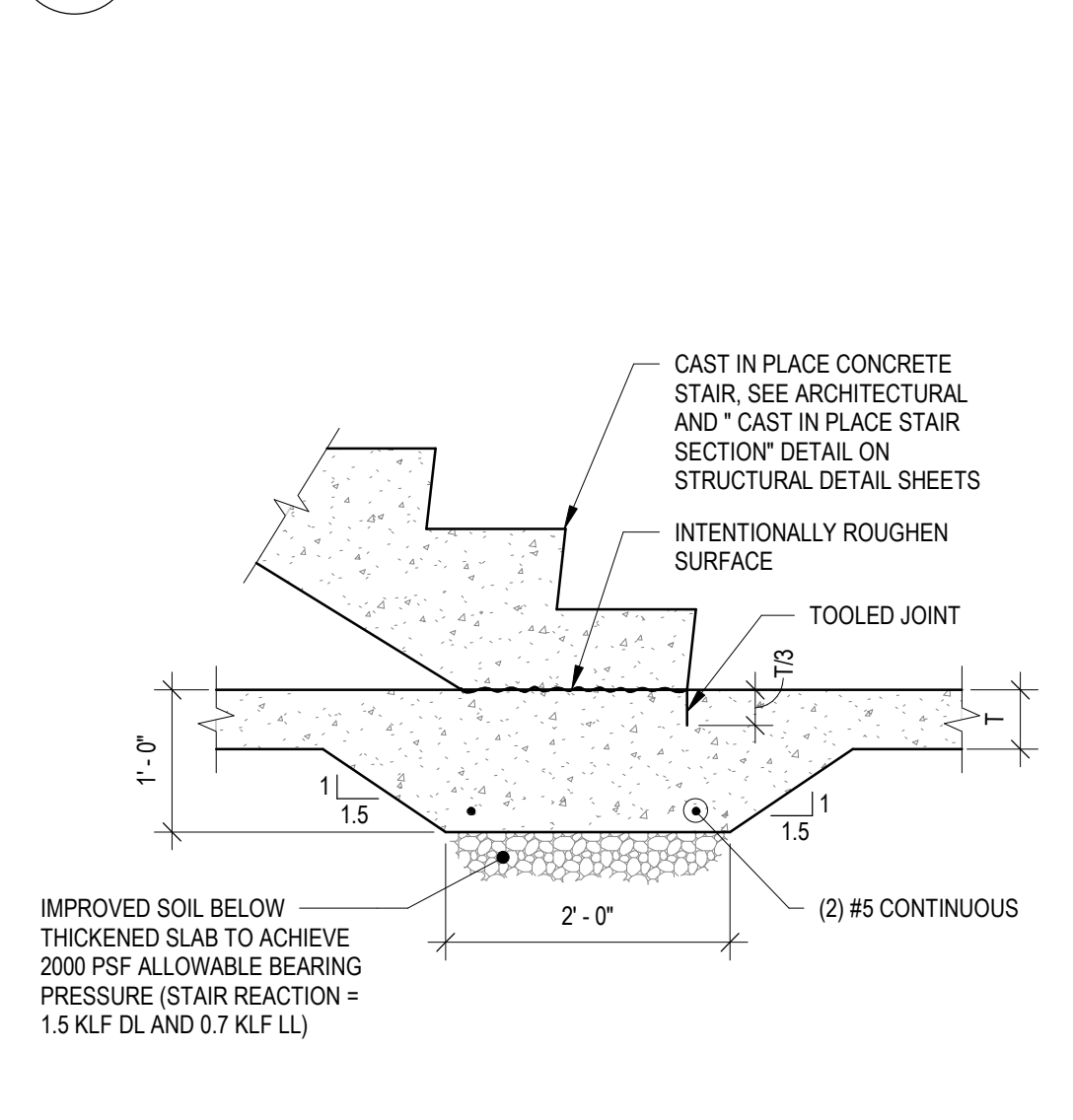
E1 PLANK AT WALL DETAIL
3/4" = 1'-0"



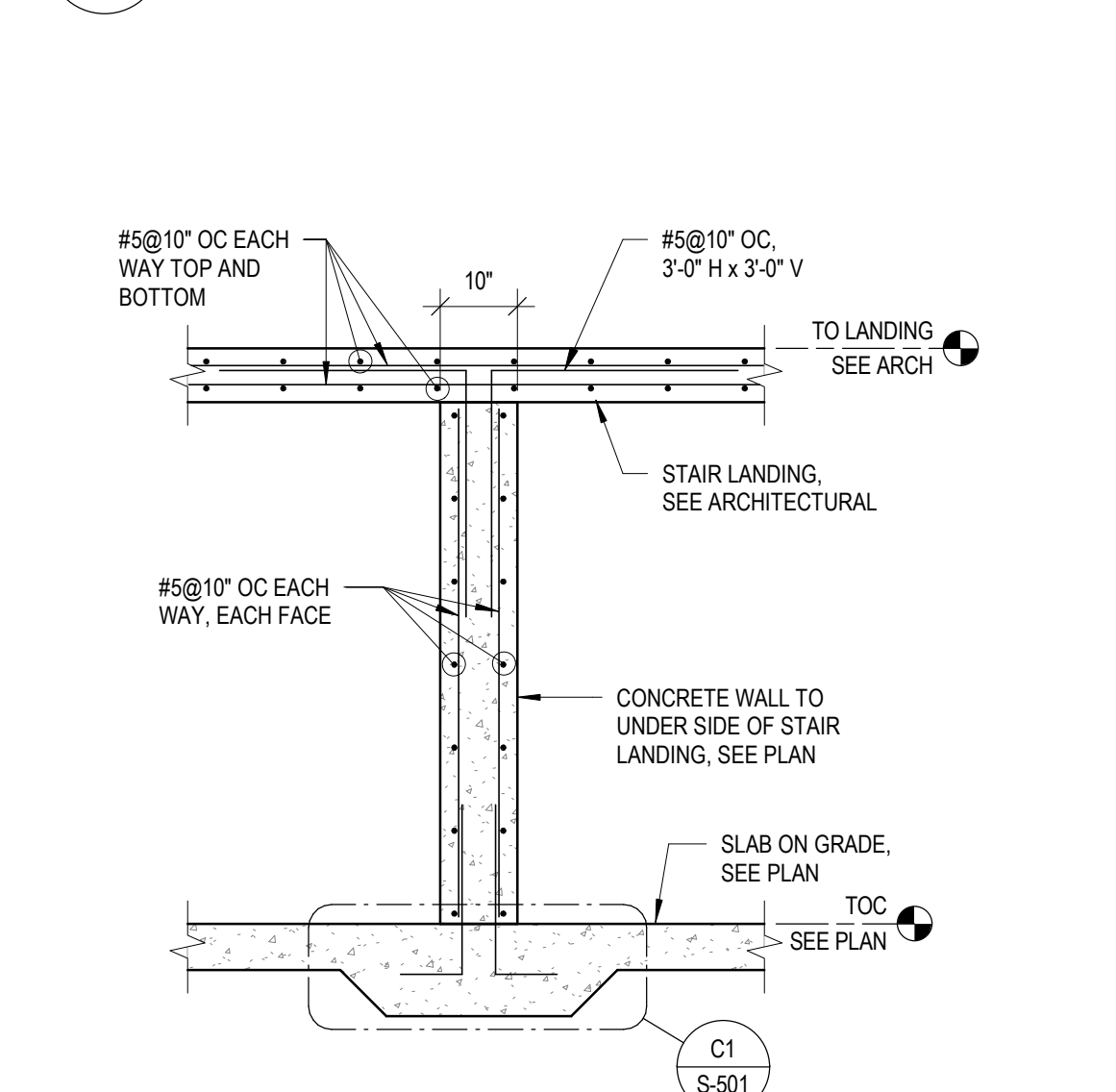
E2 SHEAR WALL DOWELS
3/4" = 1'-0"



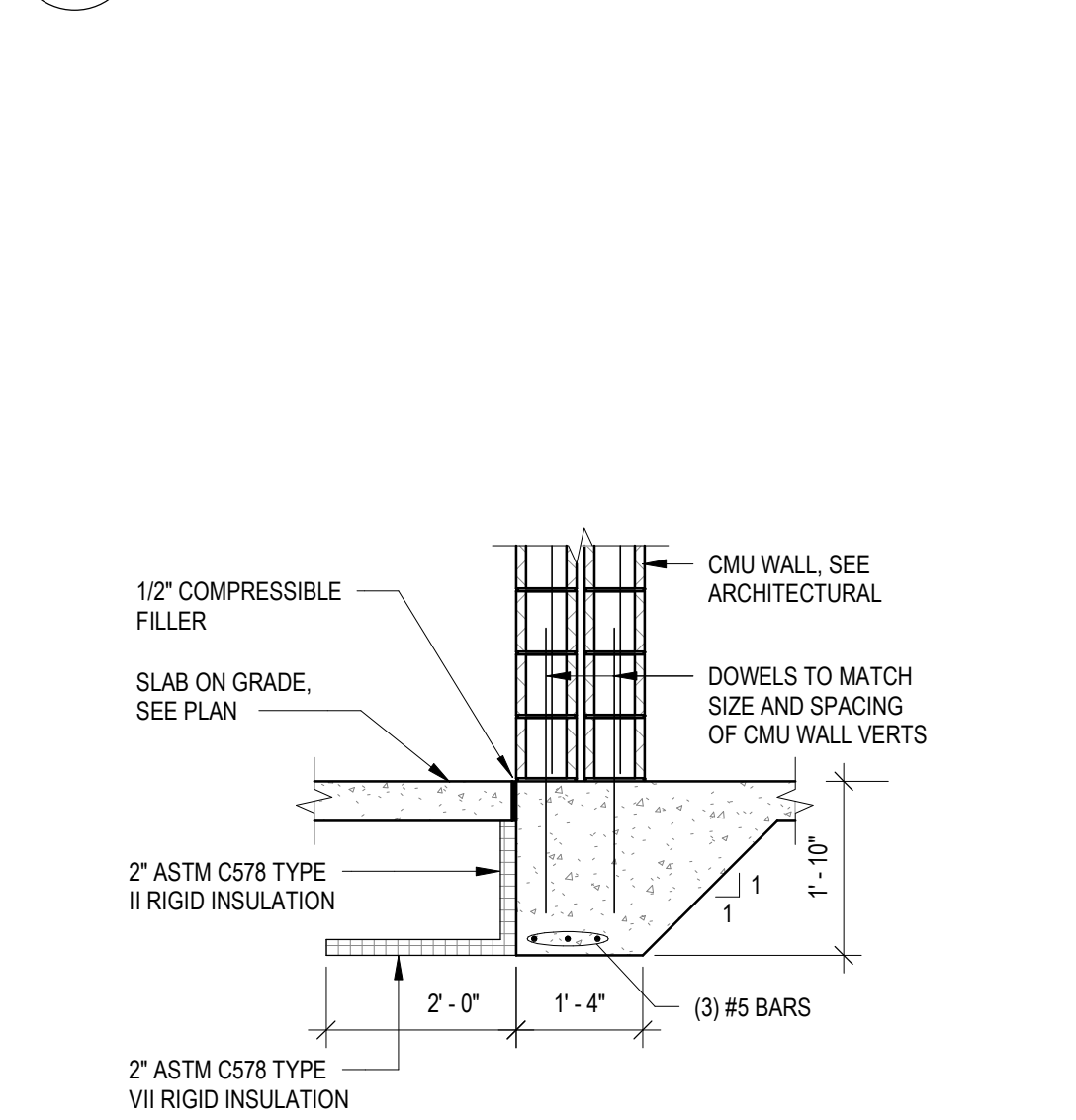
D1 ATC TUNNEL STEP SECTION
3/4" = 1'-0"



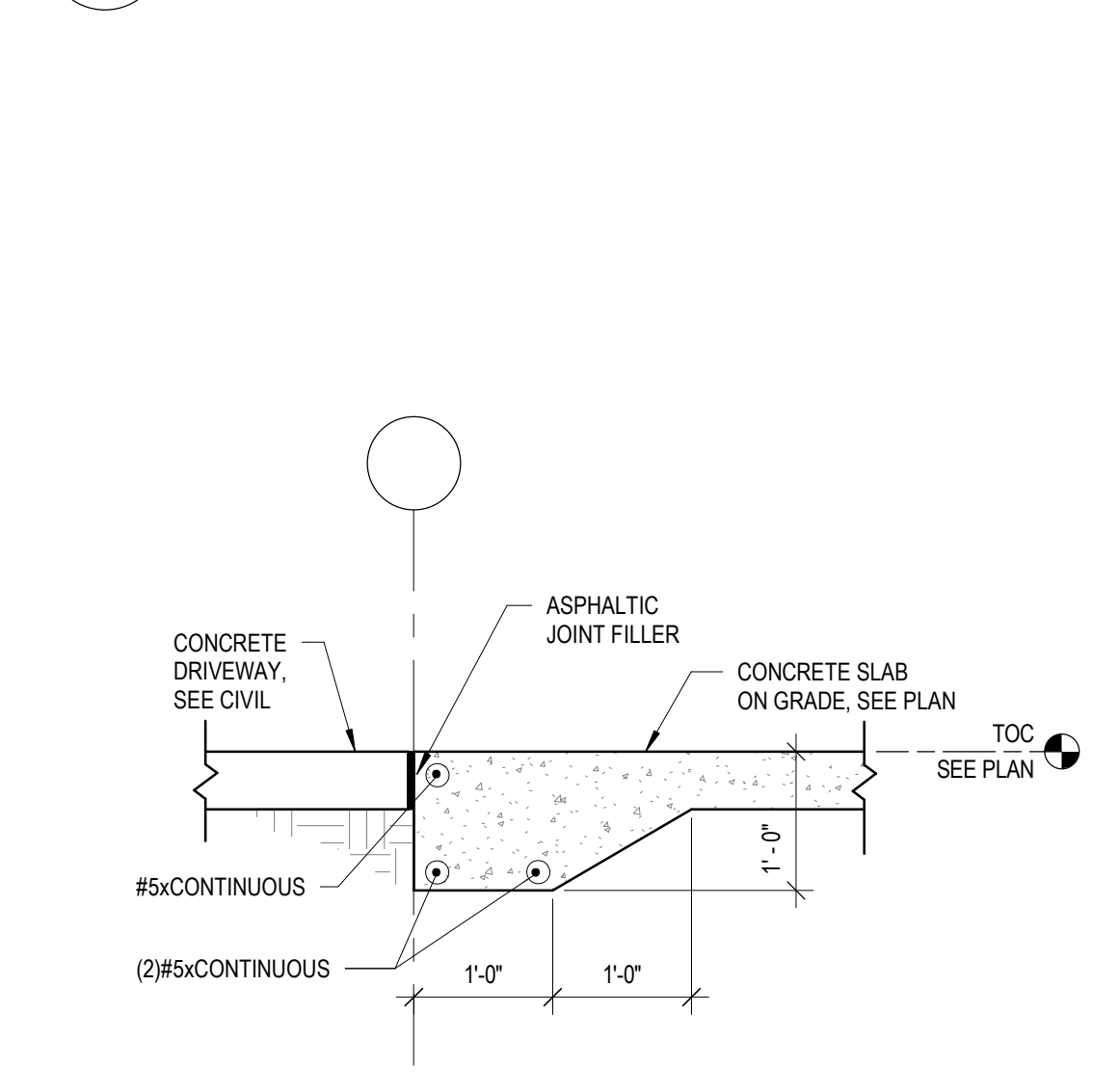
D2 SECTION AT HP PILE
3/4" = 1'-0"



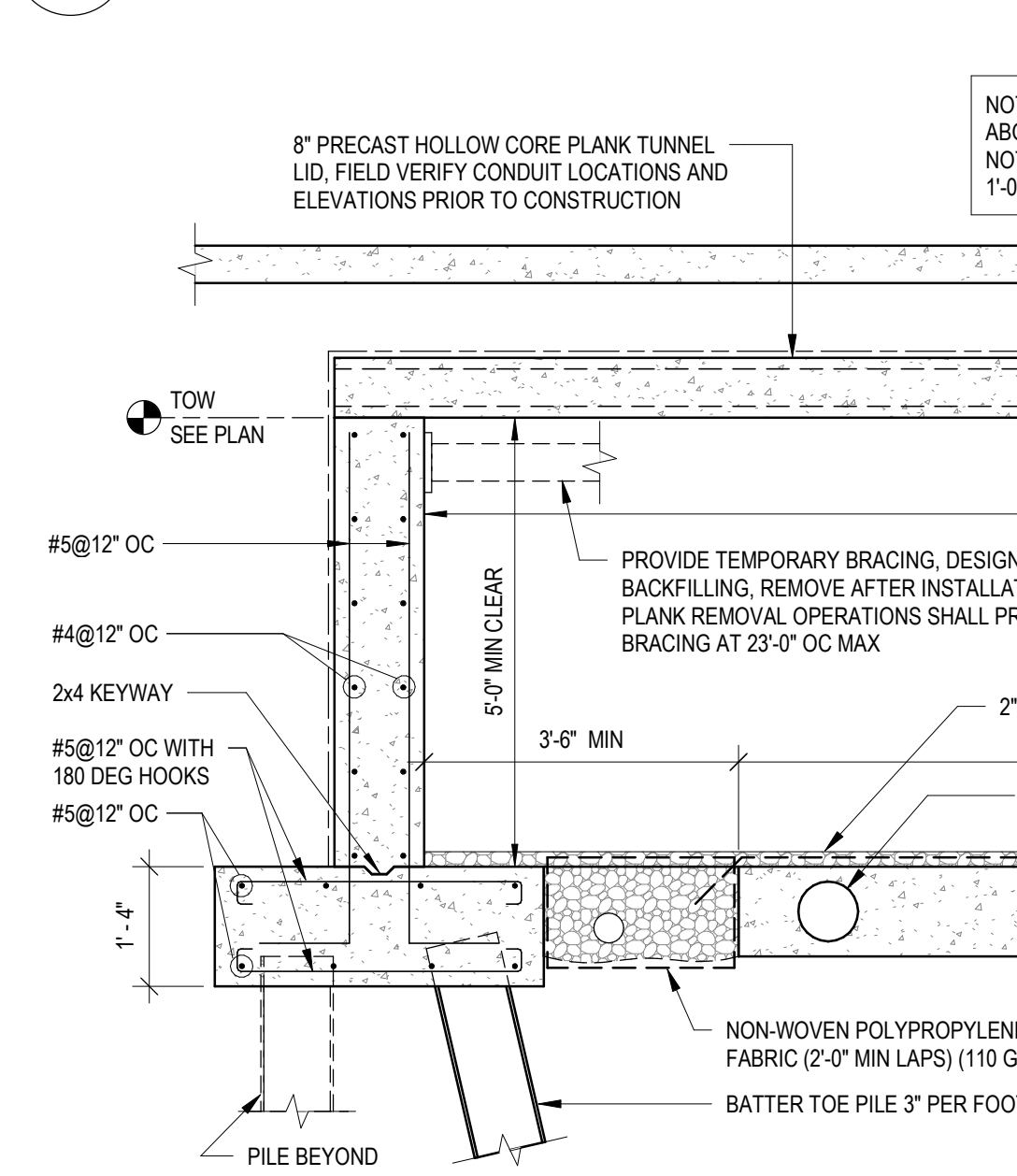
C1 THICKENED SLAB AT STAIR
3/4" = 1'-0"



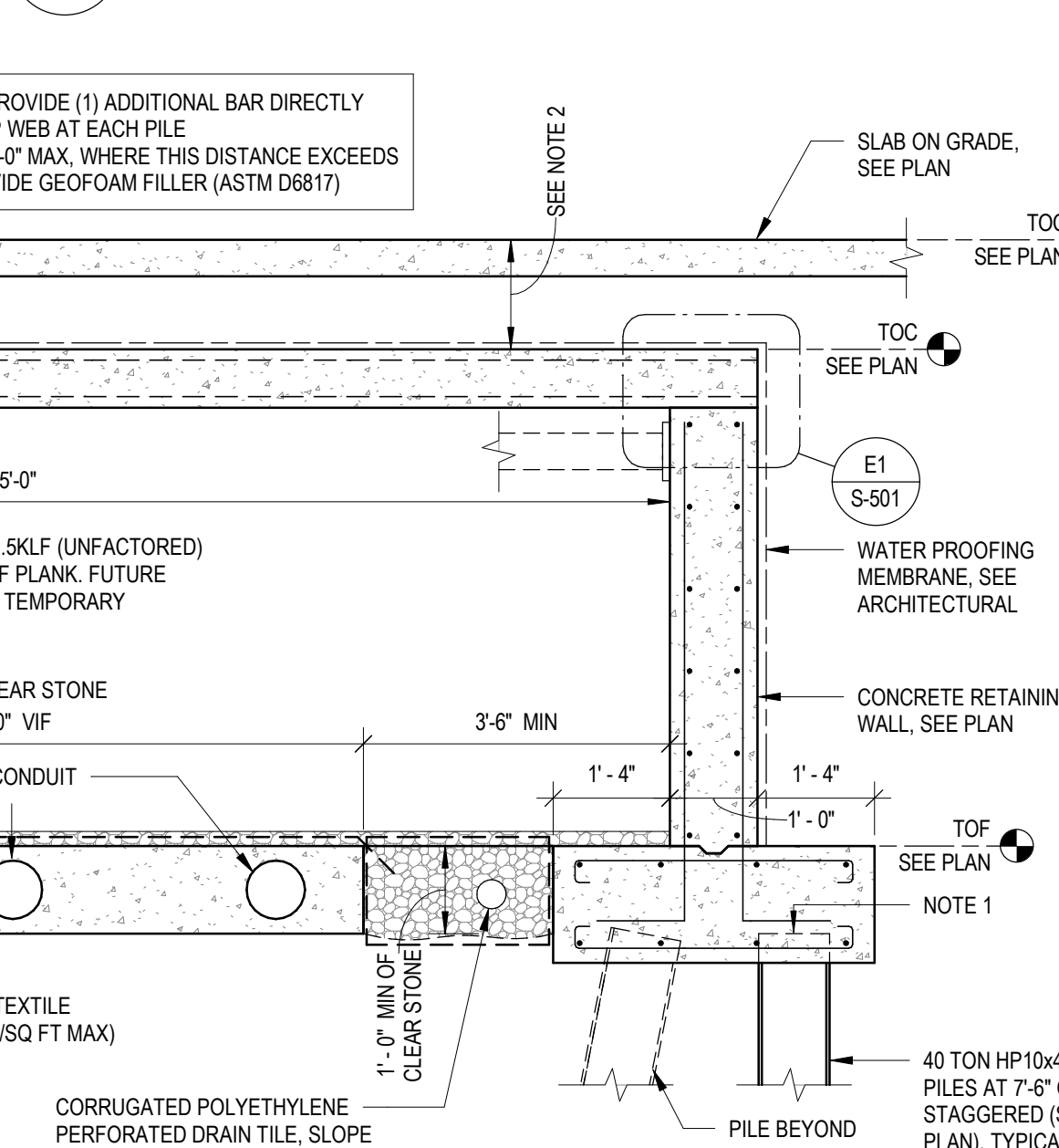
C2 SECTION AT WALL
1/2" = 1'-0"



B1 DETAIL AT TURNED DOWN SLAB
1/2" = 1'-0"



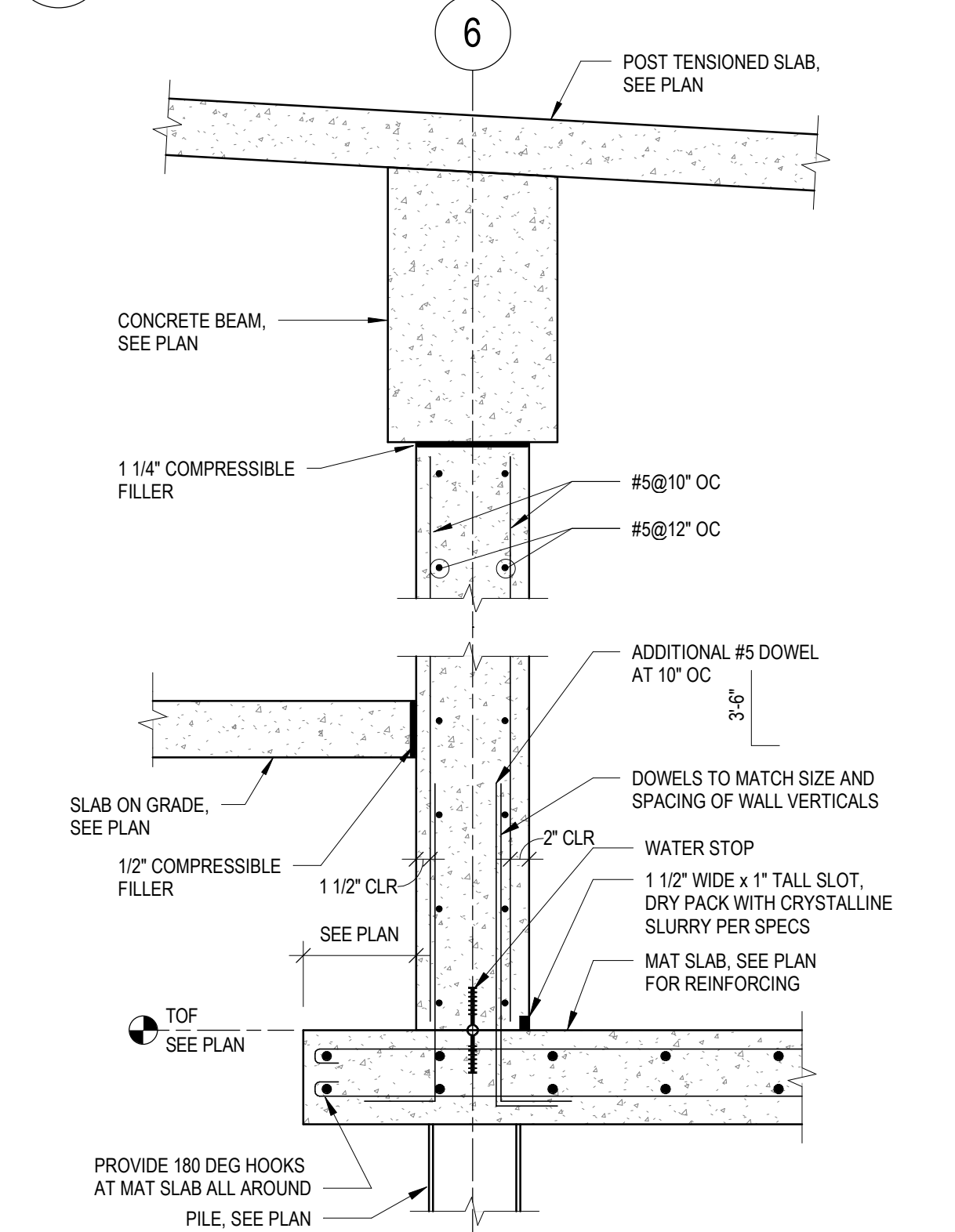
B2 SLAB ON GRADE AT RAMP ENTRANCES
3/4" = 1'-0"



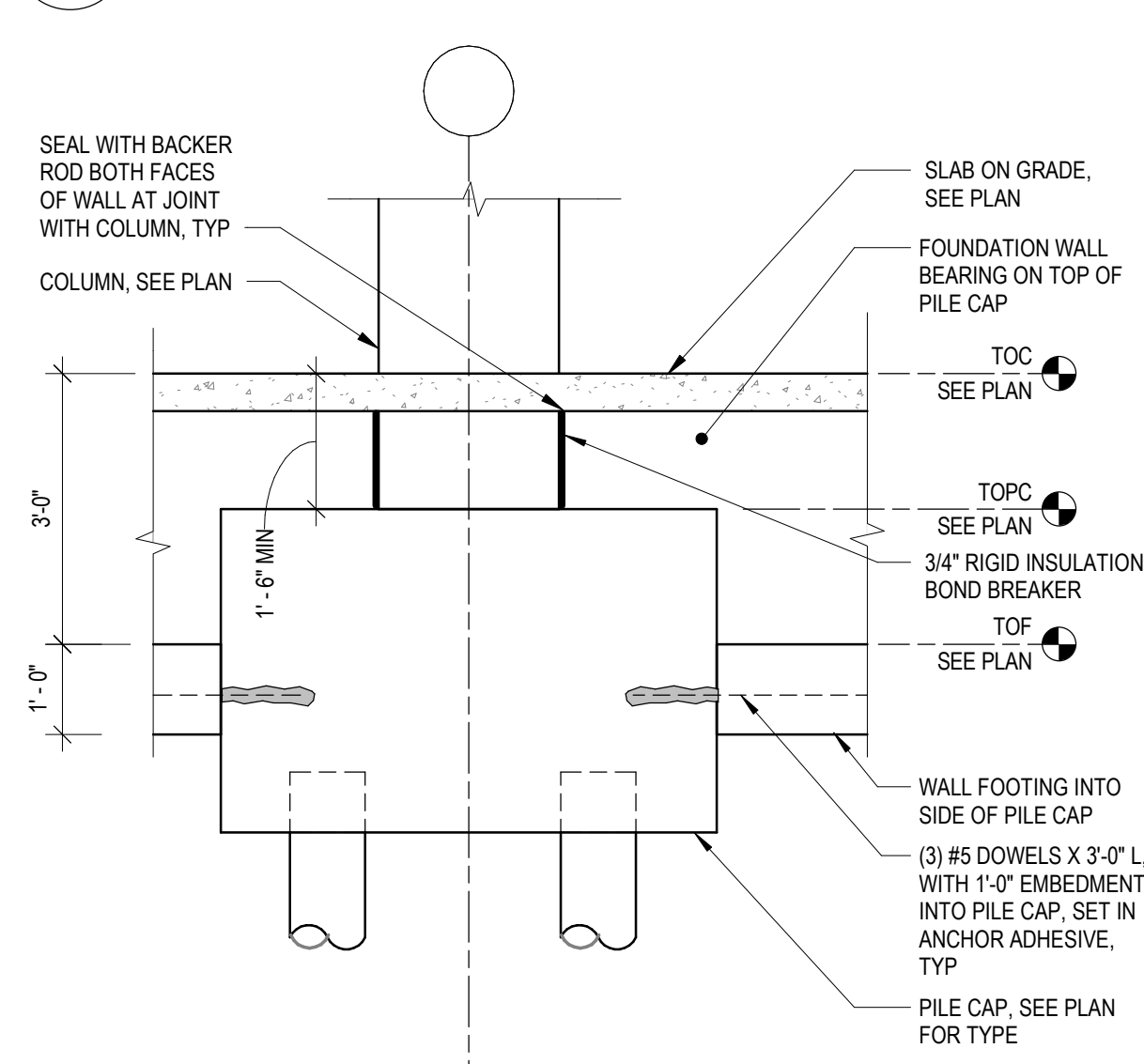
A1 SECTION THROUGH ATC TUNNEL
1/2" = 1'-0"



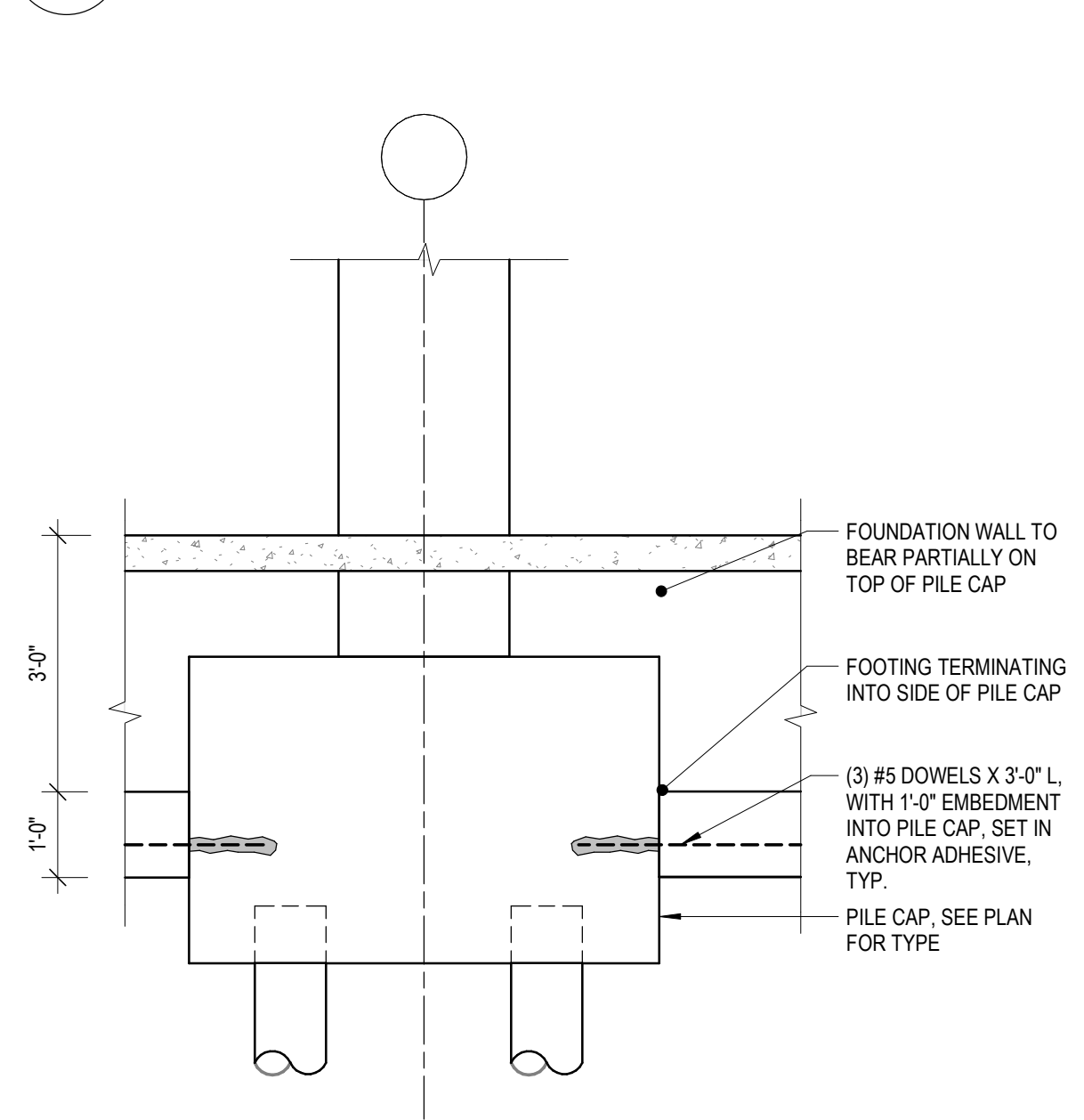
D3 BOLLARD DETAIL AT GRADE
3/4" = 1'-0"



C3 SECTION AT WATER TANK WALL
3/4" = 1'-0"



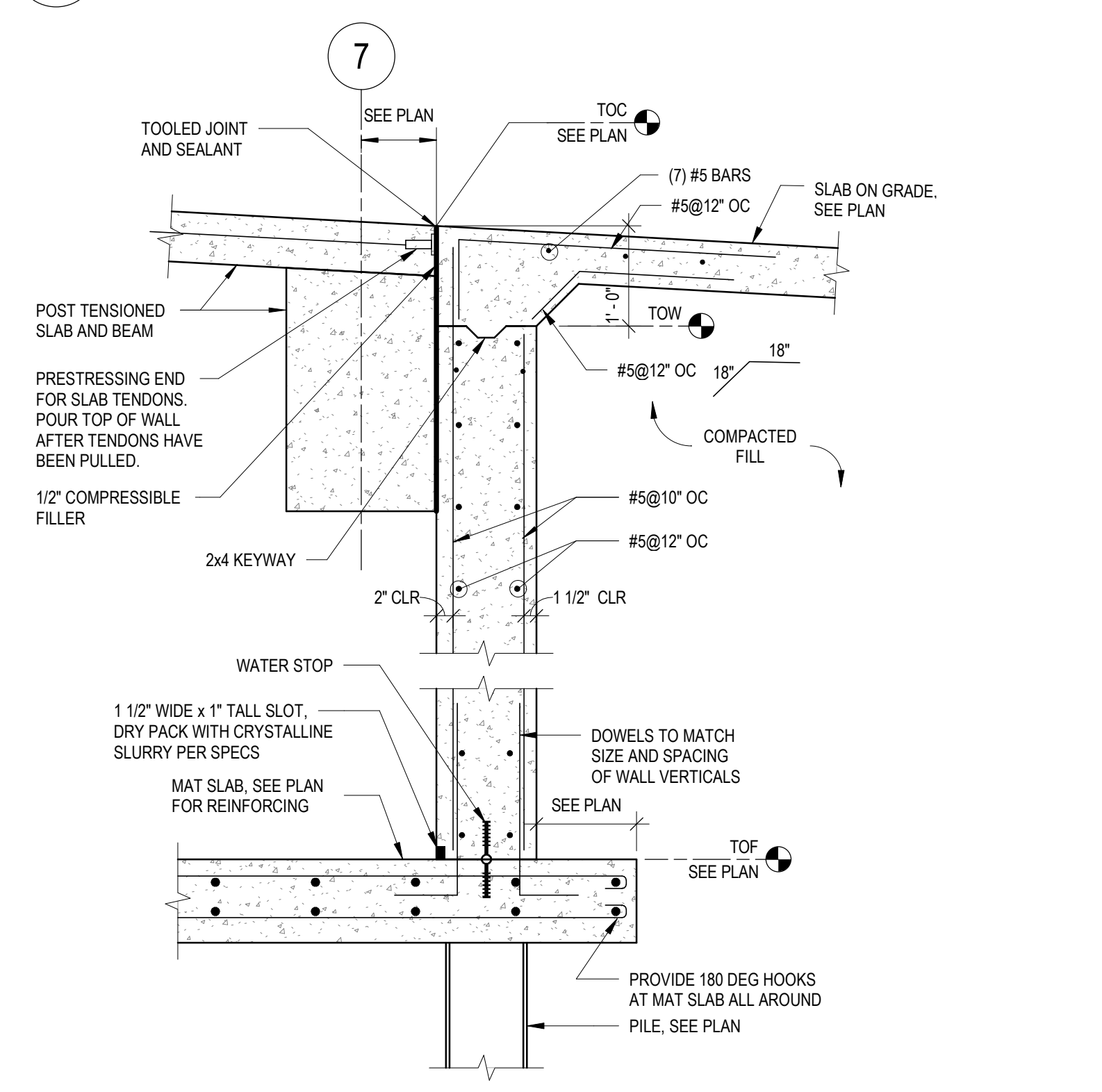
B3 SECTION AT EXTERIOR COLUMN
1/2" = 1'-0"



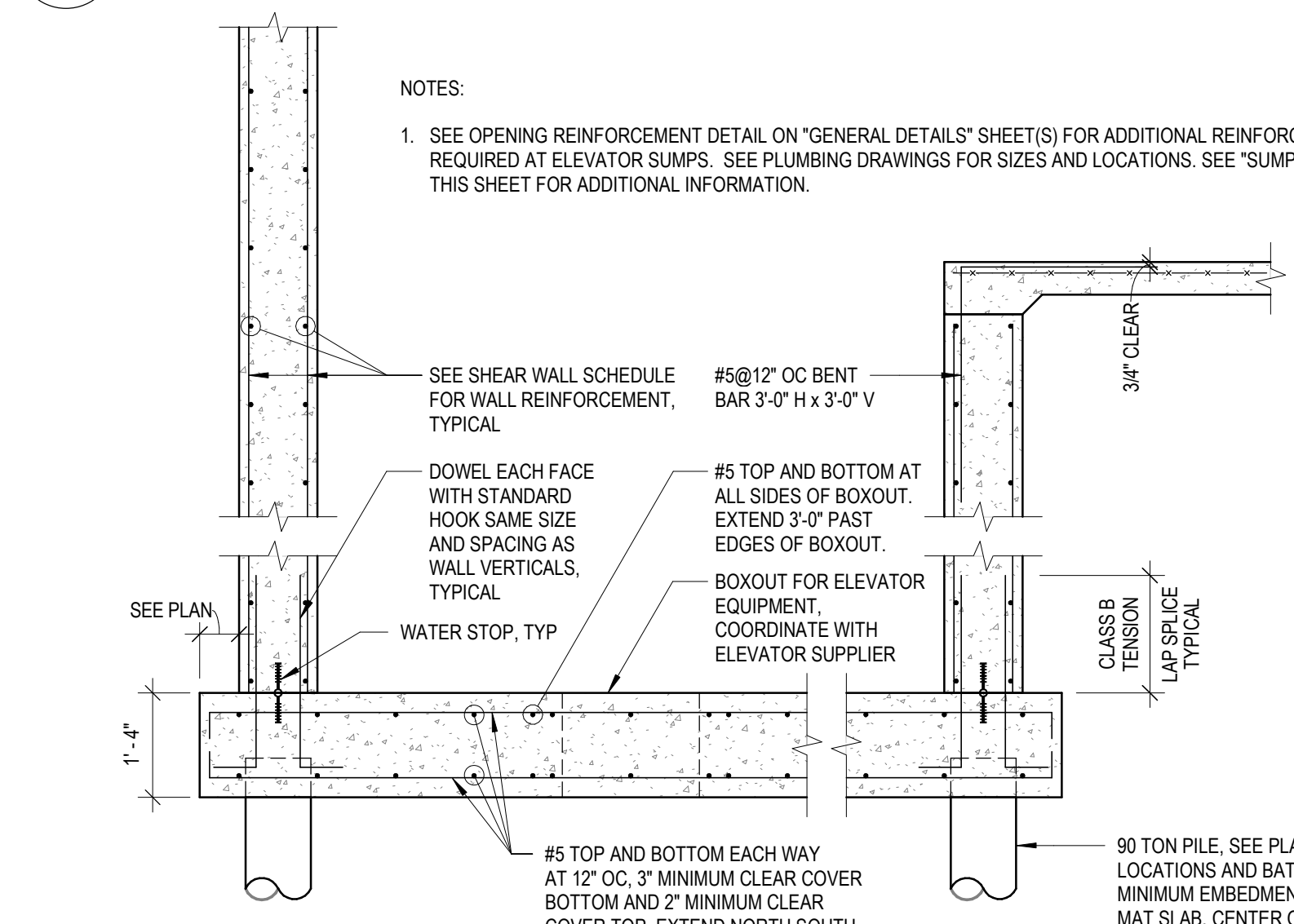
A3 SECTION AT INTERIOR COLUMN/WALL
1/2" = 1'-0"



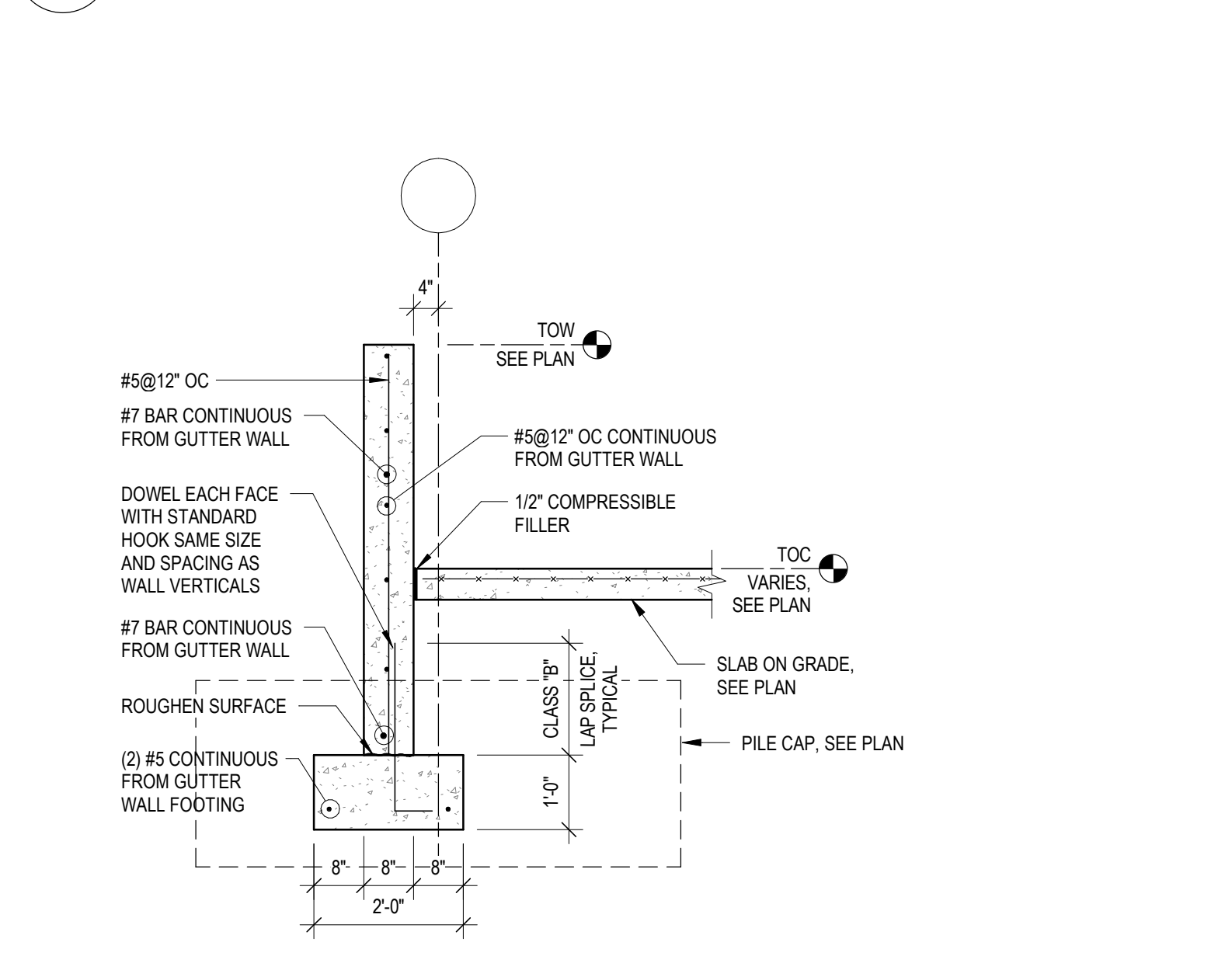
D4 SECTION AT RAMP
3/4" = 1'-0"



C4 SECTION AT RAMP WALL SLAB TRANSITION
3/4" = 1'-0"



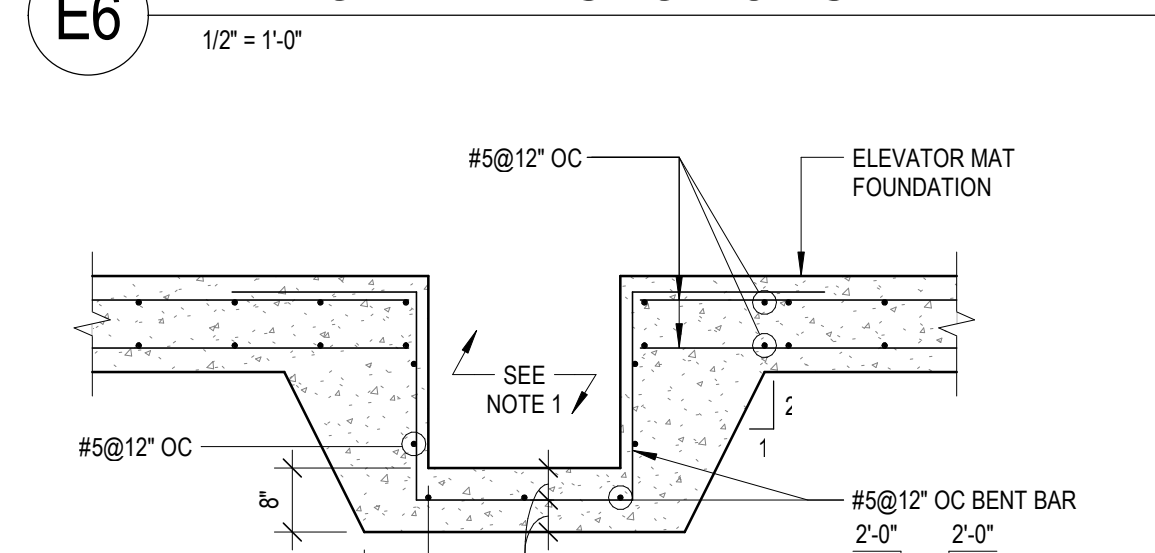
B4 SECTION AT ELEVATOR PIT
1/2" = 1'-0"



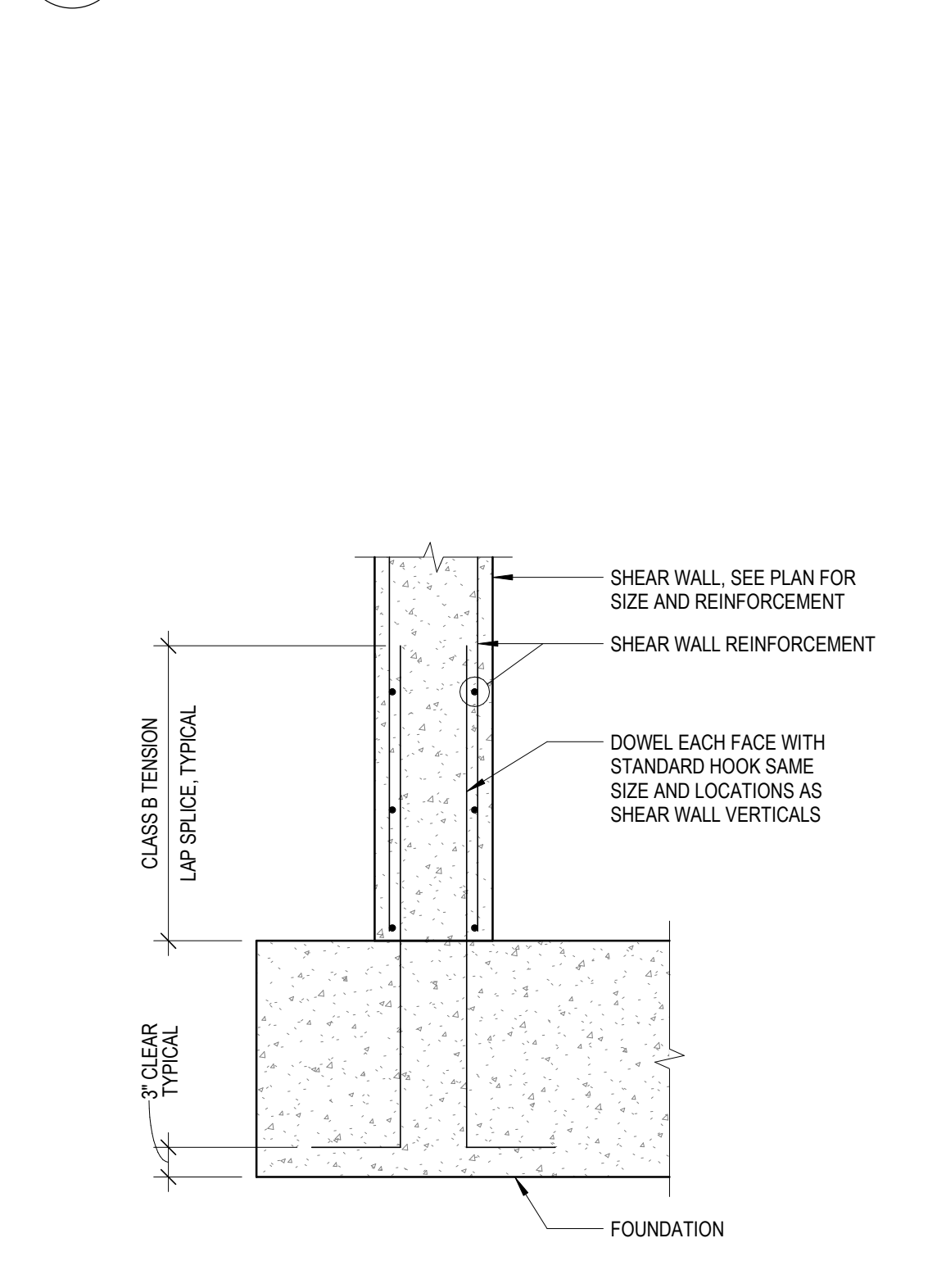
A4 SOUTH WALL PERIMETER DETAIL
1/2" = 1'-0"



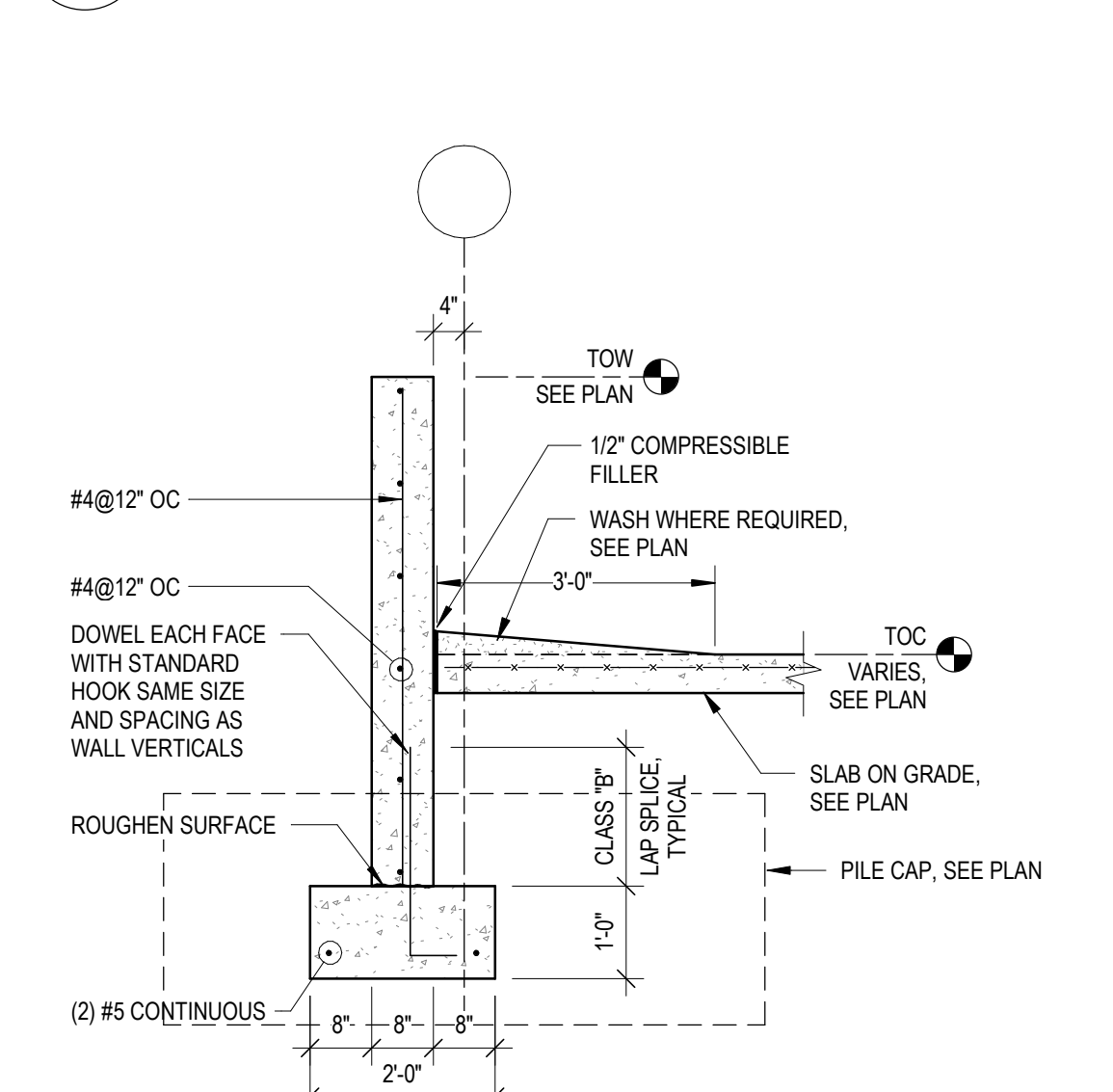
E6 TYPICAL PAD SECTIONS
1/2" = 1'-0"



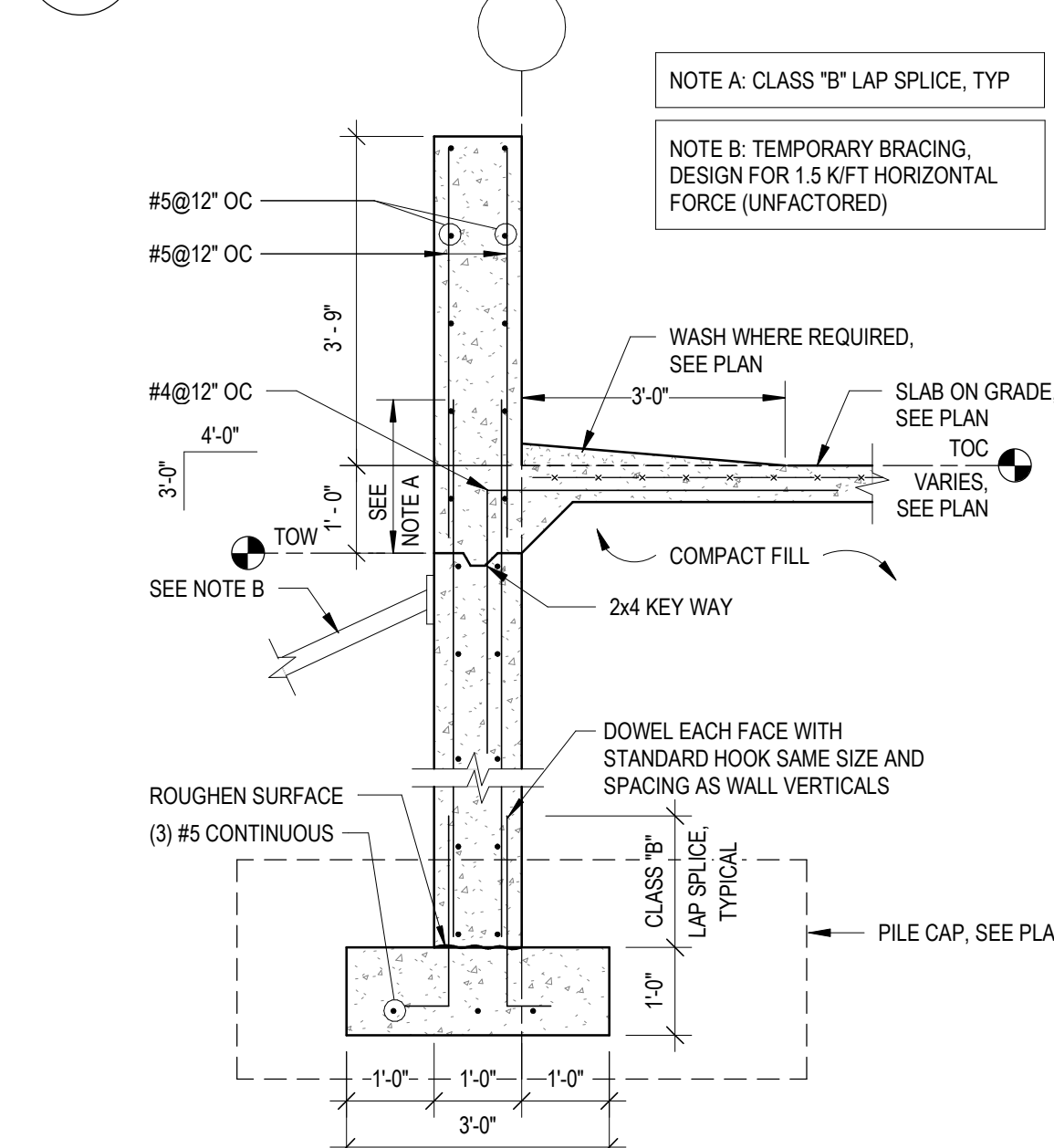
D6 SUMP PIT DETAIL
1/2" = 1'-0"



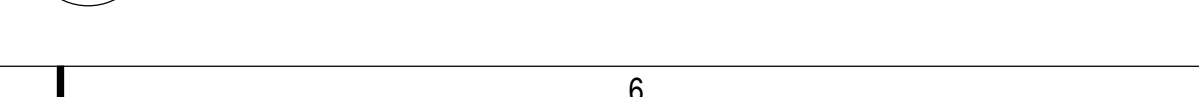
C6 SHEAR WALL DOWELS
3/4" = 1'-0"



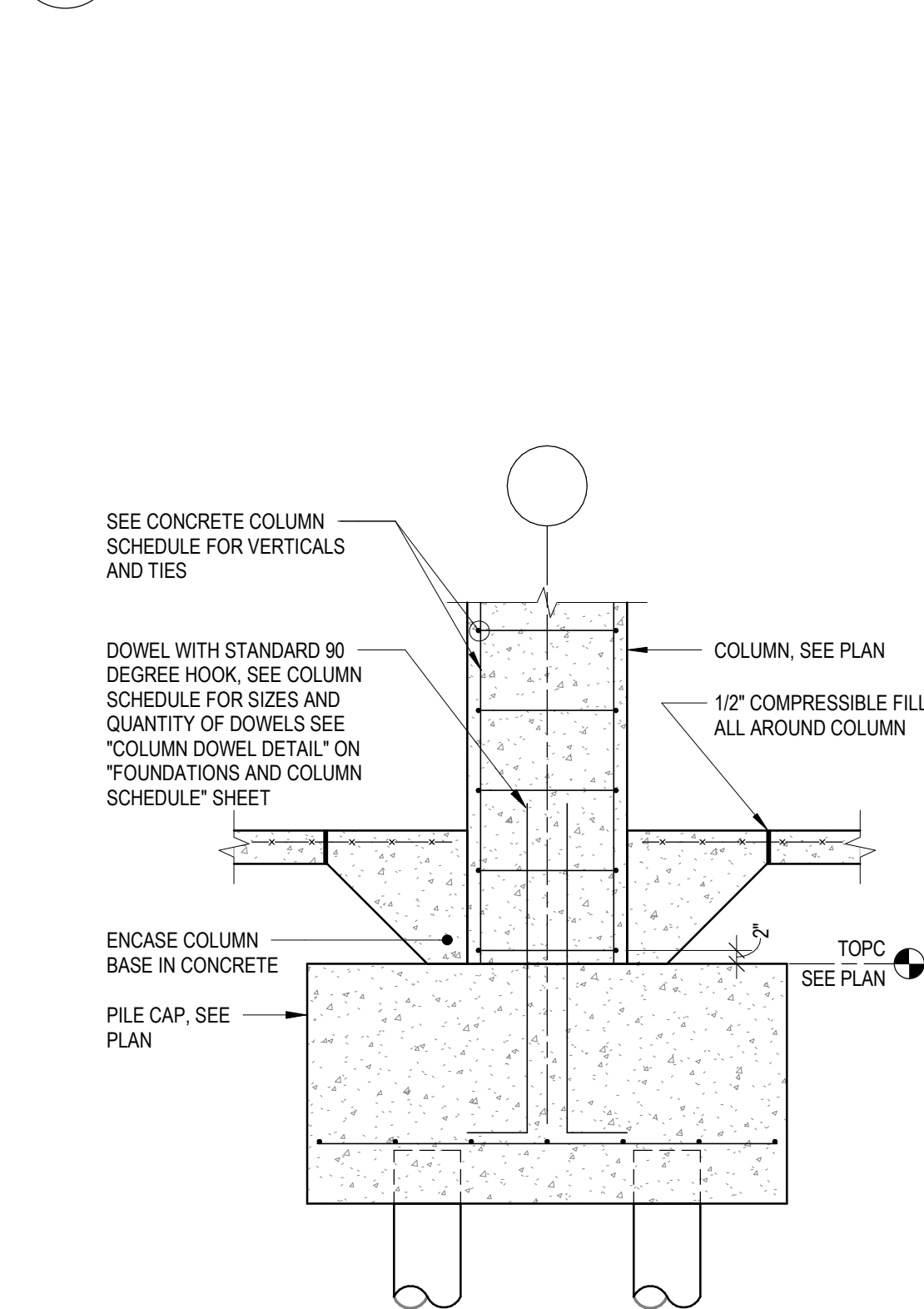
B6 TYPICAL PERIMETER DETAIL
1/2" = 1'-0"



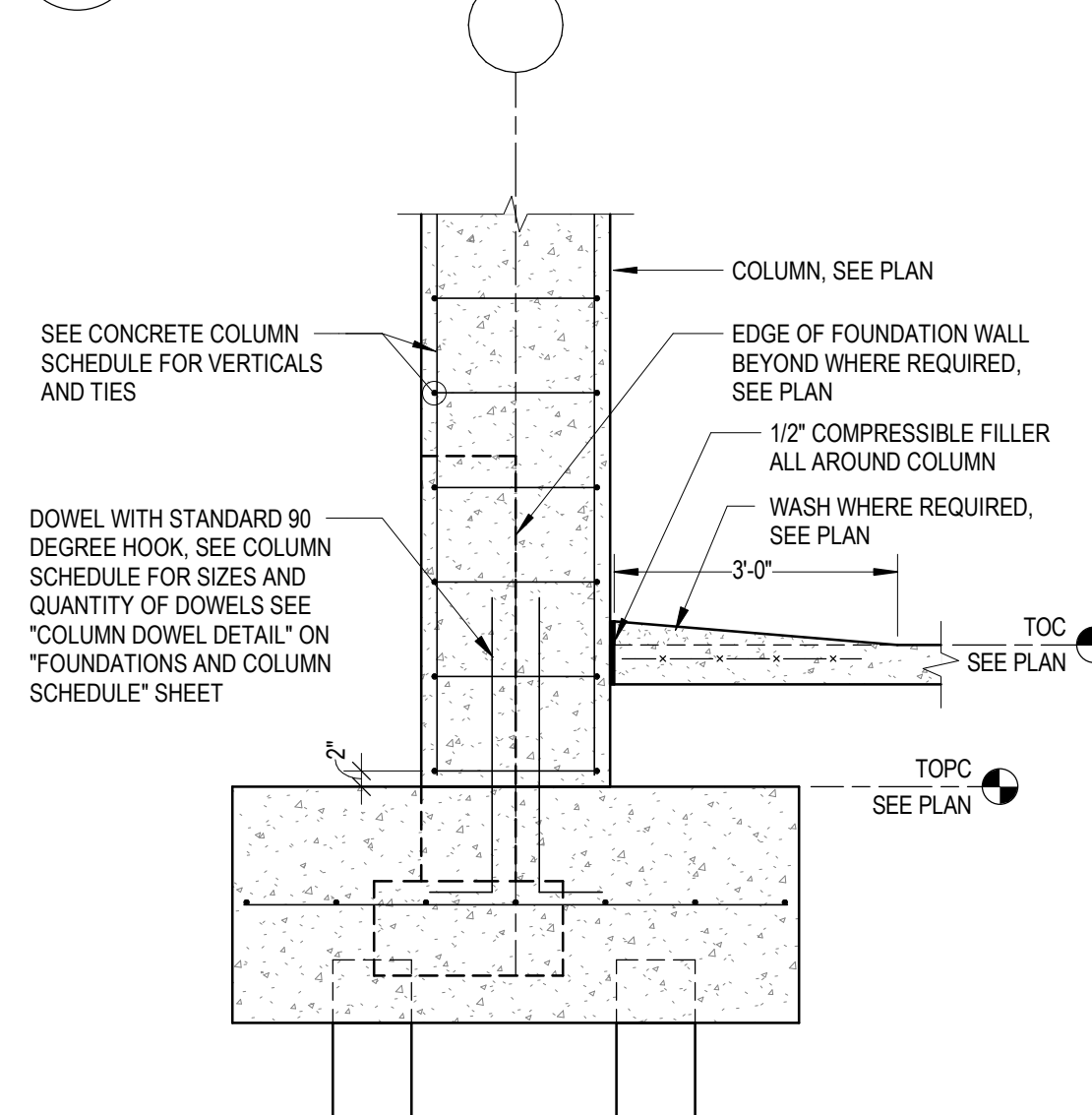
A6 SECTION AT PERIMETER RAMP WALL
1/2" = 1'-0"



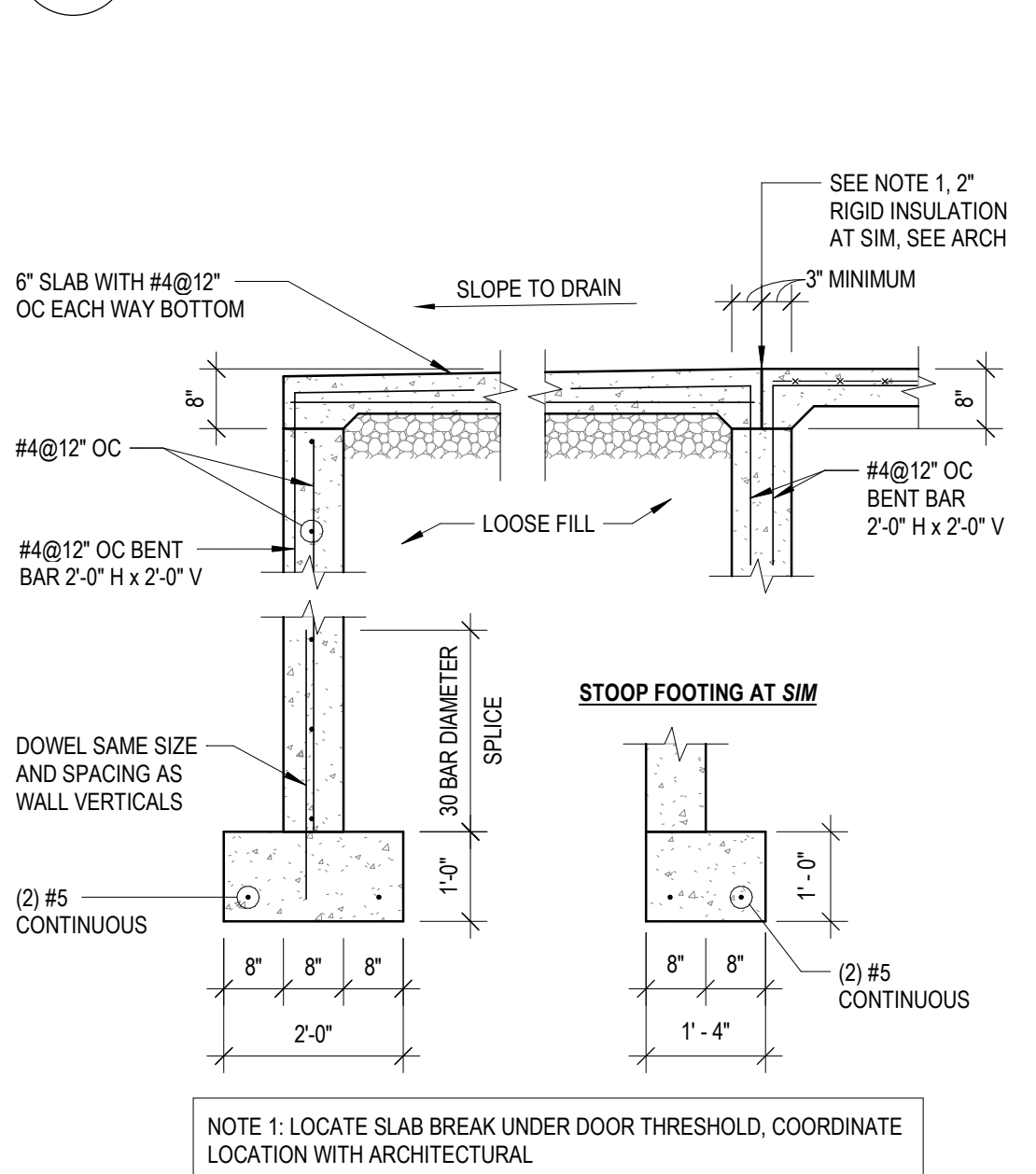
D7 SECTION
1/2" = 1'-0"



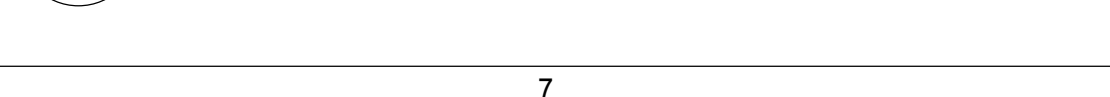
C7 INTERIOR DETAIL AT COLUMN
1/2" = 1'-0"

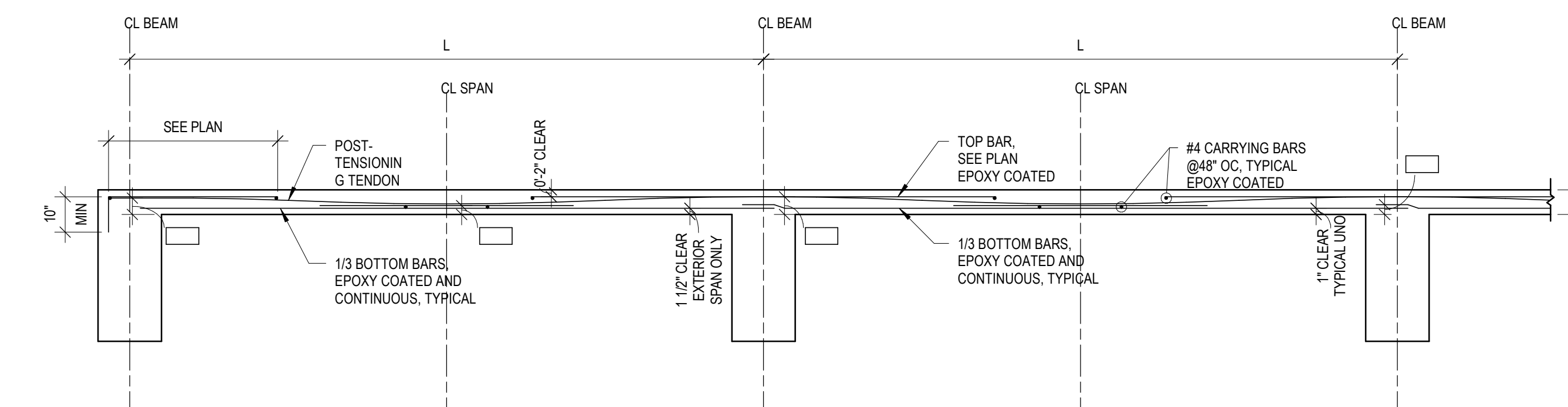


B7 PERIMETER DETAIL AT COLUMN
1/2" = 1'-0"



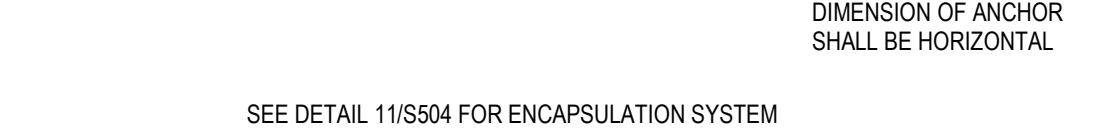
A7 TYPICAL STOOP DETAIL
1/2" = 1'-0"



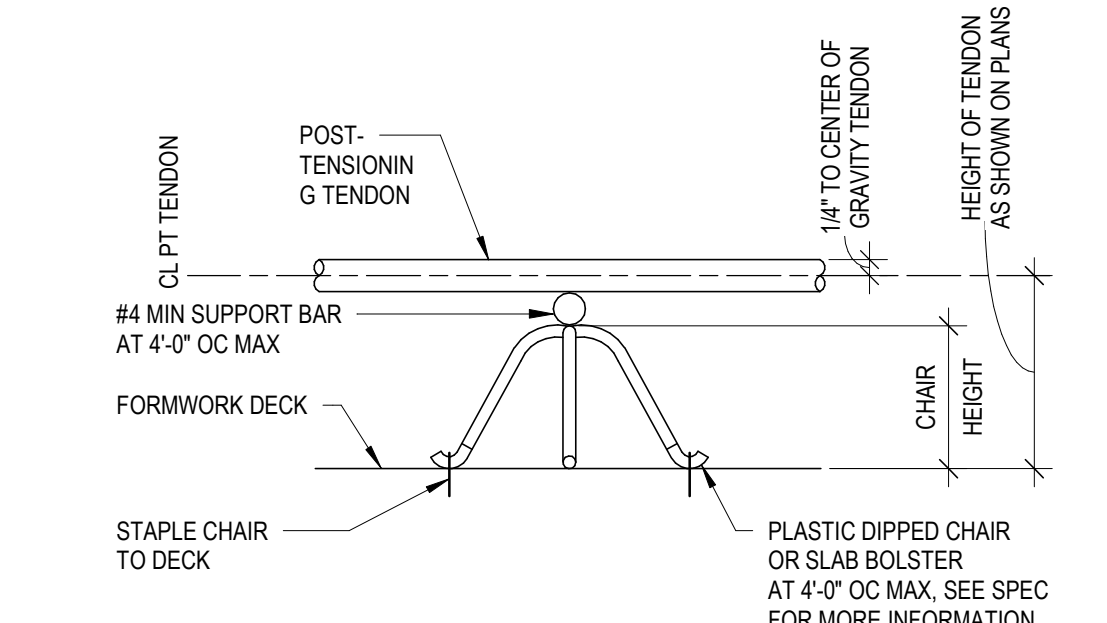


NOTES:
- TOP BAR CENTERED AT SUPPORT UNO
- BOTTOM BAR CENTERED IN SPAN UNO
- [X.X] INDICATES DISTANCE FROM BOTTOM OF SLAB TO CENTROID OF TENDON.

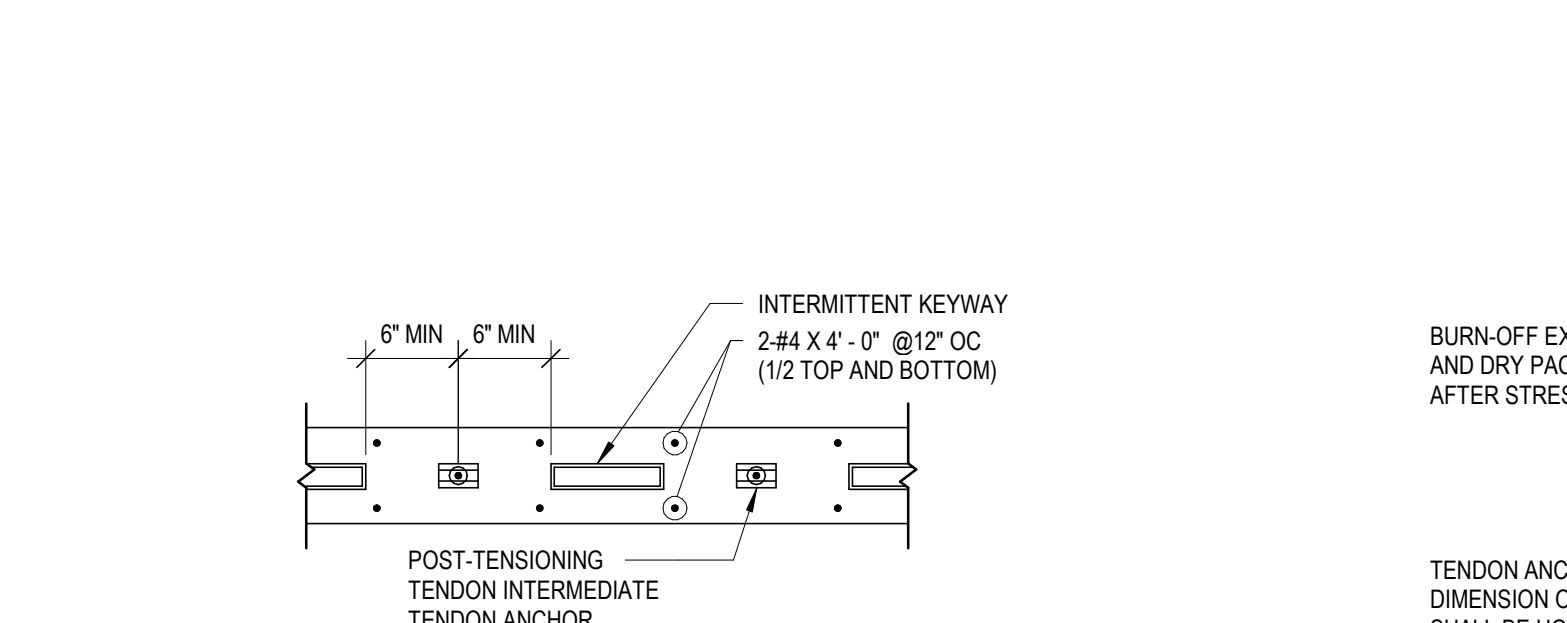
E4 TYPICAL POST-TENSIONED SLAB
3/8" = 1'-0"



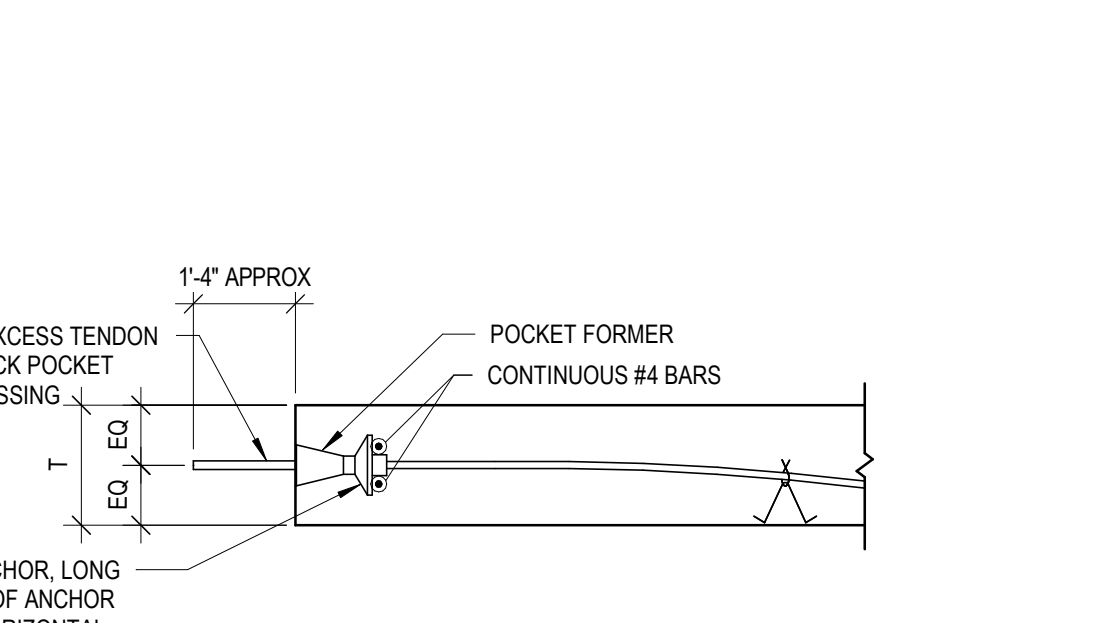
E6 TYPICAL SLAB NON-STRESSING END
1/2" = 1'-0"



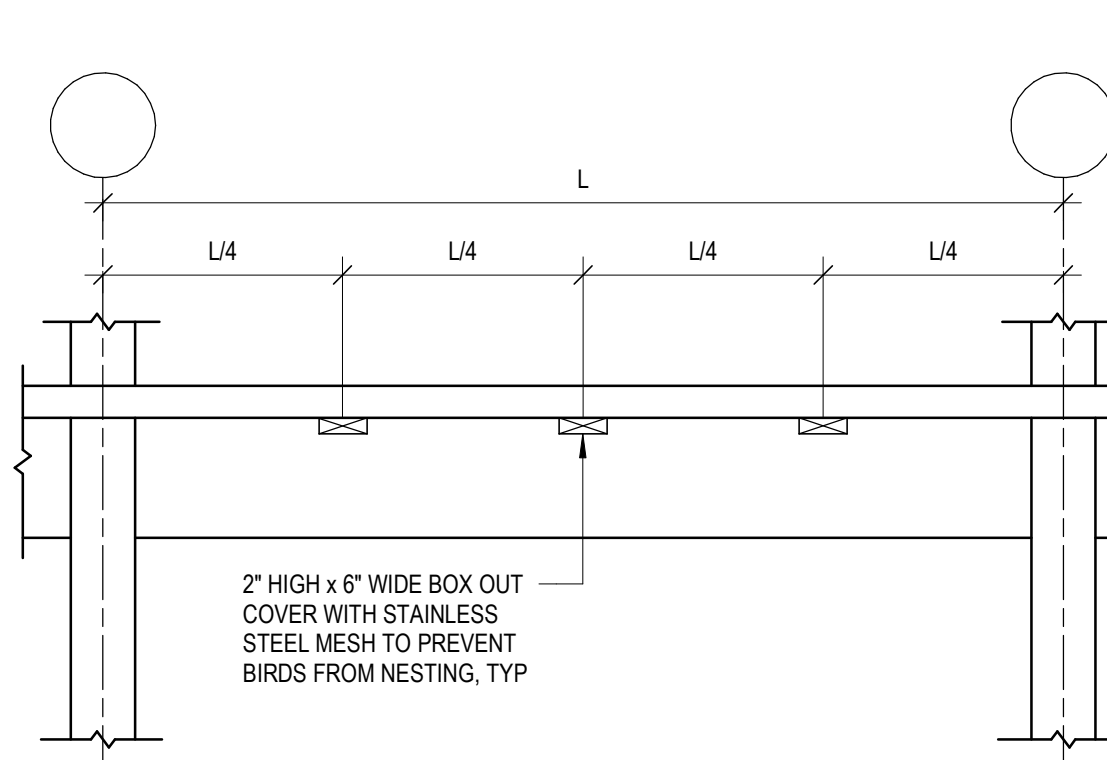
D4 TYPICAL TENDON SUPPORT DETAIL
1/2" = 1'-0"



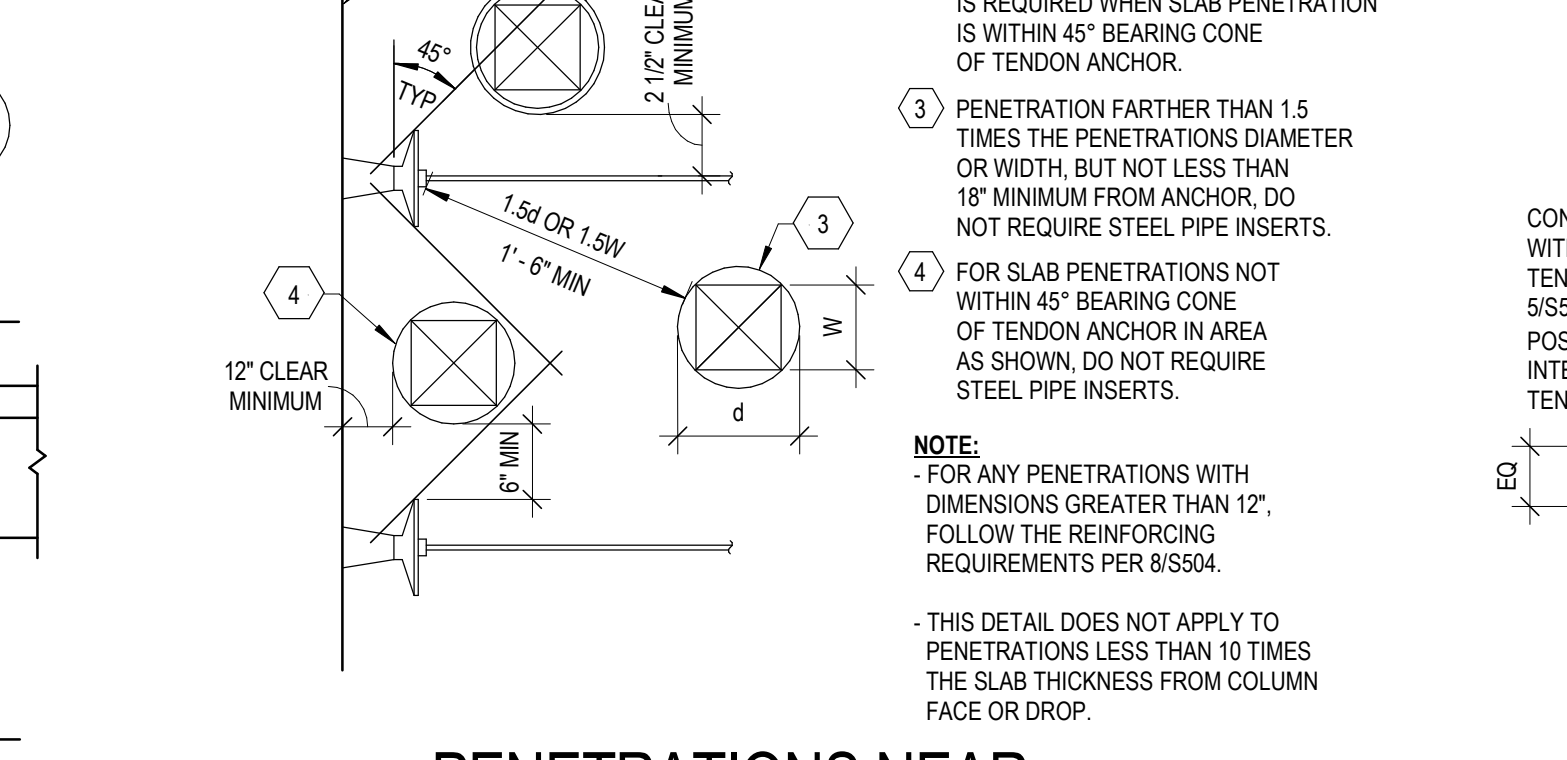
D5 TYPICAL SLAB INTERMEDIATE CONSTRUCTION JOINT DETAIL
1/2" = 1'-0"



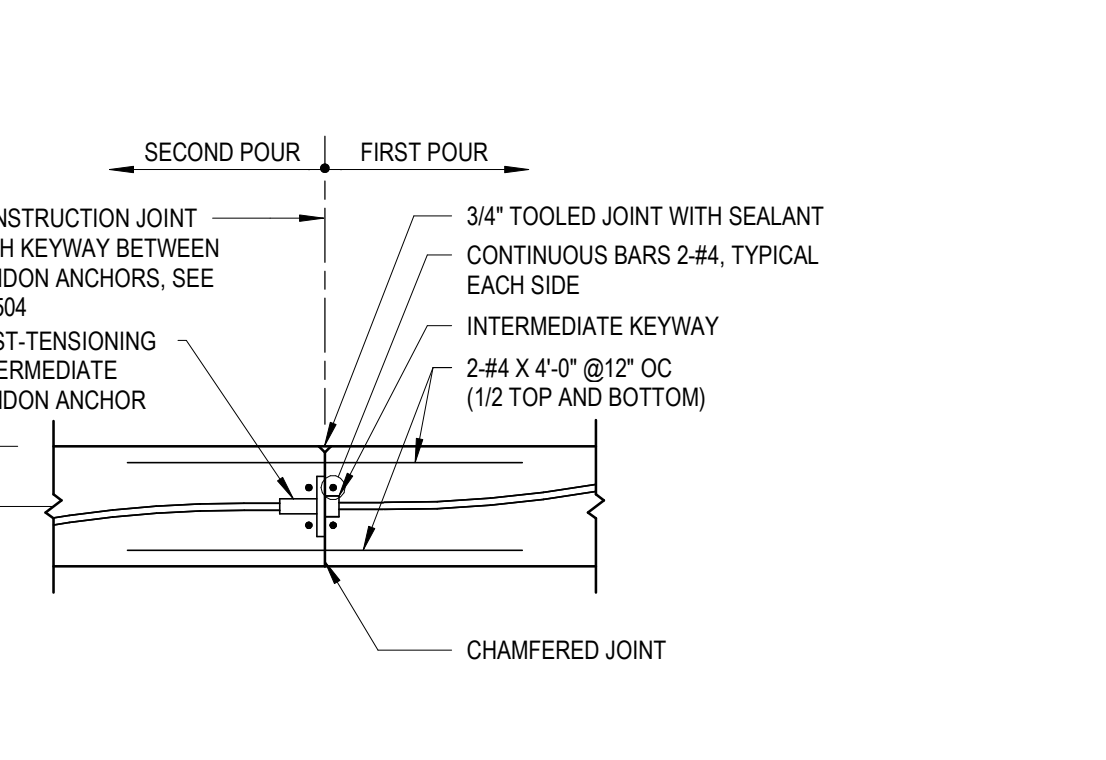
D6 TYPICAL SLAB STRESSING END
1/2" = 1'-0"



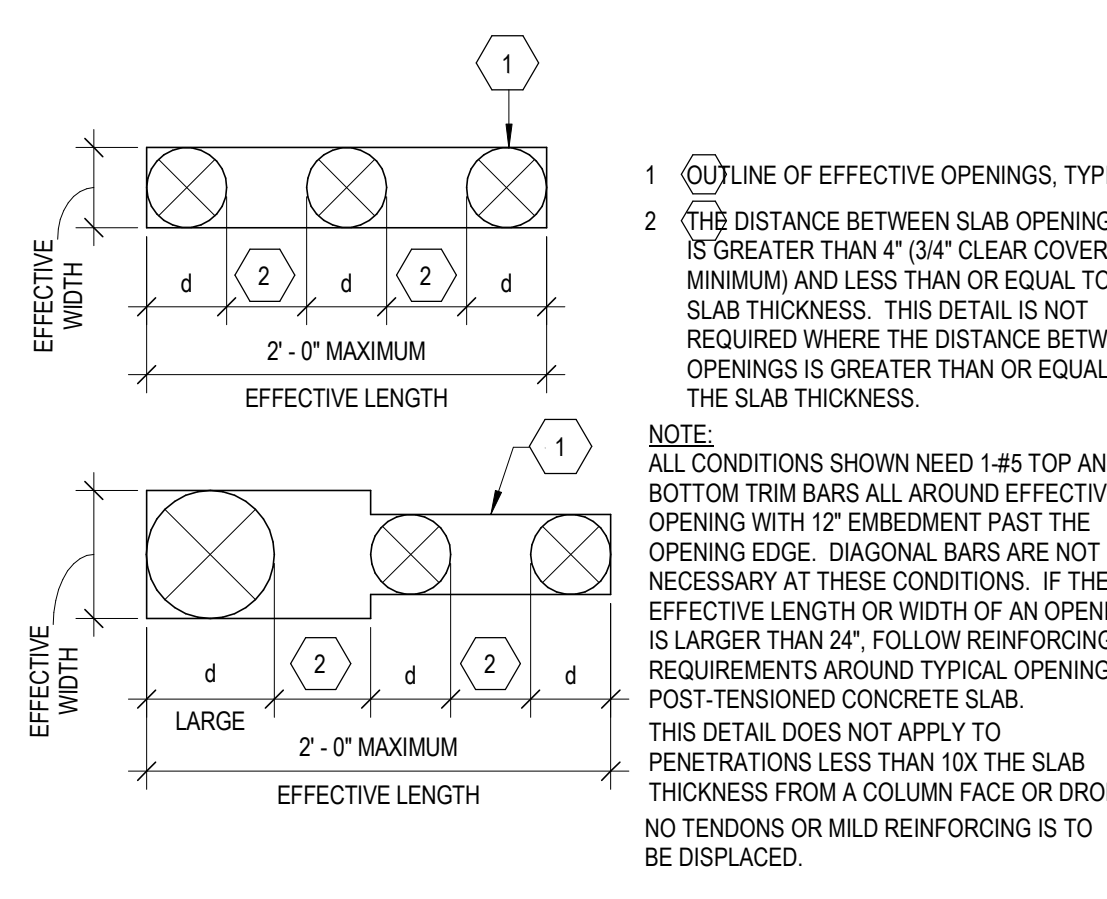
C4 TYPICAL BEAM WEB ELECTRICAL PENETRATION DETAIL
1/2" = 1'-0"



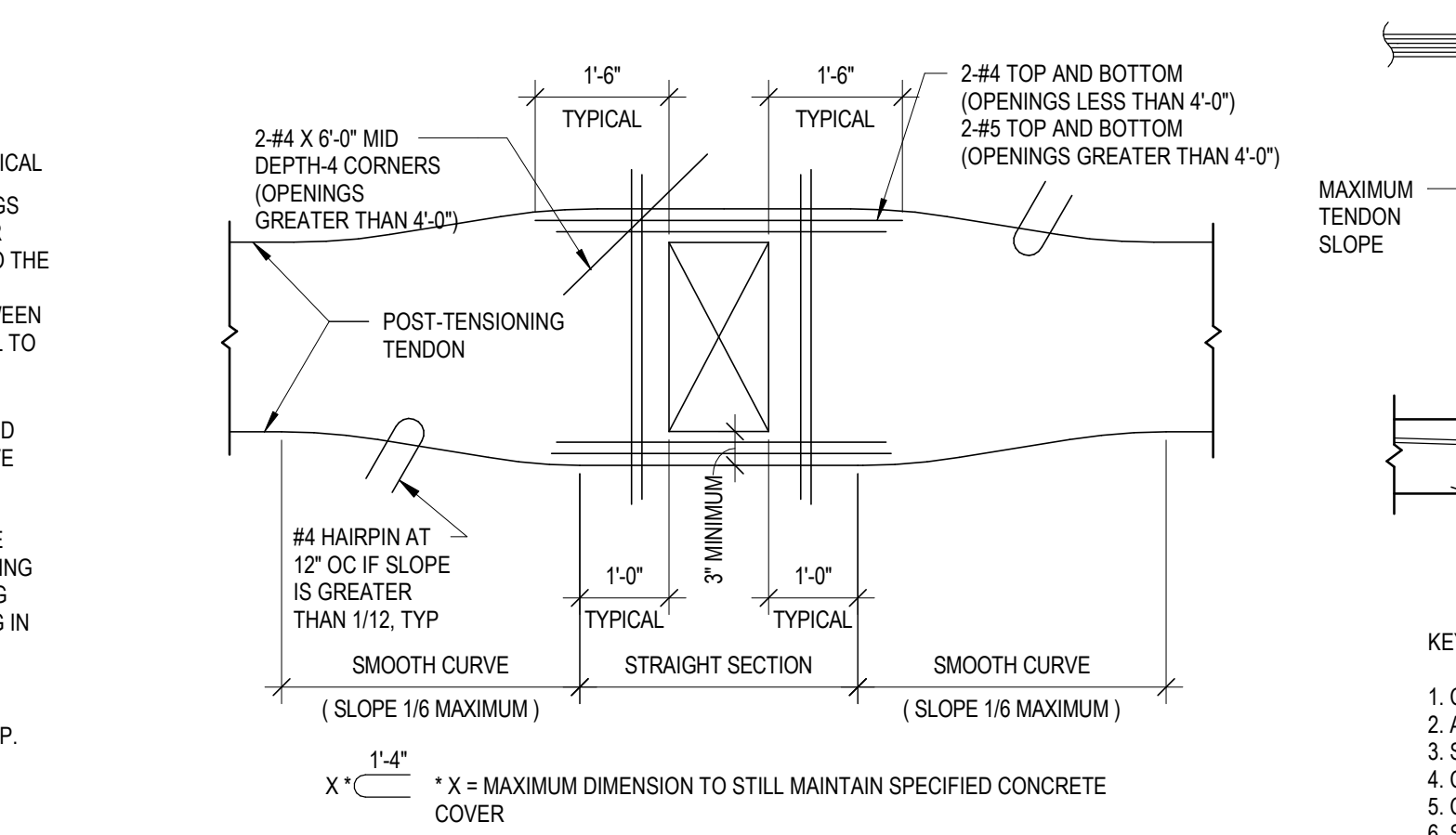
C5 PENETRATIONS NEAR TENDON ANCHORS IN POST-TENSIONED SLABS
1/2" = 1'-0"



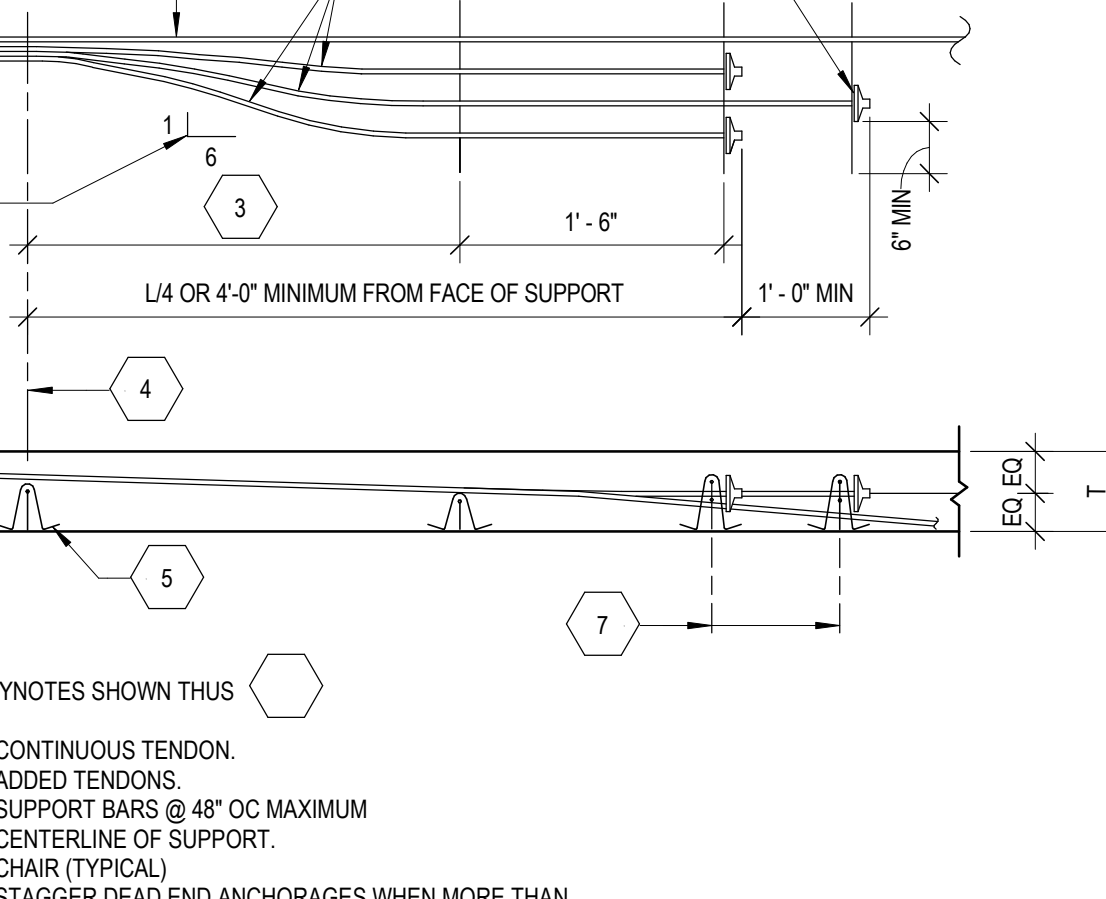
C6 TYPICAL SLAB INTERMEDIATE STRESSING END
1/2" = 1'-0"



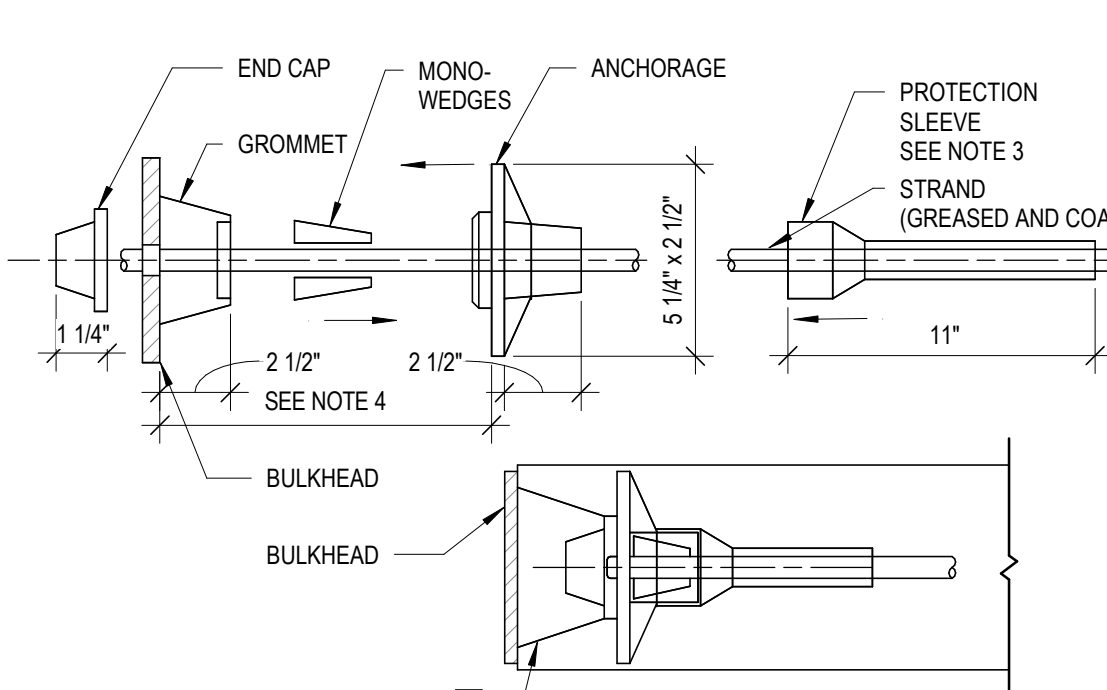
B4 SMALL MULTIPLE SLAB OPENINGS IN POST-TENSIONED SLABS
1/2" = 1'-0"



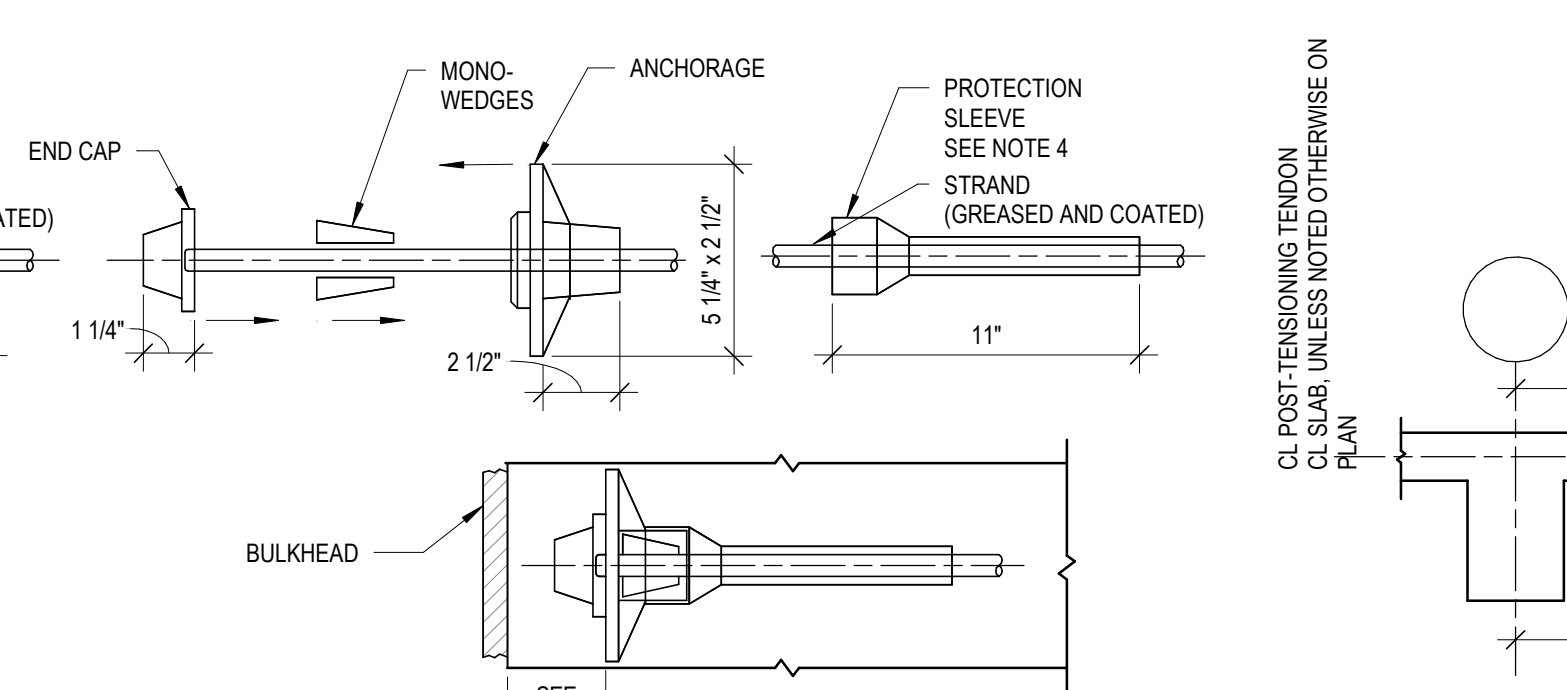
B5 TYPICAL OPENINGS IN POST-TENSIONED SLABS
1/2" = 1'-0"



B6 ADDED TENDON ANCHORAGES IN POST-TENSIONED CONCRETE SLAB
1/2" = 1'-0"



B4 STRESSING END ASSEMBLY



B5 DEAD END ASSEMBLY

A4 ENCAPSULATED TENDON DETAILS
1/2" = 1'-0"

A6 TYPICAL POST-TENSIONED SLAB TEMP & SHRINKAGE TENDON LAYOUT
1/4" = 1'-0"

SLAB TEMPERATURE TENDON SCHEDULE*	
SLAB THICKNESS	X (KIPS/FT WIDTH)
6"	10
8"	10

*PROVIDE TENDONS THROUGHOUT ONE-WAY SLAB

A4 ENCAPSULATED TENDON DETAILS
1/2" = 1'-0"

A6 TYPICAL POST-TENSIONED SLAB TEMP & SHRINKAGE TENDON LAYOUT
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1/4" = 1'-0"

A4 ENCAPSULATED TENDON DETAILS
1/2" = 1'-0"

A6 TYPICAL POST-TENSIONED SLAB TEMP & SHRINKAGE TENDON LAYOUT
1/4" = 1'-0"

A4 ENCAPSULATED TENDON DETAILS
1/2" = 1'-0"

A6 TYPICAL POST-TENSIONED SLAB TEMP & SHRINKAGE TENDON LAYOUT
1/4" = 1'-0"

A4 ENCAPSULATED TENDON DETAILS
1/2" = 1'-0"

A6 TYPICAL POST-TENSIONED SLAB TEMP & SHRINKAGE TENDON LAYOUT
1/4" = 1'-0"

A4 ENCAPSULATED TENDON DETAILS
1/2" = 1'-0"

A6 TYPICAL POST-TENSIONED SLAB TEMP & SHRINKAGE TENDON LAYOUT
1/4" = 1'-0"

A4 ENCAPSULATED TENDON DETAILS
1/2" = 1'-0"

A6 TYPICAL POST-TENSIONED SLAB TEMP & SHRINKAGE TENDON LAYOUT
1/4" = 1'-0"

A4 ENCAPSULATED TENDON DETAILS
1/2" = 1'-0"

A6 TYPICAL POST-TENSIONED SLAB TEMP & SHRINKAGE TENDON LAYOUT
1/4" = 1'-0"

A4 ENCAPSULATED TENDON DETAILS
1/2" = 1'-0"

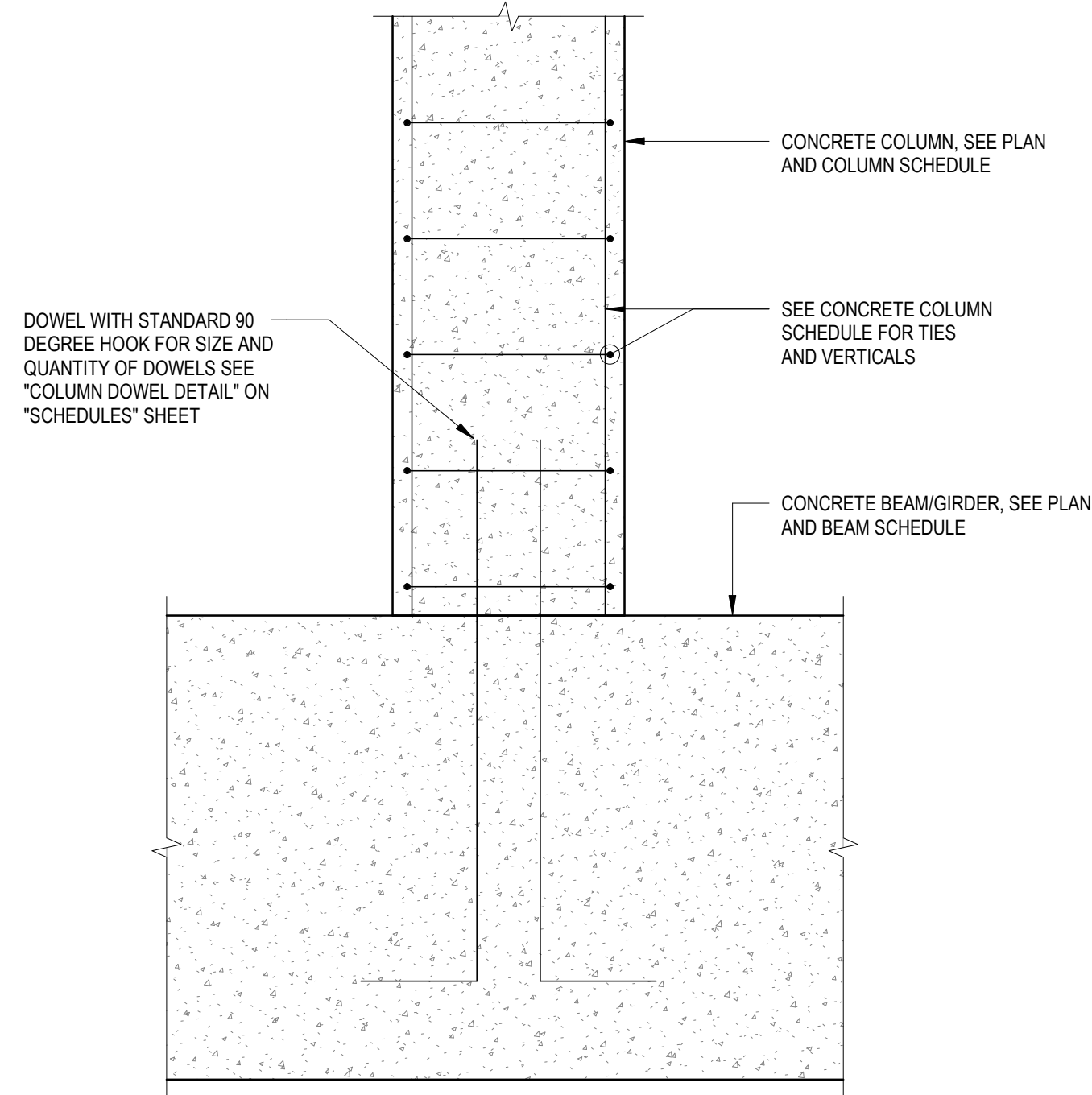
A6 TYPICAL POST-TENSIONED SLAB TEMP & SHRINKAGE TENDON LAYOUT
1/4" = 1'-0"

A4 ENCAPSULATED TENDON DETAILS
1/2" = 1'-0"

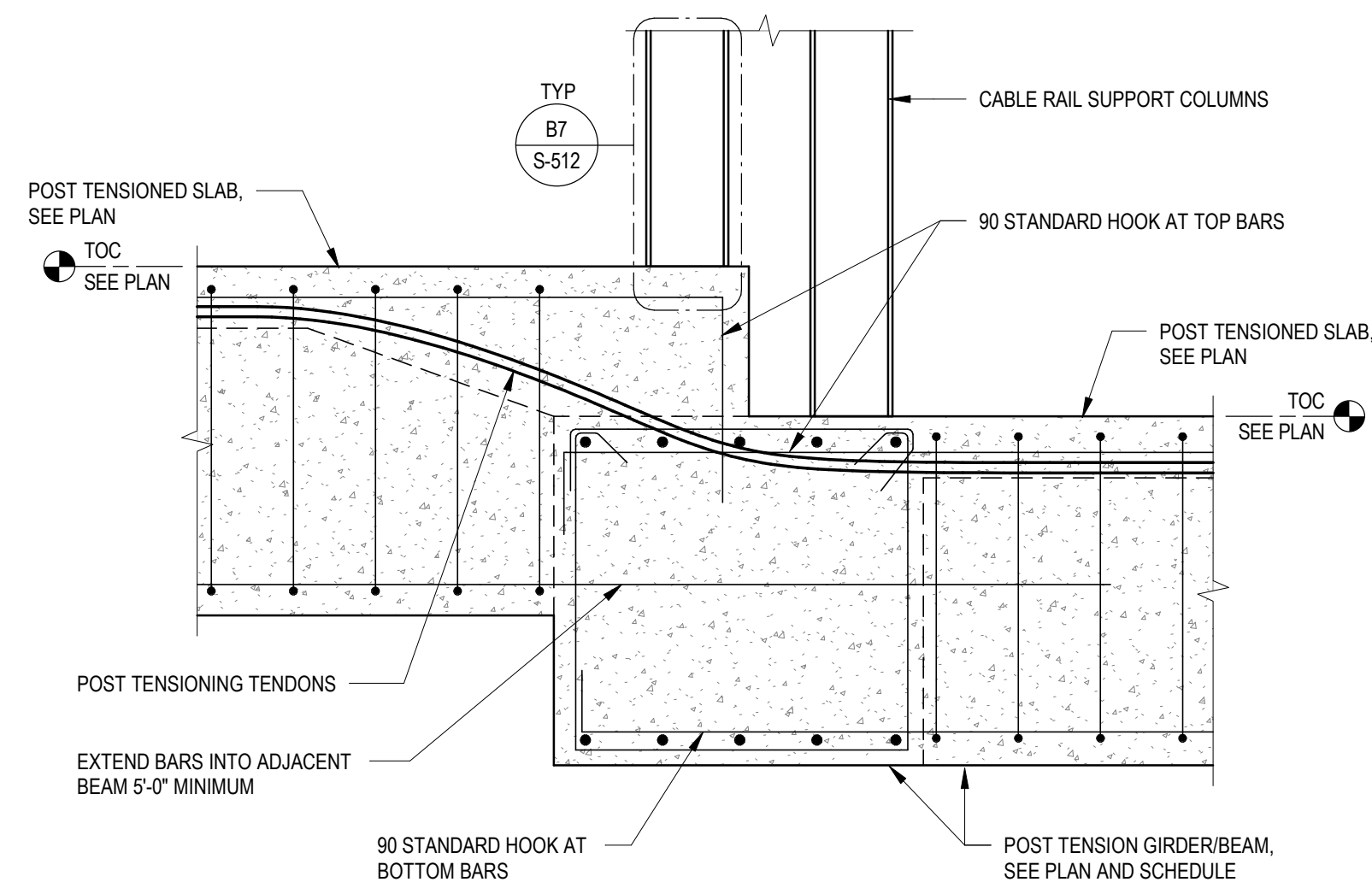
A6 TYPICAL POST-TENSIONED SLAB TEMP & SHRINKAGE TENDON LAYOUT
1/4" = 1'-0"

A4 ENCAPSULATED TENDON DETAILS
1/2" = 1'-0"

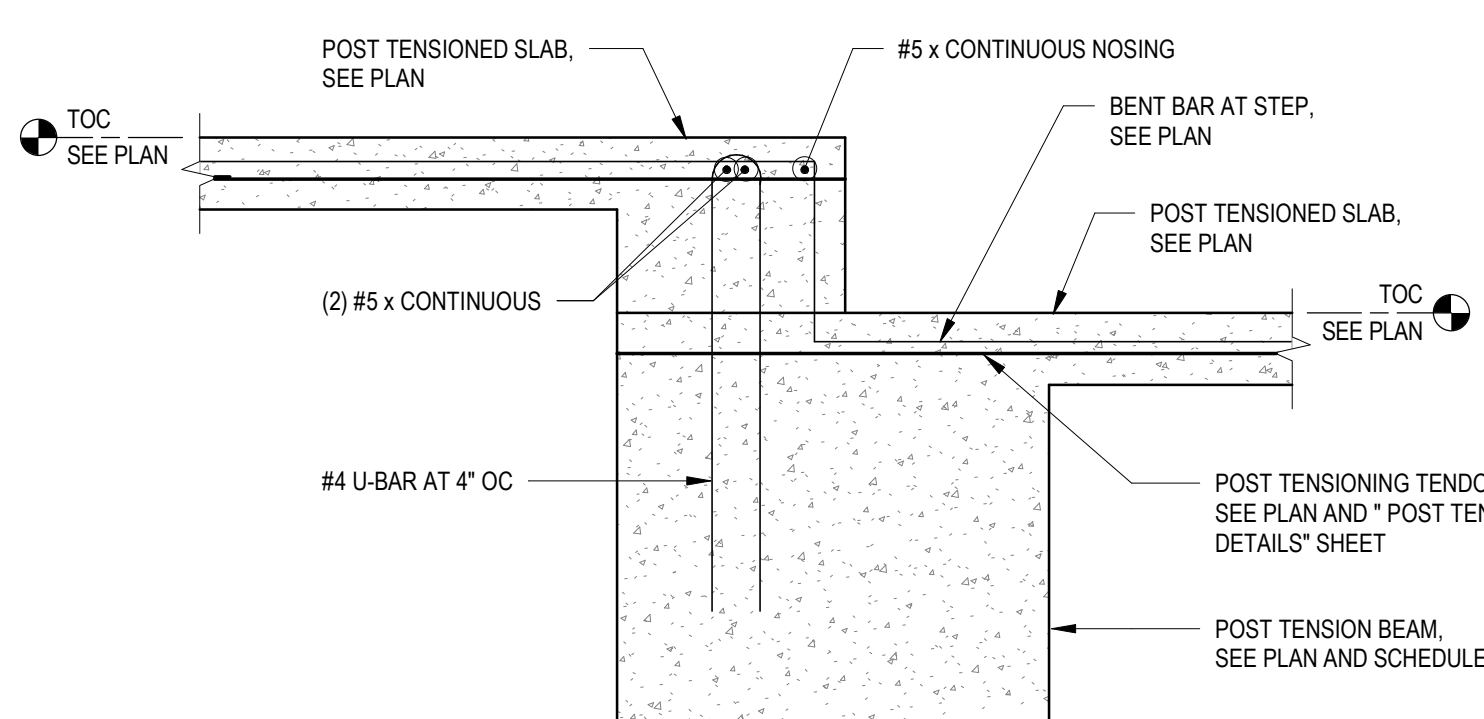
A6 TYPICAL POST-TENSIONED SLAB TEMP & SHRINK



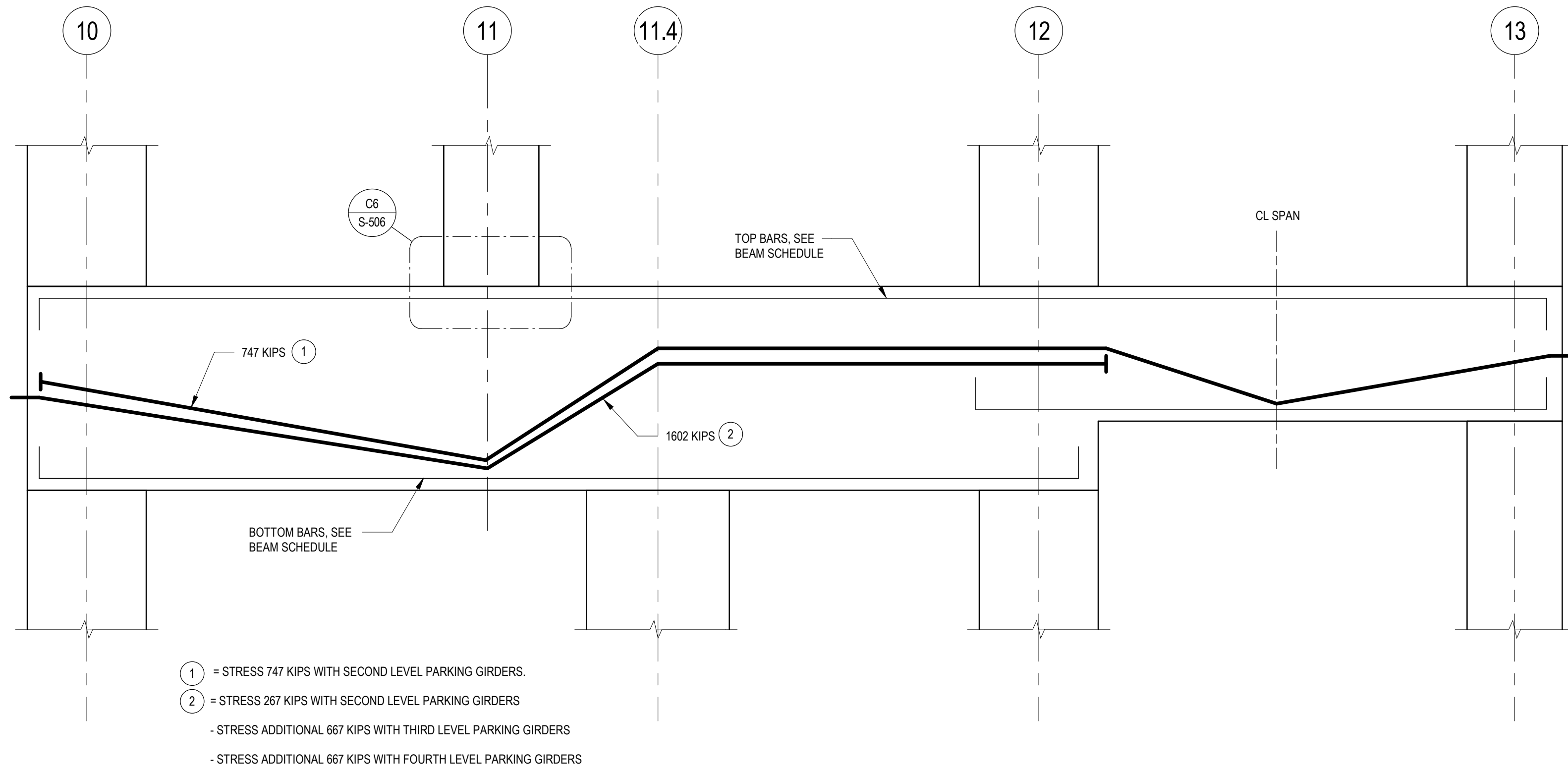
C6 COLUMN SUPPORTED BY GIRDER DETAIL
3/4" = 1'-0"



B6 SECTION AT POST TENSIONED BEAM TRANSITION
3/4" = 1'-0"



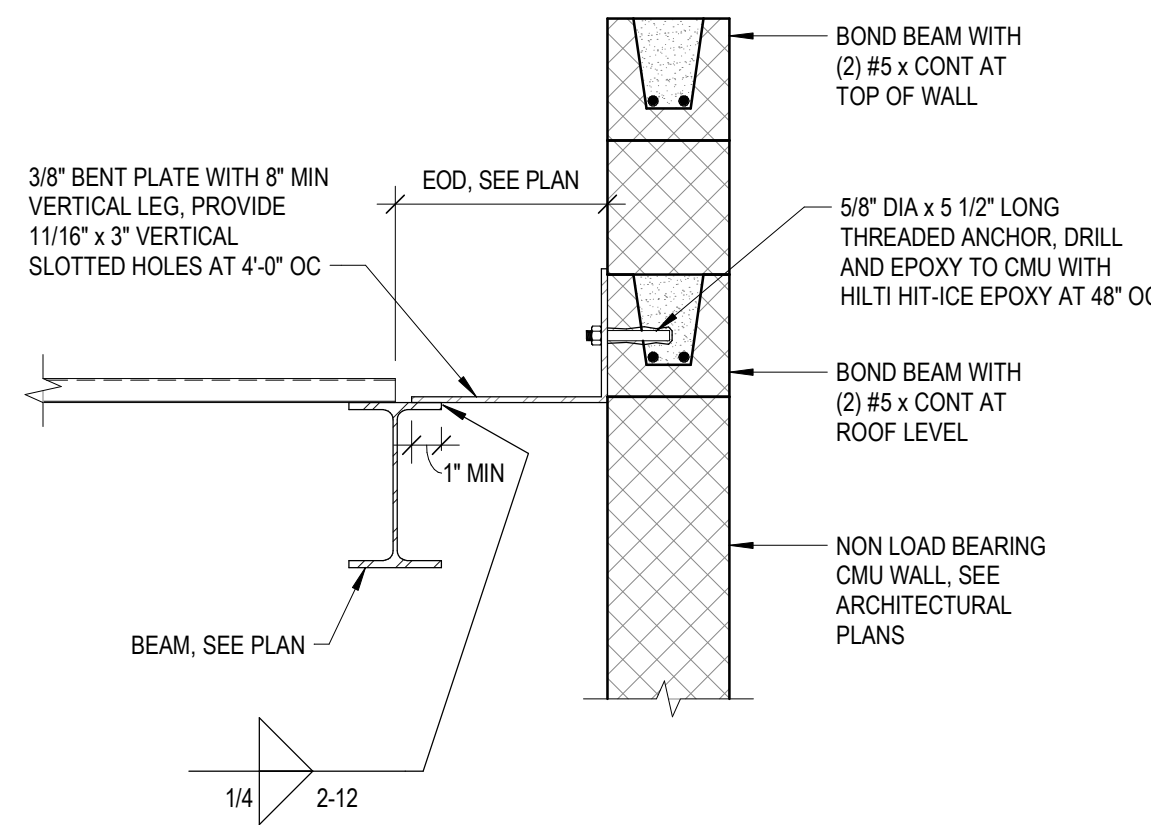
A6 SECTION AT POST TENSIONED BEAM AND SLAB TRANSITION
3/4" = 1'-0"



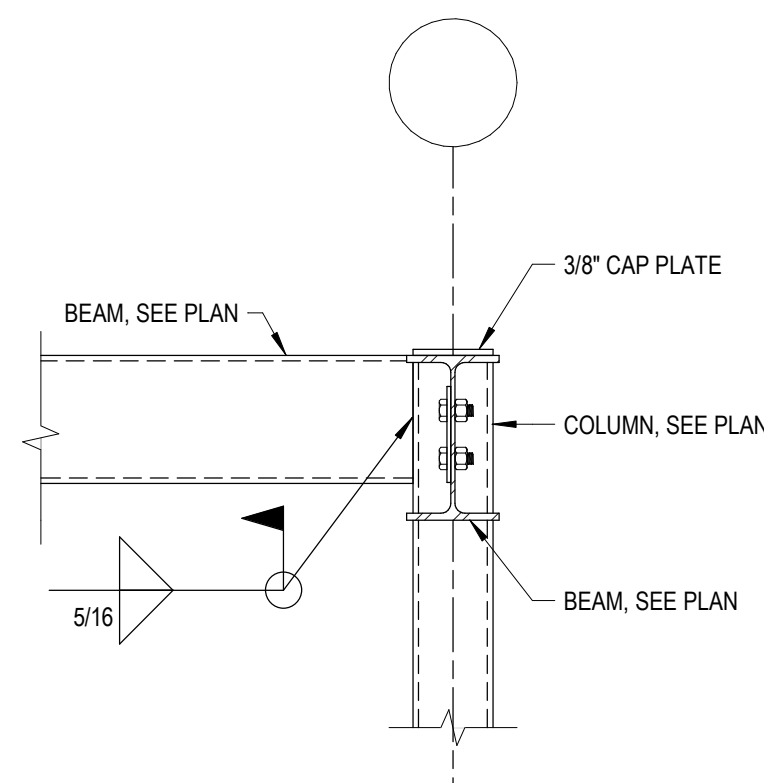
A3 STAGING OF POST TENSIONING
NTS



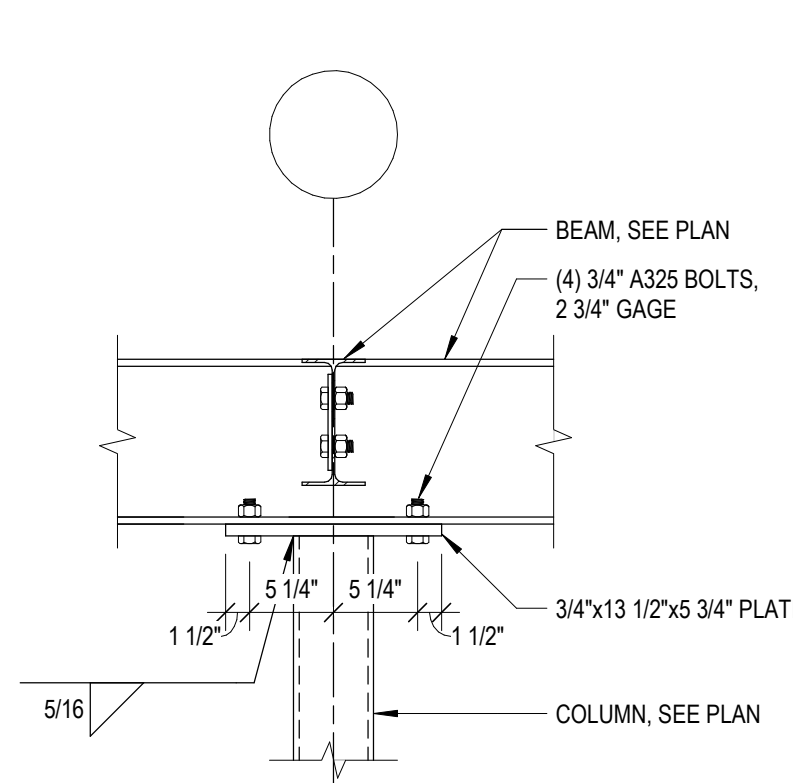
E1 WIDE FLANGE BEAM AT CMU WALL
1" = 1'-0"



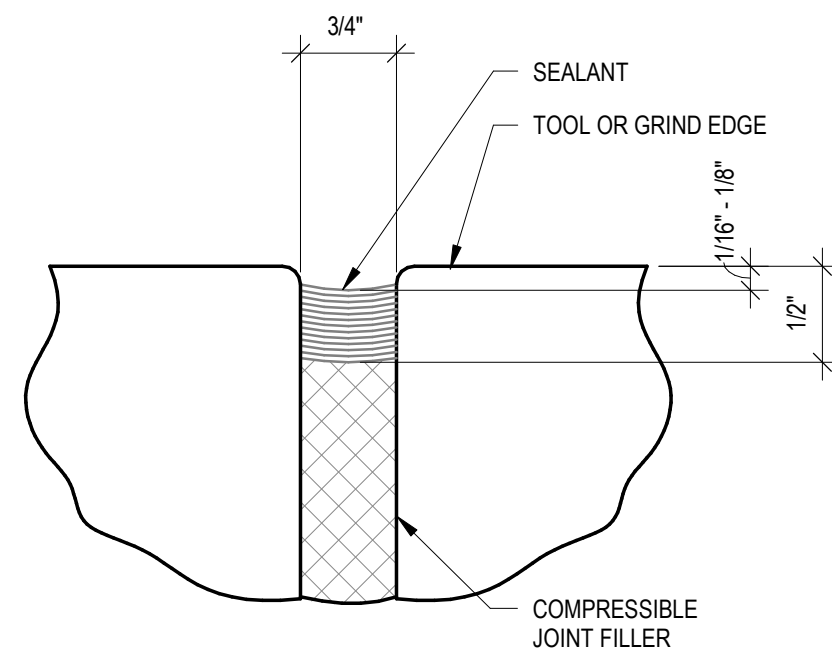
E2 WIDE FLANGE BEAM AT HSS
1" = 1'-0"



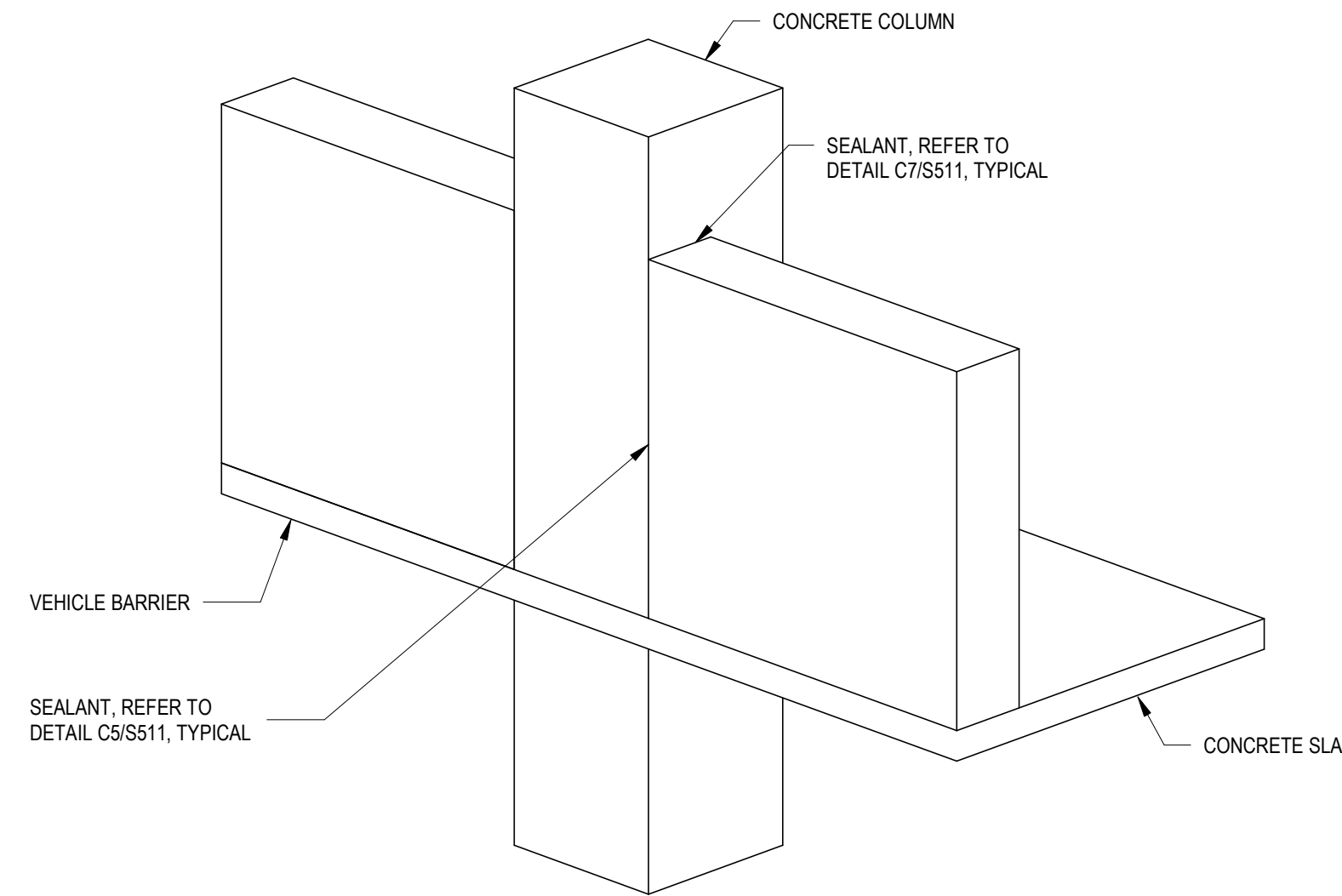
E3 WIDE FLANGE BEAM AT HSS
1" = 1'-0"



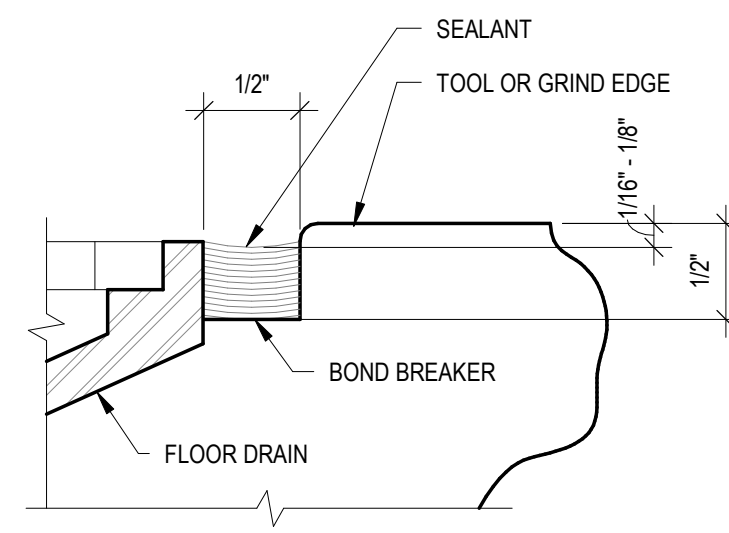
C5 SEALANT DETAIL
12\"/>



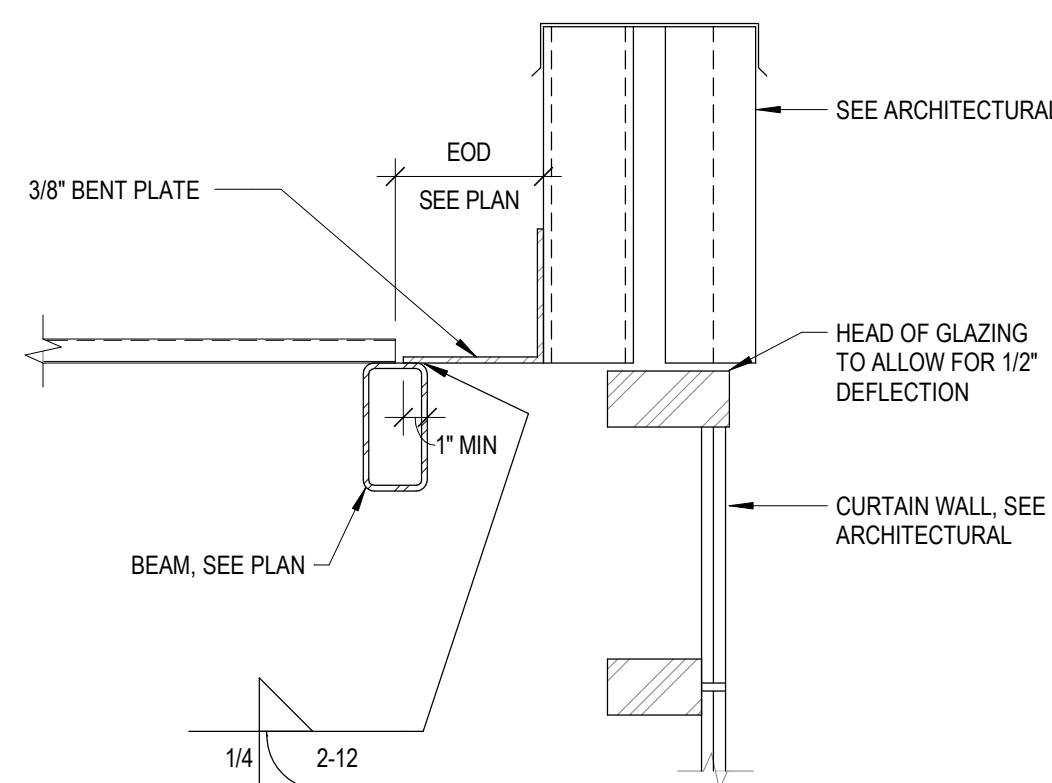
E5 SEALANT ISOMETRIC EXTERIOR COLUMN DETAIL
3/8\"/>



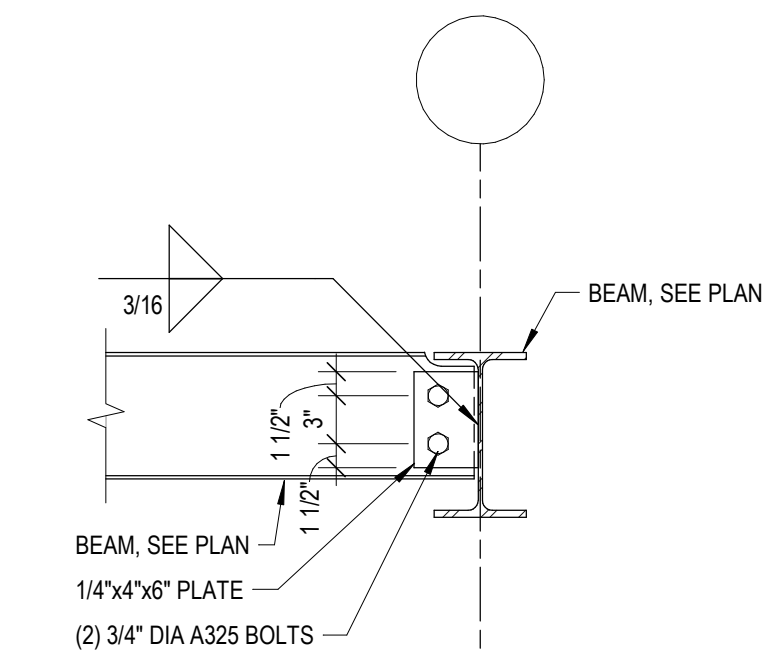
E7 SEALANT DETAIL
12\"/>



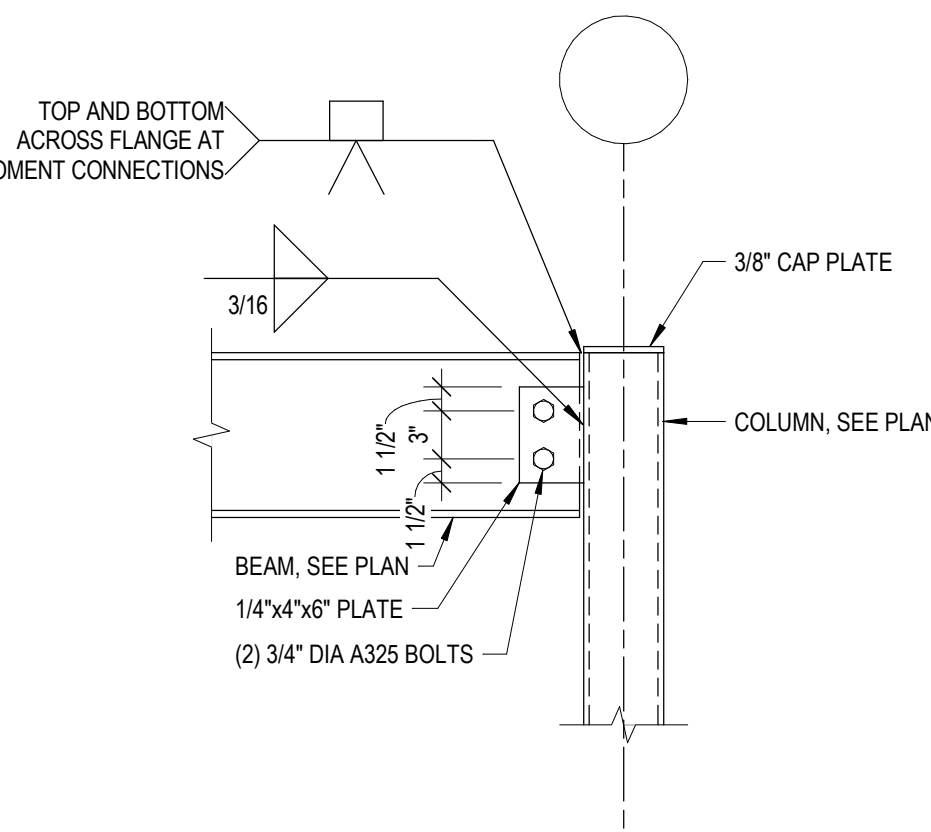
D1 EXTERIOR WALL AT HSS
1" = 1'-0"



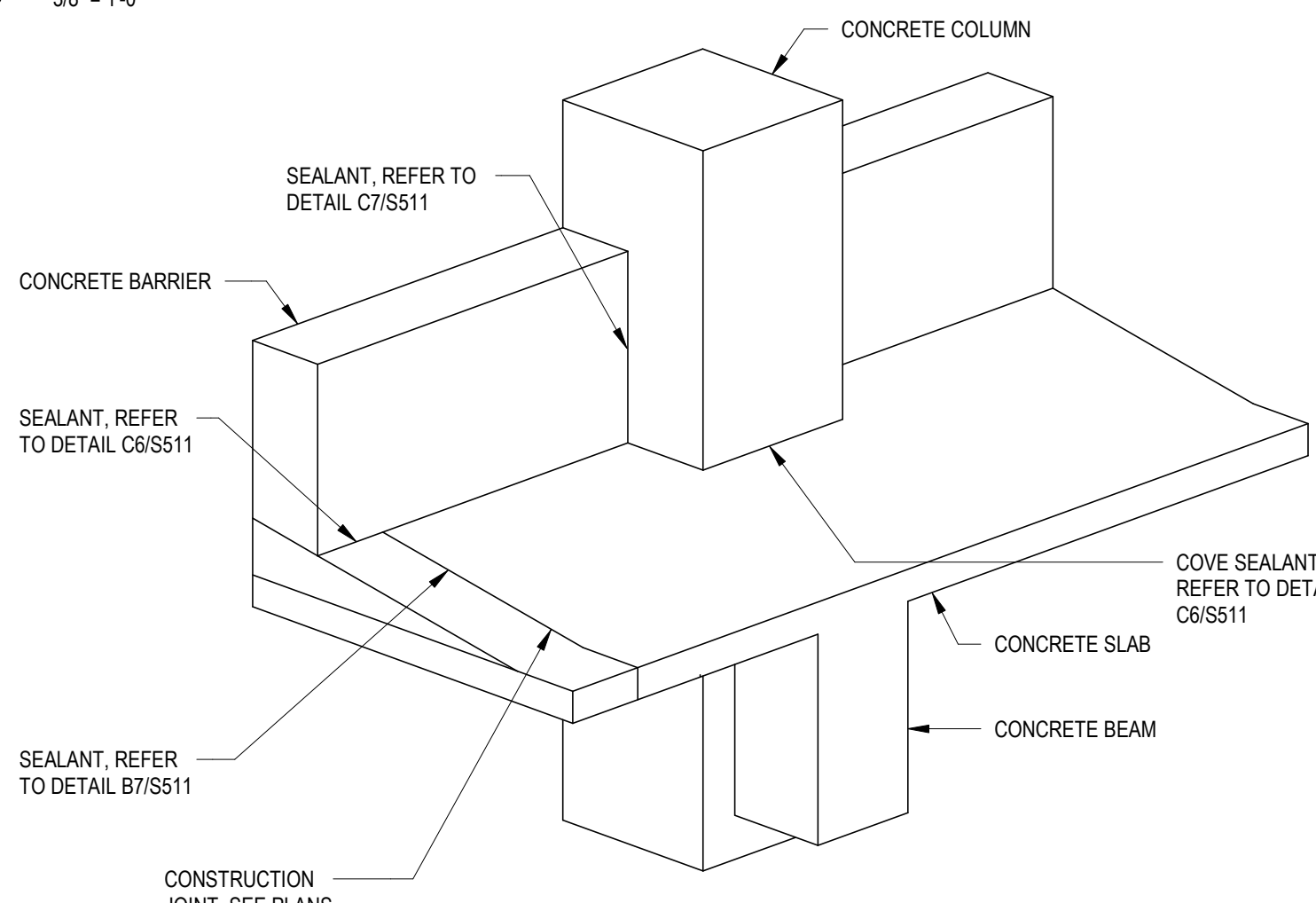
D2 WIDE FLANGE CONNECTION
1" = 1'-0"



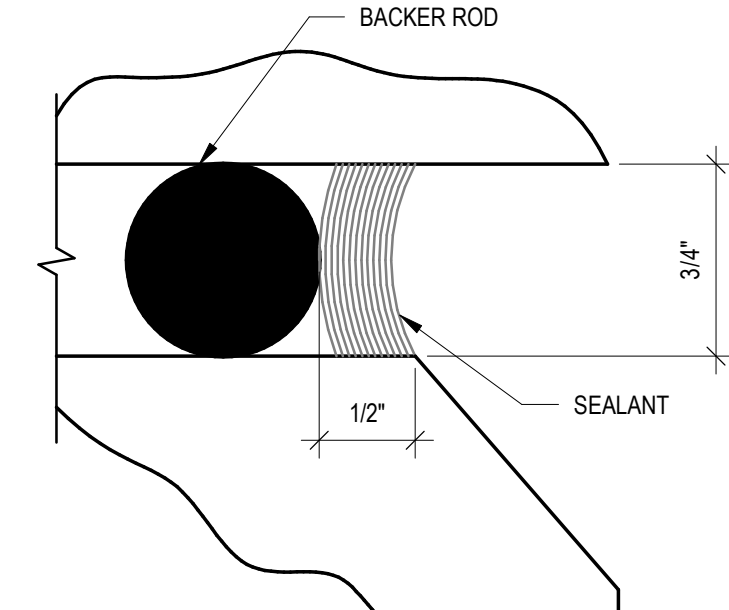
D3 WIDE FLANGE BEAM AT HSS
1" = 1'-0"



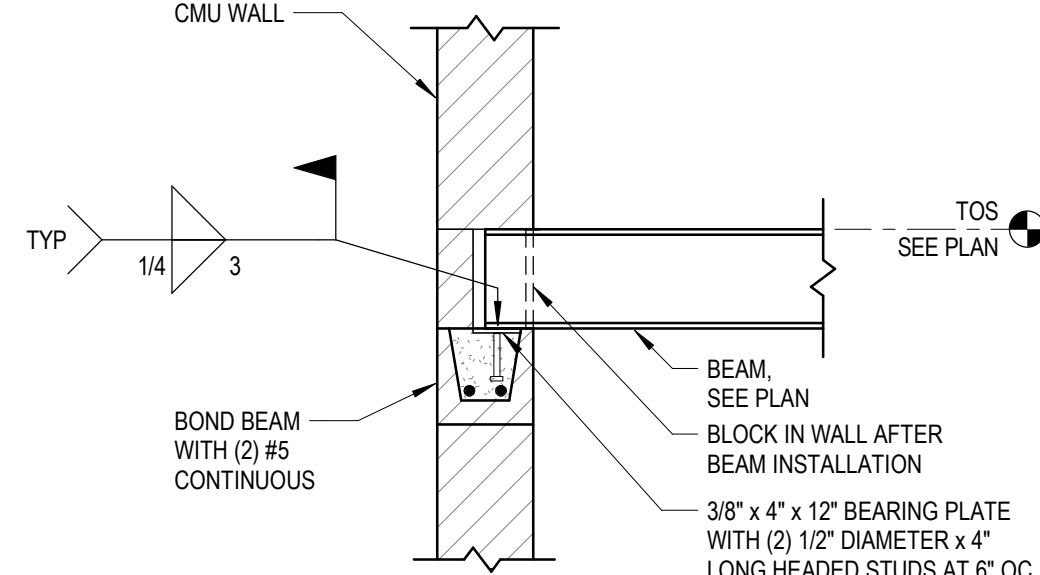
D5 SEALANT ISOMETRIC EXTERIOR COLUMN DETAIL
3/8\"/>



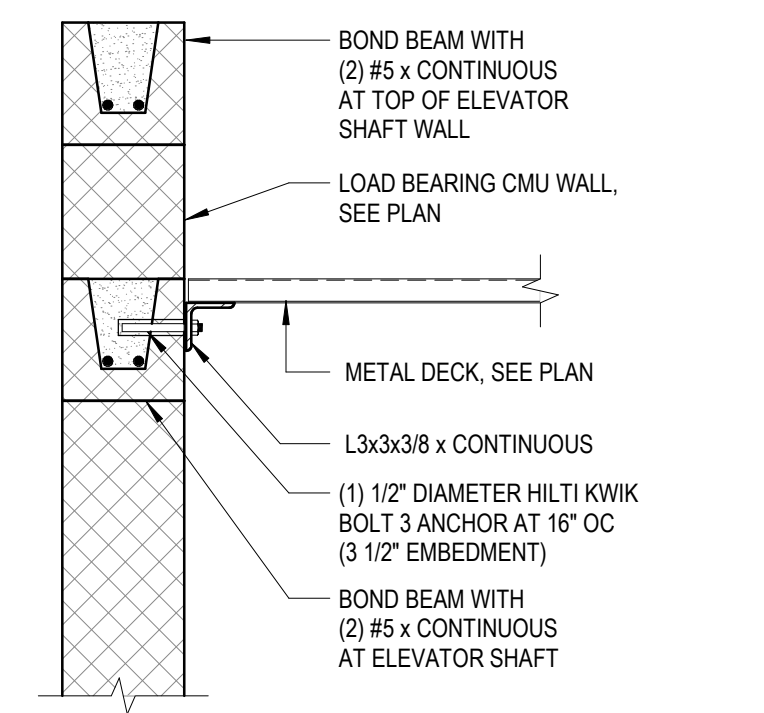
D7 SEALANT DETAIL (VERTICAL JOINT)
12\"/>



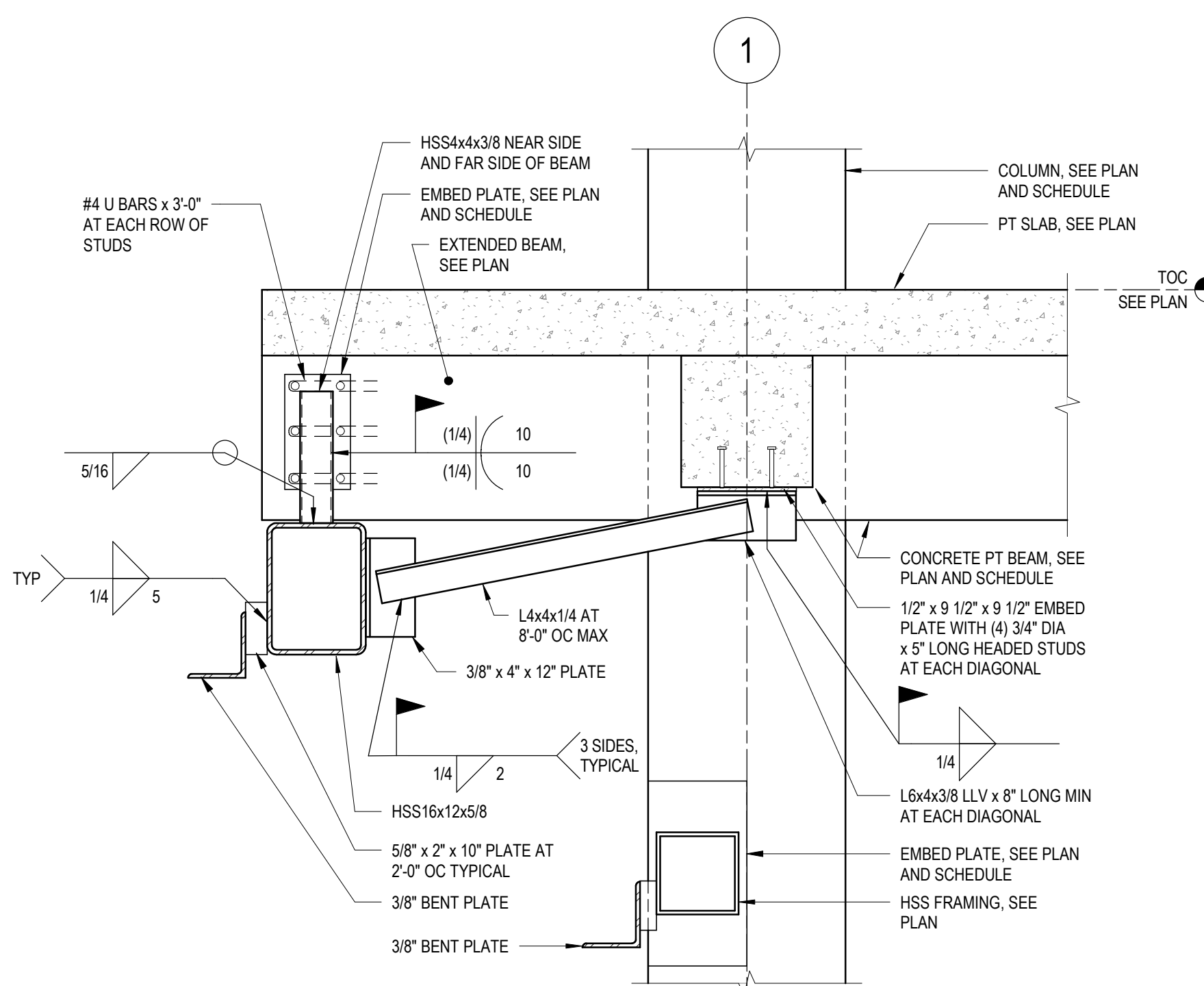
C2 BEAM AT CMU DETAIL
3/4\"/>



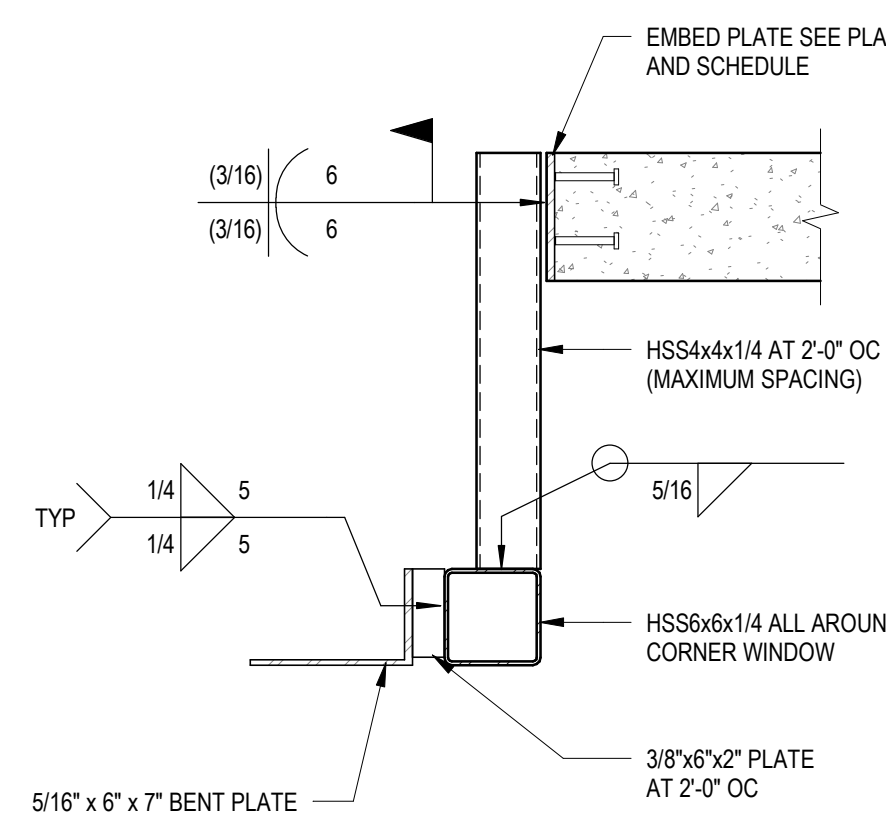
B2 METAL DECK AT CMU WALL DETAIL
1" = 1'-0"



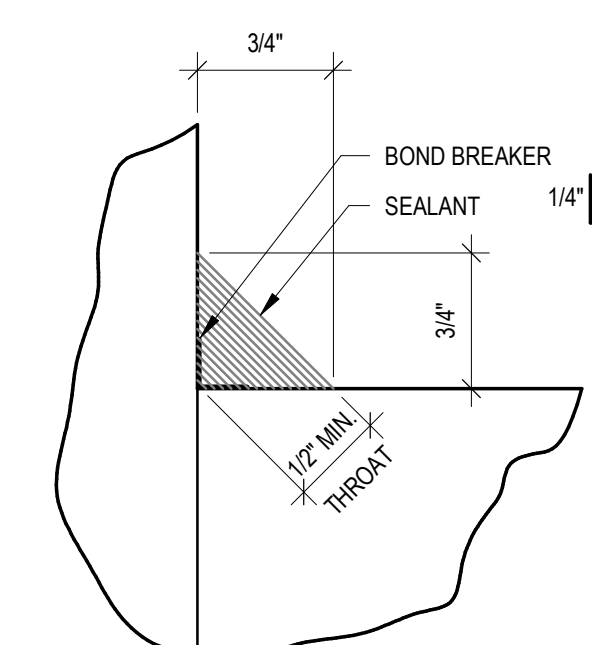
B3 SECTION AT BRICK SUPPORT
3/4\"/>



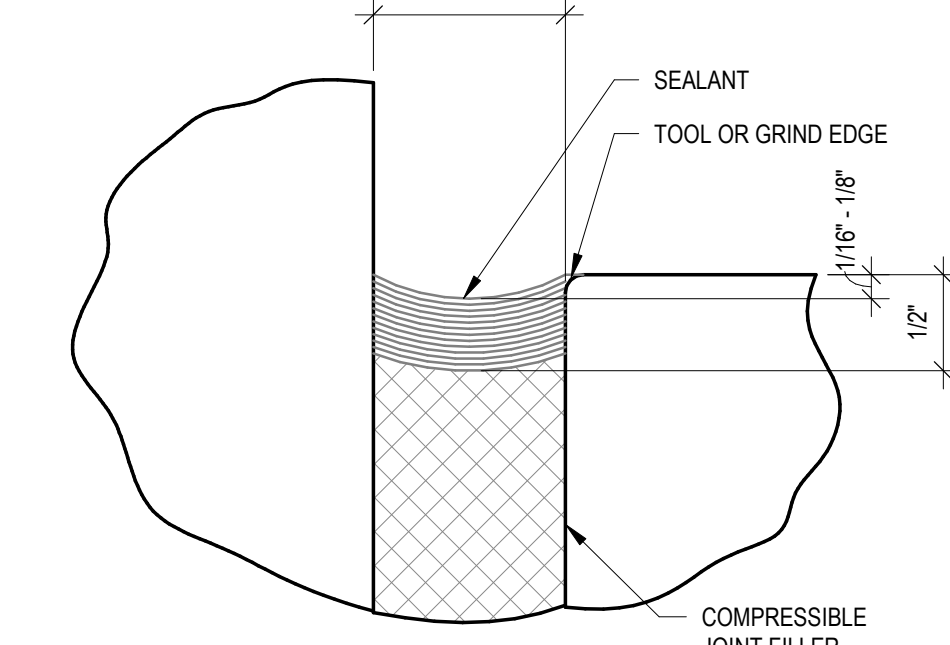
B5 HSS AT CORNER WINDOW
1" = 1'-0"



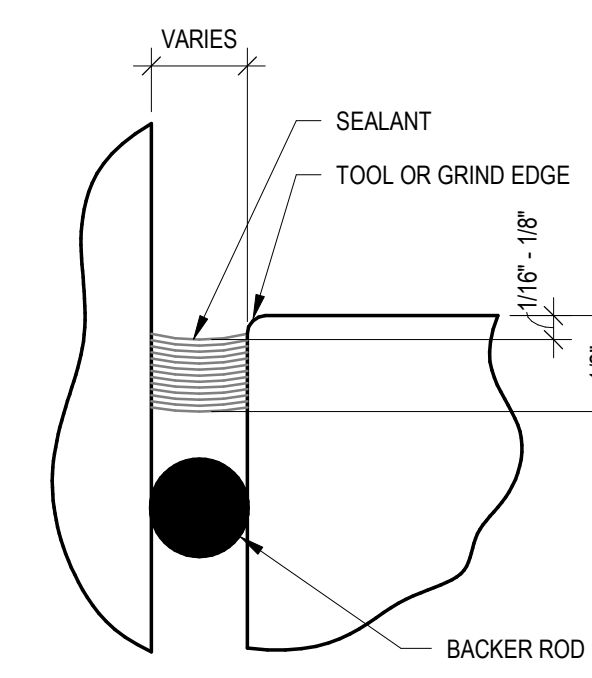
C6 SEALANT DETAIL
12\"/>



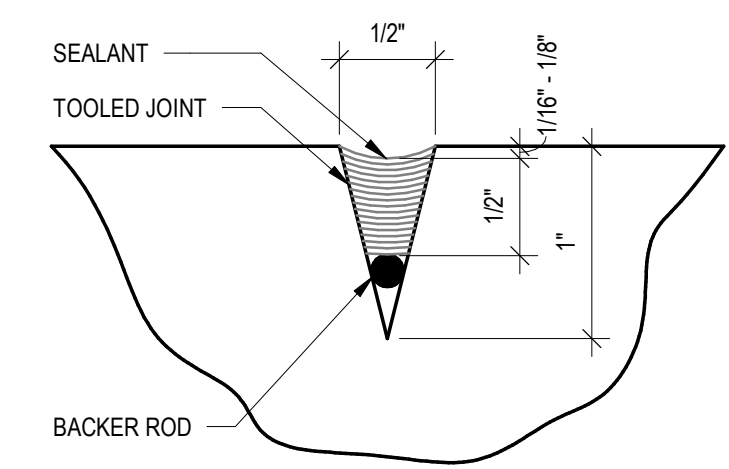
C7 SEALANT DETAIL
12\"/>



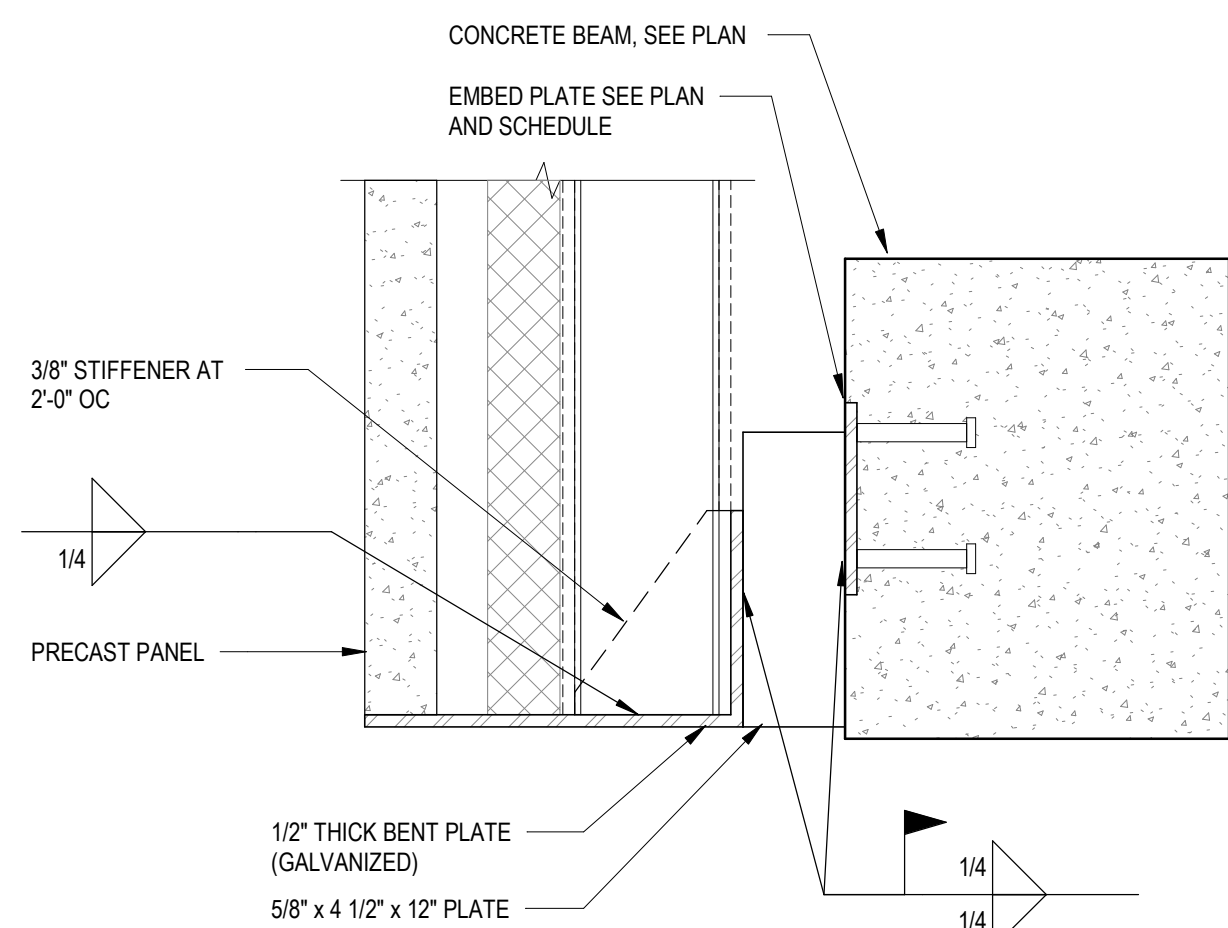
B6 SEALANT DETAIL
12\"/>



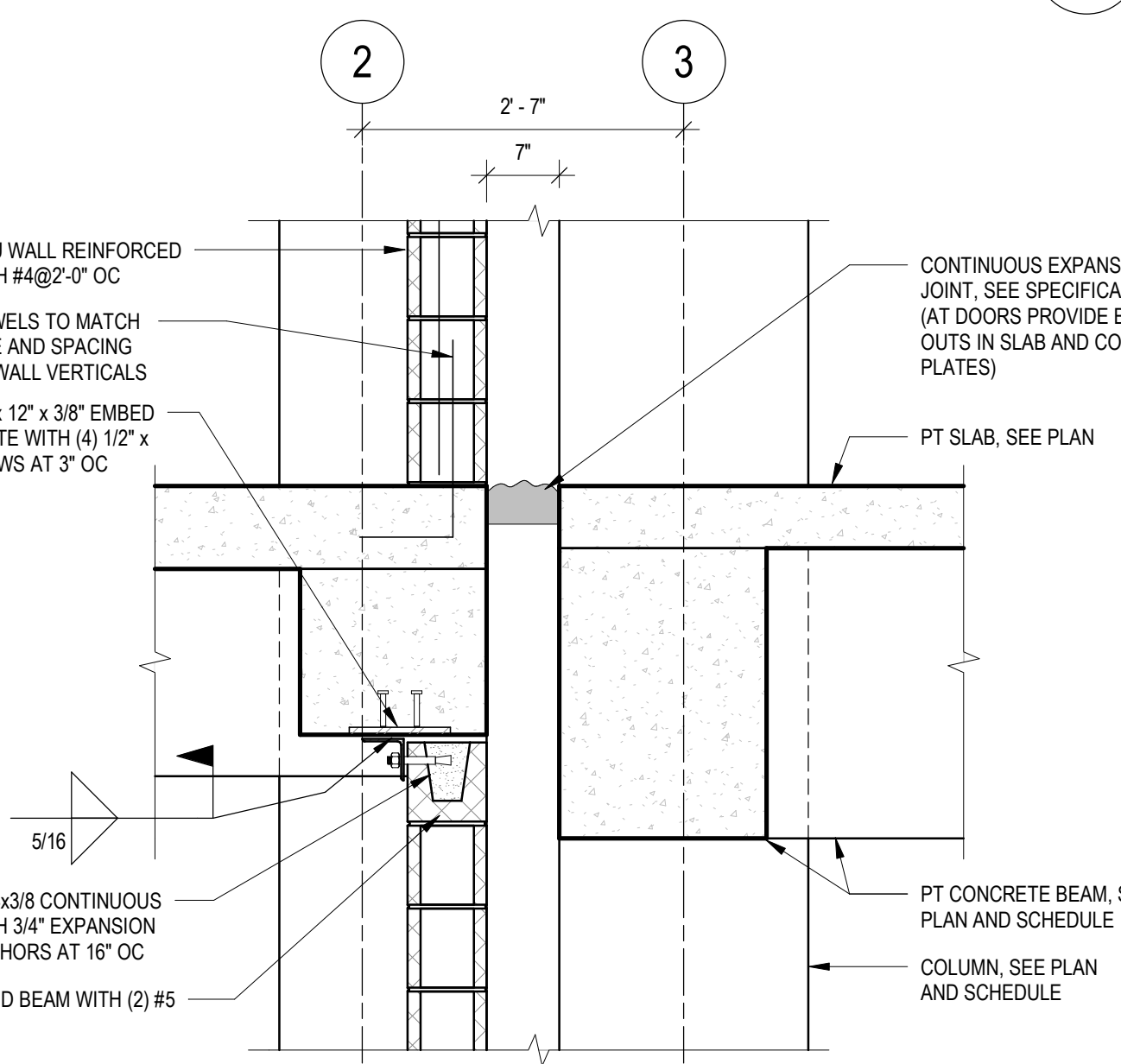
B7 SEALANT DETAIL
12\"/>



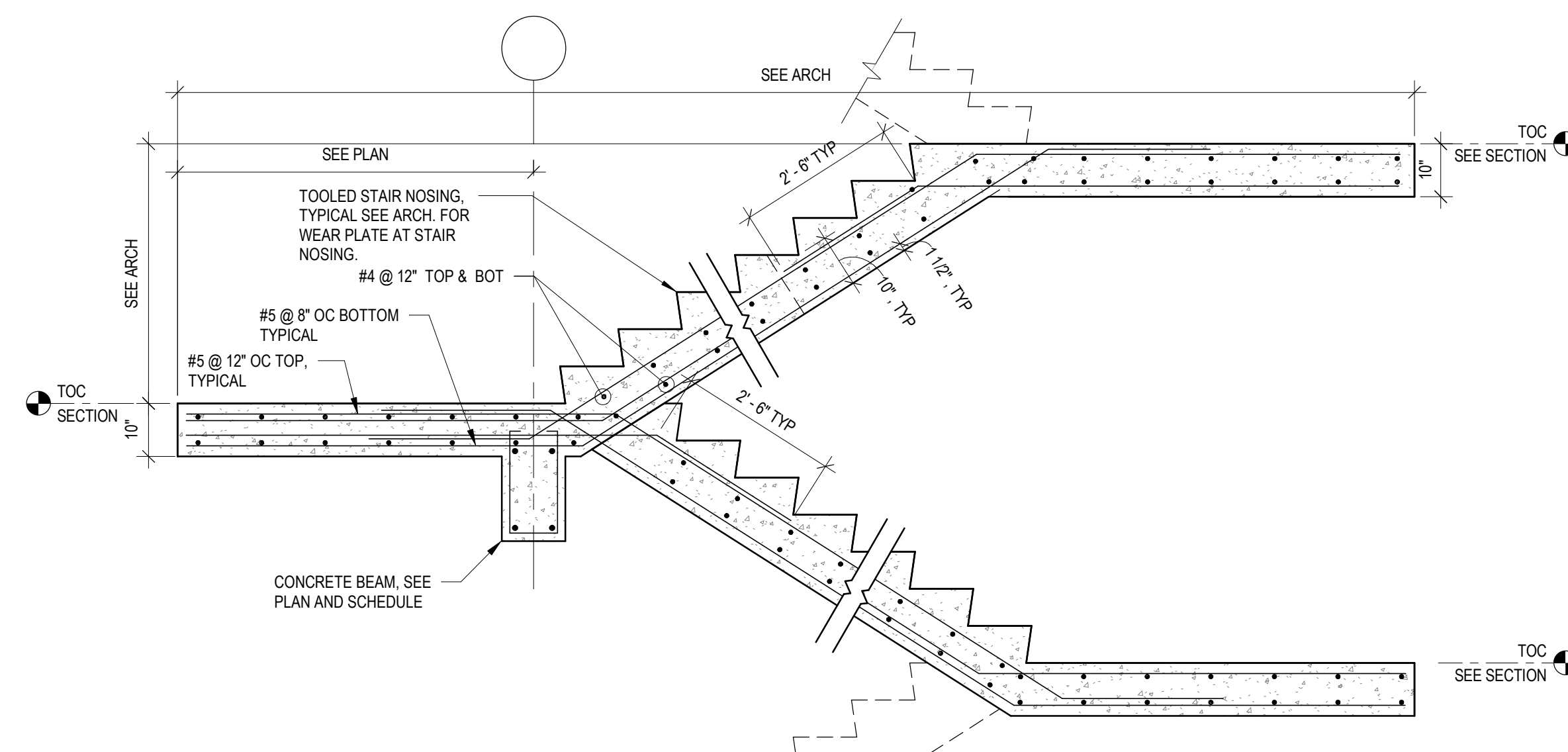
A1 PRECAST SUPPORT AT BEAM
1 1/2\"/>



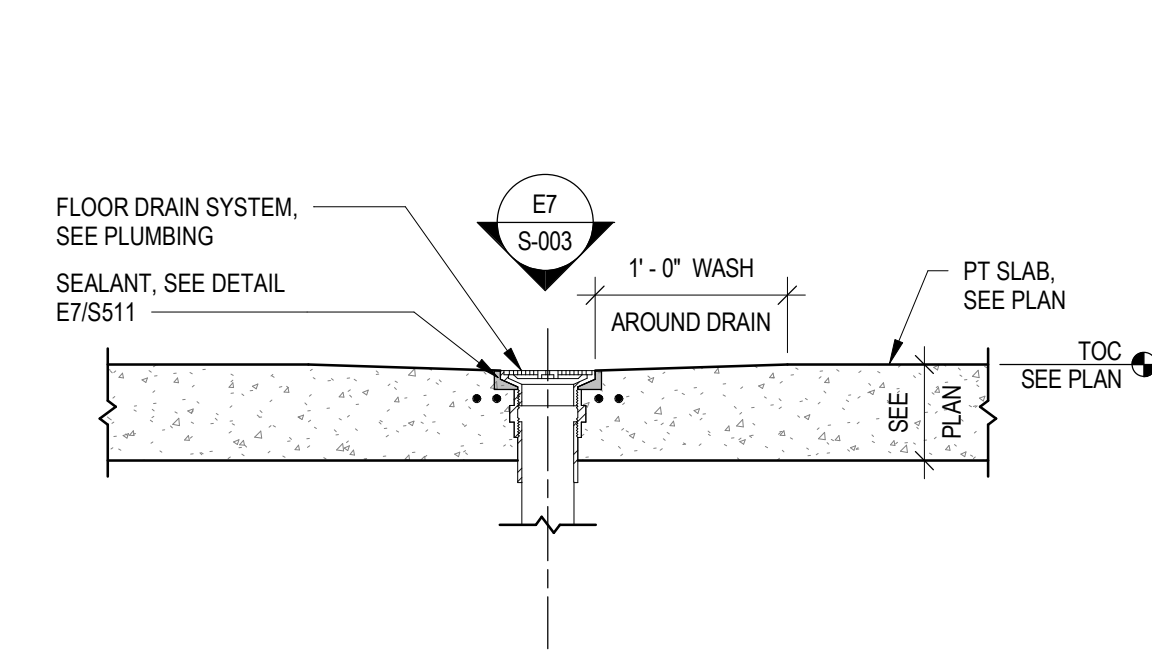
A2 EXPANSION JOINT DETAIL
3/4\"/>



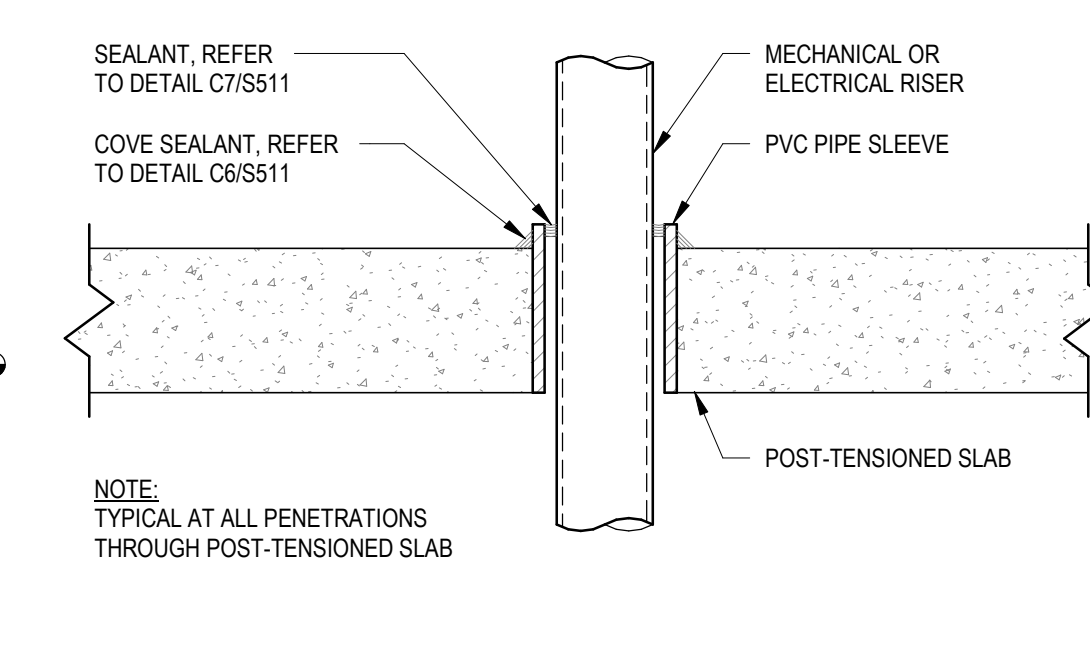
A5 CAST IN PLACE STAIR DETAIL
1/2\"/>

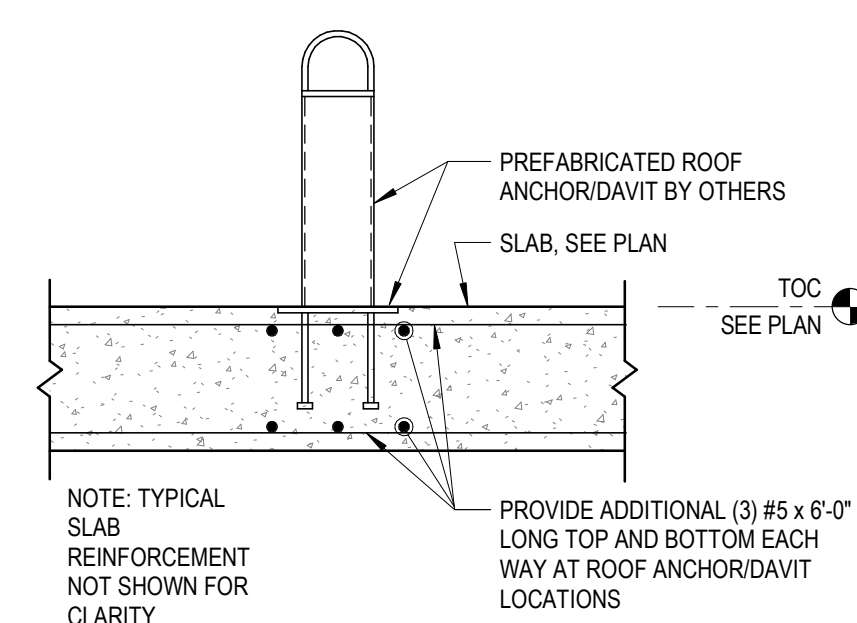


A6 FLOOR DRAIN DETAIL AT ELEVATED SLAB
1" = 1'-0"

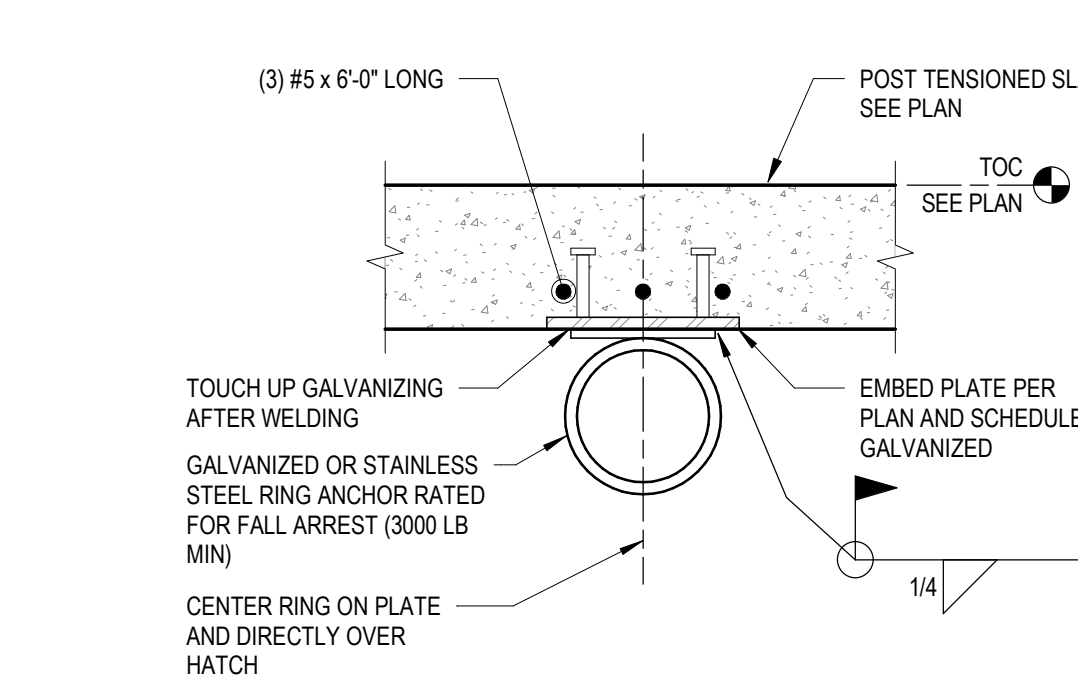


A7 PIPE SLEEVE / SUPPORT DETAIL
1 1/2\"/>

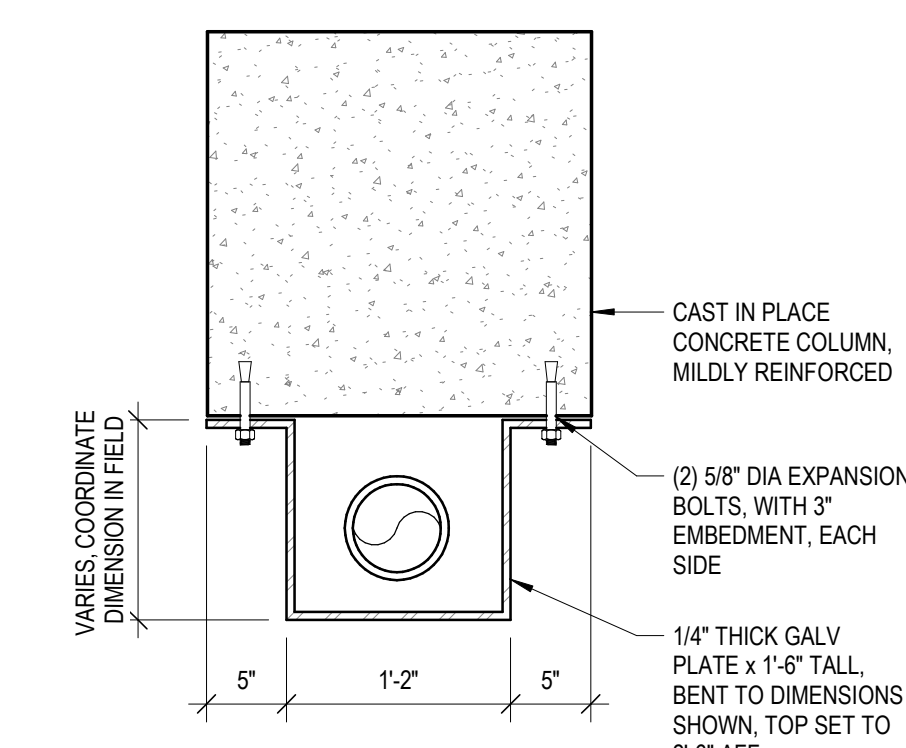




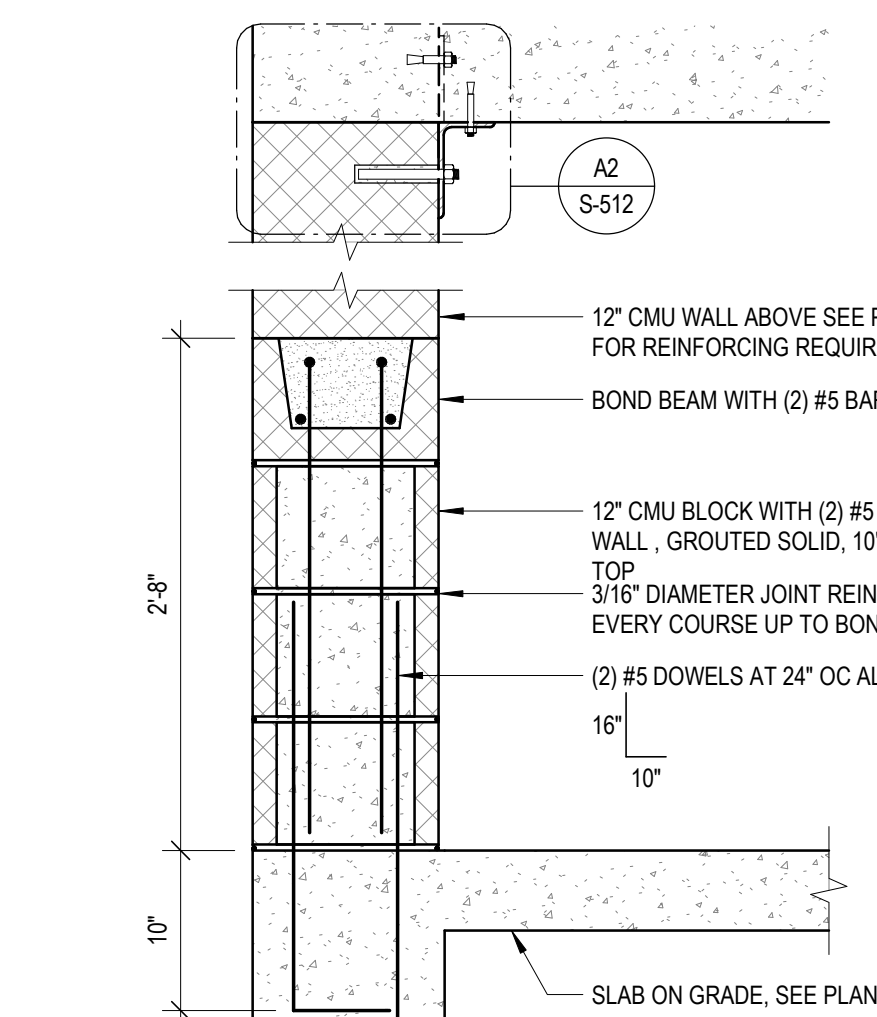
E5 SECTION AT ROOF ANCHOR
3/4" x 1'-0"



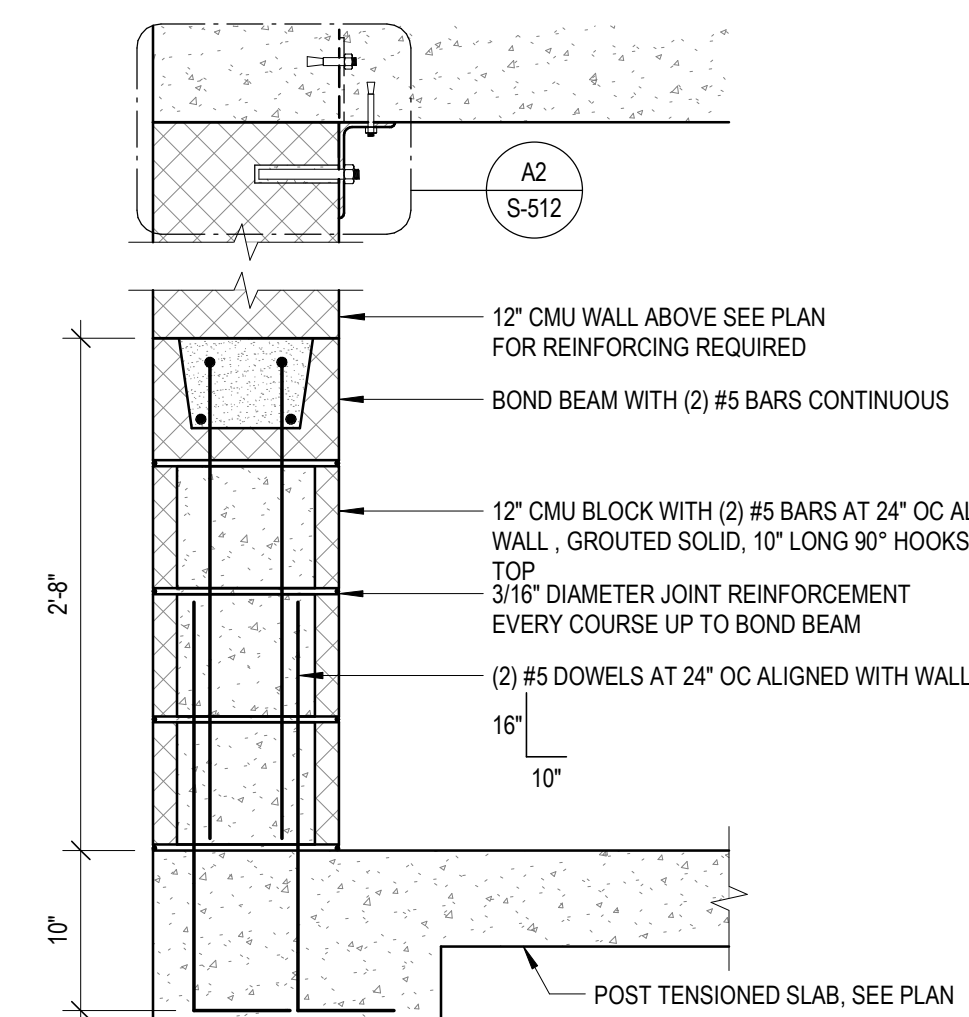
E6 TUNNEL ENTRANCE ANCHOR
1 1/2" x 1'-0"



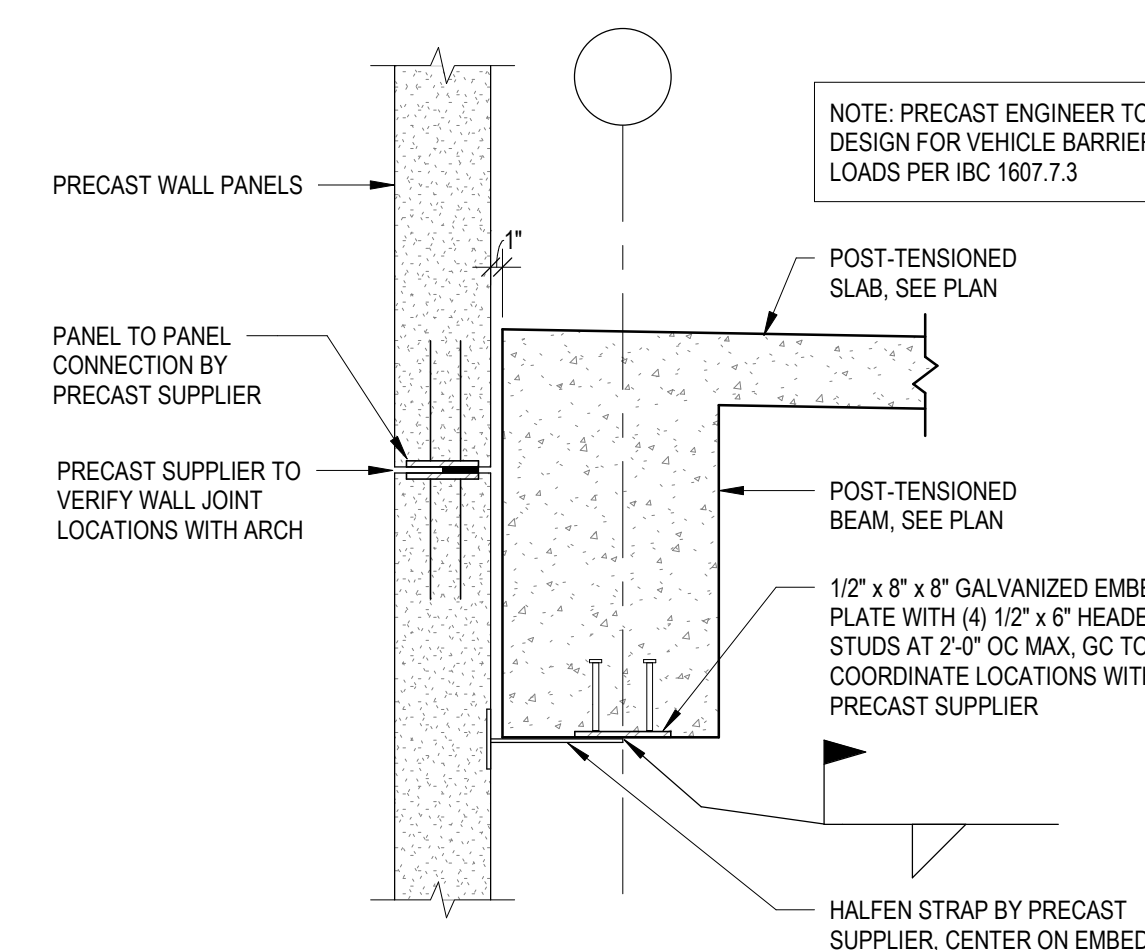
E7 PIPE/CONDUIT PROTECTION
1" x 1'-0"



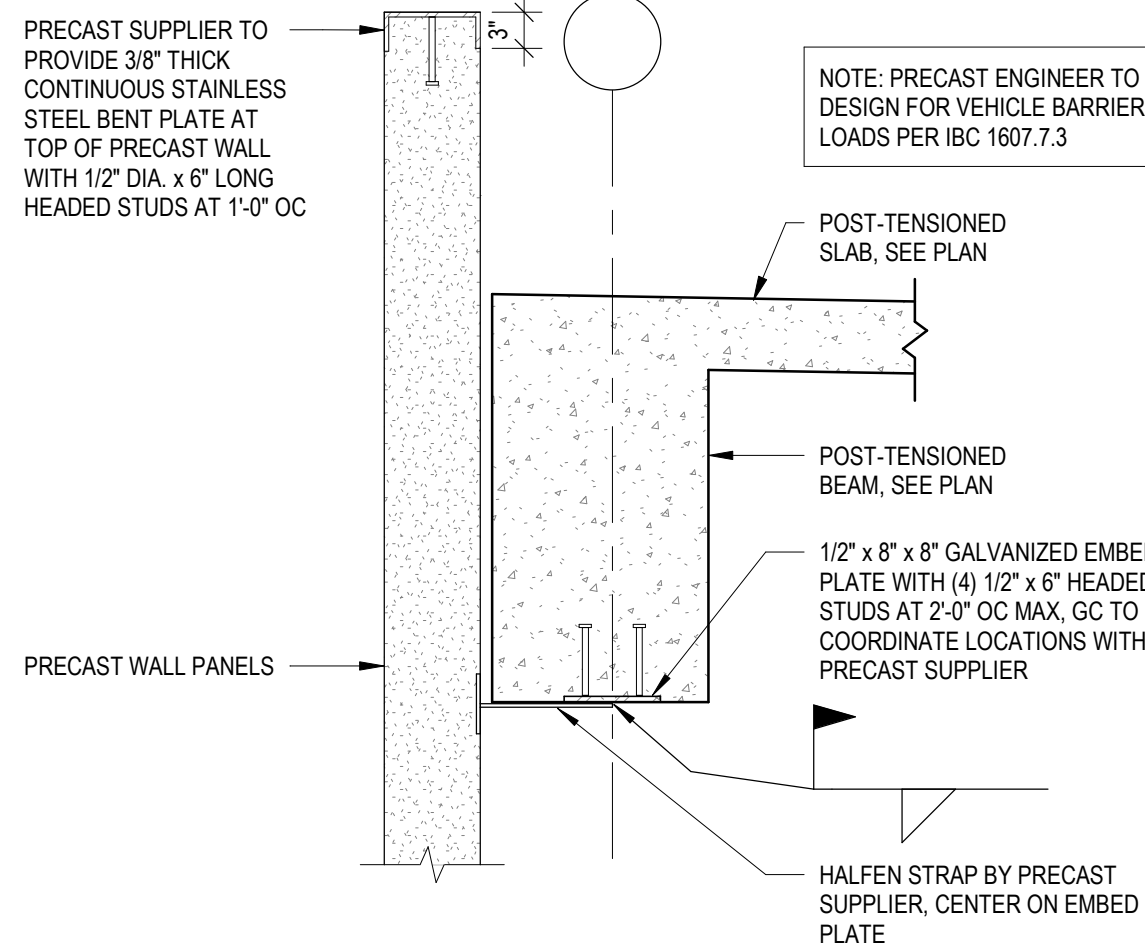
D3 MASONRY WALL FOR CRASH FORCE
1" x 1'-0"



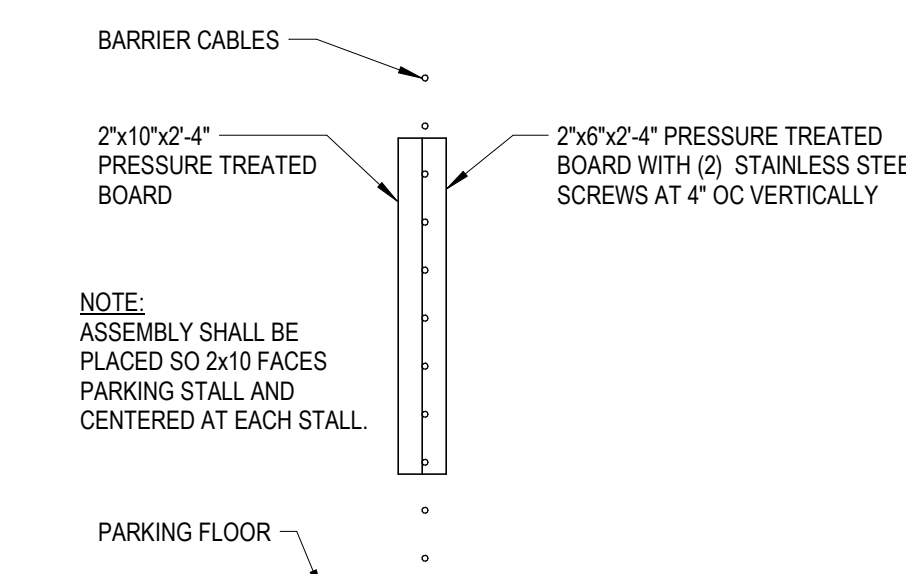
D4 MASONRY WALL FOR CRASH FORCE
1" x 1'-0"



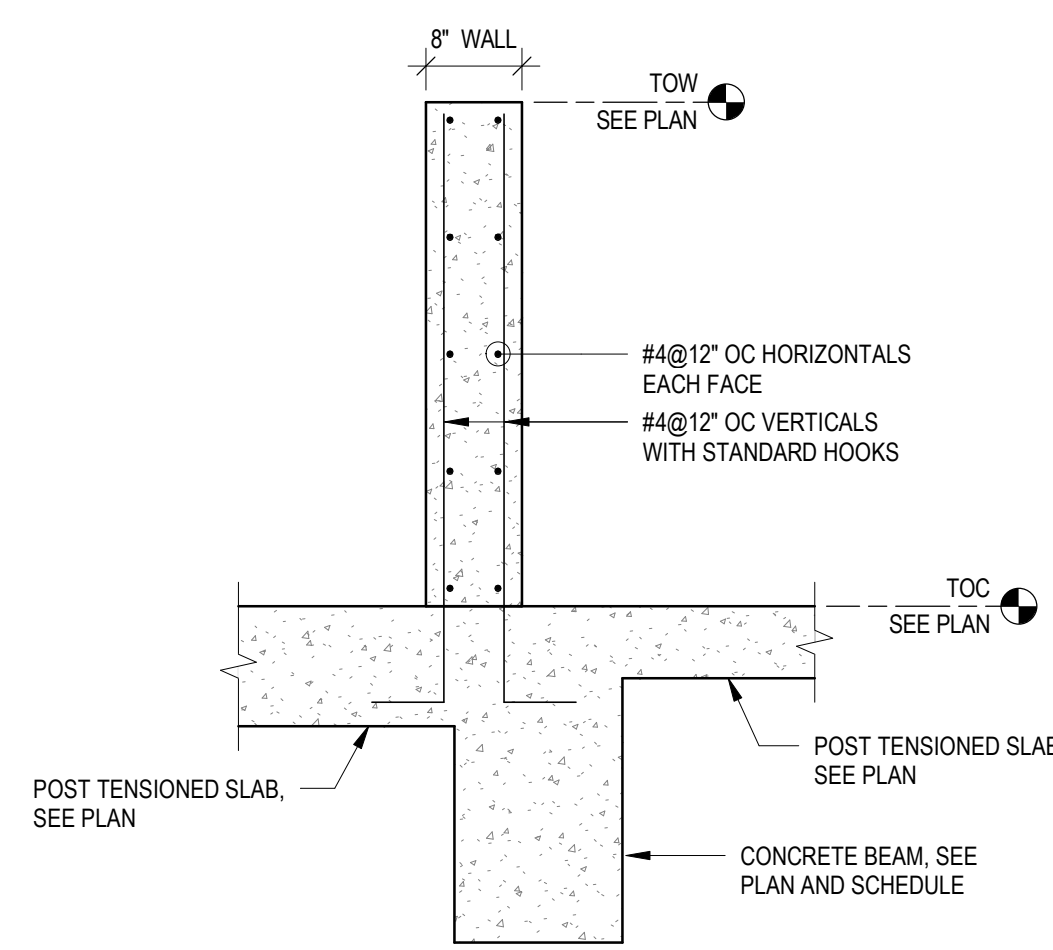
D5 VEHICLE BARRIER AT PRECAST
3/4" x 1'-0"



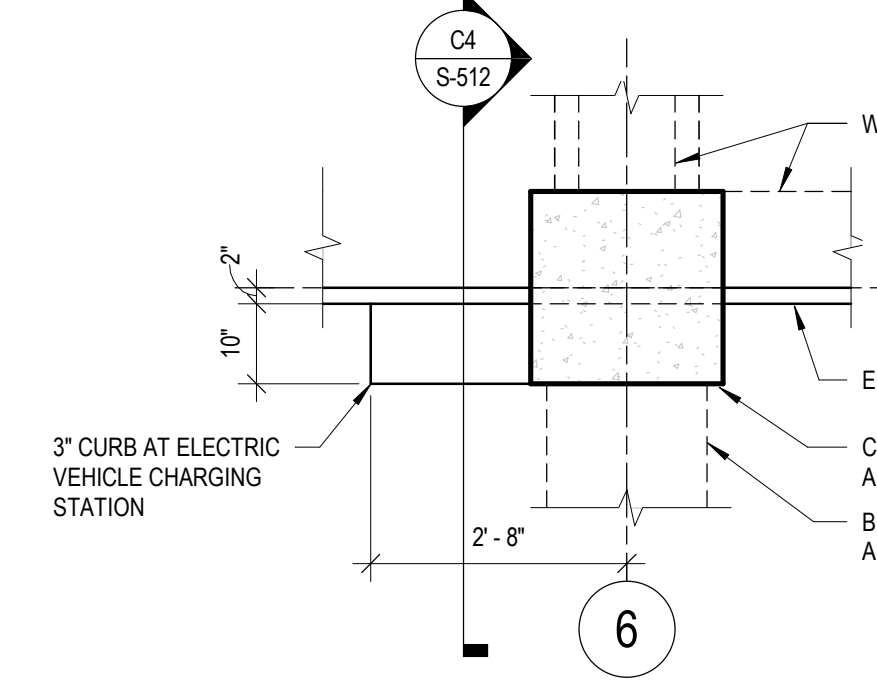
D6 VEHICLE BARRIER AT PRECAST
3/4" x 1'-0"



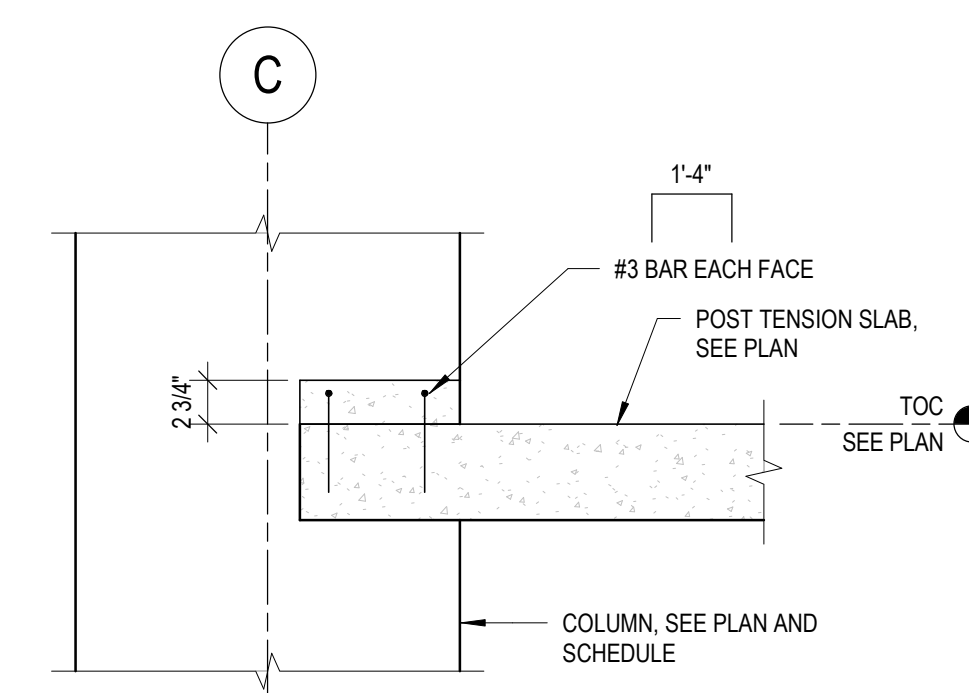
D7 BARRIER CABLE ASSEMBLY
3/4" x 1'-0"



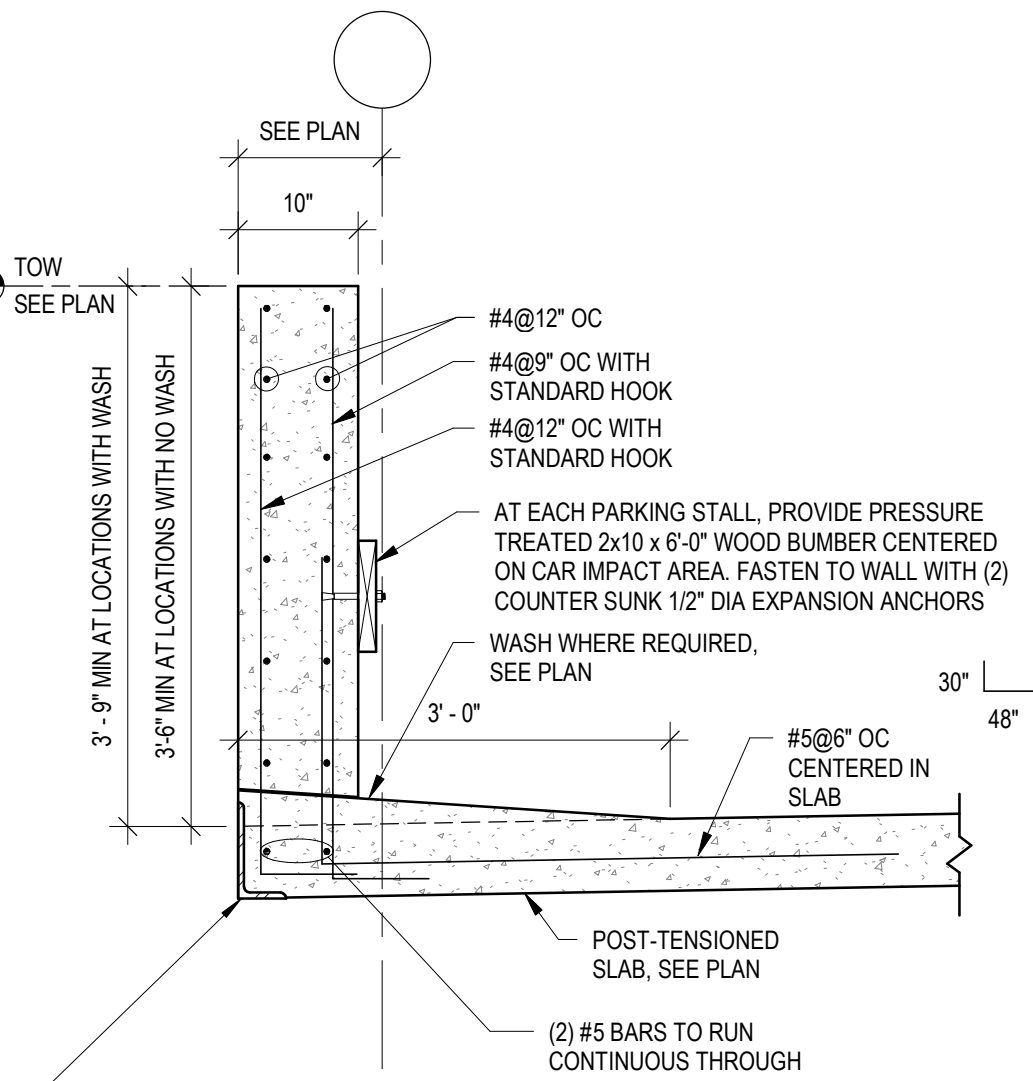
C2 SECTION AT STAIR WALL
3/4" x 1'-0"



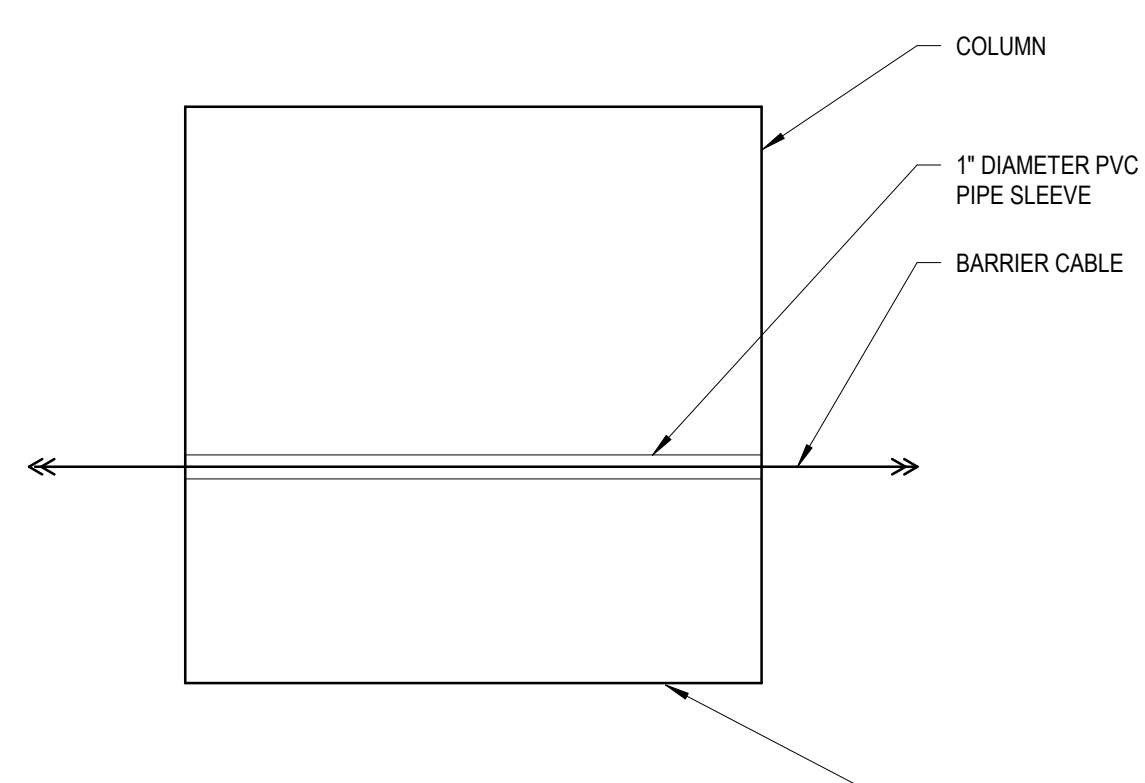
C3 PLAN AT ELECTRIC CAR STATION
1/2" x 1'-0"



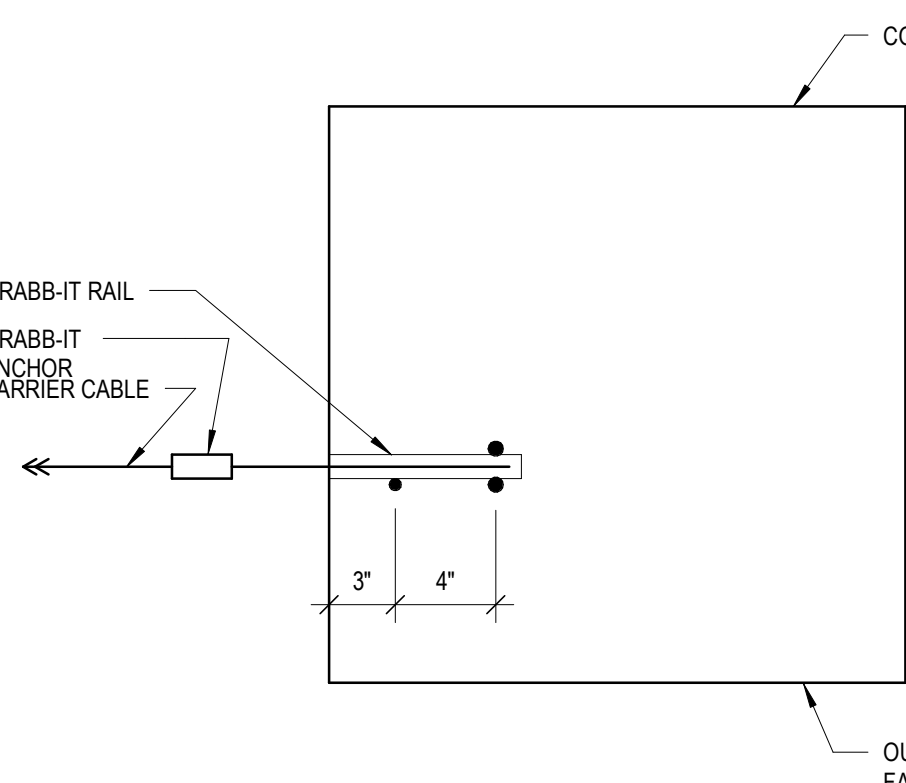
C4 SECTION AT CURB
1" x 1'-0"



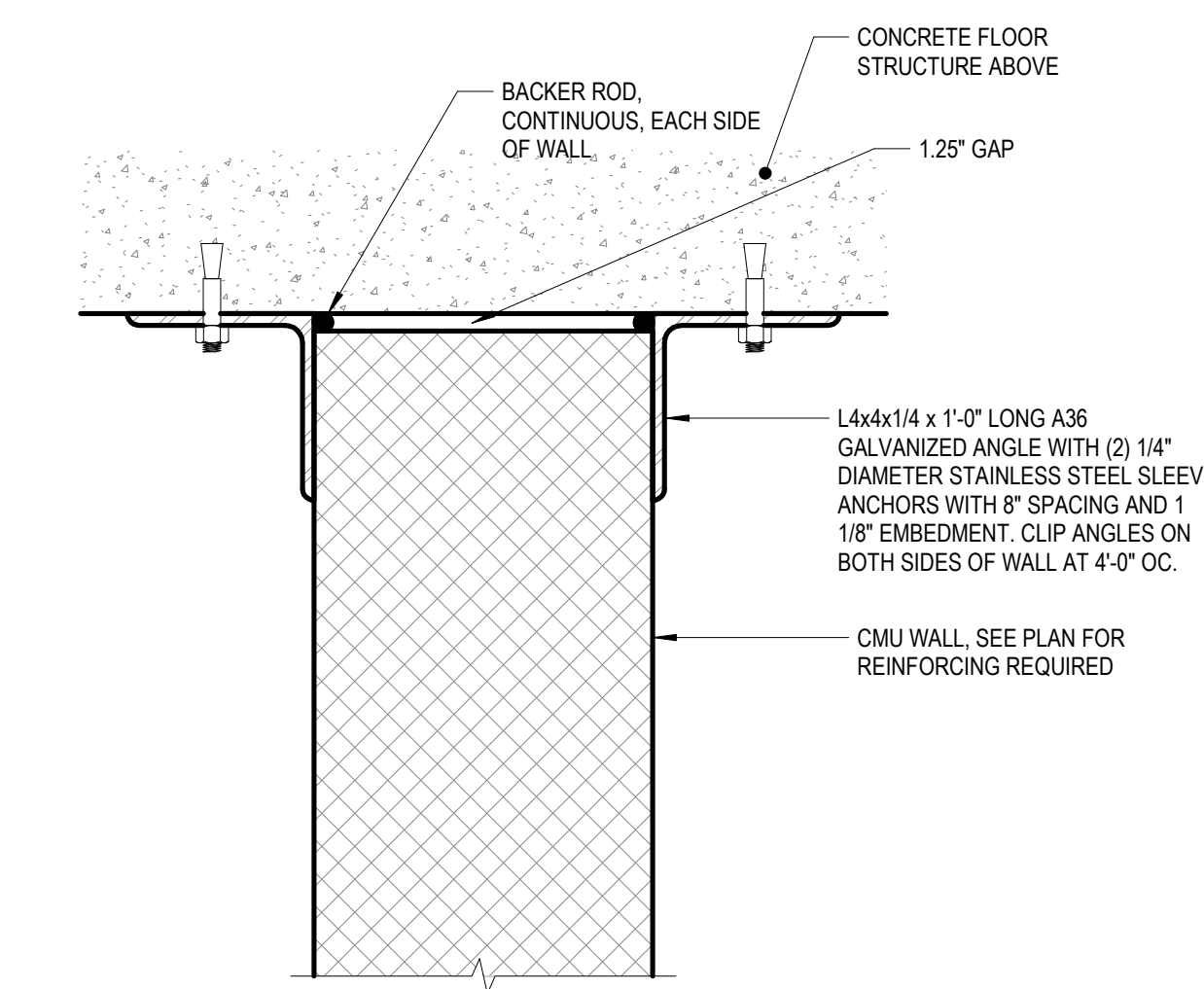
C5 VEHICLE BARRIER
3/4" x 1'-0"



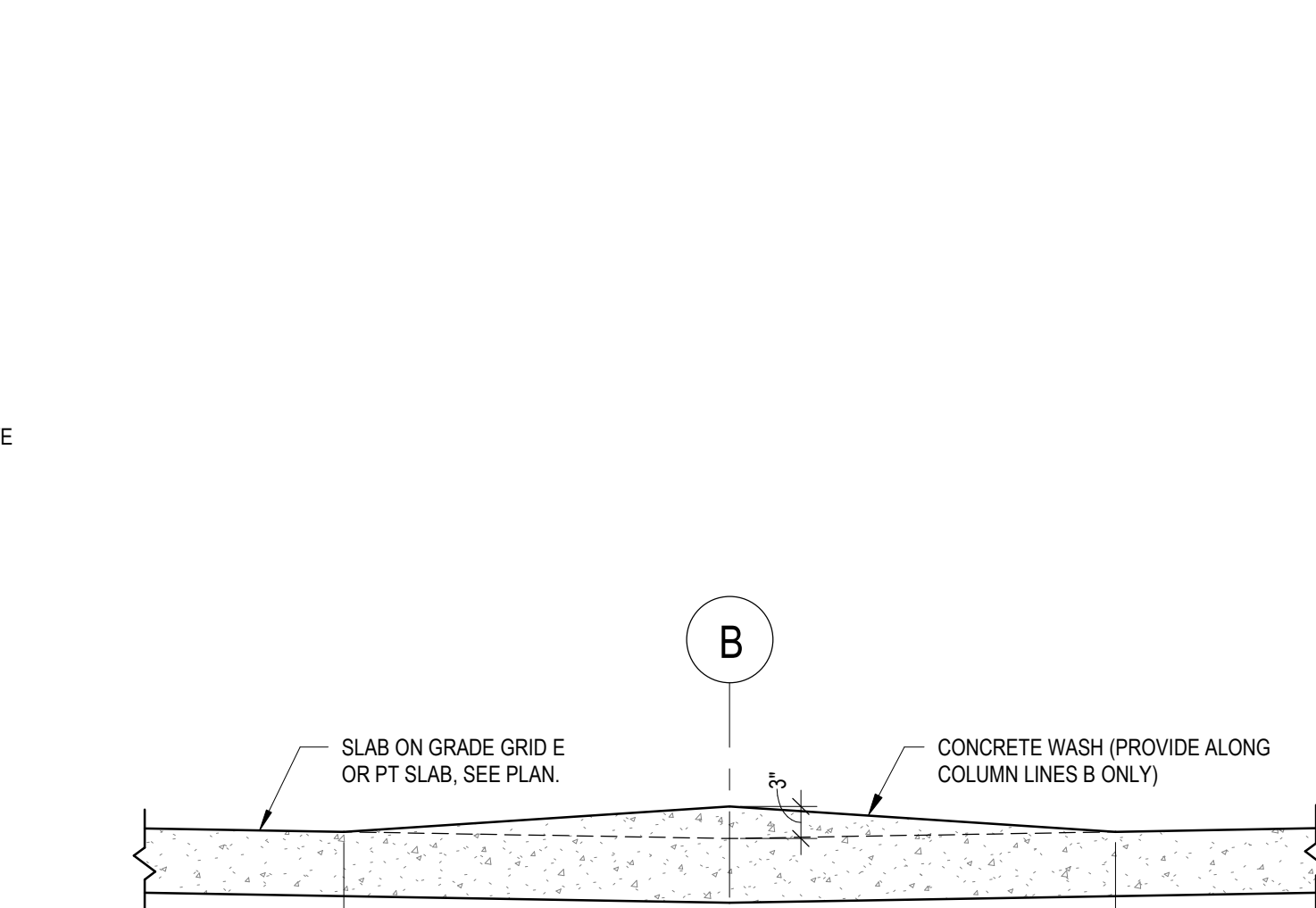
C6 CABLE RAIL THRU COLUMN
1 1/2" x 1'-0"



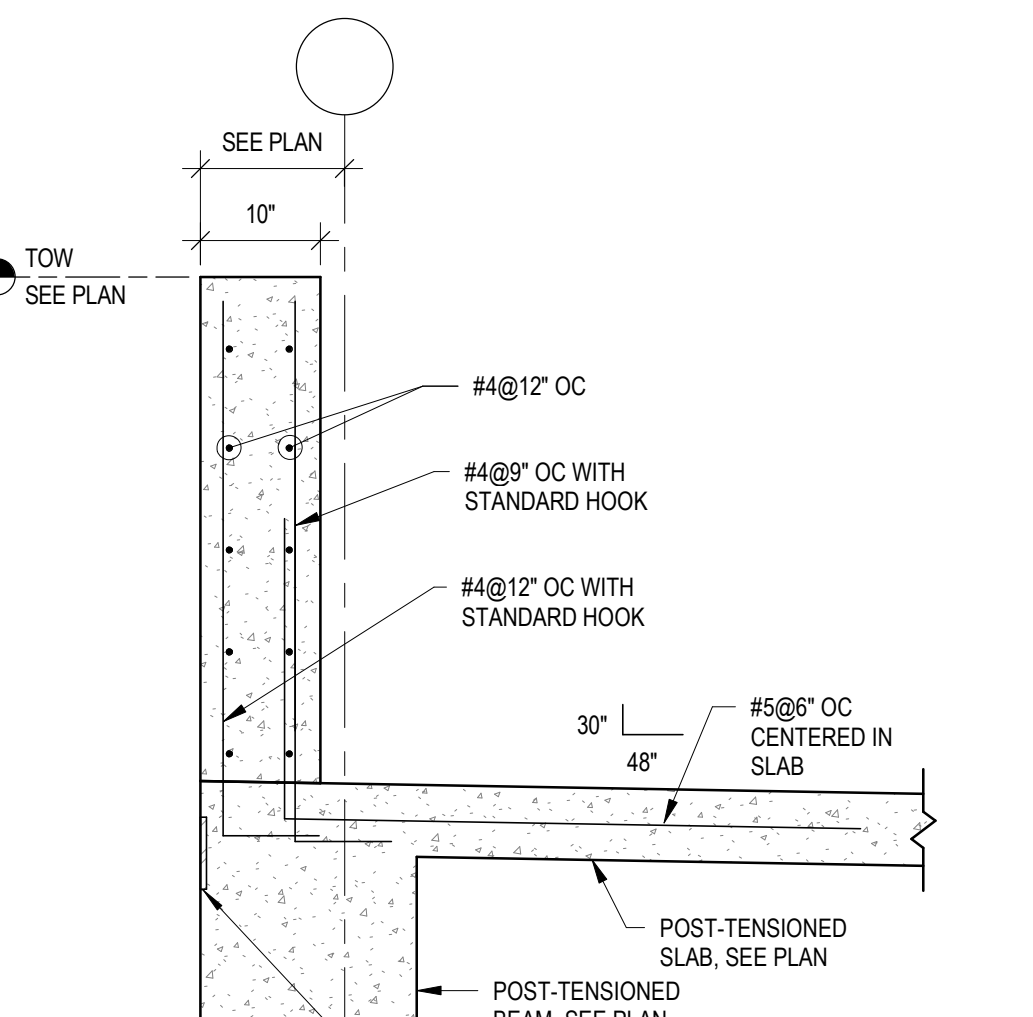
C7 CABLE RAIL ANCHORAGE AT ENDS
1 1/2" x 1'-0"



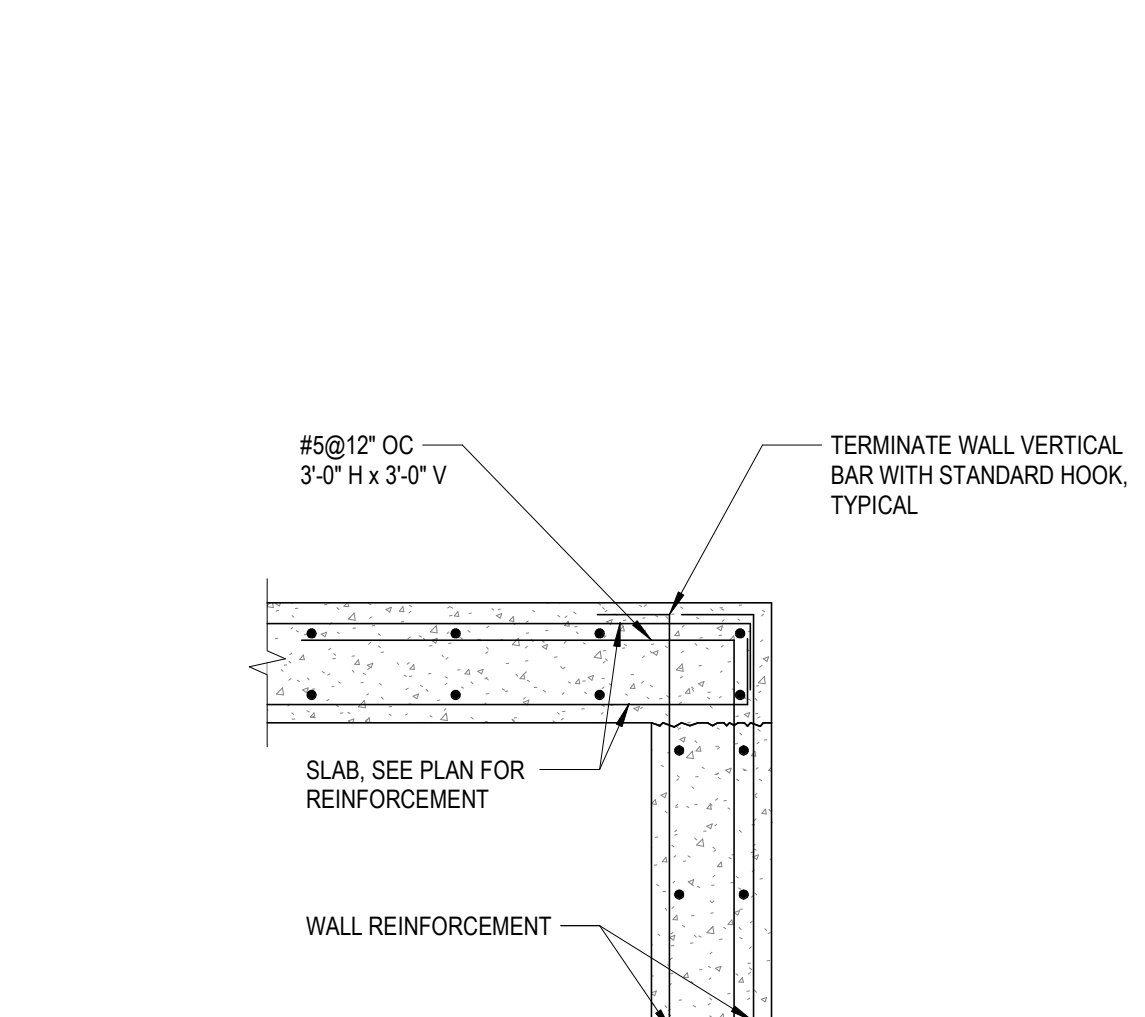
B2 MASONRY WALL BRACING TWO SIDES AVAILABLE
3" x 1'-0"



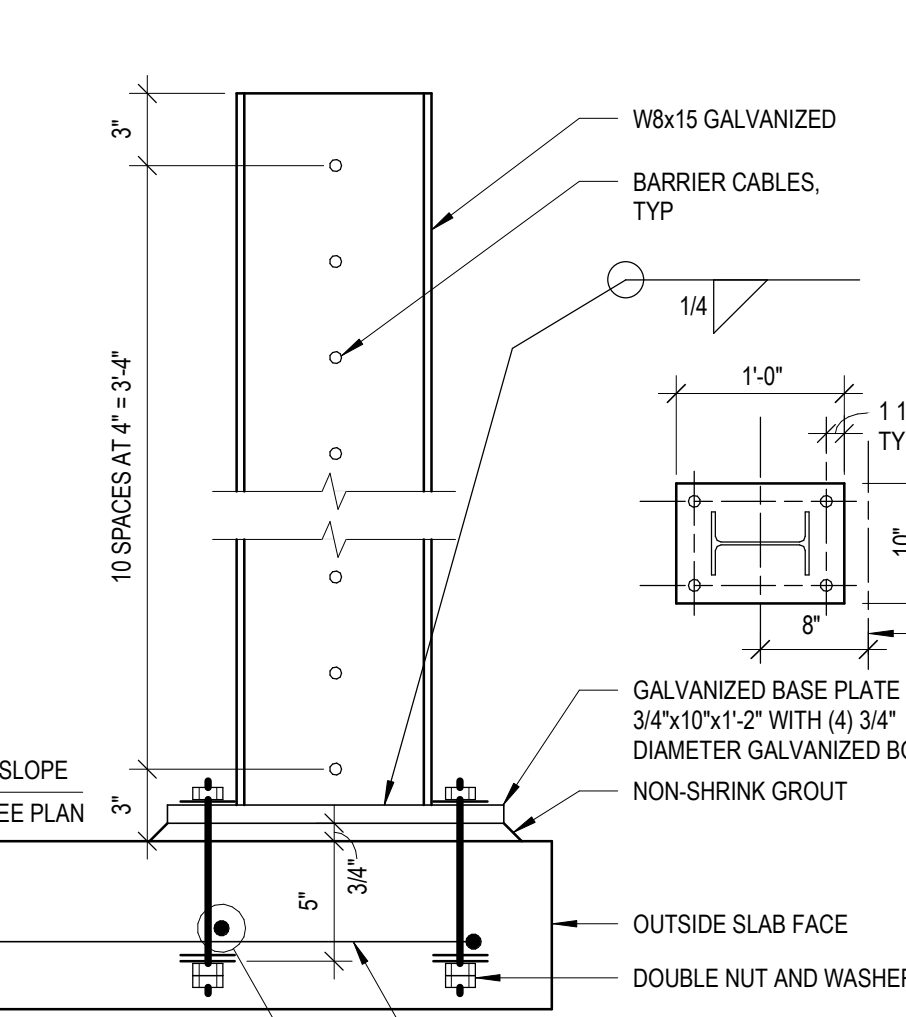
B3 CONCRETE WASH DETAIL
3/4" x 1'-0"



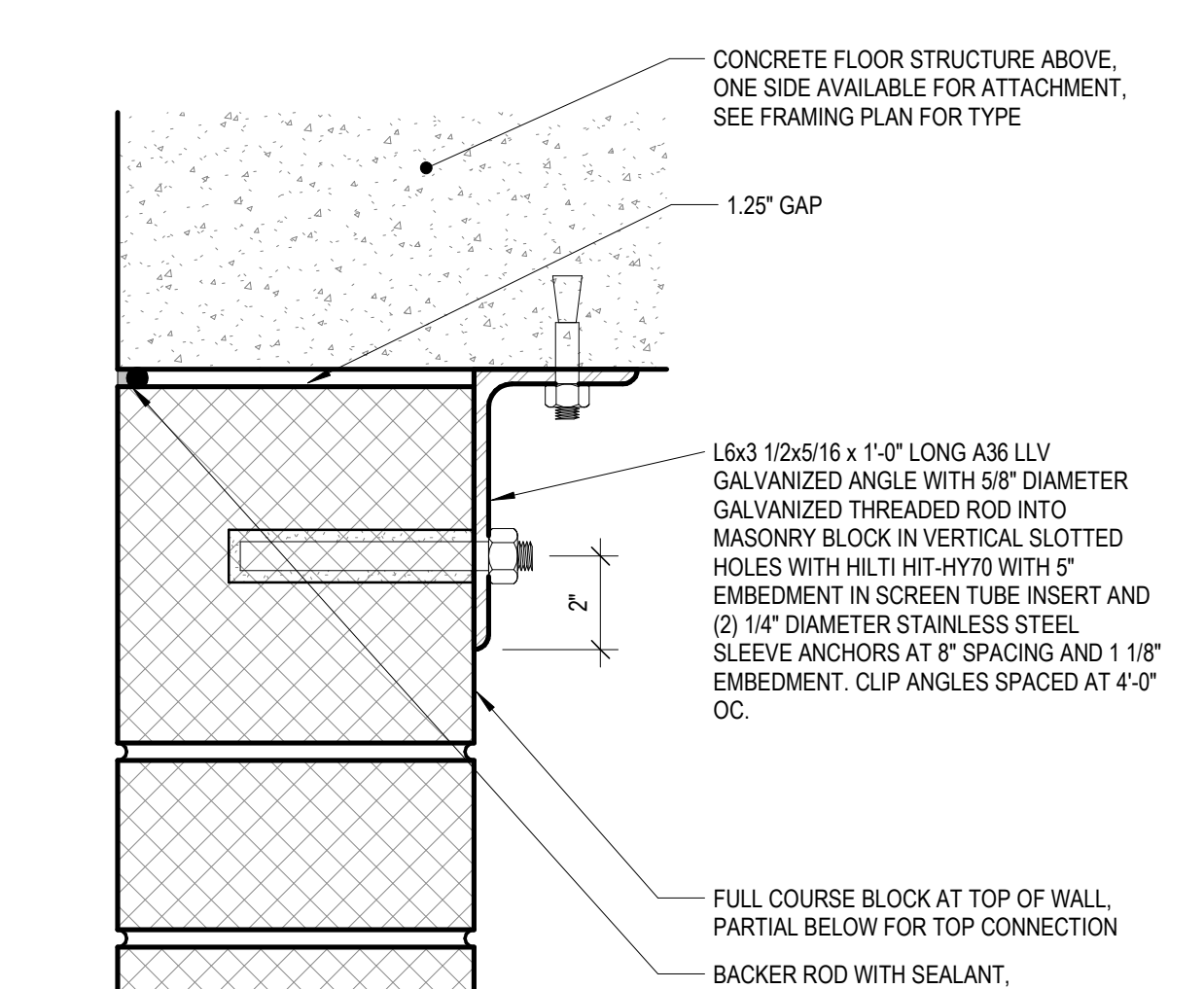
B5 VEHICLE BARRIER AT BEAM
3/4" x 1'-0"



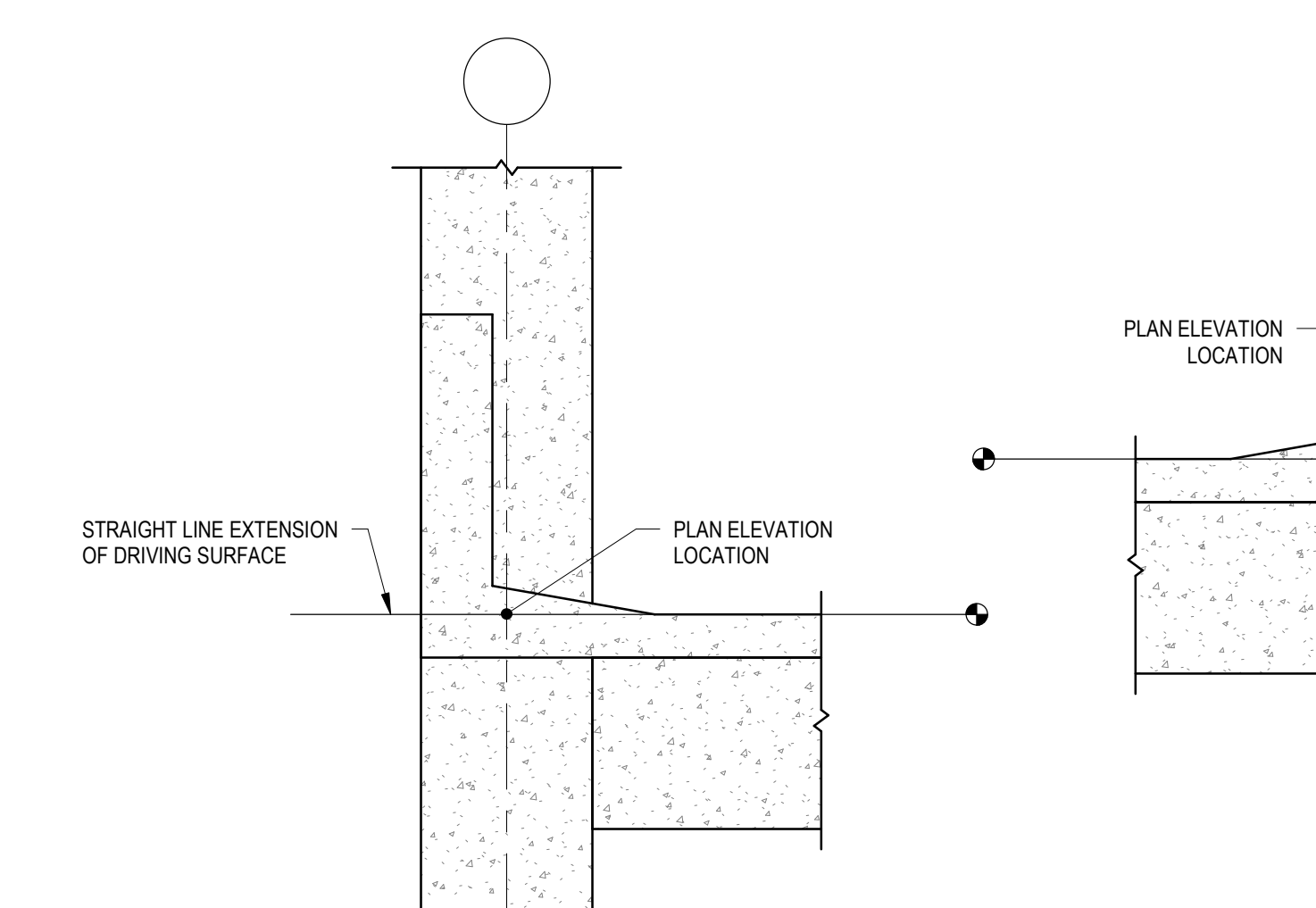
B6 SLAB EDGE AT TOP OF WALL
3/4" x 1'-0"



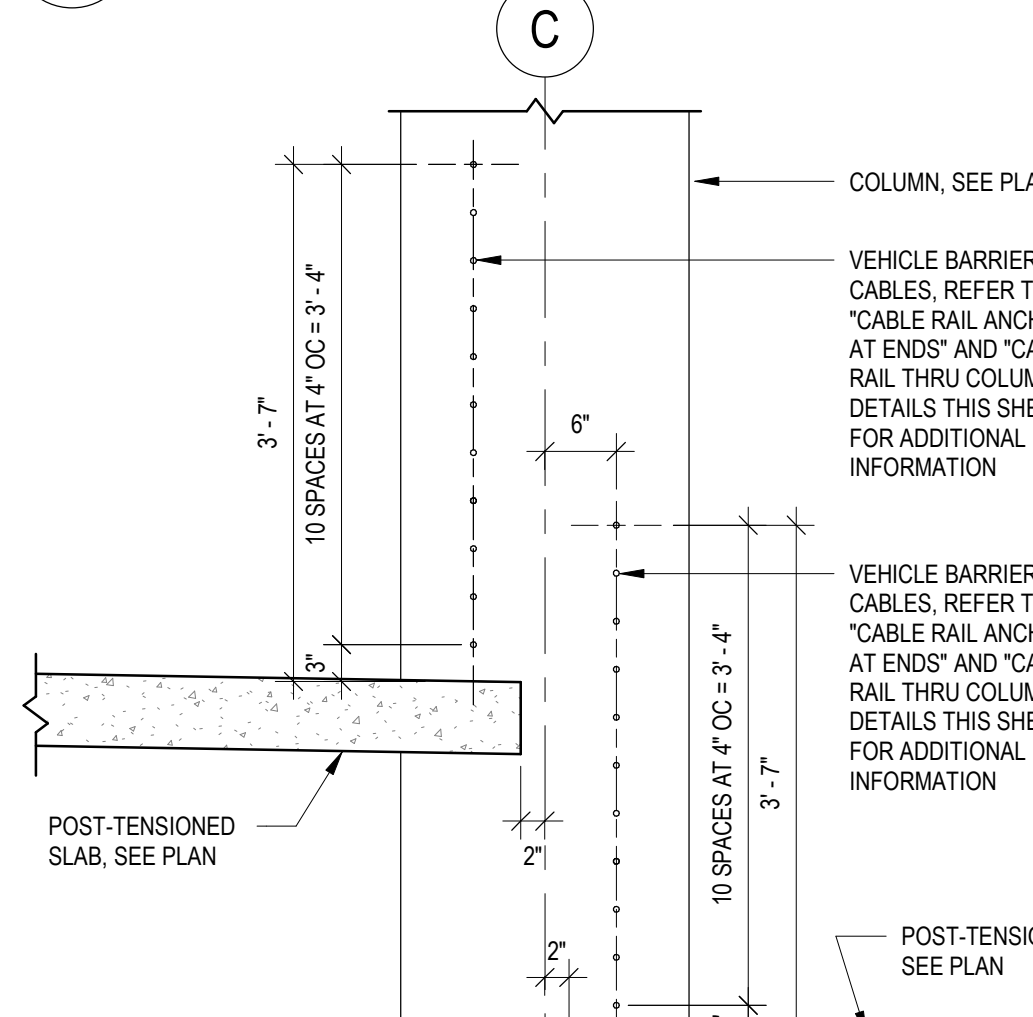
B7 CABLE RAIL INTERMEDIATE POST
1 1/2" x 1'-0"



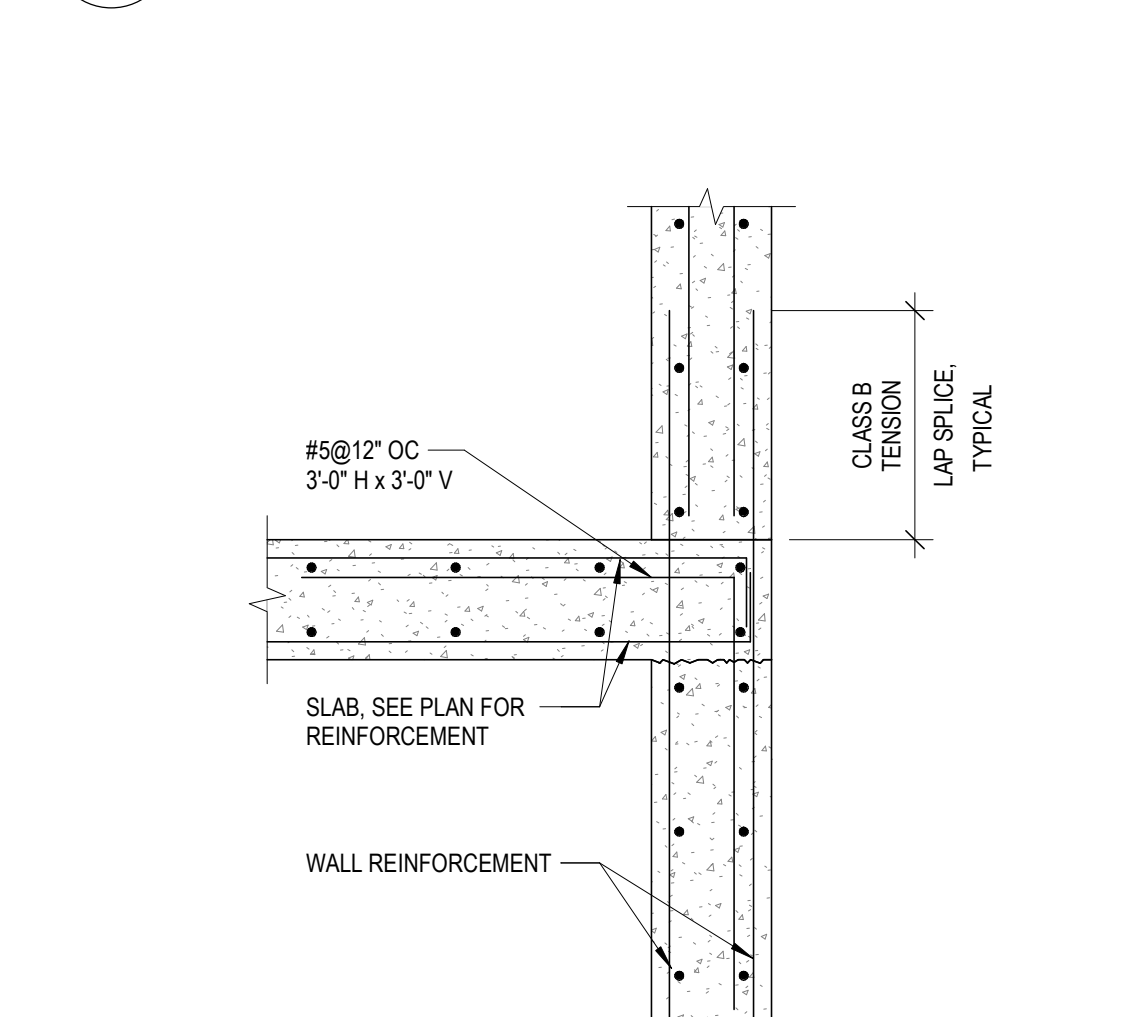
A2 MASONRY WALL BRACING ONE SIDE AVAILABLE
3" x 1'-0"



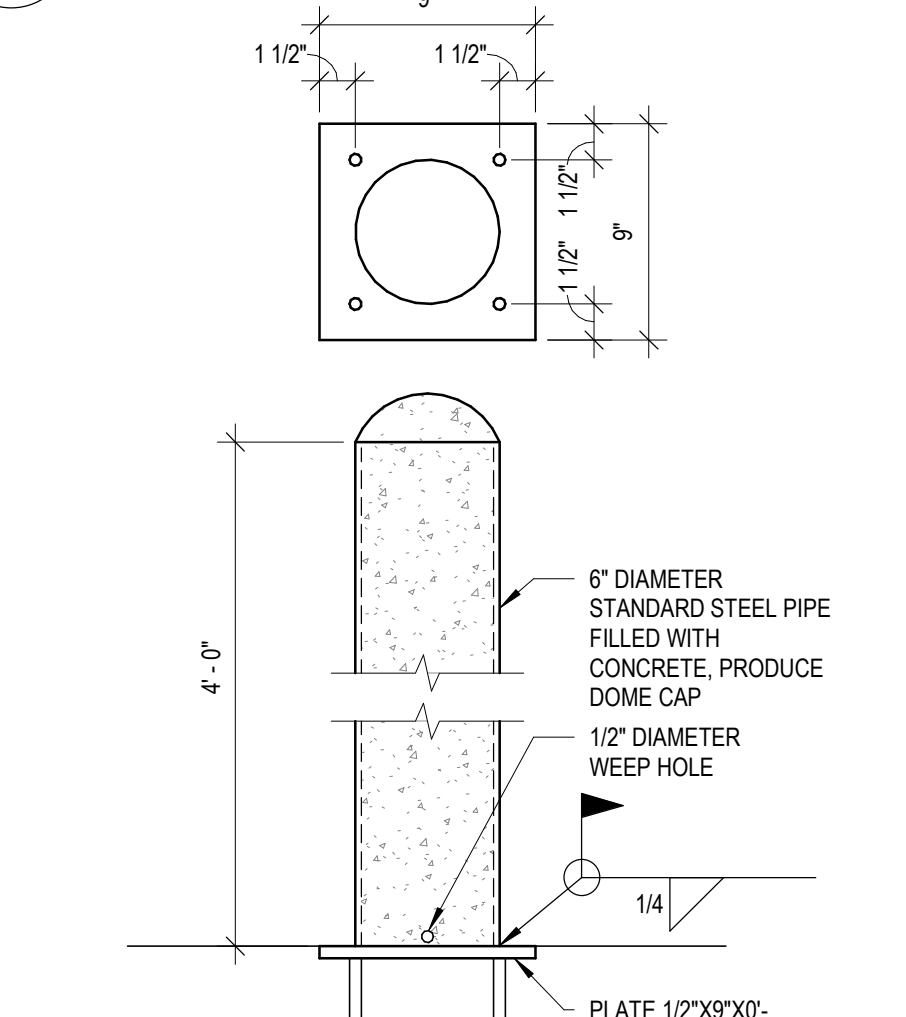
A3 ELEVATION KEY
1/2" x 1'-0"



A5 VEHICLE BARRIER AT RAMP
3/4" x 1'-0"



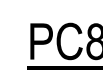
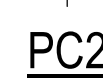
A6 SLAB EDGE AT WALL DETAIL
3/4" x 1'-0"



A7 PIPE BOLLARD DETAIL AT ELEVATED SLAB
1 1/2" x 1'-0"

CONCRETE PILE CAP SCHEDULE NOTES:

1. ALL BOTTOM REINFORCING SHALL HAVE STANDARD 180 DEGREE HOOKS EACH END.
2. PILE CAP REINFORCING PLACING ORDER:
LONG BARS BOTTOM
SHORT BARS BOTTOM
3. SEE TYPICAL PILE CAP ELEVATION FOR INFORMATION PERTAINING TO PILE CAP SCHEDULE.
4. SEE GRAPHICAL PILE TYPE KEY FOR PILE ALLOWABLE LOADS.
5. SEE TYPICAL UPLIFT PILE ELEVATION FOR REQUIREMENTS AT UPLIFT PILES.
6. UNLESS SHOWN OTHERWISE ON PLAN, ALL PILE CAP CENTERLINES ARE ON COLUMN GRID LINES.



TYPICAL PILE CAP ELEVATION



TYPICAL PIPE PILE CAP SPLICE



TYPICAL UPLIFT HP PILE ELEVATION



TYPICAL STEEL HP PILE SPLICE

CONCRETE COLUMN SCHEDULE NOTES:

1. SEE TYPICAL COLUMN DIAGRAM DETAIL. THIS SHEET FOR INFORMATION PERTAINING TO COLUMN SCHEDULE.
2. SEE CONCRETE COLUMN STRENGTH EXTENTS DETAIL. THIS SHEET FOR COLUMNS/LAB INTERFACE.
3. FOR ELEVATIONS OF COLUMNS SEE SCHEDULE UNLESS NOTED ON PLAN.
4. SEE POST TENSION DETAILS' SHEET FOR ADDITIONAL TIES REQUIRED AT BEAM COLUMN INTERSECTION.
5. SEE "TOP OF COLUMN DETAIL." THIS SHEET FOR REBAR DETAIL. AT TOP OF COLUMNS.
6. COLUMN REINFORCING TO BE CONTINUOUS OR TO BE TENSION SPUN ACCORDING TO 10-42 (10-8) SECTION 12.14.3 USING WELD OF MECHANICAL SPLICES. MECHANICAL OR WELD SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP. THEY SHALL BE STAGGERED A MINIMUM OF 48" APART SPLICES IN GRID LINE WILL NOT ALLOWED. UNLESS NOTED.
7. CENTER COLUMN C-42 SOUTH OF CIRCLE LANE 2.



TOP OF COLUMN DETAIL
AT PARKING SPACE



TOP OF COLUMN DETAIL
AT COMMERCIAL SPACE

CONCRETE COLUMN DOWELS DETAIL

EMBED PLATE CONNECTION DIAGRAM

EMBED PLATE AT HSS FRAME

EMBED PLATE AT HSS BASE



EMBED PLATE AT SNOW CHUTE DIAGRAM

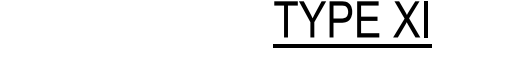
UNTEL SCHEDULE NOTES:

1. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL OPENINGS.
2. COORDINATE BOTTOM OF UNTEL ELEVATION WITH ARCHITECTURAL DRAWINGS.
3. ALL DIMENSIONS ARE NOMINAL MASONRY DIMENSIONS UNLESS NOTED OTHERWISE.
4. PROVIDE MINIMUM 6" BEARING EACH END UNLESS NOTED OTHERWISE.
5. FOR PRECAST CONCRETE UNTELS, WIDTH OF UNTEL = NOMINAL MASONRY WALL THICKNESS - 38".
6. FOR CMU UNTELS, CONTRACTOR TO PROVIDE TEMPORARY SHORING UNTIL MASONRY HAS PROPERLY SET (3 DAYS MINIMUM).
7. FOR STEEL UNTELS, PROVIDE 1/4" BOLT PER PLATE UNLESS NOTED OTHERWISE. WIDTH OF PLATE = NOMINAL MASONRY THICKNESS (INCLUDING VENEER); 1" EXTEND PLATE FULL LENGTH OF UNTEL UNLESS NOTED OTHERWISE.
8. FOR STEEL UNTELS GREATER THAN OR EQUAL TO 12" LONG, PROVIDE 1/2" DIAMETER x 4" LONG HEADED WELDED STUDS AT 32" OC ON TOP FLANGE. STEEL UNTELS LESS THAN 12" LONG MAY BE PLACED CLOSE WITHOUT ANCHOR BOLTS OR BEARING PLATES, UNLESS NOTED OTHERWISE.
9. ALL STEEL UNTELS HAVE Fy = 50 KSI.

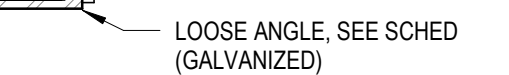
UNTEL SCHEDULE NOTES:



TYPE III



TYPE XI




LOOSE ANGLE, SEE SCHED
(GALVANIZED)



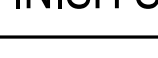






E.



POST-TENSIONED BEAM SCHEDULE																														
MARK	TYPE	LENGTH CL. SPAN	CL. SPAN	EFFECTIVE FORCE (KIPS)	TENDON ORIGINATES				SHORT BOTTOM BARS		LONG BOTTOM BARS				LONG TOP BARS				STIRRUPS				REMARKS							
					A	B	C	D	AMOUNT	LENGTH	SUPPORT	TYPE	AMOUNT	LENGTH	SUPPORT	TYPE	AMOUNT	LENGTH	AMOUNT	TYPE	SIZE	TYPE		SIZE						
																														
B01	1	62'-0"	20'	34'	347	24'	4"	30'	-	-	-	10"	B 3 S 5 A	CONT.	10"	CONT.	B 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	4	A	10'-0" 30 Ø"	BAL Ø 12"	SPACING AT EACH END	
B02	2	62'-0"	20'	34'	347	30'	4"	30'	-	-	-	CONT.	A 3 S 5 A	CONT.	10"	CONT.	A 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	4	B	10'-0" 30 Ø"	BAL Ø 12"		
B03	3	62'-0"	20'	34'	347	30'	4"	24'	-	-	-	CONT.	A 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"		BAL Ø 12"
B04	1	62'-0"	18'	34'	480	24'	4"	30'	-	-	-	CONT.	B 3 S 5 A	CONT.	10"	CONT.	B 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	10"	4	A	10'-0" 30 Ø"		BAL Ø 12"
B05	2	62'-0"	18'	34'	480	30'	4"	30'	-	-	-	CONT.	A 3 S 5 A	CONT.	10"	CONT.	A 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	10"	4	A	10'-0" 30 Ø"		BAL Ø 12"
B06	3	62'-0"	18'	34'	480	30'	4"	24'	-	-	-	CONT.	A 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"		BAL Ø 12"
B07	1	62'-0"	18'	34'	694	24'	4"	30'	-	-	-	10"	B 3 S 5 A	CONT.	10"	CONT.	B 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"		BAL Ø 12"
B08	2	62'-0"	18'	34'	694	30'	4"	30'	-	-	-	CONT.	A 3 S 5 A	CONT.	10"	CONT.	A 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	10"	4	A	10'-0" 30 Ø"		BAL Ø 12"
B09	3	62'-0"	18'	34'	694	30'	4"	24'	-	-	-	CONT.	A 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"		BAL Ø 12"
B10	1	62'-0"	18'	34'	694	24'	4"	30'	-	-	-	10"	B 3 S 5 A	CONT.	10"	CONT.	B 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"		BAL Ø 12"
B11	3	62'-0"	18'	34'	694	30'	4"	30'	-	-	-	CONT.	A 3 S 5 A	CONT.	10"	CONT.	A 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	10"	4	A	10'-0" 30 Ø"	BAL Ø 12"	
B12	5	62'-0"	18'	34'	587	24'	4"	24'	-	-	-	10"	B 3 S 5 B	10"	CONT.	CONT.	B 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B13	1	62'-0"	18'	34'	480	24'	4"	30'	-	-	-	10"	B 3 S 5 A	CONT.	10"	CONT.	B 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B14	3	62'-0"	18'	34'	480	30'	4"	30'	-	-	-	CONT.	A 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	10"	4	A	10'-0" 30 Ø"	BAL Ø 12"	
B15	5	23'-6"	14'	28'	107	18'	5"	18'	-	-	-	7"	B 2 S 5 B	7"	CONT.	B 3 8 -	-	-	-	-	3	B	10'-0" 30 Ø"	CONT.	7"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B16	5	18'-5"	14'	28'	80	10'	10'	10'	-	-	-	10"	B 2 S 5 B	7"	CONT.	B 3 8 -	-	-	-	-	3	B	10'-0" 30 Ø"	CONT.	7"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B17	5	62'-0"	18'	34'	801	24'	4"	24'	-	-	-	10"	B 3 S 5 B	10"	CONT.	B 4 8 -	-	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B18	1	62'-0"	20'	34'	347	24'	4"	30'	-	-	-	10"	B 3 S 5 A	CONT.	10"	CONT.	B 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	10"	4	A	10'-0" 30 Ø"	BAL Ø 12"	
B19	1	62'-0"	18'	34'	614	24'	4"	30'	-	-	-	10"	B 3 S 5 A	CONT.	10"	CONT.	B 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	10"	4	A	10'-0" 30 Ø"	BAL Ø 12"	
B20	3	62'-0"	18'	34'	614	30'	4"	24'	-	-	-	CONT.	A 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B21	5	23'-6"	18'	20'	160	15'	8"	15'	-	-	-	10"	B 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B22	5	62'-0"	18'	34'	694	24'	4"	24'	-	-	-	10"	B 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B23	1	19'-0"	18'	20'	160	15'	8"	10'	-	-	-	7"	B 3 S 5 A	CONT.	7"	CONT.	B 4 6 -	-	-	-	3	A	10'-0" 30 Ø"	CONT.	4	A	10'-0" 30 Ø"	BAL Ø 12"		
B24	3	19'-0"	18'	20'	160	15'	8"	10'	-	-	-	CONT.	A 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	3	B	10'-0" 30 Ø"	CONT.	4	B	10'-0" 30 Ø"	BAL Ø 12"		
B25	3	62'-0"	18'	34'	694	30'	4"	24'	-	-	-	CONT.	A 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B26	3	62'-0"	20'	34'	480	30'	4"	24'	-	-	-	CONT.	A 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B27	1	62'-0"	18'	34'	507	24'	4"	30'	-	-	-	10"	B 3 S 5 A	CONT.	10"	CONT.	B 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	10"	4	A	10'-0" 30 Ø"	BAL Ø 12"	
B28	2	62'-0"	18'	34'	507	30'	4"	30'	-	-	-	CONT.	A 3 S 5 A	CONT.	10"	CONT.	A 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	10"	4	A	10'-0" 30 Ø"	BAL Ø 12"	
B29	3	62'-0"	18'	34'	507	30'	4"	24'	-	-	-	CONT.	A 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B30	1	62'-0"	18'	34'	427	24'	4"	30'	-	-	-	10"	B 3 S 5 A	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	10"	4	A	10'-0" 30 Ø"	BAL Ø 12"	
B31	2	62'-0"	18'	34'	427	30'	4"	30'	-	-	-	CONT.	A 3 S 5 A	CONT.	10"	CONT.	A 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	10"	4	A	10'-0" 30 Ø"	BAL Ø 12"	
B32	3	62'-0"	18'	34'	427	30'	4"	24'	-	-	-	CONT.	A 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B33	5	23'-6"	20'	34'	80	18'	8"	18'	-	-	-	10"	B 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B34	1	62'-0"	18'	34'	534	24'	4"	30'	-	-	-	10"	B 3 S 5 A	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	10"	4	A	10'-0" 30 Ø"	BAL Ø 12"	
B35	3	62'-0"	18'	34'	534	30'	4"	24'	-	-	-	CONT.	A 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B36	1	62'-0"	18'	34'	507	24'	4"	24'	-	-	-	10"	B 3 S 5 A	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	10"	4	A	10'-0" 30 Ø"	BAL Ø 12"	
B37	2	62'-0"	18'	34'	507	24'	4"	30'	-	-	-	CONT.	A 3 S 5 A	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	A	10'-0" 30 Ø"	CONT.	10"	4	A	10'-0" 30 Ø"	BAL Ø 12"	
B38	3	62'-0"	26'	28'	507	24'	4"	19'	-	-	-	40"	A 3 S 5 B	10"	CONT.	CONT.	A 4 8 -	-	-	-	4	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B39	4	13'-6"	12'	16'	-	-	-	-	-	-	-	20"	I 3 J 7 I	20"	CONT.	B 3 7 -	-	-	-	-	3	B	10'-0" 30 Ø"	CONT.	20"	3	A	BAL Ø 8"	RAMP STAIR BARS, MILDLY REINFORCED	
B51	5	15'-9"	12'	24'	80	12'	-	18'	-	-	-	5"	B 2 S 5 B	20"	5"	CONT.	B 2 8 -	-	-	-	2	B	10'-0" 30 Ø"	CONT.	20"	3	A	BAL Ø 8"	STRAIGHT PROFILE	
B52	1	25'-0"	18'	24'	134	12'	5"	18'	-	-	-	10"	B 2 S 5 A	CONT.	10"	CONT.	B 2 8 -	-	-	-	2	A	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B53	2	31'-0"	18'	24'	134	18'	5"	18'	-	-	-	CONT.	A 2 S 5 A	CONT.	CONT.	A 2 8 -	-	-	-	2	A	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"		
B54	3	31'-0"	18'	24'	134	18'	5"	12'	-	-	-	CONT.	A 2 S 5 B	10"	CONT.	CONT.	A 2 8 -	-	-	-	2	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B55	1	31'-0"	16'	24'	240	12'	5"	18'	-	-	-	10"	B 2 S 5 A	CONT.	10"	CONT.	B 2 8 -	-	-	-	2	A	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B56	2	31'-0"	16'	24'	240	18'	5"	18'	-	-	-	CONT.	A 2 S 5 A	CONT.	CONT.	A 2 8 -	-	-	-	2	A	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"		
B57	3	31'-0"	16'	24'	240	18'	5"	12'	-	-	-	CONT.	A 2 S 5 B	10"	CONT.	CONT.	A 2 8 -	-	-	-	2	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B58	1	31'-0"	16'	24'	187	12'	5"	18'	-	-	-	10"	B 2 S 5 A	CONT.	10"	CONT.	B 2 8 -	-	-	-	2	A	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B59	2	31'-0"	16'	24'	187	18'	5"	18'	-	-	-	CONT.	A 2 S 5 A	CONT.	CONT.	A 2 8 -	-	-	-	2	A	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"		
B60	3	31'-0"	16'	24'	187	18'	5"	12'	-	-	-	CONT.	A 2 S 5 B	10"	CONT.	CONT.	A 2 8 -	-	-	-	2	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B61	1	4-10 1/2"	18'	24'	107	18'	-	18'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	STRAIGHT PROFILE	
B62	3	15'-9"	16'	24'	107	18'	8"	14'	-	-	-	4-8 1/2"	B 2 S 5 B	6"	4-8 1/2"	CONT.	B 2 8 -	-	-	-	2	B	10'-0" 30 Ø"	CONT.	6"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B63	5	37'-5"	18'	24'	106	14'	8"	14'	-	-	-	10"	B 2 S 5 B	48"	10"	CONT.	B 2 8 -	-	-	-	2	B	10'-0" 30 Ø"	CONT.	48"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B64	4	37'-5"	18'	24'	160	6"	4"	8"	-	-	-	10"	B 2 S 5 B	10"	CONT.	B 2 8 -	-	-	-	-	2	B	10'-0" 30 Ø"	CONT.	48"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B65	4	19'-5"	16'	24'	267	18'	18"	8"	-	-	-	4"	B 2 S 5 B	48"	4"	CONT.	B 3 8 -	-	-	-	3	B	10'-0" 30 Ø"	CONT.	48"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B66	4	25'-0"	18'	24'	134	18'	5"	16"	-	-	-	10"	B 2 S 5 B	10"	CONT.	B 2 8 -	-	-	-	-	2	B	10'-0" 30 Ø"	CONT.	10"	4	B	10'-0" 30 Ø"	BAL Ø 12"	
B67	1	31'-0"	16'	24'	134	12'	8"	18"	-	-	-	10"	B 2 S																	

[illegible]

FLOOR PLAN SYMBOLS LEGEND			Revised 05-23-2017
	WALL	(M100)	EQUIPMENT NUMBER
	EXISTING WALL TO REMAIN		WORKING POINT
	DOOR		INTERIOR SECTION REFERENCE TAG
	EXISTING DOOR AND FRAME TO REMAIN		EXTERIOR SECTION REFERENCE TAG
	INTERIOR BORROWED LIGHT		INTERIOR ELEVATION REFERENCE TAG
	DIMENSION LINE NOMINAL SIZE		EXTERIOR ELEVATION REFERENCE TAG
	PARTITION TAG		PLAN DETAIL REFERENCE TAG
	OFFICE		ROOM NAME AND NUMBER
	FLOOR ELEVATION		KEYNOTE
	REVISION CLOUD		—CROMMET
	NEW GRIDLINE		REVISION TAG
	EXISTING GRIDLINE		CENTERLINE

FINISH SYMBOLS LEGEND & ABBREVIATIONS			Revised 02/20/2019
			MATERIAL CHANGE LOCATION
			MATERIAL INSTALL DIRECTION
	WALL PROTECTION		ACCENT WALL FINISH
	CORNER GUARD		KEYNOTE

















FLOR AND FINISH PLAN GENERAL NOTES

1. ALL LOUVERS, VENTS, GRILLES AND OTHER INSCO MECHANICAL AND ELECTRICAL SERVICES ARE TO BE PAINTED TO MATCH SURFACE TO WHICH THEY APPEAR. UNLESS OTHERWISE NOTED.
2. HM FRAMES TO BE PAINTED TO MATCH THE SURFACE ON WHICH IT APPEARS. UNLESS NOTED OTHERWISE.
3. ALL GPO CEILINGS AND SOFFITS TO BE PNT. UNLESS NOTED OTHERWISE.
4. WHEN MORE THAN ONE FINISH IS LISTED IN A ROOM FINISH TAKE THE FIRST FINISH TO BE THE PRIMARY FINISH OTHER FINISHES LISTED ARE SPECIFICALLY CALLED OUT AND ARE SHOWN IN ELEVATION.
5. REFER TO SCHEDULES FOR ADDITIONAL, CASEWORK AND FINISH NOTES.
6. CONTRACTOR IS RESPONSIBLE FOR MAKING SMOOTH, FLAT JOINTS BETWEEN TRANSITION OF DIFFERENT FLOORING MATERIALS.
7. ALL CORNER GUARDS TO BE FULL HEIGHT, UNLESS NOTED OTHERWISE.
8. PAINT AND WOOD STAIN DRAW DETAILS MUST BE SUBMITTED AND APPROVED BY INTERIOR DESIGNER.
9. NO RAB AT MASONRY WALLS - TYPICAL.
10. ALL FLOOR FINISHES SHALL CHANGE AT CENTERLINE OF DOOR, UNLESS NOTED OTHERWISE.
11. REFER TO FINISH SCHEDULE FOR TOP.
12. HANDRAILS TO BE INSTALLED WITH FINISH AT 3" AFF. UNLESS OTHERWISE NOTED.
13. INSTALL WOOD, PLANK, AND GRAPHIC FLM WITH GRAIN VERTICAL. UNLESS NOTED OTHERWISE.

GENERAL NOTES

Revised 20-12-2019

1. THE ARCHITECTURAL DRAWINGS SHOW PRINCIPAL AREAS AND LIMITS OF CONSTRUCTION WHERE WORK MUST BE ACCOMPLISHED UNDER THE CONTRACT. INCIDENTAL WORK MAY BE NECESSARY IN AREAS NOT SHOWN ON ARCHITECTURAL DRAWINGS DUE TO CHANGING ELECTRICAL, MECHANICAL, AND PLUMBING CONDITIONS. SUCH WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACT AND ALL TRADES SHALL INSPECT THESE AREAS. ADEQUATE WORK REQUIRED AND DO THE WORK IN ACCORDANCE OF CONTRACT REQUIREMENTS AT NO ADDITIONAL COST TO THE OWNER.
2. CONTRACTORS SHALL VISIT THE SITE DURING BUILDING TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS. THE GENERAL CONTRACTOR SHALL LOCATE, INSPECT AND FIELD VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS PRIOR TO DEMOLITION AND CONSTRUCTION. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.
3. DO NOT SCALE DRAWINGS. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.
4. WHEREVER OPENINGS ARE CUT THROUGH FIRE RATED PARTITIONS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE UL-955 TYPE A RATCH AND REPAIR ANY DAMAGING TO MAINTAIN THE INTEGRITY OF THE FIRE RATING.
5. GENERAL CONTRACTOR TO CHECK MECHANICAL DRAWINGS FOR EXISTING PIPES AND DUCTS FURRED IN WALLS. VERIFY SIZE AND LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO PROCEEDING WITH FURRING.
6. FIREPROOFING SHALL BE UNLINED. ANY SUBCONTRACTOR PENETRATING THE FLOORING SHALL BE REQUIRED TO REPLACE THE FLOORING TO THE ORIGINAL CONDITION, INCLUDING ALL THE SUBCONTRACTORS RESPONSIBILITY.
7. EQUIPMENT UNIT DIMENSIONS ARE FOR PRODUCT DESCRIPTION ONLY. VERIFY SIZE WITH MANUFACTURER.
8. ALL DIMENSIONS PERTAINING TO MECHANICAL OR ELECTRICAL SERVICES OR EQUIPMENT SHALL BE VERIFIED WITH THE RESPECTIVE TRADE.
9. CONTRACTORS THAT PENETRATE AND/OR DISTURB ANY AREAS AT EXISTING CONDITIONS, PATCH AREA TO MATCH EXISTING ADJACENT AREA OR SURFACE AND PREPARE FOR SCHEDULED FINISH APPLICATION. COORDINATE WORK WITH GENERAL CONTRACTOR PRIOR TO PROCEEDING.
10. VERIFY HEIGHTS AND LOCATIONS OF ACCESS PANELS (AP) AND COORDINATE TYPES OF ACCESS PANELS WITH ARCHITECT.
11. PROVIDE UNITS AND FRAMING FOR GRILLES, LOUVERS, AND ROOF VENTS AS REQUIRED BY MECHANICAL CONTRACTOR. VERIFY SIZE AND LOCATION.
12. STRUCTURAL, MECHANICAL, AND ELECTRICAL ABBREVIATIONS AND SYMBOLS MAY DIFFER FROM ARCHITECTURAL. SEE RESPECTIVE SECTIONS AND DRAWINGS FOR DEFINITIONS AND MEASURE THE WORK.
13. AT MECHANICAL AND ELECTRICAL EQUIPMENT ROOMS, PROVIDE 3/4" FRT. PYROLYD BACKING BEHIND ALL SURFACE MOUNTED EXTERIORS AND EQUIPMENT, UNLESS NOTED OTHERWISE.
14. HANGING PIPES SHALL BE PROVIDED BY TRADES AND LOCATIONS. SEE THE MECHANICAL AND ELECTRICAL DRAWINGS FOR SIZES AND LOCATIONS.

REFLECTED CEILING PLAN SYMBOLS LEGEND			Revised 12/2011
	GPOD CEILING / SOFFIT		2 x 4 LIGHT FIXTURE
	ACT CEILING SYSTEM		2 x 2 LIGHT FIXTURE
	ACCESS PANEL		1 x 4 LIGHT FIXTURE
	CEILING ELEVATION AND FINISH		PENDANT STRIP LIGHT FIXTURE
	MECHANICAL SUPPLY GRILLE		PENDANT STRIP LIGHT FIXTURE
	MECHANICAL RETURN GRILLE		RECESSED LIGHT FIXTURE
	KEYNOTE		WALL SCONCE LIGHT FIXTURE
	MECHANICAL RADIANT HEAT PANEL		MECHANICAL LINEAR SUPPLY GRILLE
NOTE: NOT ALL SYMBOLS MAY BE USED ON EACH PLAN			

REFLECTED CEILING PLAN GENERAL NOTES

Revision 11/1/2019

1. GENERAL CONTRACTOR TO COORDINATE ALL CEILING-MOUNTED EQUIPMENT SUPPORT REQUIREMENTS, LOCATIONS, DIMENSIONS, ETC WITH EQUIPMENT SUPPLIER AND OWNER, PRIOR TO INSTALLATION.
2. ALL CEILINGS TO BE EXPOSED CONCRETE. NO FINISHES APPLIED, UNLESS OTHERWISE NOTED.
3. FINISHED GROUND FLOOR SHALL EXTEND 1' BEYOND FACE AND EXPOSED ENDS OF WALL CASINGS, FULL HEIGHT CASINGS, ETC. UNLESS NOTED OTHERWISE. COORDINATE CEILING DIMENSIONS TO SUPERIOR FLOOR FACSA-SUPPLY DETAILS ARE REFERENCED FROM THE REFLECTED CEILING PLAN.
4. SEE MECHANICAL DRAWINGS FOR SPRINKLER HEAD TYPES AND LOCATIONS. CENTER ALL HEADS IN ACTUALLY NOTED OTHERWISE.
5. ALL CEILING MOUNTED ITEMS SUCH AS LIGHT FIXTURES, GRILLES, DIFFUSERS, SPEAKERS, EXIT LIGHTS, ETC. SHALL BE LOCATED IN THE CENTER OF EXIT PANELS, SPRINKLER HEADS, ETC. UNLESS OTHERWISE NOTED. COORDINATE WITH MECHANICAL AND ELECTRICAL DRAWINGS

PARKING STRIPING GENERAL NOTES:

1. ALL STRIPING IS YELLOW
2. ALL PARKING IS DIVIDED BY A SINGLE 4" LINE
3. THE WIDTH OF THE PARKING SPACE IS MEASURED FROM THE CENTERLINE TO CENTERLINE OF THE SINGLE STRIP.
4. PAINT A BACK LINE ON ALL COMPACT SPACES (C).
5. CENTER STALL OF PARKING SPACES TO BE CENTERED ON STRUCTURAL COLUMNS, WHERE APPLICABLE.
6. STRIPING TO TERMINATE A CONSISTENT DISTANCE FROM END WALL, MAXIMUM 6' OPEN.
7. DO NOT PAINT THE HANDICAPPED SYMBOL ON THE CONCRETE.
8. DO NOT PAINT THE LETTER THAT DESIGNATES STALL TYPE (I, E, T, "C").

PARKING STALL SYMBOLS LEGEND	
	<p>ACCESSIBLE PARKING SPOT (8'-0" X 16'-0")</p> <p>8'-0" ACCESS AISLE</p> <p>NOTE: ALSO USED FOR ACCESSIBLE EVCS PARKING SPOT</p>
	<p>ACCESSIBLE VAN PARKING SPOT (8'-0" X 16'-0")</p> <p>8'-0" ACCESS AISLE</p>
	<p>STANDARD PARKING SPOT (9'-0" X 16'-0")</p> <p>NOTE: ALSO USED FOR EVCS PARKING SPOT</p>
	<p>COMPACT PARKING SPOT (8'-0" X 16'-0")</p>
	<p>MOTORCYCLE / MOPED PARKING SPOT (5'-0" X 16'-0")</p>

PARKING COUNT PER TYPE		PARKING COUNT PER LEVEL		PARKING COUNT PER LEVEL	
STALL TYPE	COUNT	STALL TYPE	COUNT	STALL TYPE	COUNT
Accessible (8'0" X 16'0")	6	FIRST LEVEL PARKING		FLOOR PLAN - SECOND LEVEL 149	149
Accessible (8'0" X 16'0")	1	Accessible (8'0" X 16'0")	1		
Accessible VAN (8'0" X 16'0")	3	Accessible (8'0" X 16'0")	3	THIRD LEVEL PARKING	
COMPACT (8'6" X 16'0")	56	Accessible VAN (8'0" X 16'0")	3	COMPACT (8'6" X 16'0")	12
EV CHARGING STATION (8'0" X 16'0")	1	Accessible VAN (8'0" X 16'0")	3	COMPACT (8'6" X 16'0")	12
MOTORCYCLE/EMPOED (8'0" X 9'0")	8	EV CHARGING STATION (8'0" X 16'0")	1	THIRD LEVEL PARKING 148	148
MOTORCYCLE/EMPOED (8'0" X 10'0")	12	MOTORCYCLE/EMPOED (8'0" X 9'0")	8		
STANDARD (8'0" X 16'0")	675	MOTORCYCLE/EMPOED (8'0" X 10'0")	12	FLOOR PLAN - FOURTH LEVEL	
		STANDARD (8'0" X 16'0")	44	COMPACT (8'6" X 16'0")	12
		FIRST LEVEL PARKING 84	84	STANDARD (8'0" X 16'0")	136
				FLOOR PLAN - FIFTH LEVEL 148	148
		FLOOR PLAN - SECOND LEVEL			
		Accessible (8'0" X 16'0")	13	FLOOR PLAN - FIFTH LEVEL	
		COMPACT (8'6" X 16'0")	12	COMPACT (8'6" X 16'0")	9
		EV CHARGING STATION (8'0" X 16'0")	1	STANDARD (8'0" X 16'0")	137
		EV CHARGING STATION (8'0" X 16'0")	1	FLOOR PLAN - FIFTH LEVEL 146	146
		STANDARD (8'0" X 16'0")	129	STANDARD (8'0" X 16'0")	136
				Total 675	675

GRAEF

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CONSULTANTS:

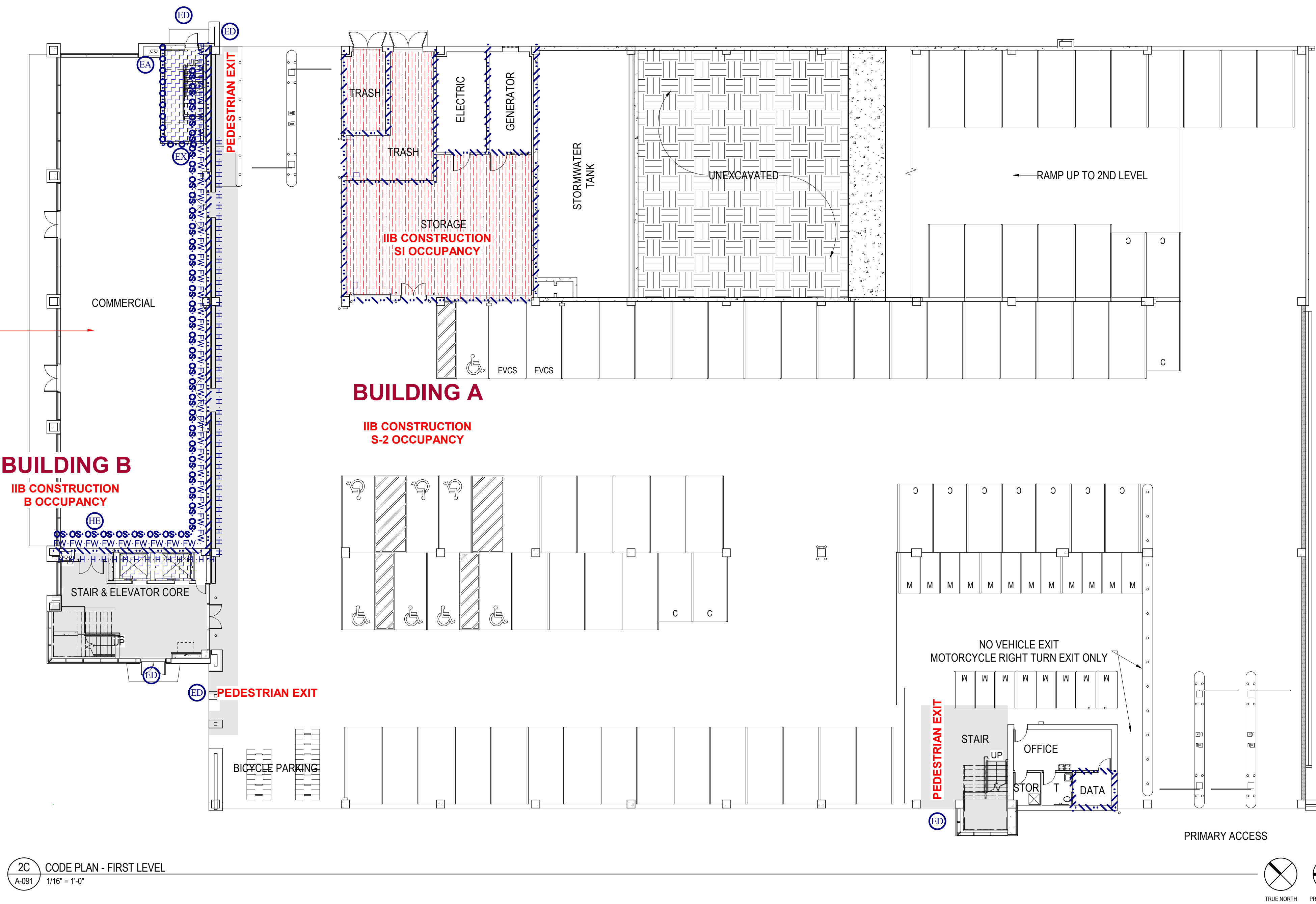
B | W | B | R

PROJECT TITLE:
Capitol East Parking Garage

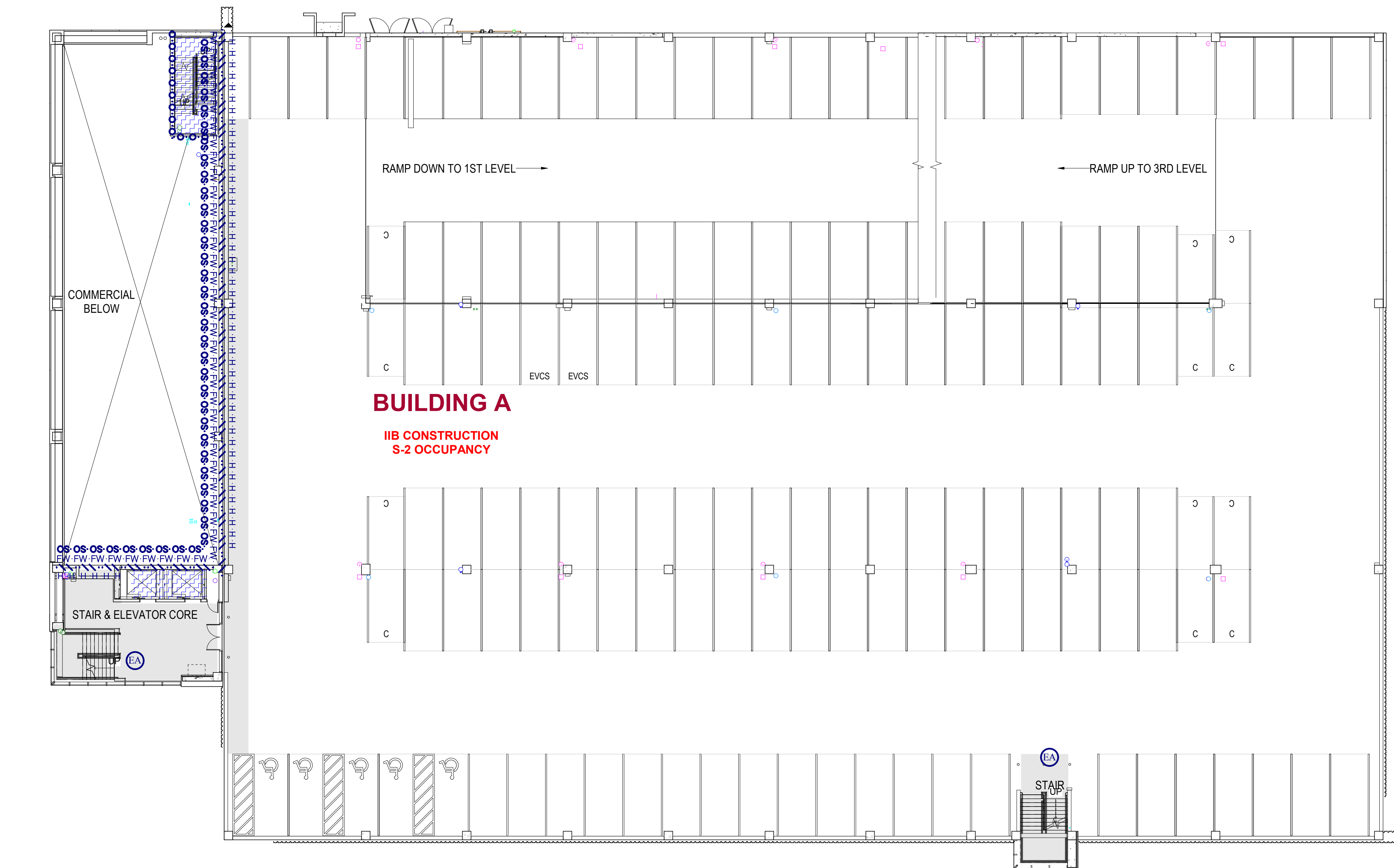
CLIENT:
CITY OF MADISON PARKING UTILITY
215 MARTIN LUTHER KING JR BLVD
MADISON, WISCONSIN 53801-2986

NO		DATE	DESCRIPTION	ISSUE:

PROJECT INFORMATION:	
PROJECT NUMBER:	3.2016187.00
DATE:	06/30/2017
DRAWN BY:	LS
CHECKED BY:	KF
APPROVED BY:	RG
SCALE:	AS NOTED
SET TYPE:	BD
SHEET TITLE:	
SYMBOLS LEGENDS, AND GENERAL NOTES	



2C
A-091
CODE PLAN - FIRST LEVEL
1/16" = 1'-0"



3A
A-091
CODE PLAN - SECOND LEVEL
1/16" = 1'-0"

CODE SUMMARY

PROJECT DESCRIPTION Project consists of two separate buildings. Building A - Five tier, 600,000 sq ft parking structure. Building B - Two tier, 100,000 sq ft parking structure. Public access to the ramp is from Livingston St. and Main St.	
GENERAL TYPE OF PROJECT	YES NO
NEW BUILDING	●
ADDITION	●
REMODEL	●
AUTHORITIES HAVING JURISDICTION (A/H's)	YES NO
CITY OF MADISON	●
STATE OF WISCONSIN	●
APPLICABLE REGULATIONS	YES NO
2009 IBC / 2011 WISCONSIN COMMERCIAL BUILDING CODE	●
2000 NFPA 101 (LIFE SAFETY CODE)	●
ANSI A117.1-103	●
ADAA	●

CODE SUMMARY - BUILDING A

OCCUPANCY CLASSIFICATION(S) - BUILDING A	YES NO
OCCUPANCIES (IBC CH 3 & 4) (LSC CH 12-42)	S-2
CHANGE OF OCCUPANCY? (If Remodeling)	●
SEPARATED OCCUPANCIES? (IBC Section 508)	●
FIRE BARRIER RATING(S) (Section 707)	SEE CODE PLANS
TYPE(S) OF CONSTRUCTION	IBC (Chapter 6) IB
CONSTRUCTION TYPE(S)	SEE CODE PLANS
AREA SEPARATIONS / FIRE WALLS	SEE CODE PLANS
ALLOWABLE AREA PER TIER (S-2)	50,000
BASIC ALLOWABLE AREA (From Table 503.4.1)	50,000
FRONTAGE INCREASE (From Table 503.4.1)	12,500
SPRINKLER INCREASE (From Table 503.4.1)	0
BASIC ALLOWABLE AREA X 1 (1-HOUR CONSTRUCTION SUBSET)	NA
BASIC ALLOWABLE AREA X 2 (2-HOUR CONSTRUCTION SUBSET)	NA
BASIC ALLOWABLE AREA X 3 (3-HOUR CONSTRUCTION SUBSET)	NA
TOTAL ALLOWABLE AREA/FLOOR	62,500
ACTUAL AREA PER LEVEL	
PARKING RAMP (S-2)	
FIRST TIER	45,730
SECOND TIER	50,904
THIRD TIER	50,904
FOURTH TIER	50,904
FIFTH TIER	42,740
TOTAL	241,182

BUILDING HEIGHT	YES NO
ONE-FOUR SPRINKLER SUBSET (From Table 503.4.1)	●
EXTRA FLOOR HEIGHT FOR SPRINKLER (From Table 503.4.1)	0
EGRESS	YES NO
AREAS OF REFUGE REQUIRED	●
ACCESSIBLE MEANS OF EGRESS ("MODE") REQUIRED	●
ELEVATOR REQUIRED AS MEANS OF EGRESS	●
MEANS OF EGRESS CAPACITY (width in inches)	75"

OCCUPANT LOAD OF BUILDING (B)	ACTUAL AREA	SF/OCCUPANT	OCCUPANTS
FIRST LEVEL	42,901		
SECOND LEVEL	45,755		
THIRD LEVEL	51,640	200 gross	1,191
FOURTH LEVEL	52,285		
FIFTH LEVEL	42,703		
FIRST LEVEL, ACC. STOR.	4,657	300 gross	16
FIRST LEVEL BUSINESS	101	100 gross	1
TOTAL BUILDING OCCUPANT LOAD			1,208

FIRE-RESISTIVE REQUIREMENTS	TABLE 601.5 TEST
STRUCTURAL FRAME	
COLUMNS	2 IBC 722.2.4
TRUSSES	2 IBC 722.2.3(2)
BEARING WALLS	
EXTERIOR BEARING WALLS	NA
INTERIOR BEARING WALLS	NA
NON-BEARING WALLS AND PARTITIONS (IBC Table 602 and Section 602.4.1)	
EXTERIOR	NA
INTERIOR	See Code Plans
FLOOR CONSTRUCTION	
FLOOR/CEILING ASSEMBLY	2 IBC 722.2.3(2)
PRIME & SEC. FLOOR BEAMS, JOISTS	2 IBC 722.2.3(2)
ROOF CONSTRUCTION	
ROOF/CEILING ASSEMBLY	2 IBC 722.2.3(2)
PRIME & SEC. ROOF BEAMS, JOISTS	2 IBC 722.2.3(2)
OTHER	
SHAFTS AND EXIT PASSAGEWAYS	0 N/A
EXTERIOR DOORS AND WINDOWS	0 N/A
BUILDING IS OF TYPE IIB CONSTRUCTION. STRUCTURAL FRAME, FLOOR/CEILING, ROOF/CEILING CONSTRUCTION ARE TO BE OF RATINGS INDICATED TO SUPPORT 2-HOUR RATED FIRE WALL REQ'D BY IIB CONSTRUCTION THAT SEPARATES BUILDING A AND B.	

MISCELLANEOUS	YES NO
FIRE RESISTIVE CORRIDORS? (IBC Table 1018.1)	●
SMOKE TIGHT CORRIDORS (SMOKE PARTITIONS) (IBC 407.2)	●
INCIDENTAL USE AREA RATING(S) (IBC Table 1018.1)	SEE PLANS
INTERIOR FINISHES CLASSIFICATION	TABLE 803.4 & SECTION 803.4.1
OCCUPANCY	EXITS CORRIDORS ROOMS (UND.)
S-2	NA NA NA C NA

NO PLUMBING FIXTURES ASSUMED FOR THE S-2 OCCUPANCY

CODE SUMMARY - BUILDING B

OCCUPANCY CLASSIFICATION(S) - BUILDING B	YES NO
OCCUPANCIES (IBC CH 3 & 4) (LSC CH 12-42)	B
CHANGE OF OCCUPANCY? (If Remodeling)	●
SEPARATED OCCUPANCIES? (IBC Section 508)	●
FIRE BARRIER RATING(S) (Section 707)	SEE CODE PLANS
TYPE(S) OF CONSTRUCTION	IBC (Chapter 6) IB
CONSTRUCTION TYPE(S)	SEE CODE PLANS
AREA SEPARATIONS / FIRE WALLS	SEE CODE PLANS
ALLOWABLE AREA PER FLOOR (B)	23,000
BASIC ALLOWABLE AREA (From Table 503.4.1)	23,000
FRONTAGE INCREASE (From Table 503.4.1)	5,750
SPRINKLER INCREASE (From Table 503.4.1)	0
BASIC ALLOWABLE AREA X 1 (1-HOUR CONSTRUCTION SUBSET)	NA
BASIC ALLOWABLE AREA X 2 (2-HOUR CONSTRUCTION SUBSET)	NA
BASIC ALLOWABLE AREA X 3 (3-HOUR CONSTRUCTION SUBSET)	NA
TOTAL ALLOWABLE AREA/FLOOR	74,750
ACTUAL AREA PER LEVEL	
FIRST FLOOR	4,662
SECOND FLOOR	5,668
TOTAL	10,330

BUILDING HEIGHT	YES NO
ONE-FOUR SPRINKLER SUBSET (From Table 503.4.1)	●
EXTRA FLOOR HEIGHT FOR SPRINKLER (From Table 503.4.1)	0
EGRESS	YES NO
AREAS OF REFUGE REQUIRED	●
ACCESSIBLE MEANS OF EGRESS ("MODE") REQUIRED	●
ELEVATOR REQUIRED AS MEANS OF EGRESS	●
MEANS OF EGRESS CAPACITY (width in inches)	17"

OCCUPANT LOAD OF BUILDING (B)	ACTUAL AREA	SF/OCCUPANT	OCCUPANTS
FIRST LEVEL	4,662		
SECOND LEVEL	5,668	100 gross	103
TOTAL BUILDING OCCUPANT LOAD			103

FIRE-RESISTIVE REQUIREMENTS	TABLE 601.5 TEST
STRUCTURAL FRAME	
COLUMNS	2 IBC 722.2.4
TRUSSES	2 IBC 722.2.3(2)
BEARING WALLS	
EXTERIOR BEARING WALLS	NA
INTERIOR BEARING WALLS	NA
NON-BEARING WALLS AND PARTITIONS (IBC Table 602 and Section 602.4.1)	
EXTERIOR	NA
INTERIOR	See Code Plans
FLOOR CONSTRUCTION	
FLOOR/CEILING ASSEMBLY	2 IBC 722.2.3(2)
PRIME & SEC. FLOOR BEAMS, JOISTS	2 IBC 722.2.3(2)
ROOF CONSTRUCTION	
ROOF/CEILING ASSEMBLY	2 IBC 722.2.3(2)
PRIME & SEC. ROOF BEAMS, JOISTS	2 IBC 722.2.3(2)
OTHER	
SHAFTS AND EXIT PASSAGEWAYS	0 N/A
EXTERIOR DOORS AND WINDOWS	0 N/A
BUILDING IS OF TYPE IIB CONSTRUCTION. STRUCTURAL FRAME, FLOOR/CEILING, ROOF/CEILING CONSTRUCTION ARE TO BE OF RATINGS INDICATED TO SUPPORT 2-HOUR RATED FIRE WALL REQ'D BY IIB CONSTRUCTION THAT SEPARATES BUILDING A AND B.	

MISCELLANEOUS	YES NO
FIRE RESISTIVE CORRIDORS? (IBC Table 1018.1)	●
SMOKE TIGHT CORRIDORS (SMOKE PARTITIONS) (IBC 407.2)	●
INCIDENTAL USE AREA RATING(S) (IBC Table 1018.1)	SEE PLANS
INTERIOR FINISHES CLASSIFICATION	TABLE 803.4 & SECTION 803.4.1
OCCUPANCY	EXITS CORRIDORS ROOMS (UND.)
B	NA NA NA C NA

ALL FIT-OUT, INCLUDING PLUMBING FIXTURES, OF THE B- OCCUPANCY IS NOT IN CONTRACT AND WILL BE DONE IN THE FUTURE.

CODE PLAN SYMBOLS LEGEND

	SMOKE PARTITION (IBC 710)
	FIRE PARTITION (IBC 710)
	'CORRIDOR WALLS' (IBC 708)
	1 HR FIRE RATED ASSEMBLY (IBC 508.2.3)
	1 HR FIRE RATED ASSEMBLY (IBC 508.2.3)
	FIRE DAMPER USUALLY REQUIRED
	1 HR FIRE RATED ASSEMBLY WITH SMOKE PROTECTION
	2 HR FIRE RATED ASSEMBLY WITH SMOKE PROTECTION
	FIRE DAMPER USUALLY REQUIRED
	2 HR FIRE RATED ASSEMBLY WITH SMOKE PROTECTION
	3 HR FIRE RATED ASSEMBLY WITH SMOKE PROTECTION
	FIRE DAMPER USUALLY REQUIRED
	3 HR FIRE RATED ASSEMBLY WITH SMOKE PROTECTION
	FIRE WALL (IBC 708)
	EXIT ACCESS
	EXIT
	EXIT DISCHARGE
	HORIZONTAL EXIT
	DELAYED EGRESS
	FIRE EXTINGUISHER
	FIRE EXTINGUISHER CABINET
	FIRE VALVE
	FIRE VALVE CABINET
	PROJECT LIMITS LINE

	SMOKE BOUNDARY (IBC 710, 716.5, LSC XX 3.7.8.3)
	HORIZONTAL EXIT (IBC 103)
	OCCUPANCY SEPARATION (IBC 508.2.5, 710, LSC XX 3.2 (FIRE BARRIERS))
	HEALTHCARE SUITE (IBC 1014.2.2)

	EGRESS PATH (SURROUNDING SYMBOLS INDICATE RATING AND DAMPER REQUIREMENTS)
	EXIT PASSAGEWAY (SURROUNDING SYMBOLS INDICATE RATING AND DAMPER REQUIREMENTS)
	SHAFT (SURROUNDING SYMBOLS INDICATE RATING AND DAMPER REQUIREMENTS)
	INCIDENTAL USE (SURROUNDING SYMBOLS INDICATE RATING AND DAMPER REQUIREMENTS)

NOT ALL SYMBOLS MAY BE USED ON EACH PLAN. REFERENCES TO LSC (LIFE SAFETY CODE) "XX" REFERS TO CH 12-42.

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CONSULTANTS:

B W B R

PROJECT TITLE:

Capitol East Parking Garage

211 SOUTH LIVINGSTON STREET, MADISON WI 53703
PHONE NUMBER 1627
CONTRACT NUMBER 7951

CLIENT:

CITY OF MADISON PARKING UTILITY

215 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53701-2886

ISSUE:

NO DATE DESCRIPTION

PROJECT INFORMATION:

PROJECT NUMBER: 3.2016187.00

DATE: 06/30/2017

DRAWN BY: LS

CHECKED BY: RL

APPROVED BY: RG

SCALE: AS NOTED

SET TYPE: BD

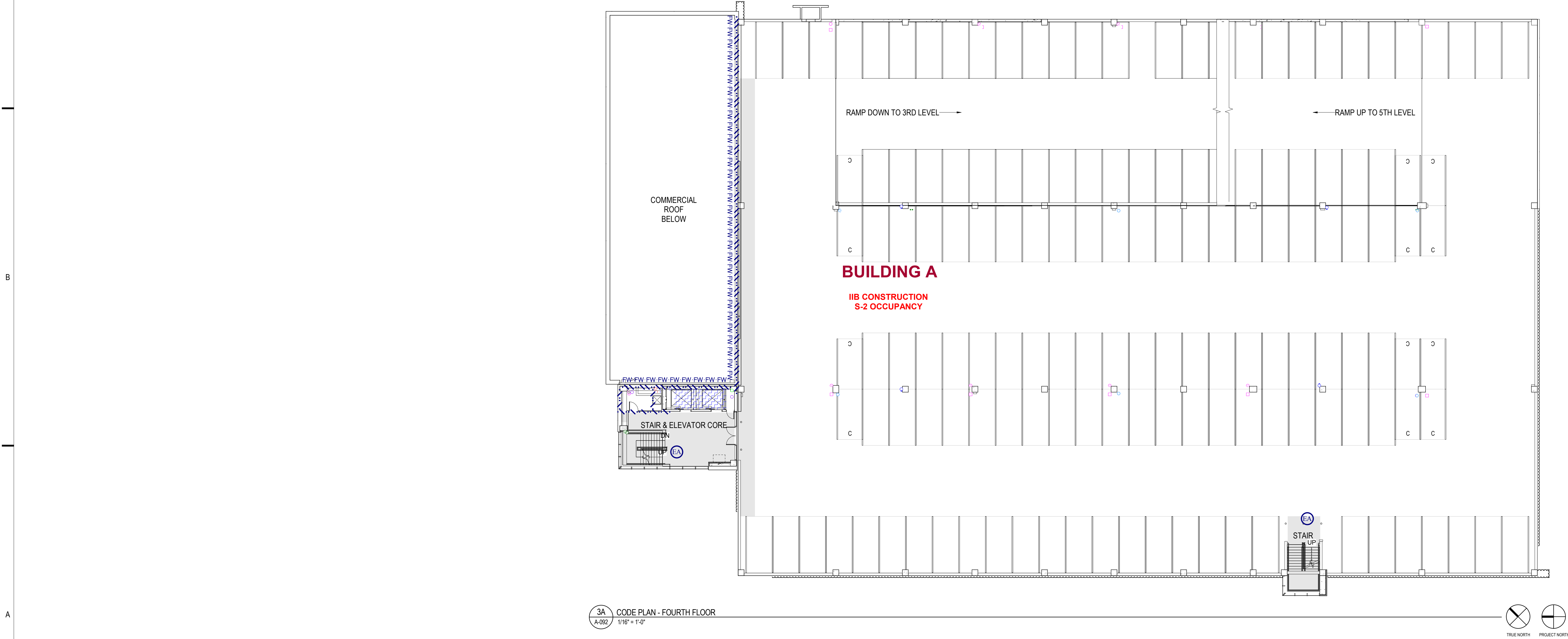
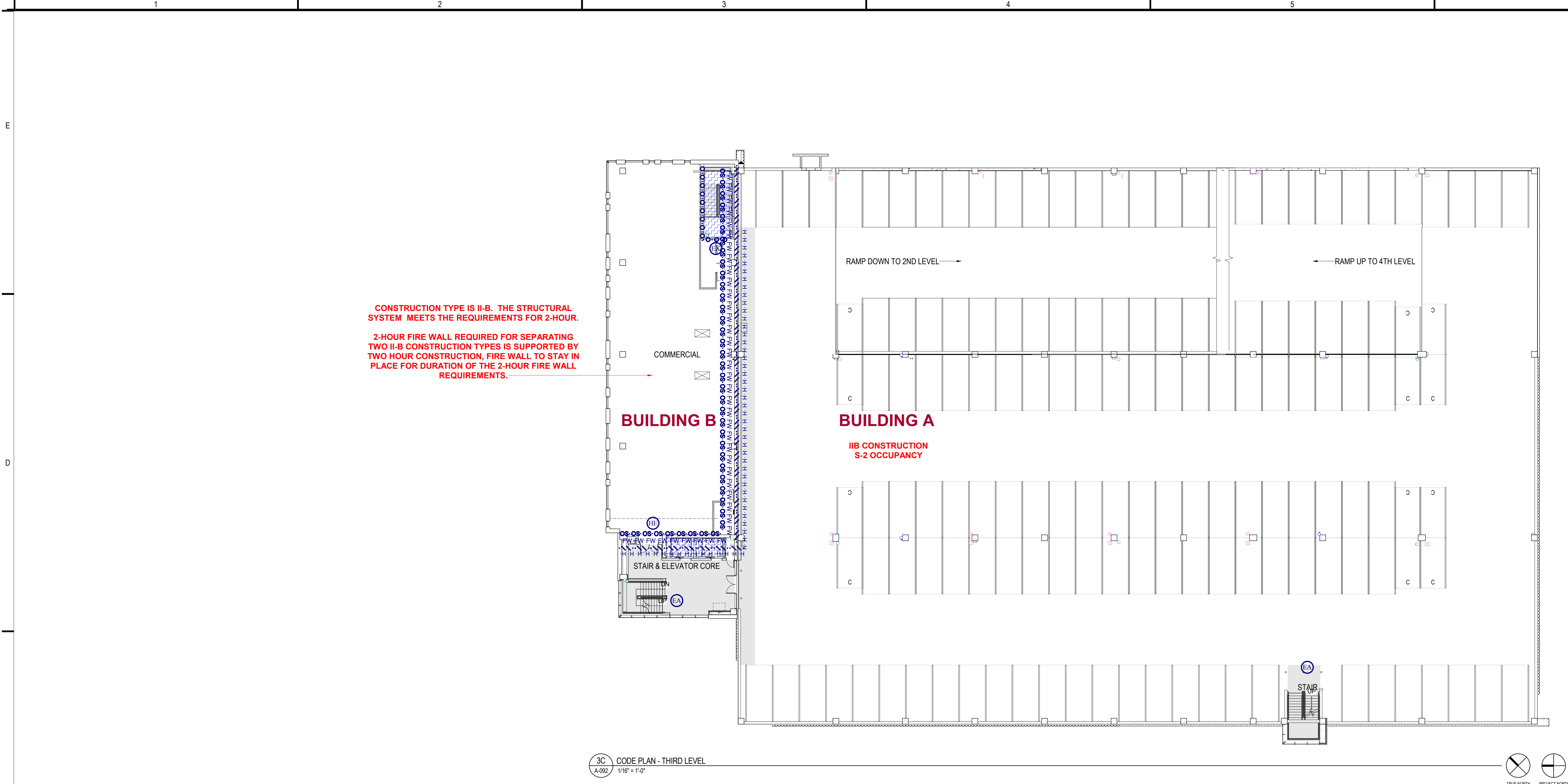
SHEET TITLE:

FIRST & SECOND LEVEL - CODE PLAN

SHEET NUMBER:

A-091

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CODE PLAN SYMBOLS LEGEND

FIRE RESISTANCE RATINGS		SMOKE PARTITION (IBC 710) CONJ. OF CORRIDOR WALLS (LSC XX.3.3.2)
		FIRE PARTITION CORRIDOR WALLS (IBC 708)
		1 HR FIRE RATED ASSEMBLY INCIDENTAL USE (IBC 508.2.5) PROTECTION OF HAZARDOUS (LSC XX.3.3)
		1 HR FIRE RATED ASSEMBLY FIRE DAMPER USUALLY REQUIRED
		1 HR FIRE RATED ASSEMBLY WITH SMOKE PROTECTION FIRE AND SMOKE DAMPER USUALLY REQUIRED
		2 HR FIRE RATED ASSEMBLY FIRE DAMPER USUALLY REQUIRED
		2 HR FIRE RATED ASSEMBLY WITH SMOKE PROTECTION FIRE AND SMOKE DAMPER USUALLY REQUIRED
		3 HR FIRE RATED ASSEMBLY FIRE DAMPER USUALLY REQUIRED
		3 HR FIRE RATED ASSEMBLY WITH SMOKE PROTECTION FIRE AND SMOKE DAMPER USUALLY REQUIRED
		FIRE WALL (IBC 706)

MEANS OF EGRESS		EXIT ACCESS
		EXIT
		EXIT DISCHARGE
		HORIZONTAL EXIT
MISCELLANEOUS		FIRE EXTINGUISHER
		FIRE EXTINGUISHER CABINET
		FIRE VALVE
		FIRE VALVE CABINET
PROJECT LIMITS LINE		

WALL CLASSIFICATION		SMOKE BOUNDARY SEE IBC 710, 716.5.3 LSC XX.3.7, 8.3
		HORIZONTAL EXIT SEE IBC 105 FOR 1-3 OCCUPANCY, SEE ALSO 408.2
		OCCUPANCY SEPARATION SEE IBC 201.2.5, 712 LSC 26.1.2 (FIRE BARRIERS)
		HEALTHCARE SUITE SEE IBC 1014.2.2 EXIT REQUIREMENTS DEFINE SPACE 15,000 SF MAX. PATIENT TREATMENT SUITE 9,000 SF MAX. PATIENT SLEEPING SUITE

AREA CLASSIFICATION		EGRESS PATH SURROUNDING SYMBOLS INDICATE RATING AND DAMPER REQUIREMENTS
		EXIT PASSAGEWAY SURROUNDING SYMBOLS INDICATE RATING AND DAMPER REQUIREMENTS
		SHAFT SURROUNDING SYMBOLS INDICATE RATING AND DAMPER REQUIREMENTS FIRE DAMPER REQUIRED AT BOTTOM OF SHAFT
		INCIDENTAL USE SURROUNDING SYMBOLS INDICATE RATING AND DAMPER REQUIREMENTS SPACE REQUIRED TO LIMIT TRANSFER OF SMOKE CLOSER, LATCH & GASKETS REQUIRED (IBC 508.2.5, LSC XX.3.3)

NOT ALL SYMBOLS MAY BE USED ON EACH PLAN.
REFERENCES TO LSC (LIFE SAFETY CODE) "XX" REFERS TO CH 12 - 42.



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CONSULTANTS:
B W B R

PROJECT TITLE:
Capitol East Parking Garage

211 SOUTH LIVINGSTON STREET, MADISON WI 53703
PHONE NUMBER 1627
CONTRACT NUMBER 7951

CLIENT:
CITY OF MADISON PARKING UTILITY
215 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53703-2086



ISSUE:
NO DATE DESCRIPTION

PROJECT INFORMATION:
PROJECT NUMBER: 3.2016187.00
DATE: 06/30/2017
DRAWN BY: LS
CHECKED BY: RL
APPROVED BY: RG
SCALE: AS NOTED
SET TYPE: BD

SHEET TITLE:
THIRD & FOURTH LEVEL - CODE
PLAN

SHEET NUMBER:

A-092



CODE PLAN SYMBOLS LEGEND

FIRE RESISTANCE RATINGS		SMOKE PARTITION (IBC 710) CONST. OF CORRIDOR WALLS (LSC XX.3.6.2)
		FIRE PARTITION
		CORRIDOR WALLS (IBC 706)
		1 HR FIRE RATED ASSEMBLY
		HORIZONTAL USE (IBC 509.2.5) PROTECTION OF HAZARDOUS (LSC XX.3.2)
		1 HR FIRE RATED ASSEMBLY
		FIRE DAMPER USUALLY REQUIRED
		1 HR FIRE RATED ASSEMBLY WITH SMOKE PROTECTION
		FIRE AND SMOKE DAMPER USUALLY REQUIRED
		2 HR FIRE RATED ASSEMBLY

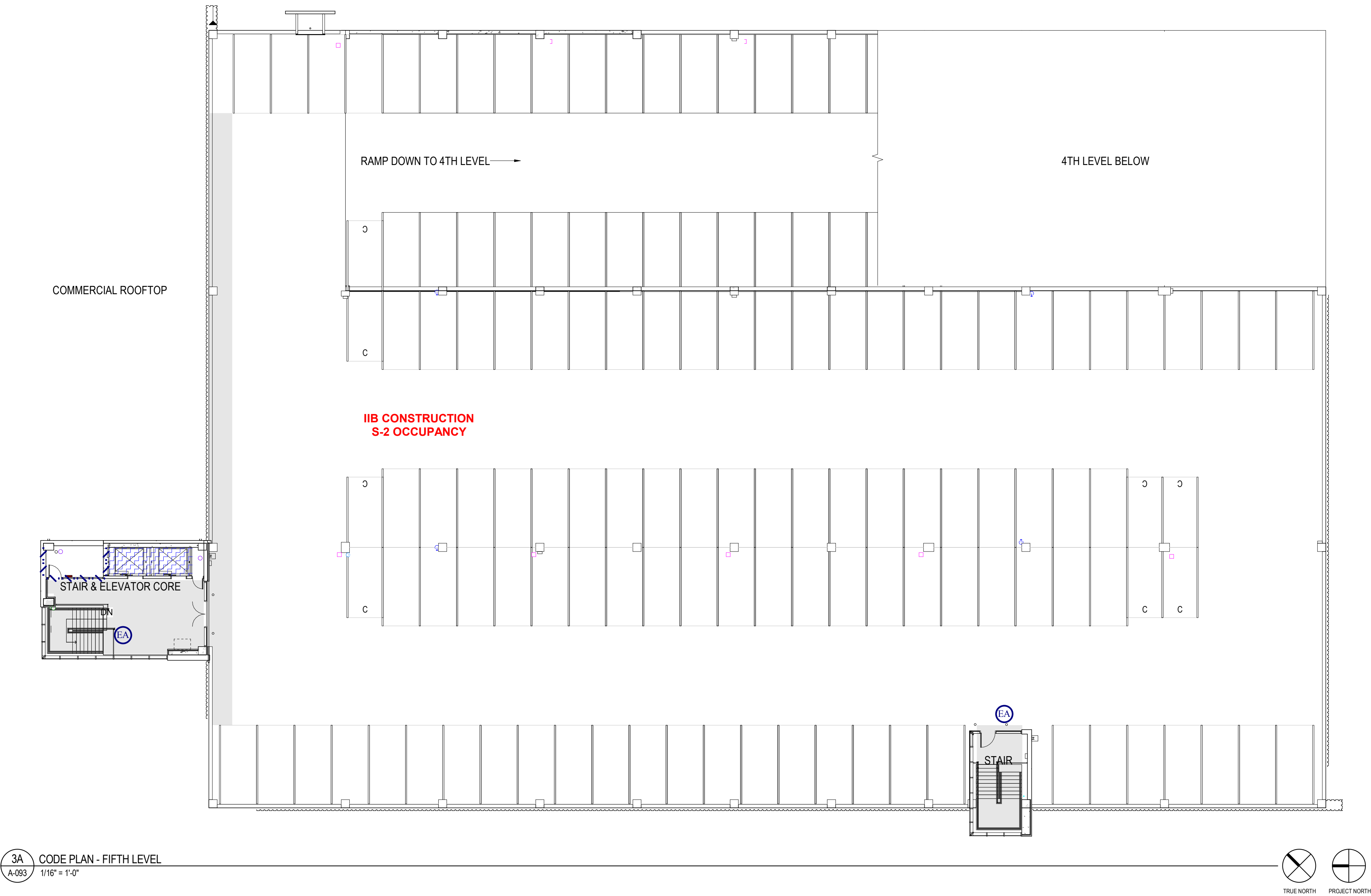
MEANS OF EGRESS		EXIT ACCESS
		EXIT
		EXIT DISCHARGE
		HORIZONTAL EXIT
		DELAYED EGRESS

MISCELLANEOUS	FE	FIRE EXTINGUISHER
	FEC	FIRE EXTINGUISHER CABINET
	FV	FIRE VALVE
	FVC	FIRE VALVE CABINET
	---	PROJECT LIMITS LINE

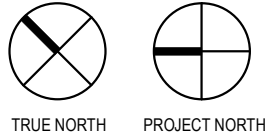
WALL CLASSIFICATION		SMOKE BOUNDARY SEE IBC 710, 716.5.5 (LSC XX.3.7.8.3)
		HORIZONTAL EXIT
		OCCUPANCY SEPARATION SEE IBC 105 FOR 1-3 OCCUPANCY. SEE ALSO 409.2
		FIRE BARRIER SEE IBC 509.2.5, 712 (LSC XX.3.2)
		HEALTHCARE SUITE SEE IBC 1014.2.2 EXIT REQUIREMENTS DEFINE SPACE 10,000 SF MAX. PATIENT TREATMENT SUITE 3,000 SF MAX. PATIENT SLEEPING SUITE

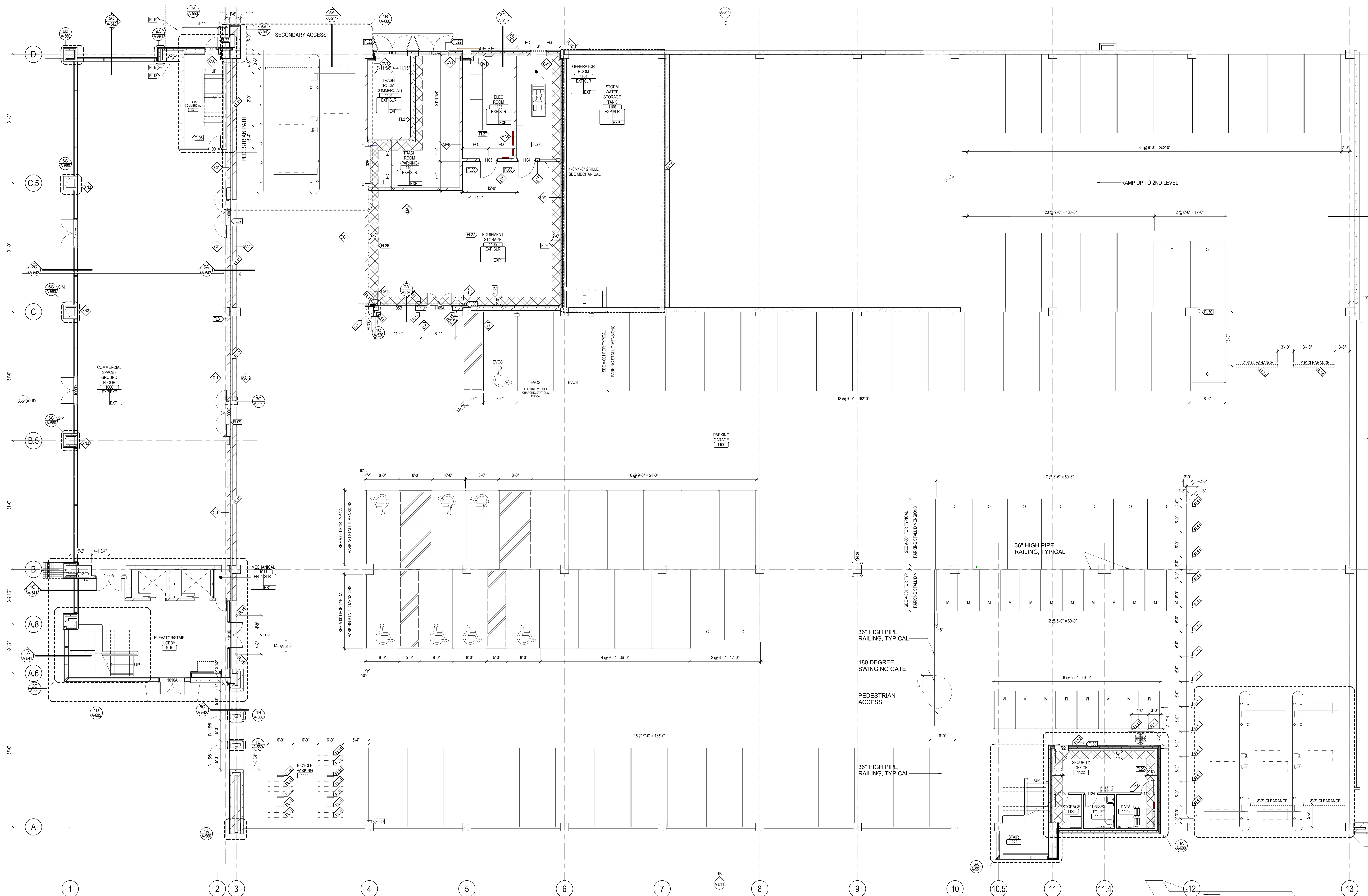
AREA CLASSIFICATION		EGRESS PATH SURROUNDING SYMBOLS INDICATE RATING AND DAMPER REQUIREMENTS
		EXIT PASSAGEWAY SURROUNDING SYMBOLS INDICATE RATING AND DAMPER REQUIREMENTS
		SHAFT SURROUNDING SYMBOLS INDICATE RATING AND DAMPER REQUIREMENTS. FIRE DAMPER REQUIRED AT BOTTOM OF SHAFT
		INCIDENTAL USE SURROUNDING SYMBOLS INDICATE RATING AND DAMPER REQUIREMENTS. SPACE REQUIRED TO LIMIT TRANSFER OF SMOKE CLOSED LATCH & GASKETS REQUIRED (IBC 509.2.5, LSC XX.3.2)

NOT ALL SYMBOLS MAY BE USED ON EACH PLAN.
REFERENCES TO LSC (LIFE SAFETY CODE) "XX" REFERS TO CH 12 - 42.



3A CODE PLAN - FIFTH LEVEL
A.093 1/16" = 1'-0"





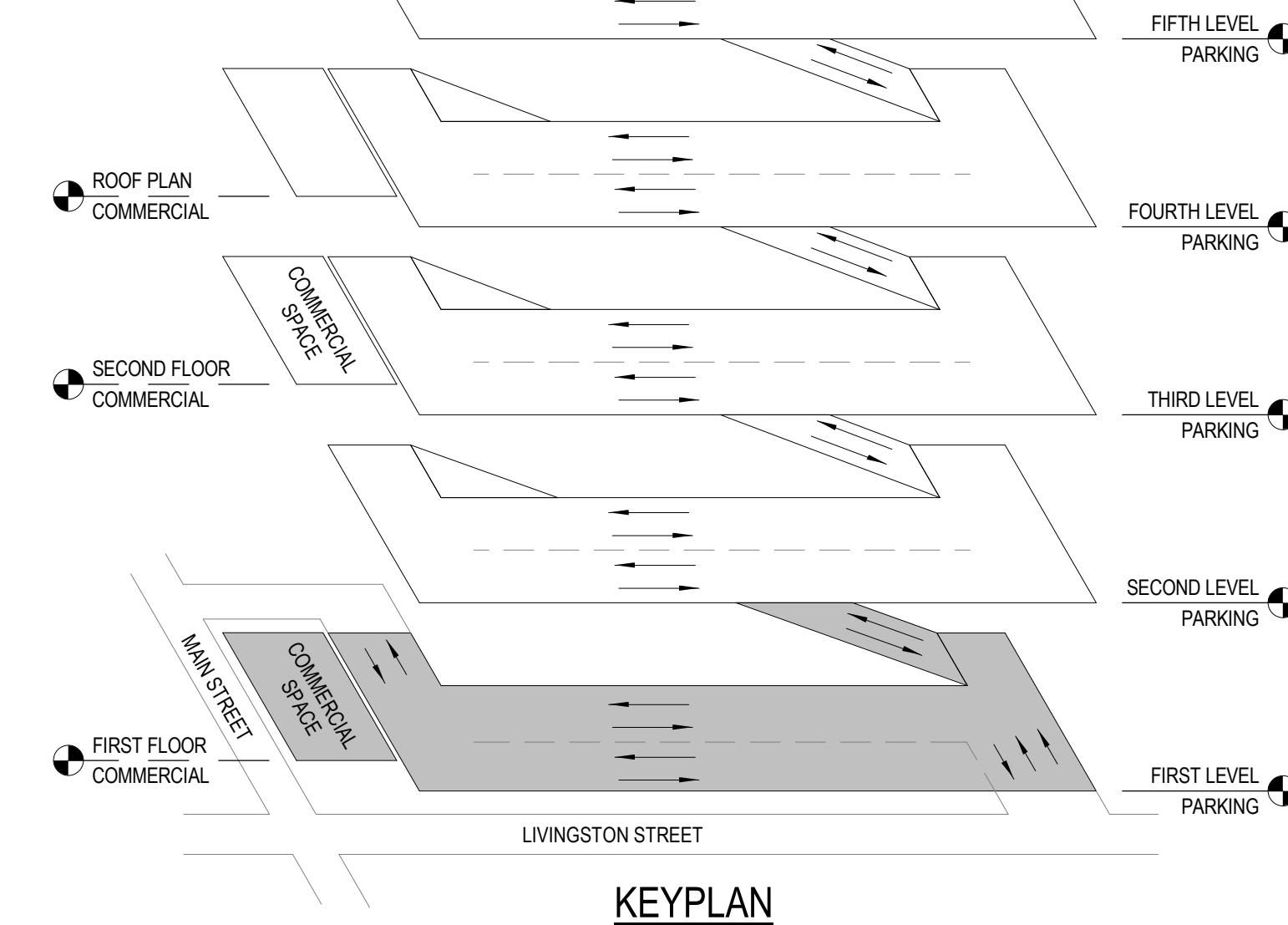
1A FLOOR PLAN - FIRST LEVEL
1/8" = 1'-0"

PARKING COUNT PER TYPE		PARKING COUNT PER LEVEL		PARKING COUNT PER LEVEL	
STALL TYPE	COUNT	STALL TYPE	COUNT	STALL TYPE	COUNT
Accessible (8'-0" X 18'-0")	6	FIRST LEVEL PARKING		FLOOR PLAN - SECOND LEVEL	
Accessible (8'-0" X 18'-0")	4	Accessible (8'-0" X 18'-0")	1	Accessible (8'-0" X 18'-0")	5
ACCESSIBLE VAN (8'-0" X 18'-0")	3	Accessible (8'-0" X 18'-0")	4	ACCESSIBLE VAN (8'-0" X 18'-0")	13
COMPACT (8'-6" X 16'-0")	16	ACCESSIBLE VAN (8'-0" X 18'-0")	13	COMPACT (8'-6" X 16'-0")	2
EV CHARGING STATION (8'-0" X 18'-0")	4	COMPACT (8'-6" X 16'-0")	10	EV CHARGING STATION (8'-0" X 18'-0")	2
MOTORCYCLE/MOPED (5'-0" X 9'-0")	8	STANDARD (8'-0" X 18'-0")	2	MOTORCYCLE/MOPED (5'-0" X 9'-0")	12
MOTORCYCLE/MOPED (5'-0" X 9'-0")	12	EV CHARGING STATION (8'-0" X 18'-0")	2	MOTORCYCLE/MOPED (5'-0" X 9'-0")	18
STANDARD (8'-0" X 18'-0")	362	STANDARD (8'-0" X 18'-0")	44	STANDARD (8'-0" X 18'-0")	129
Total 675	675	FIRST LEVEL PARKING: 84	84	Total 675	675

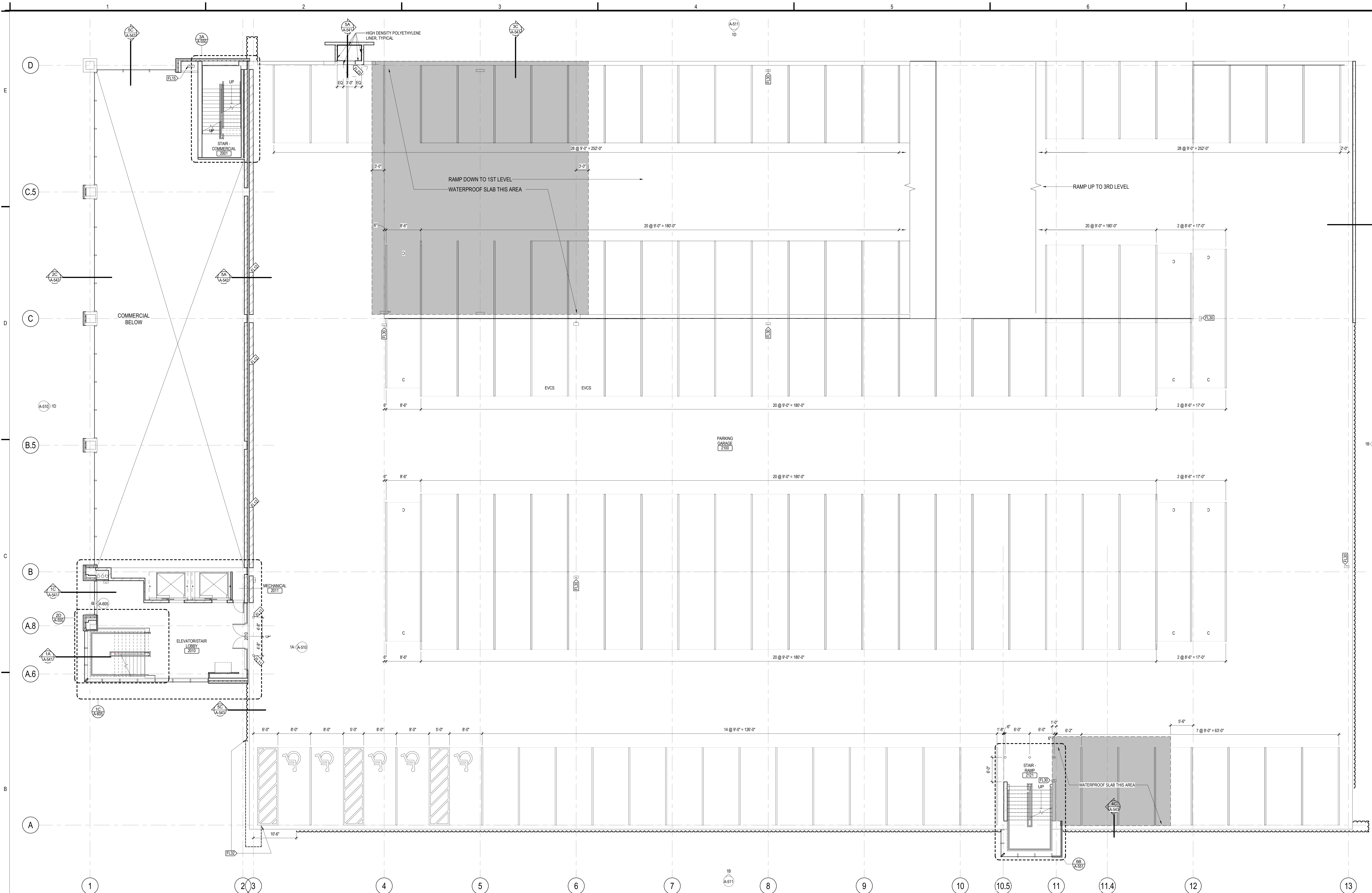
FLOOR AND FINISH PLAN KEYED NOTES

- CL.01** WALL FINISHES VARY. SEE ELEVATIONS.
- CL.02** PROVIDE STAINLESS STEEL TOILET ROOM ACCESSORIES TO INCLUDE: GRAB BARS, TOILET PAPER HOLDER, PAPER TOWEL DISPENSER, SOAP DISPENSER, SANITARY NAPKIN RECEPTACLE, ACC. MIRROR, AND STAINLESS STEEL SHELF.
- CL.03** PROVIDE (2) COAT HOOKS ON BACKSIDE OF DOOR.
- CL.04** FLOORING IN ELEVATOR CAB TO BE RFP. SEE SPEC FOR ADDITIONAL FINISH INFORMATION.
- CL.05** SEE ENLARGED STAIR PLANS FOR FINISH INFORMATION.
- CL.06** STAIR TREADS, RISERS AND LANDINGS TO BE EXPOSED CONCRETE. HANDRAILS TO BE STAINLESS STEEL CABLE RAIL.
- CL.07** PAINT HM DOORS AND HM FRAMES PNT3 BOTH SIDES.
- CL.08** PAINT HM DOOR AND HM FRAME PNT3 BOTH SIDES.
- CL.09** PROVIDE PVC/FORM TOP 18" BASE UP TO 4'-4" F.F. EXTENTS NOTED ON PLAN. BUTT JOINT AT SEAMS AND PROVIDE INPRO PVC TOP TRIM AT TOP OF PANELS.
- CL.10** 6" DIA/48" TALL BOLLARD
- CL.11** EXPANSION JOINT & COVER
- CL.12** RAIN WATER LEADER AND OVERFLOW FROM THE COMMERCIAL ROOFING OPPOSED TO THIS LOCATION IN THE CEILING SPACE OF LEVEL 3
- CL.13** NOT USED
- CL.14** RAIN WATER OVERFLOW FROM THE STAIR AND ELEVATOR TOWER DAYLIGHTS THROUGH A DOWNSPOUT NOZZLE (LAMB'S TONGUE)
- CL.15** EXTERIOR ACCESS DOOR
- CL.16** PAY ON-FOOT MACHINE - OFOI
- CL.17** BIKE RACK
- CL.18** REMOVABLE GRATE. SEE CIVIL
- CL.19** NOT USED
- CL.20** AUTO GATE (SEE REVENUE CONTROL SUPPLIER DRAWINGS)
- CL.21** REVENUE CONTROL SYSTEM (SEE REVENUE CONTROL SUPPLIER DRAWINGS)
- CL.22** DOOR ACCESS CONTROL, CARD READER
- CL.23** SNOW CHUTE 3'-0"X3'-0" ACCESS PANEL
- CL.24** RECESSED HOSE BIBB CABINET
- CL.25** INSULATE EXTERIOR OF FOUNDATION WALL FROM FOOTING TO GRADE - PERIMETER OF STORMWATER TANK
- CL.26** PROVIDE 3" UNDER SLAB INSULATION AROUND THE PERIMETER OF SEMI-HEATED SPACE
- CL.27** PROVIDE 3" SPRAY-ON CEILING INSULATION FOR THE ROOM
- CL.28** NOT USED
- CL.29** EXPOSED BASE AT ALL MASONRY WALLS AND ALUMINUM CURTAIN WALL. STAINLESS STEEL BASE AS INDICATED ON PLAN.
- CL.30** PROVIDE SURFACE MOUNTED CABINET (FEC2) AND FIRE EXTINGUISHER
- CL.31** PROVIDE BRACKET (FEC1) AND FIRE EXTINGUISHER
- CL.32** ART INSTALLATION - OWNER FURNISHED OWNER INSTALLED - GC TO ENSURE CONTINUOUS AND WATERTIGHT WEATHER BARRIER AT INTERFACE WITH OTHER BUILDING ELEMENTS
- CL.33** AUTOMATIC DOOR OPERATOR ACTUATOR - BOLLARD MOUNT
- CL.34** AUTOMATIC DOOR OPERATOR ACTUATOR - JAMB MOUNT

NOTE: NOT ALL KEYED NOTES MAY BE USED ON EACH PLAN.



6A KEYPLAN - FIRST LEVEL
1/8" = 1'-0"



1A FLOOR PLAN - SECOND LEVEL

A-102 1/8" = 1'-0"

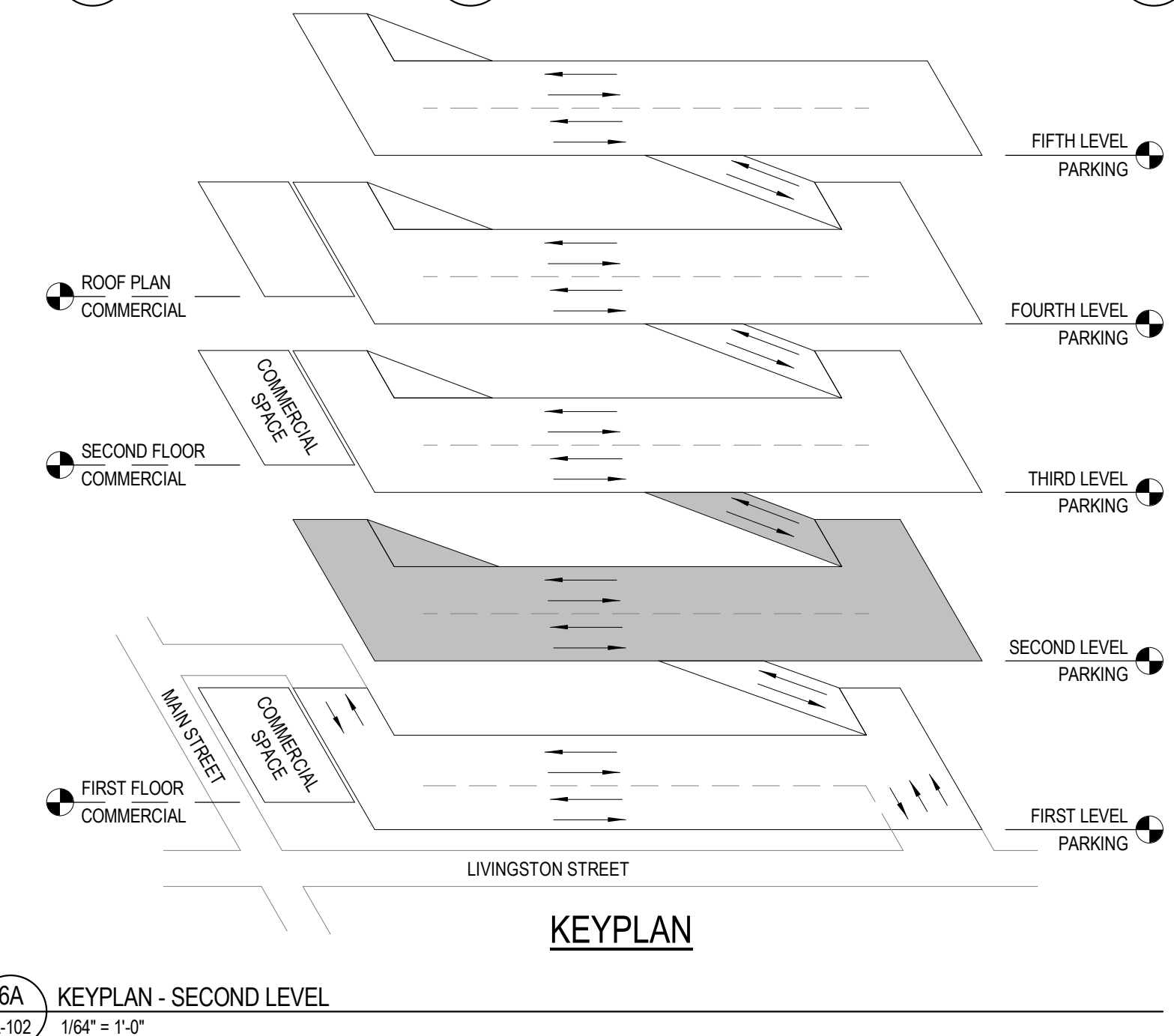
PARKING COUNT PER TYPE	
STALL TYPE	COUNT
ACCESSIBLE (8'-0" X 12'-0")	6
ACCESSIBLE (8'-0" X 12'-0")	4
ACCESSIBLE VAN (8'-0" X 12'-0")	3
COMPACT (8'-0" X 12'-0")	56
EV CHARGING STATION (8'-0" X 12'-0")	4
MOTORCYCLE/MOPED (5'-0" X 9'-0")	8
MOTORCYCLE/MOPED (5'-0" X 10'-0")	12
STANDARD (8'-0" X 12'-0")	382
TOTAL: 675	675

PARKING COUNT PER LEVEL	
STALL TYPE	COUNT
FIRST LEVEL PARKING	1
ACCESSIBLE (8'-0" X 12'-0")	4
ACCESSIBLE VAN (8'-0" X 12'-0")	3
COMPACT (8'-0" X 12'-0")	10
EV CHARGING STATION (8'-0" X 12'-0")	2
MOTORCYCLE/MOPED (5'-0" X 9'-0")	8
MOTORCYCLE/MOPED (5'-0" X 10'-0")	12
STANDARD (8'-0" X 12'-0")	44
FIRST LEVEL PARKING: 84	84
FLOOR PLAN - SECOND LEVEL	5
ACCESSIBLE (8'-0" X 12'-0")	13
COMPACT (8'-0" X 12'-0")	13
EV CHARGING STATION (8'-0" X 12'-0")	2
STANDARD (8'-0" X 12'-0")	129

PARKING COUNT PER LEVEL	
STALL TYPE	COUNT
FLOOR PLAN - SECOND LEVEL: 149	149
THIRD LEVEL PARKING	12
COMPACT (8'-0" X 12'-0")	136
STANDARD (8'-0" X 12'-0")	148
THIRD LEVEL PARKING: 148	148
FLOOR PLAN - FOURTH LEVEL	12
COMPACT (8'-0" X 12'-0")	136
FLOOR PLAN - FOURTH LEVEL: 148	148
FLOOR PLAN - FIFTH LEVEL	9
COMPACT (8'-0" X 12'-0")	137
STANDARD (8'-0" X 12'-0")	146
FLOOR PLAN - FIFTH LEVEL: 146	146
TOTAL: 675	675

FLOOR AND FINISH PLAN KEYED NOTES

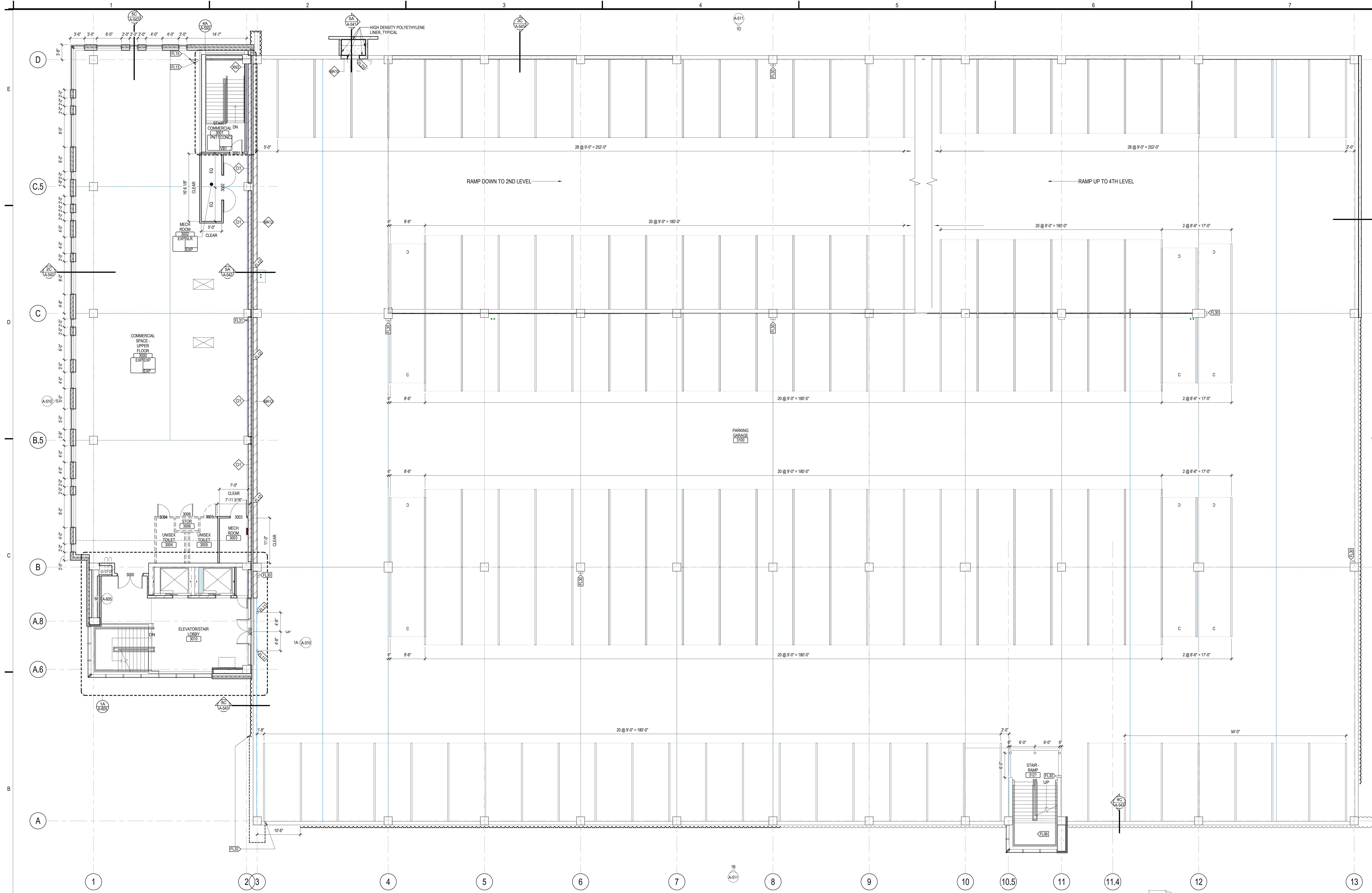
- NOTE: NOT ALL KEYED NOTES MAY BE USED ON EACH PLAN
- CL101 WALL FINISHES VARY. SEE ELEVATIONS.
 - CL102 PROVIDE STAINLESS STEEL TOILET ROOM ACCESSORIES TO INCLUDE: GRAB BARS, TOILET PAPER HOLDER, PAPER TOWEL DISPENSER, SOAP DISPENSER, SANITARY NAPKIN RECEPTACLE, ACC MIRROR, AND STAINLESS STEEL SHELF.
 - CL103 PROVIDE (2) COAT HOOKS ON BACKSIDE OF DOOR.
 - CL104 FLOORING IN ELEVATOR CAB TO BE RF-1. SEE SPEC FOR ADDITIONAL FINISH INFORMATION.
 - CL105 SEE ENLARGED STAIR PLANS FOR FINISH INFORMATION.
 - CL106 STAIR TREADS, RISERS AND LANDINGS TO BE EXPOSED CONCRETE. HANDRAILS TO BE STAINLESS STEEL CABLE RAIL.
 - CL107 NOT USED.
 - CL108 PAINT HM DOORS AND HM FRAMES PNTG BOTH SIDES.
 - CL109 PAINT HM DOOR AND HM FRAME PNTG BOTH SIDES.
 - CL110 PROVIDE PVC1 FORM TOP OF BASE UP TO 4" A.F.F. EXTENTS NOTED ON PLAN. BUTT JOINT AT SEAM AND PROVIDE INRP PVC TOP TRIM AT TOP OF PANELS.
 - CL111 6" DIA / 40" TALL BOLLARD.
 - CL112 EXPANSION JOINT & COVER.
 - CL113 RAIN WATER LEADER AND OVERFLOW FROM THE COMMERCIAL ROOFING OFFSETS TO THIS LOCATION IN THE CEILING SPACE OF LEVEL 3.
 - CL114 NOT USED.
 - CL115 RAIN WATER OVERFLOW FROM THE STAIR AND ELEVATOR TOWER DAYLIGHTS THROUGH A DOWNSCOT NOZZLE (JAMES TOUNGE).
 - CL116 EXTERIOR ACCESS DOOR.
 - CL117 PAY-ON-FOOT MACHINE - OFOI.
 - CL118 BIKE RACK.
 - CL119 REMOVABLE GRATE. SEE CIVIL.
 - CL120 AUTO GATE. (SEE REVENUE CONTROL SUPPLIER DRAWINGS).
 - CL121 REVENUE CONTROL SYSTEM (SEE REVENUE CONTROL SUPPLIER DRAWINGS).
 - CL122 DOOR ACCESS CONTROL CARD READER.
 - CL123 SNOW CHUTE 3'-0"x3'-0" ACCESS PANEL.
 - CL124 RECESSED HOSE BIBB CABINET.
 - CL125 INSULATE EXTERIOR OF FOUNDATION WALL FROM FOOTING TO GRADE - PERIMETER OF STORMWATER TANK.
 - CL126 PROVIDE 3" UNDER SLAB INSULATION AROUND THE PERIMETER OF SEMI-HEATED SPACE.
 - CL127 PROVIDE 3" SPRAY-ON CEILING INSULATION FOR THE ROOM.
 - CL128 NOT USED.
 - CL129 EXPOSED BASE AT ALL MASONRY WALLS AND ALUMIN CURTAIN WALL. STAINLESS STEEL BASE AS INDICATED ON PLAN.
 - CL130 PROVIDE SURFACE MOUNTED CABINET (FEC) AND FIRE EXTINGUISHER.
 - CL131 PROVIDE BRACKET (FEC) AND FIRE EXTINGUISHER.
 - CL132 ART INSTALLATION - OWNER FURNISHED OWNER INSTALLED - GC TO ENSURE CONTINUOUS AND WATERTIGHT WEATHER BARRIER AT INTERFACE WITH OTHER BUILDING ELEMENTS.
 - CL133 AUTOMATIC DOOR OPERATOR ACTUATOR - BOLLARD MOUNT.
 - CL134 AUTOMATIC DOOR OPERATOR ACTUATOR - JAMB MOUNT.



KEYPLAN

6A KEYPLAN - SECOND LEVEL

A-102 1/8" = 1'-0"



FLOOR PLAN - THIRD LEVEL PARKING & SECOND LEVEL COMMERCIAL
1/8" = 1'-0"

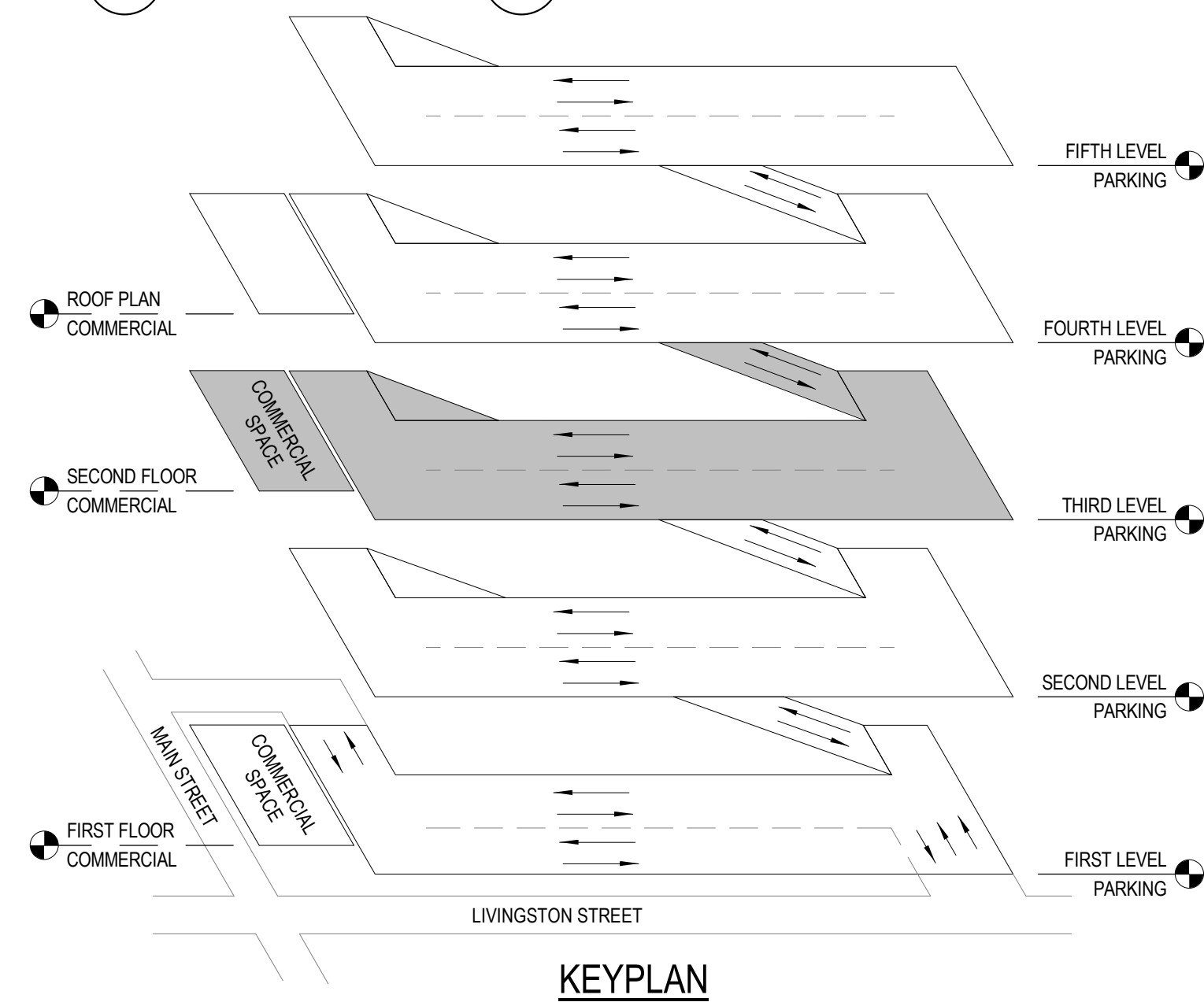
PARKING COUNT PER TYPE	
STALL TYPE	COUNT
Accessible (8'-0" X 12'-0")	6
Accessible (8'-0" X 12'-0")	4
ACCESSIBLE VAN (8'-0" X 12'-0")	3
ACCESSIBLE VAN (8'-0" X 12'-0")	16
EV CHARGING STATION (8'-0" X 12'-0")	4
MOTORCYCLE/MOPED (6'-0" X 9'-0")	8
MOTORCYCLE/MOPED (6'-0" X 10'-0")	12
STANDARD (8'-0" X 12'-0")	582
Total: 675	675

PARKING COUNT PER LEVEL	
STALL TYPE	COUNT
FIRST LEVEL PARKING	
Accessible (8'-0" X 12'-0")	1
Accessible (8'-0" X 12'-0")	4
ACCESSIBLE VAN (8'-0" X 12'-0")	3
ACCESSIBLE VAN (8'-0" X 12'-0")	10
EV CHARGING STATION (8'-0" X 12'-0")	2
MOTORCYCLE/MOPED (6'-0" X 9'-0")	8
MOTORCYCLE/MOPED (6'-0" X 10'-0")	12
STANDARD (8'-0" X 12'-0")	44
FIRST LEVEL PARKING: 84	84
FLOOR PLAN - SECOND LEVEL	
Accessible (8'-0" X 12'-0")	5
ACCESSIBLE VAN (8'-0" X 12'-0")	13
EV CHARGING STATION (8'-0" X 12'-0")	2
STANDARD (8'-0" X 12'-0")	129

PARKING COUNT PER LEVEL	
STALL TYPE	COUNT
FLOOR PLAN - SECOND LEVEL: 149	149
THIRD LEVEL PARKING	
COMPACT (8'-6" X 16'-0")	12
STANDARD (8'-6" X 16'-0")	136
THIRD LEVEL PARKING: 148	148
FLOOR PLAN - FOURTH LEVEL	
COMPACT (8'-6" X 16'-0")	12
STANDARD (8'-6" X 16'-0")	136
FLOOR PLAN - FOURTH LEVEL: 148	148
FLOOR PLAN - FIFTH LEVEL	
COMPACT (8'-6" X 16'-0")	9
STANDARD (8'-6" X 16'-0")	137
FLOOR PLAN - FIFTH LEVEL: 146	146
Total: 675	675

FLOOR AND FINISH PLAN KEYED NOTES

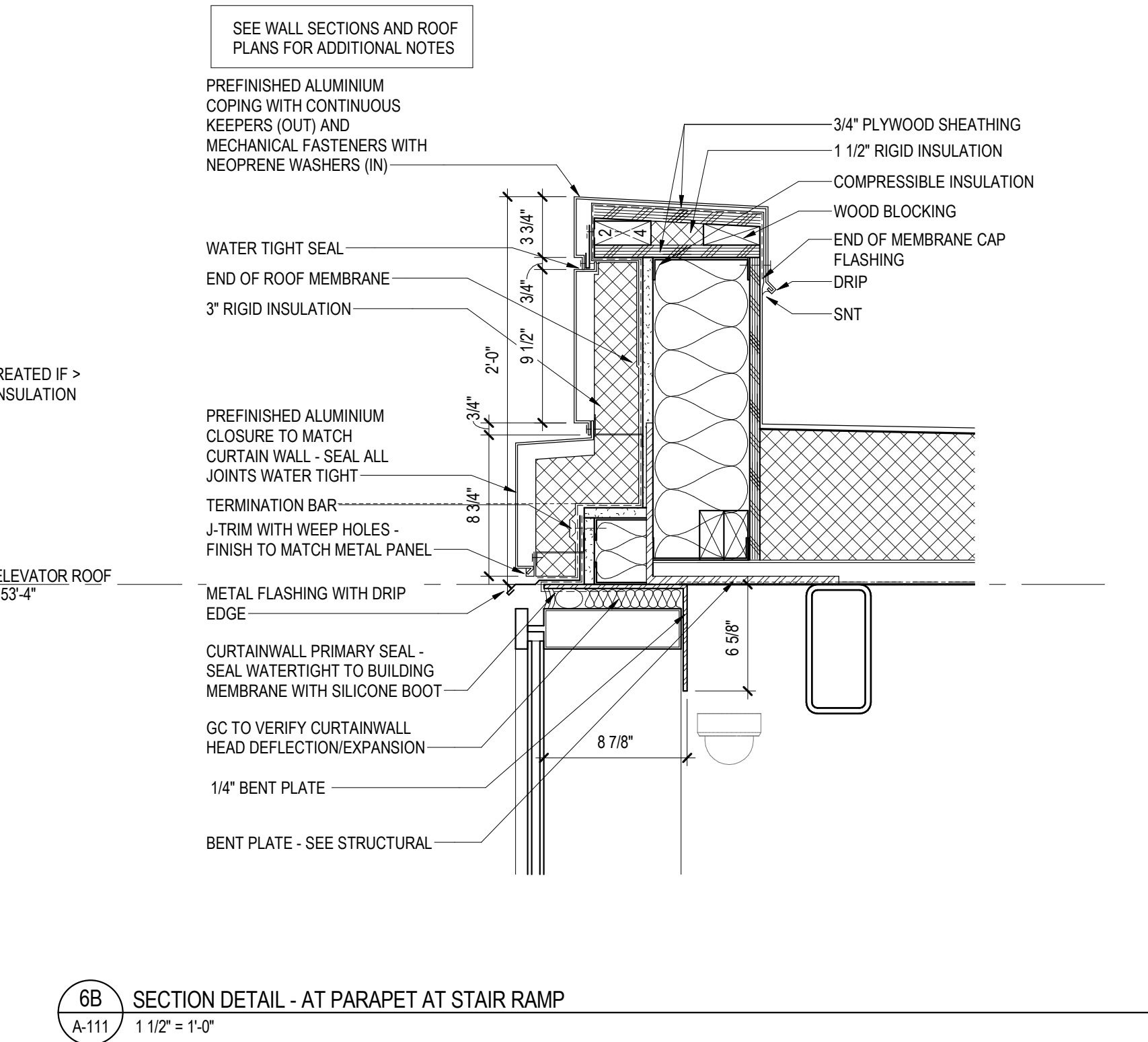
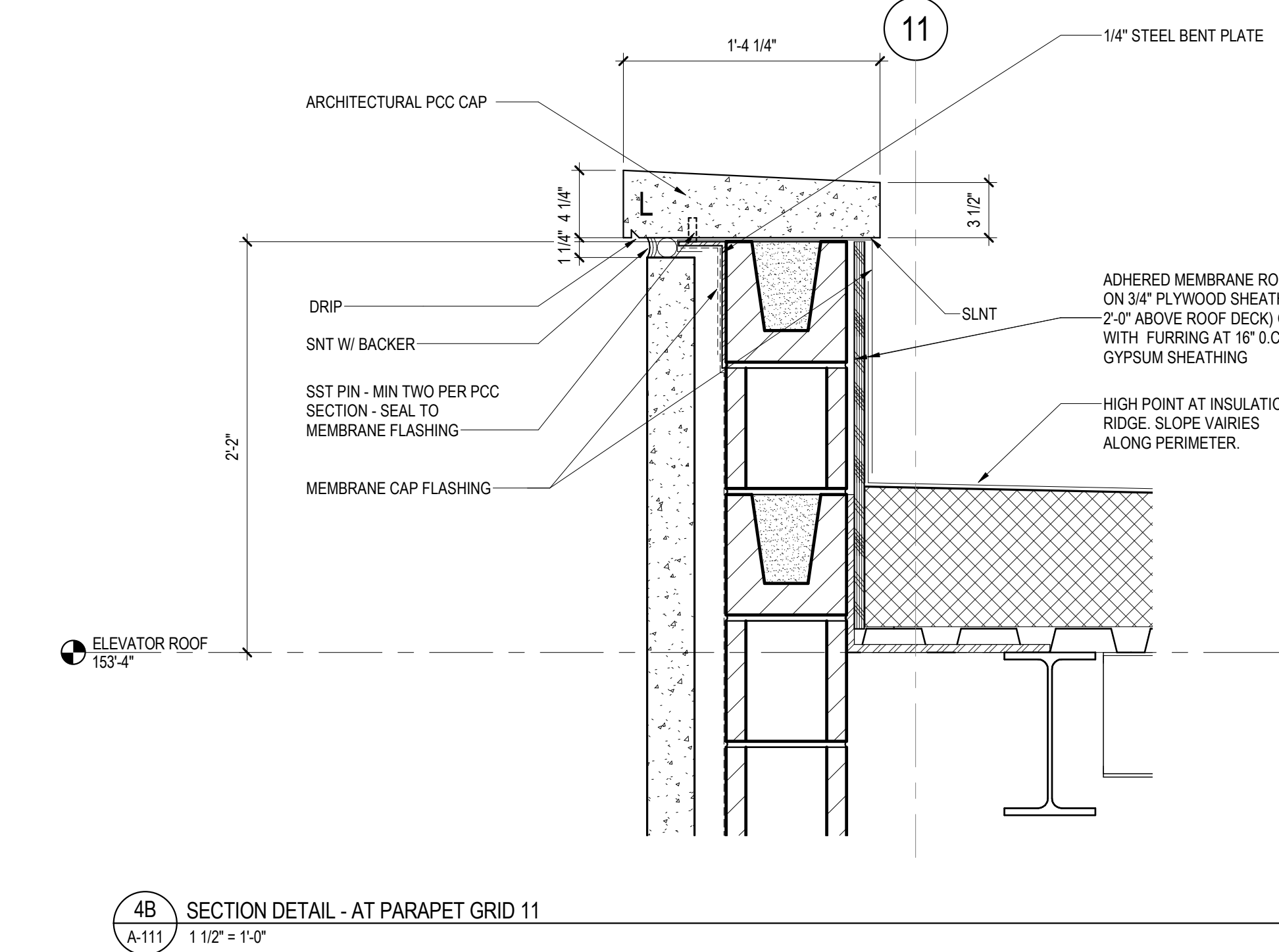
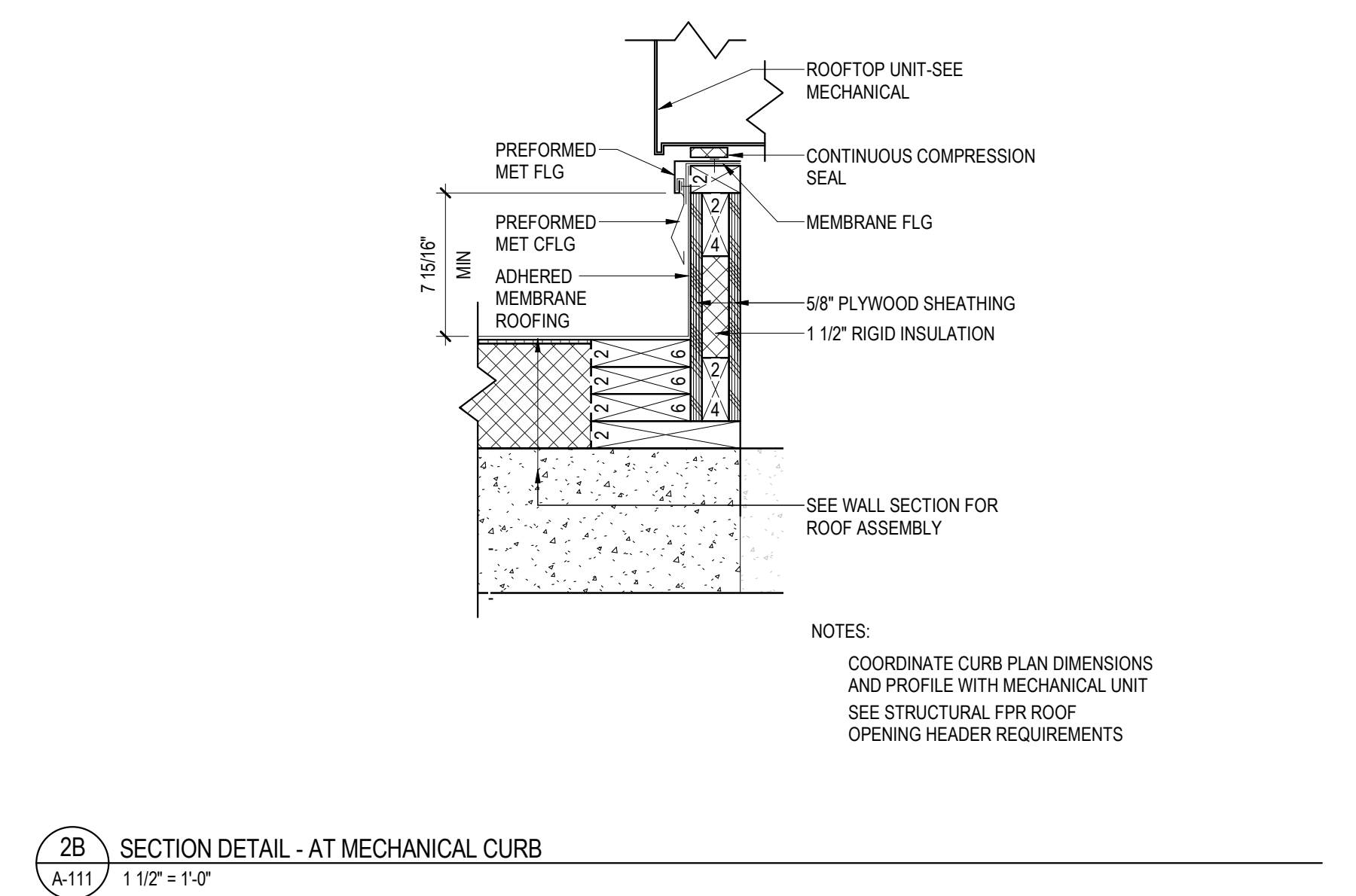
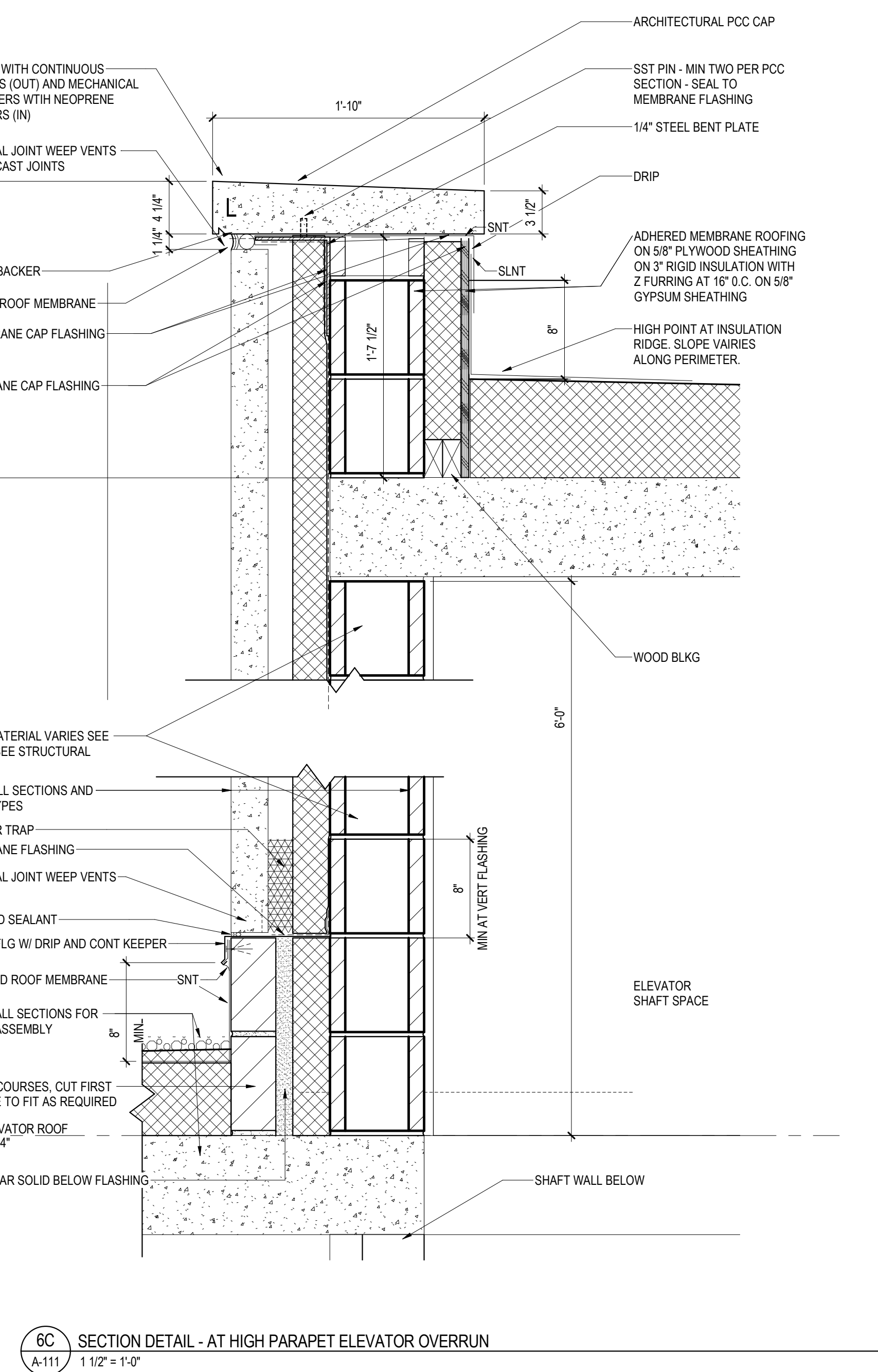
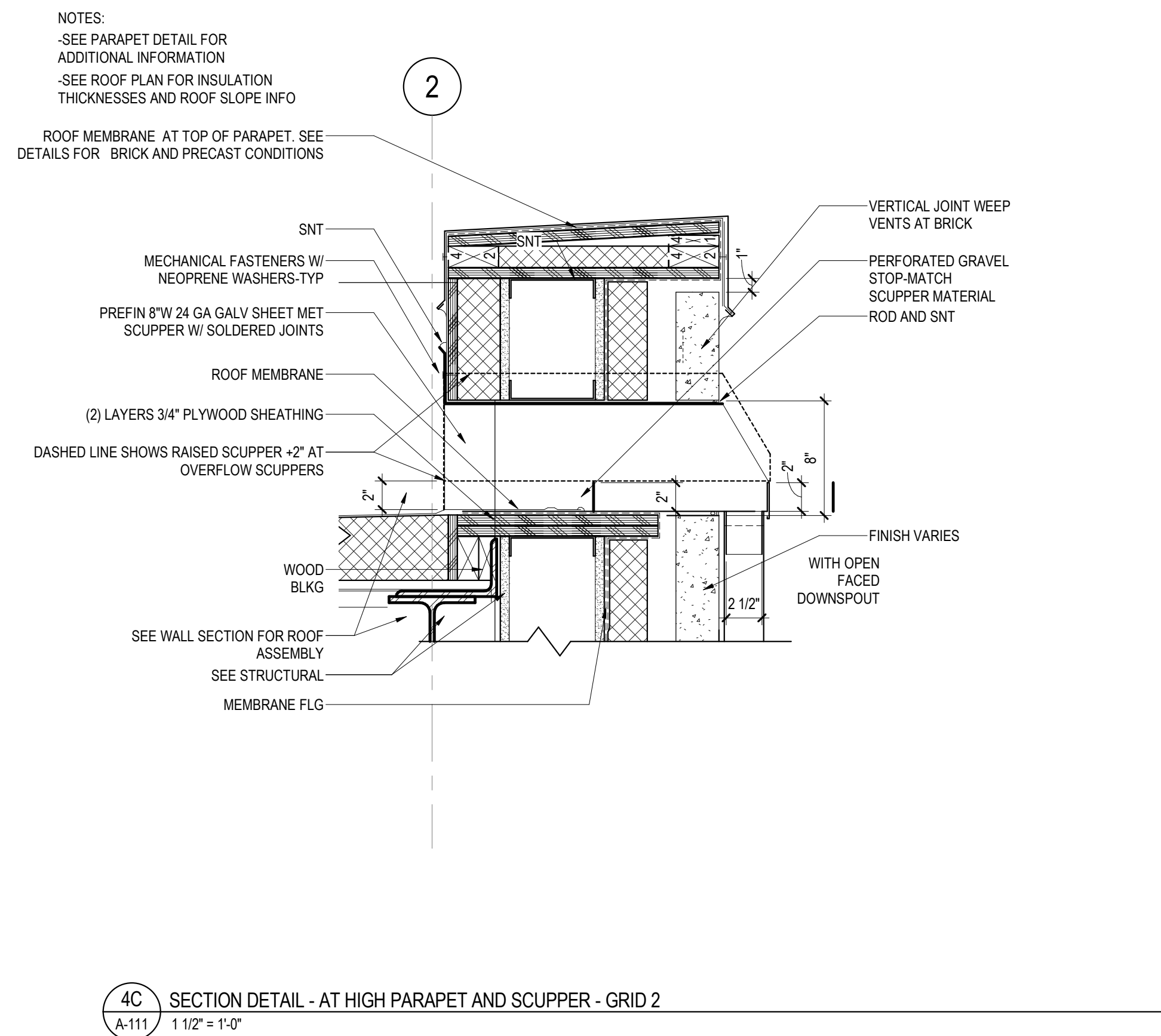
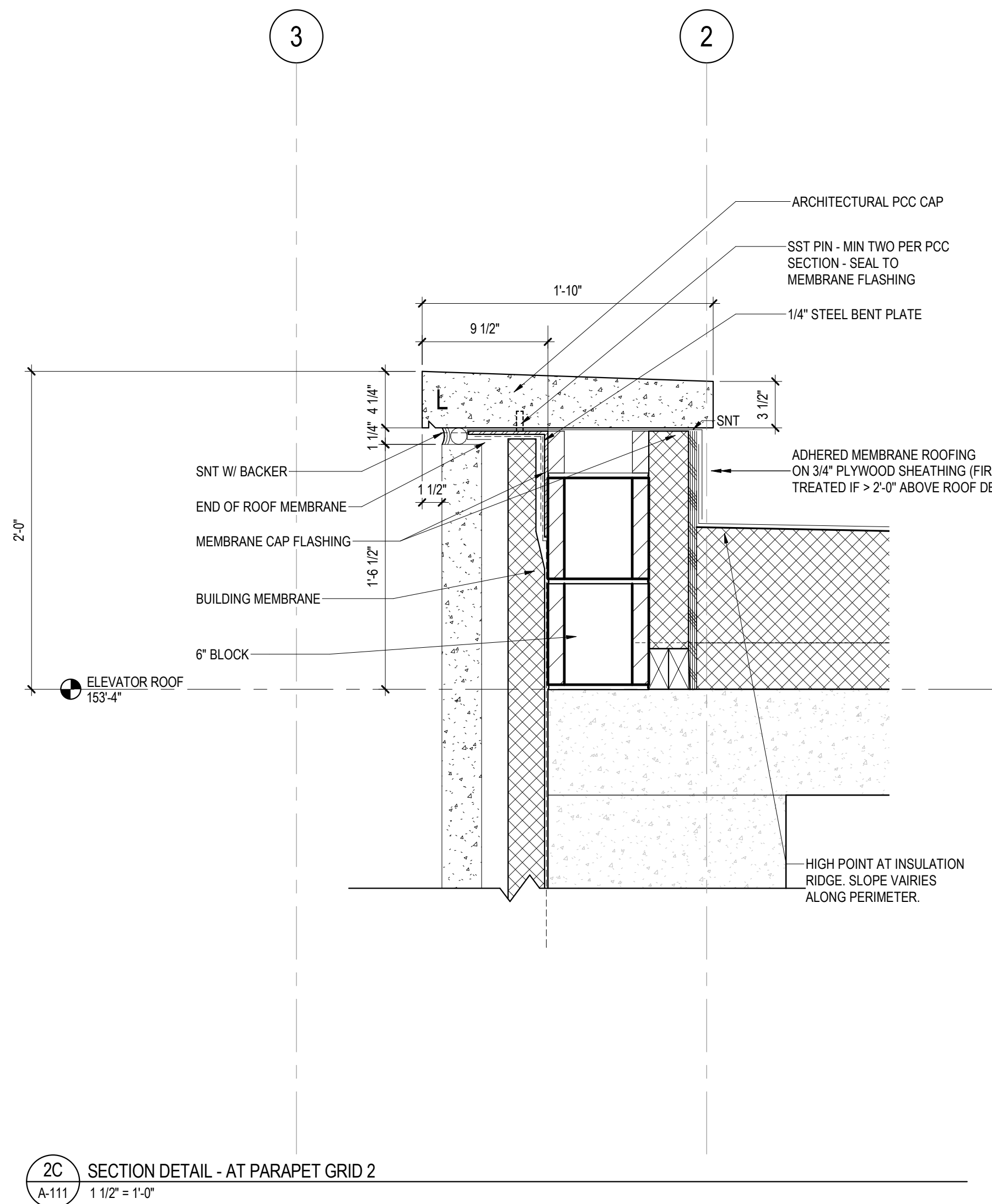
- RECESSED HOSE BIBB CABINET
INSULATE EXTERIOR OF FOUNDATION WALL FROM FOOTING TO GRADE - PERIMETER OF STORMWATER PANK
PROVIDE 3" UNDER SLAB INSULATION AROUND THE PERIMETER OF SEMI-HEATED SPACE
PROVIDE 3" SPRAY-ON CEILING INSULATION FOR THE ROOM
EXPOSED BASE AT ALL MASONRY WALLS AND ALUMINUM CURTAIN WALL - STAINLESS STEEL BASE AS INDICATED ON PLAN
PROVIDE SURFACE MOUNTED CABINET (FEC2) AND FIRE EXTINGUISHER
PROVIDE BRACKET (FEC1) AND FIRE EXTINGUISHER
ART INSTALLATION - OWNER FURNISHED OWNER INSTALLED - GC TO ENSURE CONTINUOUS AND WATER/TIGHT WEATHER BARRIER AT INTERFACE WITH OTHER BUILDING ELEMENTS
AUTOMATIC DOOR OPERATOR ACTUATOR - BOLLARD MOUNT
AUTOMATIC DOOR OPERATOR ACTUATOR - JAMB MOUNT
- WALL FINISHES VARY. SEE ELEVATIONS.
PROVIDE STAINLESS STEEL TOILET ROOM ACCESSORIES TO INCLUDE: GRAB BARS, TOILET PAPER HOLDER, PAPER TOWEL DISPENSER, SOAP DISPENSER, SANITARY NAPKIN RECEPTACLE, ACC. MIRROR, AND STAINLESS STEEL SHELF.
PROVIDE (2) COAT HOOKS ON BACKSIDE OF DOOR
SEE ENLARGED STAIR PLANS FOR FINISH INFORMATION.
STAIR TREADS, RISERS AND LANDINGS TO BE EXPOSED CONCRETE. HANDRAILS TO BE STAINLESS STEEL CABLE RAIL.
NOT USED.
PAINT HM DOORS AND HM FRAMES PNT3 BOTH SIDES.
PAINT HM DOOR AND HM FRAME PNT3 BOTH SIDES.
PROVIDE PNC1 FORM TOP OF BASE UP TO 4'-4" A.F.F. - EXTENTS NOTED ON PLAN. BUTT JOINT AT SEAMS AND PROVIDE INFO PNC TOP 18" IN AT TOP OF PANELS.
NOTE: NOT ALL KEYED NOTES MAY BE USED ON EACH PLAN
- 6" DIA / 48" TALL BOLLARD
EXPANSION JOINT & COVER
RAIN WATER LEADER AND OVERFLOW FROM THE COMMERCIAL ROOFING OFFSETS TO THIS LOCATION IN THE CEILING SPACE OF LEVEL 3
NOT USED
RAIN WATER OVERFLOW FROM THE STAIR AND ELEVATOR TOWER DAYLIGHTS THROUGH A DOWNSPOUT NOZZLE (LAMPS TOUNCE)
EXTERIOR ACCESS DOOR
PAY-ON-FOOT MACHINE - OFOI
BIKE RACK
REMOVABLE GRATE. SEE CIVIL
AUTO GATE (SEE REVENUE CONTROL SUPPLIER DRAWINGS)
REVENUE CONTROL SYSTEM (SEE REVENUE CONTROL SUPPLIER DRAWINGS)
DOOR ACCESS CONTROL CARD READER
SNOW CHUTE 3'-0"X3'-0" ACCESS PANEL

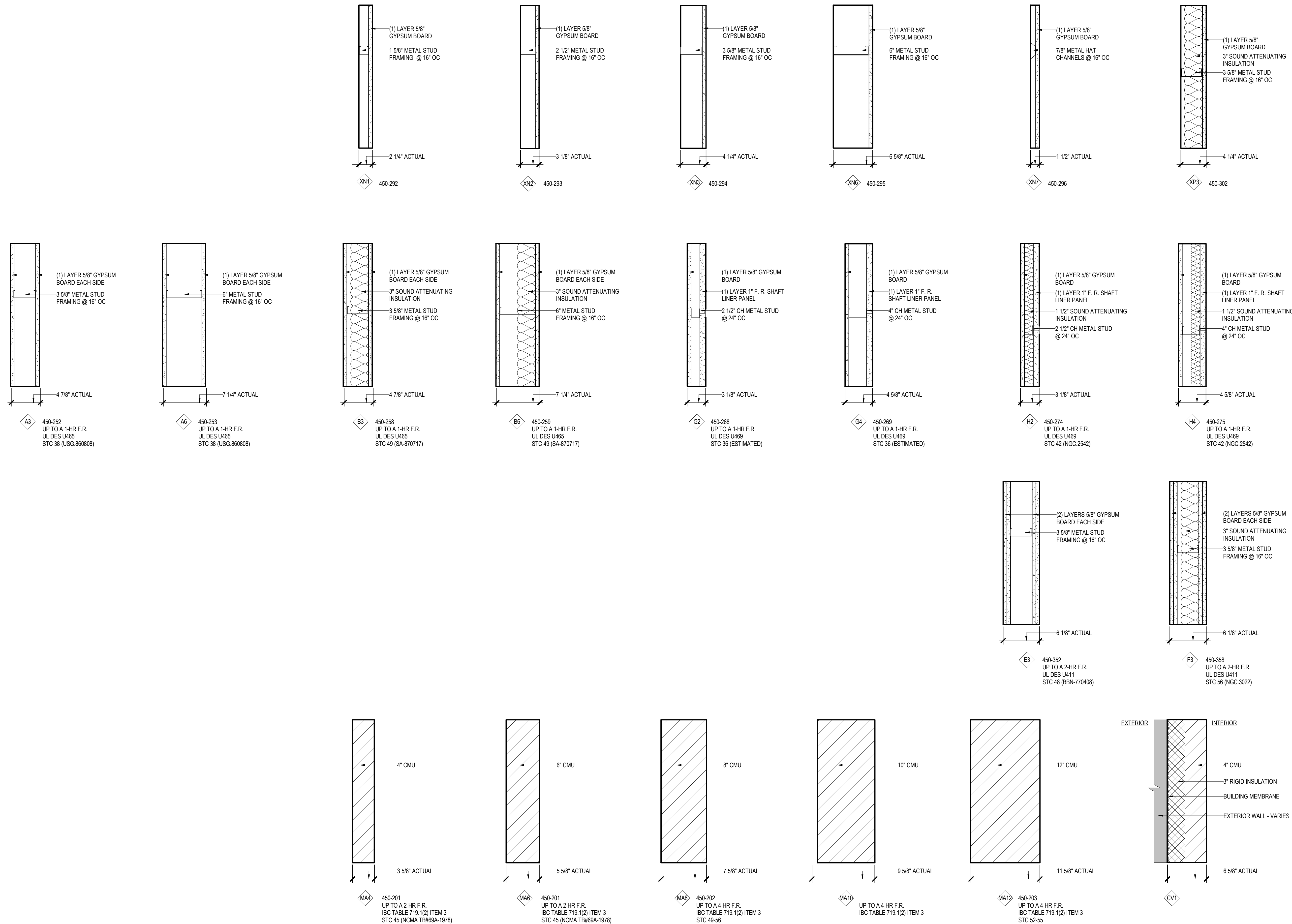


KEYPLAN - THIRD LEVEL
1/8" = 1'-0"



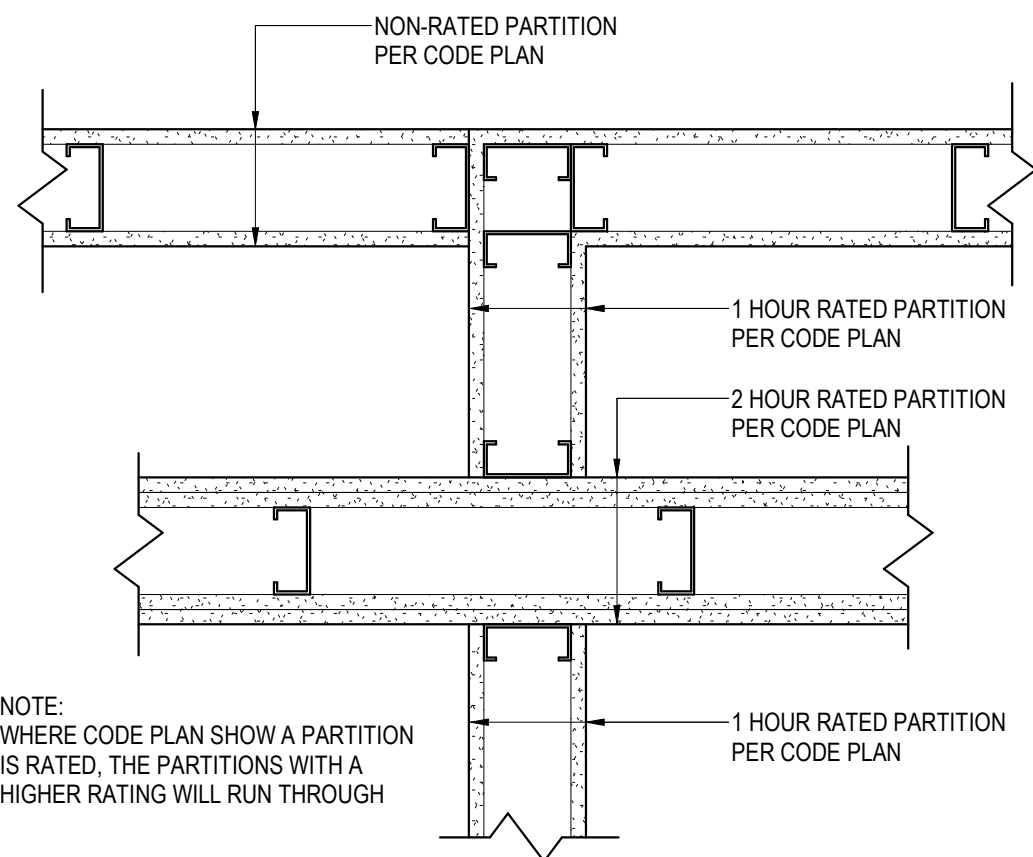






PARTITION TYPES

1 1/2\"/>

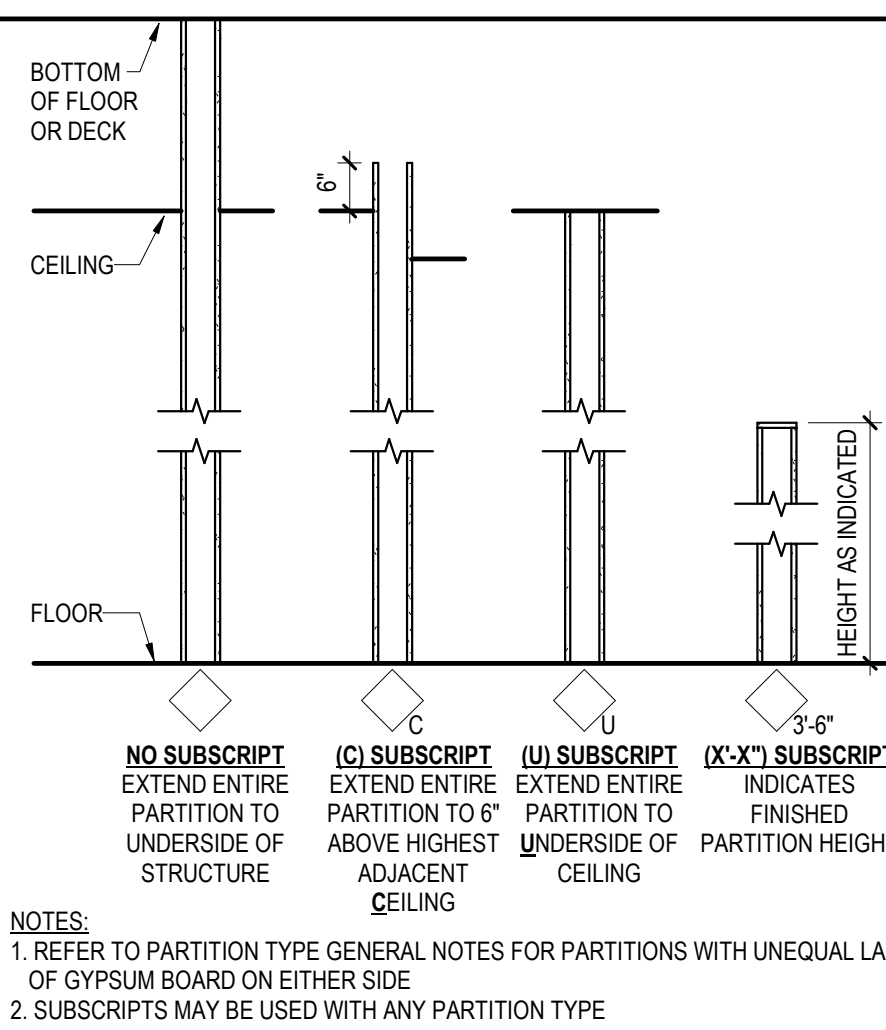


PLAN DETAIL GUIDELINE - RATED WALL INTERSECTIONS

1 PLAN DETAIL GUIDELINE - RATED WALL INTERSECTIONS

1 1/2\"/>

INTERIOR PARTITION TAG SUBSCRIPT KEY



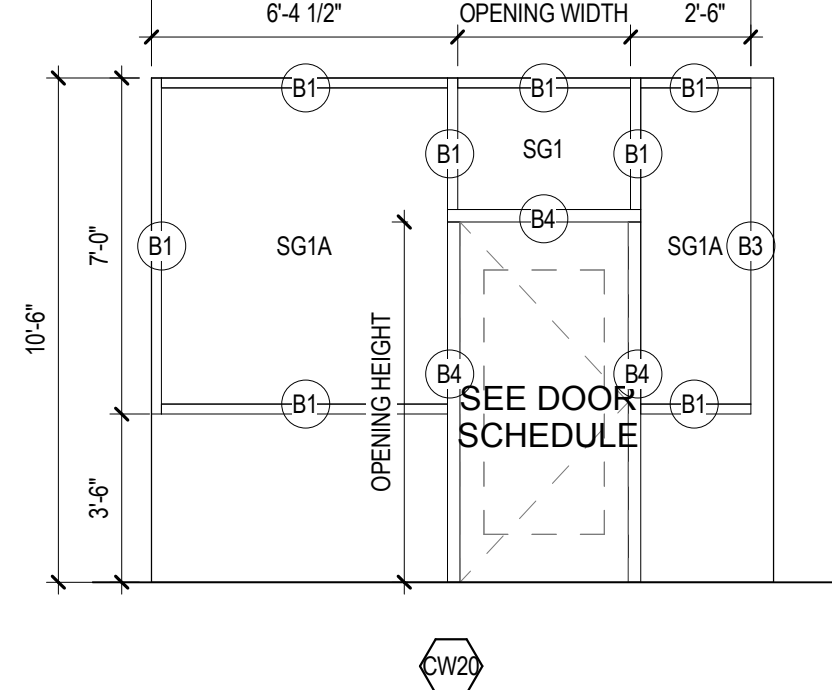
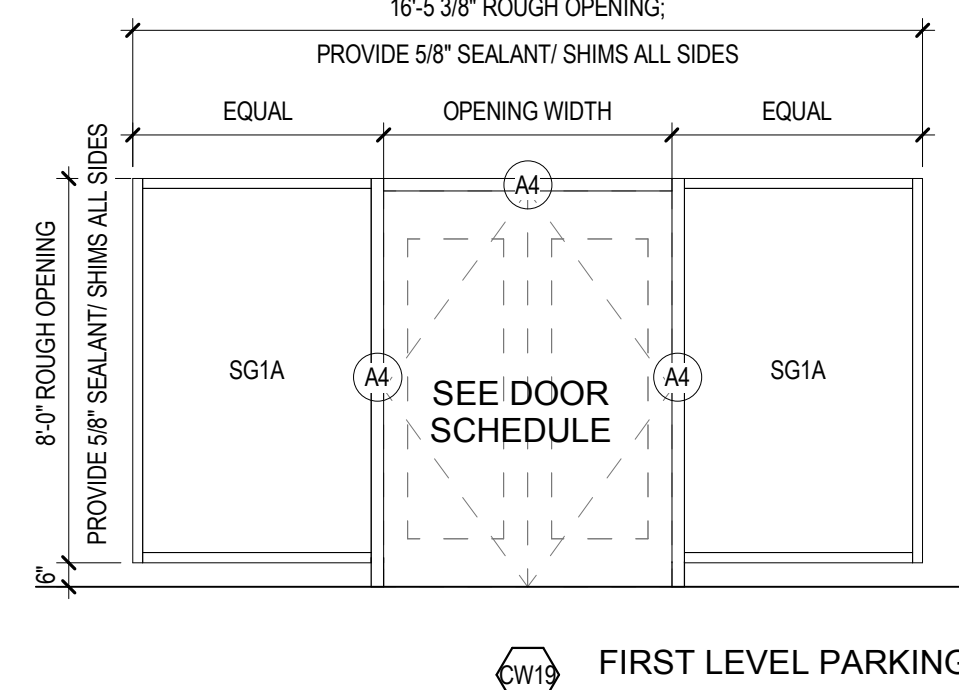
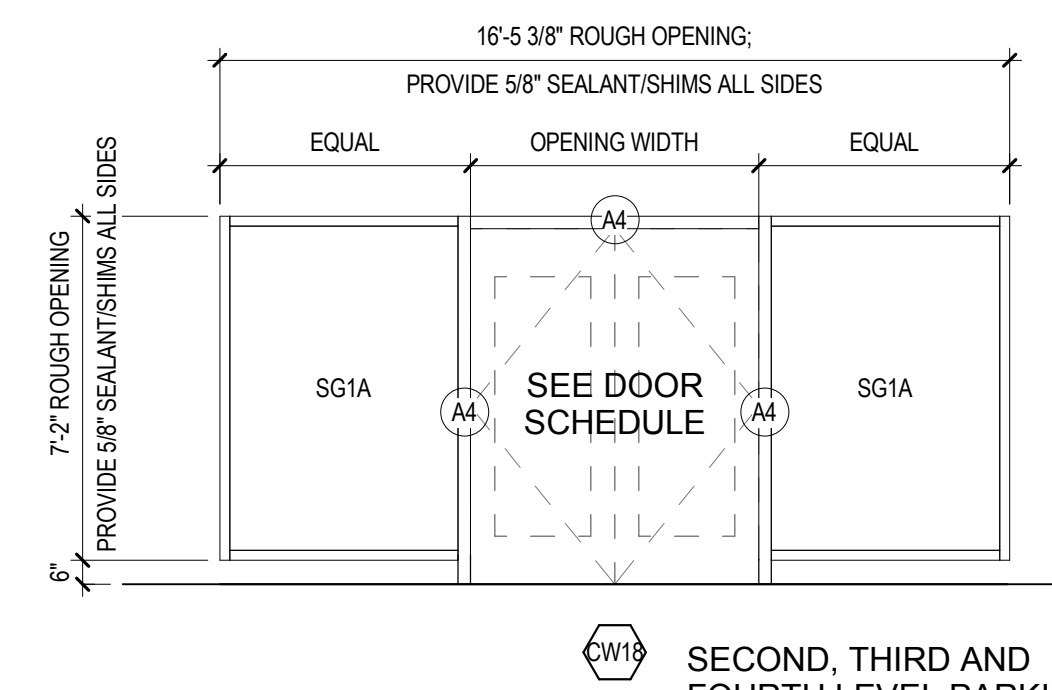
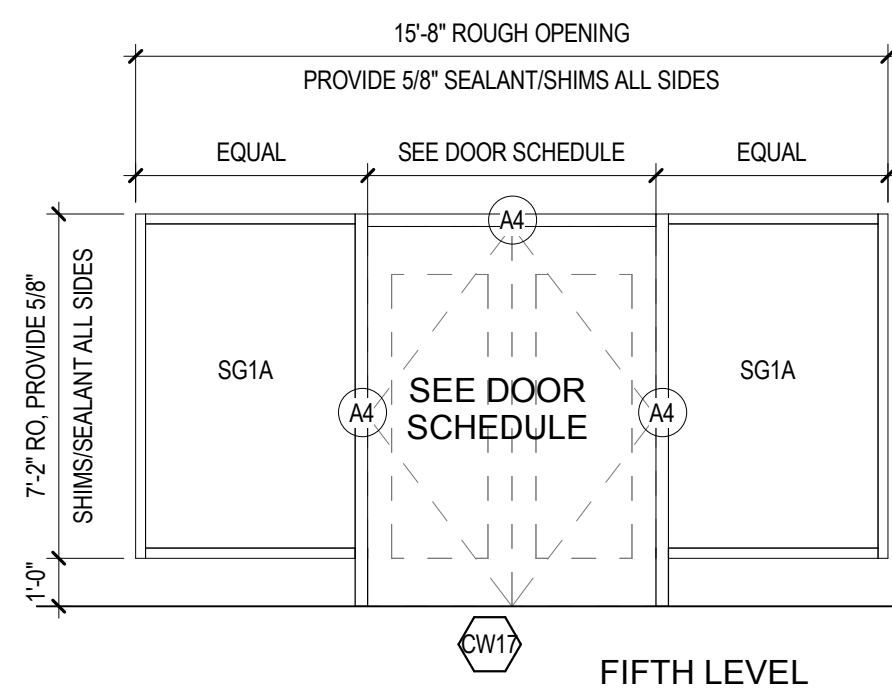
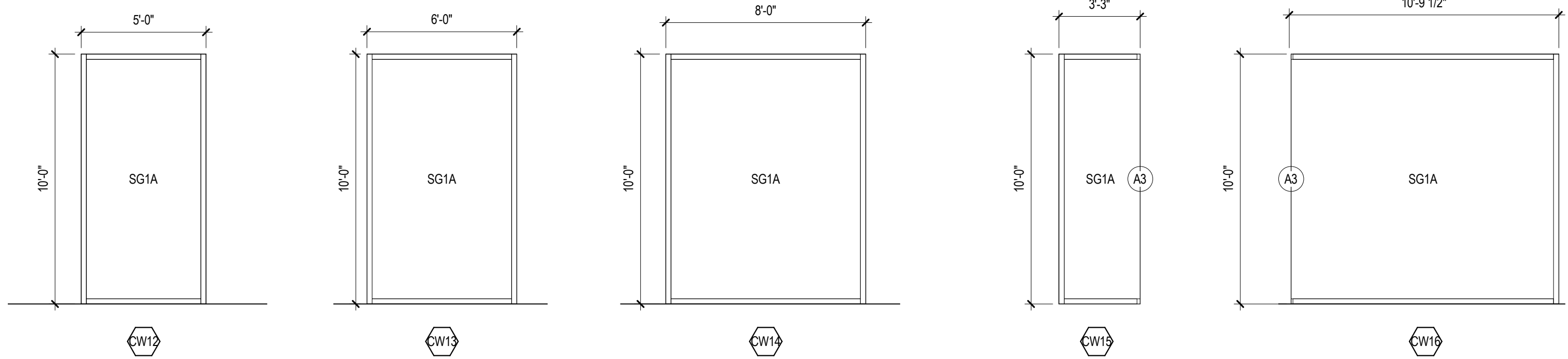
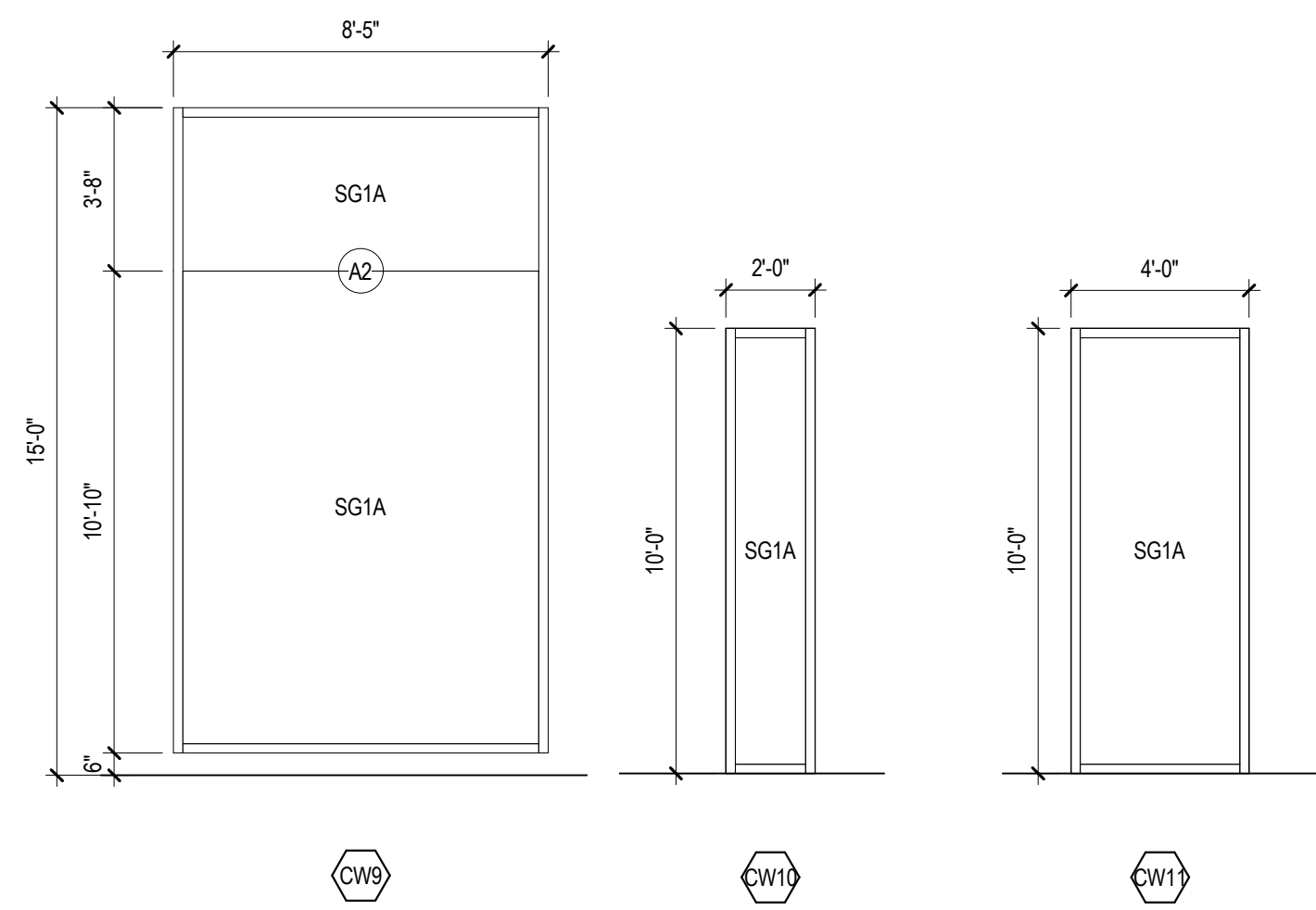
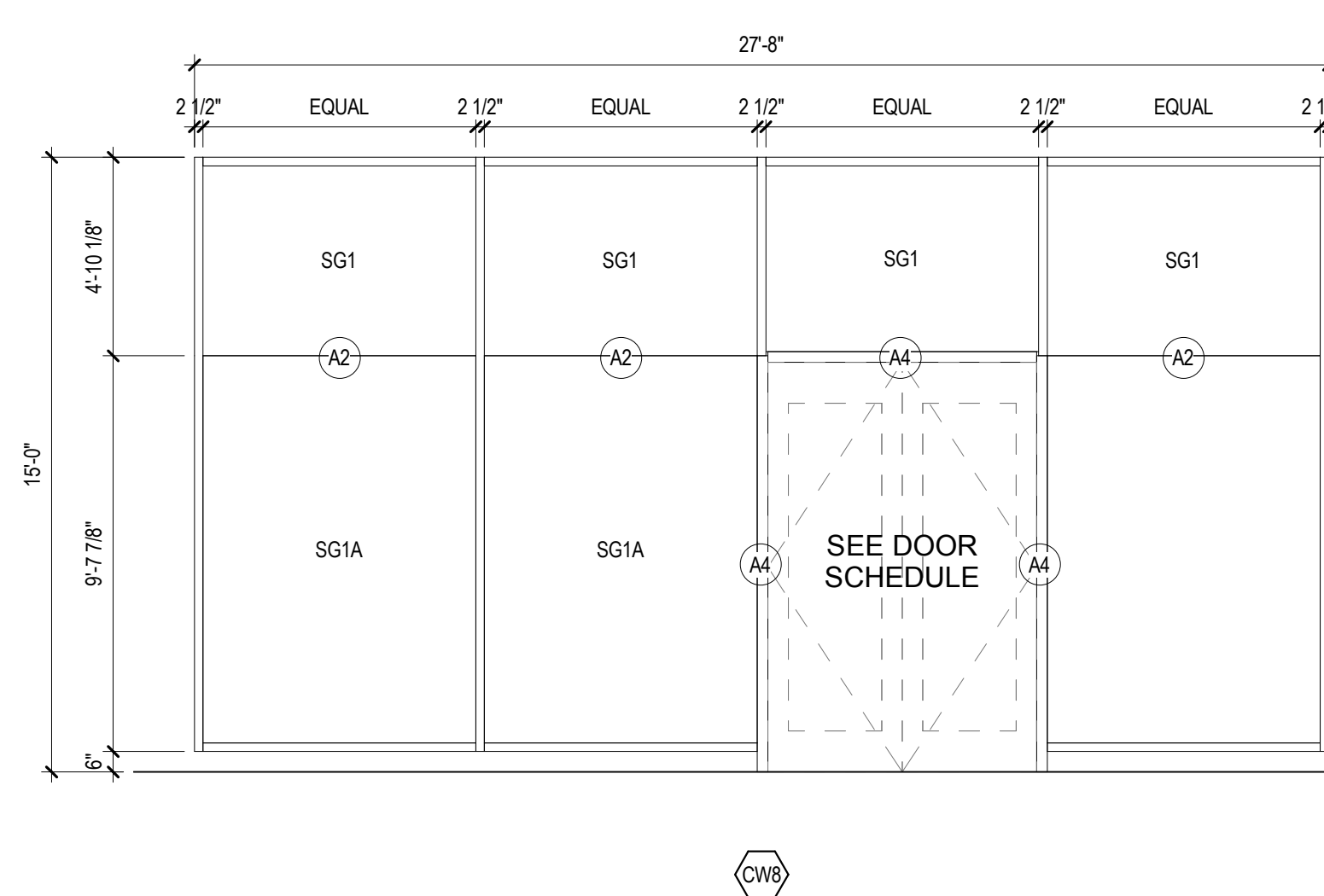
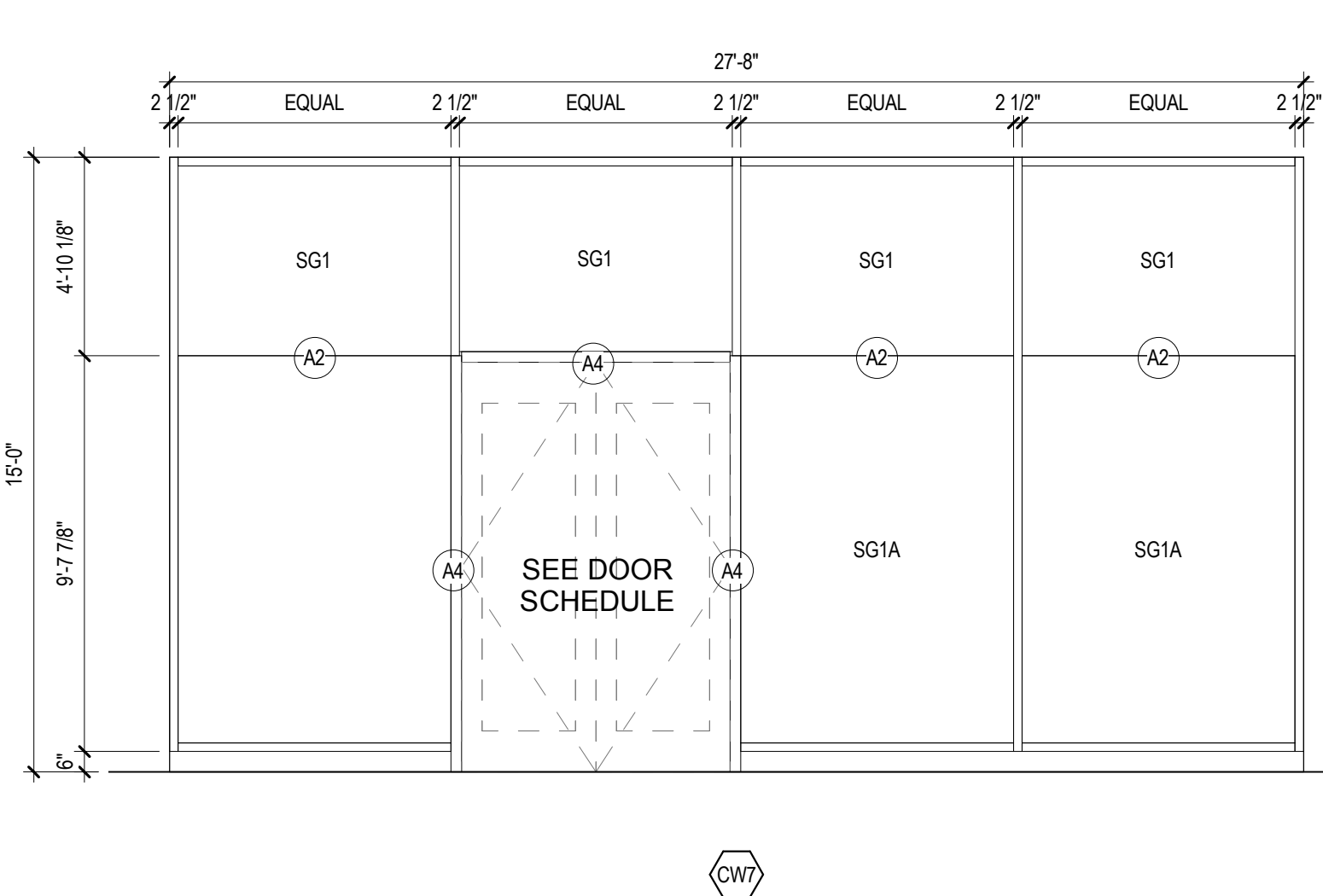
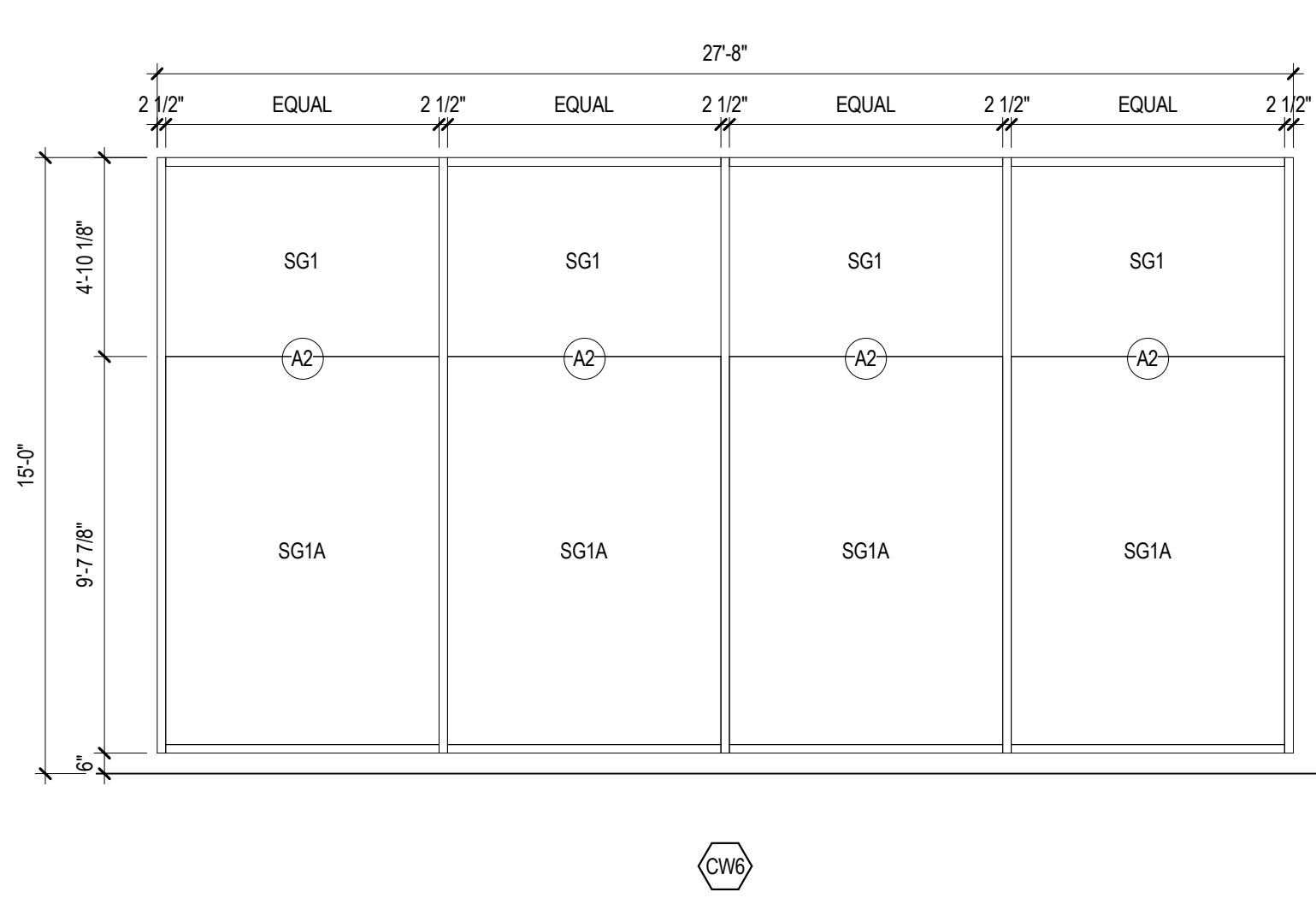
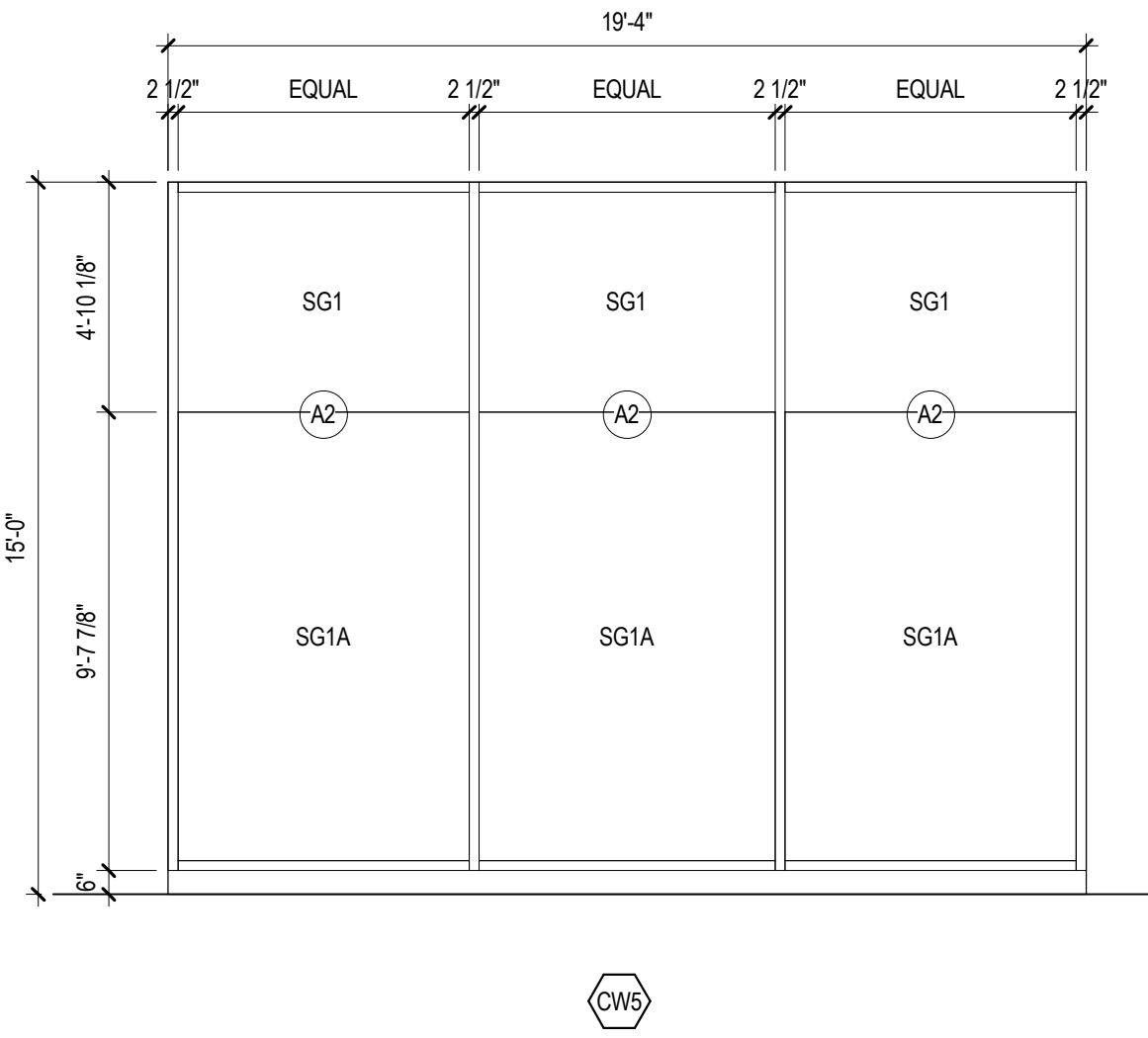
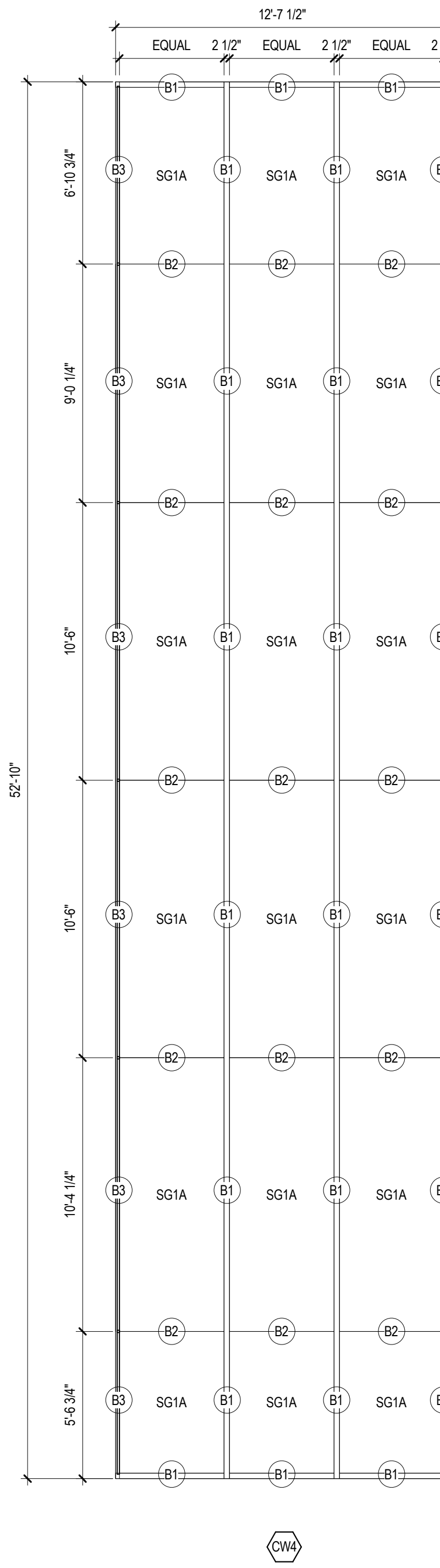
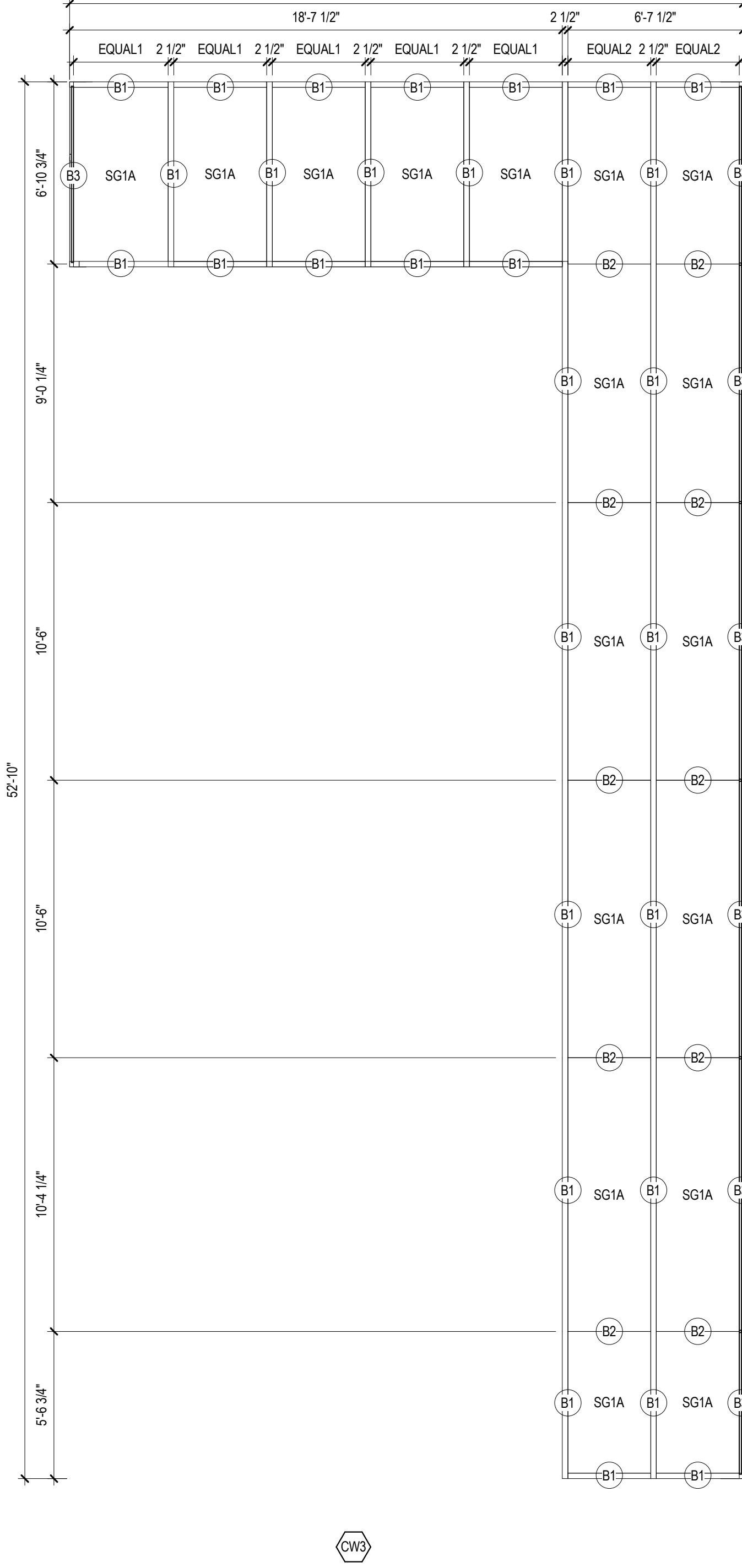
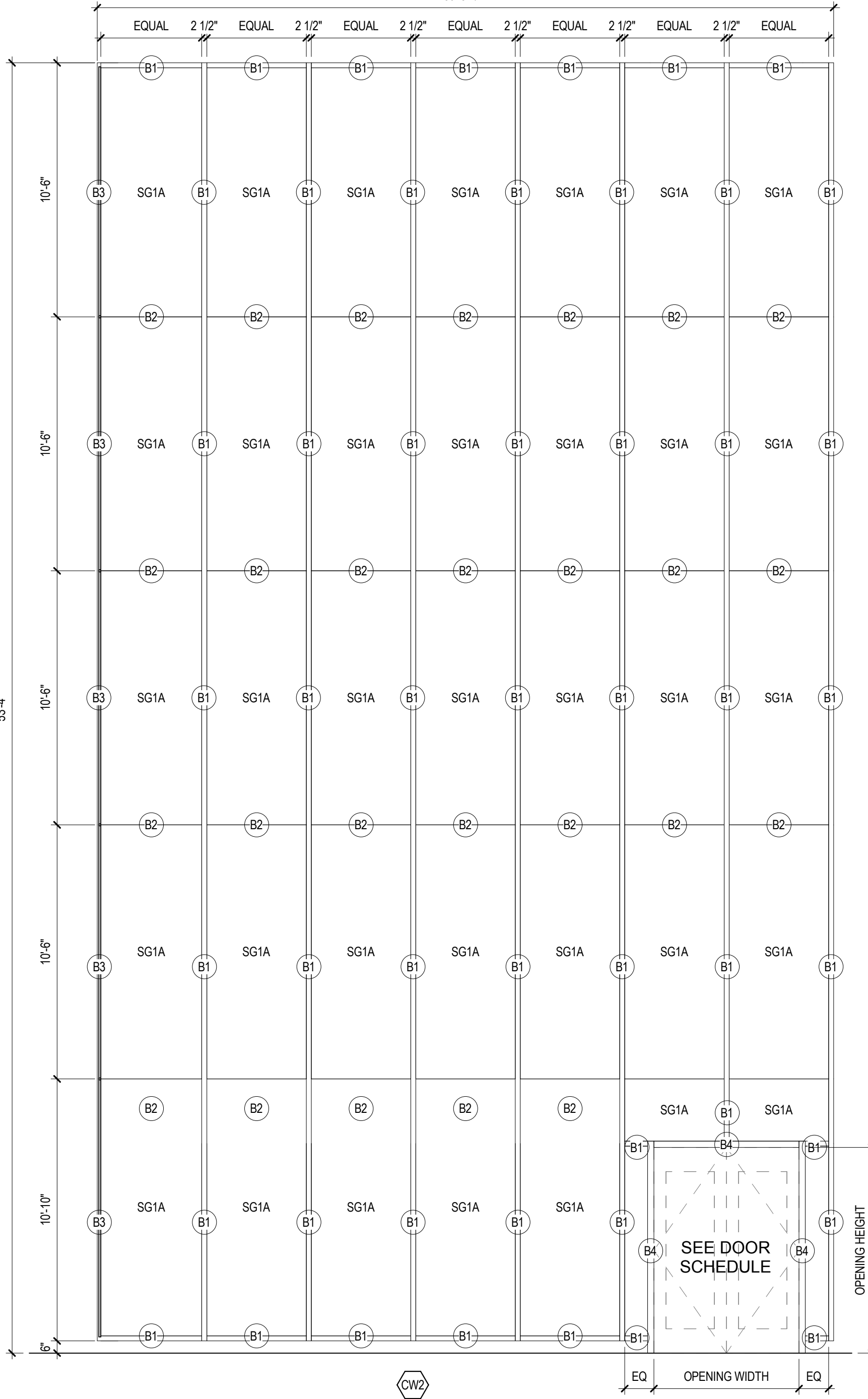
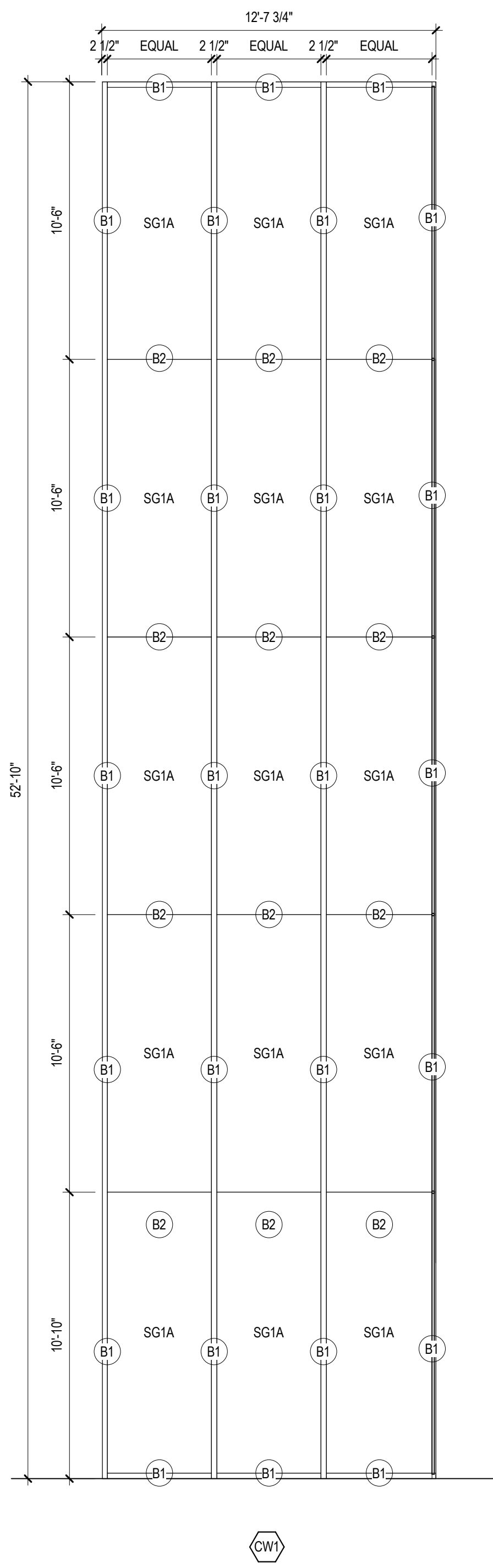
ACOUSTIC PARTITION GENERAL NOTES

1. USE ACOUSTICAL SEALANT AT ALL GPRD PARTITION PENETRATIONS AND JOINTS SUCH AS THE STRUCTURE ABOVE, FLOOR SURFACES AND PARTITIONS CONSTRUCTED OF ANOTHER MATERIAL, UNLESS NOTED OTHERWISE.
2. ALLOW MINIMUM 1/8\"/>
3. BEFORE INSTALLING GPRD PANELS OR SOUND ATTENUATION INSULATION, APPLY MINIMUM 1/16\"/>
4. RESILIENT CHANNELS ARE TO BE INSTALLED HORIZONTALLY WITH MOUNTING FLANGE DOWN. AN EXCEPTION IS MADE FOR THE RESILIENT CHANNEL NEAREST THE FLOOR. IT MAY BE INSTALLED WITH THE MOUNTING FLANGE UP.
5. WHEN SOUND ATTENUATION INSULATION (SA INS) IS USED, IT MUST NOT CONTACT THE GPRD MOUNTED ON THE RESILIENT CHANNEL. SIDE OF PARTITION AS THE LISTED SOUND ATTENUATION VALUE WILL BE COMPROMISED.
6. LOCATE OUTLETS IN ALTERNATE STUD CAVITIES AND USE SEPARATE CONDUIT FOR OUTLETS ON OPPOSITE SIDE OF THE SAME PARTITION.
7. ELECTRICAL BOXES CAN BE RIGIDLY MOUNTED TO STUDS WITH STANDARD MOUNTING BRACKETS. DO NOT ALLOW BOX MOUNTING BRACKETS OR CONDUIT TO TOUCH THE RESILIENT CHANNELS. ELECTRICAL BOXES ARE NOT PERMITTED IN WALLS EXCEEDING A TWO HOUR FIRE RATING UNLESS WALLS ARE SO TESTED.

PARTITION GENERAL NOTES

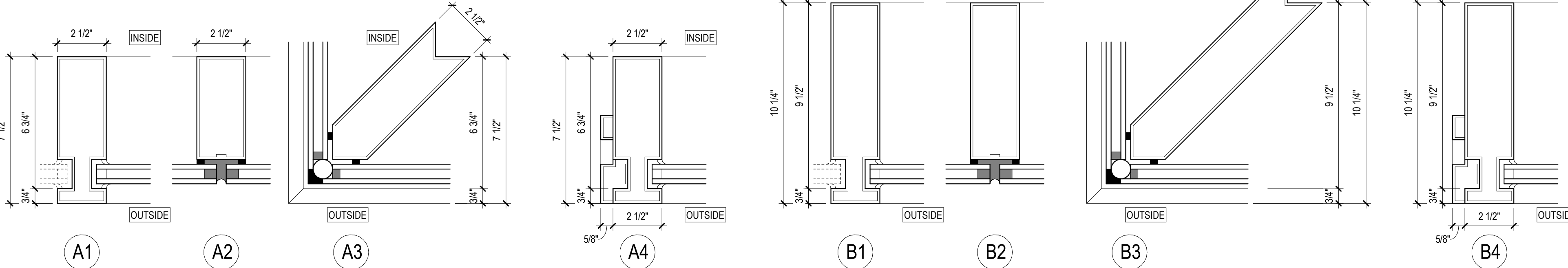
1. SEE CODE PLANS FOR REQUIRED PARTITION FIRE RATINGS.
2. GYPSUM BOARD AND METAL STUDS USED IN FIRE RATED SEPARATION PARTITIONS SHALL EXTEND FROM FLOOR TO UNDERSIDE OF STRUCTURE, UNLESS NOTED OTHERWISE.
3. WHERE SMOKE PARTITIONS ARE REQUIRED BY CODE PLANS, THE FOLLOWING APPLIES TO ALL NON-ACOUSTICAL TYPE SMOKE PARTITIONS:
EXTEND GYPSUM BOARD ON CORRIDOR SIDE TO STRUCTURE ABOVE. SEAL TOP AND BOTTOM OF PARTITION AND ALL PENETRATIONS THROUGH THE PARTITION ON THE CORRIDOR SIDE WITH A SMOKE SEALANT HAVING A MINIMUM WARM SMOKE TEMPERATURE RATING OF 400 DEGREES F (193 C). ALL SEALS MUST HAVE PRE-APPROVAL OF CODE OFFICIAL. ROOM SIDE GYPSUM BOARD CAN EXTEND TO 6\"/>
4. WHERE SMOKE PARTITIONS ARE REQUIRED BY CODE PLANS, THE FOLLOWING APPLIES TO ALL ACOUSTICAL TYPE SMOKE PARTITIONS:
EXTEND GYPSUM BOARD ON BOTH SIDES TO STRUCTURE ABOVE. SEAL TOP AND BOTTOM OF PARTITION AND ALL PENETRATIONS THROUGH THE PARTITION ON THE CORRIDOR SIDE WITH A SMOKE SEALANT HAVING A MINIMUM WARM SMOKE TEMPERATURE RATING OF 400 DEGREES F (193 C). ALL SEALS MUST HAVE PRE-APPROVAL OF CODE OFFICIAL. ROOM SIDE GYPSUM BOARD CAN EXTEND TO 6\"/>
5. CONTRACTORS TO VERIFY CONDITIONS ABOVE CEILING AT EXISTING PARTITIONS IDENTIFIED WITH FIRE SMOKE PARTITION SYMBOLS. REPAIR CONDITIONS THAT DO NOT MEET REQUIREMENTS OF THE INDICATED FIRE SMOKE RATING SHOWN, SUCH AS BUT NOT LIMITED TO OPENINGS IN PARTITIONS, GAPS AROUND DUCTWORK, PIPES AND CONDUIT, MISSING SMOKE DAMPERS, ETC.
6. DIMENSIONS TO METAL STUD PARTITION ARE MEASURED TO FINISH FACE OF PARTITION UNLESS NOTED OTHERWISE.
7. THE DIMENSION SHOWING THE LOCATION OF A DOOR FRAME IN GYPSUM BOARD WALLS IS TO THE INSIDE OF THE DOOR FRAME (DOOR OPENING). PROVIDE 4\"/>
8. SOUND ATTENUATING INSULATION MEANS GLASS FIBER OR MINERAL WOOL BATTS OR ISOLANT'S BEARING THE UL LABEL FOR FIRE RESISTANCE. VERIFY TYPE AND DENSITY (PCF) WITH FIRE TEST NUMBER SHOWN ON PARTITION TYPE.
9. FOR PARTITION HEIGHTS SEE PARTITION TAG LEGEND AND TAG SUBSCRIPTS ON PLANS.
10. ALL FURRING TO BE PARTITION TYPE XN2, UNLESS NOTED OTHERWISE.
11. FOR PARTITION TYPES WITH GYPSUM BOARD ON ONE SIDE ONLY, INSTALL GYPSUM BOARD ON ROOM SIDE UNLESS NOTED OR DETAILED OTHERWISE.
12. FOR SHAFT WALL PARTITION TYPES, INSTALL LINER PANEL ON NON-ACCESSIBLE SIDE, UNLESS NOTED OR DETAILED OTHERWISE.
13. LEAD LINING ON GYPSUM BOARD EXTENDS TO 7'-0\"/>
14. PROVIDE 1/2\"/>
15. WHEN GYPSUM BOARD PARTITIONS ARE LOCATED BELOW STRUCTURE THAT HAS A VERTICAL DEFLECTION MOVEMENT MORE THAN 1/2\"/>
16. WHEN PARTITION FRAMING RUNS HIGHER THAN 12'-0\"/>
17. BULKHEAD FRAMING SHALL EXTEND TO UNDERSIDE OF STRUCTURE WITH DIAGONAL STUD FRAMING BRACES AT 4'-0\"/>
18. GENERAL CONTRACTOR SHALL PROVIDE AND COORDINATE ALL IN-WALL BLOCKING FOR WALL MOUNTED CASEWORK AND EQUIPMENT SUPPLIED BY THIS CONTRACT, OWNER FURNISHED OR BY VENDORS. CONTRACTORS OPTION TO PROVIDE 3/4\"/>
19. IN WET AREAS SUCH AS BUT NOT LIMITED TO SHOWER, TUB, GLASS WASHING ROOMS, SOILED UTILITY ROOMS, JANITOR CLOSETS, COMMERCIAL FOOD PROCESSING ROOMS, ETC., USE TILE BACKER BOARD BEHIND THE CERAMIC TILE AND EXTEND TO 2'-0\"/>
20. IN WET AREAS SUCH AS SOILED UTILITY ROOMS, JANITOR CLOSETS, ETC., USE 5/8\"/>
21. FOR ALL REMODELING PROJECTS, ALL PARTITIONS NOTED AS INFILLS WITHIN, OR EXTENSIONS ONTO EXISTING PARTITIONS, ARE EXTENDED AS SUCH FOR INTENT ONLY. ALL EXPOSED PARTITION FACES ARE TO ALIGN.

HM FRAME PROFILE

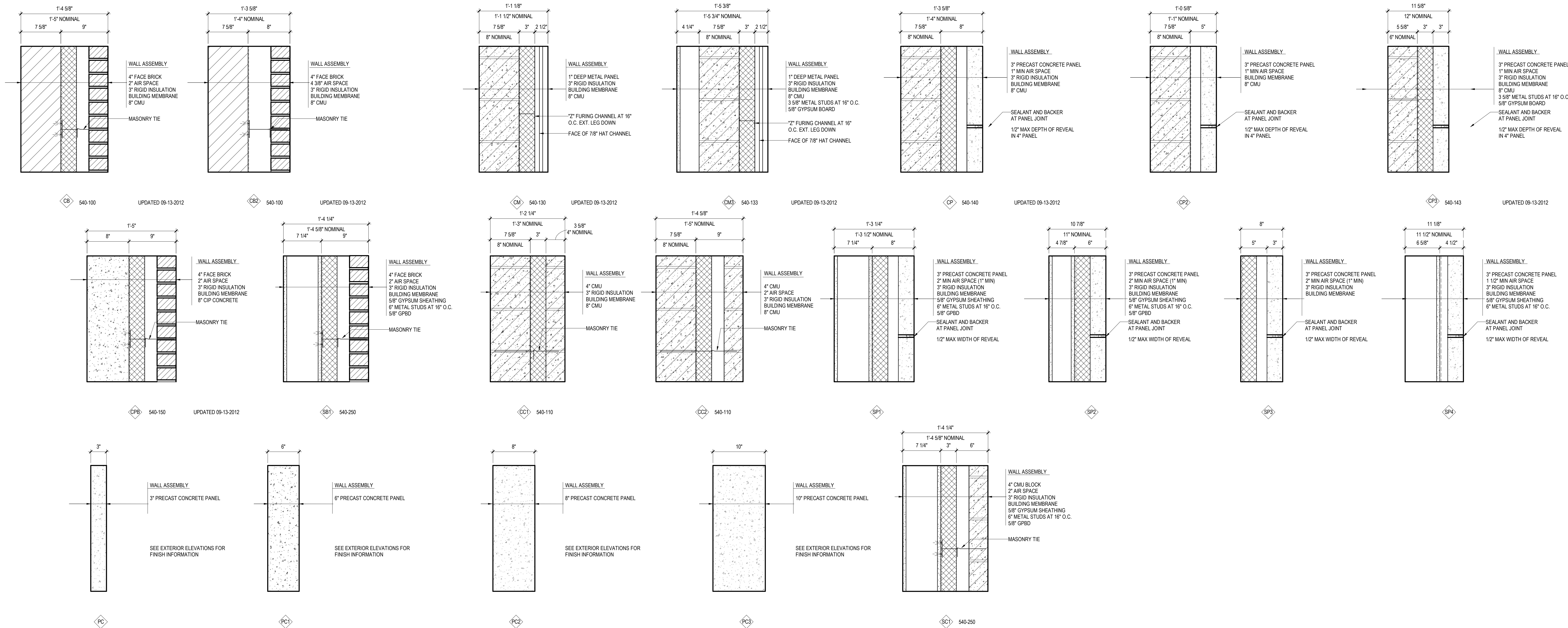


CURTAINWALL TYPES
1/4" = 1'-0"

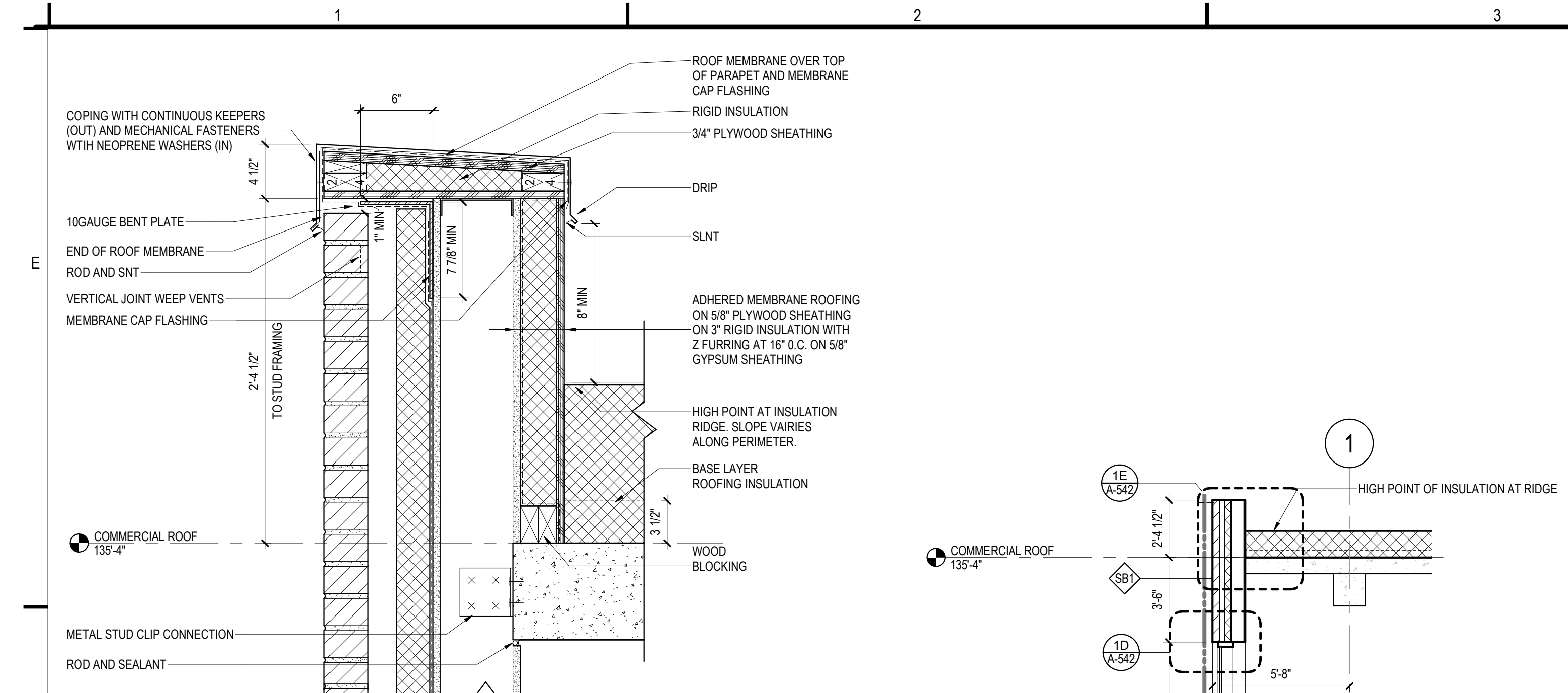
NOTE: ALL CURTAIN WALL PROFILE ARE
A1 UNLESS NOTED
OTHERWISE



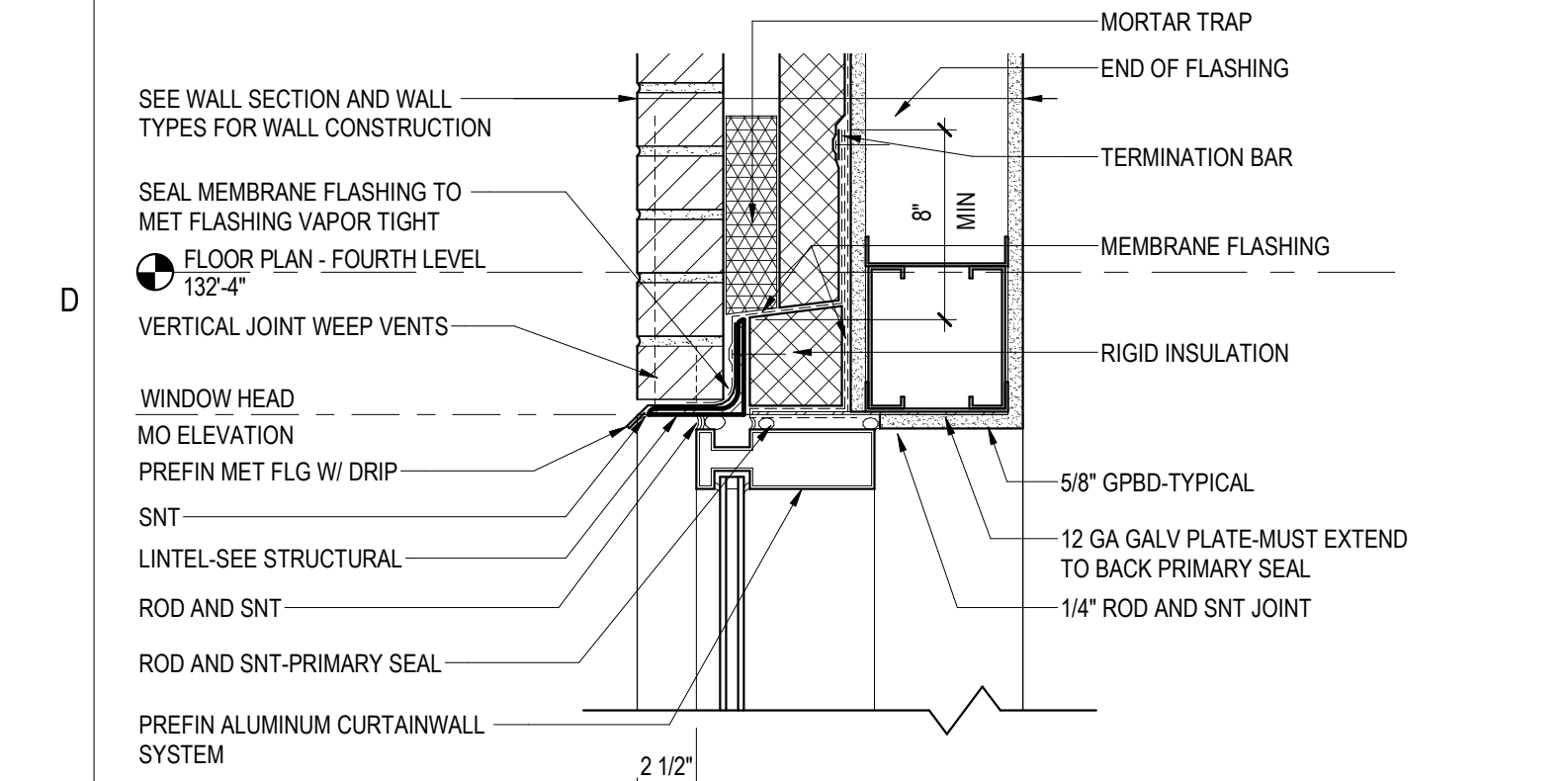
CURTAIN WALL PROFILE TYPES
3/8" = 1'-0"



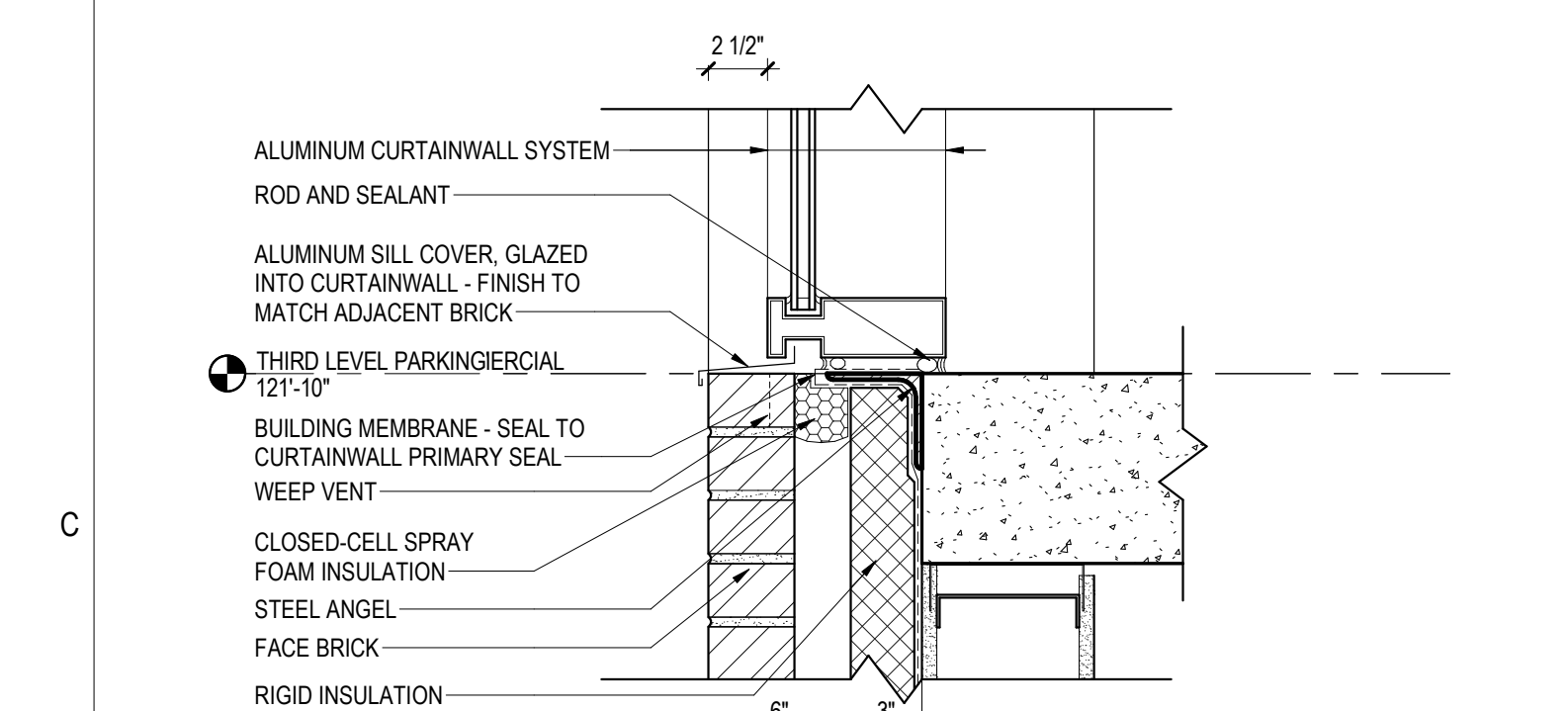
WALL TYPES
1 1/2\"/>



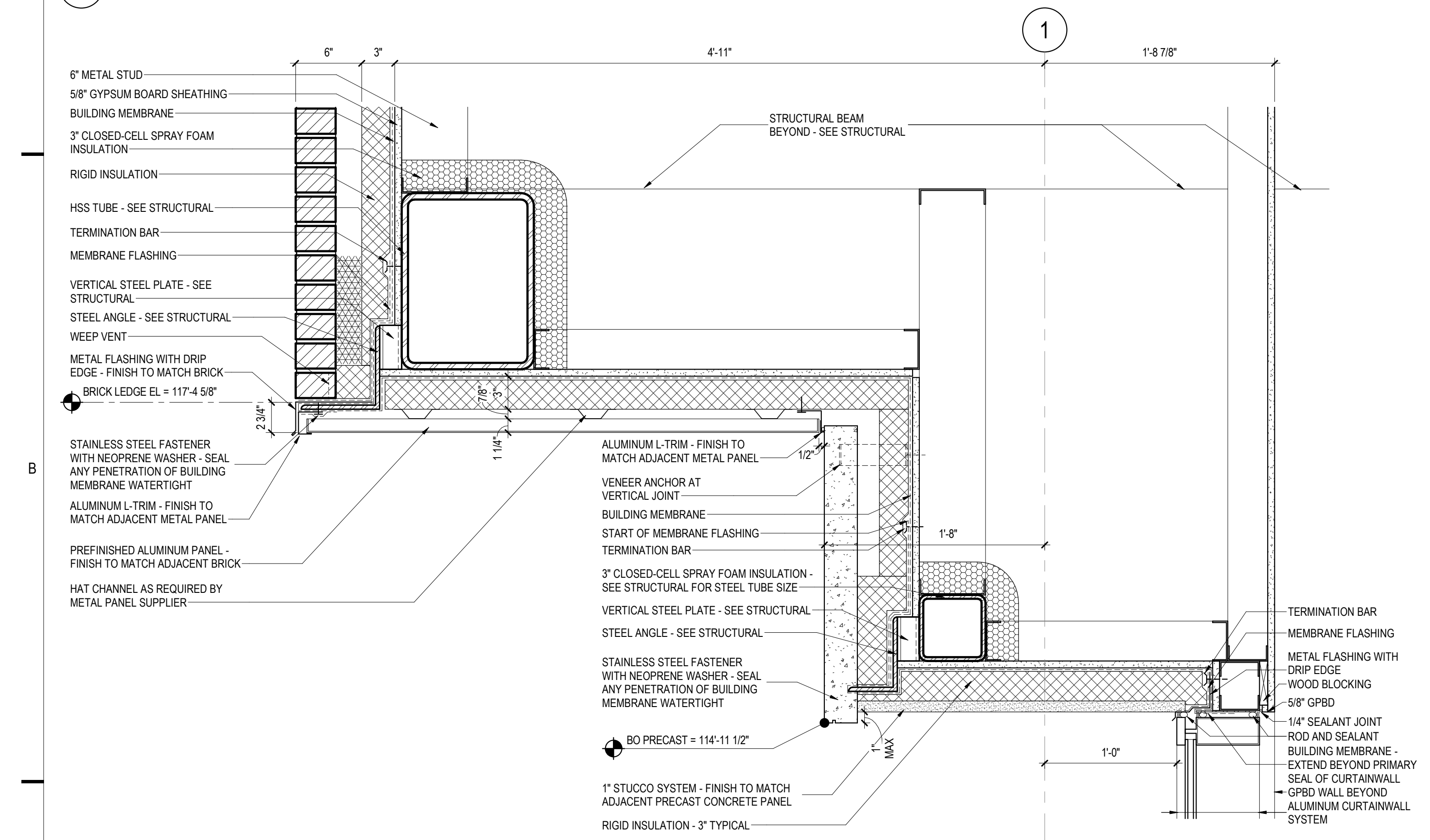
1E SECTION DETAIL - COMMERCIAL PARAPET TYPICAL
A-542 1 1/2" x 1'-0"



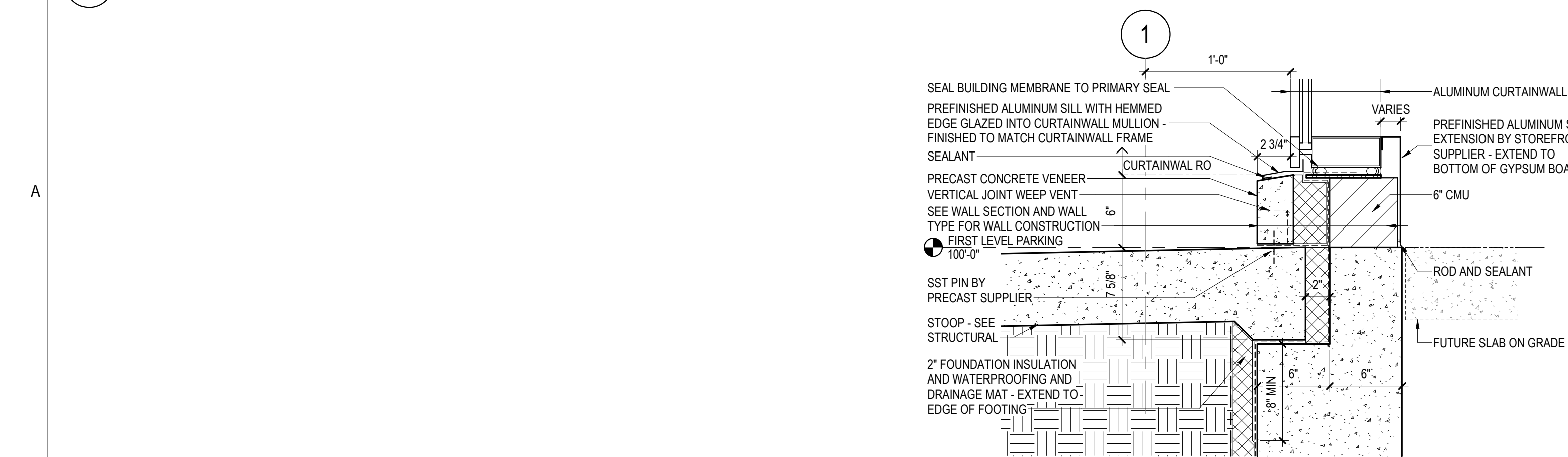
1D SECTION DETAIL - CURTAINWALL CURTAINWALL HEAD AT BRICK WALL TYPICAL
A-542 1 1/2" x 1'-0"



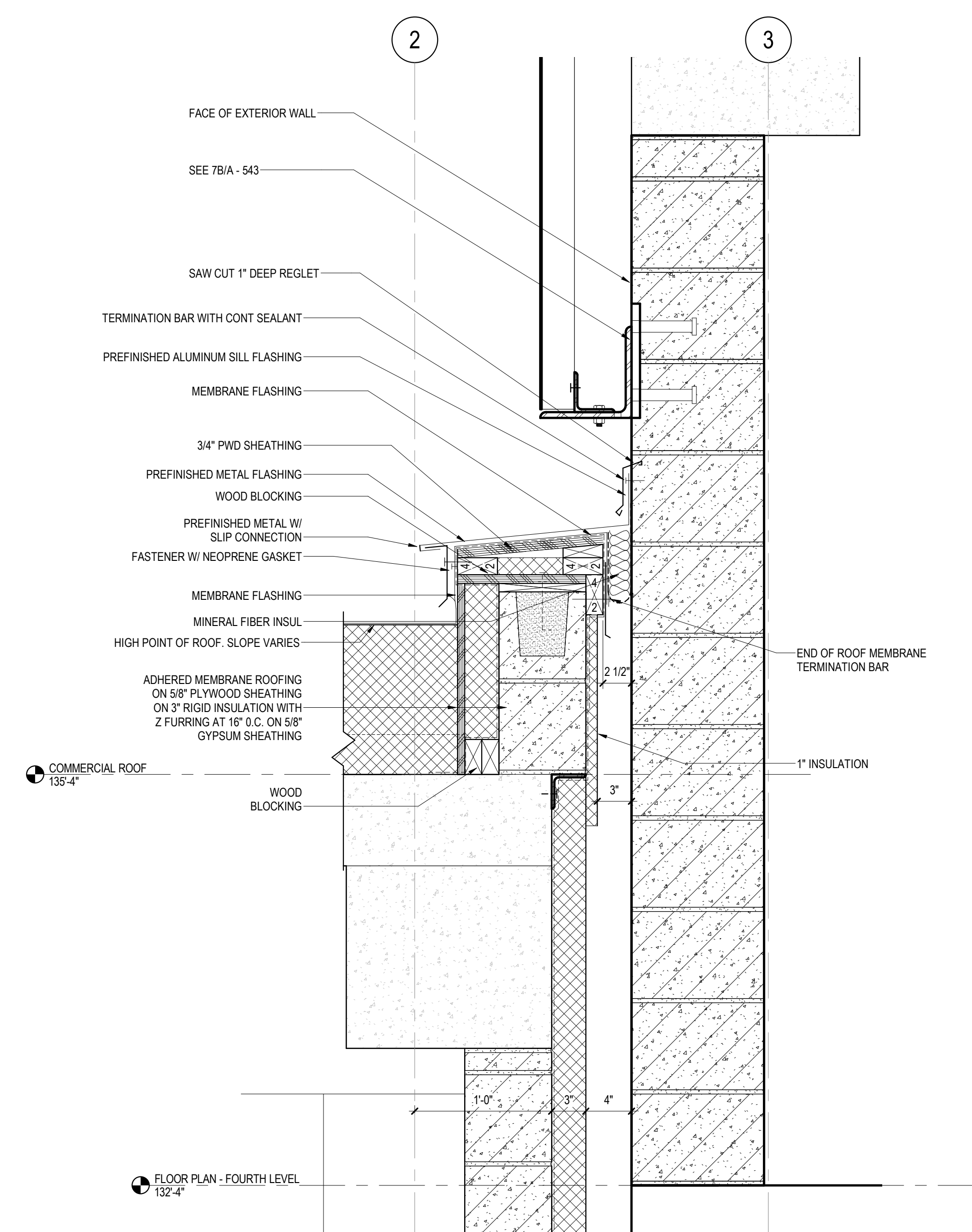
1C SECTION DETAIL - COMMERCIAL CURTAINWALL SILL AT BRICK WALL
A-542 1 1/2" x 1'-0"



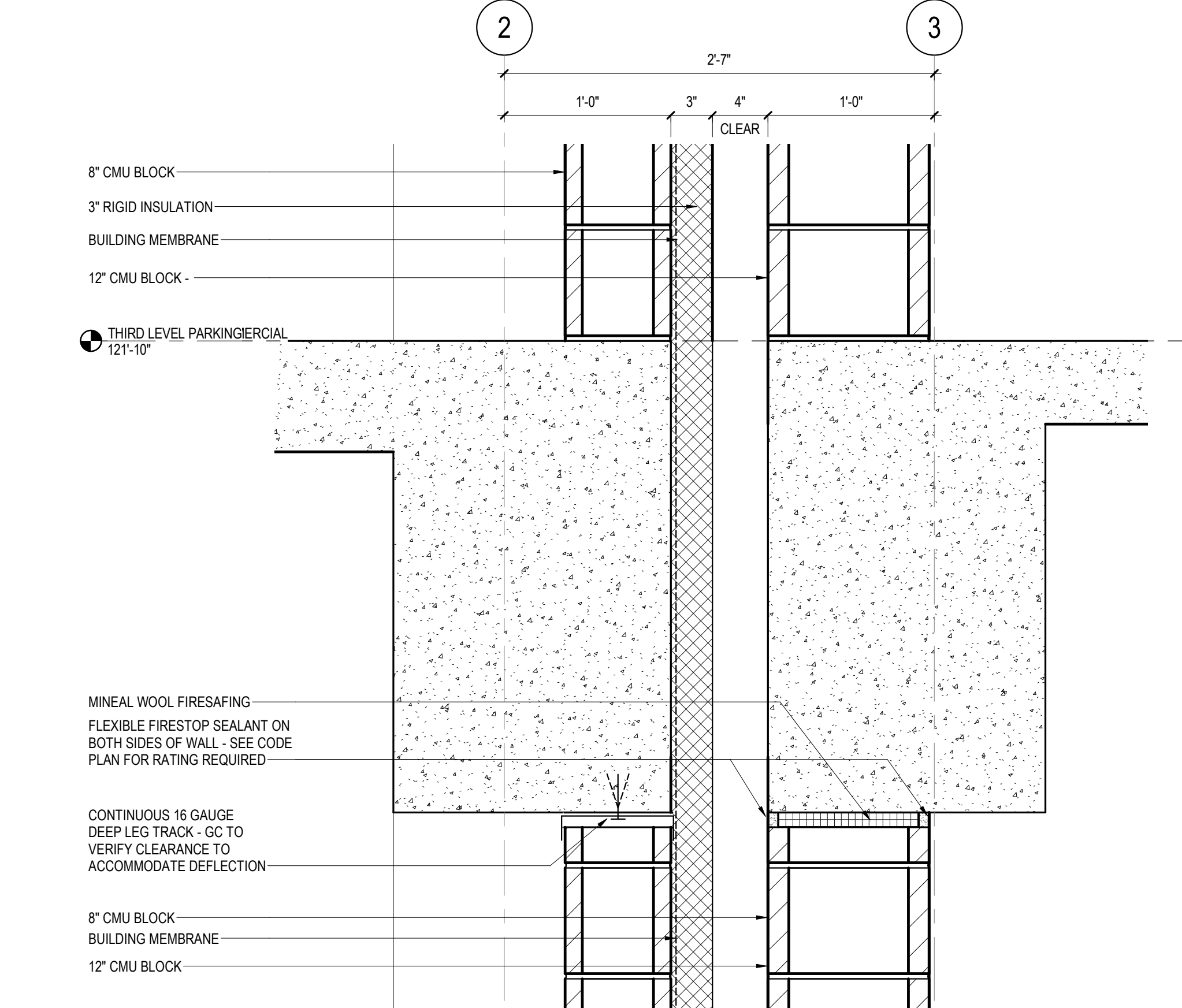
1A SECTION DETAIL - COMMERCIAL CANTILEVER SOFFIT & FASCIA
A-542 1 1/2" x 1'-0"



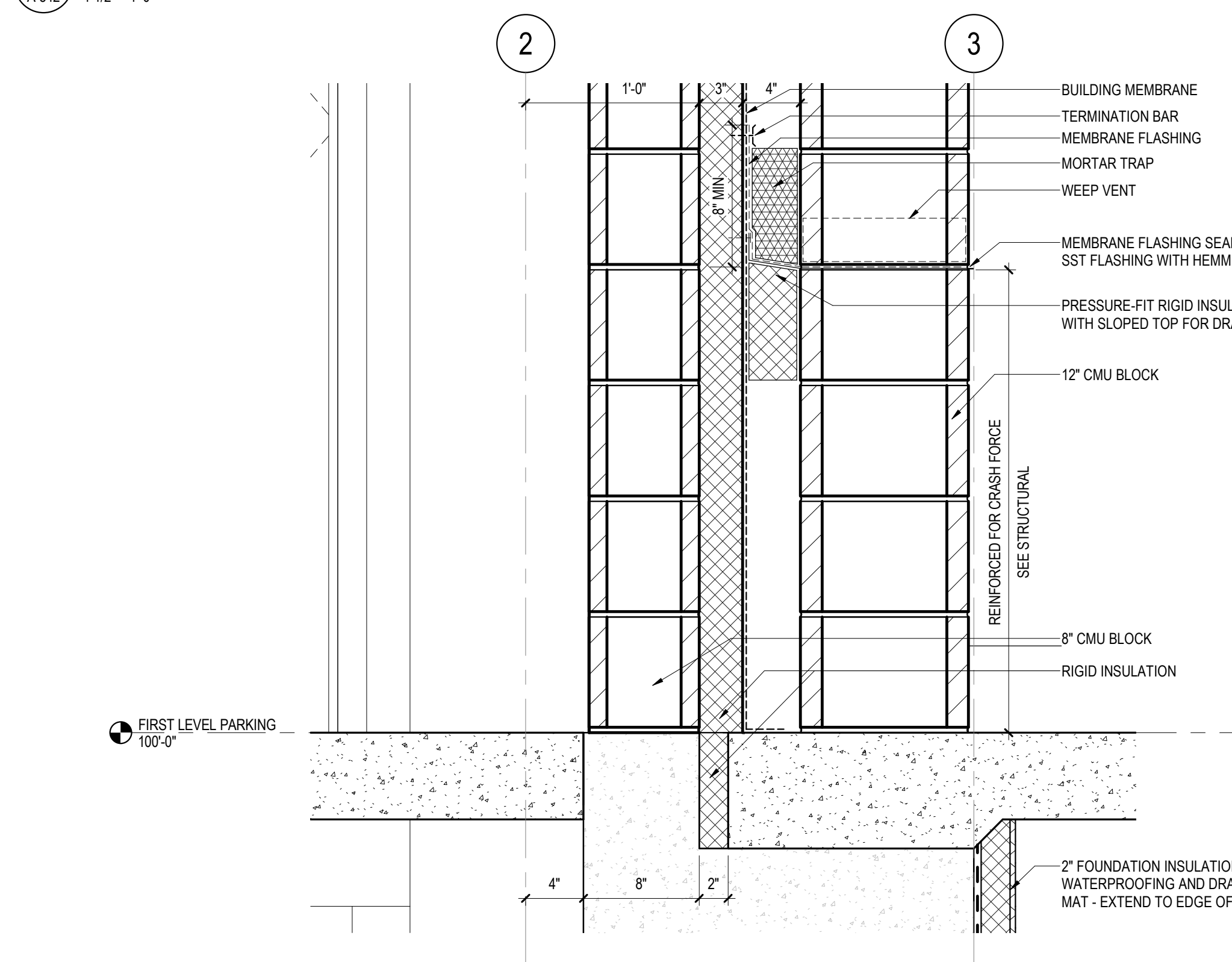
2A SECTION DETAIL - COMMERCIAL CURTAIN WALL SILL AT STOOP
A-542 1 1/2" x 1'-0"



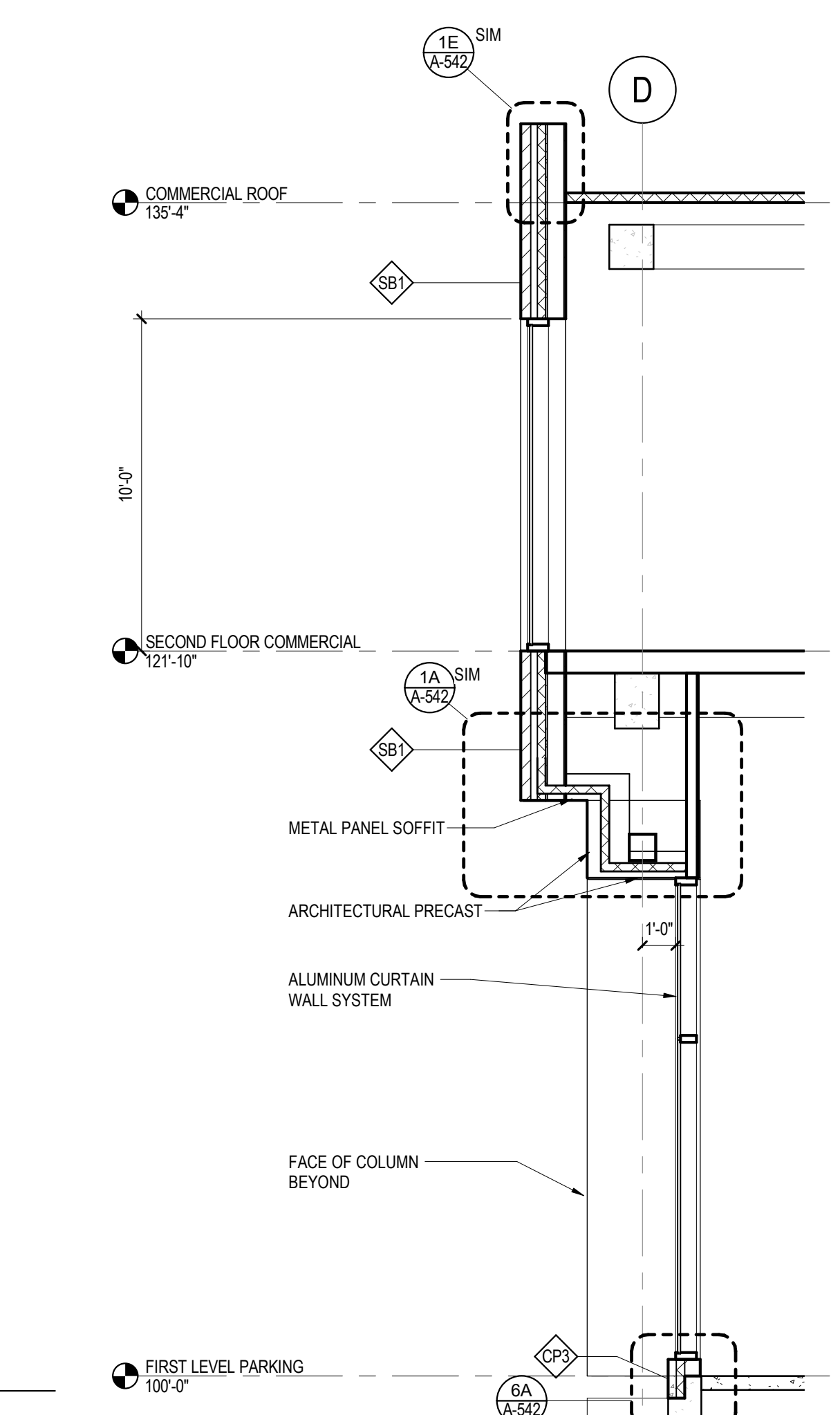
3C SECTION DETAIL - COMMERCIAL ROOF CURB
A-542 1 1/2" x 1'-0"



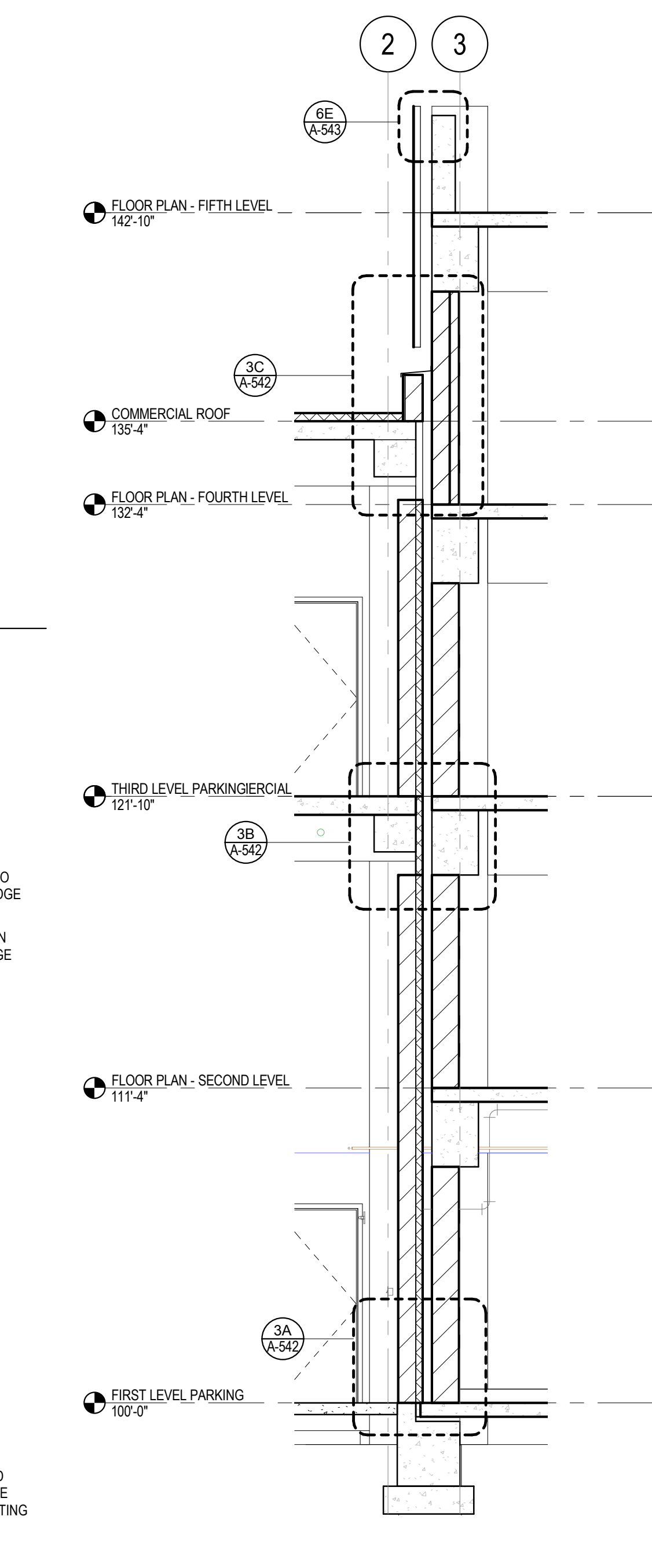
3B SECTION DETAIL - COMMERCIAL SOUTH SECOND FLOOR SLAB
A-542 1 1/2" x 1'-0"



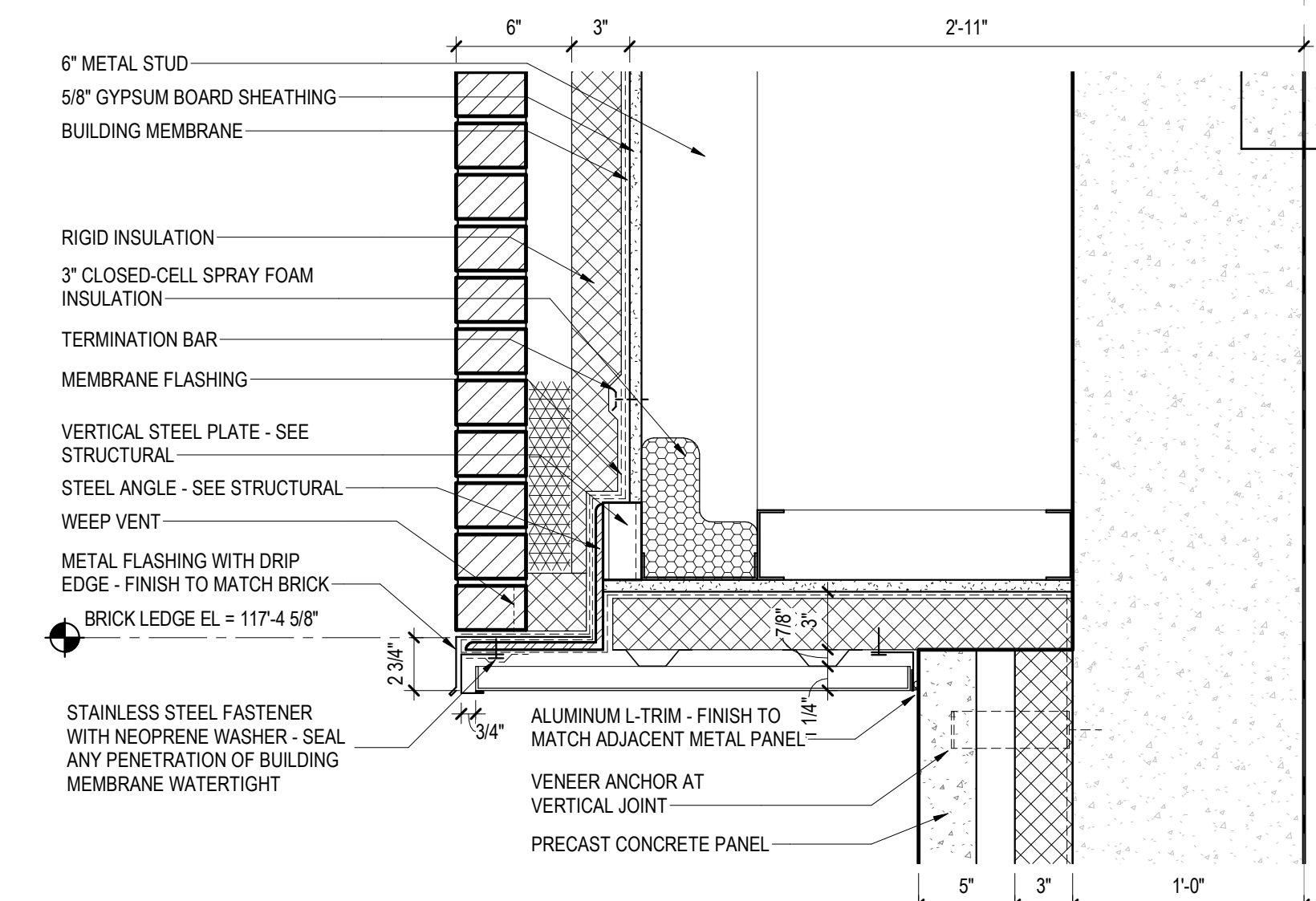
3A SECTION DETAIL - COMMERCIAL SOUTH WALL SOG
A-542 1 1/2" x 1'-0"



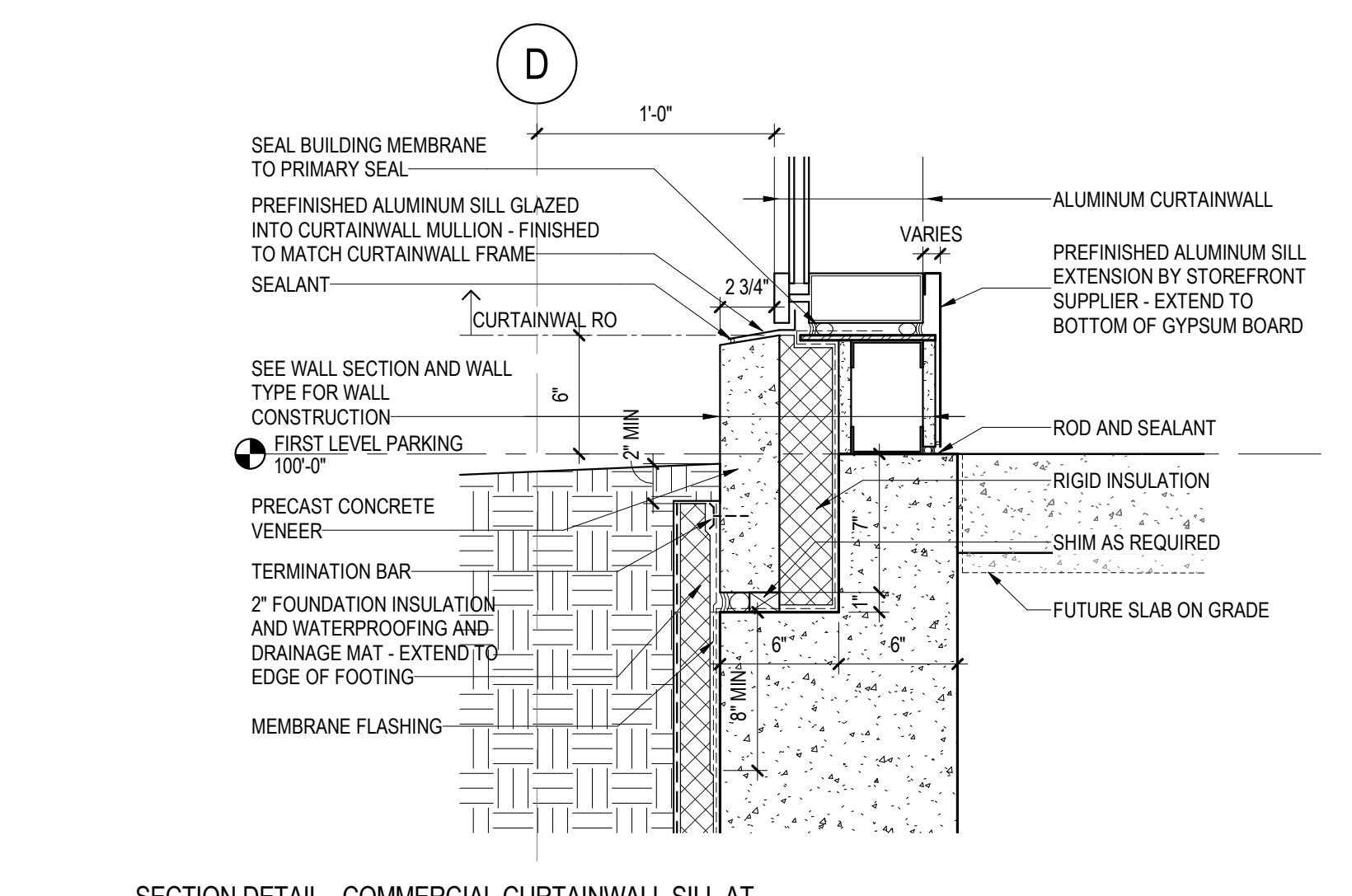
5C WALL SECTION - COMMERCIAL EAST
A-542 1/4" x 1'-0"



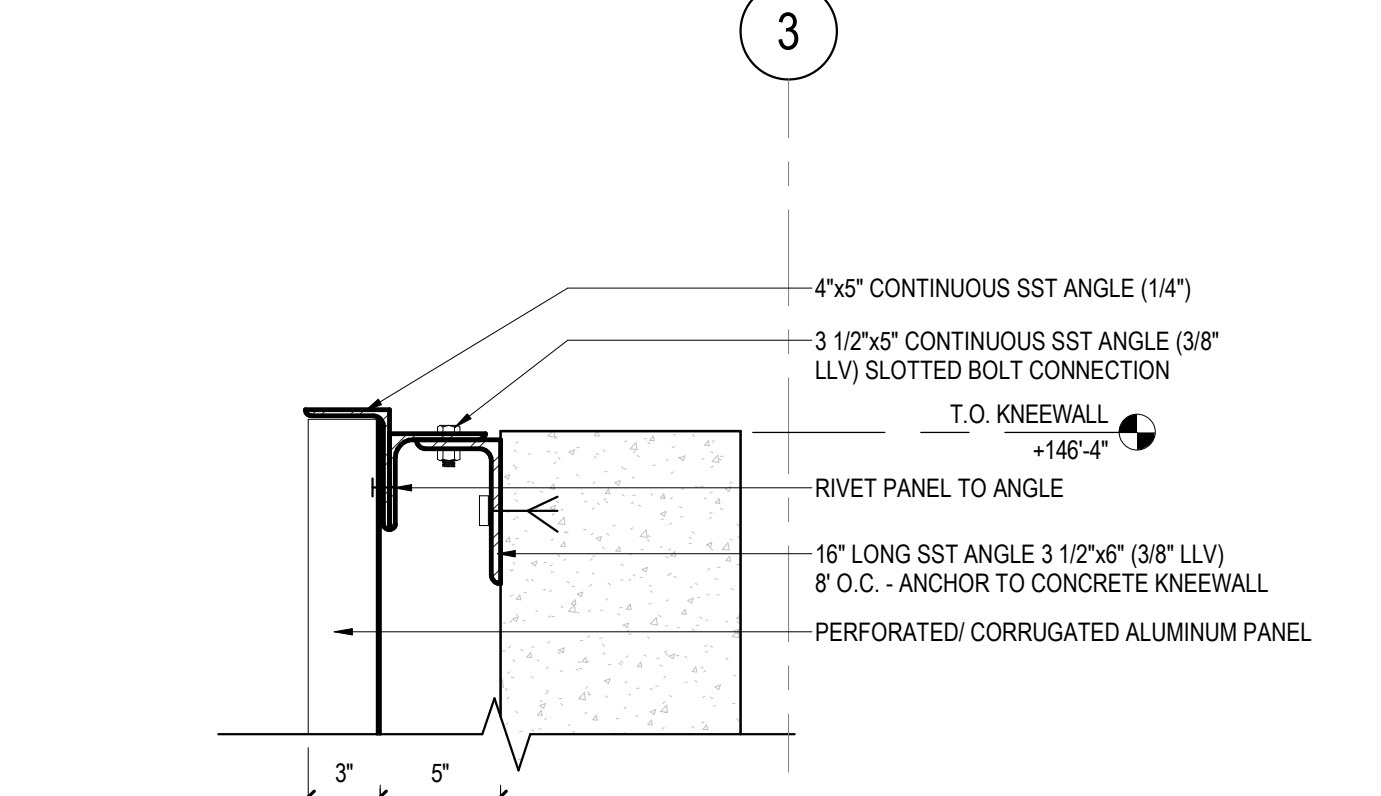
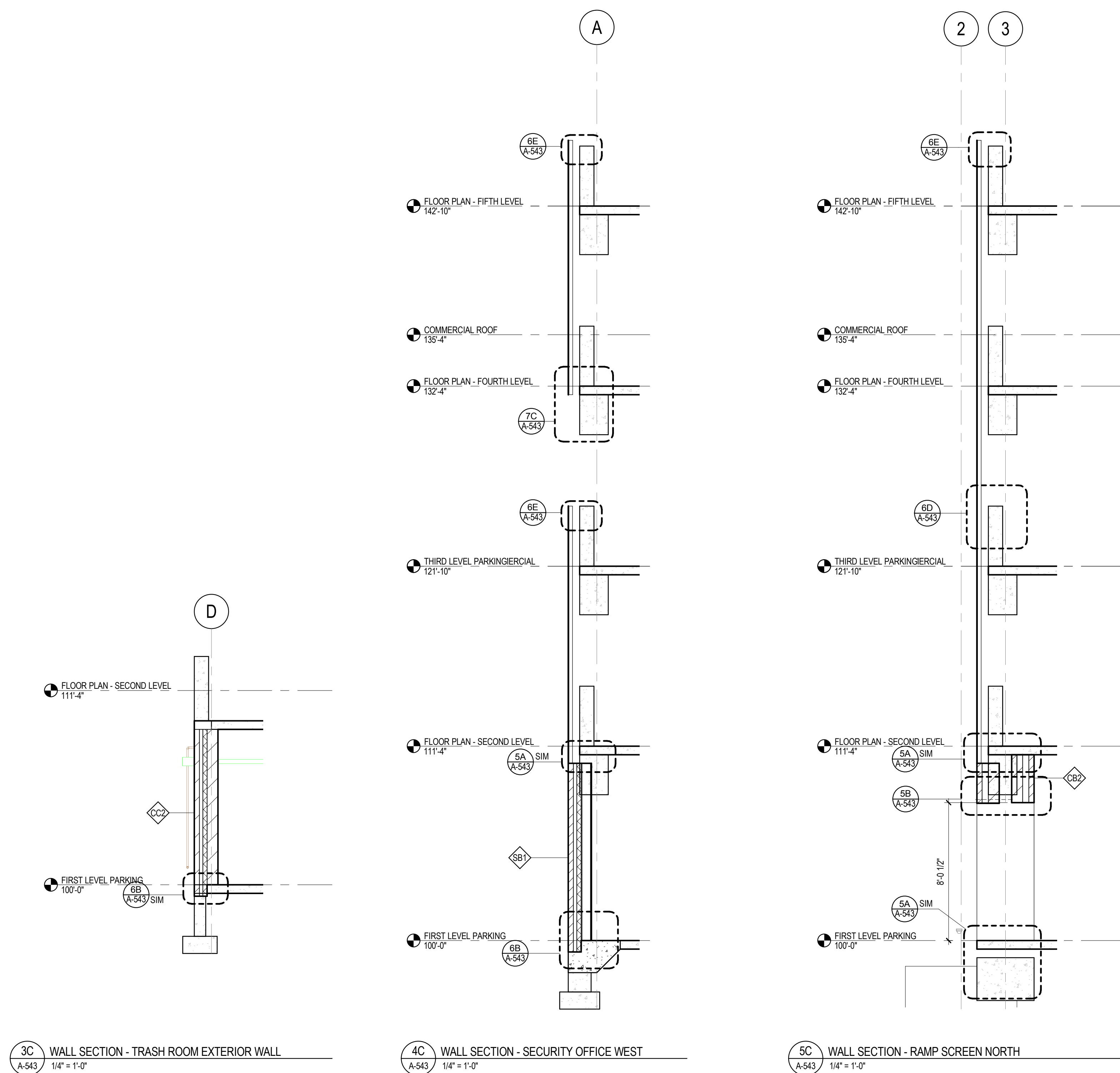
6A WALL SECTION - COMMERCIAL SOUTH
A-542 1/4" x 1'-0"



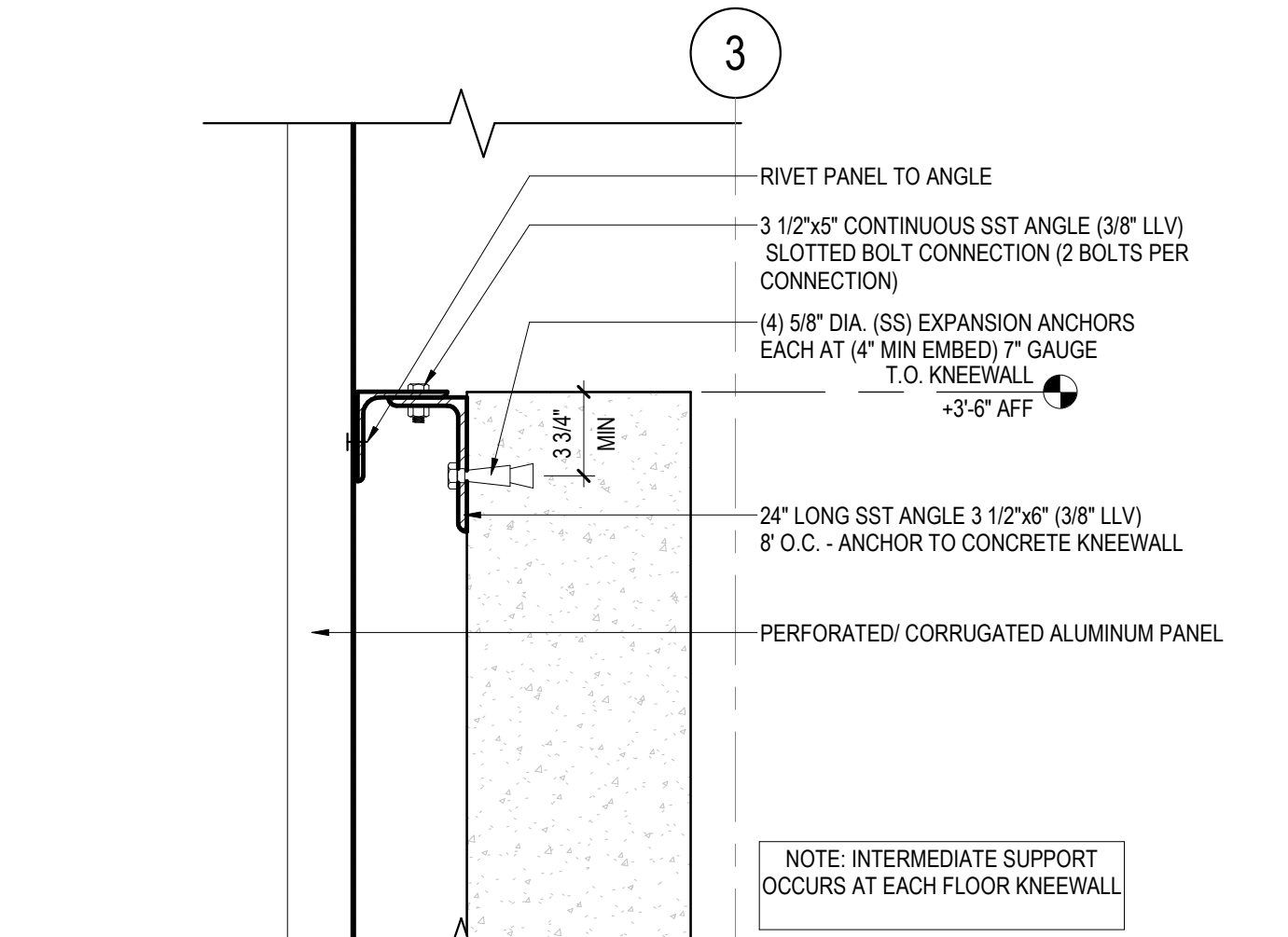
6B SECTION DETAIL - COMMERCIAL CANTILEVER SOFFIT EAST
A-542 1 1/2" x 1'-0"



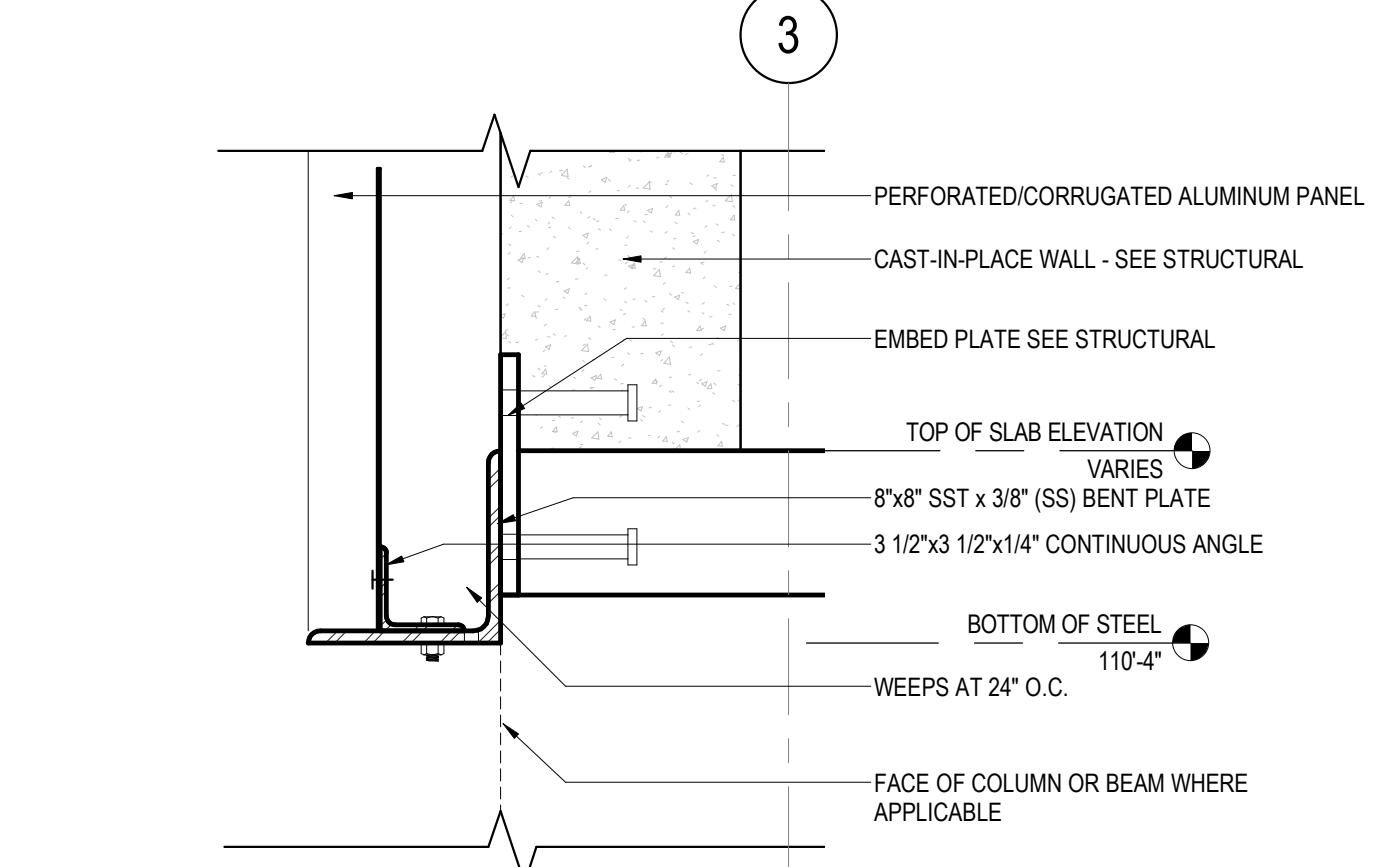
6A SECTION DETAIL - COMMERCIAL CURTAINWALL SILL AT SIDEWALK
A-542 1 1/2" x 1'-0"



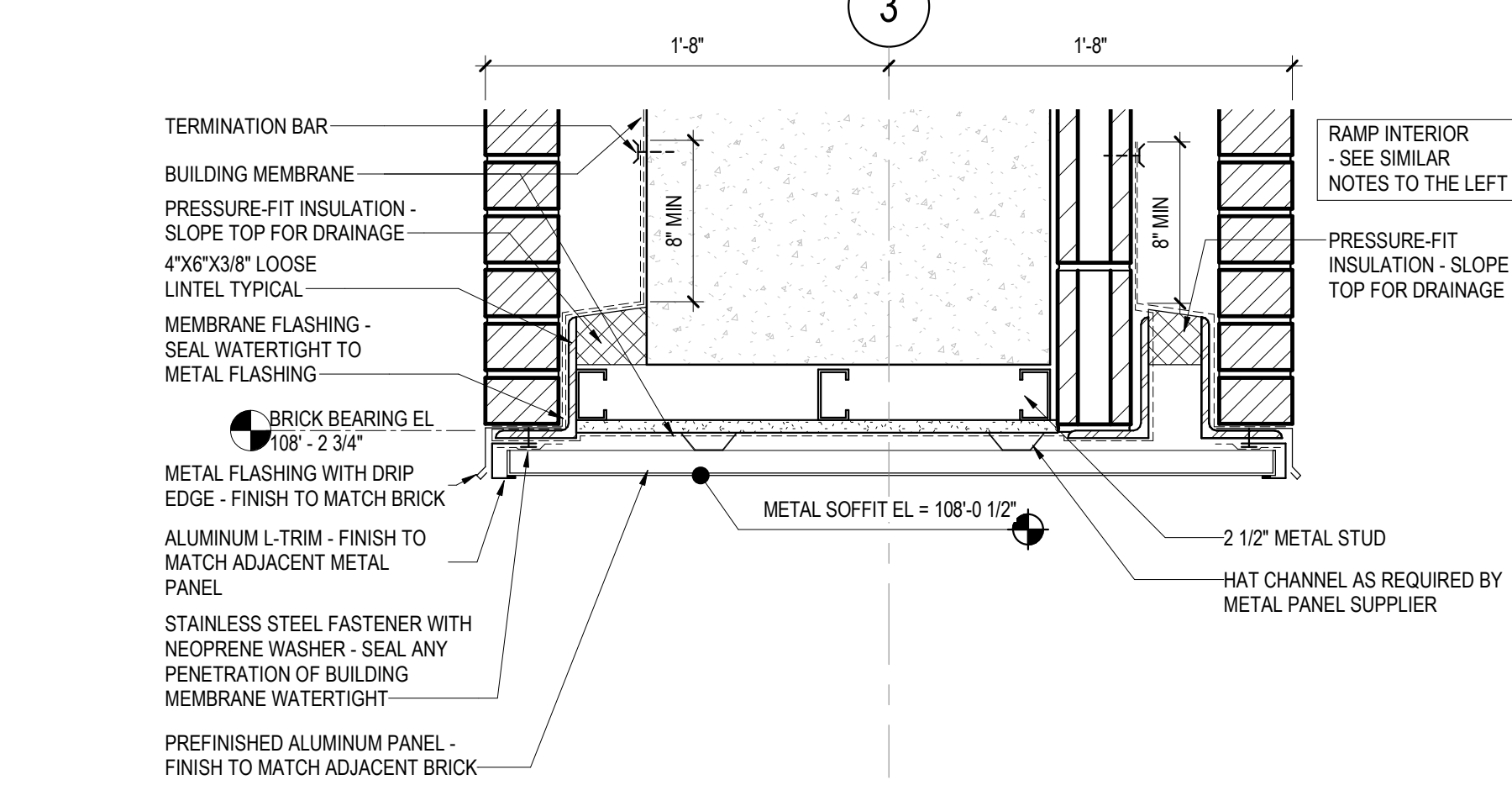
6E SECTION DETAIL - METAL SCREEN TOP TYPICAL
A-543 / 1 1/2\"/>



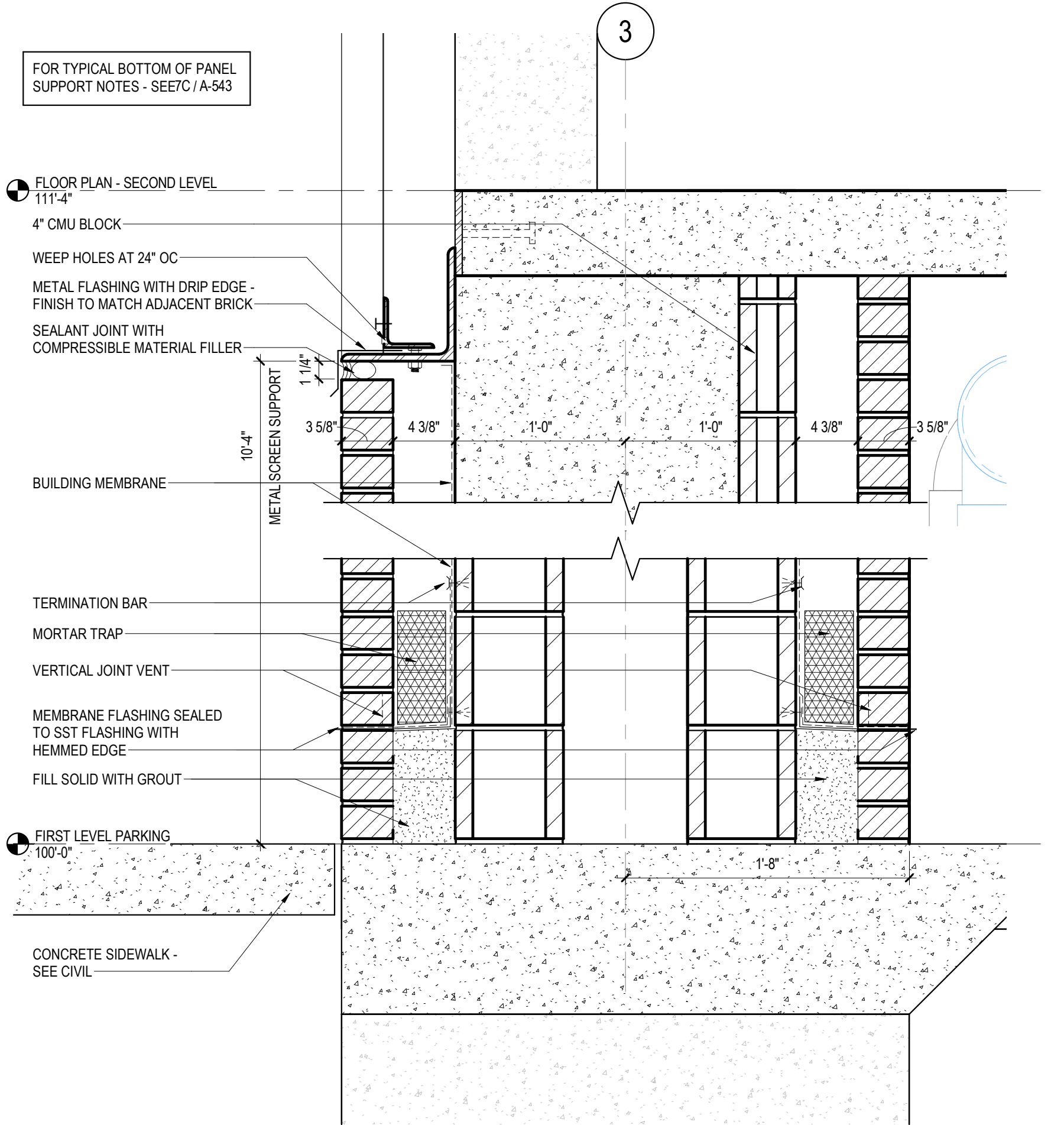
6D SECTION DETAIL - METAL SCREEN AT INTERMEDIATE SUPPORT
A-543 / 1 1/2\"/>



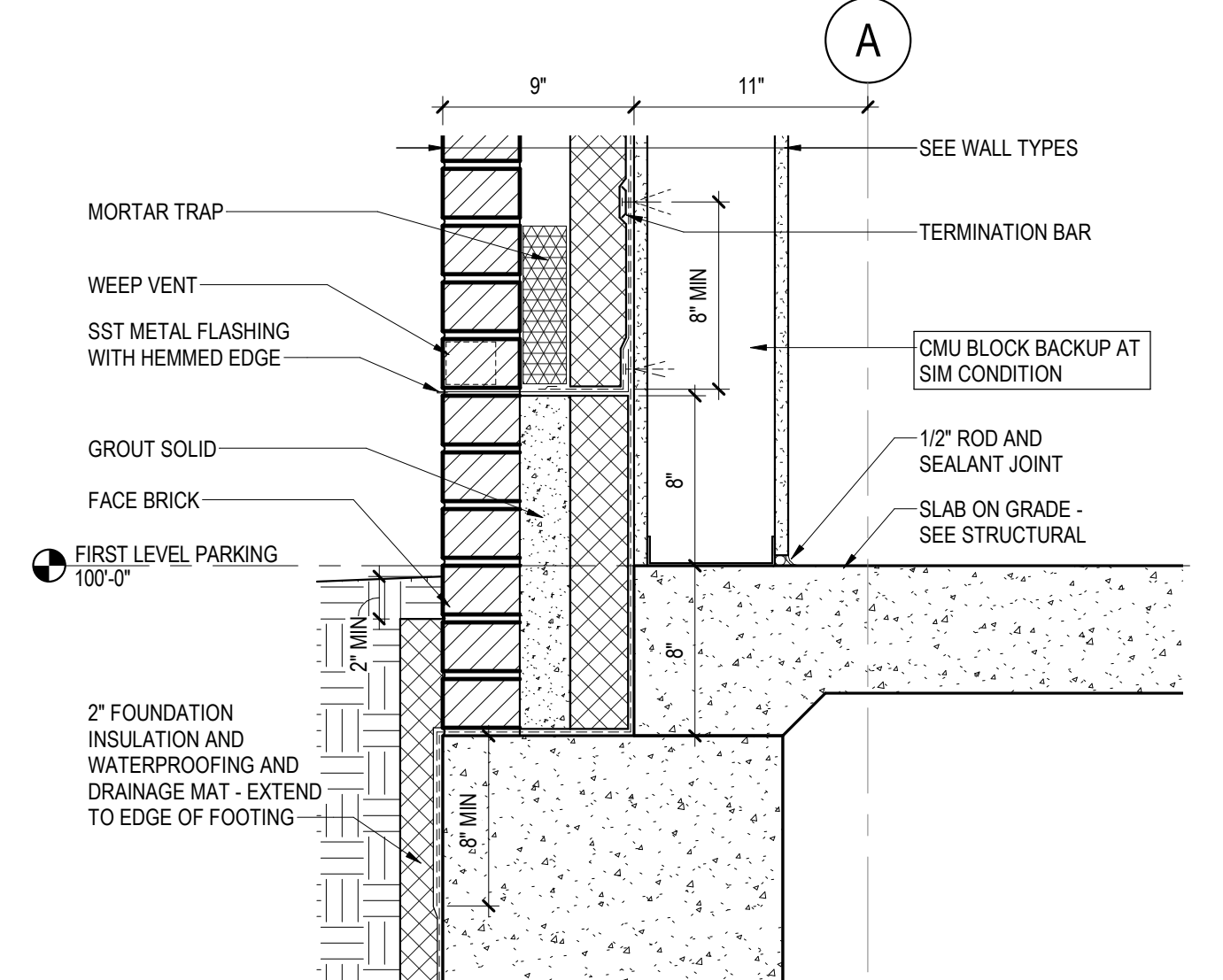
7C SECTION DETAIL - METAL SCREEN AT BOTTOM ANGLE
A-543 / 1 1/2\"/>



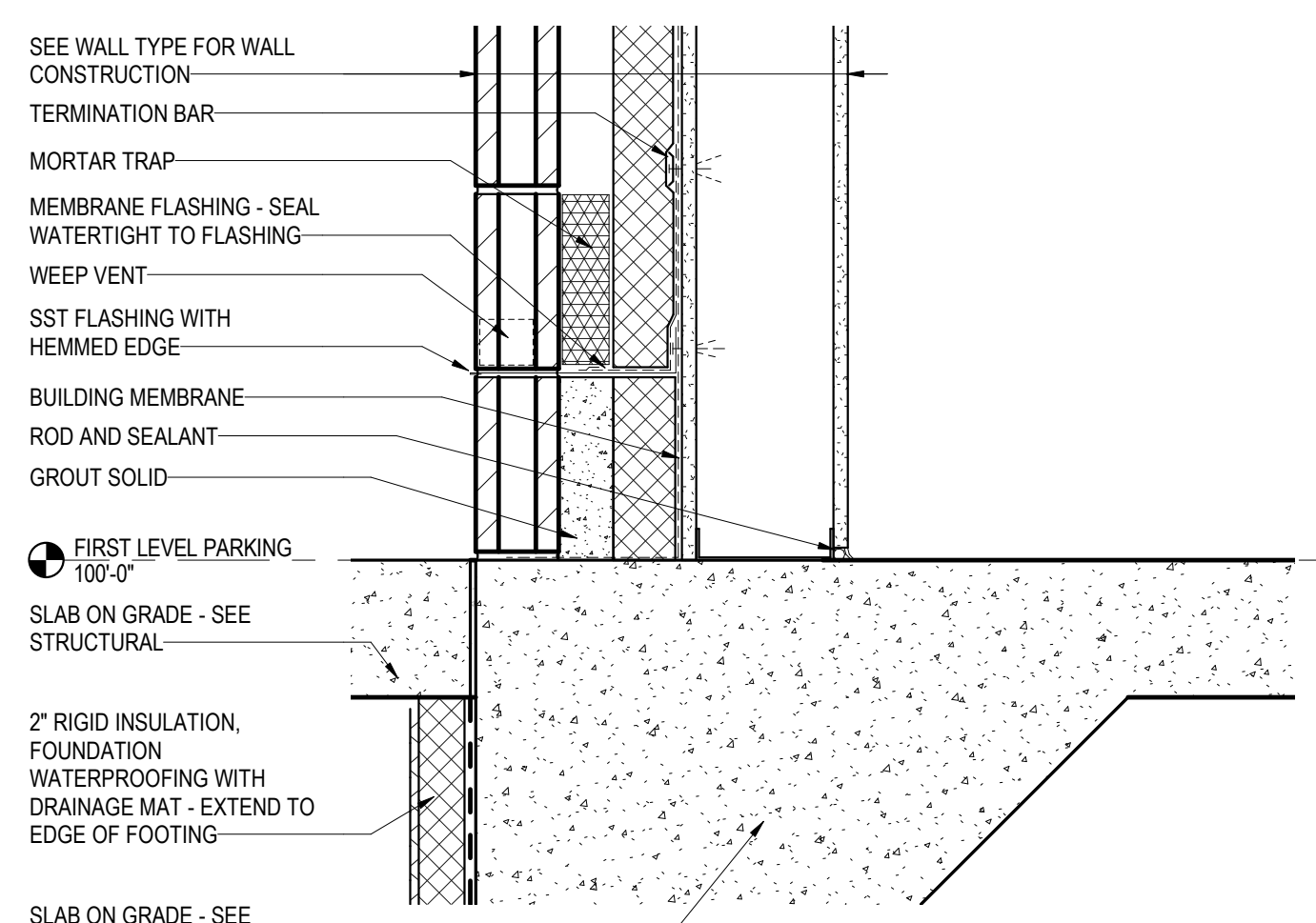
5B SECTION DETAIL - PLAZA ENTRY BRICK WALL SOFFIT
A-543 / 1 1/2\"/>



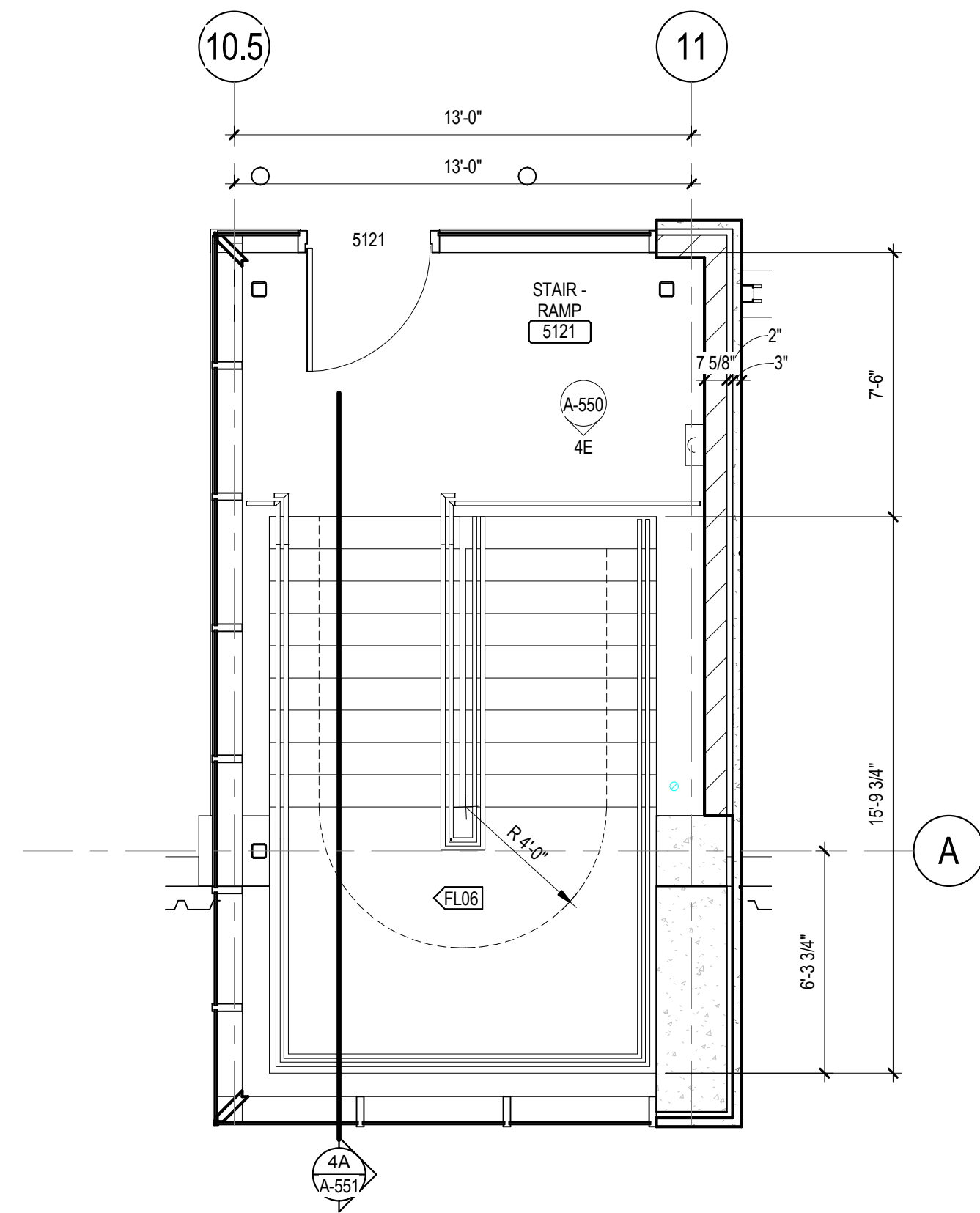
5A SECTION DETAIL - BRICK WALL PIER AT METAL SCREEN
A-543 / 1 1/2\"/>



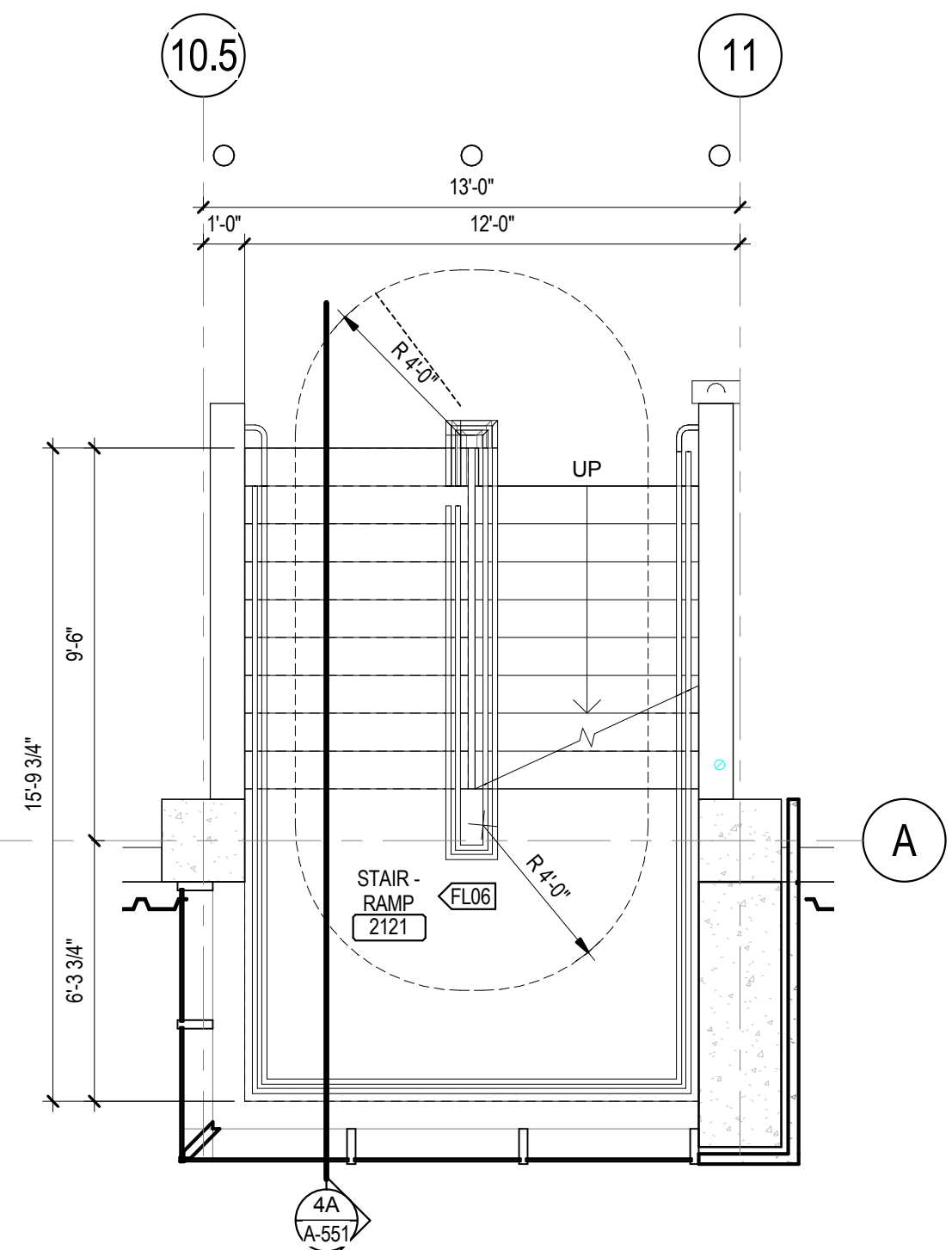
6B SECTION DETAIL - BRICK WALL BASE AT SECURITY OFFICE
A-543 / 1 1/2\"/>



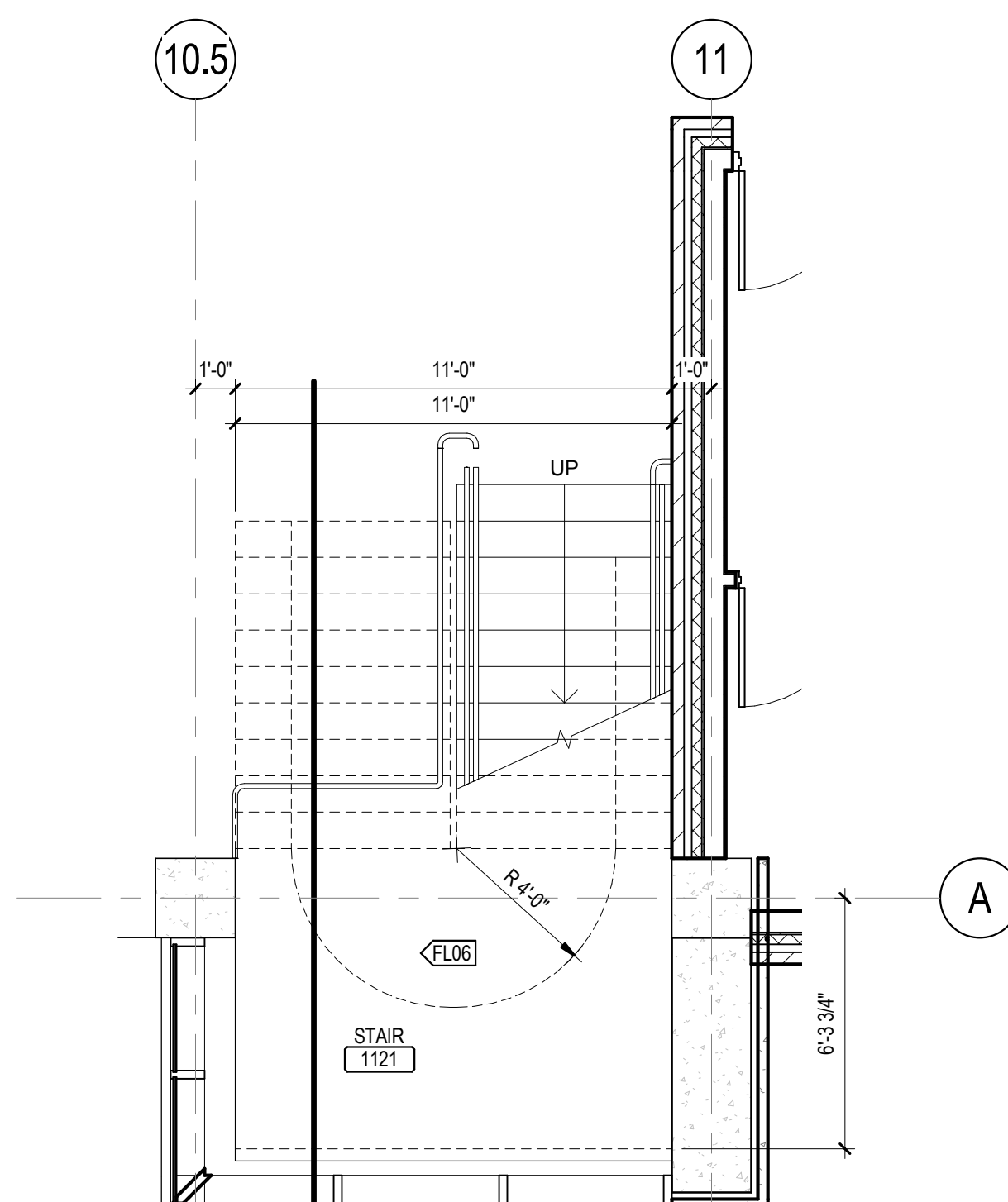
6A SECTION DETAIL - SECURITY OFFICE BLOCK WALL BASE
A-543 / 1 1/2\"/>



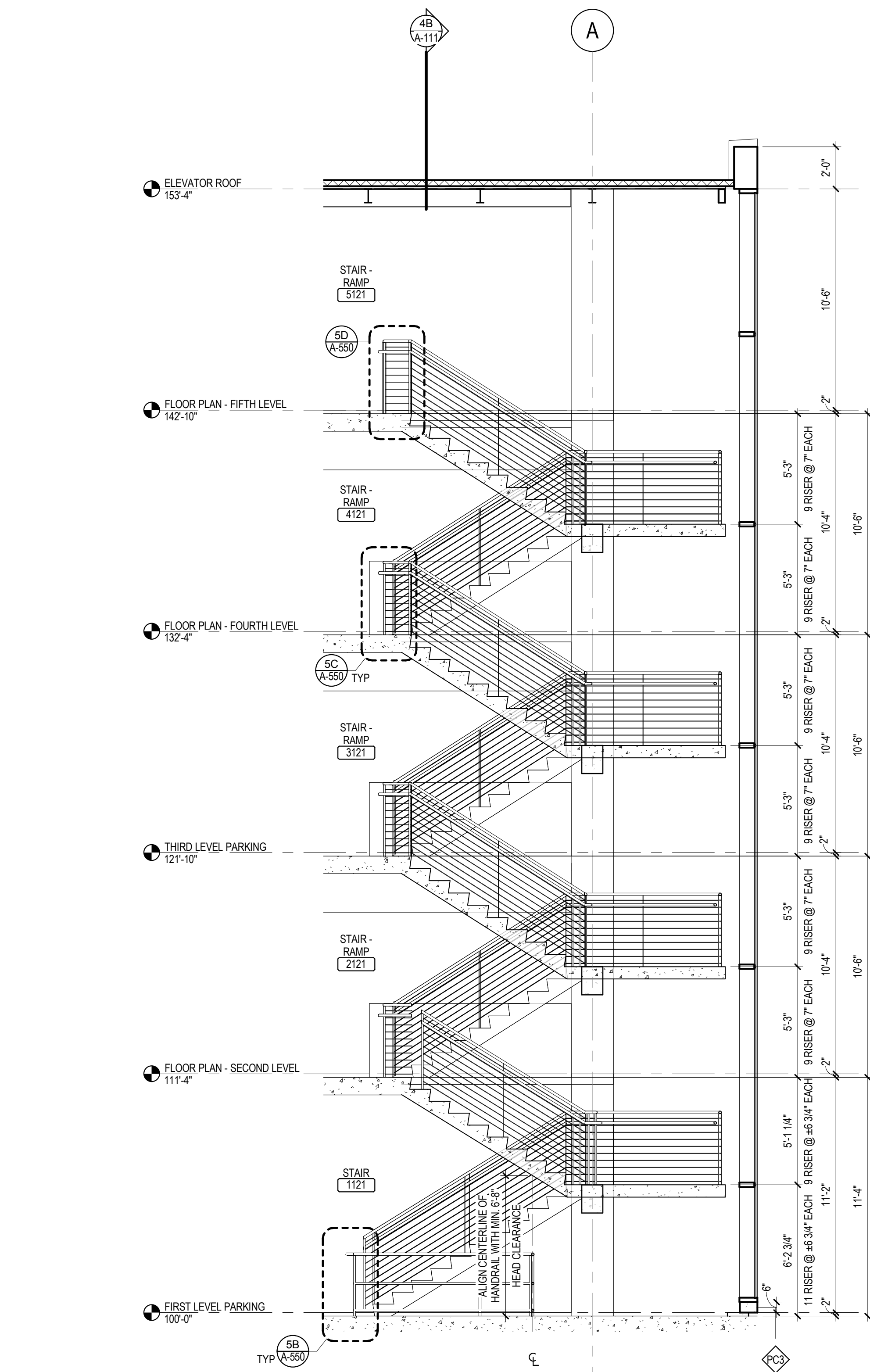
6C STAIR PLAN - FIFTH LEVEL - RAMP STAIR 02
1/4" = 1'-0"



6B STAIR PLAN - SECOND LEVEL - RAMP STAIR 02
1/4" = 1'-0"



6A STAIR PLAN - FIRST LEVEL - RAMP STAIR 02
1/4" = 1'-0"



4A STAIR SECTION - STAIR 1121
1/4" = 1'-0"

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CONSULTANTS:

- B W B R

PROJECT TITLE:

D Capitol East Parking Garage

211 SOUTH LIVINGSTON STREET, MADISON WI 53703
MUNIS NUMBER 1627
CONTRACT NUMBER 7951

CLIENT:

CITY OF MADISON PARKING UTILITY
215 MARTIN LUTHER KING JR BLVD
MADISON, WISCONSIN 53801-2986



ISSUE:

NO	DATE	DESCRIPTION
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PROJECT INFORMATION:

PROJECT NUMBER: 3.2016187.00

DATE: 06/30/2017

DRAWN BY: SD

CHECKED BY: ID

CHECKED BY: JD
APPROVED BY: BO

APPROVED BY: RG

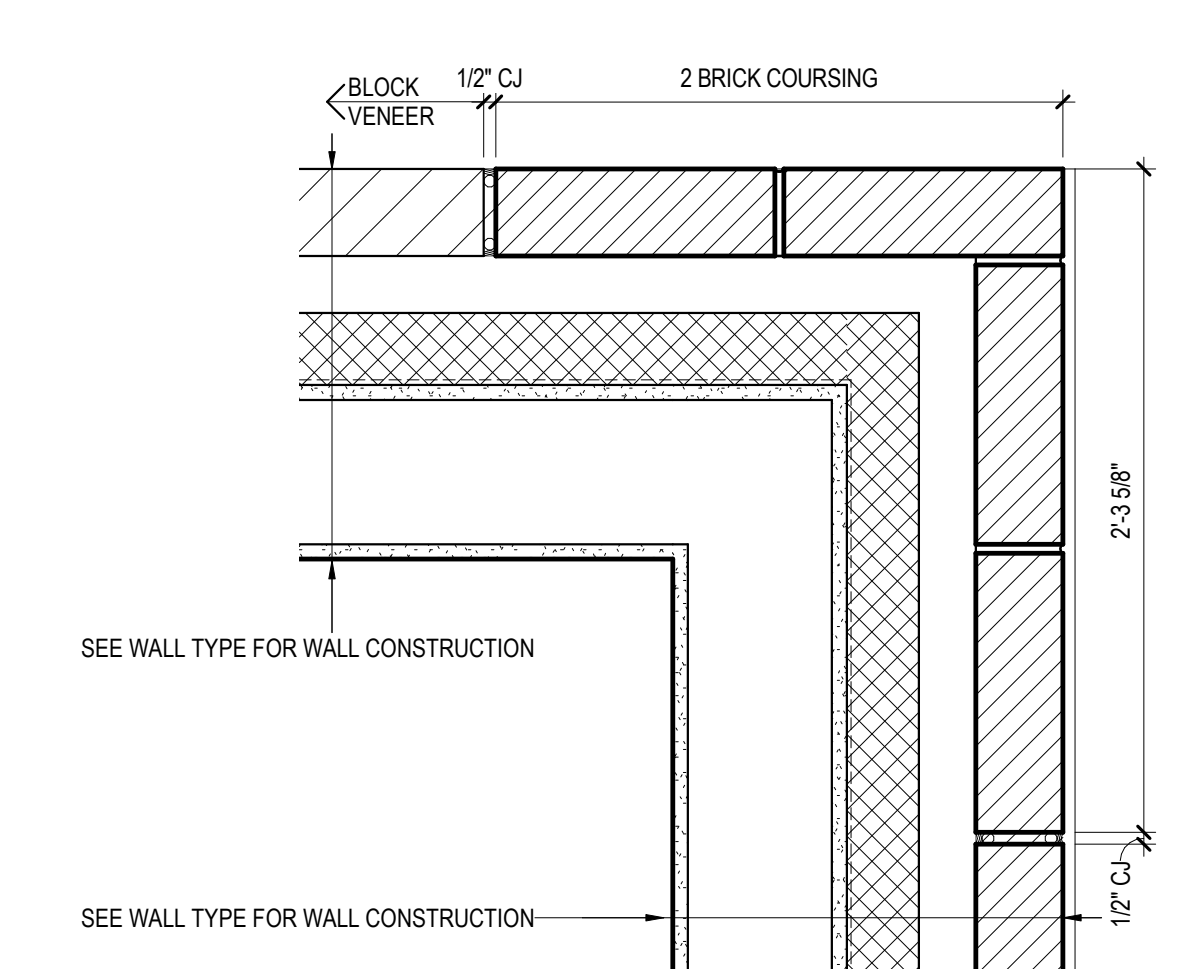
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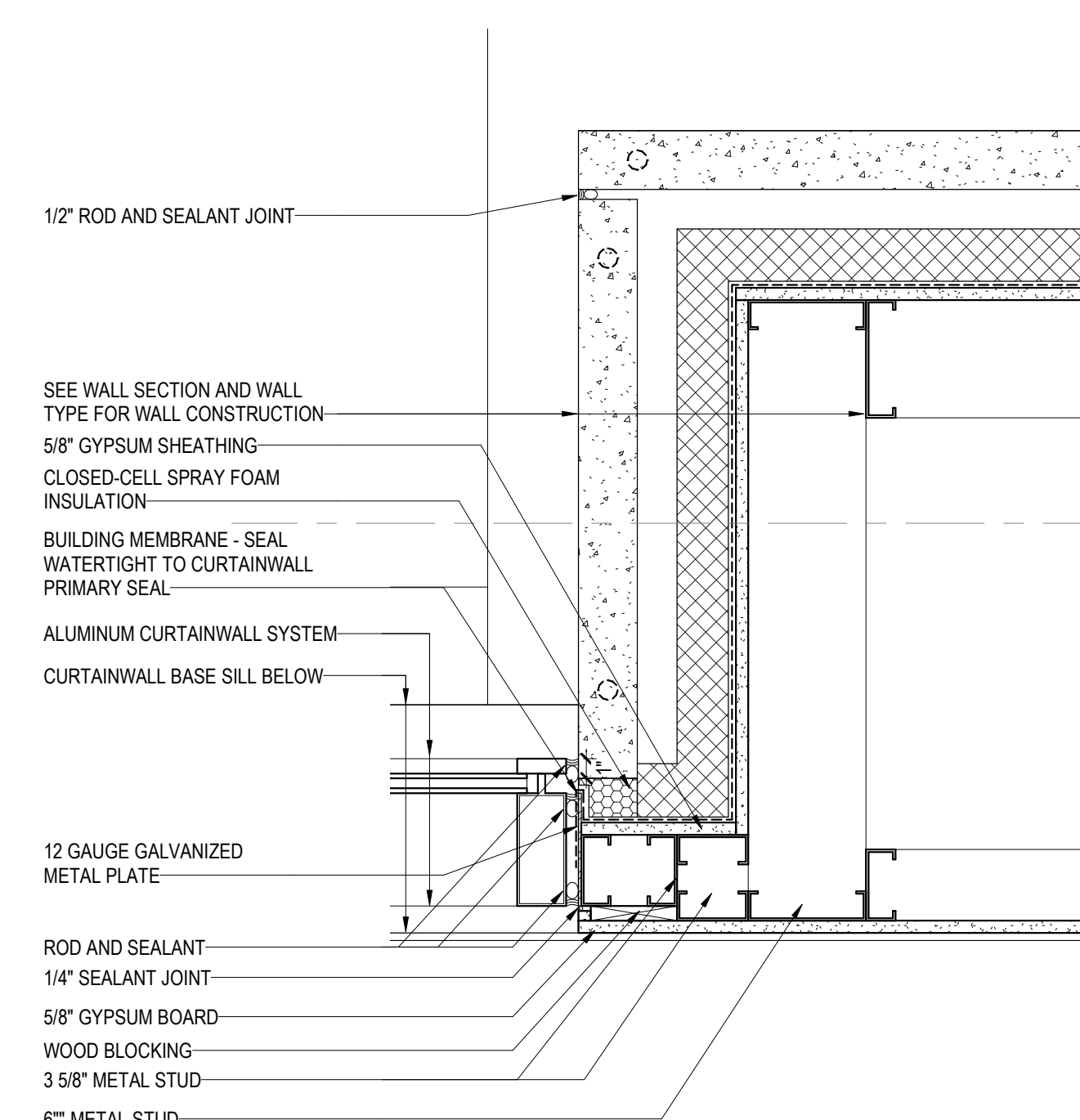
EXTERIOR PLAN DETAILS

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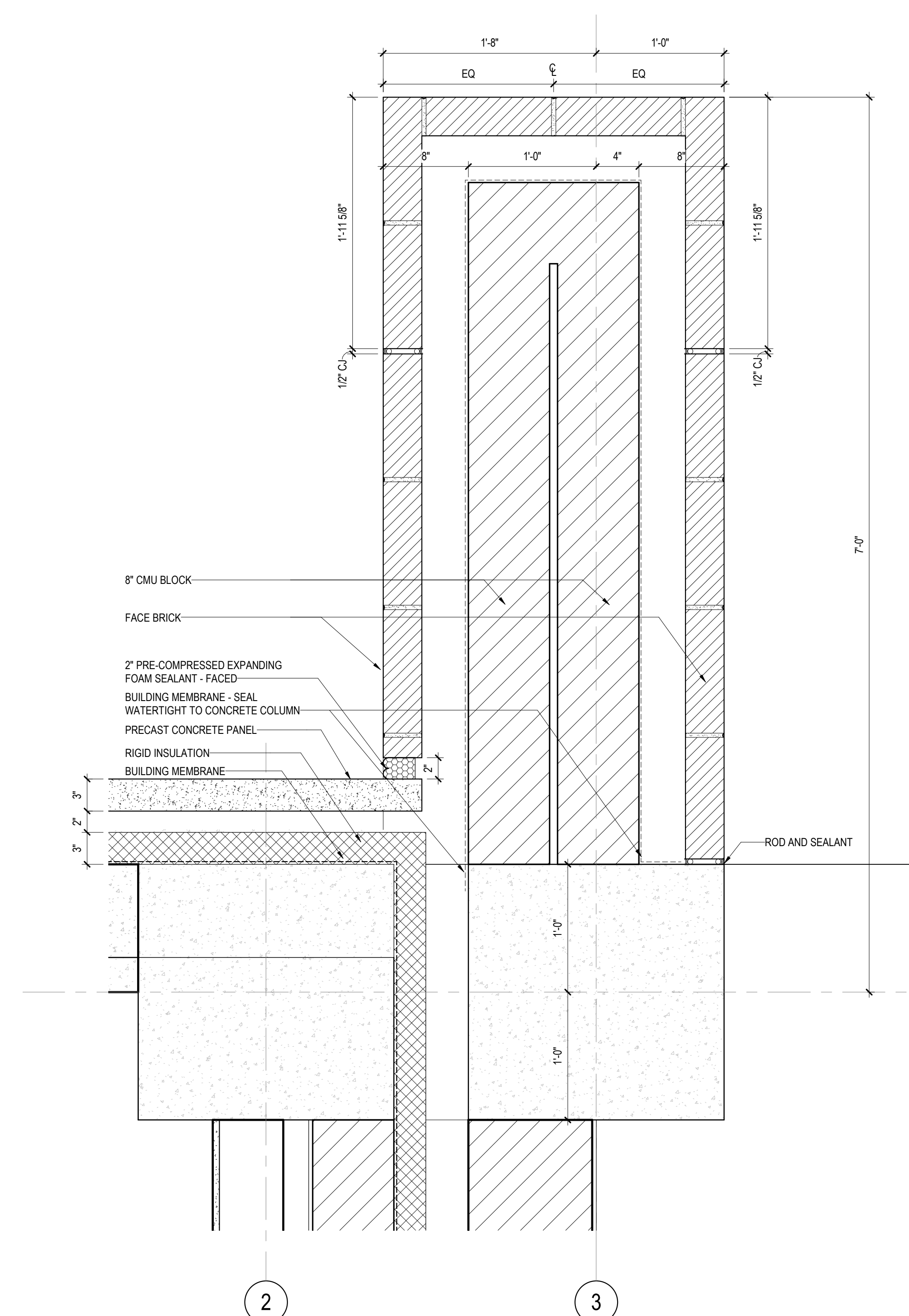
A-561



3A PLAN DETAIL - SECURITY OFFICE BRICK/CMU CORNER
A-561 1 1/2" = 1'-0"



4A PLAN DETAIL - COMMERCIAL CURTAINWALL JAMB
A-561 1 1/2" = 1'-0"



6A PLAN DETAIL - NORTHEAST FIN WALL - BRICK PIER
A-561 1 1/2" = 1'-0"

5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CONSULTANTS:

B W B R

PROJECT TITLE:

Capitol East Parking Garage

211 SOUTH LIVINGSTON STREET, MADISON WI 53703
MUNIS NUMBER 1627
CONTRACT NUMBER 7951

CLIENT:

CITY OF MADISON PARKING UTILITY

215 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53801-2986



ISSUE:

NO	DATE	DESCRIPTION
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C

B

A

PROJECT INFORMATION:

PROJECT NUMBER: 3.2016187.00

DATE: 06/30/2017

DRAWN BY: BL

CHECKED BY: JD

APPROVED BY: RG

SCALE: AS NOTED

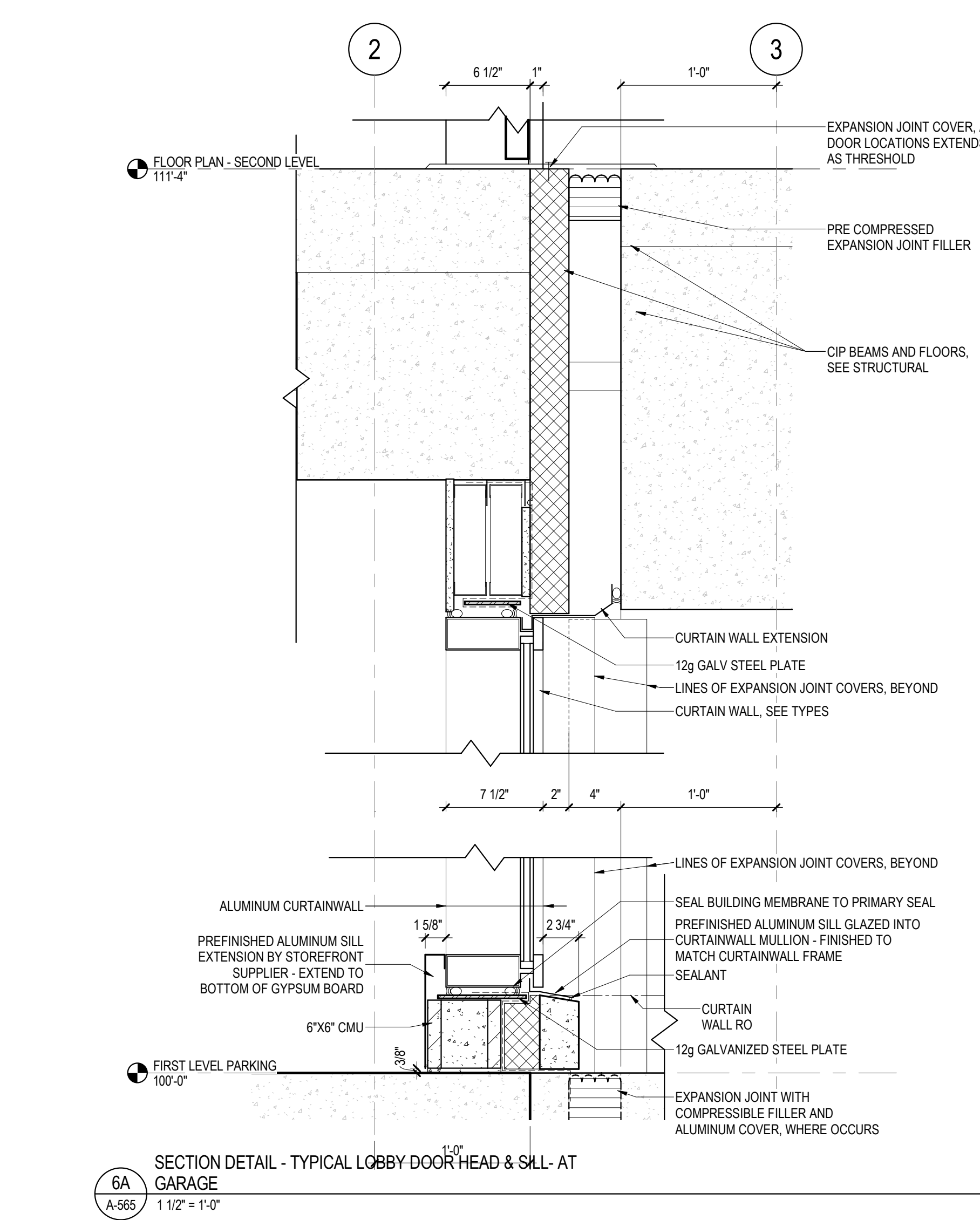
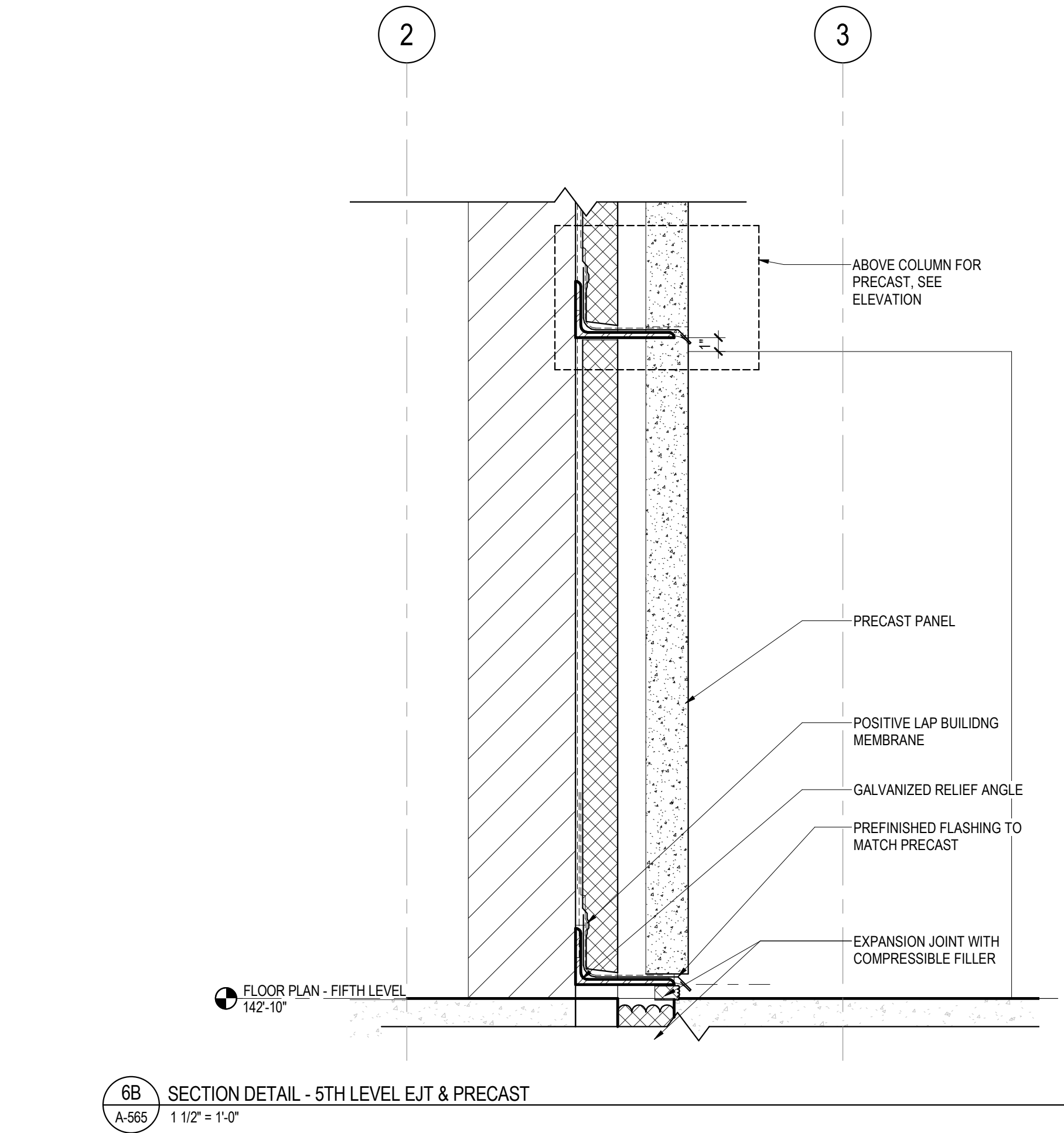
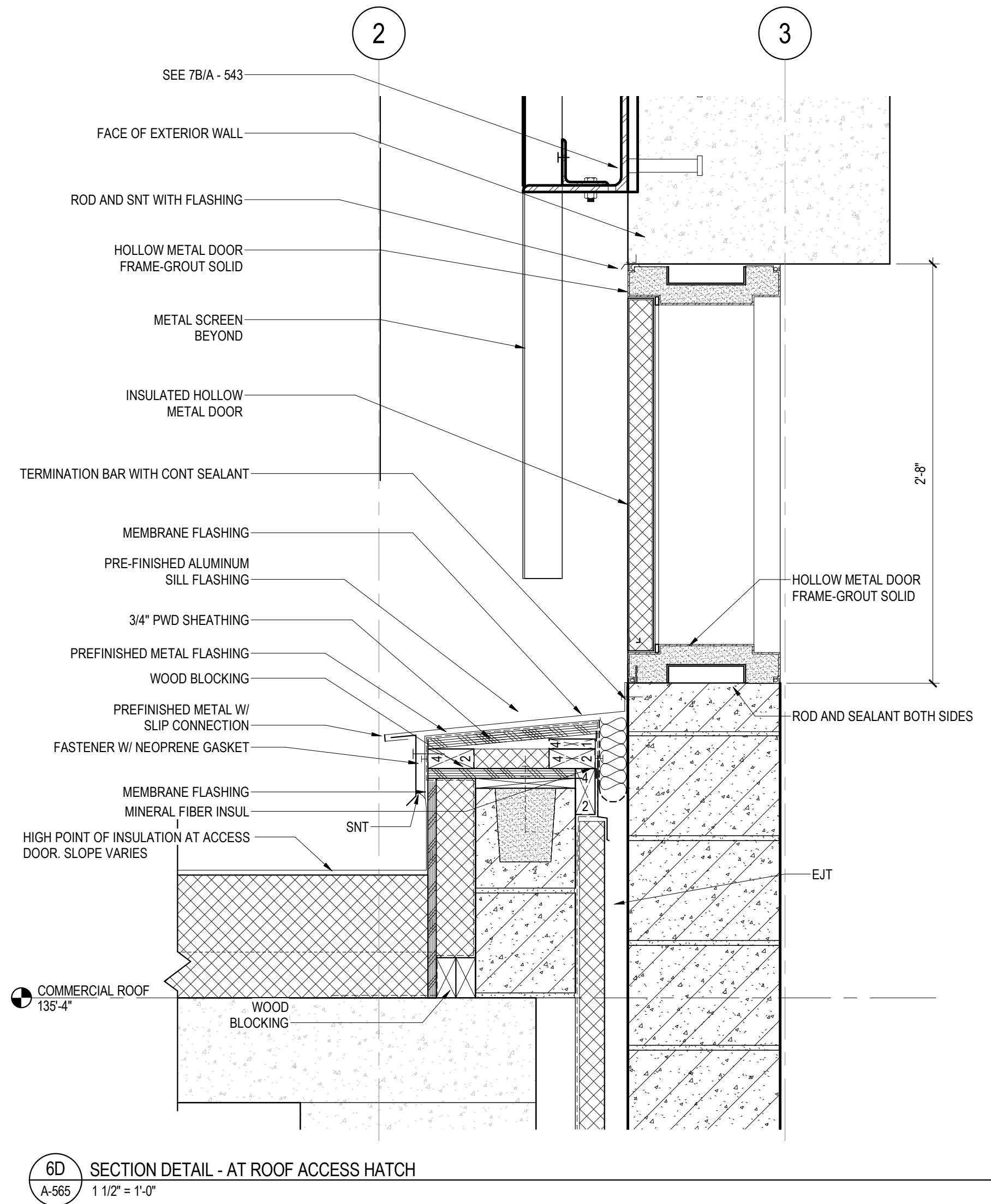
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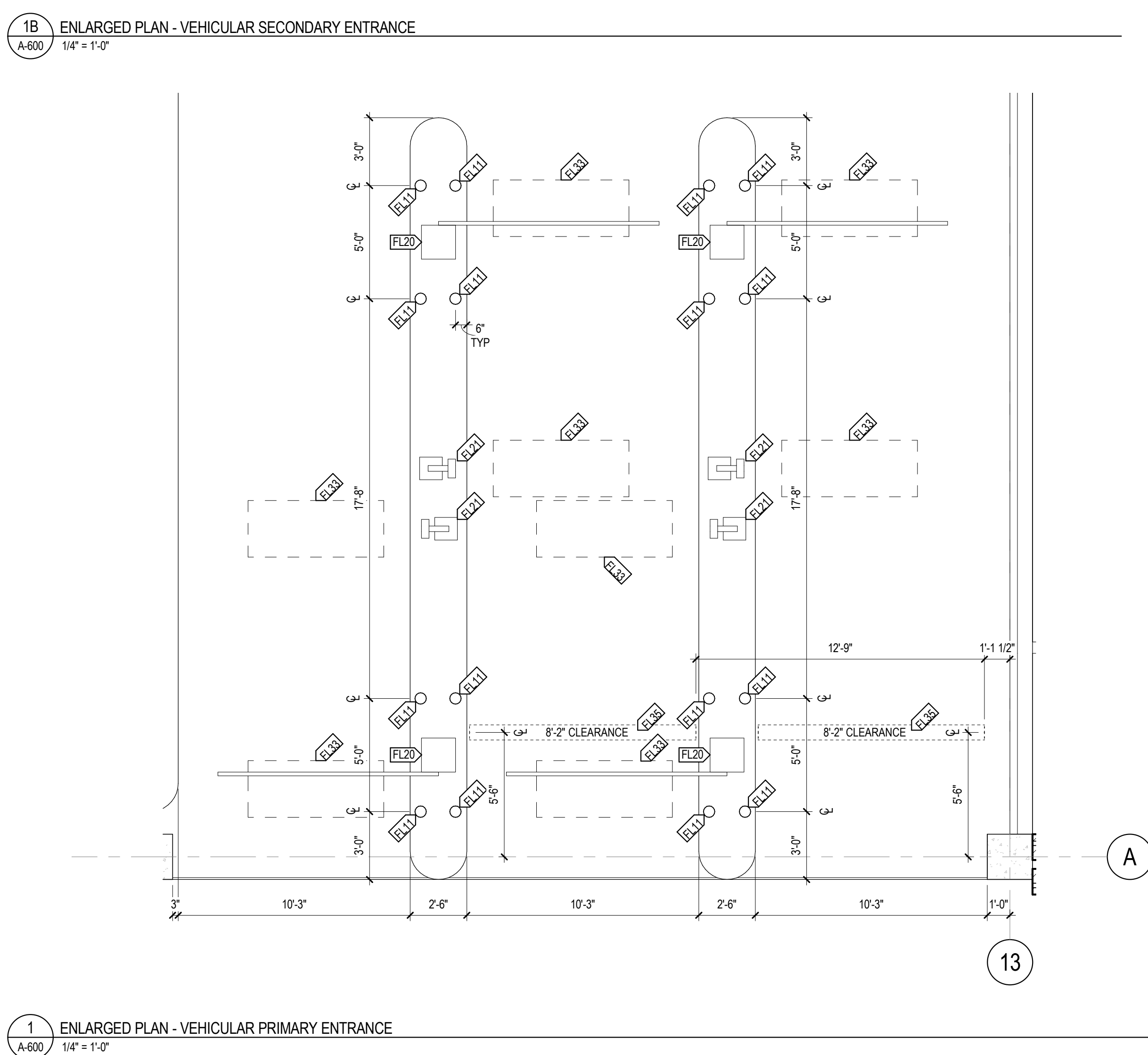
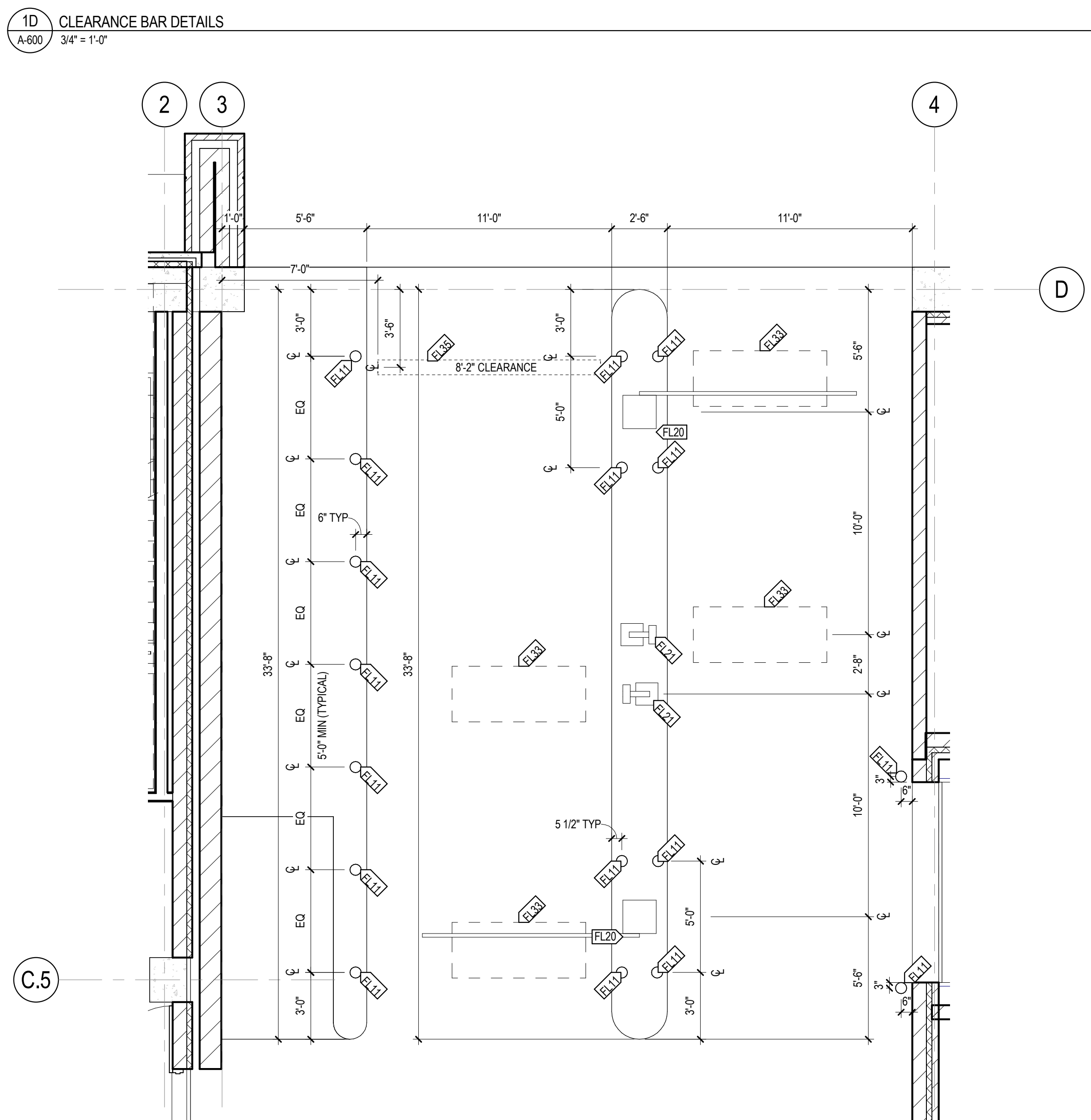
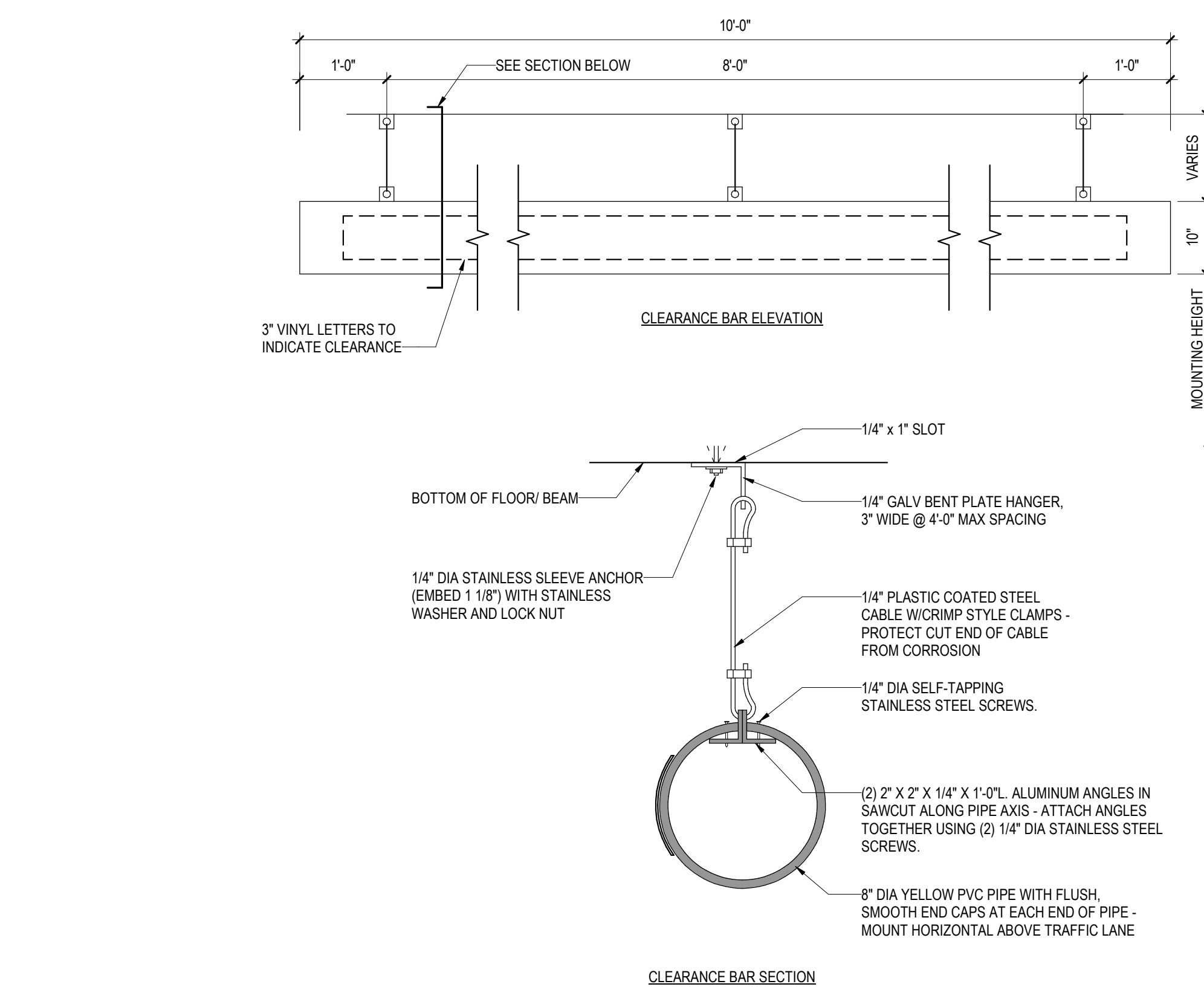
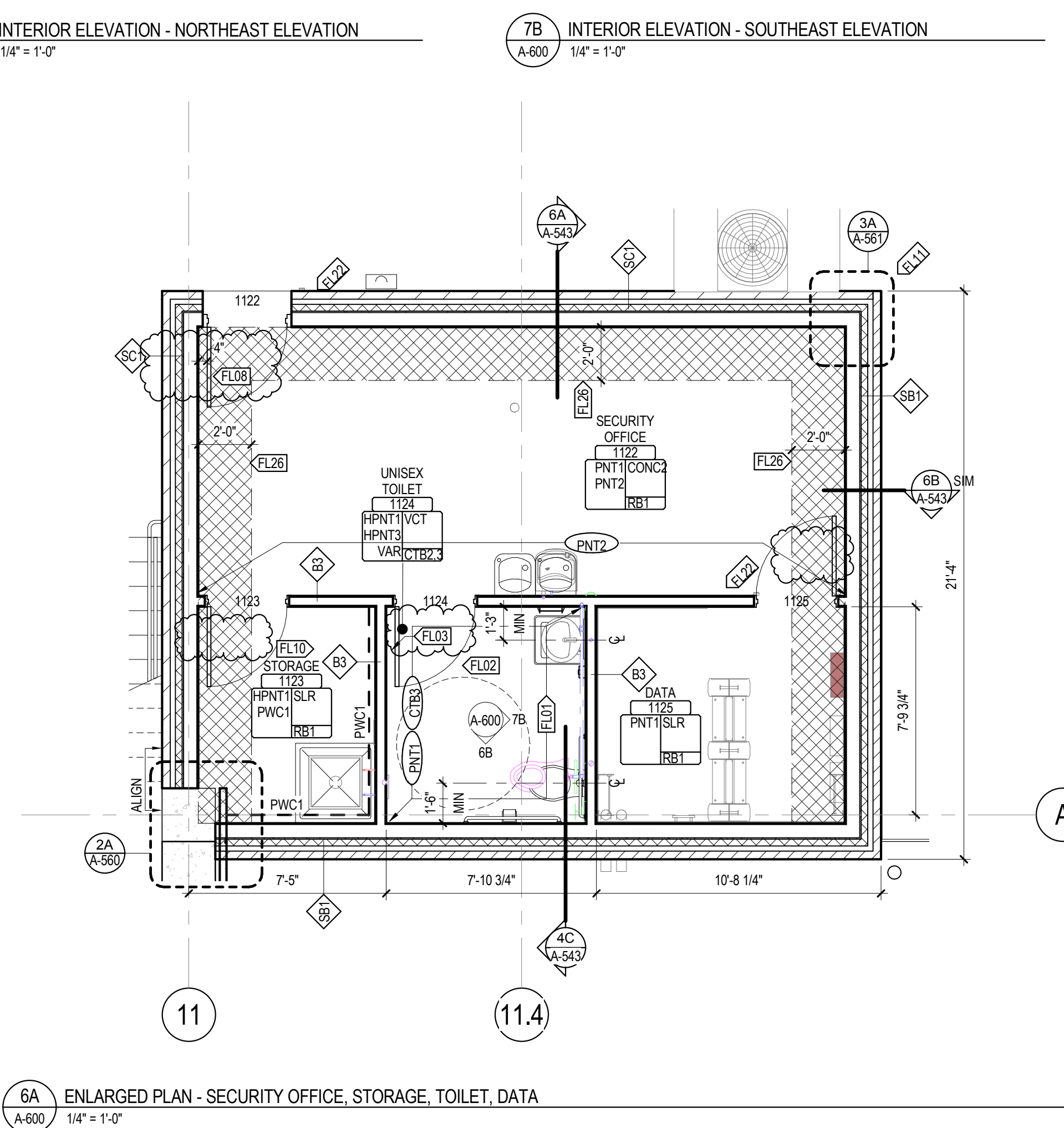
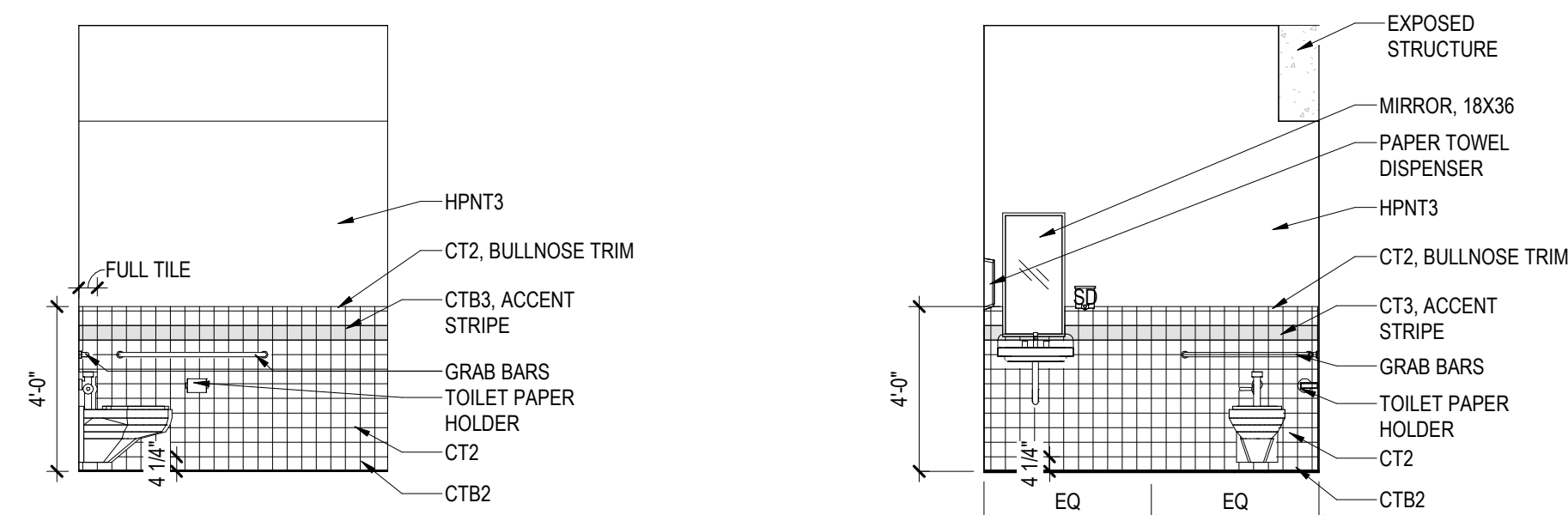
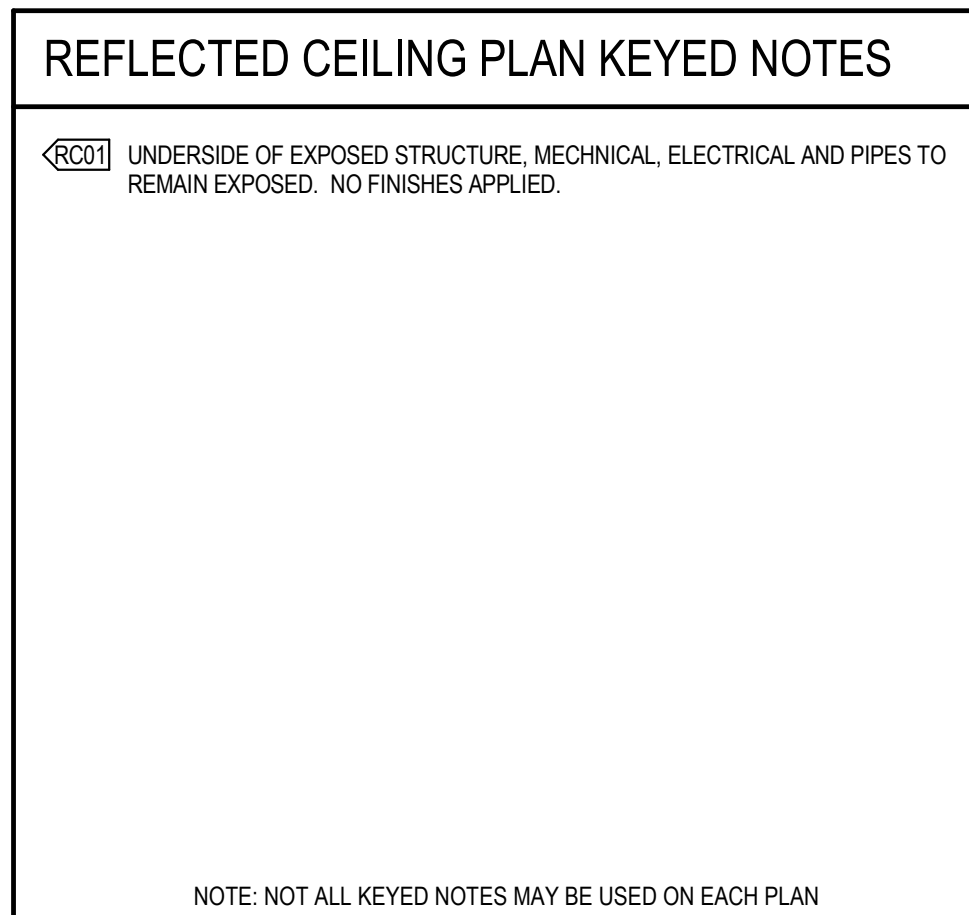
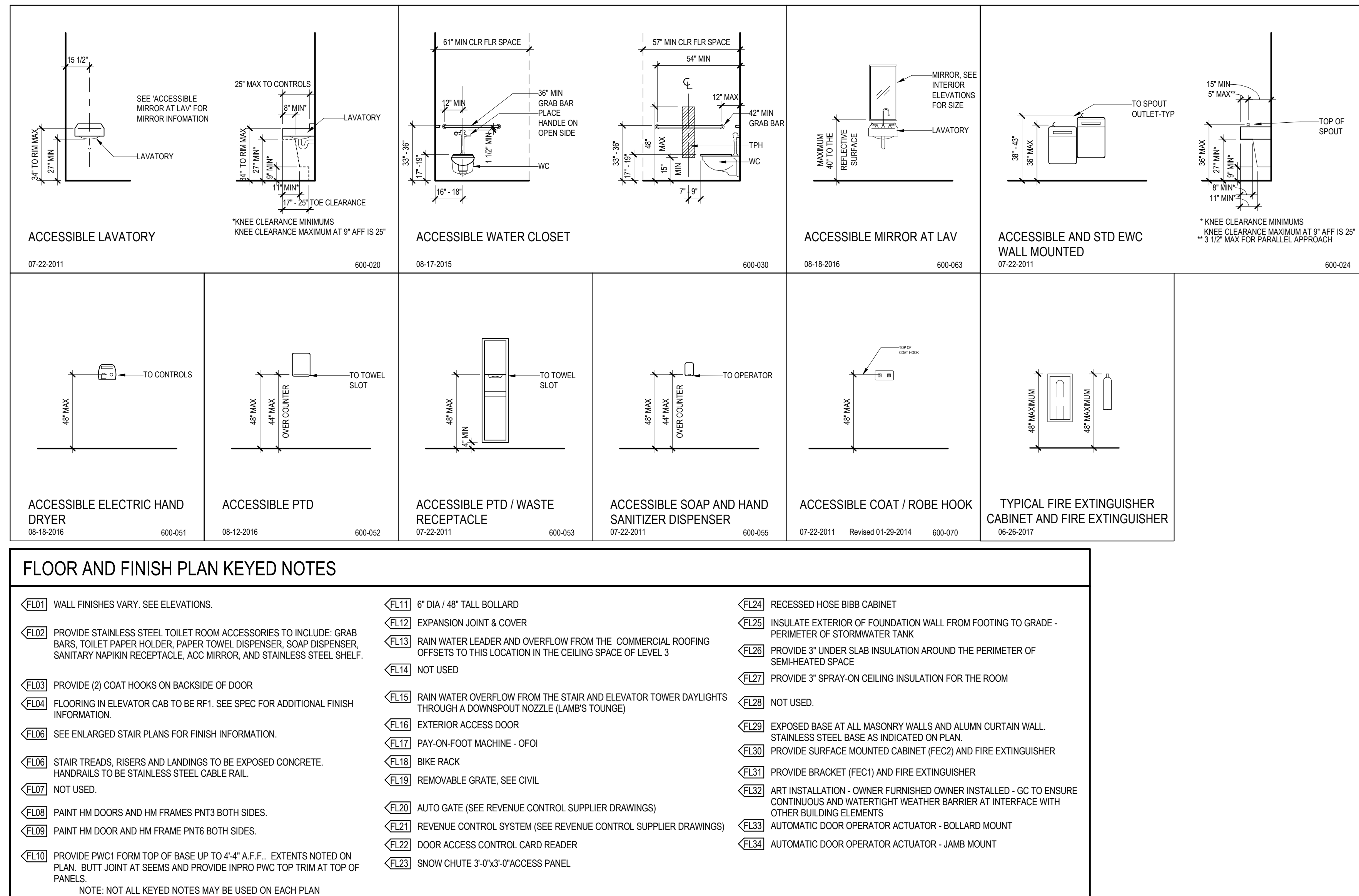
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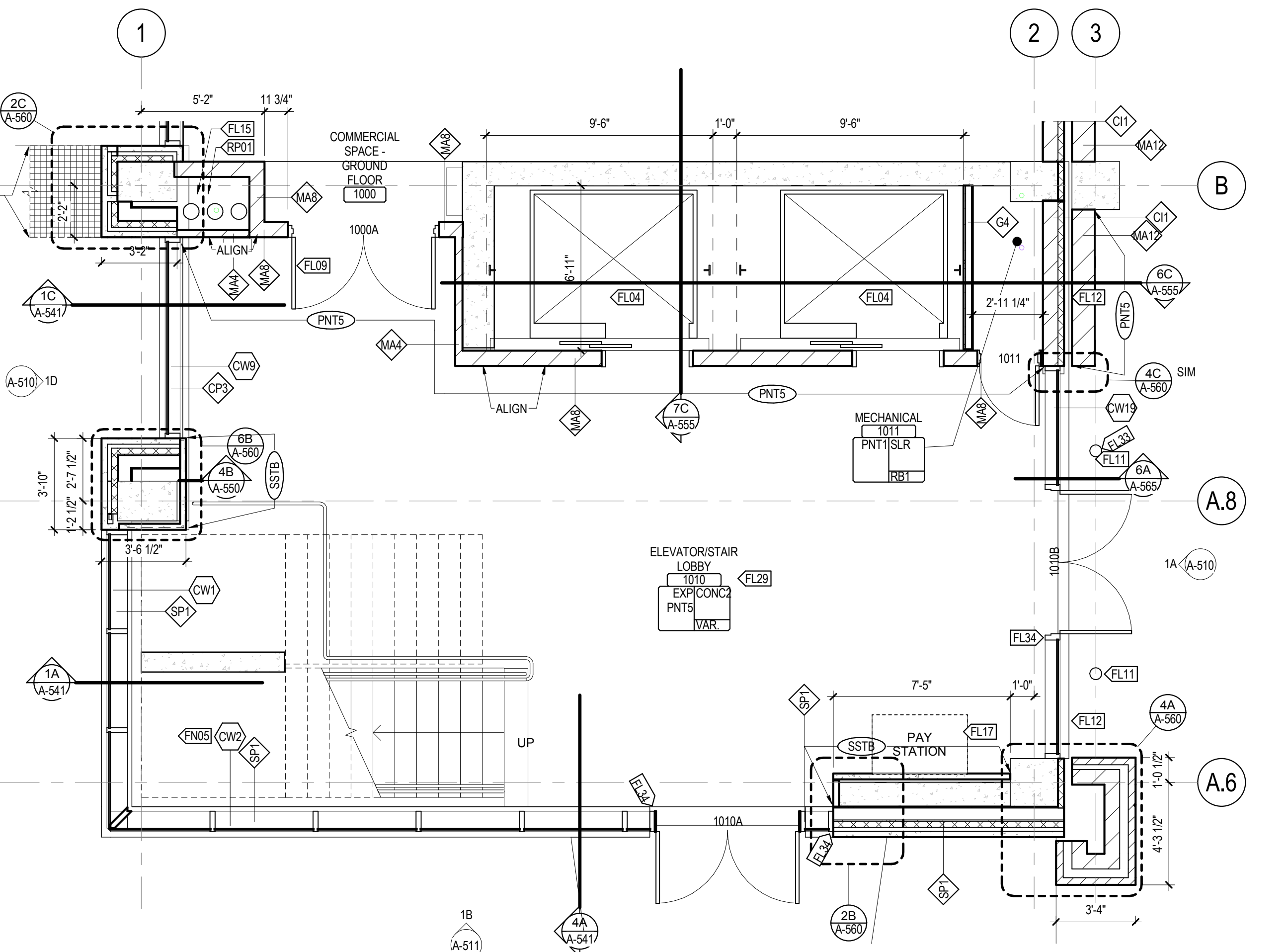
EXTERIOR SECTION DETAILS

SHEET NUMBER:

A-565

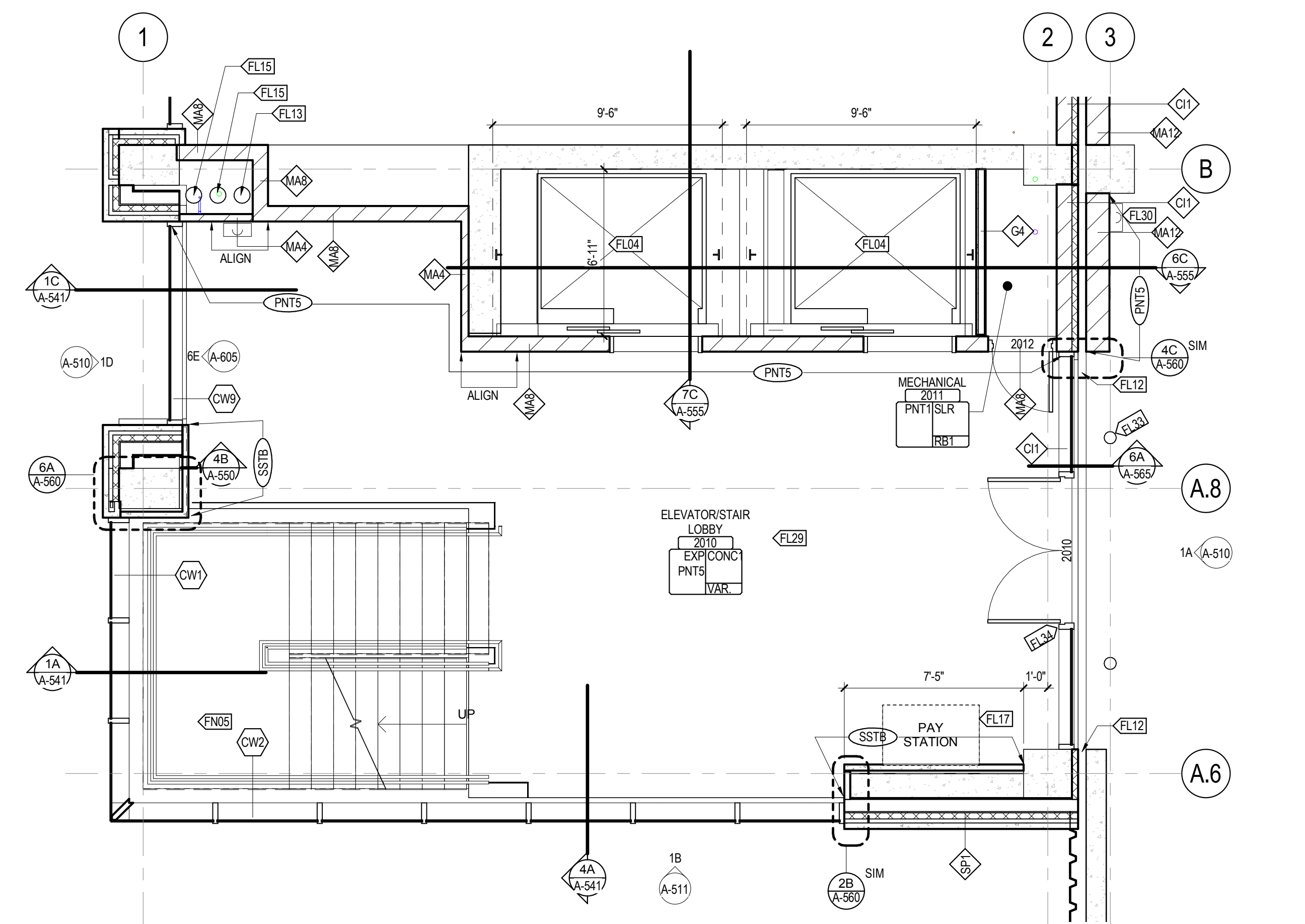






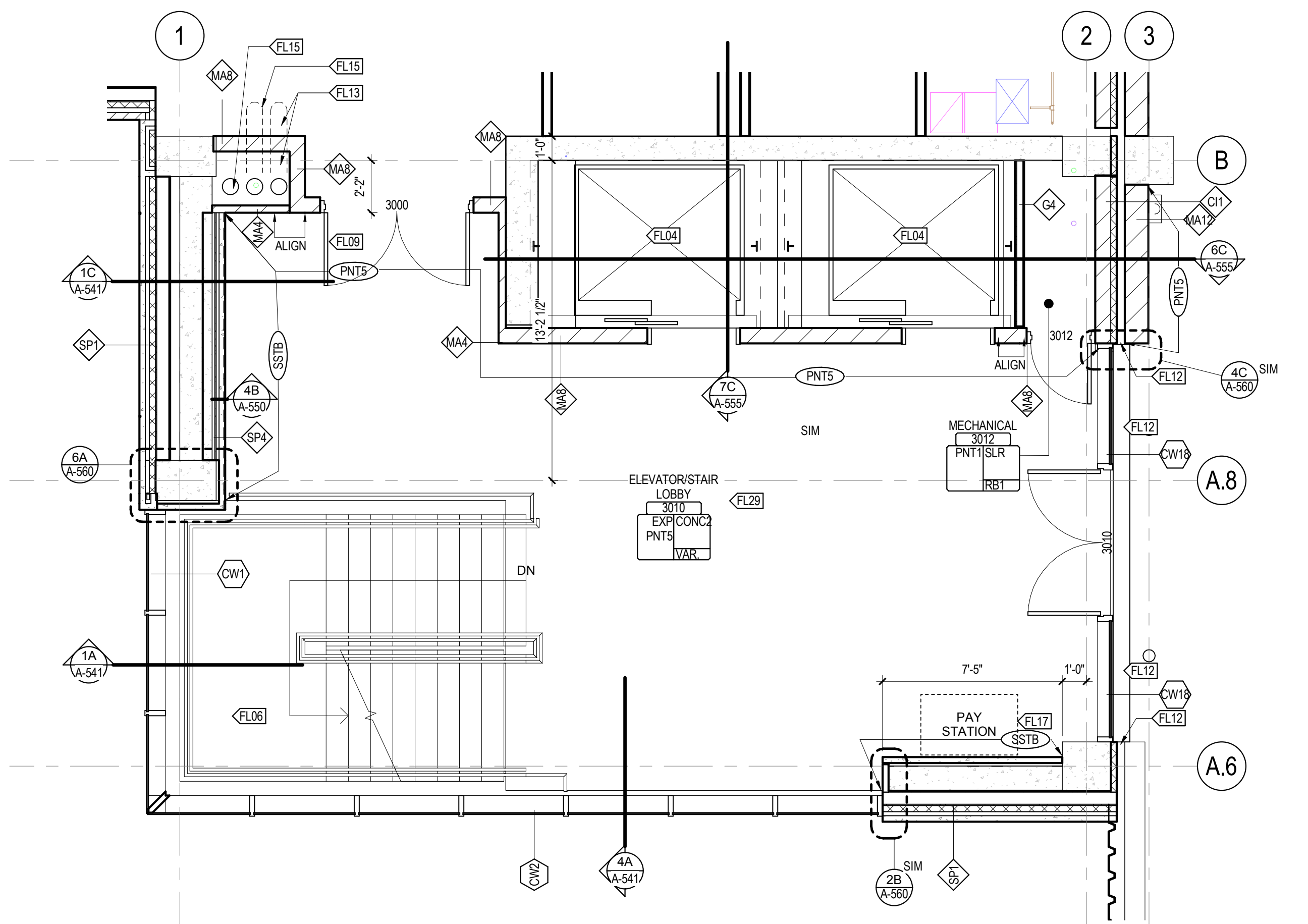
1D ENLARGED PLAN - FIRST LEVEL

A-605 1/4" = 1'-0"



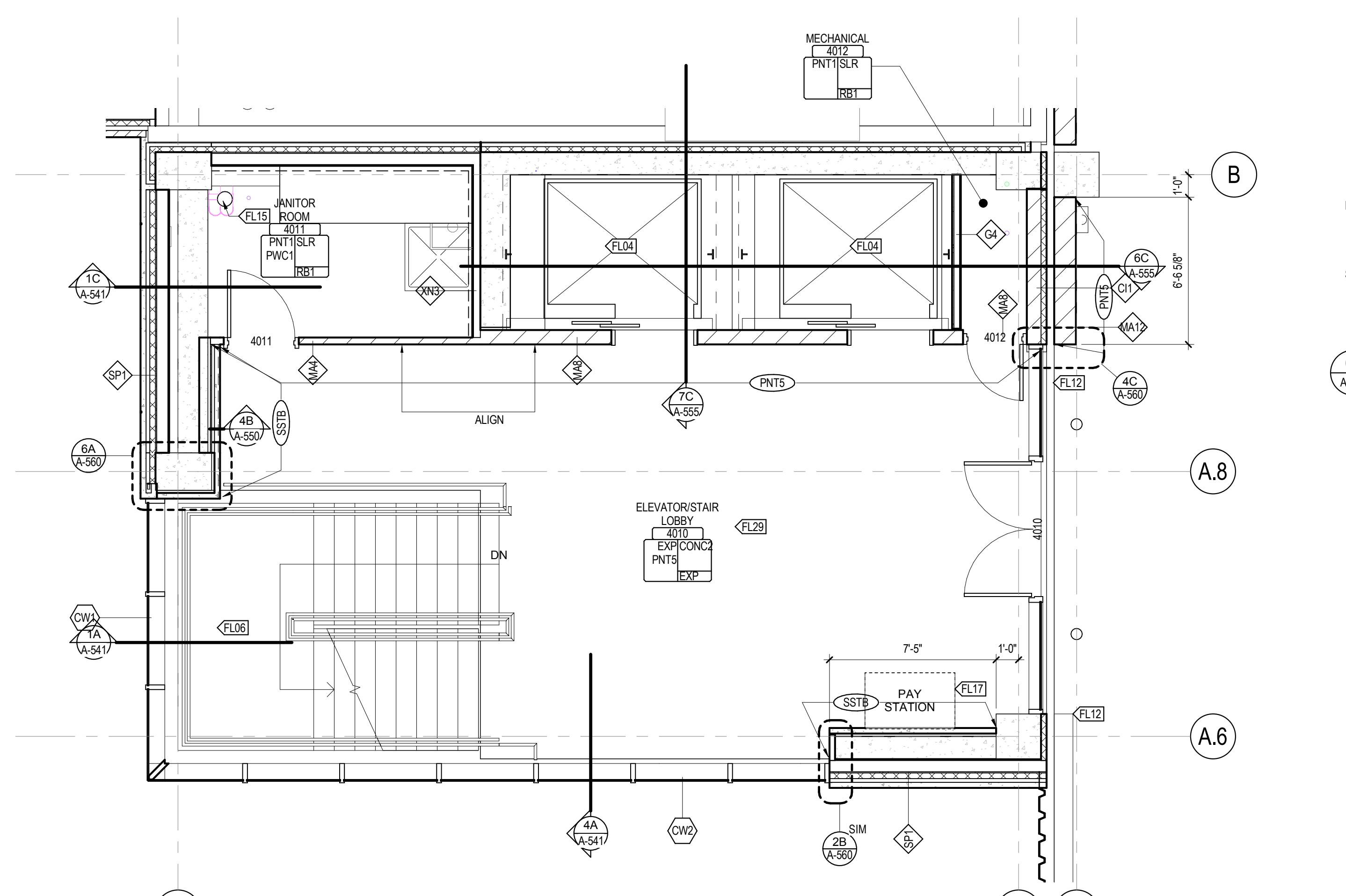
1C ENLARGED PLAN - SECOND LEVEL - ELEVATOR LOBBY

A-605 1/4" = 1'-0"



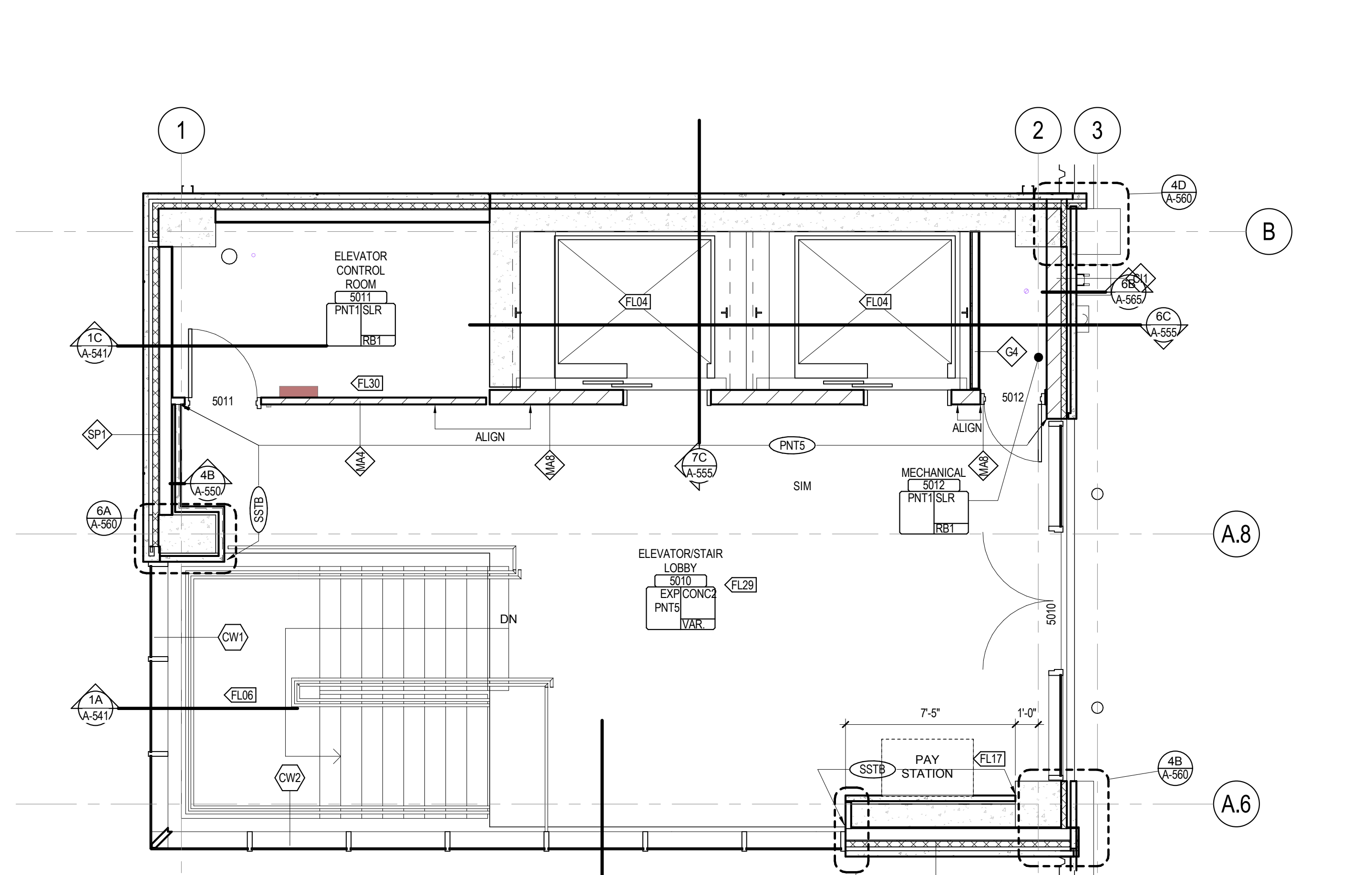
1A ENLARGED PLAN - THIRD LEVEL PARKING/SECOND LEVEL COMMERCIAL - ELEVATOR LOBBY

A-605 1/4" = 1'-0"



3D ENLARGED PLAN - FOURTH LEVEL - ELEVATOR LOBBY

A-605 1/4" = 1'-0"



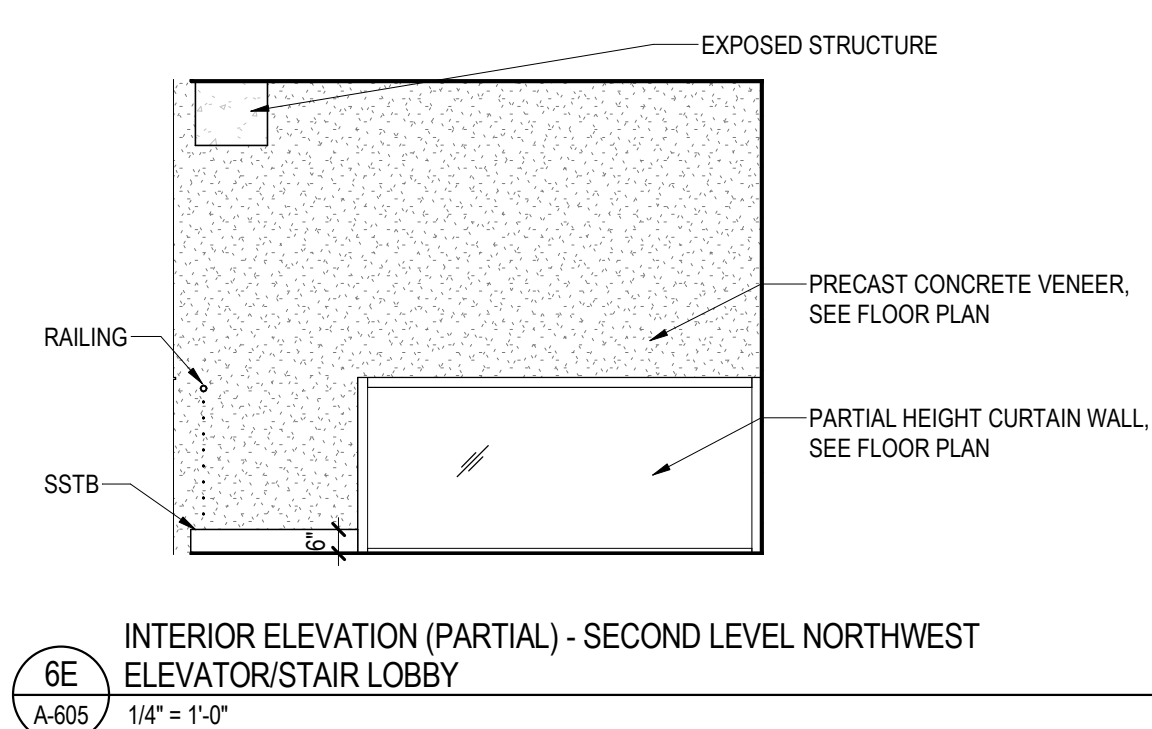
3C ENLARGED PLAN - FIFTH LEVEL - ELEVATOR LOBBY

A-605 1/4" = 1'-0"

FLOOR AND FINISH PLAN KEYED NOTES

- <FL01> WALL FINISHES VARY. SEE ELEVATIONS.
- <FL02> PROVIDE STAINLESS STEEL TOILET ROOM ACCESSORIES TO INCLUDE: GRAB BARS, TOILET PAPER HOLDER, PAPER TOWEL DISPENSER, SOAP DISPENSER, SANITARY NAPKIN RECEPTACLE, ACC MIRROR, AND STAINLESS STEEL SHELF.
- <FL03> PROVIDE (2) COAT HOOKS ON BACKSIDE OF DOOR.
- <FL04> FLOORING IN ELEVATOR CAB TO BE RFI. SEE SPEC FOR ADDITIONAL FINISH INFORMATION.
- <FL05> SEE ENLARGED STAIR PLANS FOR FINISH INFORMATION.
- <FL06> STAIR TREADS, RISERS AND LANDINGS TO BE EXPOSED CONCRETE. HANDRAILS TO BE STAINLESS STEEL CABLE RAIL.
- <FL07> NOT USED.
- <FL08> PAINT HM DOORS AND HM FRAMES PNT3 BOTH SIDES.
- <FL09> PAINT HM DOOR AND HM FRAME PNT6 BOTH SIDES.
- <FL10> PROVIDE PWIC1 FORM TOP OF BASE UP TO 4'-4" A.F.F. - EXTENTS NOTED ON PLAN. BUTT JOINT AT SEAMS AND PROVIDE INPRD PVC TOP TRIM AT TOP OF PANELS.
- <FL11> 6" DIA / 48" TALL BOLLARD
- <FL12> EXPANSION JOINT & COVER
- <FL13> RAIN WATER LEADER AND OVERFLOW FROM THE COMMERCIAL ROOFING OFFSETS TO THIS LOCATION IN THE CEILING SPACE OF LEVEL 3
- <FL14> NOT USED
- <FL15> RAIN WATER OVERFLOW FROM THE STAIR AND ELEVATOR TOWER DAYLIGHTS THROUGH A DOWNSPOUT NOZZLE (LAMB'S TONGUE)
- <FL16> EXTERIOR ACCESS DOOR
- <FL17> PAY-ON-FOOT MACHINE - CFO
- <FL18> BIKE RACK
- <FL19> REMOVABLE GRATE, SEE CIVIL
- <FL20> AUTO GATE (SEE REVENUE CONTROL SUPPLIER DRAWINGS)
- <FL21> REVENUE CONTROL SYSTEM (SEE REVENUE CONTROL SUPPLIER DRAWINGS)
- <FL22> DOOR ACCESS CONTROL CARD READER
- <FL23> SNOW CHUTE 3'-0"x3'-0" ACCESS PANEL
- <FL24> RECESSED HOSE BIBB CABINET
- <FL25> INSULATE EXTERIOR OF FOUNDATION WALL FROM FOOTING TO GRADE - PERIMETER OF STORMWATER TANK
- <FL26> PROVIDE 2" UNDER SLAB INSULATION AROUND THE PERIMETER OF SEMI HEATED SPACE
- <FL27> PROVIDE 2" SPRAY-ON CEILING INSULATION FOR THE ROOM
- <FL28> NOT USED
- <FL29> EXPOSED BASE AT ALL MASONRY WALLS AND ALUMN CURTAIN WALL. STAINLESS STEEL BASE AS INDICATED ON PLAN.
- <FL30> PROVIDE SURFACE MOUNTED CABINET (FEC2) AND FIRE EXTINGUISHER
- <FL31> PROVIDE BRACKET (FEC1) AND FIRE EXTINGUISHER
- <FL32> KIT INSTALLATION - OWNER FURNISHED OWNER INSTALLED - GC TO ENSURE CONTINUOUS AND WATER TIGHT WEATHER BARRIERS AT INTERFACE WITH OTHER BUILDING ELEMENTS
- <FL33> AUTOMATIC DOOR OPERATOR ACTUATOR - BOLLARD MOUNT
- <FL34> AUTOMATIC DOOR OPERATOR ACTUATOR - JAMB MOUNT

NOTE: NOT ALL KEYED NOTES MAY BE USED ON EACH PLAN



BE INTERIOR ELEVATION (PARTIAL) - SECOND LEVEL NORTHWEST ELEVATOR/STAIR LOBBY

A-605 1/4" = 1'-0"

ELECTRICAL SYMBOLS AND ABBREVIATIONS

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS INDICATED HERE ARE USED IN DRAWINGS AND MAY NOT APPLY TO CURRENT PROJECT. ADDITIONAL SYMBOLS MAY BE INDICATED ON DRAWINGS.

ELECTRICAL ABBREVIATIONS

1P	- ONE POLE	KVAR	- KILOVOLT AMPERE REACTIVE
2P	- TWO POLE	KW	- KILOWATT
3P	- THREE POLE	LP	- LIGHTING PANEL
4P	- FOUR POLE	LS	- LIMIT SWITCH
1P 1W	- ONE POLE, ONE WIRE	LV	- LOW VOLTAGE
1P 2W	- ONE POLE, TWO WIRE	MC	- MECHANICAL CONTRACTOR
2P 2W	- TWO POLE, TWO WIRE	MCA	- MINIMUM CIRCUIT AMPS
2P 3W	- TWO POLE, THREE WIRE	MCC	- MOTOR CONTROL CENTER
3P 3W	- THREE POLE, THREE WIRE	MDC	- MAIN DISTRIBUTION PANEL
3P 4W	- THREE POLE, FOUR WIRE	MISC	- MISCELLANEOUS
4P 4W	- FOUR POLE, FOUR WIRE	MH	- MANHOLE
A	- AMPERE	MLO	- MAIN LINES ONLY
AC	- ALTERNATING CURRENT	MTD	- MOUNTED
AF	- AMPERE FRAME	MTS	- MOUNTING
AFF	- ABOVE FINISHED FLOOR	MTS	- MANUAL TRANSFER SWITCH
AFS	- ABOVE FINISHED GRADE	MW	- MICROWAVE
AG	- AMPERE INTERRUPTING CAPACITY	N/A	- NOT APPLICABLE
AL	- ALUMINUM	MV	- MEDIUM VOLTAGE
AS	- AMP SWITCH	NC	- NORMALLY CLOSED
AT	- AMP TRIP	NEC	- NATIONAL ELECTRIC CODE
ARCH	- ARCHITECT	NEC	- NOT IN CONTRACT
ATS	- AUTOMATIC TRANSFER SWITCH	NO	- NORMALLY OPEN
A/V	- AUDIO VISUAL	#	- NUMBER
B	- BELOW FINISHED FLOOR	NTS	- NOT TO SCALE
BF	- BELOW FLOOR	P	- POLE
BFF	- BELOW FINISHED FLOOR	PB	- PULL BOX
BFG	- BELOW FINISHED GRADE	PC	- PLUMBING SYSTEM CONTRACTOR
BLDG	- BUILDING	PH	- PHASE
C	- CONDUIT	PNL	- PANEL OR PANELBOARD
CAT	- CATV	PR	- POWER PANEL
CATV	- CABLE TELEVISION	PR	- PRIMARY
CB	- CIRCUIT BREAKER	PRC	- POLY VINYL CHLORIDE
CKT	- CIRCUIT	REC	- RECESSED
CO	- COPPER	REF	- REFRIGERATOR
CT	- CURRENT TRANSFORMER	RSC	- RIGID STEEL CONDUIT
CU	- COPPER	SEC	- SECURITY TRANSFORMER
CL	- CENTERLINE	SP	- SHIRE
D	- DEDICATED DEVICE	SN	- SOLID NEUTRAL
DC	- DIRECT CURRENT	SS	- STAINLESS STEEL
DD	- DOUBLE DUPLEX	ST	- SHUNT TRIP
DR	- DRYER	STP	- SHIELDED TWISTED PAIR
Δ	- DELTA	SUP	- SUSPENDED
DSC	- DISCONNECT	SW	- SWITCH
DW	- DISHWASHER	SWBD	- SWITCHBOARD
DWA	- DRAWING	T	- TAMPER RESISTANT SAFETY RECEPTACLE
E	- EMERGENCY	TC	- TELEPHONE CABLE
EC	- ELECTRICAL CONTRACTOR	TC	- TELEPHONE CABLE
EMT	- ELECTRIC METALLIC TUBING	TEL	- TELEPHONE (DATA)
ETR	- EXISTING TO REMAIN	TELECOM	- TELECOMMUNICATIONS
ERL	- EXISTING TO BE RELOCATED	TEL	- TELEPHONE
ERLD	- RELOCATED EQUIPMENT'S NEW LOCATION	TYP	- TYPICAL
EW	- ELECTRIC WATER COOLER	UG	- UNDERGROUND
EX	- EXISTING	UTP	- UNSHIELDED TWISTED PAIR
FA	- FIRE ALARM	U	- UNLESS OTHERWISE INDICATED
FLA	- FULL LOAD AMPS	V	- VOLT
FO	- FIBER OPTIC	W	- WATT
FPC	- FIRE PROTECTION CONTRACTOR	WA	- WASHER
GC	- GENERAL CONTRACTOR	WP	- WEATHERPROOF
GFC	- GROUND FAULT INTERRUPTER	XMR	- XRAY
GFT	- GROUND FAULT PROTECTION EQUIPMENT	XV	- XRAY VIEWER
GND	- GROUND	Y	- WYE
GRC	- GALVANIZED RIGID CONDUIT	ZAM	- ZONE ADAPTER MODULE
HI	- HANDHOLE		
HP	- HORIZONTAL		
HVAC	- HEATING, VENTILATING, AND AIR CONDITIONING		
HZ	- HERTZ CYCLES PER SECOND		
JB	- JUNCTION BOX		
KVA	- KILOVOLT AMPERE		

FIRE ALARM

FACP	ANNUNCIATOR PANEL - PHOTOELECTRIC - INTELLIGENT - (E) INDICATES ELEVATOR RECALL OPTION	SMT	SMOKE DETECTOR - PHOTOELECTRIC - INTELLIGENT - (E) INDICATES ELEVATOR RECALL OPTION	FAS	FIRE ALARM STROBE - WALL MOUNTED 6" 8" AFF OR 8" BELOW CEILING, WHICHEVER IS LOWER - (X) INDICATES STROBE CANDELA RATING
CM	CONTROL MODULE - ADDRESSABLE	HMT	HEAT DETECTOR - INTELLIGENT - (E) INDICATES ELEVATOR SHUTDOWN OPTION	FAS	FIRE ALARM STROBE - WALL MOUNTED 6" 8" AFF OR 8" BELOW CEILING, WHICHEVER IS LOWER - (X) INDICATES STROBE CANDELA RATING
MM	MONITOR MODULE - ADDRESSABLE	FS	SPRINKLER FLOW SWITCH	FAS	FIRE ALARM HORN - WALL MOUNTED 6" 8" AFF OR 8" BELOW CEILING, WHICHEVER IS LOWER - (X) INDICATES STROBE CANDELA RATING
FJ	FIRE FIGHTER'S TELEPHONE JACK	TS	SPRINKLER TAMPER SWITCH	FAS	FIRE ALARM HORN / STROBE - WALL MOUNTED 6" 8" AFF OR 8" BELOW CEILING, WHICHEVER IS LOWER - (X) INDICATES STROBE CANDELA RATING
ZS	PULL STATION - MOUNTED 4" 8" AFF	SD	SMOKE DAMPER		

VOICE/DATA

VO	VOICE/DATE OUTLET - CEILING MOUNTED	VDO	VOICE/DATE OUTLET WITH JACK - WALL MOUNTED PHONE - 4P AFF
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EQUIPMENT ROOM

TMB	GROUND BAR - TMB	RACK	2 POST EQUIPMENT RACK 34" TALL, FLOOR-MOUNT
LAD	LADDER TRAY	VWM	VERTICAL WIRE/CABLE MANAGER FOR EQUIPMENT RACK 6" WIDE, VERTICAL COVERS FRONT AND BACK
BKG	34" PL WOOD BACKBOARD	ECB	EQUIPMENT CABINET 36" X 24" X 28" STAINLESS STEEL DOUBLE HINGED, LOCKABLE VANDAL-RESISTANT

LIGHTING FIXTURES

SM	SURFACE MOUNTED	SM	SURFACE MOUNTED ACCENT - CHEVRON INDICATES DIRECTION OF ILLUMINATION
RM	RECESS MOUNTED	SM	RECESS MOUNTED ACCENT - CHEVRON INDICATES DIRECTION OF ILLUMINATION
WM	WALL MOUNTED	SM	EMERGENCY BATTERY UNIT - DUAL LIGHTING HEADS
IFM	IN-GROUND OR IN-FLOOR MOUNTED	SM	STRIP OR UNDER CABINET
HSP	SINGLE HEAD SPOT OR FLOOD	SM	EXT LIGHT FIXTURE - CEILING MOUNTED - SHADING INDICATES FACE(S) - ARROW(S) AND FACE(S) AS INDICATED ON DRAWINGS
HDP	DOUBLE HEAD SPOT OR FLOOD	SM	EXT LIGHT FIXTURE - CEILING MOUNTED - SHADING INDICATES FACE(S) - ARROW(S) AND FACE(S) AS INDICATED ON DRAWINGS
TLM	TRIP MOUNTED LIGHT FIXTURE		
EML	EXIT LIGHT FIXTURE - END MOUNTED - SHADING INDICATES FACE(S) - ARROW(S) AND FACE(S) AS INDICATED ON DRAWINGS		

LIGHTING FIXTURE DESIGNATIONS

GLP-1	(A) INDICATES FIXTURE TYPE (SEE SCHEDULE) BRANCH CIRCUITING - (B) (P) INDICATES PANEL - (I) INDICATES CIRCUIT NUMBER	GLP-1	(A) INDICATES FIXTURE TYPE (SEE SCHEDULE) BRANCH CIRCUITING - (B) (P) INDICATES PANEL - (I) INDICATES CIRCUIT NUMBER
GLP-1	(A) INDICATES FIXTURE TYPE (SEE SCHEDULE) BRANCH CIRCUITING - (B) (P) INDICATES PANEL - (I) INDICATES CIRCUIT NUMBER	GLP-1	(A) INDICATES FIXTURE TYPE (SEE SCHEDULE) BRANCH CIRCUITING - (B) (P) INDICATES PANEL - (I) INDICATES CIRCUIT NUMBER

LIGHTING CONTROL

SW	SWITCH - MOUNTED 3" 8" AFF, UOI - (X) INDICATES SWITCH ID - (Y) INDICATES SWITCH ID - (Z) INDICATES SWITCH ID - (A) INDICATES SWITCH TYPE - (B) INDICATES SWITCH TYPE - (C) INDICATES SWITCH TYPE - (D) INDICATES SWITCH TYPE - (E) INDICATES SWITCH TYPE - (F) INDICATES SWITCH TYPE - (G) INDICATES SWITCH TYPE - (H) INDICATES SWITCH TYPE - (I) INDICATES SWITCH TYPE	MCS	MOMENTARY CONTACT SWITCH - LOW VOLTAGE - (X) INDICATES SWITCH ID - (Y) INDICATES SWITCH ID - (Z) INDICATES SWITCH ID - (A) INDICATES SWITCH TYPE - (B) INDICATES SWITCH TYPE - (C) INDICATES SWITCH TYPE - (D) INDICATES SWITCH TYPE - (E) INDICATES SWITCH TYPE - (F) INDICATES SWITCH TYPE - (G) INDICATES SWITCH TYPE - (H) INDICATES SWITCH TYPE - (I) INDICATES SWITCH TYPE
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RACEWAYS AND BOXES

MH	MANHOLE	F	ELECTRICAL BOX - FLOOR MOUNTED - FLUSH - OUTLET TYPES REQUIRED AT EACH BOX AS INDICATED ON DRAWINGS
HH	HANDHOLE	P	ELECTRICAL BOX - FLOOR MOUNTED - POKE THRU - OUTLET TYPES REQUIRED AT EACH BOX AS INDICATED ON DRAWINGS
PB	PULL BOX		
J	JUNCTION BOX		
CTB	CABLE TAP BOX		

EQUIPMENT AND PANELBOARDS

UT	UTILITY TRANSFORMER - PAD MOUNTED	BP	BRANCH PANELBOARD - RECESSED MOUNTED - (SEE SCHEDULE)	DP	DISTRIBUTION PANELBOARD
BP	BRANCH PANELBOARD - SURFACE MOUNTED - (SEE SCHEDULE)	SW	SWITCHBOARD		

MOTOR STARTERS AND DISCONNECTS

M	MOTOR STARTER - MANUAL	DC	DISCONNECT SWITCH
M	MOTOR STARTER - MAGNETIC - (X) INDICATES MOTOR STARTER CONTROLLED (SEE SCHEDULE)	DC	DISCONNECT SWITCH - FUSED
M	COMBINATION MOTOR STARTER - (X) INDICATES MOTOR STARTER CONTROLLED (SEE SCHEDULE)		

WIRING DEVICES

DR	DUPLEX RECEPTACLE - MOUNTED 1" 8" AFF, UOI - (X) INDICATES CIRCUIT NUMBER (PANEL BOUNDARY AS INDICATED ON DRAWINGS)	SPO	SPECIAL PURPOSE OUTLET - FLUSH - IDENTIFICATION (SEE SCHEDULE)
DR	DUPLEX RECEPTACLE - MOUNTED 1" 8" AFF, UOI - (X) INDICATES CIRCUIT NUMBER (PANEL BOUNDARY AS INDICATED ON DRAWINGS)	M	MOTOR CONNECTION - (X) INDICATES MOTOR IDENTIFICATION (SEE SCHEDULE)
DR	DUPLEX RECEPTACLE - MOUNTED 1" 8" AFF, UOI - (X) INDICATES CIRCUIT NUMBER (PANEL BOUNDARY AS INDICATED ON DRAWINGS)	QDR	QUADPLEX RECEPTACLE - MOUNTED 1" 8" AFF, UOI - (X) INDICATES CIRCUIT NUMBER (PANEL BOUNDARY AS INDICATED ON DRAWINGS)

GENERAL SYMBOLS

X	DETAIL REFERENCE - TOP DESIGNATES DETAIL NUMBER - BOTTOM DESIGNATES SHEET NUMBER	G-UP	EQUIPMENT NAMING DESIGNATION - FLOOR LEVEL - (G) GROUND TIER - (2) SECOND TIER - (3) THIRD TIER - (4) FOURTH TIER - (5) FIFTH TIER - (R) ROOF
X	DETAIL COVERAGE AREA		
X	SECTION REFERENCE - TOP DESIGNATES SECTION NUMBER - BOTTOM DESIGNATES SHEET NUMBER		

ONE LINE DIAGRAM

XAF	DISCONNECT SWITCH - NON-FUSED - (XAF) INDICATES RATING - SIZE AS INDICATED ON DRAWINGS	XAF	CIRCUIT BREAKER - (XAF) INDICATES TRIP SIZE - (XAF) INDICATES NUMBER OF POLES
XAF	DISCONNECT SWITCH - FUSED - (XAF) INDICATES FRAME SIZE - (XAF) INDICATES FUSE RATING - SIZE AS INDICATED ON DRAWINGS	XAF	AUTO-TRANSFER SWITCH
XAF	DISCONNECT SWITCH - CIRCUIT BREAKER - (XAF) INDICATES FRAME SIZE - (XAF) INDICATES TRIP SIZE - SIZE AS INDICATED ON DRAWINGS	XAF	SHUNT TRIP
XAF	DISCONNECT SWITCH - CIRCUIT BREAKER - (XAF) INDICATES FRAME SIZE - (XAF) INDICATES TRIP SIZE - SIZE AS INDICATED ON DRAWINGS	XAF	VARIABLE FREQUENCY DRIVE - (XAF) INDICATES MOTOR CONTROLLED
XAF	MOTOR STARTER - MAGNETIC - (XAF) INDICATES TYPE - (XAF) INDICATES 2 WINDING - (XAF) INDICATES 3 WINDING - (XAF) INDICATES 4 WINDING - (XAF) INDICATES 5 WINDING - (XAF) INDICATES 6 WINDING - (XAF) INDICATES 7 WINDING - (XAF) INDICATES 8 WINDING - (XAF) INDICATES 9 WINDING - (XAF) INDICATES 10 WINDING - (XAF) INDICATES 11 WINDING - (XAF) INDICATES 12 WINDING - (XAF) INDICATES 13 WINDING - (XAF) INDICATES 14 WINDING - (XAF) INDICATES 15 WINDING - (XAF) INDICATES 16 WINDING - (XAF) INDICATES 17 WINDING - (XAF) INDICATES 18 WINDING - (XAF) INDICATES 19 WINDING - (XAF) INDICATES 20 WINDING - (XAF) INDICATES 21 WINDING - (XAF) INDICATES 22 WINDING - (XAF) INDICATES 23 WINDING - (XAF) INDICATES 24 WINDING - (XAF) INDICATES 25 WINDING - (XAF) INDICATES 26 WINDING - (XAF) INDICATES 27 WINDING - (XAF) INDICATES 28 WINDING - (XAF) INDICATES 29 WINDING - (XAF) INDICATES 30 WINDING - (XAF) INDICATES 31 WINDING - (XAF) INDICATES 32 WINDING - (XAF) INDICATES 33 WINDING - (XAF) INDICATES 34 WINDING - (XAF) INDICATES 35 WINDING - (XAF) INDICATES 36 WINDING - (XAF) INDICATES 37 WINDING - (XAF) INDICATES 38 WINDING - (XAF) INDICATES 39 WINDING - (XAF) INDICATES 40 WINDING - (XAF) INDICATES 41 WINDING - (XAF) INDICATES 42 WINDING - (XAF) INDICATES 43 WINDING - (XAF) INDICATES 44 WINDING - (XAF) INDICATES 45 WINDING - (XAF) INDICATES 46 WINDING - (XAF) INDICATES 47 WINDING - (XAF) INDICATES 48 WINDING - (XAF) INDICATES 49 WINDING - (XAF) INDICATES 50 WINDING - (XAF) INDICATES 51 WINDING - (XAF) INDICATES 52 WINDING - (XAF) INDICATES 53 WINDING - (XAF) INDICATES 54 WINDING - (XAF) INDICATES 55 WINDING - (XAF) INDICATES 56 WINDING - (XAF) INDICATES 57 WINDING - (XAF) INDICATES 58 WINDING - (XAF) INDICATES 59 WINDING - (XAF) INDICATES 60 WINDING - (XAF) INDICATES 61 WINDING - (XAF) INDICATES 62 WINDING - (XAF) INDICATES 63 WINDING - (XAF) INDICATES 64 WINDING - (XAF) INDICATES 65 WINDING - (XAF) INDICATES 66 WINDING - (XAF) INDICATES 67 WINDING - (XAF) INDICATES 68 WINDING - (XAF) INDICATES 69 WINDING - (XAF) INDICATES 70 WINDING - (XAF) INDICATES 71 WINDING - (XAF) INDICATES 72 WINDING - (XAF) INDICATES 73 WINDING - (XAF) INDICATES 74 WINDING - (XAF) INDICATES 75 WINDING - (XAF) INDICATES 76 WINDING - (XAF) INDICATES 77 WINDING - (XAF) INDICATES 78 WINDING - (XAF) INDICATES 79 WINDING - (XAF) INDICATES 80 WINDING - (XAF) INDICATES 81 WINDING - (XAF) INDICATES 82 WINDING - (XAF) INDICATES 83 WINDING - (XAF) INDICATES 84 WINDING - (XAF) INDICATES 85 WINDING - (XAF) INDICATES 86 WINDING - (XAF) INDICATES 87 WINDING - (XAF) INDICATES 88 WINDING - (XAF) INDICATES 89 WINDING - (XAF) INDICATES 90 WINDING - (XAF) INDICATES 91 WINDING - (XAF) INDICATES 92 WINDING - (XAF) INDICATES 93 WINDING - (XAF) INDICATES 94 WINDING - (XAF) INDICATES 95 WINDING - (XAF) INDICATES 96 WINDING - (XAF) INDICATES 97 WINDING - (XAF) INDICATES 98 WINDING - (XAF) INDICATES 99 WINDING - (XAF) INDICATES 100 WINDING	XAF	TRANSFORMER - POTENTIAL - TRANSFORMER - CURRENT
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6/27/2017 3:55:14 PM

EAST MAIN STREET

A1 ELECTRICAL SITE PLAN
1" = 100'

SOUTH LIVINGSTON STREET

- KEYED NOTES THIS SHEET
- 1 PROVIDE 3W x 5L x 4D PULL BOX, INSTALLED FLUSH WITH SIDEWALK IN TERRACE FOR CITY OWNED FIBER OPTIC CABLEING.
 - 2 UTILITY TRANSFORMER LOCATION. UTILITY TRANSFORMER & PAD ARE FURNISHED, INSTALLED, AND OWNED BY M&E UTILITY.
 - 3 PROVIDE CONCRETE PROTECTION BOLLARDS FOR UTILITY TRANSFORMER. COORDINATE EXACT LOCATIONS OF BOLLARDS WITH M&E UTILITY.
 - 4 PROPOSED LOCATION FOR NATURAL GAS METERS.
 - 5 PROVIDE (4) 4" PVC SCHED 40 CONDUITS WITH PULL STRINGS, STUBBED 3'-0" UNDERGROUND, OUT 3'-0" FROM BUILDING FOR CONNECTION TO UTILITY SERVICE ENTRANCE CONDUITS. SERVICE ENTRANCE CONDUITORS BY M&E UTILITY. TERMINATIONS AT TRANSFORMER SECONDARY AND MAIN SWITCHBOARD BY M&E UTILITY.
 - 6 DOWNLIGHT RECESSED IN METAL PANEL SOFFIT, 15'-0" AFG.

- KEYED NOTES THIS SHEET
- 7 CONDUIT STUB LOCATIONS IN TERRACE FOR FUTURE CONNECTIONS TO CITY-OWNED FIBER OPTIC INFRASTRUCTURE.
 - 8 PROVIDE (2) 4" SCHED 40 PVC CONDUITS UNDERGROUND FROM TERRACE INTO COMMERCIAL SPACE. REFER TO E-101 FOR CONDUIT STUB-UP LOCATION.
 - 9 EXISTING MANHOLE FOR COMMERCIAL DATA SERVICE PROVIDERS (NON CITY-OWNED). MODIFICATIONS TO MANHOLE AND CONNECTION TO COMMERCIAL SPACE CONDUIT STUBS BY OTHERS.
 - 10 PROVIDE (2) 4" SCHED 40 PVC CONDUITS UNDERGROUND FROM PULL BOX INTO IT ROOM. REFER TO E-401 FOR CONDUIT STUB-UP LOCATION.
 - 11 PROVIDE (2) 4" SCHED 40 PVC CONDUITS UNDERGROUND FROM PULL BOX.

GRÄEF

5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CONSULTANTS:

PROJECT TITLE:
CAPITOL EAST PARKING GARAGE

211 SOUTH LIVINGSTON STREET, MADISON WI 53703
PLANS NUMBER 1627
CONTRACT NUMBER 7951

CLIENT:
CITY OF MADISON PARKING UTILITY
215 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53801-2086



ISSUE:

NO	DATE	DESCRIPTION
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PROJECT INFORMATION:

PROJECT NUMBER: 2016-5051

DATE: 06/30/2017

DRAWN BY: RRK

CHECKED BY: RJ

APPROVED BY: DW

SCALE: AS NOTED

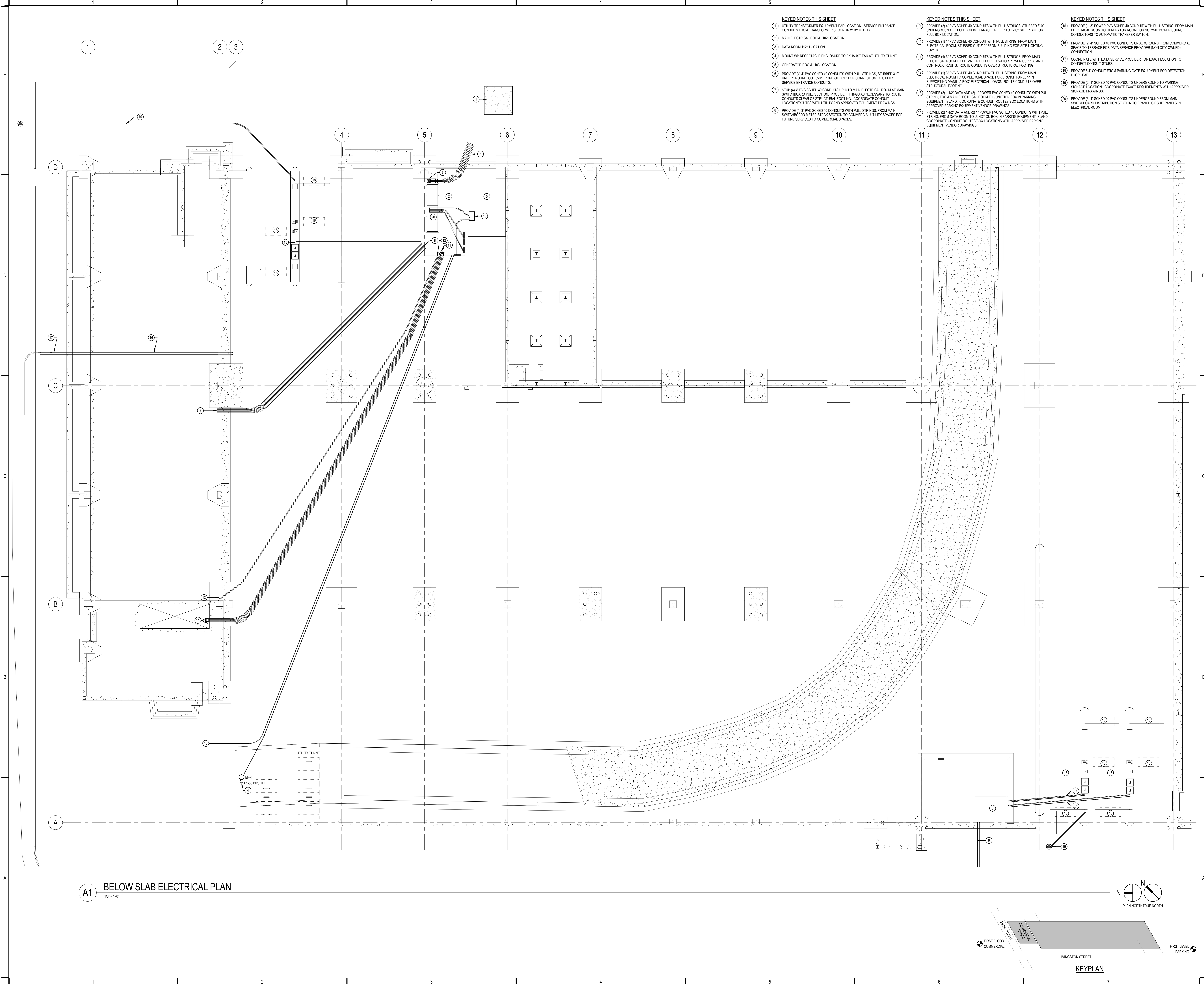
SET TYPE: BD

SHEET TITLE:

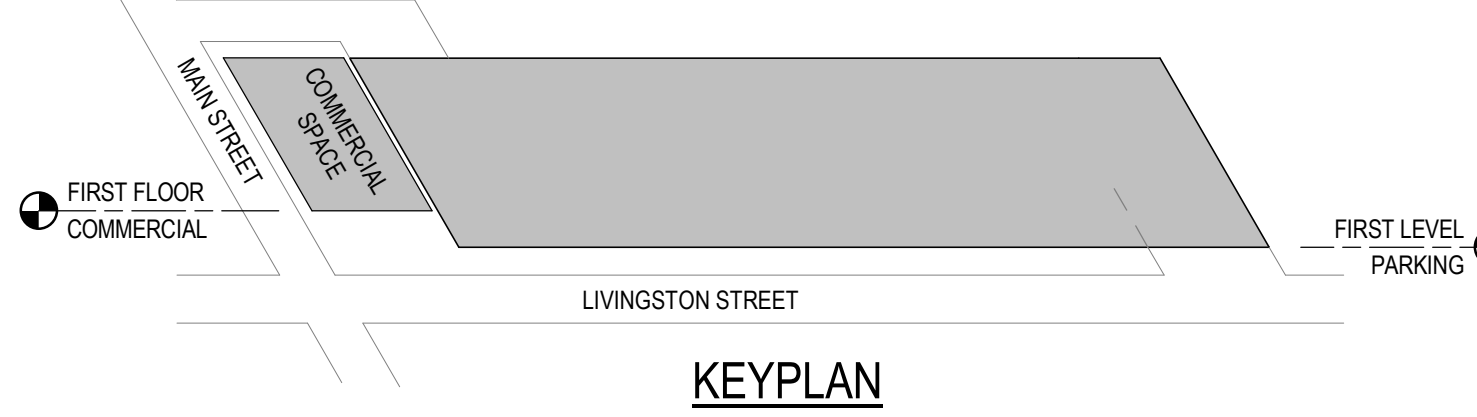
ELECTRICAL SITE PLAN

SHEET NUMBER:

E-002



A1 BELOW SLAB ELECTRICAL PLAN
1/8" = 1'-0"



KEYED NOTES THIS SHEET

- 1 UTILITY TRANSFORMER EQUIPMENT PAD LOCATION. SERVICE ENTRANCE CONDUITS FROM TRANSFORMER SECONDARY BY UTILITY.
- 2 MAIN ELECTRICAL ROOM 1102 LOCATION.
- 3 DATA ROOM 1125 LOCATION.
- 4 MOUNT WP RECEPTACLE ENCLOSURE TO EXHAUST FAN AT UTILITY TUNNEL.
- 5 GENERATOR ROOM 1103 LOCATION.
- 6 PROVIDE (4) 4" PVC SCHED 40 CONDUITS WITH PULL STRINGS, STUBBED 3'-0" UNDERGROUND, OUT 5'-0" FROM BUILDING FOR CONNECTION TO UTILITY SERVICE ENTRANCE CONDUITS.
- 7 STUB (4) 4" PVC SCHED 40 CONDUITS UP INTO MAIN ELECTRICAL ROOM AT MAIN SWITCHBOARD RULL SECTION. PROVIDE FITTINGS AS NECESSARY TO ROUTE CONDUITS CLEAR OF STRUCTURAL FOOTING. COORDINATE CONDUIT LOCATION/ROUTES WITH UTILITY AND APPROVED EQUIPMENT DRAWINGS.
- 8 PROVIDE (4) 3" PVC SCHED 40 CONDUITS WITH PULL STRINGS, FROM MAIN SWITCHBOARD METER STACK SECTION TO COMMERCIAL UTILITY SPACES FOR FUTURE SERVICES TO COMMERCIAL SPACES.

KEYED NOTES THIS SHEET

- 9 PROVIDE (2) 4" PVC SCHED 40 CONDUITS WITH PULL STRINGS, STUBBED 3'-0" UNDERGROUND TO PULL BOX IN TERRACE. REFER TO E-002 SITE PLAN FOR PULL BOX LOCATION.
- 10 PROVIDE (1) 1" PVC SCHED 40 CONDUIT WITH PULL STRINGS, FROM MAIN ELECTRICAL ROOM, STUBBED OUT 5'-0" FROM BUILDING FOR SITE LIGHTING POWER.
- 11 PROVIDE (4) 3" PVC SCHED 40 CONDUITS WITH PULL STRINGS, FROM MAIN ELECTRICAL ROOM TO ELEVATOR PIT FOR ELEVATOR POWER SUPPLY, AND CONTROL CIRCUITS. ROUTE CONDUITS OVER STRUCTURAL FOOTING.
- 12 PROVIDE (1) 3" PVC SCHED 40 CONDUIT WITH PULL STRINGS, FROM MAIN ELECTRICAL ROOM TO COMMERCIAL SPACE FOR BRANCH PANEL, PTH SUPPORTING "VANILLA BOX" ELECTRICAL LOADS. ROUTE CONDUITS OVER STRUCTURAL FOOTING.
- 13 PROVIDE (2) 1-1/2" DATA AND (2) 1" POWER PVC SCHED 40 CONDUITS WITH PULL STRINGS, FROM MAIN ELECTRICAL ROOM TO JUNCTION BOX IN PARKING EQUIPMENT ISLAND. COORDINATE CONDUIT ROUTES/BOX LOCATIONS WITH APPROVED PARKING EQUIPMENT VENDOR DRAWINGS.
- 14 PROVIDE (2) 1-1/2" DATA AND (2) 1" POWER PVC SCHED 40 CONDUITS WITH PULL STRINGS, FROM DATA ROOM TO JUNCTION BOX IN PARKING EQUIPMENT ISLAND. COORDINATE CONDUIT ROUTES/BOX LOCATIONS WITH APPROVED PARKING EQUIPMENT VENDOR DRAWINGS.

KEYED NOTES THIS SHEET

- 15 PROVIDE (1) 3" POWER PVC SCHED 40 CONDUIT WITH PULL STRING, FROM MAIN ELECTRICAL ROOM TO GENERATOR ROOM FOR NORMAL POWER SOURCE CONDUCTORS TO AUTOMATIC TRANSFER SWITCH.
- 16 PROVIDE (2) 4" SCHED 40 PVC CONDUITS UNDERGROUND FROM COMMERCIAL SPACE TO TERRACE FOR DATA SERVICE PROVIDER (NON CITY-OWNED) CONNECTION.
- 17 COORDINATE WITH DATA SERVICE PROVIDER FOR EXACT LOCATION TO CONNECT CONDUIT STUBS.
- 18 PROVIDE (2) 3/4" CONDUIT FROM PARKING GATE EQUIPMENT FOR DETECTION LOOP LEAD.
- 19 PROVIDE (2) 1" SCHED 40 PVC CONDUITS UNDERGROUND TO PARKING SIGNAGE LOCATION. COORDINATE EXACT REQUIREMENTS WITH APPROVED SIGNAGE DRAWINGS.
- 20 PROVIDE (2) 4" SCHED 40 PVC CONDUITS UNDERGROUND FROM MAIN SWITCHBOARD DISTRIBUTION SECTION TO BRANCH CIRCUIT PANELS IN ELECTRICAL ROOM.

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CONSULTANTS:

PROJECT TITLE:
CAPITOL EAST PARKING GARAGE

211 SOUTH LIVINGSTON STREET, MADISON WI 53703
MUNS NUMBER 162
CONTRACT NUMBER 7561

CLIENT:
CITY OF MADISON PARKING UTILITY
215 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53703-2086



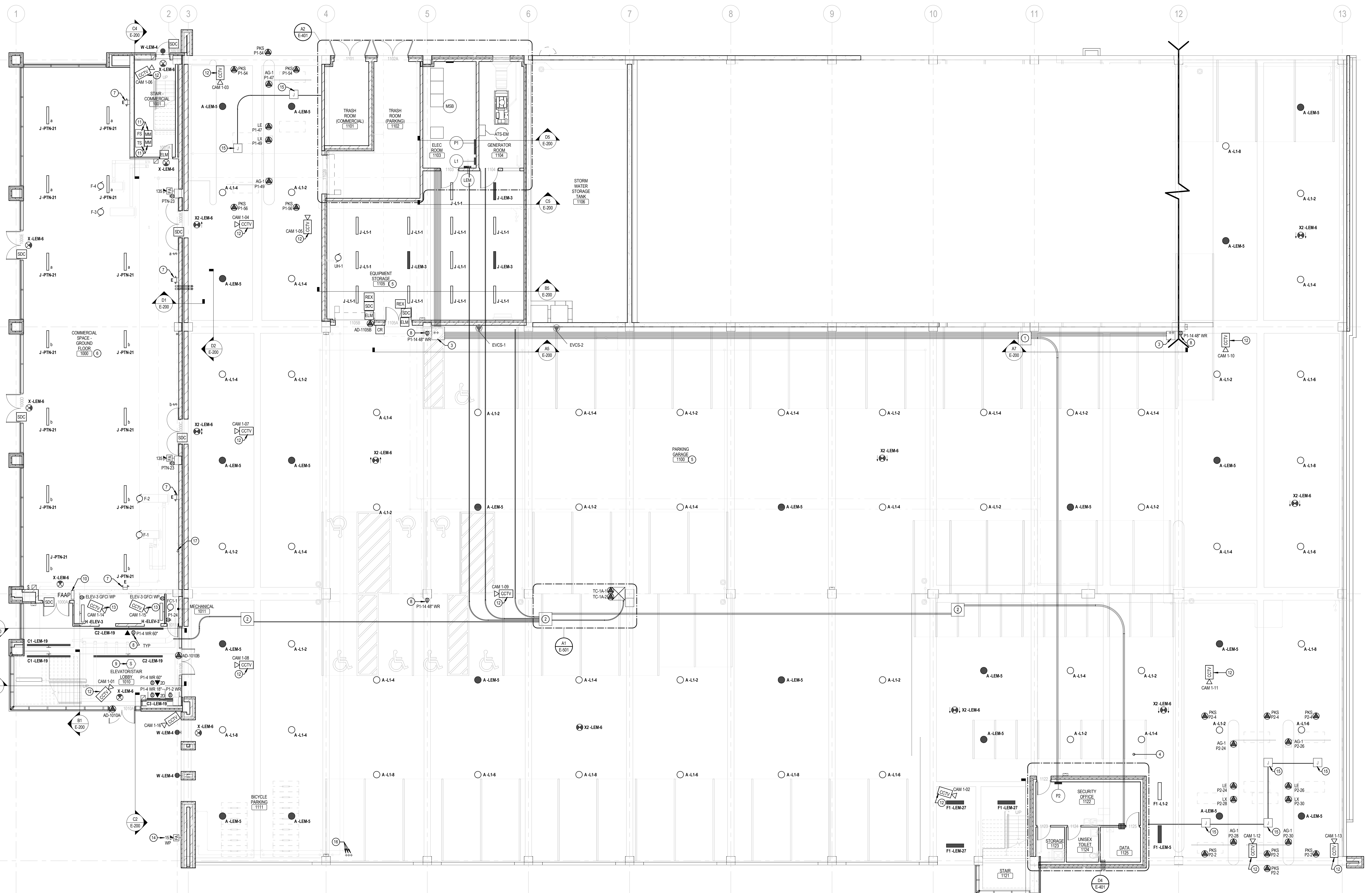
ISSUE:

NO	DATE	DESCRIPTION
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PROJECT INFORMATION:
PROJECT NUMBER: 2016-5051
DATE: 06/30/2017
DRAWN BY: RRK
CHECKED BY: RJ
APPROVED BY: DW
SCALE: AS NOTED
SET TYPE: BD

SHEET TITLE:
BELOW SLAB ELECTRICAL PLAN

SHEET NUMBER:



B1 FIRST LEVEL PARKING - ELECTRICAL PLAN

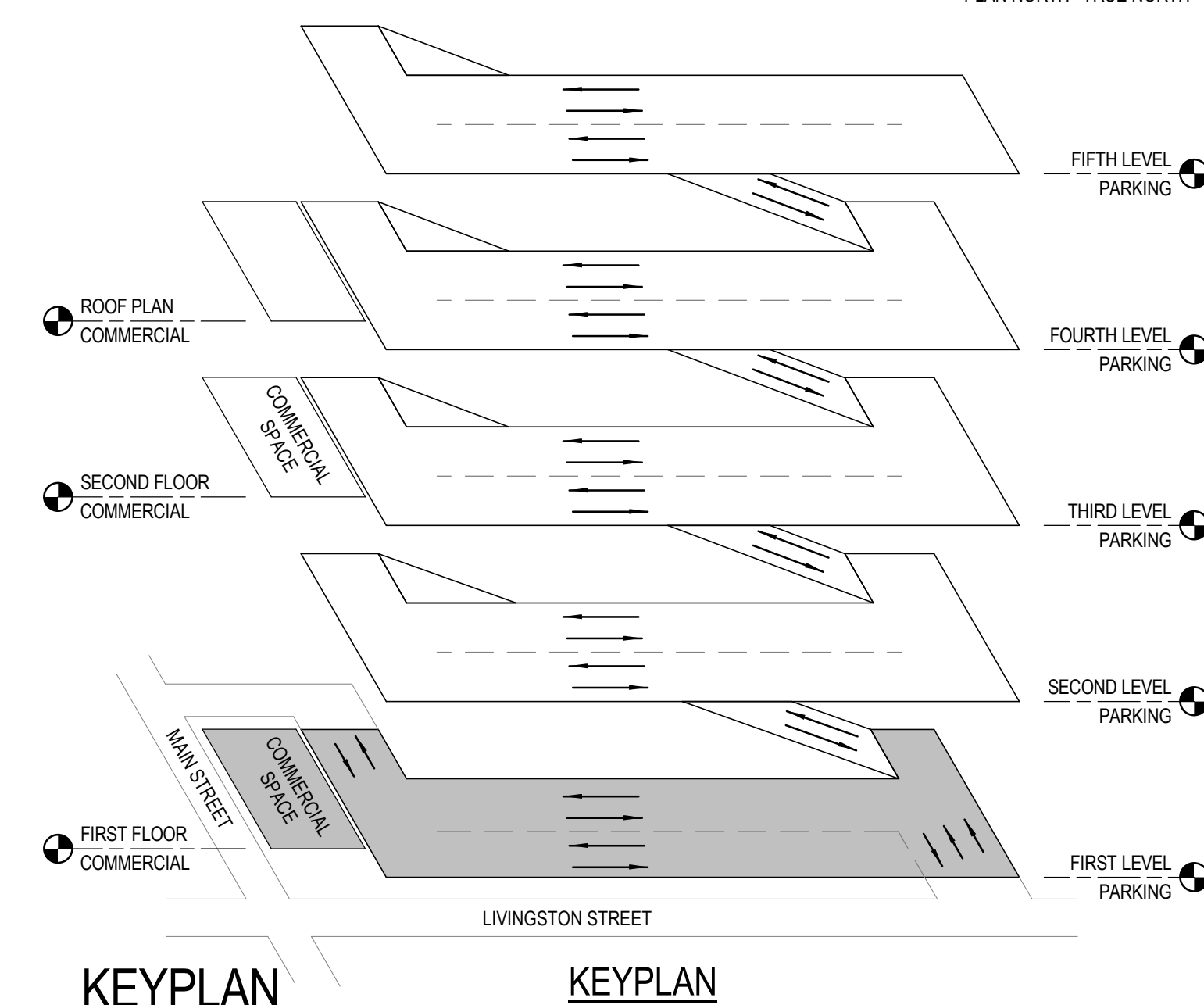
1/8" = 1'-0"

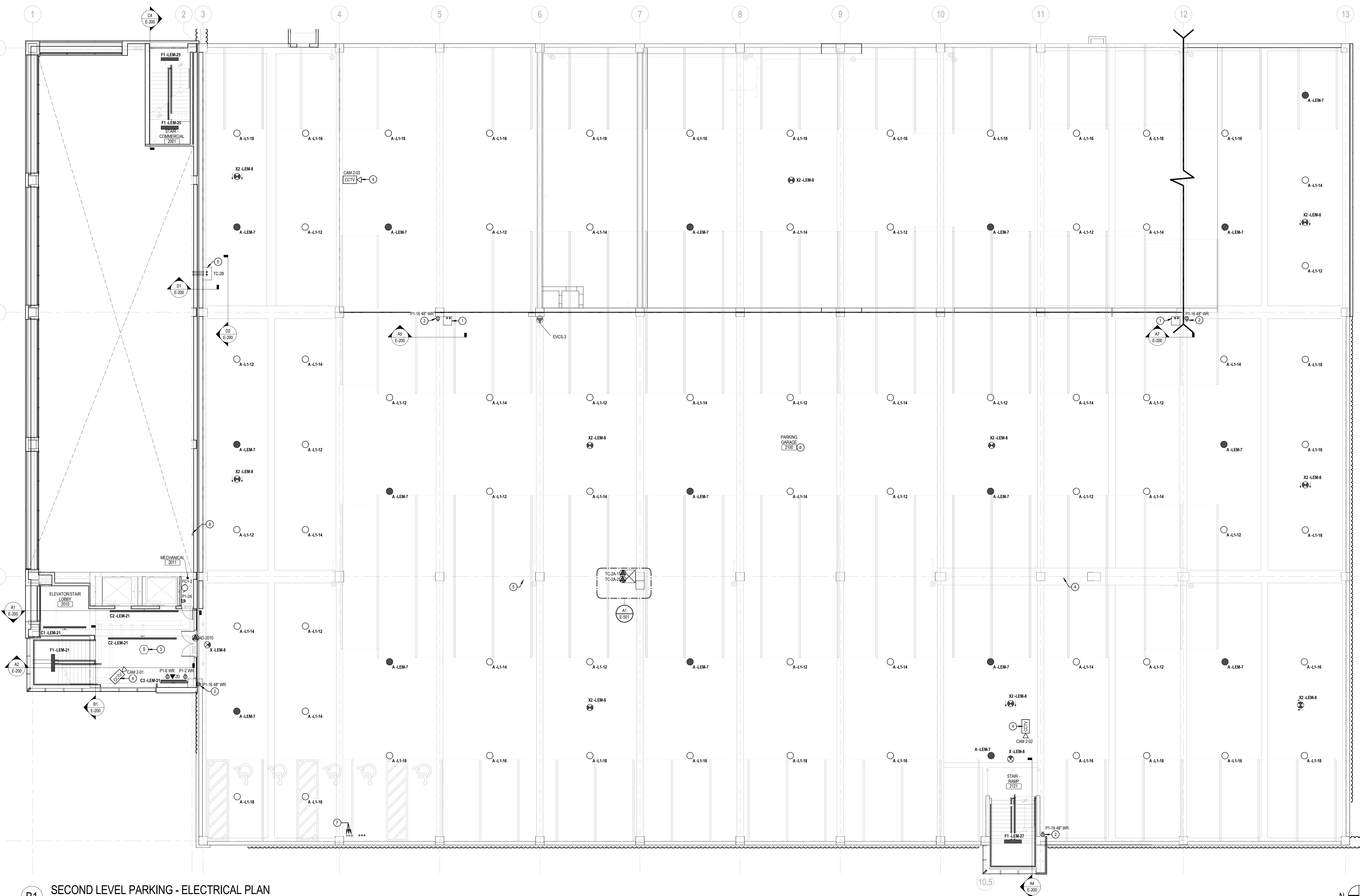
KEYED NOTES THIS SHEET

- 1 PROVIDE PULL BOX FOR POWER CONDUITS ROUTED OVERHEAD, MOUNTED TO DECK CEILING.
- 2 PROVIDE PULL BOX FOR DATA CONDUITS ROUTED OVERHEAD, MOUNTED TO DECK CEILING.
- 3 PROVIDE PULL BOX FOR POWER CONDUITS ROUTED OVERHEAD, MOUNTED TO DECK CEILING. PROVIDE CONDUIT STUDS THRU CEILING FOR BRANCH CIRCUITS SUPPLYING PARKING DECK LEVEL(S) ABOVE.
- 4 PROVIDE (1) 4" RMC CONDUIT, FROM MAIN ELECTRICAL ROOM TO DATA ROOM FOR DATA ROOM BRANCH CIRCUIT PANEL.
- 5 SURFACE MOUNT LIGHT FIXTURES IN THIS SPACE TO EXPOSED STRUCTURAL CEILING. PROVIDE SURFACE MOUNT BOX & CONDUIT INSTALLATIONS IN THIS SPACE.
- 6 PENDANT MOUNT LIGHT FIXTURES IN THIS SPACE TO EXPOSED STRUCTURAL CEILING, 12'-0" ABO.
- 7 CIRCUIT EMERGENCY BATTERY UNIT TO UNSWITCHED LIGHTING BRANCH CIRCUIT SUPPLYING THIS SPACE.
- 8 PROVIDE DUPLEX RECEPTACLE WITH WEATHER-RESISTANT, GASKETED COVER. RECEPTACLE SUPPLIED VIA CIRCUIT BREAKER WITH INTEGRAL GROUND FAULT PROTECTION.
- 9 SYSTEM SMOKE DETECTOR UTILIZED FOR ELEVATOR RECALL OPERATION. PROVIDE FIRE ALARM SYSTEM INTERFACE.
- 10 COORDINATE EXACT LOCATION OF FIRE ALARM SYSTEM ANNUNCIATOR PANEL WITH CITY OF MADISON FIRE DEPARTMENT.
- 11 PROVIDE FLOW SWITCHES, TAMPER SWITCHES, MONITOR MODULES, AND SYSTEM CONNECTIONS TO FIRE ALARM SYSTEM AT FIRE PROTECTION RISER. REFER TO APPROVED FIRE PROTECTION DESIGN DRAWINGS FOR REQUIRED DEVICE QUANTITIES.
- 12 POWER-OVER-ETHERNET (POE) SECURITY CAMERA LOCATION. SECURITY CAMERAS FURNISHED BY OWNER. INSTALLED BY ELECTRICAL CONTRACTOR.
- 13 POWER-OVER-ETHERNET (POE) SECURITY CAMERA LOCATED IN ELEVATOR CAB. SECURITY CAMERAS FURNISHED BY OWNER. INSTALLED BY ELECTRICAL CONTRACTOR.

KEYED NOTES THIS SHEET

- 14 PROVIDE WEATHERPROOF NOTIFICATION DEVICE FOR OUTSIDE ANNUNCIATION OF FIRE ALARM SYSTEM.
- 15 PROVIDE 1" SURFACE MOUNTED CONDUIT TO 4" W" CEILING-MOUNT WEATHERPROOF BOX FOR FUTURE AVI READER AT PARKING GATE EQUIPMENT. PROVIDE SYSTEMS PATHWAY BACK TO PARKING EQUIPMENT IN ISLANDS.
- 16 PROVIDE (3) 4" CONDUIT SLEEVES IN DECK FOR FUTURE POWER/SYSTEM PATHWAYS ASSOCIATED WITH FUTURE PHOTOVOLTAIC ARRAY INSTALLATION AT ROOF. COORDINATE SLEEVE LOCATIONS WITH OTHER TRACES.
- 17 PROVIDE (1) 3" CONDUIT THRU FLOOR FOR SUPPLY FEED TO BRANCH PANEL PTN.

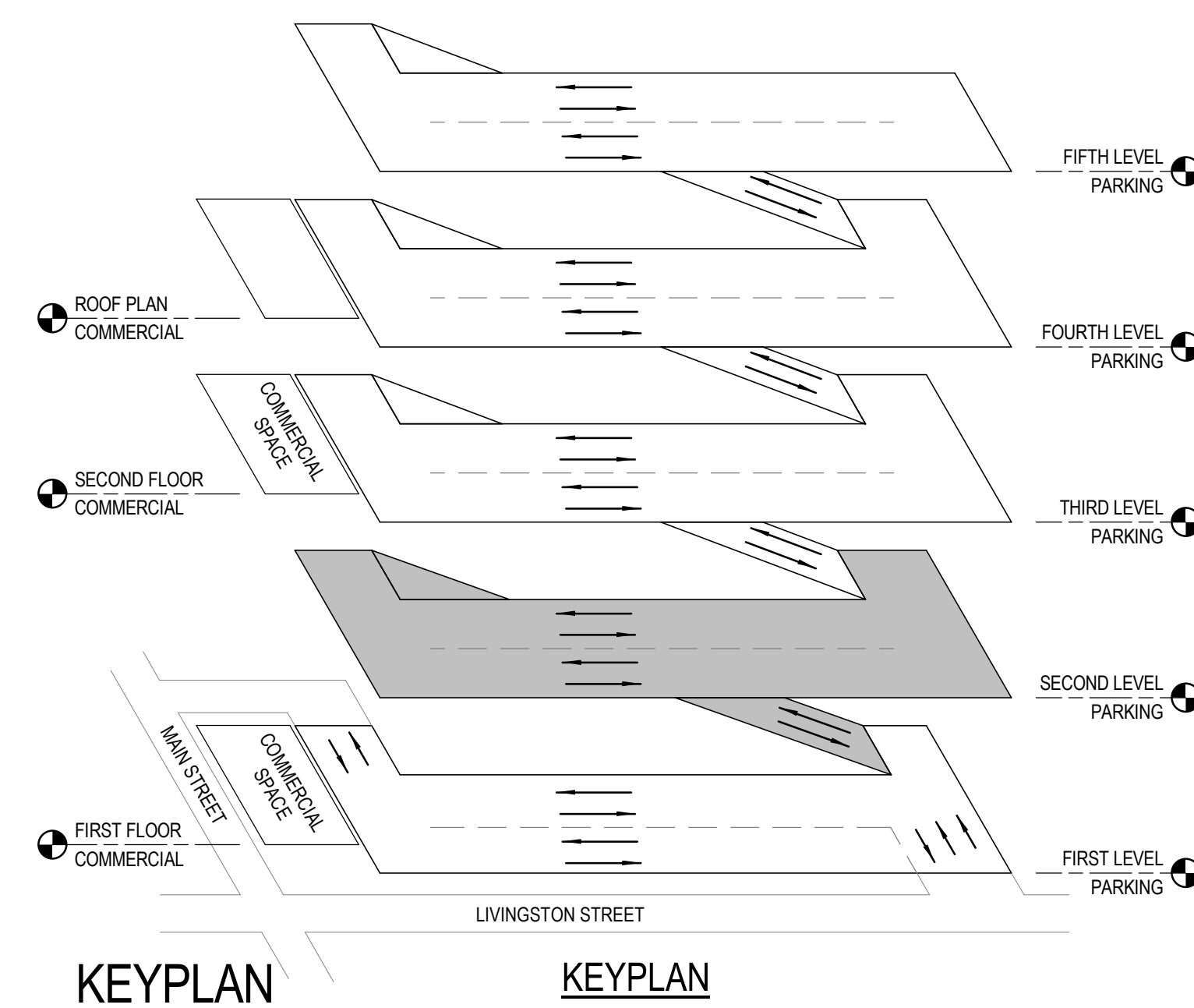




B1 SECOND LEVEL PARKING - ELECTRICAL PLAN

KEYED NOTES THIS SHEET

- PROVIDE PULL BOX FOR POWER CONDUITS ROUTED OVERHEAD, MOUNTED TO DECK CEILING. PROVIDE CONDUIT STUBS THRU CEILING FOR BRANCH CIRCUITS SUPPLYING PARKING DECK LEVEL(S) ABOVE.
- PROVIDE DUPLEX RECEPTACLE WITH WEATHER-RESISTANT, GASKETED COVER MOUNTED TO STRUCTURAL COLUMN. RECEPTACLE SUPPLIED VIA CIRCUIT BREAKER WITH INTEGRAL GROUND FAULT PROTECTION.
- SYSTEM SMOKE DETECTOR UTILIZED FOR ELEVATOR RECALL OPERATION. PROVIDE FIRE ALARM SYSTEM INTERFACE.
- POWER-OVER-ETHERNET (POE) SECURITY CAMERA LOCATION. SECURITY CAMERAS FURNISHED BY OWNER, INSTALLED BY ELECTRICAL CONTRACTOR @ 4' AFF.
- PROVIDE 48"x24"x2" NEMA 4X DOUBLE HINGED, STEEL BOX FOR HOUSING DATA SERVICE PROVIDER DEMARC AND FUTURE FIRST FLOOR COMMERCIAL TENANT EQUIPMENT. PENTAIR/NOPTMAN PART # PTM4824G4.
- SURFACE-MOUNT LIGHT FIXTURES IN THIS SPACE TO EXPOSED STRUCTURAL CEILING. PROVIDE SURFACE-MOUNT BOX & CONDUIT INSTALLATIONS IN THIS SPACE.
- PROVIDE (3) 4" CONDUIT SLEEVES IN DECK FOR FUTURE POWER/SYSTEM PATHWAYS ASSOCIATED WITH FUTURE PHOTOVOLTAIC ARRAY INSTALLATION AT ROOF. COORDINATE SLEEVE LOCATIONS WITH OTHER TRADES.
- PROVIDE (1) 3" CONDUIT THRU FLOOR FOR SUPPLY FEED TO BRANCH PANEL 211V.

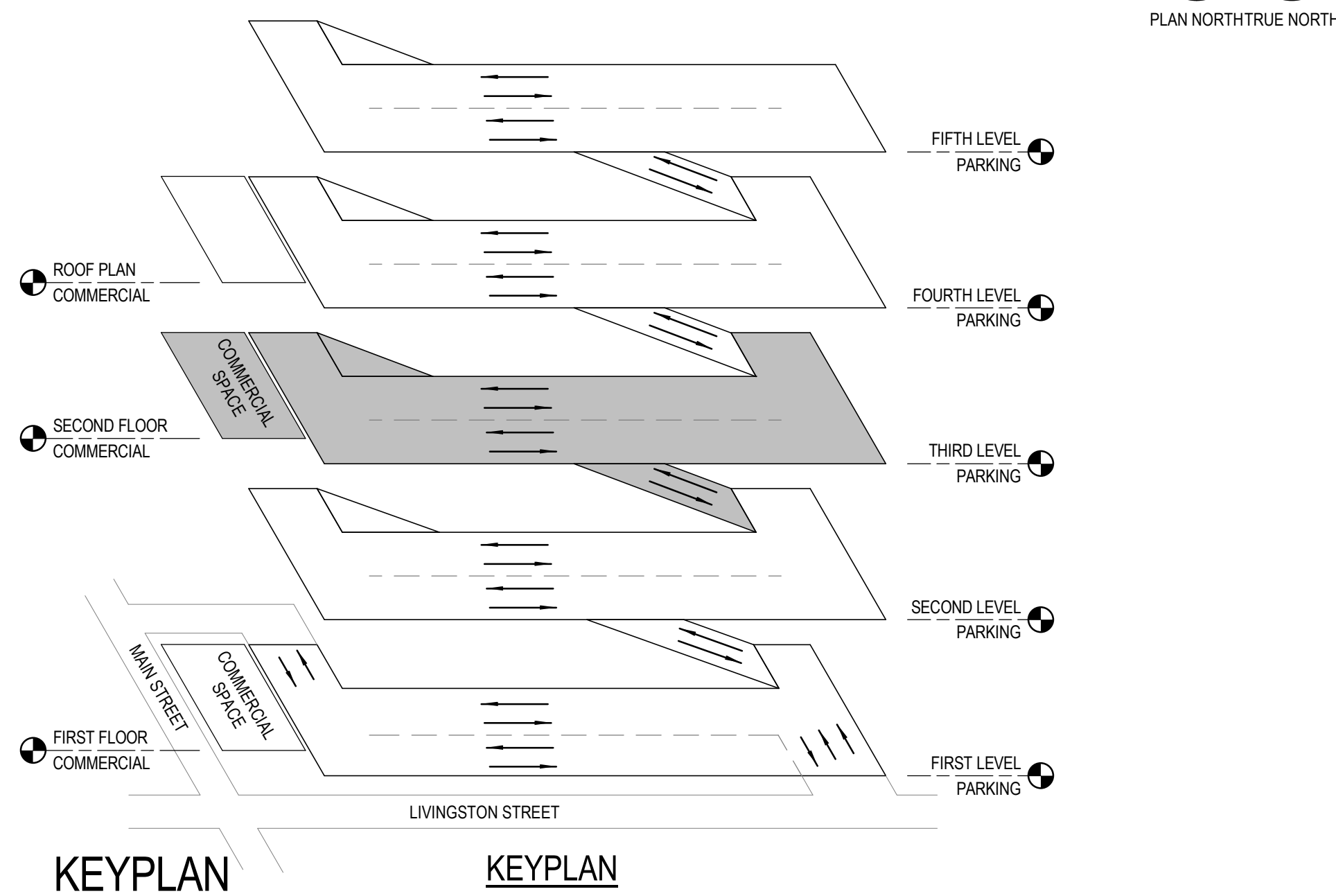




B1 THIRD LEVEL PARKING - ELECTRICAL PLAN
1/8" = 1'-0"

KEYED NOTES THIS SHEET

1. PROVIDE PULL BOX FOR POWER CONDUITS ROUTED OVERHEAD, MOUNTED TO DECK CEILING. PROVIDE CONDUIT STUBS THRU CEILING FOR BRANCH CIRCUITS SUPPLYING PARKING DECK LEVEL(S) ABOVE.
2. PROVIDE DUPLEX RECEPTACLE WITH WEATHER RESISTANT, GASKETED COVER MOUNTED TO STRUCTURAL COLUMN. RECEPTACLE SUPPLIED VIA CIRCUIT BREAKER WITH INTEGRAL GROUND FAULT PROTECTION.
3. SYSTEM SMOKE DETECTOR UTILIZED FOR ELEVATOR RECALL OPERATION. PROVIDE FIRE ALARM SYSTEM INTERFACE.
4. PROVIDE DIGITAL, ADDRESSABLE FIRE ALARM SYSTEM FOR COMMERCIAL SPACE. FIRE ALARM CONTROL PANEL (FACP) LOCATED IN PARKING RAMP MAIN ELECTRICAL ROOM. PROVIDE REQUIRED DEVICES FOR ELEVATOR RECALL, FIRE PROTECTION SYSTEM SUPERVISION, AND COMMERCIAL SPACE DETECTION, NOTIFICATION, AND PULL STATION DEVICES. REFER TO DETAIL C4E301.
5. PROVIDE TELEPHONE LINE CONNECTION TO FIRE ALARM CONTROL PANEL.
6. PENDANT MOUNT LIGHT FIXTURES IN THIS SPACE TO EXPOSED STRUCTURAL CEILING, 12' 0" ABS.
7. CIRCUIT EMERGENCY BATTERY UNIT TO UNSWITCHED LIGHTING BRANCH CIRCUIT SUPPLYING THIS SPACE.
8. PROVIDE PULL BOX FOR DATA CONDUITS ROUTED OVERHEAD, MOUNTED TO DECK CEILING.
9. POWER-OVER-ETHERNET (POE) SECURITY CAMERA LOCATION. SECURITY CAMERAS FURNISHED BY OWNER, INSTALLED BY ELECTRICAL CONTRACTOR 9' 0" AFF.
10. PROVIDE 36"x24"x24" NEMA 4X, DOUBLE HINGED, STEEL BOX FOR HOUSING DATA SERVICE PROVIDER (DSAP) AND FUTURE FIRST FLOOR COMMERCIAL TENANT EQUIPMENT. PENTAIR/HOFFMAN PART # PTH338242424.
11. SURFACE MOUNT LIGHT FIXTURES IN THIS SPACE TO EXPOSED STRUCTURAL CEILING. PROVIDE SURFACE MOUNT BOX & CONDUIT INSTALLATIONS IN THIS SPACE.
12. PROVIDE (3) 4" CONDUIT SLEEVES IN DECK FOR FUTURE POWER/SYSTEM PATHWAYS ASSOCIATED WITH FUTURE PHOTOVOLTAIC ARRAY INSTALLATION AT ROOF. COORDINATE SLEEVE LOCATIONS WITH OTHER TRADES.
13. PROVIDE (1) 3" CONDUIT THRU FLOOR FOR SUPPLY FEED TO BRANCH PANEL PTN.

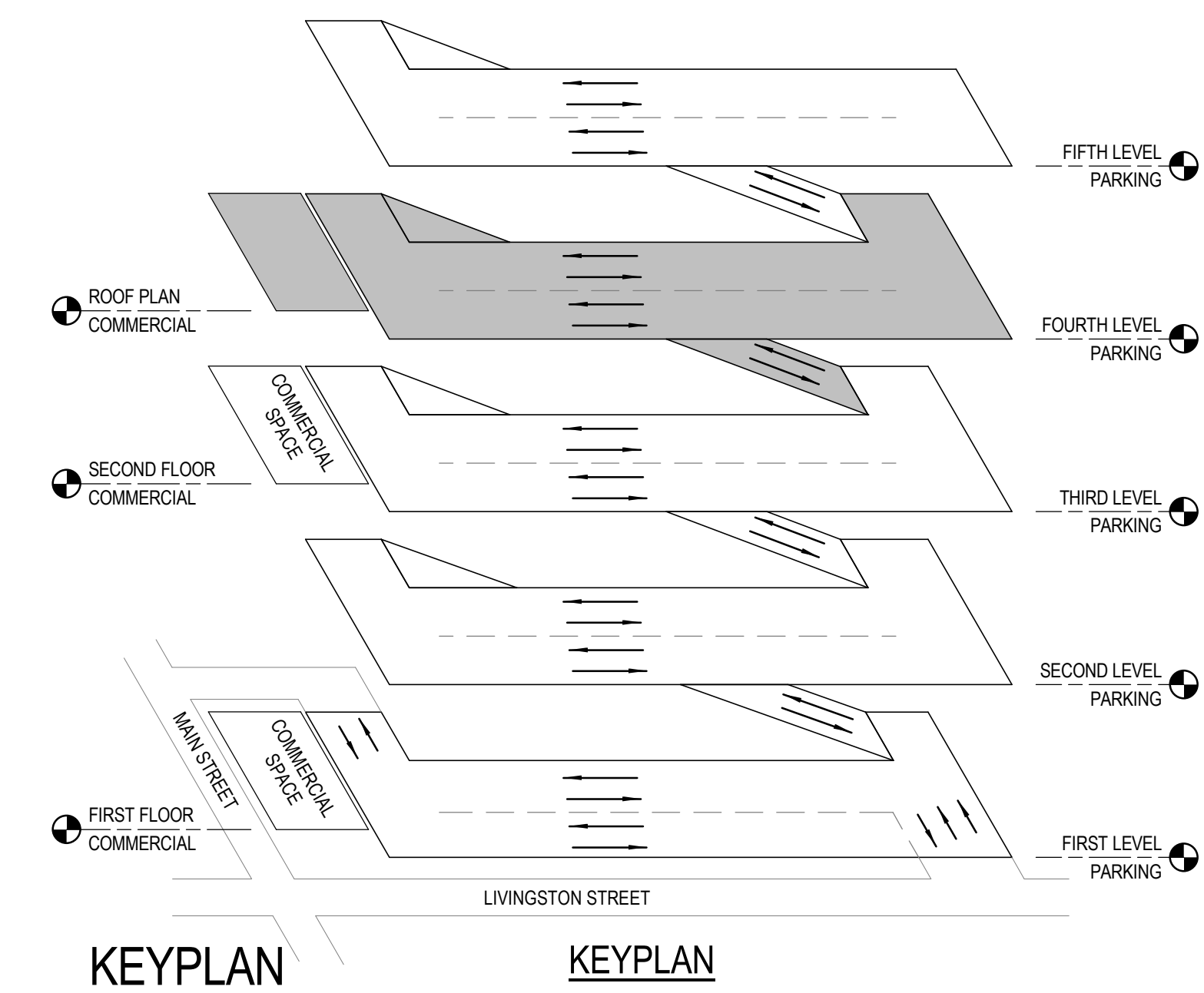


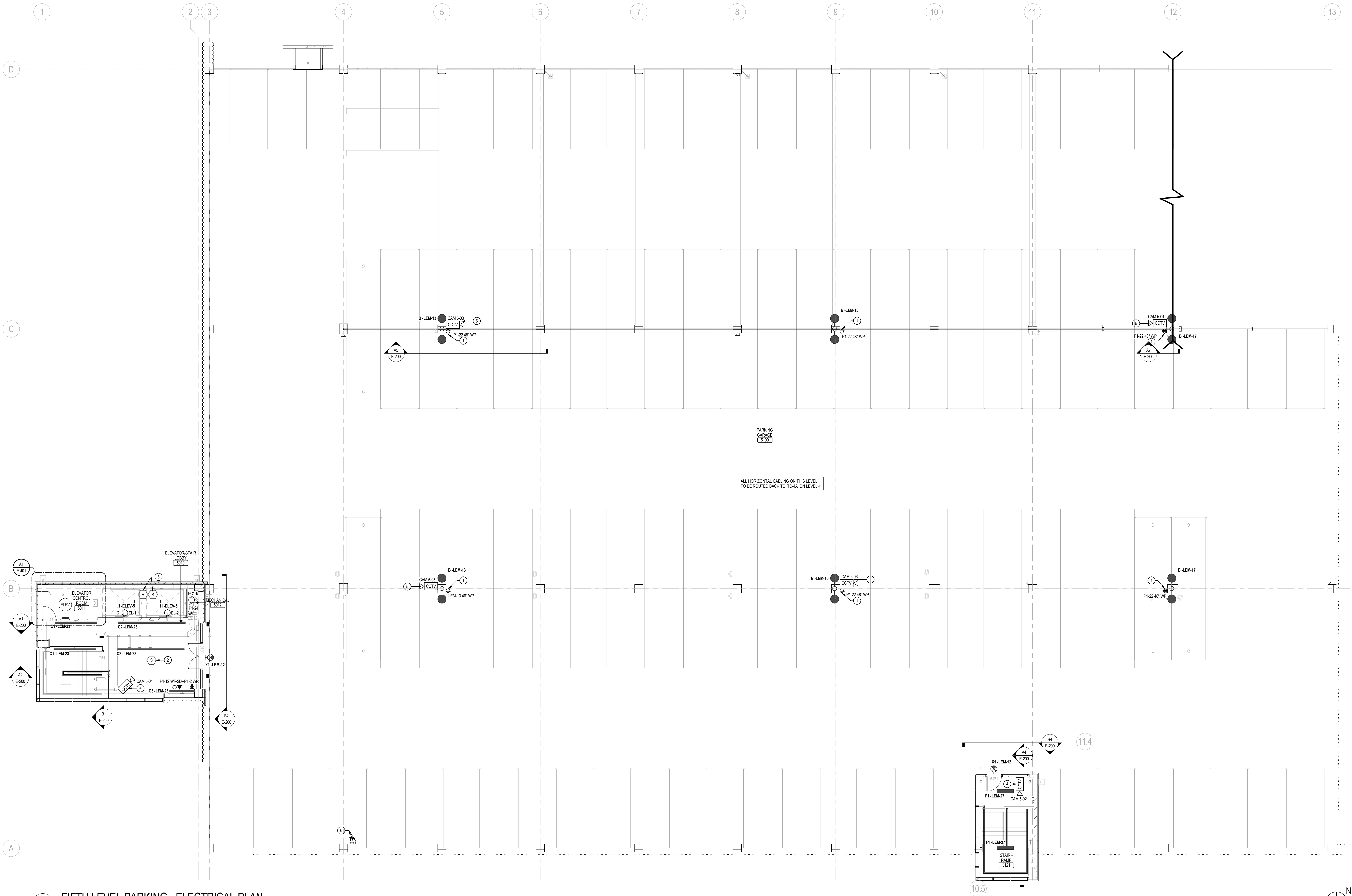


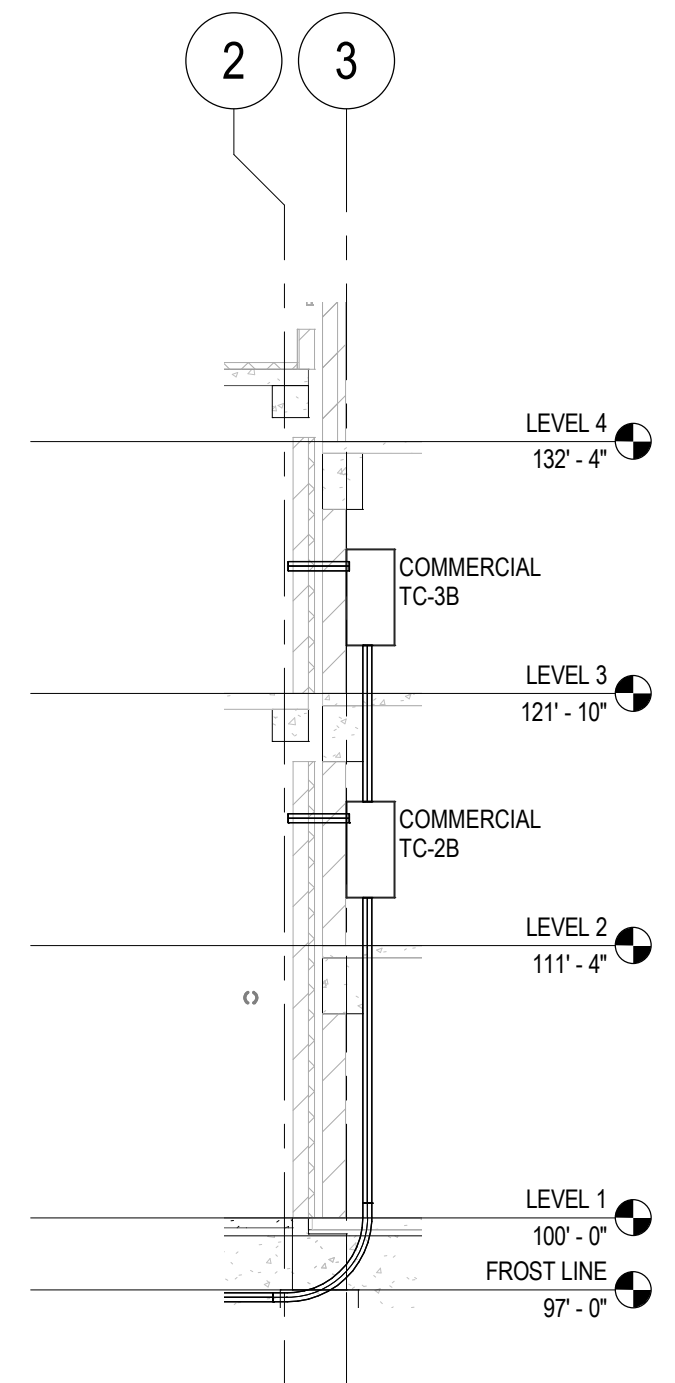
B1 FOURTH LEVEL PARKING - ELECTRICAL PLAN
1/8\"/>

KEYED NOTES THIS SHEET

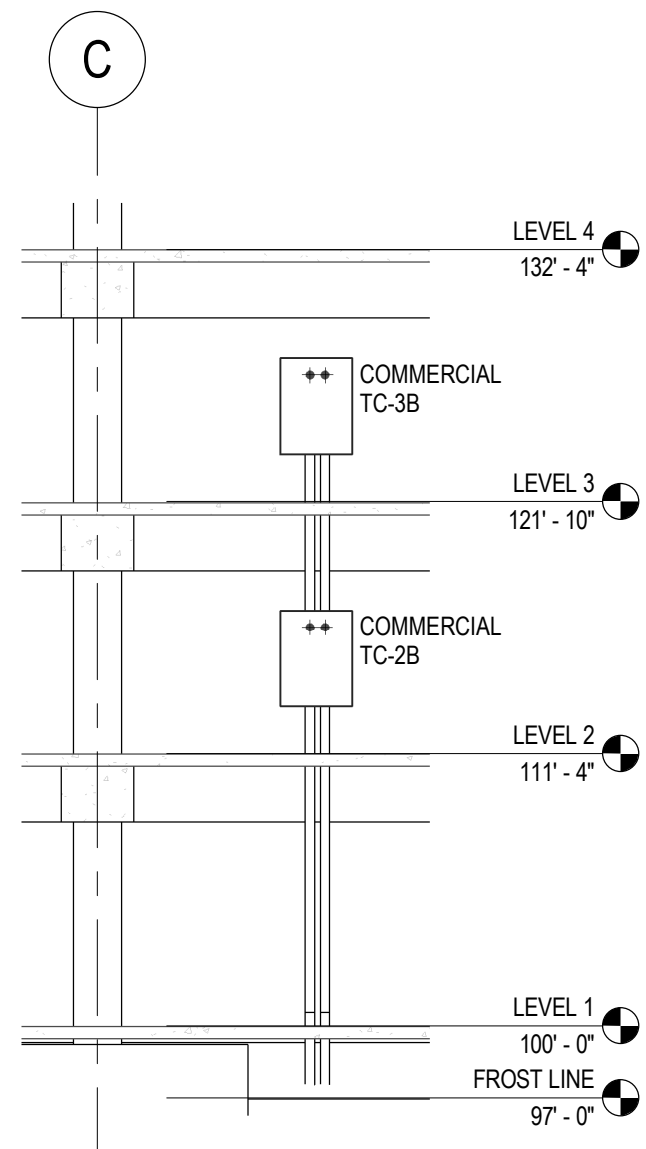
1. PROVIDE PULL BOX FOR POWER CONDUITS ROUTED OVERHEAD. MOUNTED TO DECK CEILING. PROVIDE CONDUIT STUBS THRU CEILING FOR BRANCH CIRCUITS SUPPLYING PARKING DECK LEVEL(S) ABOVE.
2. PROVIDE SURFACE RECEPTACLE WITH WEATHER-RESISTANT GASKETED COVER MOUNTED TO STRUCTURAL COLUMN. RECEPTACLE SUPPLIED VIA CIRCUIT BREAKER WITH INTEGRAL GROUND FAULT PROTECTION.
3. PROVIDE (2) 1\"/>
4. SYSTEM SMOKE DETECTOR UTILIZED FOR ELEVATOR RECALL OPERATION. PROVIDE FIRE ALARM SYSTEM INTERFACE.
5. PROVIDE PULL BOX FOR DATA CONDUITS ROUTED OVERHEAD. MOUNTED TO DECK CEILING.
6. POWER-OVER-ETHERNET (POE) SECURITY CAMERA LOCATION. SECURITY CAMERAS FURNISHED BY OWNER. INSTALLED BY ELECTRICAL CONTRACTOR'S AFF.
7. SURFACE-MOUNT LIGHT FIXTURES IN THIS SPACE TO EXPOSED STRUCTURAL CEILING. PROVIDE SURFACE-MOUNT BOX & CONDUIT INSTALLATIONS IN THIS SPACE.
8. PROVIDE (2) 4\"/>



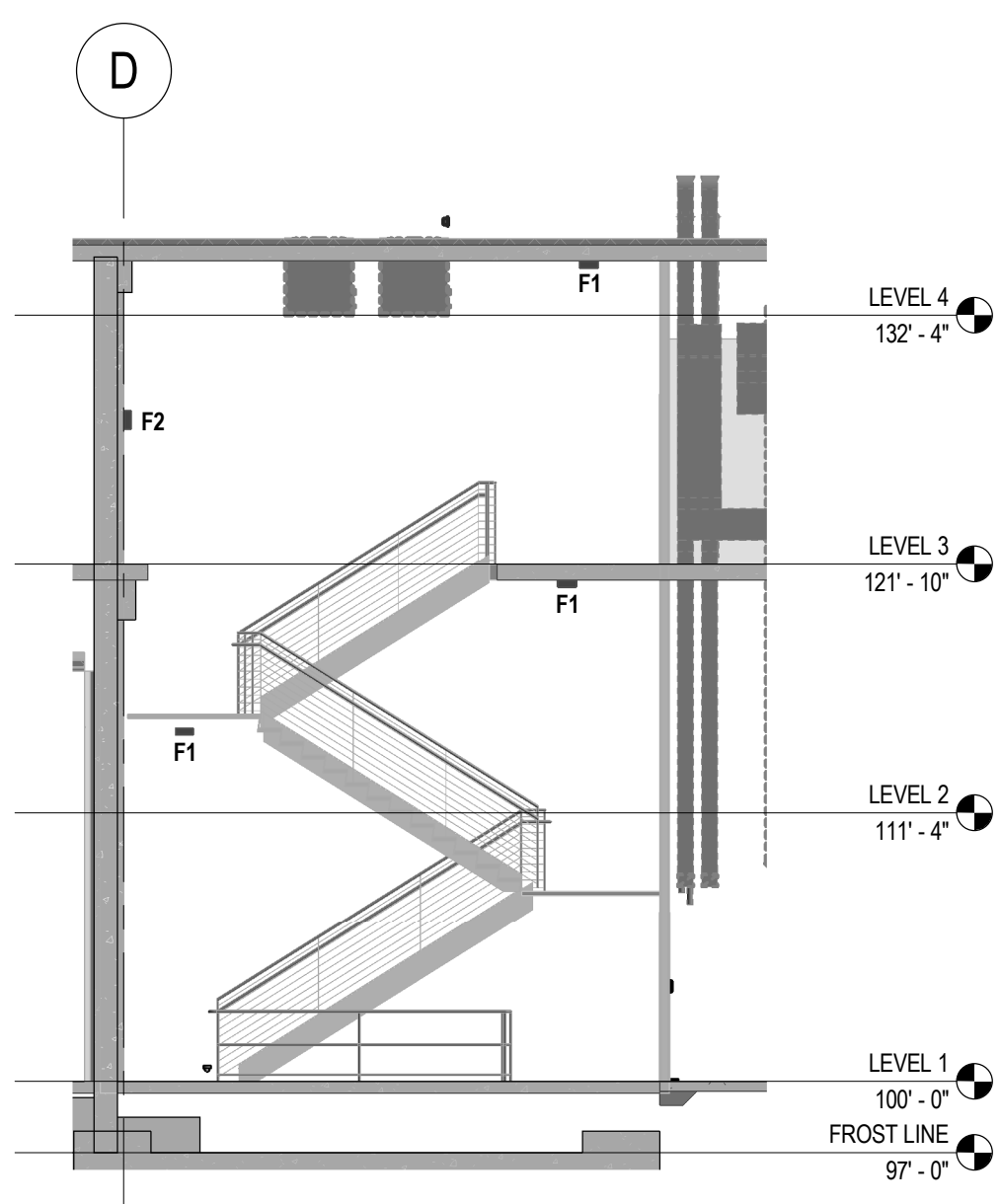




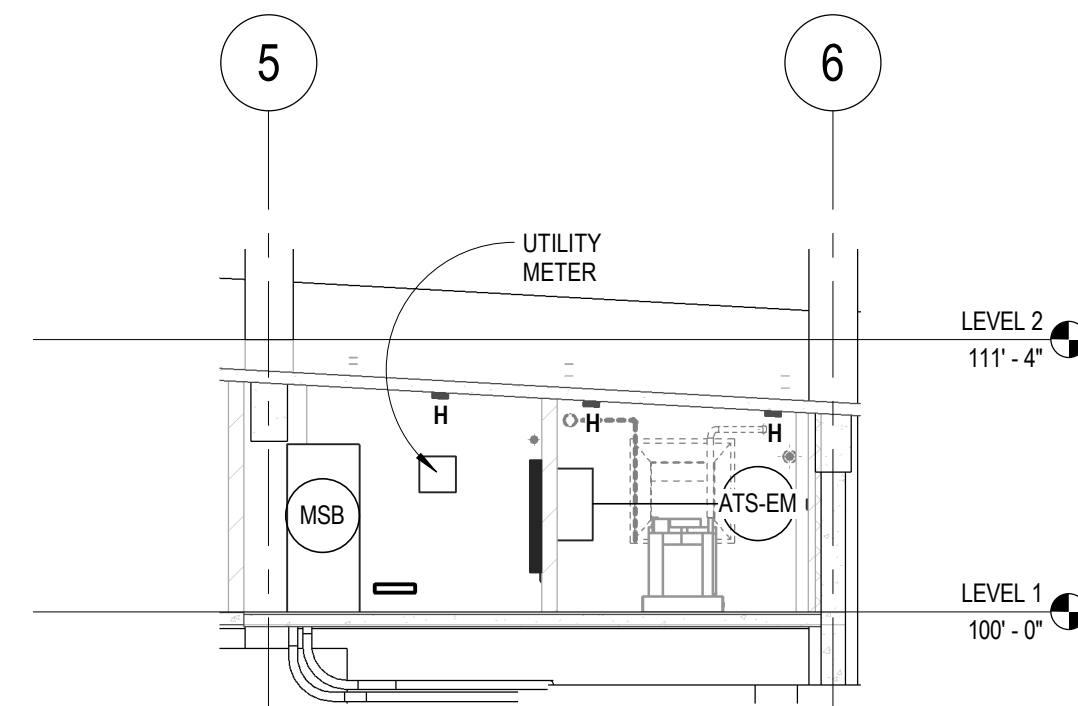
D1 COMMERCIAL DATA ENCLOSURES - N
1/8" = 1'-0"



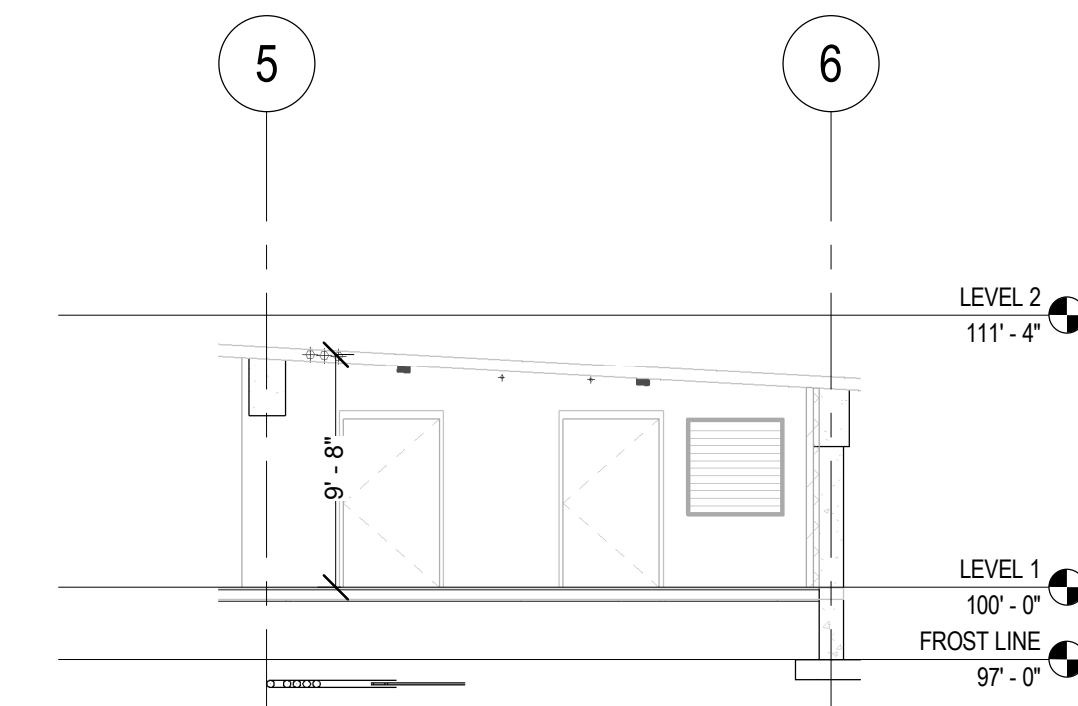
D2 COMMERCIAL DATA ENCLOSURES - W
1/8" = 1'-0"



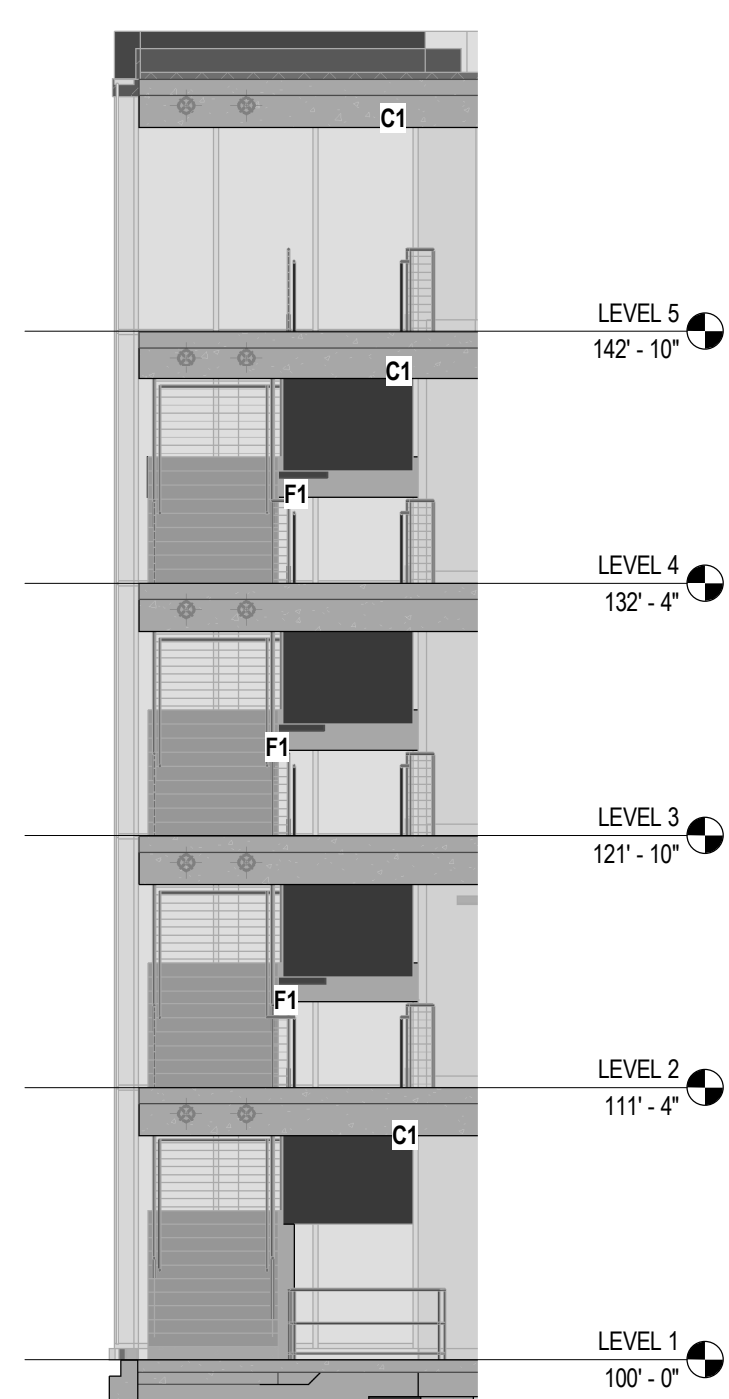
D3 STAIR TOWER COMMERCIAL SPACES
1/8" = 1'-0"



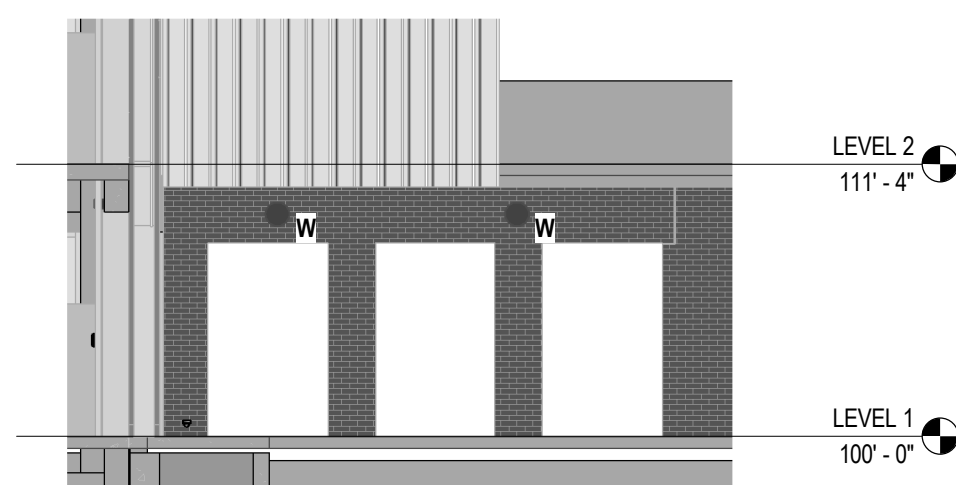
D4 ELEC ROOM NORTH SECTION 2
1/8" = 1'-0"



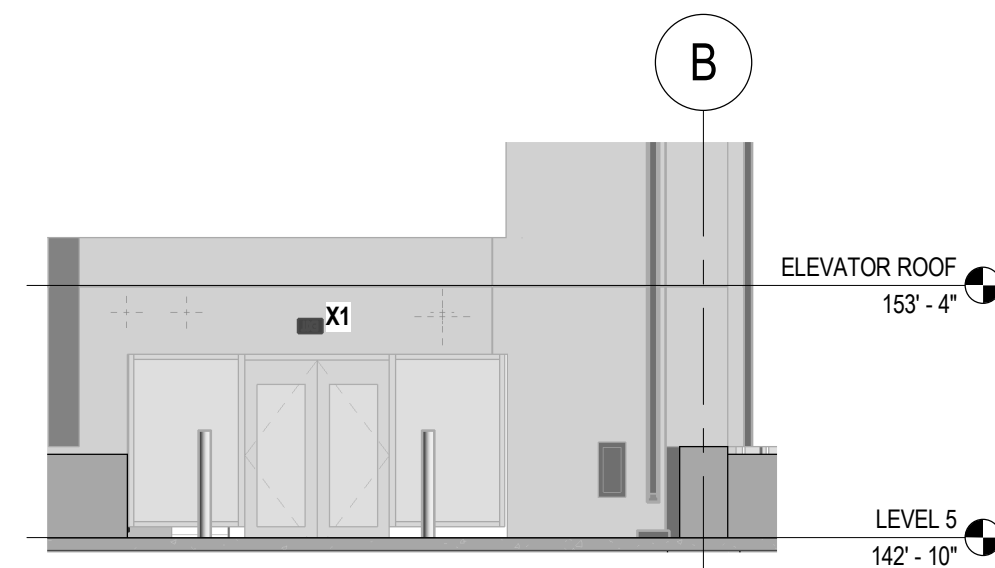
D5 ELEC ROOM NORTH SECTION 1
1/8" = 1'-0"



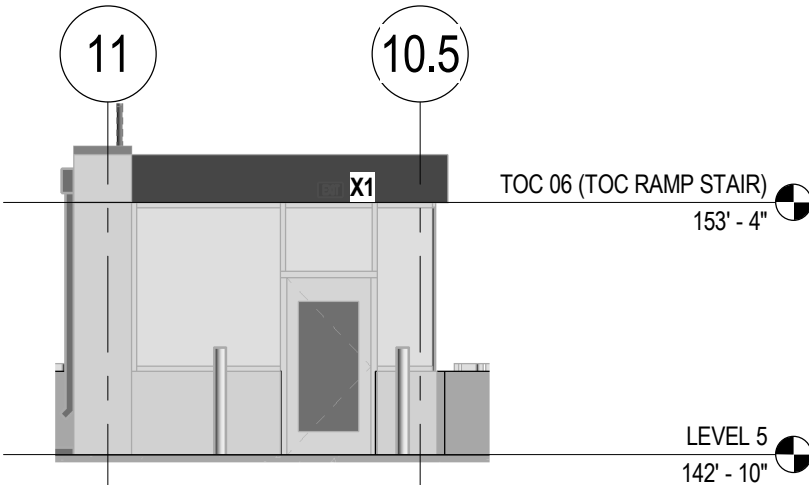
B1 ELEVATOR STAIR
1/8" = 1'-0"



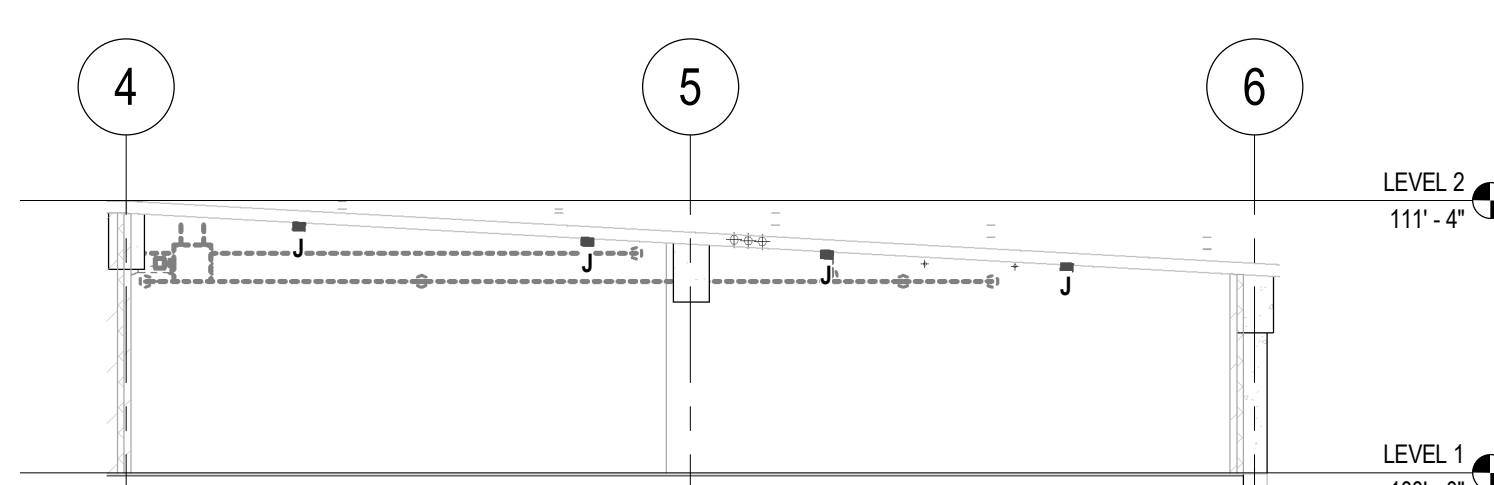
B2 BIKE RACK ENTRANCE
1/8" = 1'-0"



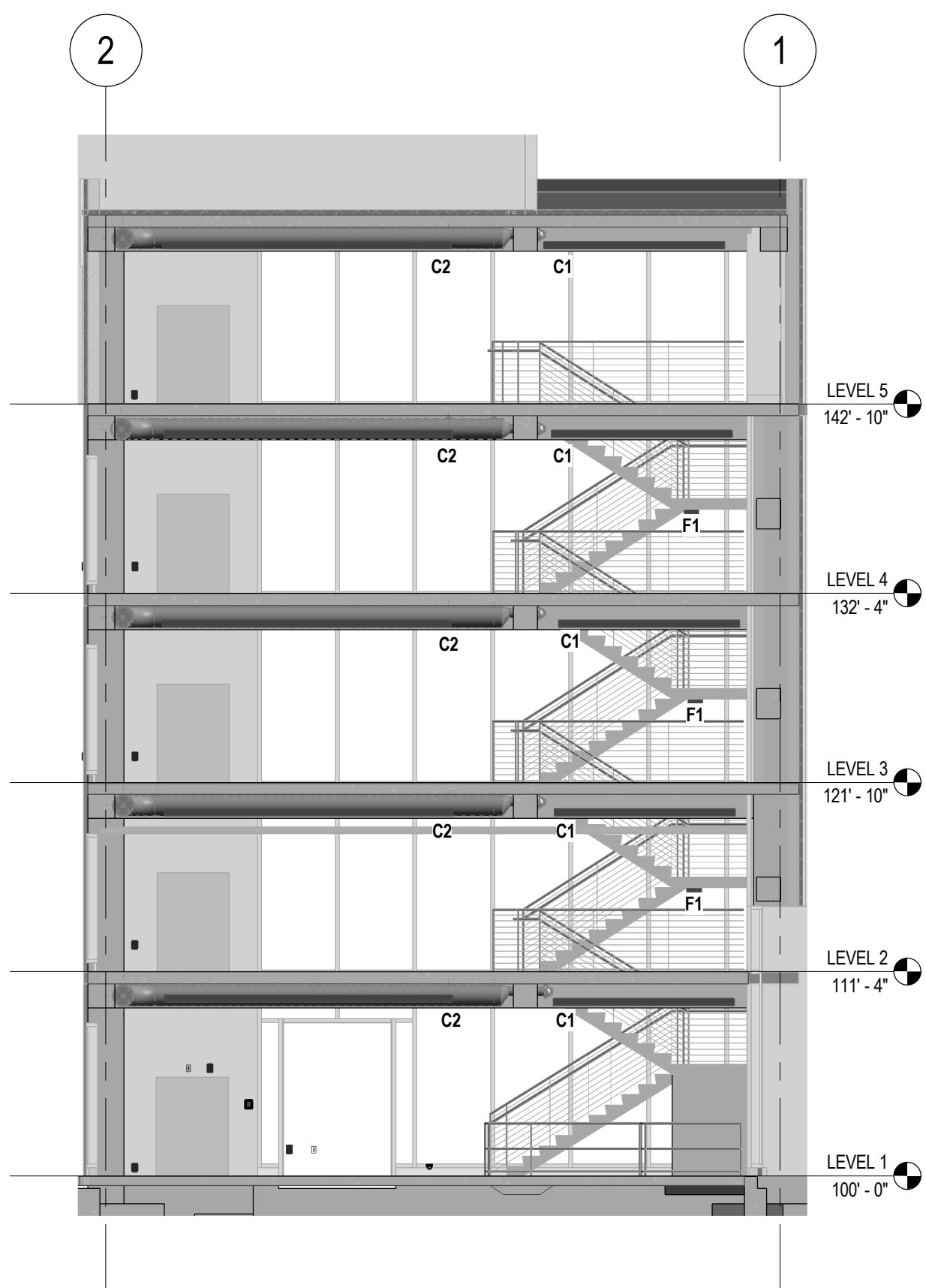
B3 ELEVATOR STAIR - ROOF
1/8" = 1'-0"



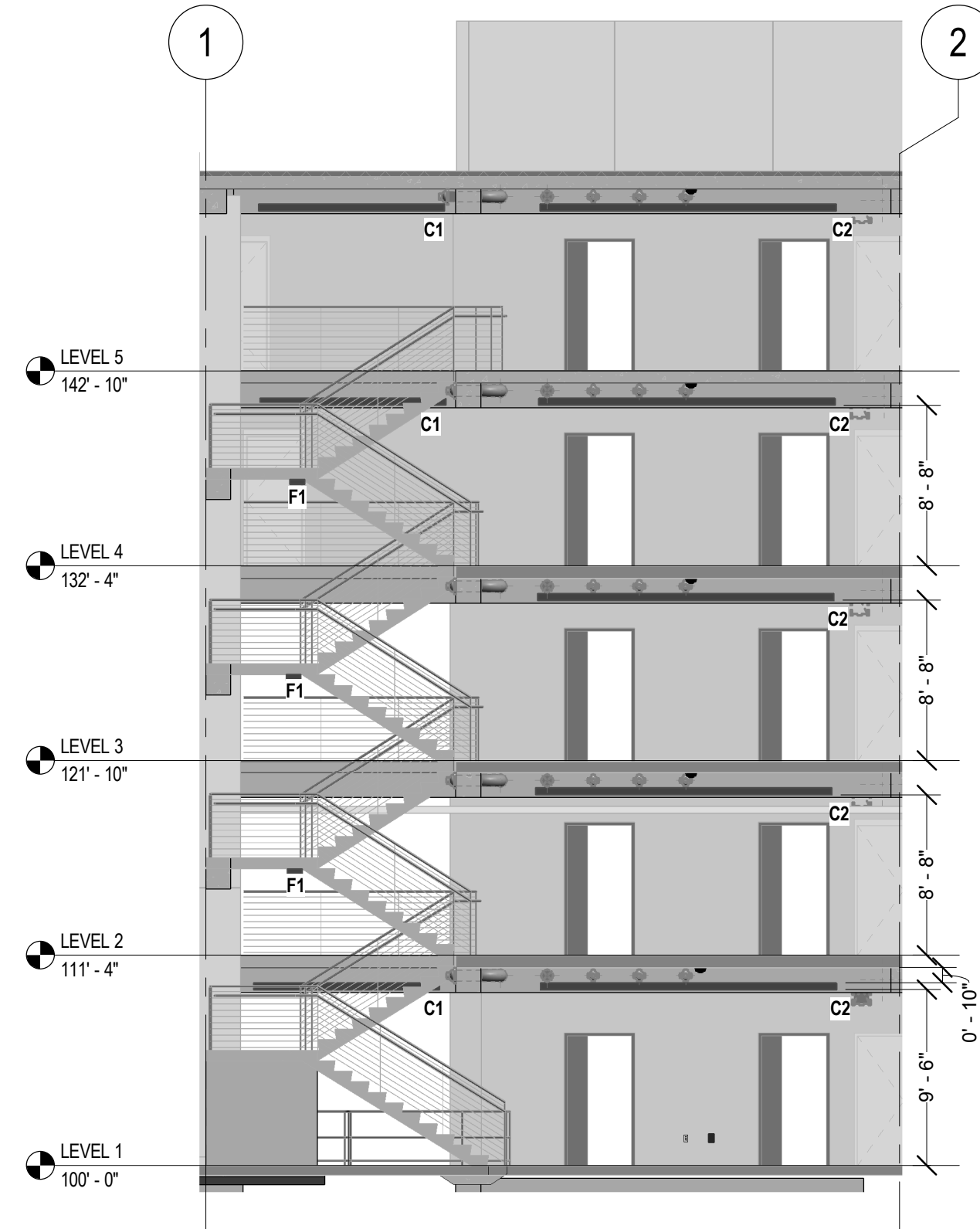
B4 SOUTH STAIR TOWER - ROOF
1/8" = 1'-0"



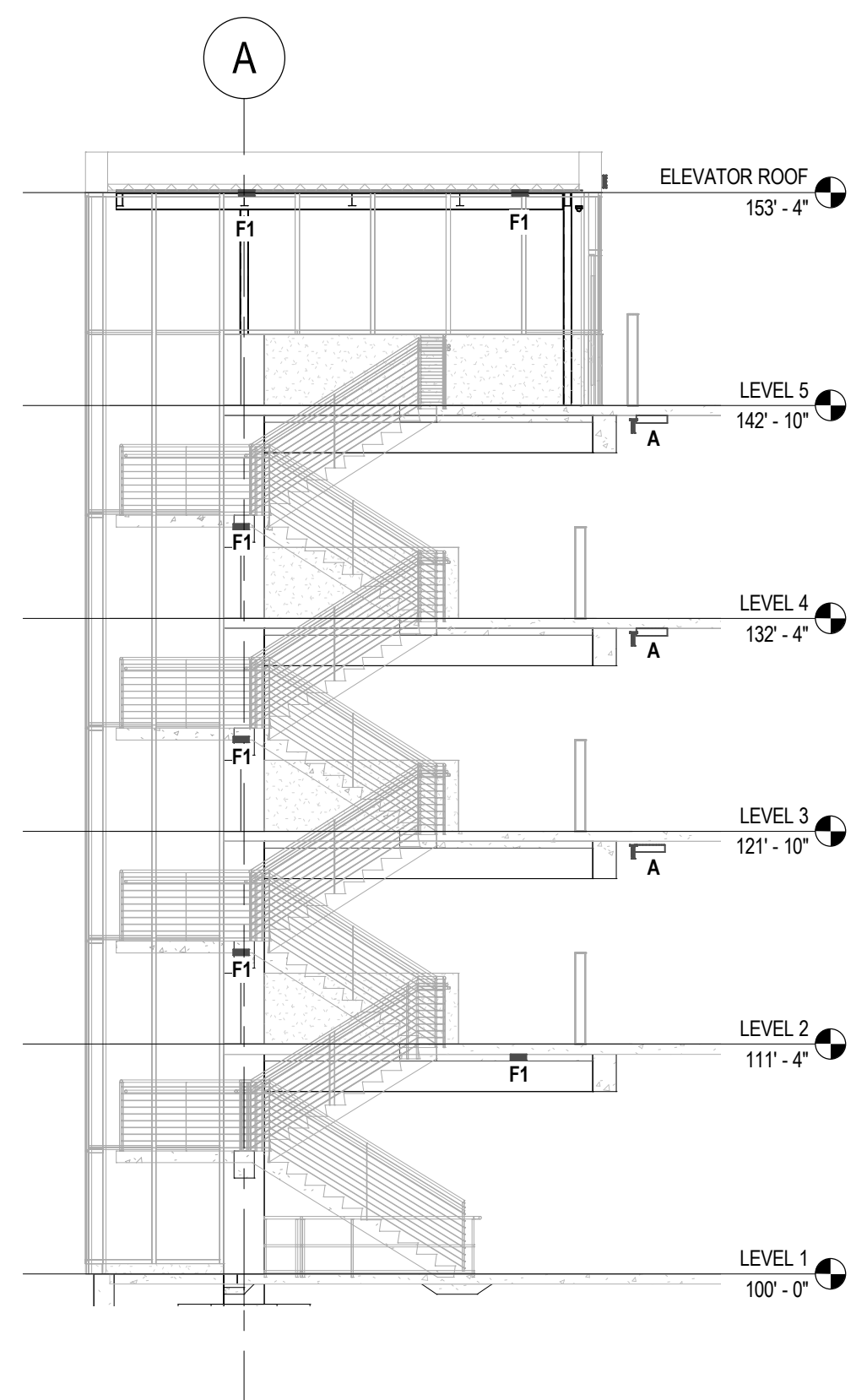
B5 EQUIPMENT STORAGE
1/8" = 1'-0"



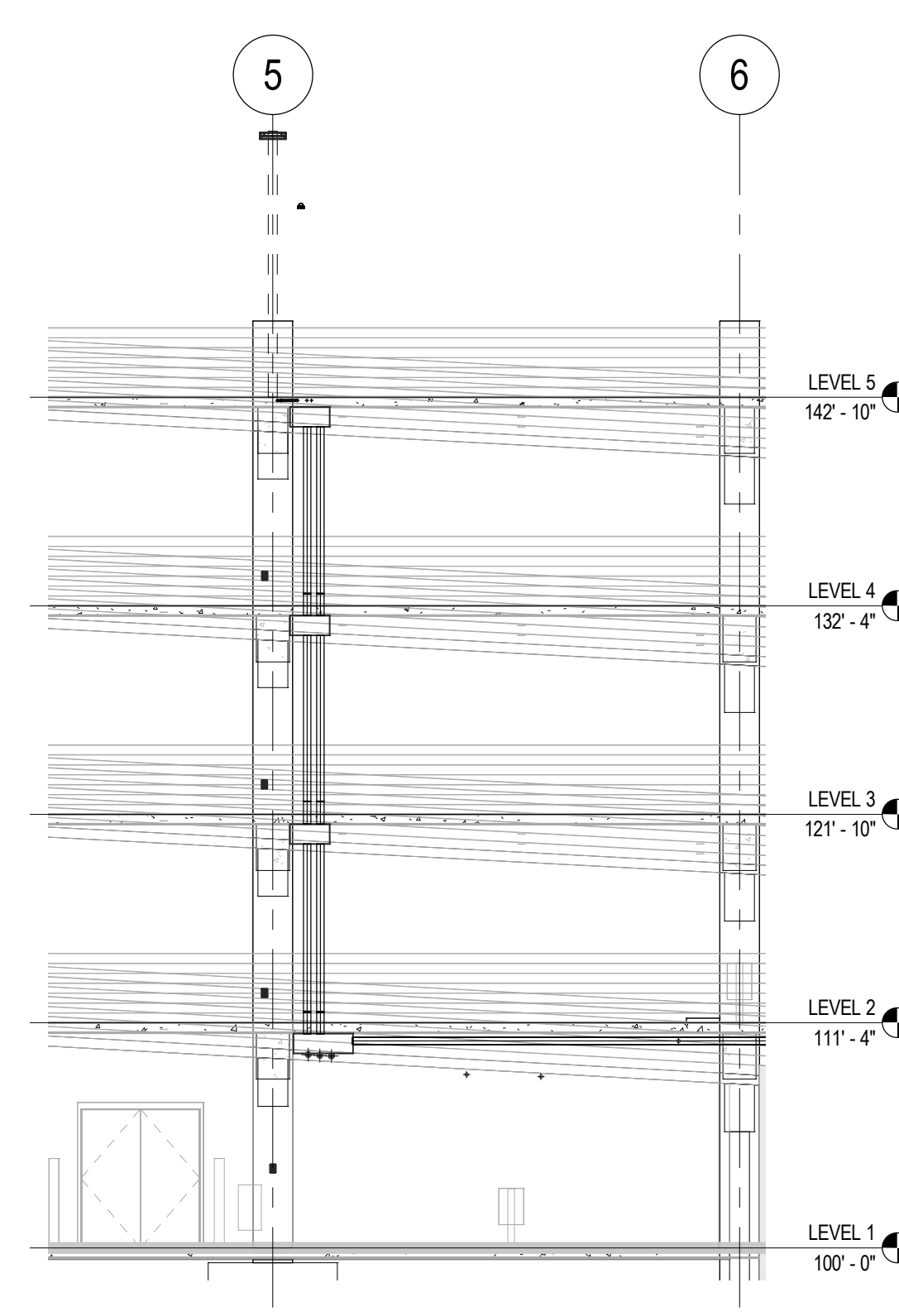
A1 ELEVATOR LOBBY/STAIR
1/8" = 1'-0"



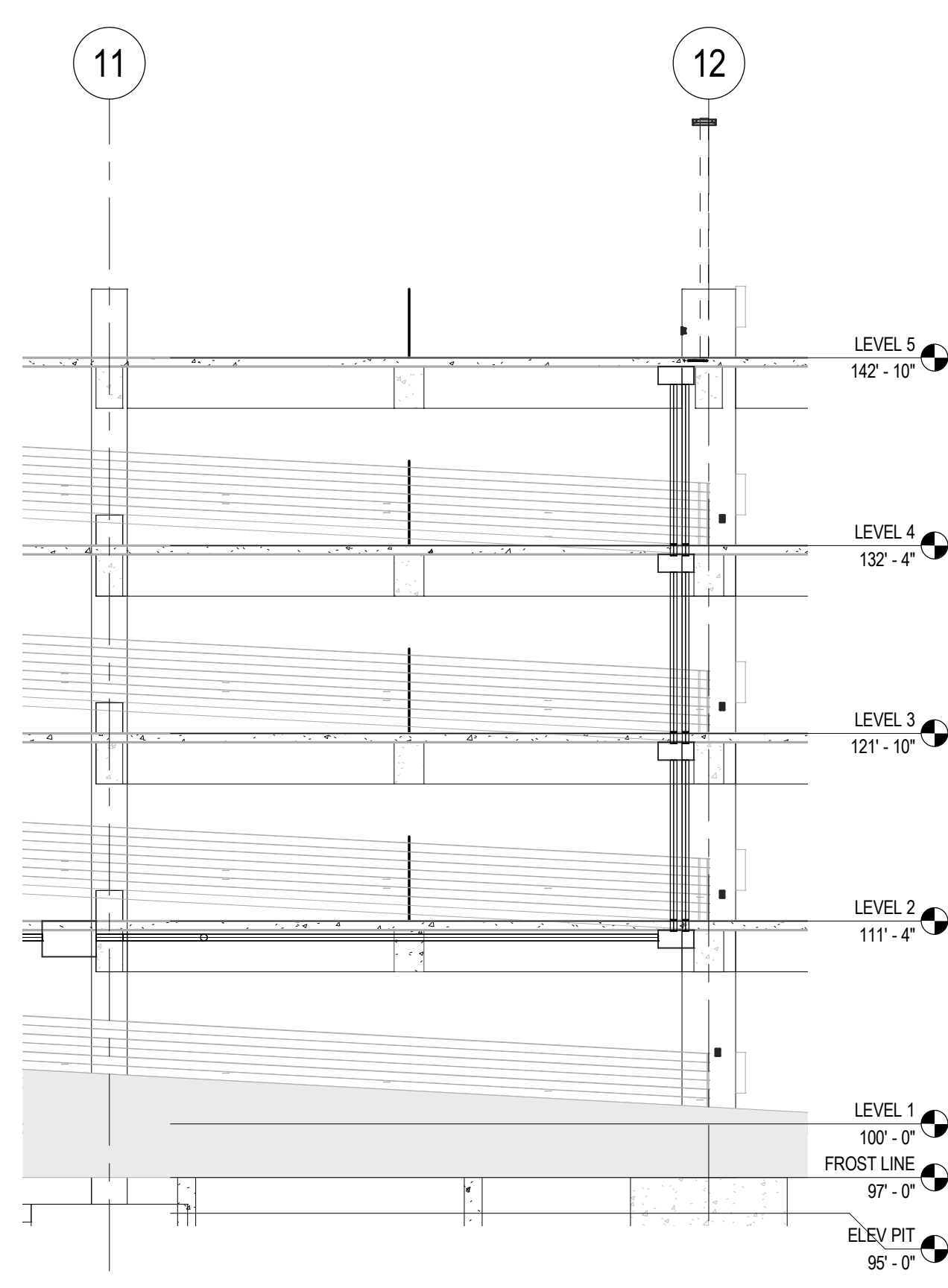
A2 ELEVATOR LOBBY/STAIR
1/8" = 1'-0"



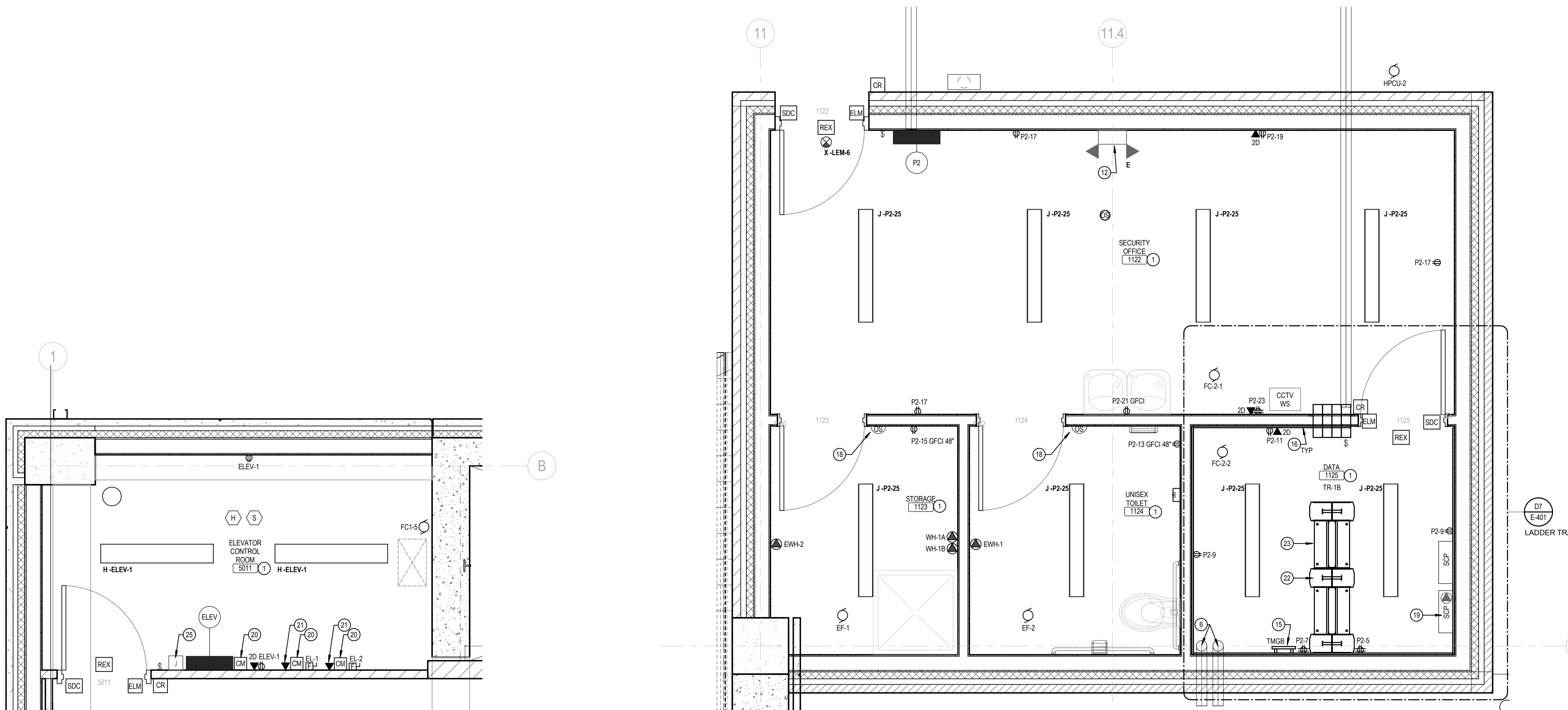
A3 SOUTH STAIR TOWER
1/8" = 1'-0"



A4 VERTICAL CONDUIT RISER - GRIDLINE 5
1/8" = 1'-0"



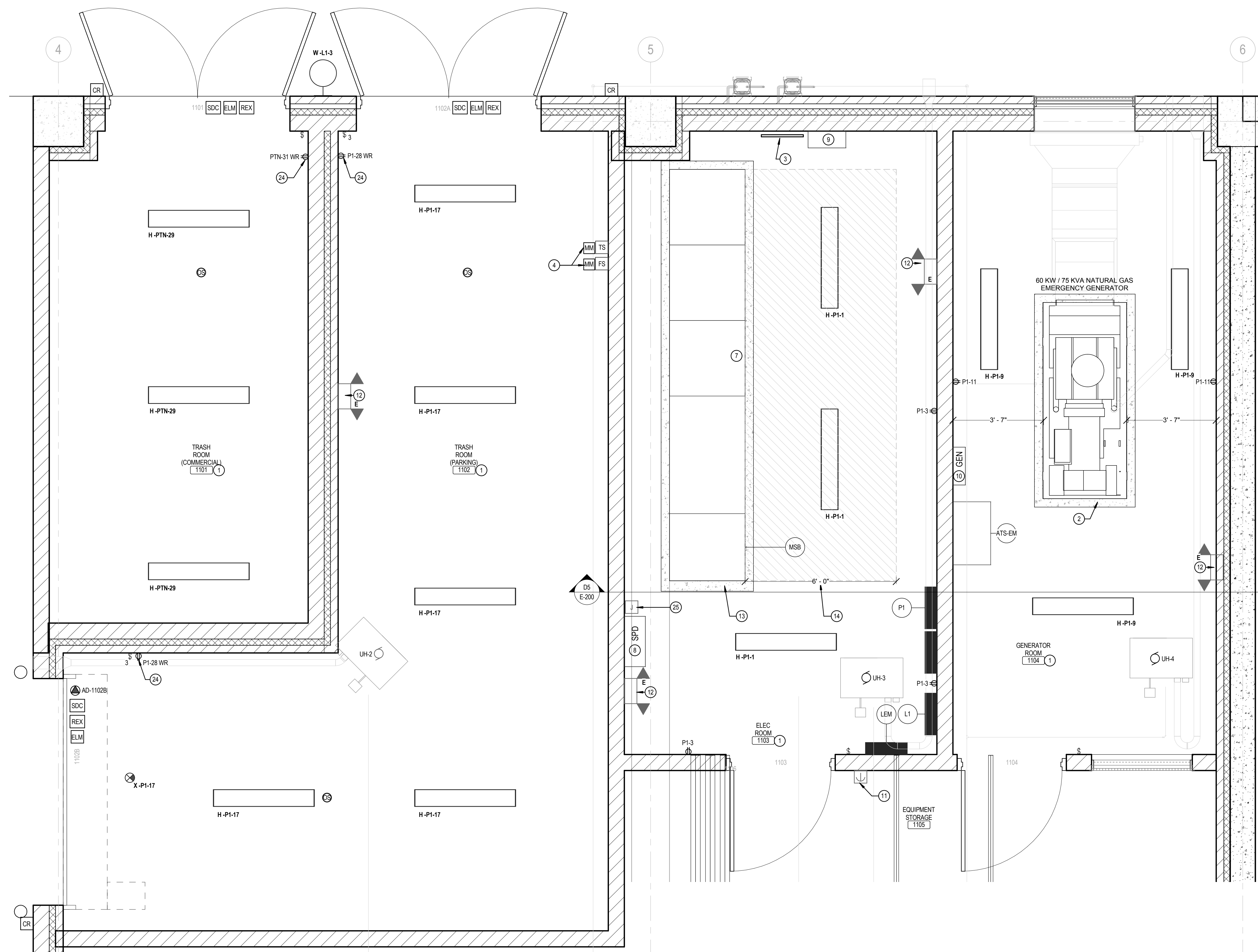
A5 VERTICAL CONDUIT RISER - GRIDLINE 12
1/8" = 1'-0"



A1 ELEVATOR CONTROL ROOM 5011
1/2" = 1'-0"

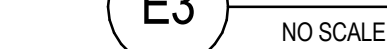
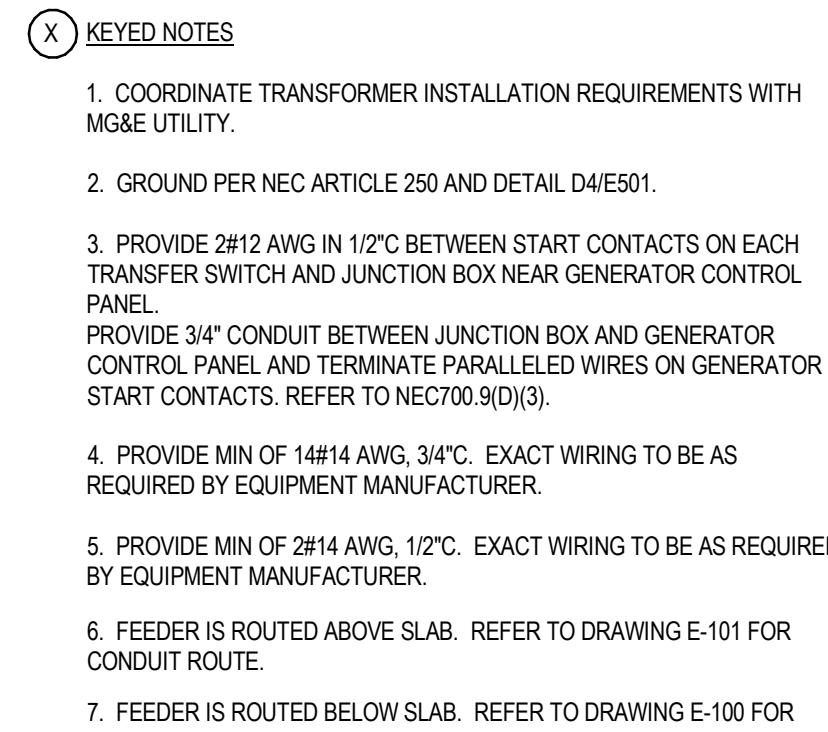
D4 OFFICE ELECTRICAL PLAN
1/2" = 1'-0"

D7 DATA 1125 - LADDER TRAY
1/2" = 1'-0"

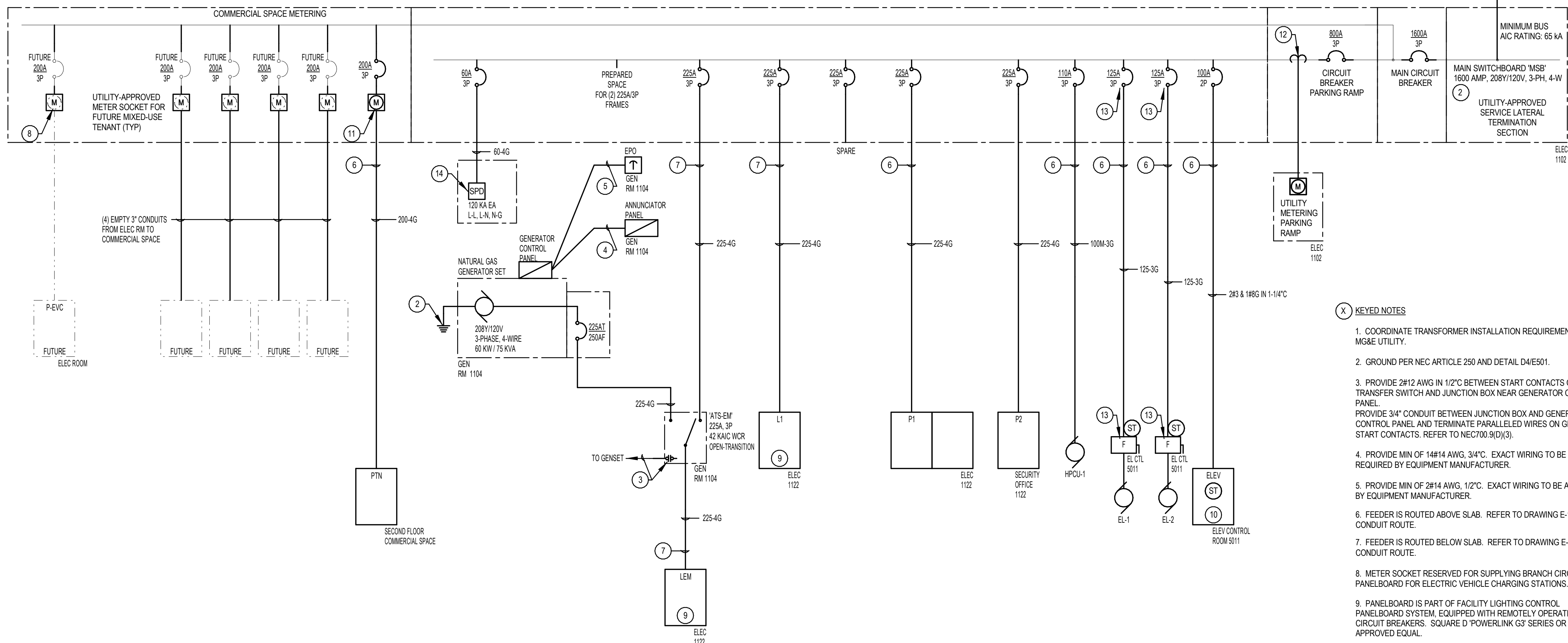


A2 MEP SPACES / TRASH ROOMS
1/2" = 1'-0"

- KEYED NOTES THIS SHEET**
- 1 SURFACE MOUNT LIGHT FIXTURES IN THIS SPACE TO EXPOSED STRUCTURAL CEILING. PROVIDE SURFACE MOUNT BOX & CONDUIT INSTALLATIONS IN THIS SPACE.
 - 2 PROVIDE 4" HOUSEKEEPING PAD FOR GENSET. EXTEND PAD 4" FROM ALL SIDES OF EQUIPMENT FOOTPRINT.
 - 3 PROVIDE GROUNDING BAR IN MAIN ELECTRICAL ROOM. GROUND MAIN SWITCHBOARD PER NEC REQUIREMENTS, INCLUDING GROUND RODS AT ELECTRICAL ROOM AND CONNECTION TO PIPING AT WATER SERVICE ROOM. REFER TO DETAIL D3E501.
 - 4 PROVIDE FLOW SWITCHES, TAMPER SWITCHES, MONITOR MODULES, AND SYSTEM CONNECTIONS TO FIRE ALARM SYSTEM AT FIRE PROTECTION RISER. REFER TO APPROVED FIRE PROTECTION DESIGN DRAWINGS FOR REQUIRED DEVICE QUANTITIES.
 - 5 PROVIDE (4) 3" EMPTY CONDUITS (WITH PULL STRINGS) UNDERGROUND TO COMMERCIAL SPACE FOR FUTURE POWER FEEDERS FROM ELECTRICAL ROOM.
 - 6 PROVIDE (2) 4" ENTRANCE CONDUITS FROM CITY OF MADISON.
 - 7 PROVIDE SIGNAGE INDICATING THE PRESENCE OF AN EMERGENCY STANDBY GENERATOR. INCLUDE KEY PLAN INDICATING LOCATION OF EMERGENCY STANDBY GENERATOR WITHIN STRUCTURE.
 - 8 PROVIDE SURGE PROTECTION DEVICE (SPD) FOR MAIN SWITCHBOARD, MOUNTED EXTERNALLY.
 - 9 PROVIDE UTILITY-APPROVED METER ENCLOSURE FOR PARKING RAMP ELECTRICAL SERVICE. METER FURNISHED AND INSTALLED BY UTILITY.
 - 10 PROVIDE GENERATOR ANNUNCIATOR PANEL AND ASSOCIATED CONTROL. CONNECTING BACK TO GENSET IN GENERATOR ROOM 1105.
 - 11 PROVIDE EMERGENCY POWER OFF (EPO) AT THIS LOCATION AND CONTROL INTERFACE WITH BUILDING GENERATOR.
 - 12 CIRCUIT EMERGENCY BATTERY UNIT TO UNSWITCHED LIGHTING BRANCH CIRCUIT SUPPLYING THIS SPACE.
 - 13 PROVIDE 4" HOUSEKEEPING PAD FOR MAIN SWITCHBOARD. EXTEND PAD 4" FROM ALL SIDES OF EQUIPMENT FOOTPRINT.
 - 14 MAINTAIN "DOUBLE" WORKING CLEARANCE AT MAIN SWITCHBOARD PER NEC 110.26 C.28.
 - 15 TMGB: PROVIDE GROUNDING BUS PER DETAIL B6E501.
 - 16 PLYWOOD BACKBOARD. PROVIDE 4" X 8" X 3/4" AC GRADE, VOID FREE, FIRE RESISTANT MARINE GRADE PLYWOOD BACKBOARD MOUNTED ON WALLS AT 6" AFF TO 102" AFF. PAINT ALL SIDES WITH ONE COAT OF PAINT PRIMER AND TWO FINISH COATS OF FIRE RETARDANT WHITE PAINT. LEAVE EXPOSED ONE FIRE RETARDANT STAMP PER SHEET OF PLYWOOD.
 - 17 PROVIDE 4" LADDER STYLE CABLE TRAYS, HORIZONTAL AND VERTICAL, WITH 4" SLUNG SPACING SUSPENDED FROM STRUCTURE PER MANUFACTURER'S MOUNTING INSTRUCTIONS. COORDINATE EXACT LOCATION AND ACCESSORIES FOR CABLE TRAY WITH OWNER'S REPRESENTATIVE PRIOR TO ORDERING. COORDINATE FINAL LOCATIONS OF ALL CEILING-MOUNT DEVICES, LIGHT FIXTURES, ETC. WITH LADDER TRAY LOCATIONS PRIOR TO ROUGH-IN.
 - 18 PROVIDE WALLBOX OCCUPANCY SENSOR WITH INTEGRAL RELAY FOR CONTROL OF EXHAUST FAN WITHIN SPACE.
 - 19 ACCESS CONTROL PANEL POWER SUPPLY CABINET.
 - 20 PROVIDE FIRE ALARM CONTROL MODULES AS NECESSARY FOR SHUNT-TRIP BREAKERS, POWER MODULES, AND CONTROLLERS. REFER TO DETAIL C4E501.
 - 21 PROVIDE TELEPHONE LINE CONNECTION FOR ELEVATOR CAB.
 - 22 VERTICAL WIRE MANAGER SHALL BE CPI. PROVIDE AND INSTALL CPI DOUBLE-SIDED WIDE VERTICAL WIRE MANAGERS. CPI PART #11729-703.
 - 23 EQUIPMENT RACK SHALL BE CPI. PROVIDE AND INSTALL CPI 19" WIDE STANDARD RACK 3D PART #65553-703. GROUND RACK TO TMGB WITH #6 AWG WIRE. EQUIPMENT RACK SHALL SUPPORT THE FOLLOWING:
CITY OF MADISON FIBER TERMINATIONS
HORIZONTAL WIRE MANAGERS
48-PORT PATCH PANELS FOR DATA, VOICE, CAMERAS
CITY OF MADISON NETWORK SWITCH
NETWORK VIDEO RECORDER
TRIPPLITE PDU
 - 24 PROVIDE DUPLEX RECEPTACLE WITH WEATHER-RESISTANT, GASKETED COVER. RECEPTACLE SUPPLIED VIA CIRCUIT BREAKER WITH INTEGRAL GROUND FAULT PROTECTION.
 - 25 PROVIDE 120 VOLT BRANCH CIRCUIT FROM PANEL LEM AND ELECTRICAL CONNECTION TO SHUNT-TRIP OPERATORS IN PANEL ELEV. REFER TO DETAIL C4E-501.



SECURITY CAMERA SCHEDULE				SHEET #
CAMERA ID	CAM TYPE	LOCATION	INDOOR/OUTDOOR	SHEET #
CAM-01	OCFI	ELEVATOR STAIR LOBBY 1010	IN	E-101
CAM-02	OCFI	STAIR-RAMP 1121	OUT	E-102
CAM-03	OCFI	NORTHEAST ENTRY D-3	OUT	E-101
CAM-04	OCFI	ELEVATOR C-04	IN	E-101
CAM-05	OCFI	NORTHEAST ENTRY BTWN C-4 / D-4	OUT	E-101
CAM-06	OCFI	STAIR - COMMERCIAL 1001	OUT	E-101
CAM-07	OCFI	NORTHEAST ENTRY BTWN S-3 / J-3	OUT	E-101
CAM-08	OCFI	NORTHEAST ENTRY BTWN S-3 / J-3	OUT	E-101
CAM-09	OCFI	PARKING GARAGE B-6	OUT	E-101
CAM-10	OCFI	SOUTHWEST ENTRY C-12	OUT	E-101
CAM-11	OCFI	SOUTHWEST ENTRY BTWN A-10 / B-12	OUT	E-101
CAM-12	OCFI	SOUTHWEST ENTRY A-12	OUT	E-101
CAM-13	OCFI	SOUTHWEST ENTRY A-13	OUT	E-101
CAM-14	OCFI	EXTERIOR COURTYARD LIVINGSTON / MAIN	OUT	E-101
CAM-15	OCFI	ELEVATOR C-04	IN	E-101
CAM-16	OCFI	NORTHEAST ENTRY BTWN C-3 / D-3	IN	E-101
CAM-201	OCFI	ELEVATOR STAIR LOBBY 2010	IN	E-102
CAM-202	OCFI	STAIR-RAMP 2010	OUT	E-102
CAM-203	OCFI	TOP OF RAMP BTWN C-4 / D-4	OUT	E-102
CAM-204	OCFI	PARKING GARAGE B-6	OUT	E-102
CAM-205	OCFI	PARKING GARAGE B-11	OUT	E-102
CAM-301	OCFI	ELEVATOR STAIR LOBBY 3010	IN	E-103
CAM-302	OCFI	STAIR-RAMP 3121	OUT	E-103
CAM-303	OCFI	TOP OF RAMP BTWN C-4 / D-4	OUT	E-103
CAM-304	OCFI	PARKING GARAGE B-6	OUT	E-103
CAM-305	OCFI	PARKING GARAGE B-11	OUT	E-103
CAM-401	OCFI	ELEVATOR STAIR LOBBY 4010	IN	E-104
CAM-402	OCFI	STAIR-RAMP 4121	OUT	E-104
CAM-403	OCFI	TOP OF RAMP BTWN C-4 / D-4	OUT	E-104
CAM-404	OCFI	PARKING GARAGE B-6	OUT	E-104
CAM-405	OCFI	PARKING GARAGE B-11	OUT	E-104
CAM-501	OCFI	ELEVATOR STAIR LOBBY 5010	IN	E-105
CAM-502	OCFI	STAIR-RAMP 5121	OUT	E-105
CAM-503	OCFI	LIGHT POLE C-5	OUT	E-105
CAM-504	OCFI	LIGHT POLE C-12	OUT	E-105
CAM-505	OCFI	LIGHT POLE B-3	OUT	E-105
CAM-506	OCFI	LIGHT POLE B-9	OUT	E-105



C3) NO SCALE

LIGHT FIXTURE SCHEDULE														
DES	TYPE	LUMENS	COLOR TEMP.	SYSTEM VOLTAGE	DESCRIPTION	MANUFACTURE	LIGHT FIXTURE CATALOG REF.	VOLT	MOUNT	CEILING TYPE	DEPTH	OPTIONS / ACCESSORIES	ACCEPTABLE MANUFACTURERS	SEE NOTE
A	LED	6848	4000 K	50 W	LOW BAY ROUND LED	MCGRAW EDISON	TC7-CALED1-WQ	120 V	S	ES	4 7/16"		CREE / KEMALL / GARDCO	
B	LED	13564	4000 K	275 W	TWIN HEAD POLE MOUNTED - 20' POLE	MCGRAW EDISON	VTS-ES5-LED-1-SXQ	120 V	PO	-	5 1/4"		CREE / KEMALL / GARDCO	1
C1	LED	900 per ft	4000 K	100 W	10'-0" CONTINUOUS LINEAR DOWN LIGHT- 900 LM/FT	PRIDENTIAL LITE	BIO-LIN-LED4-SO-R10-TWM-A8H-D1XNU-SC-UN-N	120 V	W	-	4 7/8"	DIRECT WALL MOUNT	PEERLESS / FINELITE	
C2	LED	900 per ft	4000 K	100 W	16'-0" CONTINUOUS LINEAR DOWN LIGHT- 900 LM/FT	PRIDENTIAL LITE	BIO-LIN-LED4-SO-R16-TWM-A8H-D1XNU-SC-UN-N	120 V	W	-	4 7/8"	DIRECT WALL MOUNT	PEERLESS / FINELITE	
C3	LED	900 per ft	4000 K	60 W	6'-0" CONTINUOUS LINEAR DOWN LIGHT- 900 LM/FT	PRIDENTIAL LITE	BIO-LIN-LED4-SO-R6-TWM-A8H-D1XNU-SC-UN-N	120 V	W	-	4 7/8"	DIRECT WALL MOUNT	PEERLESS / FINELITE	
D	LED	1500	4000 K	40 W	8" RECESSED LED DOWNLIGHT	HALO	PDK-15-840-C	120 V	R	-	7"		LITHONIA / DAYBRITE	
E	2 MR16	-	4000 K	10 W	EMERGENCY BATTERY UNIT	SURE-LITES	UEL1-SD	277 V	W	-	6 3/16"		LITHONIA / THOMAS & BETTS	2
F1	LED	7435	4000 K	50 W	VANDAL RESISTANT LINEAR STAIRWAY	LUMIMARE LED	TSL-94-46-28-CP	120 V	S	ES	3 15/32"	ONE ROW LED SENSORED ON/OFF	KEMALL / NEW STAR	
F2	LED	7435	4000 K	50 W	VANDAL RESISTANT LINEAR STAIRWAY	LUMIMARE LED	TSL-94-46-28-CP	120 V	W	-	3 15/32"	ONE ROW LED SENSORED ON/OFF	KEMALL / NEW STAR	
H	LED	7018	4000 K	70 W	VANDAL RESISTANT LINEAR ELEVATOR	FAL-SAFE	HVL8-14-D4-S2T-4D-UNVQ-S	120 V	W	-	3 19/32"		KEMALL / NEW STAR	
J	LED	4204	4000 K	35 W	LED 4 FOOT INDUSTRIAL STRIP	METALUX	4-SNLED-4D2-11S-LN	120 V	S	-	4"		PEERLESS / FINELITE	
P	LED	3970	4000 K	52 W	36" SOFT DIFFUSED BOLLARD	STERNBERG	PT9-RW402FC-2B-24S-MDL05-R1-UEK	120 V	-	-	6 5/16"		PEERLESS / FINELITE	
W	LED	2284	3500 K	25 W	EXTERIOR LED WALL PACK	LUMARK	XTORSX-N	120 V	W	-	4"		LITHONIA / STONCO	
X	LED	-	4000 K	5 W	EXIT SIGN WET LOCATION - SINGLE FACE	ISOLITE	MAX-AC-R-S-WW-UN	120 V	S	V	4"		LITHONIA / THOMAS & BETTS	3
X1	LED	-	4000 K	5 W	EXIT SIGN WET LOCATION - WALL MOUNTED	ISOLITE	MAX-AC-R-S-WW-WM	120 V	W	-	4"		LITHONIA / THOMAS & BETTS	3
X2	LED	-	4000 K	5 W	EXIT SIGN WET LOCATION - DOUBLE FACE	ISOLITE	MAX-AC-R-D-S-WW-UN	120 V	S	V	4"		LITHONIA / THOMAS & BETTS	3

3. PROVIDE CHEVRONS FOR EXIT SIGNAGE AS INDICATED ON DRAWINGS

SPECIAL PURPOSE OUTLET SCHEDULE - ISSUE												
#	SERVING	LOCATION	SIZE	VOLTS	PHASE	FEED FROM	WIRING	SEE				
						PANEL	CIRCUIT	#	SIZE	LG	CON	NOTES
AD-1010A	AUTO DOOR OPERATOR	ELEVATOR SHAFT LOBBY 1010	5 MCA	120 V	1	P1	59	2	12	12	3"	5
AD-1010B	AUTO DOOR OPERATOR	ELEVATOR SHAFT LOBBY 1017 1010	5 MCA	120 V	1	P1	60	2	12	12	3"	5
AD-1010C	AUTO DOOR OPERATOR	TRASH ROOM 1102	15 HP	120 V	1	P1	61	2	12	12	3"	5
AD-1100B	AUTO DOOR OPERATOR	ELEVATOR STORAGE 1105	15 HP	120 V	1	P1	63	2	12	12	3"	5
AC-203	AUTO OPERATOR	ELEVATOR SHAFT LOBBY 2037	5 MCA	120 V	1	P1	67	2	12	12	3"	5
AC-1	AUTOMATIC GATE	PARKING GARAGE 1100	FR	120 V	1			2	12	12	3"	12.2
EW-1	VEHICLE CHARGING STATION (FUTURE)	PARKING GARAGE 1100	-	208 V	1			-	-	-	-	7
EW-2	VEHICLE CHARGING STATION (FUTURE)	PARKING GARAGE 1100	-	208 V	1			-	-	-	-	7
EW-3	VEHICLE CHARGING STATION (FUTURE)	PARKING GARAGE 2100	-	208 V	1			-	-	-	-	7
EW-4	ELECTRIC WALL HEATER	UNILEX TOILET 1124	1800 KW	120 V	1	P2	16	2	12	12	3"	14
EW-5	ELECTRIC WALL HEATER	UNILEX TOILET 1123	1500 KW	120 V	1	P2	15	2	12	12	3"	14
EW-6	ELECTRIC WALL HEATER	JANITOR ROOM 4011	FR	120 V	1	P1	45	2	12	12	3"	14
LE	GATE ENTRY STATION	PARKING GARAGE 1100	FR	120 V	1			2	12	12	3"	13.4
LE	GATE EXIT STATION	PARKING GARAGE 1100	FR	120 V	1			2	12	12	3"	13.4
PKS	PARKING SIGNAGE - ELECTRIFIED	PARKING GARAGE 1100	-	120 V	1			2	12	12	3"	18
SCP	SECURITY CONTROL PANEL	DATA 1125										
TC-2A1	TELECOM ENCLOSURE - EQUIPMENT	PARKING GARAGE 1100	1000 W	120 V	1	P1	38	2	12	12	3"	6
TC-2A2	TELECOM ENCLOSURE - HEATER	PARKING GARAGE 1100	400 W	120 V	1	P1	40	2	12	12	3"	6
TC-2A3	TELECOM ENCLOSURE - EQUIPMENT	PARKING GARAGE 2100	1000 W	120 V	1	P1	42	2	12	12	3"	6
TC-2A4	TELECOM ENCLOSURE - HEATER	PARKING GARAGE 2100	400 W	120 V	1	P1	44	2	12	12	3"	6
TC-3A1	TELECOM ENCLOSURE - EQUIPMENT	PARKING GARAGE 3100	1000 W	120 V	1	P1	46	2	12	12	3"	6
TC-3A2	TELECOM ENCLOSURE - HEATER	PARKING GARAGE 3100	400 W	120 V	1	P1	48	2	12	12	3"	6
TC-3A3	TELECOM ENCLOSURE - EQUIPMENT	PARKING GARAGE 4100	1000 W	120 V	1	P1	50	2	12	12	3"	6
TC-3A4	TELECOM ENCLOSURE - HEATER	PARKING GARAGE 4100	400 W	120 V	1	P1	52	2	12	12	3"	6
TC-4A2	TELECOM ENCLOSURE - HEATER	PARKING GARAGE 4100	400 W	120 V	1	P2	52	2	12	12	3"	6
WH-1A	WATER HEATER	STORAGE 1123	20 KW	277 V	3	P2	27	2	12	12	3"	6
WH-1B	WATER HEATER	STORAGE 1123	6.3 KW	120 V	1	P2	31	3	8	10	3"	6

7. ELECTRIC VEHICLE CHARGING STATIONS FURNISHED AND INSTALLED BY OWNER OUTSIDE OF PROJECT SCOPE. PROVIDE (1) 1" CONDUIT BACK TO MAIN ELECTRICAL ROOM AND (

MOTOR WIRING SCHEDULE - ISSUE													
#	DRIVING	LOCATION	SIZE	VOLT	PHASE	FEED FROM	WIRING			SEE NOTES			
						PANEL	CIRCUIT	#	SIZE	WIRING			
AJ-01	CONDENSING UNIT - FURNACE	COMMERCIAL, ROOF	18 MCA	208V	1	PTN	2.4	2	10	10	3/4"		
AJ-02	CONDENSING UNIT - FURNACE	COMMERCIAL, ROOF	18 MCA	208V	1	PTN	6.6	2	10	10	3/4"		
AJ-03	CONDENSING UNIT - FURNACE	COMMERCIAL, ROOF	18 MCA	208V	1	PTN	13.2	2	10	10	3/4"		
AJ-04	CONDENSING UNIT - FURNACE	COMMERCIAL, ROOF	18 MCA	208V	1	PTN	14.8	2	10	10	3/4"		
AJ-05	CONDENSING UNIT - FURNACE	COMMERCIAL, ROOF	16 MCA	208V	1	PTN	18.24	2	10	10	3/4"		
AJ-06	CONDENSING UNIT - FURNACE	COMMERCIAL, ROOF	16 MCA	208V	1	PTN	22.20	2	10	10	3/4"		
AJ-07	CONDENSING UNIT - FURNACE	COMMERCIAL, ROOF	16 MCA	208V	1	PTN	26.28	2	10	10	3/4"		
AJ-08	CONDENSING UNIT - FURNACE	COMMERCIAL, ROOF	16 MCA	208V	1	PTN	30.32	2	10	10	3/4"		
EH-01	EXHAUST FAN	STORAGE 1123	10 HP	120V	1	P2	20	2	12	12	3/4"		
EH-02	EXHAUST FAN	LINESET TOILET 1054	10 HP	120V	1	P2	22	2	12	12	3/4"		
EH-03	EXHAUST FAN	JANITOR ROOM 4011	10 HP	120V	1	P1	53	3	12	12	3/4"		
EH-04	EXHAUST FAN	UTILITY TUNNEL	10 HP	120V	1	P1	57	3	12	12	1"		
PF-01	PASSENGER ELEVATOR	ELEVATOR CONTROL ROOM 5011	2 HP	208V	2	MSB	ONE	ONE	ONE	ONE	2		
PF-02	PASSENGER ELEVATOR	ELEVATOR CONTROL ROOM 5011	2 HP	208V	3	MSB	9	SEE ONE	ONE	ONE	2		
F-1	FURNACE	COMMERCIAL SPACE - GROUND 1000	15 KW	120V	1	PTN	1	2	12	12	3/4"		
F-2	FURNACE	COMMERCIAL SPACE - GROUND 1000	15 KW	120V	1	PTN	3	2	12	12	3/4"		
F-3	FURNACE	COMMERCIAL SPACE - GROUND 1000	15 KW	120V	1	PTN	5	2	12	12	3/4"		
F-4	FURNACE	COMMERCIAL SPACE - GROUND 1000	15 KW	120V	1	PTN	7	2	12	12	3/4"		
F-5	FURNACE	COMMERCIAL SPACE - UPPER 3000	15 KW	120V	1	PTN	9	2	12	12	3/4"		
F-6	FURNACE	COMMERCIAL SPACE - UPPER 3000	15 KW	120V	1	PTN	11	2	12	12	3/4"		
F-7	FURNACE	COMMERCIAL SPACE - UPPER 3000	15 KW	120V	1	PTN	13	2	12	12	3/4"		
F-8	FURNACE	COMMERCIAL SPACE - UPPER 3000	15 KW	120V	1	PTN	15	2	12	12	3/4"		
FC-01	FAN COIL UNIT	MECHANICAL 1011	5.4 MCA	208V	1	P1	29.37	2	10	10	3/4"		
FC-02	FAN COIL UNIT	MECHANICAL 2011	5.4 MCA	208V	1	P1	29.31	2	10	10	3/4"		
FC-03	FAN COIL UNIT	MECHANICAL 3011	5.4 MCA	208V	1	P1	33.35	2	10	10	3/4"		
FC-04	FAN COIL UNIT	MECHANICAL 4011	5.4 MCA	208V	1	P1	37.39	2	10	10	3/4"		
FC-05	FAN COIL UNIT	ELEVATOR CONTROL ROOM 5011	5.4 MCA	208V	1	ELEV	2.4	2	10	10	3/4"		
FC-06	FAN COIL UNIT	MECHANICAL 5012	5.4 MCA	208V	1	P1	41.43	2	10	10	3/4"		
PC-01	HEAT PUMP CONDENSING UNIT	SECURITY OFFICE 1122	5 MCA	208V	1	P1	8.10	5	12	12	3/4"		
PC-02	HEAT PUMP CONDENSING UNIT	SECURITY OFFICE 1122	5 MCA	208V	1	P2	12.14	2	12	12	3/4"		
HP-01	HEAT PUMP CONDENSING UNIT	20 MCA	208V	3	MSB	7	3	4	8	8	1 1/4"		
HP-02	HEAT PUMP CONDENSING UNIT	PARKING GARAGE 1100	20 MCA	208V	1	P2	1.3	2	8	10	3/4"		
HP-03	HEAT PUMP CONDENSING UNIT	EQUIP. - STORAGE 1004	20 MCA	208V	1	P2	1.3	2	8	10	3/4"		
UH-01	UNIT HEATER - GAS FIRED	TRASH ROOM 1003		-	120V	1			2	12	12	3/4"	
UH-02	UNIT HEATER - GAS FIRED	ELECTRICAL ROOM 1102		-	120V	1			5	3	12	12	3/4"
UH-03	UNIT HEATER - GAS FIRED	ELECTRICAL ROOM 1103		-	120V	1			13	12	12	3/4"	

1. PACKAGED RYAL EQUIPMENT WITH SINGLE POINT ELECTRICAL CONNECTION. VERIFY EXACT CONDUCTOR SIZE AND OVERCURRENT PROTECTION REQUIREMENTS WITH APPROVED EQUIPMENT NAMEPLATE.

SHEET NUMBER:



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CONSULTANTS:

PROJECT TITLE:
CAPITOL EAST PARKING GARAGE

211 SOUTH LIVINGSTON STREET, MADISON WI 53703
PHONE NUMBER 1627
CONTACT NUMBER 7951

CLIENT:

CITY OF MADISON PARKING UTILITY

215 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53703-2086



ISSUE:

NO DATE DESCRIPTION

PANEL SCHEDULES

SHEET TITLE:

SHEET NUMBER:

PROJECT INFORMATION:

PROJECT NUMBER: 2016-5051

DATE: 06/30/2017

DRAWN BY: RRK

CHECKED BY: RJ

APPROVED BY: DW

SCALE: AS NOTED

SET TYPE: BD

BRANCH PANEL: L1													
VOLTAGE: 208/120 3PH PHASE WIRE: 3P / 4W SVC. ENTRANCE LABEL: NO MINIMUM AIC: 22,000 AMPS IS SERIES RATED ALLOWED: NO				MAIN TYPE: MCB MAIN RATING: 225 A TYVS: NO FEED-THRU LUGS: NO MOUNTING: SURFACE				BUS MATERIAL: COPPER BUS RATING: 225 A ENCLOSURE: NEMA 1 200% NEUTRAL: NO PANELBOARD TYPE: BRANCH CIRCUIT					
CKT	CIRCUIT DESCRIPTION	TRIP	POLE	A	B	C	POLE	TRIP	CIRCUIT DESCRIPTION	CKT	TRIP	POLE	A
1	LIGHTING - EQUIPMENT STORAGE 1105	20 A	1	385	1,152		1	20 A	LIGHTING - LEVEL 1 PARKING INTERIOR ZONE A	2	20 A	1	385
3	EXTERIOR LIGHTING - EAST	20 A	1		26	1,044		20 A	LIGHTING - LEVEL 1 PARKING INTERIOR ZONE B	4	20 A	1	
5	EXTERIOR LIGHTING - NORTHWEST	20 A	1			852	348	1	LIGHTING - LEVEL 1 PARKING PERIMETER ZONE C	6	20 A	1	
7	SPARE	20 A	1	0	406			1	LIGHTING - LEVEL 1 PARKING PERIMETER ZONE D	8	20 A	1	0
9	SPARE	20 A	1		0	0		1	SPARE	10	20 A	1	
11	SPARE	20 A	1			0	1,218	1	LIGHTING - LEVEL 2 PARKING INTERIOR ZONE A	12	20 A	1	
13	SPARE	20 A	1	0	1,102			1	LIGHTING - LEVEL 2 PARKING INTERIOR ZONE B	14	20 A	1	0
15	SPARE	20 A	1		0	812		1	LIGHTING - LEVEL 2 PARKING PERIMETER ZONE C	16	20 A	1	
17	SPARE	20 A	1			0	812	1	LIGHTING - LEVEL 2 PARKING PERIMETER ZONE D	18	20 A	1	
19	SPARE	20 A	1	0	0			1	SPARE	20	20 A	1	0
21	SPARE	20 A	1		0	1,276		1	LIGHTING - LEVEL 3 PARKING INTERIOR ZONE A	22	20 A	1	
23	SPARE	20 A	1			0	1,102	1	LIGHTING - LEVEL 3 PARKING INTERIOR ZONE B	24	20 A	1	
25	SPARE	20 A	1	0	812			1	LIGHTING - LEVEL 3 PARKING PERIMETER ZONE C	26	20 A	1	0
27	SPARE	20 A	1		0	812		1	LIGHTING - LEVEL 3 PARKING PERIMETER ZONE D	28	20 A	1	
29	SPARE	20 A	1			0	0	1	SPARE	30	20 A	1	
31	SPARE	20 A	1	0	1,102			1	LIGHTING - LEVEL 4 PARKING INTERIOR ZONE A	32	20 A	1	0
33	SPARE	20 A	1		0	1,102		1	LIGHTING - LEVEL 4 PARKING INTERIOR ZONE B	34	20 A	1	
35	SPARE	20 A	1			0	754	1	LIGHTING - LEVEL 4 PARKING PERIMETER ZONE C	36	20 A	1	
37	SPARE	20 A	1	0	812			1	LIGHTING - LEVEL 4 PARKING PERIMETER ZONE D	38	20 A	1	0
39	SPARE	20 A	1		0	0		1	SPARE	40	20 A	1	
41	SPARE	20 A	1			0	0	1	SPARE	42	20 A	1	
TOTAL LOAD:				5771 VA	5072 VA	5086 VA	PANEL TOTALS						
								Total Conn. Load: 15629 VA					
								Total Est. Demand: 15629 VA					
								Total Conn. Current: 44 A					
								Total Est. Demand Current: 44 A					

KEYED NOTES THIS SHEET

- LIGHTING CONTROL PANELBOARD WITH REMOTELY OPERATED CIRCUIT BREAKERS. REFER TO ONE-LINE DIAGRAM AND SPECIFICATIONS FOR SYSTEM DETAILS. ALL CIRCUIT BREAKERS SUPPLYING LIGHTING LOADS SHALL BE INCLUDED IN OWNER'S LIGHTING CONTROL PROGRAM, UNLESS OTHERWISE NOTED. PROVIDE PROGRAMMING FOR ALL APPLICABLE CIRCUIT BREAKERS.
- PROVIDE UL 424 LISTED ACCESSORIES AND ELECTRICAL CONNECTIONS AS REQUIRED FOR SWITCHING EMERGENCY LIGHTING LOADS.
- CIRCUIT BREAKER SHALL NOT BE PROGRAMMED FOR REMOTE OPERATION.
- CIRCUIT BREAKER SHALL BE EQUIPPED WITH GROUND FAULT PROTECTION.

BRANCH PANEL: LEM													
VOLTAGE: 208/120 3PH PHASE WIRE: 3P / 4W SVC. ENTRANCE LABEL: NO MINIMUM AIC: 22,000 AMPS IS SERIES RATED ALLOWED: NO				MAIN TYPE: MCB MAIN RATING: 225 A TYVS: NO FEED-THRU LUGS: NO MOUNTING: SURFACE				BUS MATERIAL: COPPER BUS RATING: 225 A ENCLOSURE: NEMA 1 200% NEUTRAL: NO PANELBOARD TYPE: BRANCH CIRCUIT					
CKT	CIRCUIT DESCRIPTION	TRIP	POLE	A	B	C	POLE	TRIP	CIRCUIT DESCRIPTION	CKT	TRIP	POLE	A
1	FIRE ALARM CONTROL PANEL - COMMERCIAL SPACE UPPER	20 A	1	0	0		1	20 A	SHUNT TRIP OPERATOR POWER	2	20 A	1	
3	LIGHTING EQUIPMENT STORAGE 1105	20 A	1		105	158		20 A	EM LIGHTING - EXIT DISCHARGE	4	20 A	1	
5	EM LIGHTING - LEVEL 1 PARKING	20 A	1			1,268	180	1	EM LIGHTING - LEVEL 1 PARKING	6	20 A	1	
7	EM LIGHTING - LEVEL 2 PARKING	20 A	1	986	120			1	EM LIGHTING - LEVEL 2 PARKING	8	20 A	1	
9	EM LIGHTING - LEVEL 3 PARKING	20 A	1		986	120		1	EM LIGHTING - LEVEL 3 PARKING	10	20 A	1	
11	EM LIGHTING - LEVEL 4 PARKING	20 A	1			870	120	1	EM LIGHTING - LEVEL 4 PARKING	12	20 A	1	
13	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1	716	0			1	EM LIGHTING - LEVEL 5 PARKING ROOF	14	20 A	1	
15	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1		550	0		1	EM LIGHTING - LEVEL 5 PARKING ROOF	16	20 A	1	
17	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1			550	0	1	EM LIGHTING - LEVEL 5 PARKING ROOF	18	20 A	1	
19	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1	580	0			1	EM LIGHTING - LEVEL 5 PARKING ROOF	20	20 A	1	
21	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1		1,060	0		1	EM LIGHTING - LEVEL 5 PARKING ROOF	22	20 A	1	
23	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1			1,210	0	1	EM LIGHTING - LEVEL 5 PARKING ROOF	24	20 A	1	
25	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1	200	0			1	EM LIGHTING - LEVEL 5 PARKING ROOF	26	20 A	1	
27	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1		400	0		1	EM LIGHTING - LEVEL 5 PARKING ROOF	28	20 A	1	
29	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1			0	0	1	EM LIGHTING - LEVEL 5 PARKING ROOF	30	20 A	1	
31	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1	0	0			1	EM LIGHTING - LEVEL 5 PARKING ROOF	32	20 A	1	
33	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1		0	0		1	EM LIGHTING - LEVEL 5 PARKING ROOF	34	20 A	1	
35	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1			0	0	1	EM LIGHTING - LEVEL 5 PARKING ROOF	36	20 A	1	
37	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1	0	0			1	EM LIGHTING - LEVEL 5 PARKING ROOF	38	20 A	1	
39	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1		0	0		1	EM LIGHTING - LEVEL 5 PARKING ROOF	40	20 A	1	
41	EM LIGHTING - LEVEL 5 PARKING ROOF	20 A	1			0	0	1	EM LIGHTING - LEVEL 5 PARKING ROOF	42	20 A	1	
TOTAL LOAD:				2572 VA	3333 VA	4150 VA	PANEL TOTALS						
								Total Conn. Load: 11244 VA					
								Total Est. Demand: 11270 VA					
								Total Conn. Current: 16 A					
								Total Est. Demand Current: 16 A					

ABBREVIATIONS:

ST = SHUNT TRIP
GFCI = GROUND FAULT CIRCUIT INTERRUPTER
HACR = HEATING AND AIR-CONDITIONING RATED
HB = HAND-BLOCKING DEVICE

ABBREVIATIONS:

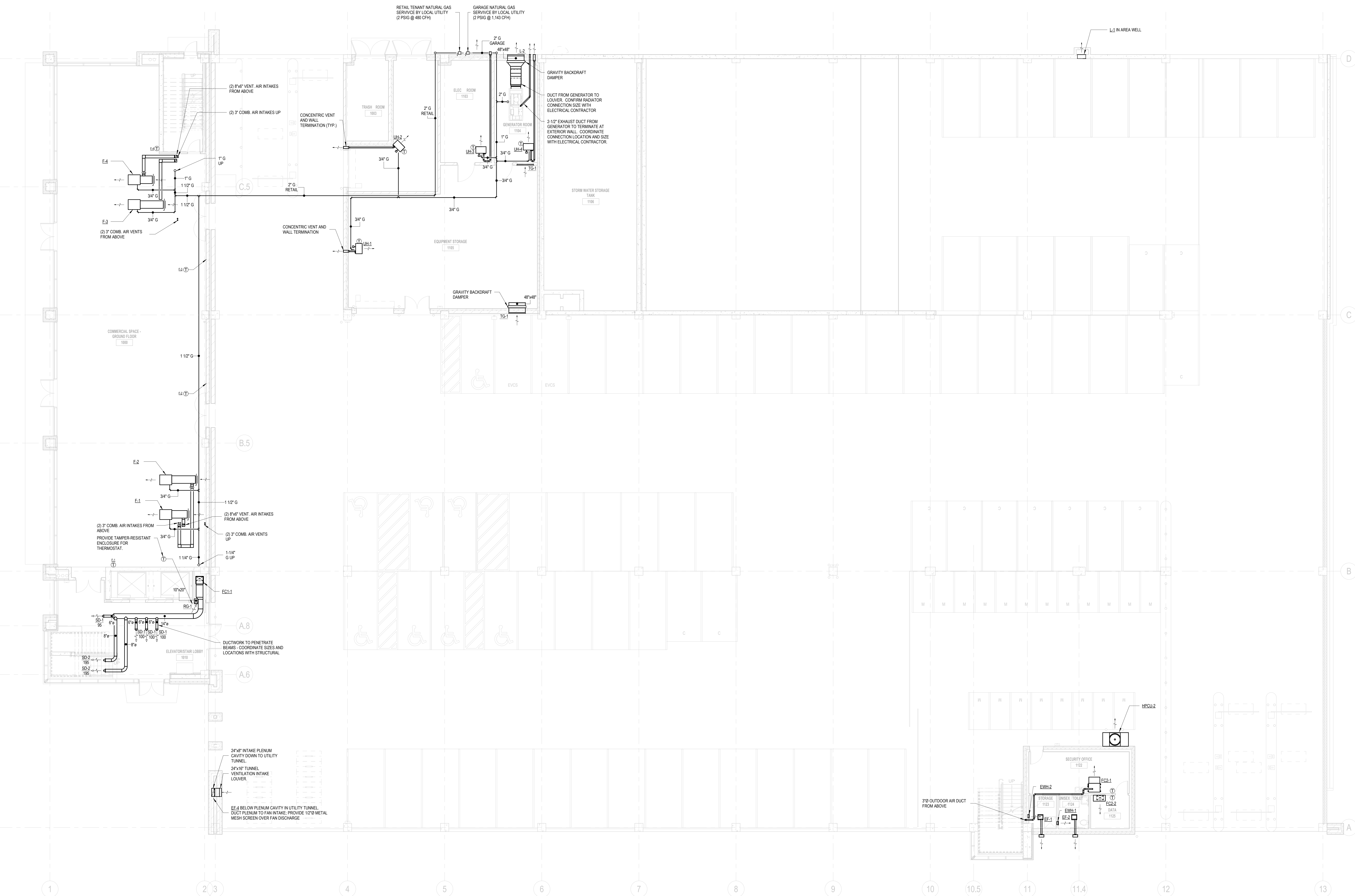
ST = SHUNT TRIP
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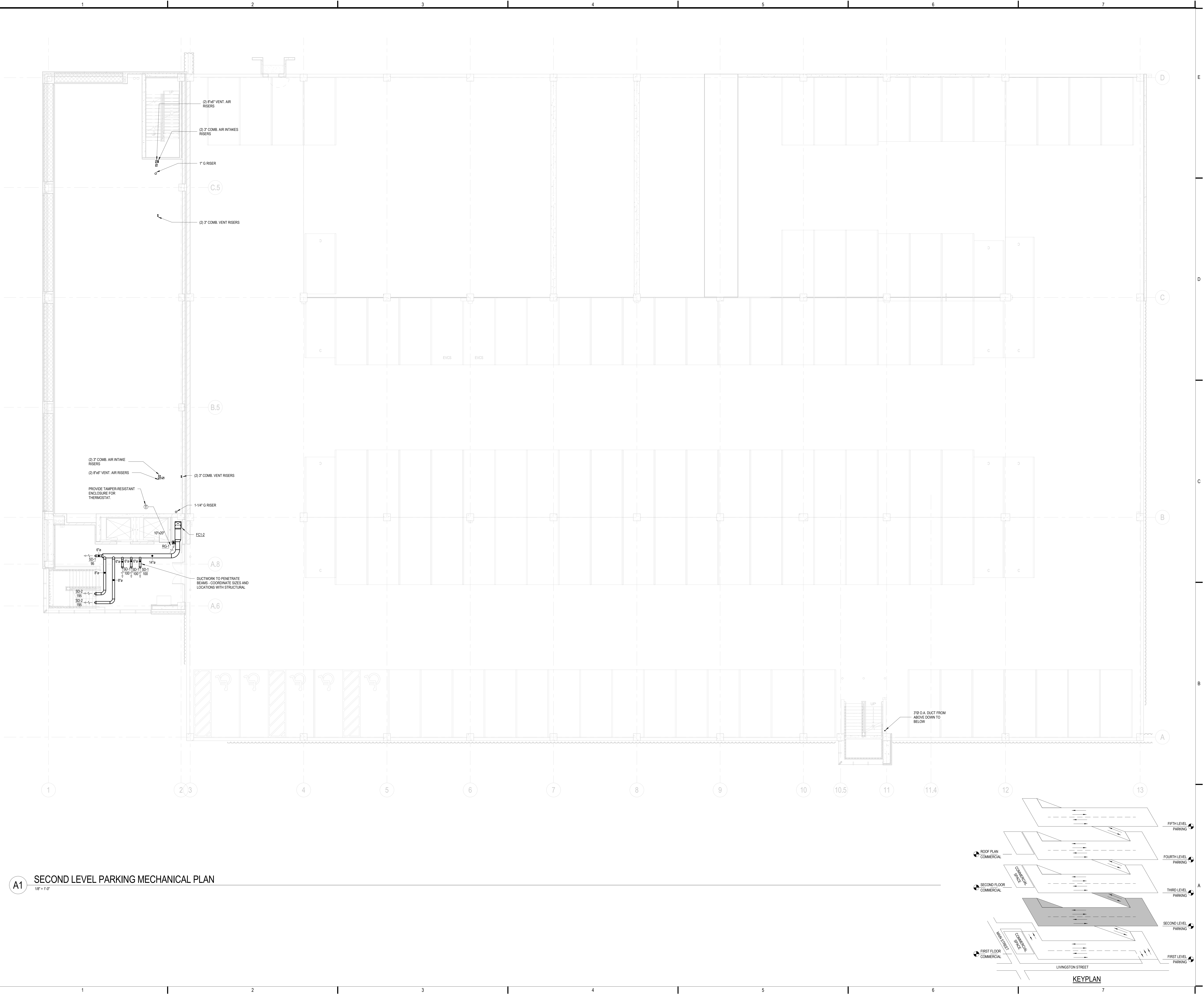
BRANCH PANEL: ELEV													
VOLTAGE: 208/120 1PH PHASE WIRE: 1P / 3W SVC. ENTRANCE LABEL: NO MINIMUM AIC: 10,000 AMPS IS SERIES RATED ALLOWED: NO					MAIN TYPE: MCB MAIN RATING: 100 A TVSN: NO FEED-THRU LUGS: NO MOUNTING: SURFACE					BUS MATERIAL: COPPER BUS RATING: 100 A ENCLOSURE: NEMA 1 200% NEUTRAL: NO PANELBOARD TYPE: BRANCH CIRCUIT			
CKT	CIRCUIT DESCRIPTION	TRIP	POLE	A	B	C	POLE	TRIP	CIRCUIT DESCRIPTION	CKT	TRIP	POLE	A
1	LIGHTS/RECEPTACLES CONTROL ROOM	20 A	1	500	52		2	20 A	FC-1-5	2			
3	ELEV PIT LIGHTS & RECEPTACLES	20 A	1			500	52			4			
5	ELEV HOISTWAY LIGHTING	20 A	1	140	0			1	20 A	SPARE	6		
7	SPARE	20 A	1		0	0	1	20 A	SPARE	8			
9	SPARE	20 A	1	0	0			1	20 A	SPARE	10		
11	SPARE	20 A	1			0	0	1	20 A	SPARE	12		
TOTAL LOAD:				692 VA		552 VA	PANEL TOTALS						
ABBREVIATIONS:							Total Conn. Load: 1244 VA						
ST = SHUNT TRIP							Total Est. Demand: 1270 VA						
GFCI = GROUND FAULT CIRCUIT INTERRUPTER							Total Conn. Current: 6 A						
HACR = HEATING AND AIR CONDITIONING RATED							Total Est. Demand Current: 6 A						
HS = HAND-LOCKING DEVICE							Total Est. Demand: 1270 VA						

ABBREVIATIONS:

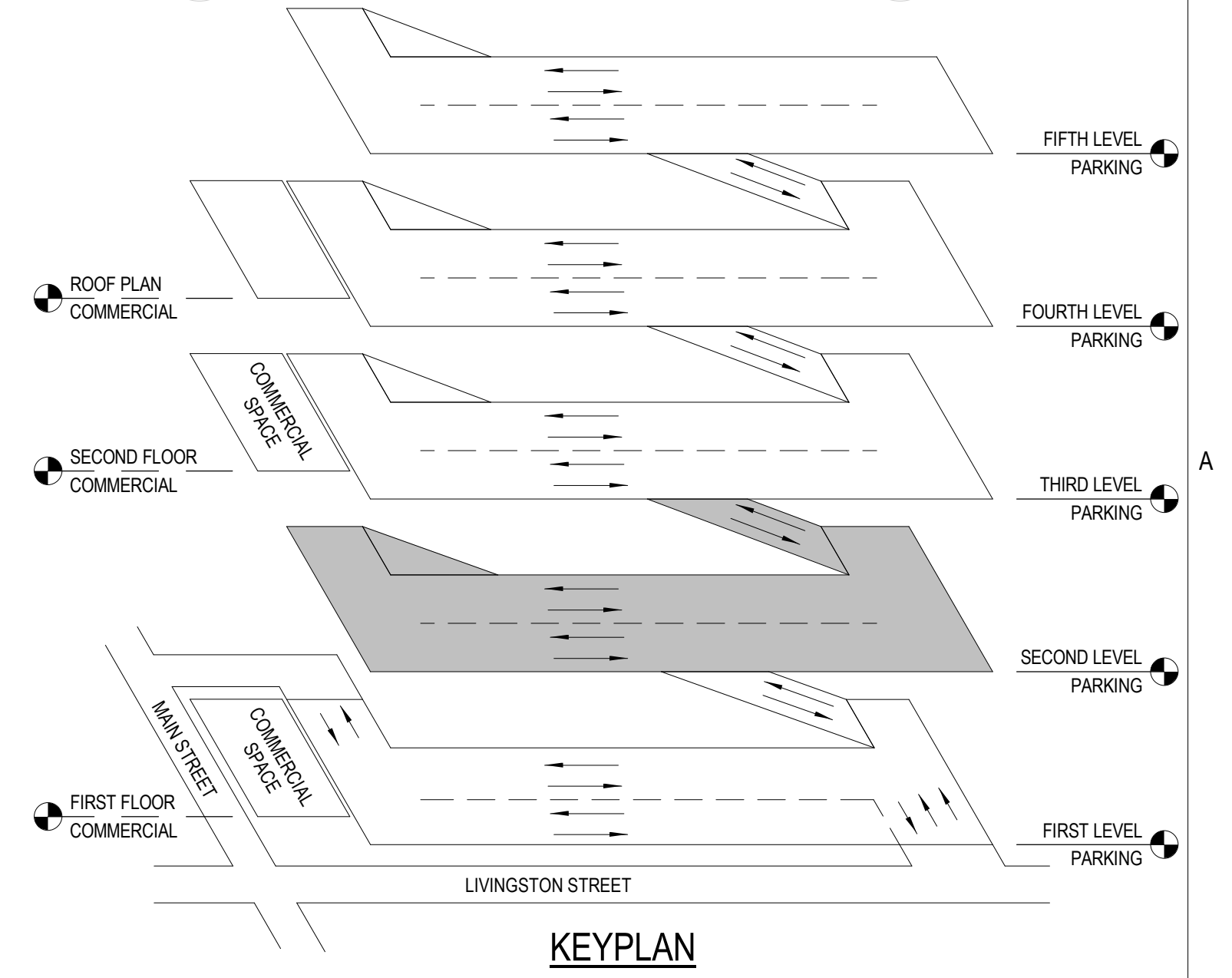
ST = SHUNT TRIP
GFCI = GROUND FAULT CIRCUIT INTERRUPTER
HACR = HEATING AND AIR-CONDITIONING RATED
HB = HAND-BLOCKING DEVICE

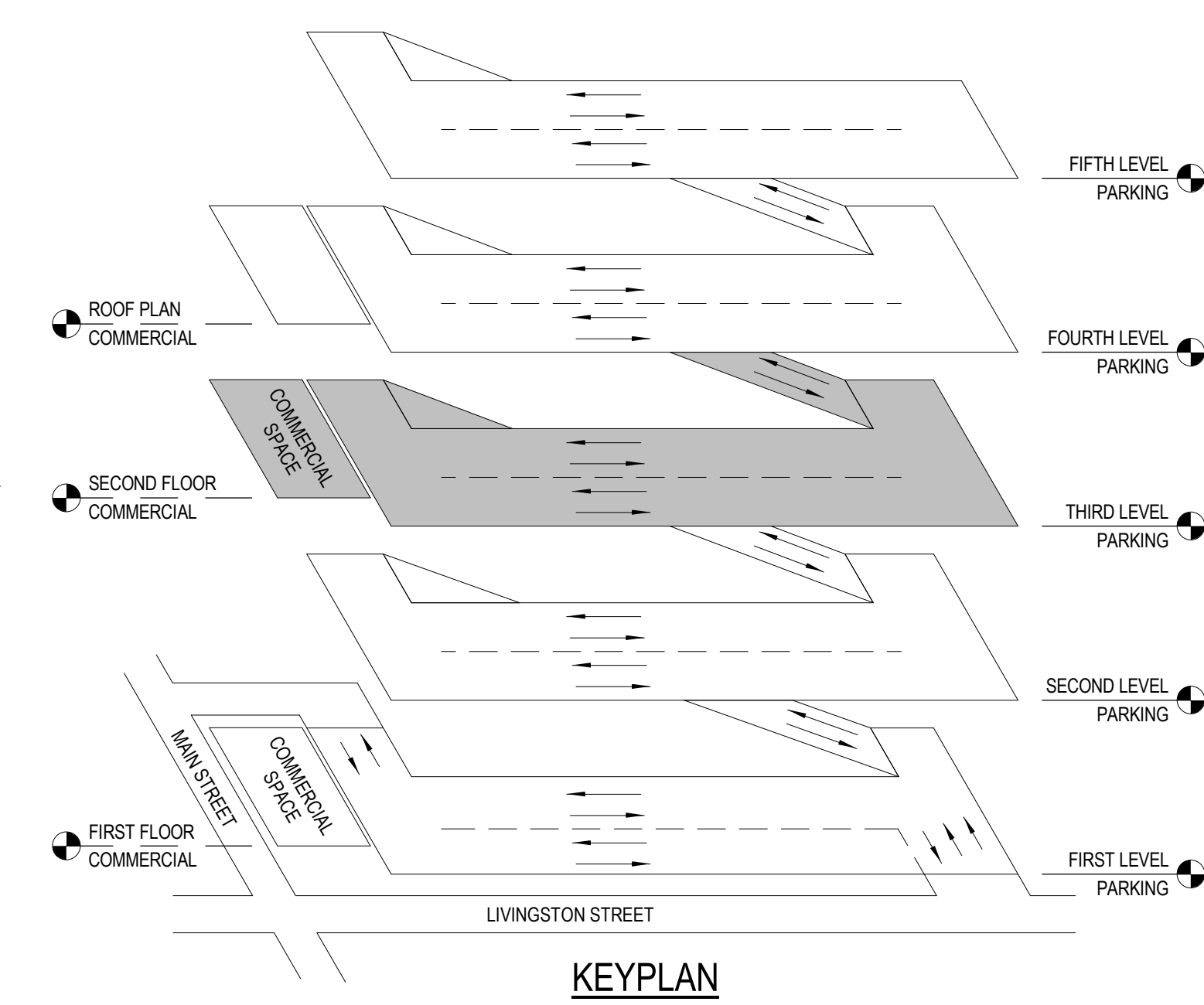
BRANCH PANEL: P2													
VOLTAGE: 208/120 3PH PHASE WIRE: 3P / 4W SVC. ENTRANCE LABEL: NO MINIMUM AIC: 10,000 AMPS IS SERIES RATED ALLOWED: NO				MAIN TYPE: MCB MAIN RATING: 225 A TYVS: NO FEED-THRU LUGS: NO MOUNTING: SURFACE				BUS MATERIAL: COPPER BUS RATING: 225 A ENCLOSURE: NEMA 1 200% NEUTRAL: NO PANELBOARD TYPE: BRANCH CIRCUIT					
CKT	CIRCUIT DESCRIPTION	TRIP	POLE	A	B	C	POLE	TRIP	CIRCUIT DESCRIPTION	CKT			
1	HPCU-2	40 A	2	2,000	800		1	20 A	PKS PARKING SIGNAGE	2			
3	RACK RECEPTACLES DATA 1125	20 A	1		2,000	600	1	20 A	PKS PARKING SIGNAGE	4			
5	RACK RECEPTACLES DATA 1125	20 A	1	360	52		2	20 A	PKS PARKING SIGNAGE	6			
7	RECEPTACLES DATA 1125	20 A	1		360	52		2	20 A	FC-2-1	8		
9	RECEPTACLES DATA 1125	20 A	1								10		
11	RECEPTACLES DATA 1125	20 A	1			180	52	2	20 A	FC-2-2	12		
13	RECEPTACLES UNISEX TOILET 1124	20 A	1	180	52			1	20 A	FC-2-2	14		
15	RECEPTACLES STORAGE 1123	20 A	1		180	1,500		1	20 A	EW-1	16		
17	RECEPTACLES SECURITY OFFICE 1122	20 A	1			540	1,500	1	20 A	EW-2	18		
19	RECEPTACLES SECURITY OFFICE 1122	20 A	1	180	610			1	20 A	EF-1 STORAGE 1123	20		
21	RECEPTACLES SECURITY OFFICE 1122	20 A	1		180	610		1	20 A	EF-2 UNISEX TOILET 1124	22		
23	RECEPTACLES SECURITY OFFICE 1122	20 A	1			360	600	1	20 A	PARKING GATE EQUIPMENT S	24		
25	LIGHTING SOUTH OFFICE	20 A	1	280	600			1	20 A	PARKING GATE EQUIPMENT S	26		
27	WH-1A STORAGE 1123	40 A	2		4,150	600		1	20 A	PARKING GATE EQUIPMENT S	28		
29							4,150	600	1	20 A	PARKING GATE EQUIPMENT S	30	
31	WH-1B STORAGE 1123	40 A	2	4,150	0			1	20 A	SPARE	32		
33	WH-1C STORAGE 1123	40 A	2		4,150	0		1	20 A	SPARE	34		
35	SPARE	20 A	1				0	0	1	20 A	SPARE	36	
37	SPARE	20 A	1	0	0			1	20 A	SPARE	38		
39	SPARE	20 A	1		0	0		1	20 A	SPARE	40		
41	SPARE	20 A	1				0	0	1	20 A	SPARE	42	
TOTAL LOAD:				9264 VA	14362 VA	8542 VA							
ABBREVIATIONS:											PANEL TOTALS		
ST = SHUNT TRIP											Total Conn. Load: 32168 VA		
GFCI = GROUND FAULT CIRCUIT INTERRUPTER											Total Est. Demand: 33188 VA		
HACR = HEATING AND AIR CONDITIONING RATED											Total Conn. Current: 89 A		
HB = HANDS-ON LOGGING DEVICE											Total Est. Demand Current: 82 A		





A1 SECOND LEVEL PARKING MECHANICAL PLAN
1/8" = 1'-0"



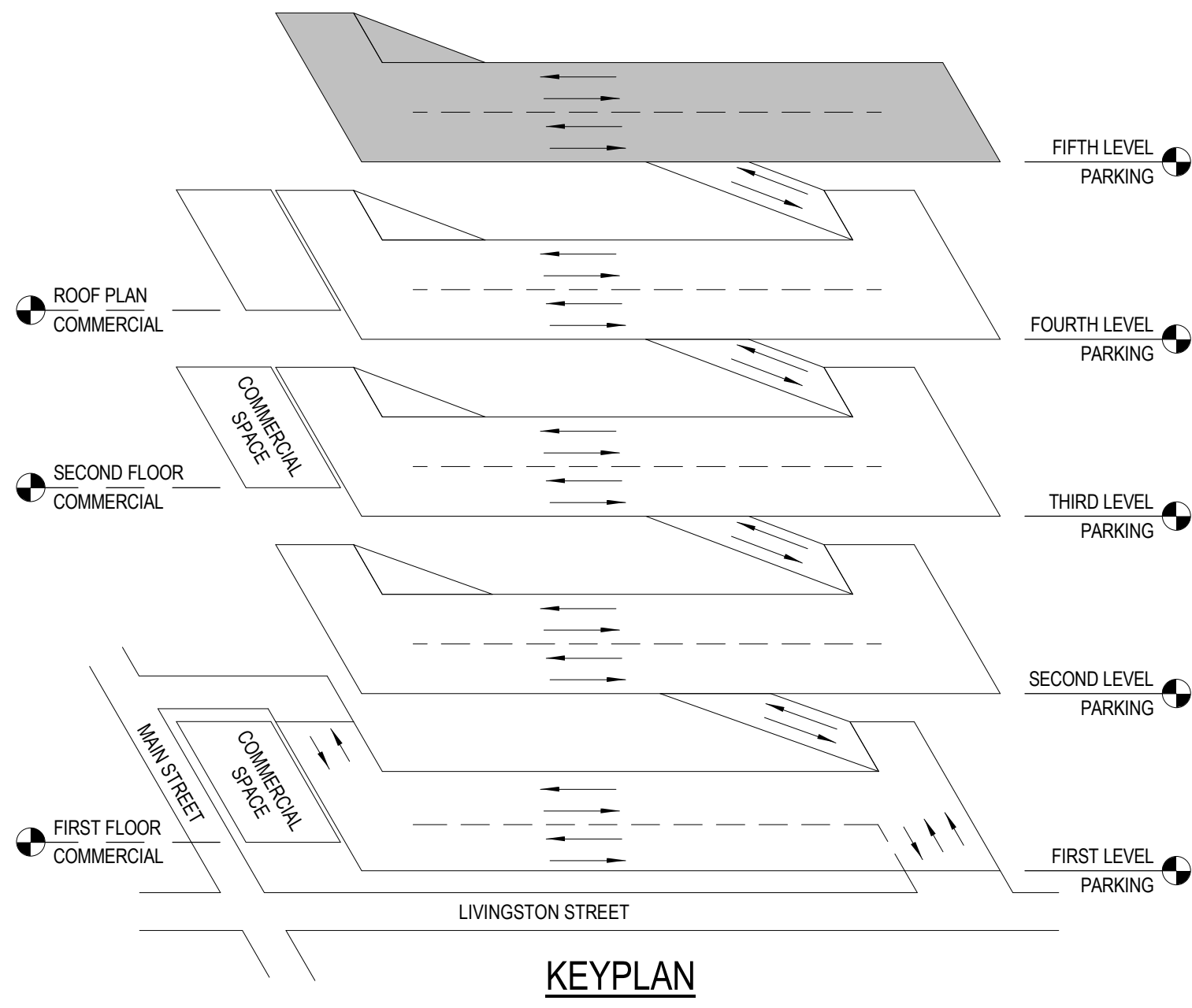


A1 THIRD LEVEL PARKING - SECOND FLOOR COMMERCIAL MECHANICAL PLAN
1/8" = 1'-0"



A1 FIFTH LEVEL PARKING MECHANICAL PLAN

1/8" = 1'-0"



KEYPLAN



UNIT HEATER SCHEDULE										
MARK	MFR./MODEL #	CFM	VOLTS/PHASE	FLA	MOCF	FAN HP	BTUH INPUT	BTUH OUTPUT	WEIGHT	NOTES
UH-1	MOORE HG330	900	120V	3.7	15	1/15	30000	36000	55 LB	*
UH-2	MOORE HG330	900	120V	3.7	15	1/15	30000	36000	55 LB	*
UH-3	MOORE HG330	900	120V	3.7	15	1/15	30000	36000	55 LB	*
UH-4	MOORE HG330	900	120V	3.7	15	1/15	30000	36000	55 LB	*

CEILING EXHAUST FANS (EF)										
UNIT NO.	SERVES	CFM	TOTAL SP W/C	RPM	M O T O R			GRAVITY BACKDRAFT DAMPER	INLET GRILLE	MANUFACTURER
					WATTS	VOLTS	PH			
EF-1	1123	75	0.25	994	-	120	1	Y	Y	GREENHECK
EF-2	1124	75	0.25	994	-	120	1	Y	Y	GREENHECK
EF-3	4011	75	0.25	994	-	120	1	Y	Y	GREENHECK
EF-4	UTILITY TUNNEL	1000	0.38	837	-	120	1	Y	Y	CSP-A2150

DIFFUSER, REGISTER, & GRILLE SCHEDULE									
MARK	SERVICE	INLET SIZE (IN)	PATTERN	FINISH	MOUNTING	MATERIAL	MANUFACTURER	MODEL NO.	NOTES
SD-1	SUPPLY	6" DIA.	NOZZLE	WHITE	SURFACE	ALUMINUM	PRICE	ND	W/ DAMPER
SR-2	SUPPLY	8" DIA.	NOZZLE	WHITE	SURFACE	ALUMINUM	PRICE	ND	W/ DAMPER
RG-1	RETURN	10"x20"	36" DEFLECTION	WHITE	SURFACE	STEEL	PRICE	96	-
TG-1	TRANSFER	48"x48"	36" DEFLECTION	WHITE	SURFACE	STEEL	PRICE	96	-

HEAT PUMP CONDENSER UNIT (HPCU)													
MARK	SERVICE	CAPACITY		REFRIGERANT TYPE	DESIGN TEMPERATURE COOL/HEAT	FANS (EACH)		ELECTRICAL			MANUFACTURER	MODEL	NOTES
		COOLING MBTU	HEAT MBTU			NO.	HP	MCA	MOCF	VOLTS			
HPCU-1	FC1-1 TO FC1-6	284	22	297	410A	95-13	1	-	96	110	208	3	CARRIER-TOSHIBA
HPCU-2	FC2-1 TO FC2-1	72	6	81	410A	95-13	1	-	-	208	1		CARRIER-TOSHIBA

AIR COOLED CONDENSER UNIT (ACU)													
MARK	SERVICE	CAPACITY		REFRIGERANT TYPE	OUTSIDE AIR TEMPERATURE	FANS (EACH)		ELECTRICAL			MANUFACTURER	MODEL	NOTES
		MBH	TONS			NO.	HP	MCA	MCA	VOLTS			
ACU-1	F-1	36	3.0	410A	-20°F	1	1/5	18.1	30	208	1	CARRIER	244BB336
ACU-2	F-2	36	3.0	410A	-20°F	1	1/5	18.1	30	208	1	CARRIER	244BB336
ACU-3	F-3	36	3.0	410A	-20°F	1	1/5	18.1	30	208	1	CARRIER	244BB336
ACU-4	F-4	36	3.0	410A	-20°F	1	1/5	18.1	30	208	1	CARRIER	244BB336
ACU-5	F-5	30	2.5	410A	-20°F	1	1/10	16.6	25	208	1	CARRIER	244BB330
ACU-6	F-6	30	2.5	410A	-20°F	1	1/10	16.6	25	208	1	CARRIER	244BB330
ACU-7	F-7	30	2.5	410A	-20°F	1	1/10	16.6	25	208	1	CARRIER	244BB330
ACU-8	F-8	30	2.5	410A	-20°F	1	1/10	16.6	25	208	1	CARRIER	244BB330

GAS FIRED FURNACE SCHEDULE																
MARK	SERVES	FAN SECTION			EXT. S.P.	MOTOR			COOLING COIL				MANUFACTURER	MODEL	NOTES	
		CFM	OUTSIDE AIR (CFM)	HP		VOLTS	PHASE	INPUT MBH	OUTPUT MBH	E.O.B. (°F)	E.W.B. (°F)	TOTAL MBH				SENSELINE MBH
F-1	1ST RETAIL S	1300	200	0.5	*	120	1	60	58	80	67	36	29	CARRIER	59TPA060E17	1.3
F-2	1ST RETAIL S	1300	200	0.5	*	120	1	60	58	80	67	36	29	CARRIER	59TPA060E17	1.3
F-3	1ST RETAIL N	1300	200	0.5	*	120	1	60	58	80	67	36	29	CARRIER	59TPA060E17	1.3
F-4	1ST RETAIL N	1300	200	0.5	*	120	1	60	58	80	67	36	29	CARRIER	59TPA060E17	1.3
F-5	2ND RETAIL S	800	200	0.5	*	120	1	60	58	80	67	30	24	CARRIER	59TPA060E17	2.3
F-6	2ND RETAIL S	800	200	0.5	*	120	1	60	58	80	67	30	24	CARRIER	59TPA060E17	2.3
F-7	2ND RETAIL N	800	200	0.5	*	120	1	60	58	80	67	30	24	CARRIER	59TPA060E17	1.3
F-8	2ND RETAIL N	800	200	0.5	*	120	1	60	58	80	67	30	24	CARRIER	59TPA060E17	1.3

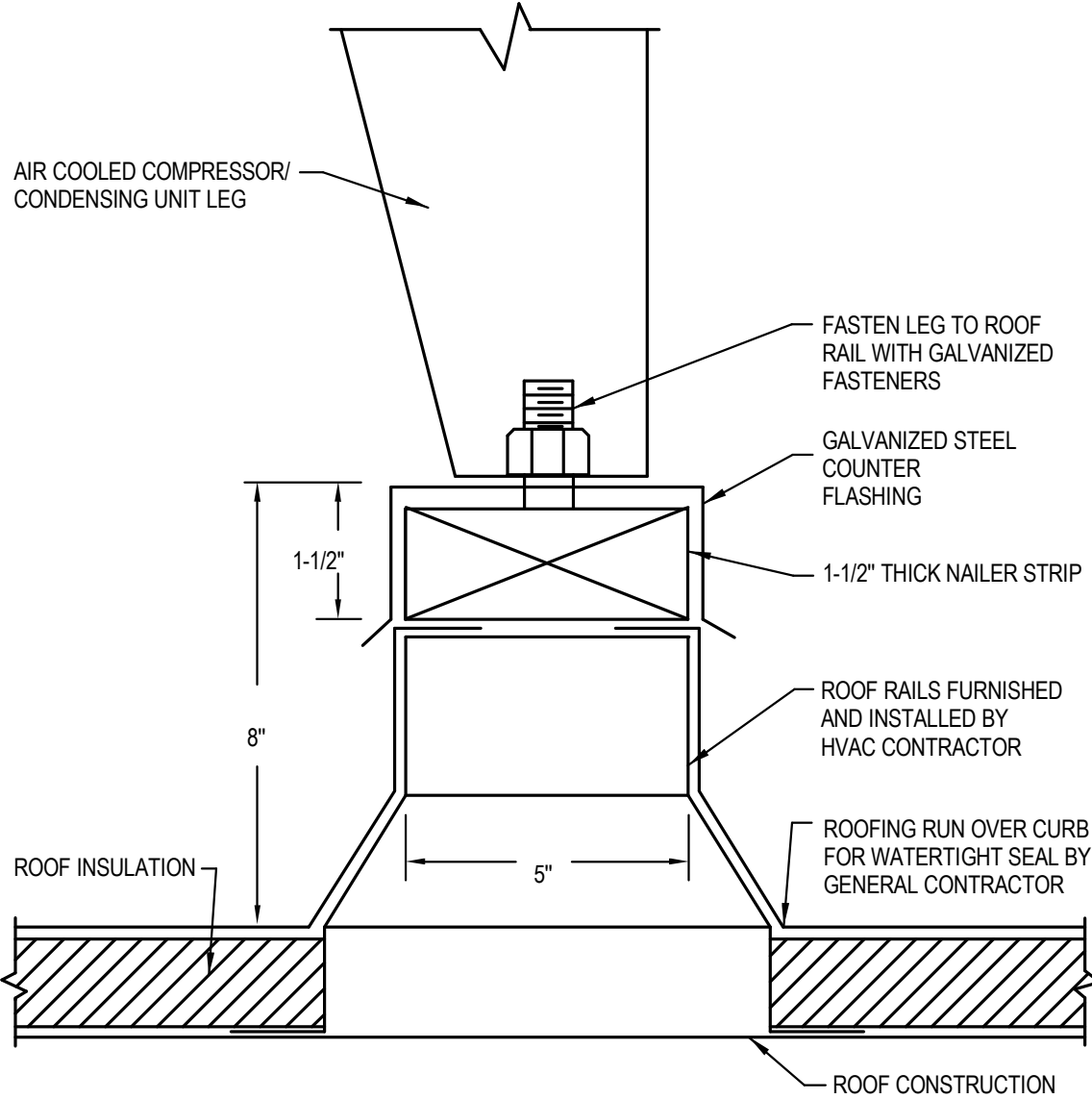
NOTES:
1. MOUNT HORIZONTALLY
2. MOUNT VERTICALLY
3. EXTEND 3/4" CONDENSATE DRAIN LINE TO NEAREST DRAIN.

VRF FAN COIL UNIT													
UNIT NO.	SERVICE	UNIT ARRANGEMENT	TOTAL CFM	O.A. CFM	EXT. SP. (IN. WC)	MCA	MOCF	VOLTS/ PH	DESIGN TEMP. COOL/ HEAT	CAPACITY			MANUFACTURER
										TOTAL MBH	SENS. MBH	HEAT MBH	
FC1-1	1010	VERTICAL	785	0	0.40	5.40	7.5	208V	80/70	30.00	17.83	34.00	CARRIER-TOSHIBA
FC1-2	2010	VERTICAL	785	0	0.40	5.40	7.5	208V	80/70	30.00	17.83	34.00	CARRIER-TOSHIBA
FC1-3	3010	VERTICAL	785	0	0.40	5.40	7.5	208V	80/70	30.00	17.83	34.00	CARRIER-TOSHIBA
FC1-4	4010	VERTICAL	630	0	0.40	5.40	7.5	208V	80/70	24.00	14.42	27.00	CARRIER-TOSHIBA
FC1-5	5011	WALL	600	0	0.00	0.50	15	208V	80/70	24.00	15.89	27.00	CARRIER-TOSHIBA
FC1-6	5010	VERTICAL	785	0	0.40	5.40	7.5	208V	80/70	30.00	17.83	34.00	CARRIER-TOSHIBA
FC2-1	1122	CEILING	410	15	0.00	0.50	15	208V	80/70	18.00	-	20.00	CARRIER-TOSHIBA
FC2-2	1125	WALL	490	0	0.00	0.50	15	208V	80/70	18.00	-	20.00	CARRIER-TOSHIBA

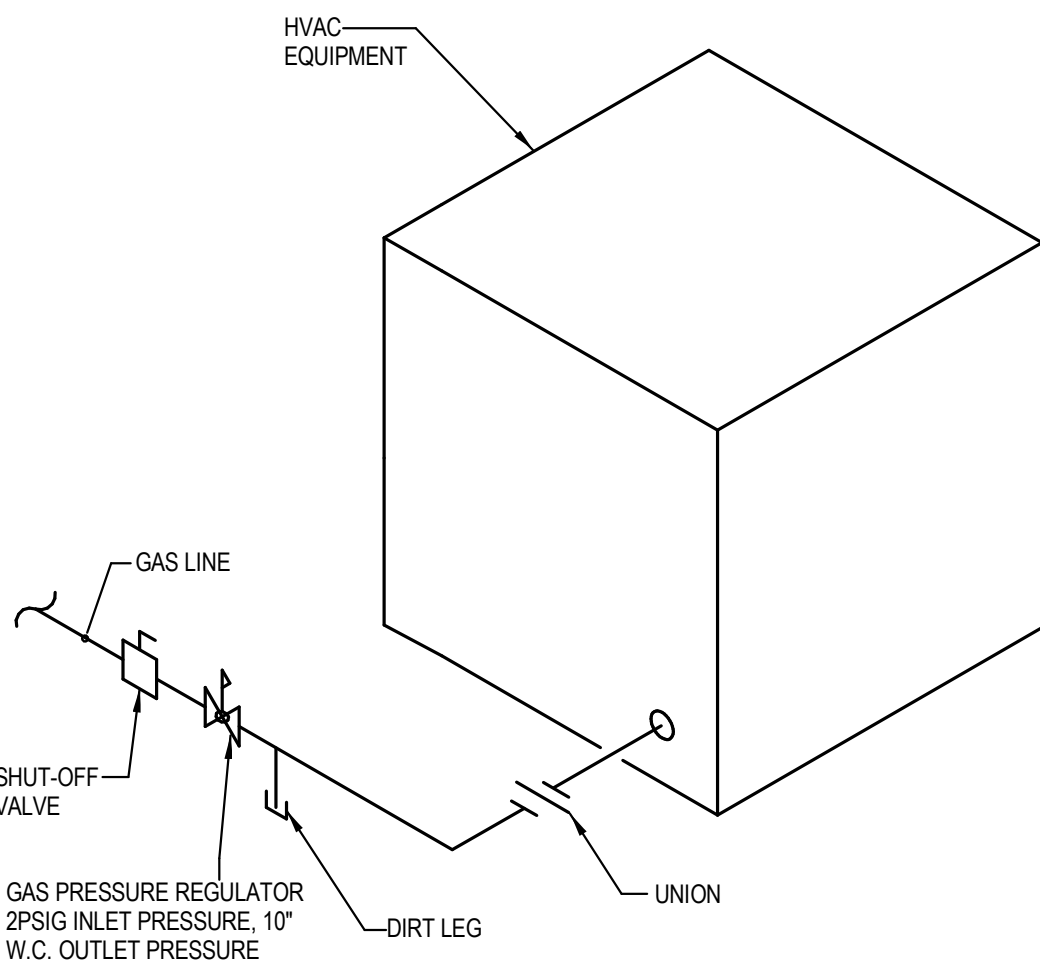
NOTES:
1. EXTEND 3/4" CONDENSATE DRAIN LINE TO NEAREST DRAIN.

LOUVER SCHEDULE							
MARK	SERVICE	DIMENSIONS (IN)	AIRFLOW (CFM)	MIN. FREE AREA (SQ. FT)	FACE VELOCITY (FPM)	MANUFACTURER	MODEL NO.
L-1	TUNNEL RELIEF	24" x 16"	1000	1.2	375	GREENHECK	EDD-601
L-2	GENERATOR ROOM	48" x 48"	5875	8.2	715	GREENHECK	EDD-601

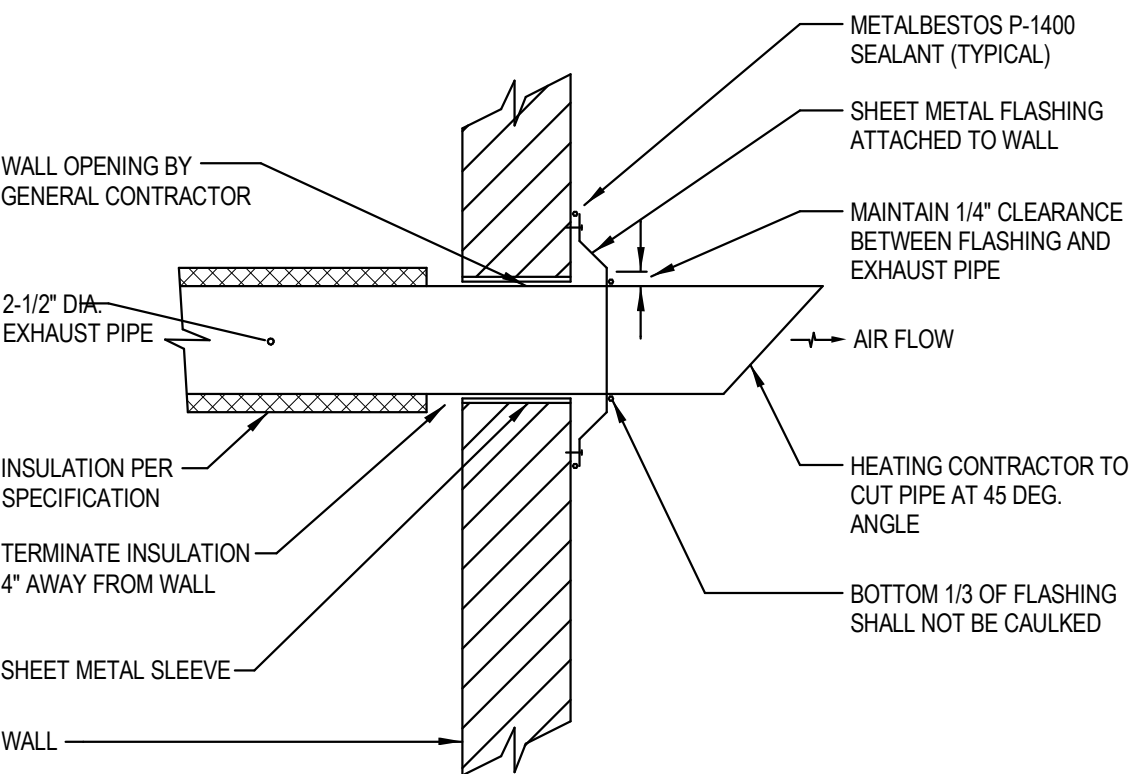
ELECTRIC WALL HEATER (EWH) SCHEDULE							
UNIT NO.	SERVICE	WATTS	BTU/HR.	MOUNTING ABOVE FLOOR (IN)	VOLTS	PHASE	MODEL
EWH-1	1123	1500	5000	12	120	1	Q-MARK
EWH-2	1124	1500	5000	12	120	1	Q-MARK
EWH-3	4011	1500	5000	12	120	1	Q-MARK



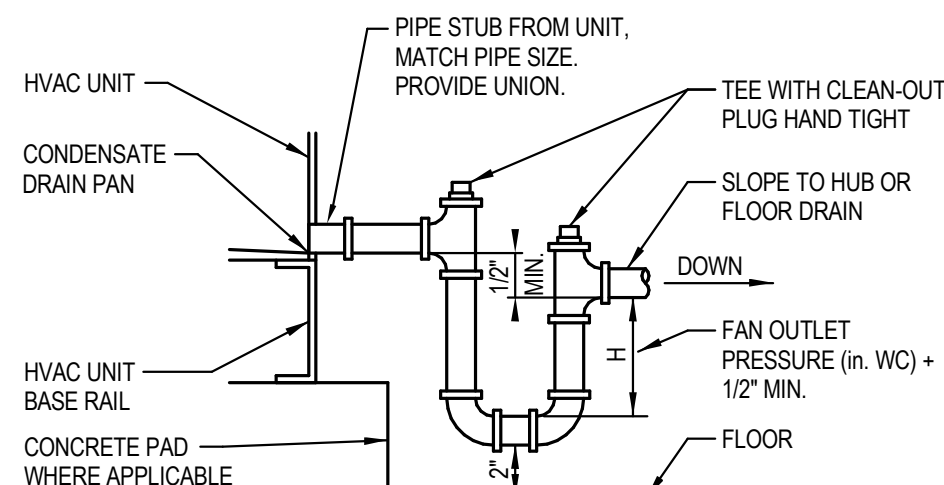
D1 ROOF RAIL SUPPORT FOR CONDENSING UNIT



C1 GAS PIPING TO EQUIPMENT DETAIL



B1 EXHAUST PIPING THROUGH WALL DETAIL



A1 CONDENSATE LOOPSEAL DETAIL

FIRE PROTECTION SYMBOLS, ABBREVIATIONS, SCHEDULES & SHEET INDEX

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS INDICATED HERE ARE USED IN THE DRAWINGS AND MAY NOT APPLY TO THIS PROJECT. ADDITIONAL SYMBOLS MAY BE INDICATED IN THE DRAWINGS.

PLUMBING ABBREVIATIONS

AFF	-	ABOVE FINISHED FLOOR	MBH	-	THOUSANDS OF BTU PER HOUR
AFG	-	ABOVE FINISHED GRADE	MC	-	MECHANICAL CONTRACTOR
AP	-	ACCESS PANEL	MEP	-	MECHANICAL, ELECTRICAL AND PIPING
APPROX	-	APPROXIMATELY	MFR	-	MANUFACTURER
ARCH	-	ARCHITECTURAL	MN	-	MINIMUM
AVG	-	AVERAGE	MISC	-	MISCELLANEOUS
BLDG	-	BUILDING	MTD	-	MOUNTED
BOT	-	BOTTOM	MTG	-	MOUNTING
BOP	-	BOTTOM OF PIPE	NA	-	NOT APPLICABLE
BT	-	BATHTUB	N/C	-	NOT IN CONTRACT
BTU	-	BRITISH THERMAL UNITS	NO	-	NUMBER
BTUH	-	BRITISH THERMAL UNITS PER HOUR	NPS	-	NOMINAL PIPE SIZE
BV	-	BALANCING VALVE	NTS	-	NOT TO SCALE
CAP	-	CEILING ACCESS PANEL	OC	-	ON CENTER
CFH	-	CUBIC FEET PER MINUTE	OD	-	OUTSIDE DIAMETER
CFM	-	CUBIC FEET PER HOUR	OFCI	-	OWNER FURNISHED, CONTRACTOR INSTALLED
CLG	-	CEILING	OFI	-	OWNER FURNISHED, OWNER INSTALLED
CO	-	CLEANOUT	PC	-	PLUMBING CONTRACTOR
COND	-	CONDUCTOR	PCF	-	POUNDS PER CUBIC FOOT
CONT	-	CONTRACTOR	PD	-	PRESSURE DROP
CTR	-	CENTER	PH	-	PHASE
CU	-	COPPER	PLBG	-	PLUMBING
CV	-	CHECK VALVE	PCC	-	POINT OF CONNECTION
CW	-	COLD WATER	PP	-	POLYPROPYLENE
CWFU	-	WATER FIXTURE UNITS	PPH	-	POUNDS PER HOUR
DET	-	DETAIL	PRV	-	PRESSURE RELIEF VALVE
DFU	-	DRAINAGE FIXTURE UNITS	PSF	-	POUNDS PER SQUARE FOOT
DK	-	DIAMETER	PSI	-	POUNDS PER SQUARE INCH
DM	-	DIMENSION	PSIA	-	POUNDS PER SQUARE INCH ABSOLUTE
DN	-	DOWN	PSIG	-	POUNDS PER SQUARE INCH GAUGE
DWG	-	DRAWING	PVC	-	POLYVINYL CHLORIDE
E	-	EXISTING	RD	-	ROOF DRAIN
ELEV	-	ELEVATION	REC	-	RECESSED
EM	-	EMERGENCY	RF	-	ROOF
EQUIP	-	EQUIPMENT	RI	-	ROUGH-IN
ETR	-	EXISTING TO REMAIN	RPSZ	-	REDUCED PRESSURE ZONE VALVE
EWI	-	ELECTRIC WATER HEATER	RV	-	RELIEF VALVE
EXIST	-	EXISTING	S	-	SLOPE
F	-	FUTURE	SCH	-	SCHEDULE
FCO	-	FLOOR CLEANOUT	SH	-	SHOWER
FD	-	FLOOR DRAIN	SHT	-	SHEET
FTE	-	FINISHED FLOOR ELEVATION	SOG	-	SLAB ON GRADE
FLR	-	FLOOR	SPEC	-	SPECIFICATION
FP	-	FIREPROOF	SQ	-	SQUARE
FS	-	FEET PER MINUTE	SS	-	SERVICE SINK
FS	-	FEET PER SECOND	SS	-	STAINLESS STEEL
FS	-	FLOOR SINK	STD	-	STANDARD
FT	-	FEET	T&P	-	TEMPERATURE AND PRESSURE
FTG	-	FOOTING	T&P	-	TO BE REMOVED
FU	-	FIXTURE UNITS	TD	-	TRENCH DRAIN
G	-	GAS	TD	-	TOTAL DRAIN FIXTURE UNITS
GAL	-	GALLON	TEMP	-	TEMPERATURE
GC	-	GENERAL CONTRACTOR	TOP	-	TOP OF PIPE
GPM	-	GALLONS PER MINUTE	TOS	-	TOP OF SLAB
GPH	-	GALLONS PER HOUR	T STAT	-	THERMISTAT
GP	-	GALLONS PER HOUR	TWPU	-	TOTAL WATER FIXTURE UNITS
HB	-	HOSE BIBB	TYP	-	TYPICAL
HD	-	HUB DRAIN	UNO	-	UNLESS OTHERWISE NOTED
HVAC	-	HEATING, VENTILATING & AIR CONDITIONING	V	-	VENT
HW	-	HOT WATER	VB	-	VACUUM BREAKER
HWFU	-	HOT WATER FIXTURE UNITS	VTR	-	VENT THRU ROOF
HWR	-	HOT WATER RETURN	W	-	WASTE
ID	-	INSIDE DIAMETER	W	-	WITH
I	-	INCHES	WO	-	WITHOUT
IN	-	INCHES	WPA	-	WATER HAMMER ARRESTOR
KO	-	KNOCK-OUT	WCO	-	WALL CLEANOUT
L	-	LAVATORY	WC	-	WATER CLOSET
LBS	-	POUNDS	WF	-	WASH FOUNTAIN
LBSHR	-	POUNDS PER HOUR	WH	-	WATER HEATER
MAX	-	MAXIMUM	WM	-	WASHING MACHINE
MB	-	MOP BASIN	WSFU	-	WATER SUPPLY FIXTURE UNITS
			WG	-	WATER GAUGE
			YCO	-	YARD CLEAN OUT

PIPING SYSTEM LABELS

WATER PIPING SYSTEMS:

--- COLD WATER
--- HOT WATER
--- HOT WATER RETURN
--- NP NON-POTABLE WATER
--- F FIRE PROTECTION

WASTE AND VENT SYSTEMS:

--- CWV CLEARWATER VENT
--- CWV CLEARWATER WASTE
--- OD OVERFLOW DRAIN LINE
--- ST STORM
--- SSD SUBSOIL DRAIN LINE
--- UNDERFLOOR FOR WASTE OR SOIL
--- SUBSOIL STORM & FORCE MAIN
--- SANITARY VENT
--- SAN WASTE OR SOL LINE

DRAINS AND CLEANOUTS



FLOOR DRAIN



FLOOR SINK



ROOF DRAIN



HUB DRAIN



FIXTURE WASTE TRAP



CLEANOUT



FLOOR CLEANOUT

PIPE VALVES AND SPECIALTIES



ANGLE VALVE



BACKFLOW PREVENTER



BALANCING VALVE



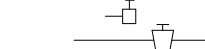
BALL VALVE



BUTTERFLY VALVE



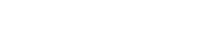
CHECK VALVE



DRAIN VALVE



GAS SHUT-OFF VALVE



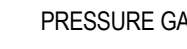
GATE VALVE



PRESSURE GAUGE



THERMOMETER



WATER HAMMER ARRESTOR



PRESSURE RELIEF VALVE



SOLENOID VALVE

REFERENCE SYMBOLS



DETAIL REFERENCE



TOP DESIGNATES DETAIL NUMBER BOTTOM DESIGNATES SHEET NUMBER



SECTION REFERENCE



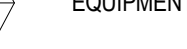
TOP DESIGNATES SECTION NUMBER BOTTOM DESIGNATES SHEET NUMBER



ELEVATION SYMBOL



EQUIPMENT NAME AND NUMBER



PLAN NOTE NUMBER



REVISION NUMBER

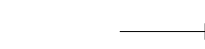


POINT OF CONNECTION



POINT OF DISCONNECTION

PIPE FITTINGS



FLANGE



UNION



ANCHOR



PIPE GUIDE



TEE BRANCH



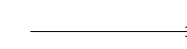
LINE CONTINUATION BREAK



PLUMBING FIXTURE STOPS



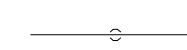
PIPELINE STRAINER



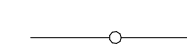
ELBOW DOWN



ELBOW UP



TEE DOWN



TEE UP



PIPE CAP



VALVE IN VERTICAL



DOUBLE WYE



WYE



WYE WITH VENT UP

FIRE PROTECTION EQUIPMENT SCHEDULE

TAG	MANUFACTURER	MODEL NO.	REMARKS
FDC-1	ELKHART BRASS	15-4W	FIRE-STANDING INLET, CAST BRASS BODY, POLISHED CHROME FINISH, FOUR (4) - 2-1/2" F NPT INLETS, 6" NPT OUTLET SIZE WITH ESCUTCHEONS STATING "STANDPIPE"
FDC-2	ELKHART BRASS	15-3W	FIRE-STANDING INLET, CAST BRASS BODY, POLISHED CHROME FINISH, THREE (3) - 2-1/2" F NPT INLETS, 6" NPT OUTLET SIZE WITH ESCUTCHEONS STATING "AUTO-SPKR"
AC-1	GENERAL AIR PRODUCTS	FP CONTRACTOR TO SELECT	DRY SPRINKLER AIR COMPRESSOR, SIZE TO MEET REQUIREMENTS OF NFPA 13 FOR DRY PIPE SYSTEM INSTALLATION AND PRESSURE MAINTENANCE.
DPV-1	VIKING	FP CONTRACTOR TO SELECT	DRY SPRINKLER VALVE, SIZE TO MEET REQUIREMENTS OF NFPA 13 FOR DRY PIPE SYSTEM INSTALLATION AND PRESSURE MAINTENANCE.
DPV-2	VIKING	FP CONTRACTOR TO SELECT	DRY SPRINKLER VALVE, SIZE TO MEET REQUIREMENTS OF NFPA 13 FOR DRY PIPE SYSTEM INSTALLATION AND PRESSURE MAINTENANCE.
DPV-3	VIKING	FP CONTRACTOR TO SELECT	DRY SPRINKLER VALVE, SIZE TO MEET REQUIREMENTS OF NFPA 13 FOR DRY PIPE SYSTEM INSTALLATION AND PRESSURE MAINTENANCE.

FIRE SPRINKLER HEAD LEGEND

SYMBOL	ORF	TEMP	RESPONSE	K-FAC	FINISH	MODEL	STYLE	PLATE	MFG.
●	1/2"	155°	QUICK	5.6	CHROME	F1FR	RECESSED	CHROME	RELIABLE
⊙	1/2"	135°	QUICK	5.5	CHROME	F4FR	CONCEALED	CHROME	RELIABLE
⊙	1/2"	155°	QUICK	5.7	CHROME	G3FR	DRY PENDENT	CHROME	RELIABLE
⊙	1/2"	155°	QUICK	5.6	BRASS	F1FR	UPRIGHT	NONE	RELIABLE
⊙	1/2"	155°	QUICK	5.6	BRASS	F1FR	PENDANT	HDOD	RELIABLE
◁	1/2"	155°	QUICK	5.6	CHROME	F1FR	HOR. SIDEWALL	CHROME	RELIABLE
◁	3/4"	135°	QUICK	8.0	CHROME	F1FR	EXT COV HOS SW	CHROME	RELIABLE
◁	1/2"	200°	QUICK	5.6	BRASS	F1FR	HOR. SIDEWALL	HDOD	RELIABLE

GRÄEF

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608 / 242 0787 fax

www.graef-usa.com

CONSULTANTS:

PROJECT TITLE:

CAPITOL EAST PARKING GARAGE

211 SOUTH LIVINGSTON STREET, MADISON, WI 53703
MUNIS NUMBER 1627
CONTRACT NUMBER 7951

CLIENT:

CITY OF MADISON PARKING UTILITY

215 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53801-2986



ISSUE:

NO DATE DESCRIPTION

PROJECT INFORMATION:

PROJECT NUMBER: 2016-5051

DATE: 06/30/2017

DRAWN BY: KRS

CHECKED BY: RAK

APPROVED BY: RAK

SCALE: AS NOTED

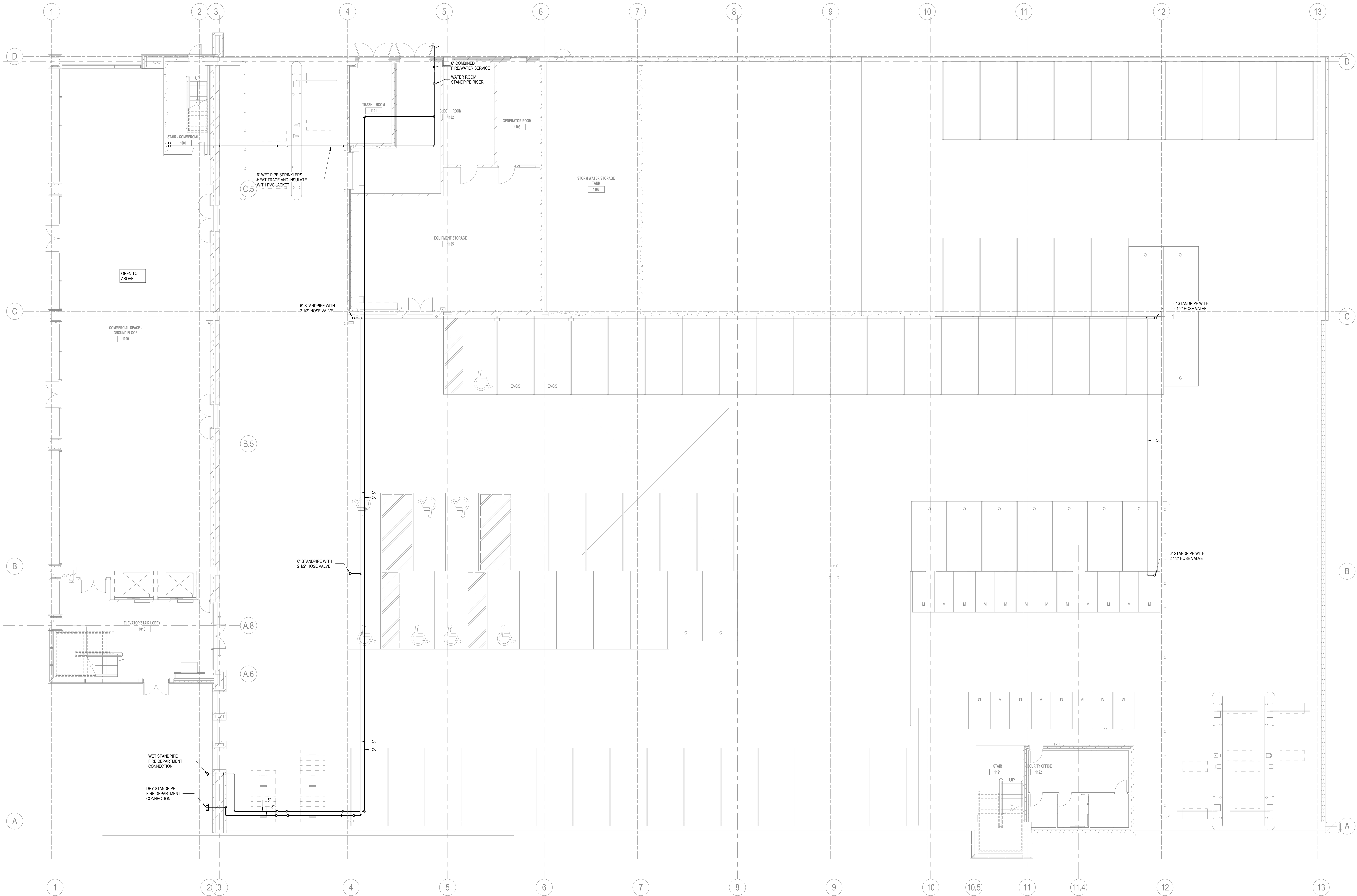
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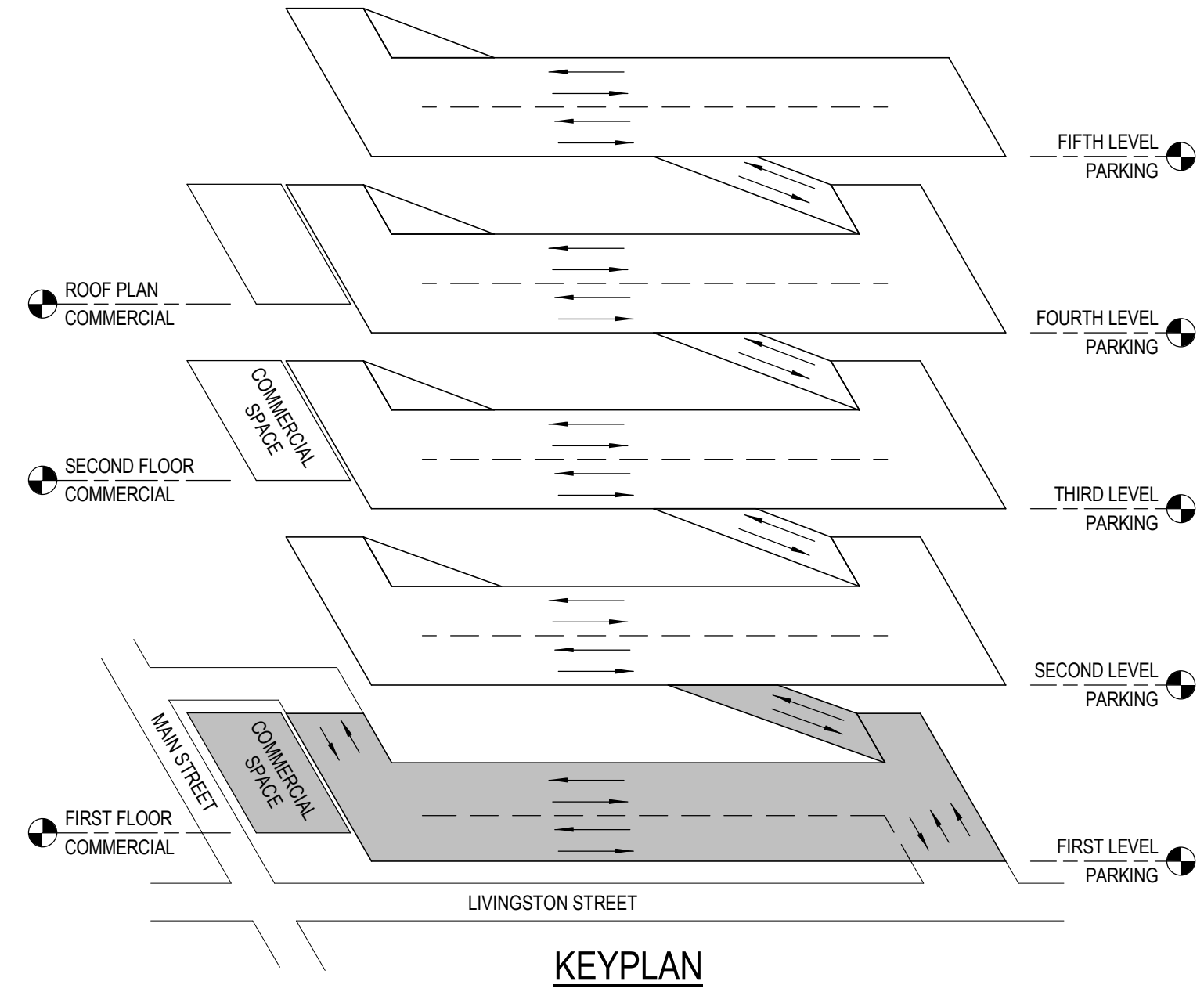
FIRE PROTECTION SYMBOLS,
SCHEDULES, AND ABBREVIATIONS

SHEET NUMBER:

FP-001



1 FIRST LEVEL PARKING / FIRST FLOOR COMMERCIAL PLAN
1/8" = 1'-0"



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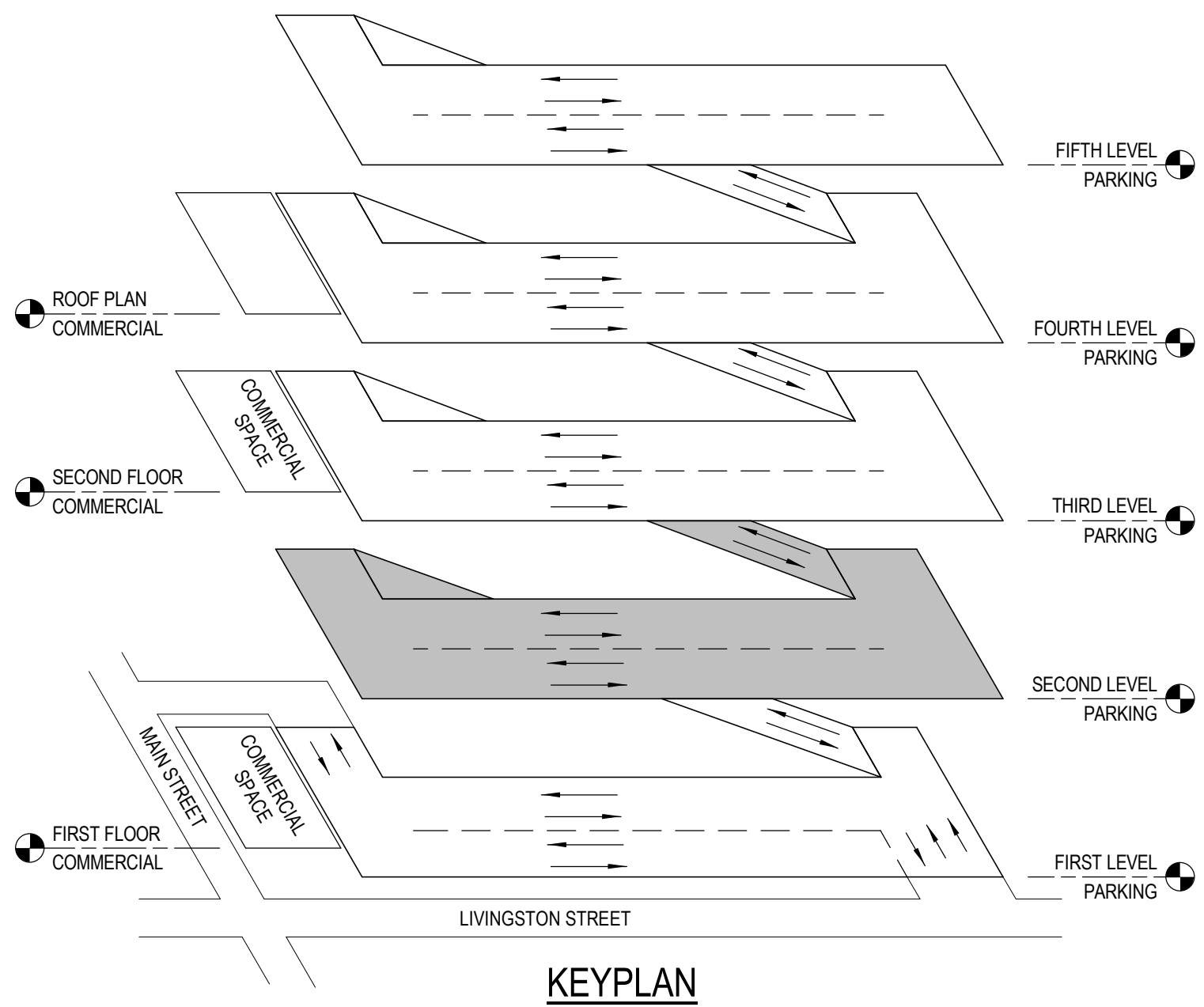
SHEET TITLE:

SECOND LEVEL PARKING PLAN

SHEET NUMBER:

1 SECOND LEVEL PARKING PLAN

1/8" = 1'-0"



KEYPLAN

CONSULTANTS:

PROJECT TITLE:
CAPITOL EAST PARKING GARAGE

211 SOUTH LIVINGSTON STREET, MADISON, WI 53703
MUNIS NUMBER 1627
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CLIENT:

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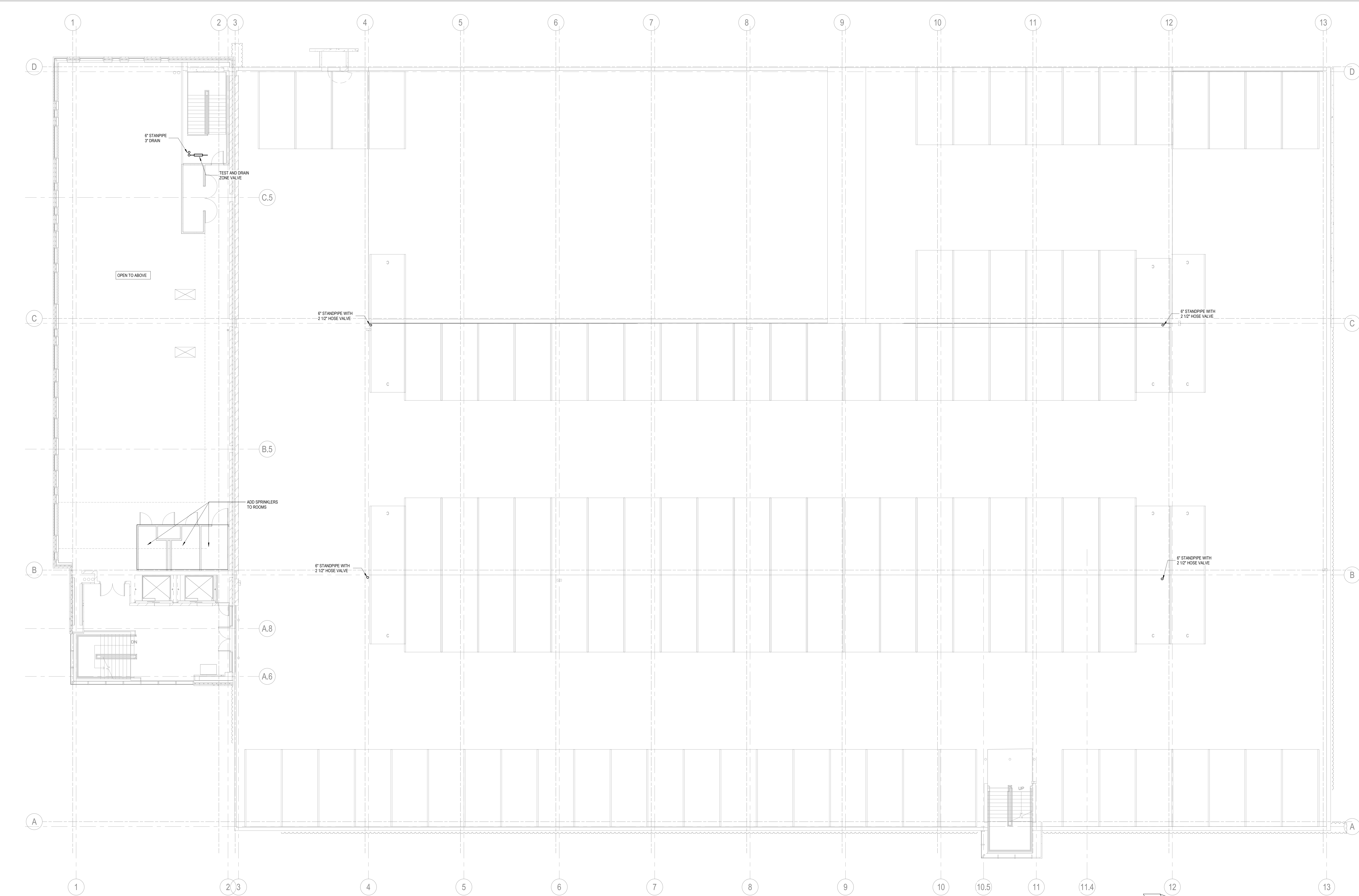
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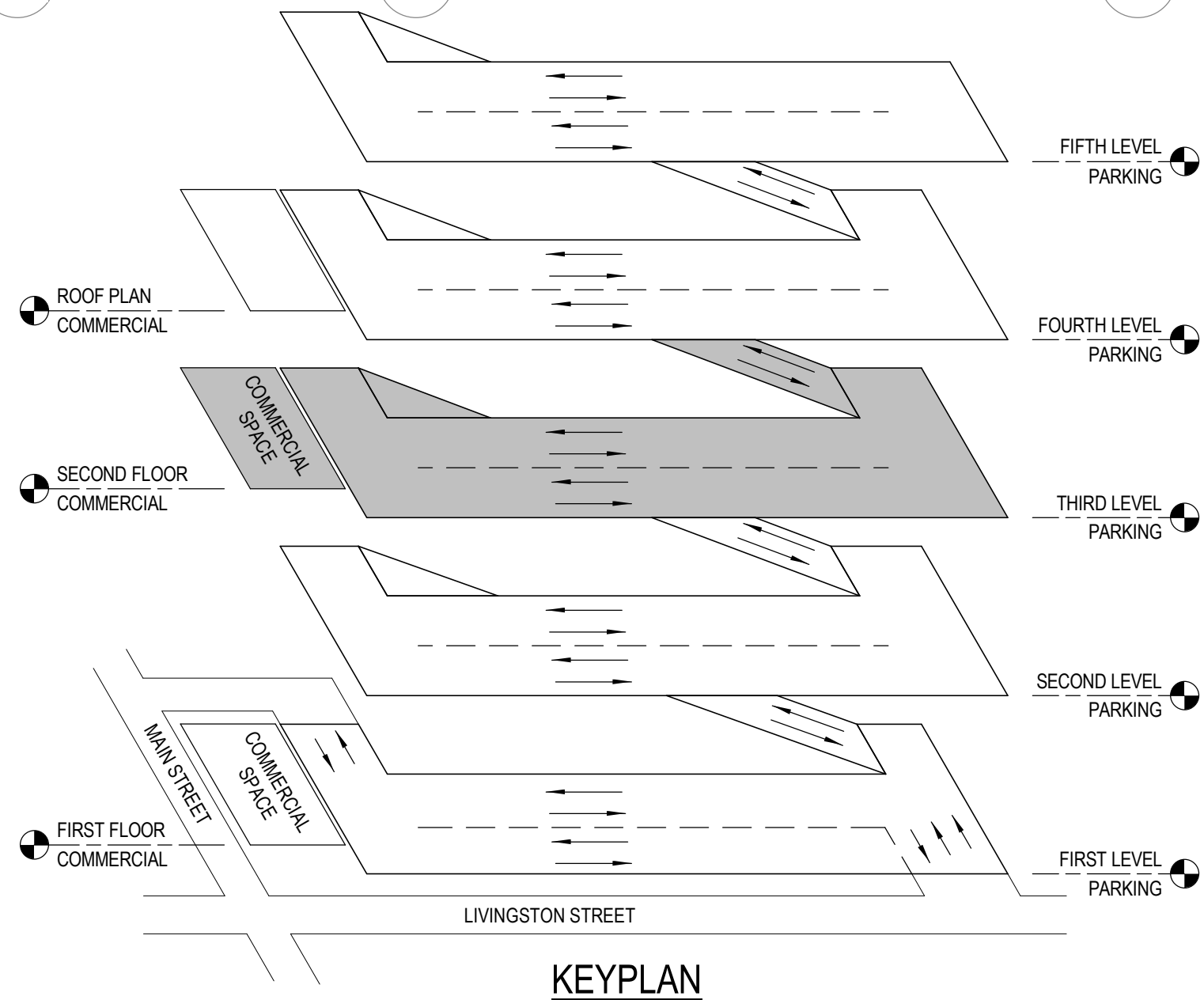
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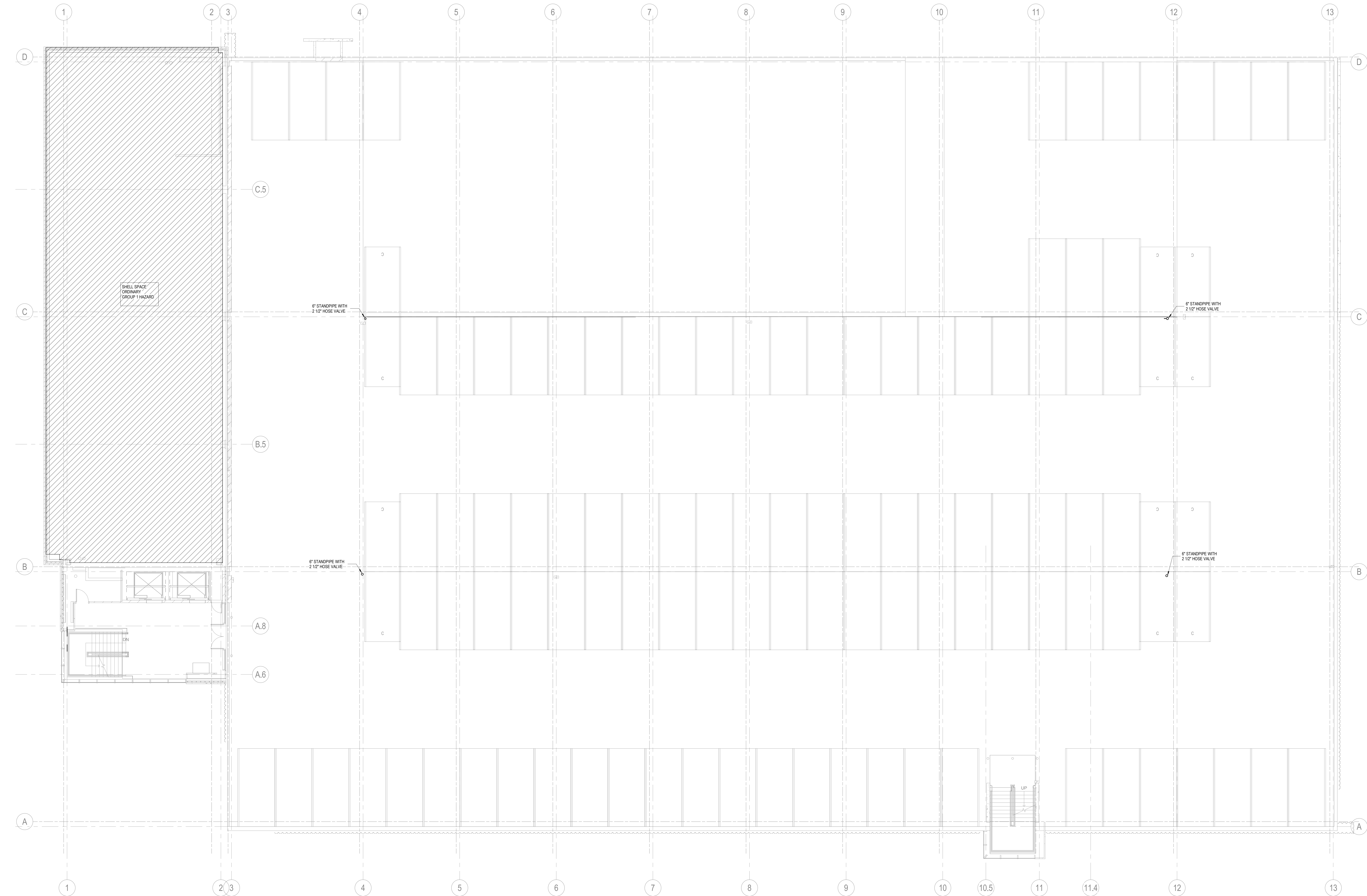
THIRD LEVEL PARKING - SECOND
FLOOR COMMERCIAL PLAN

SHEET NUMBER:



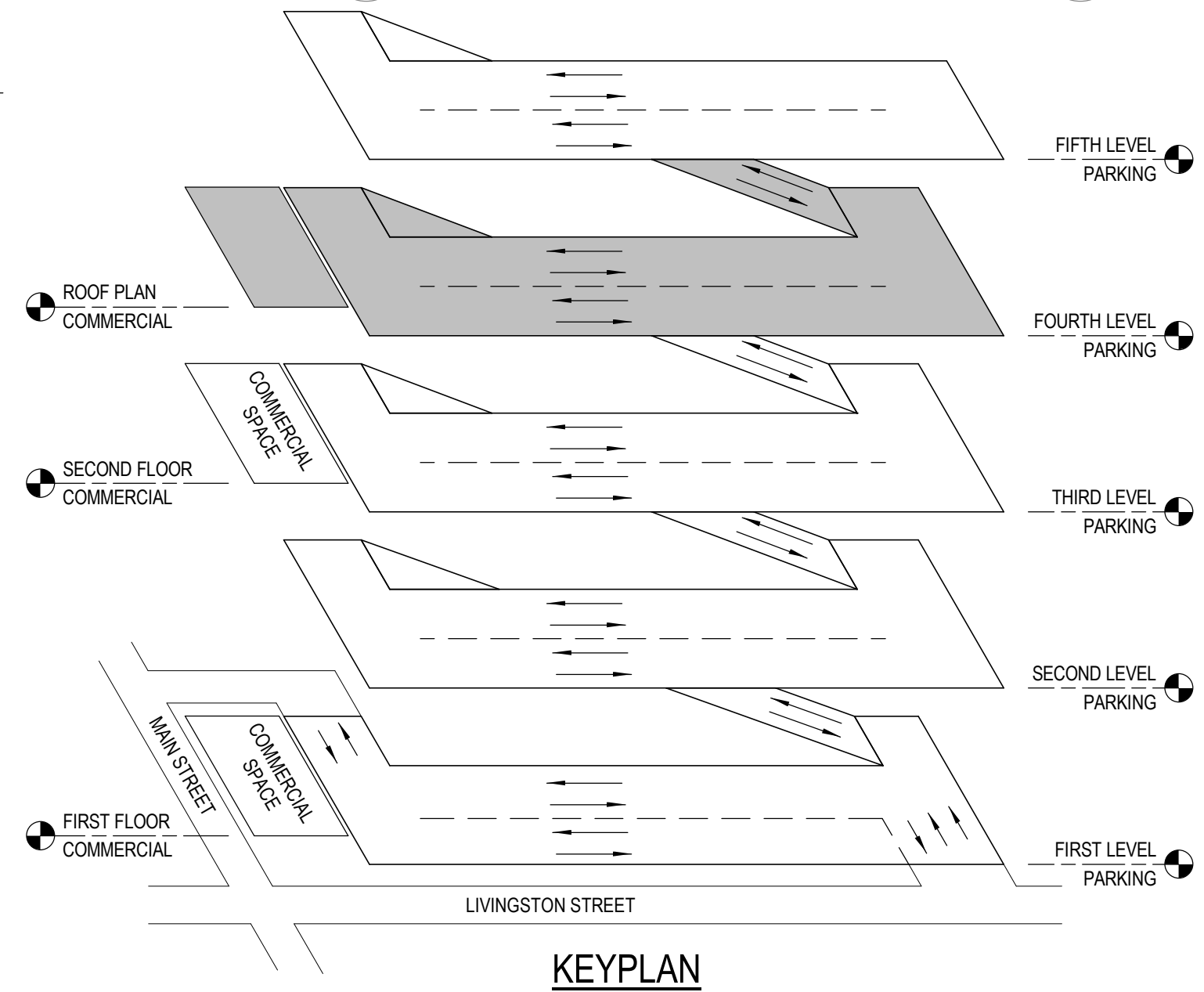
1 THIRD PARKING LEVEL / SECOND FLOOR COMMERCIAL PLAN
1/8" = 1'-0"

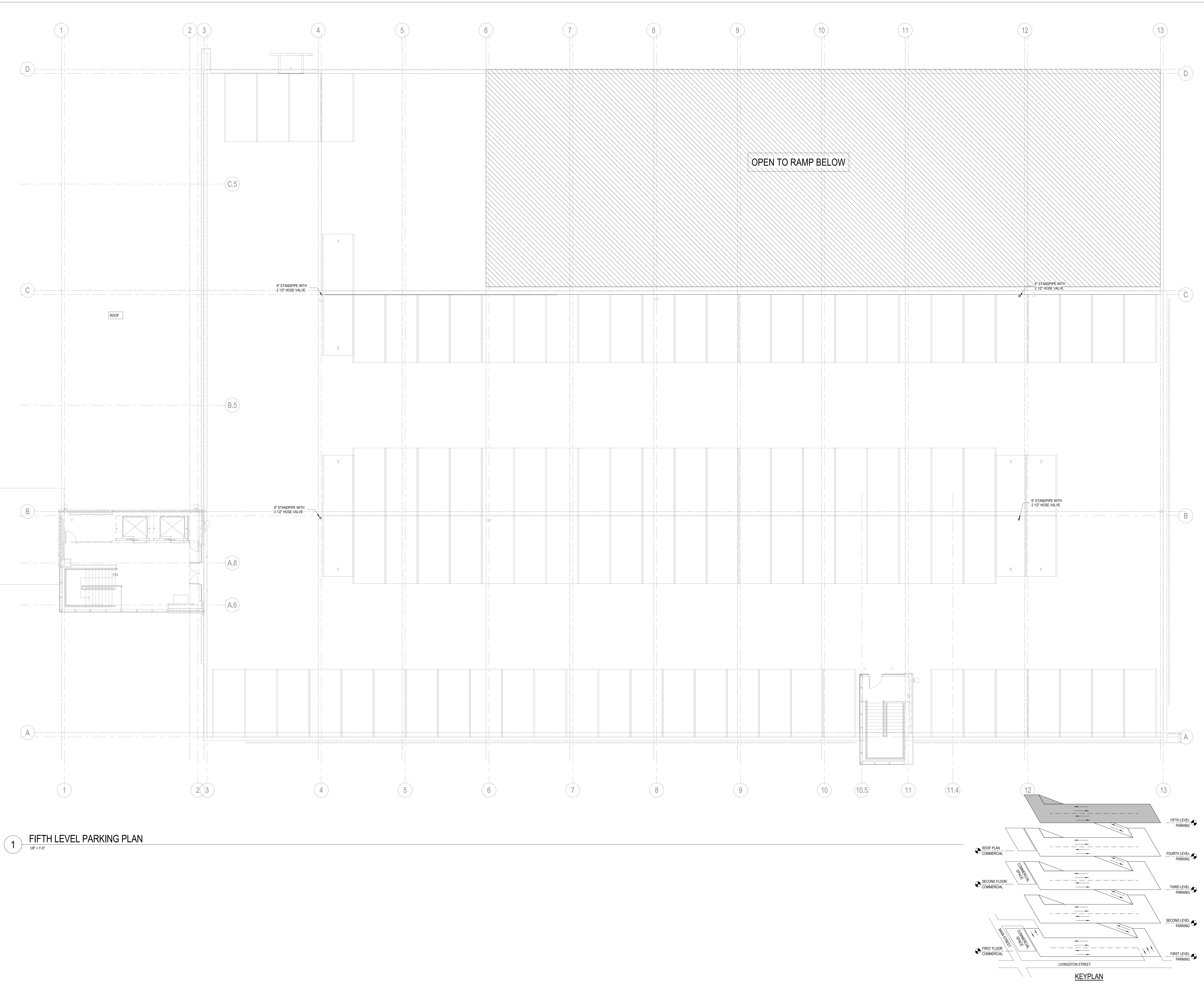


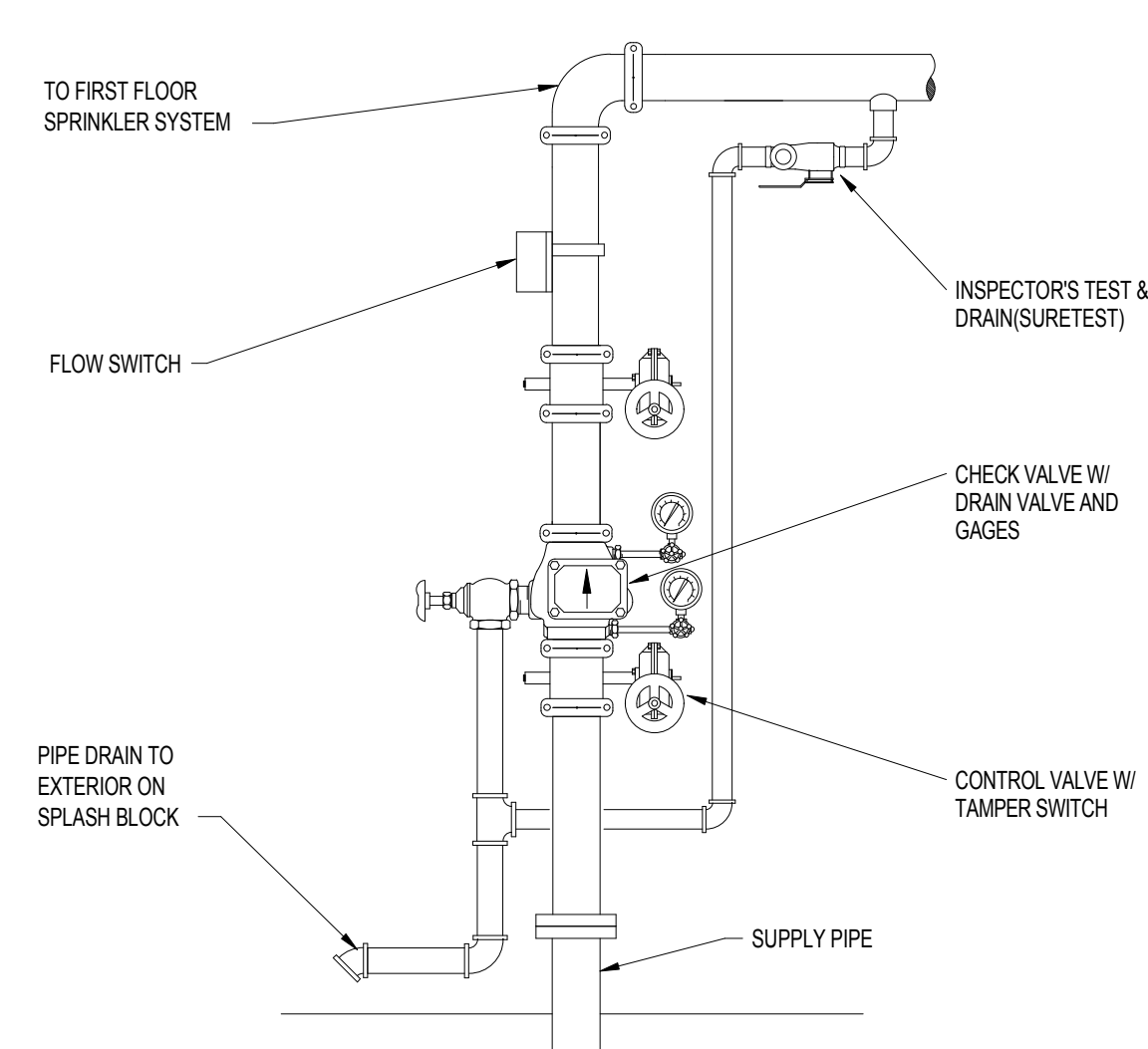


1 FOURTH LEVEL PARKING / COMMERCIAL ROOF PLAN

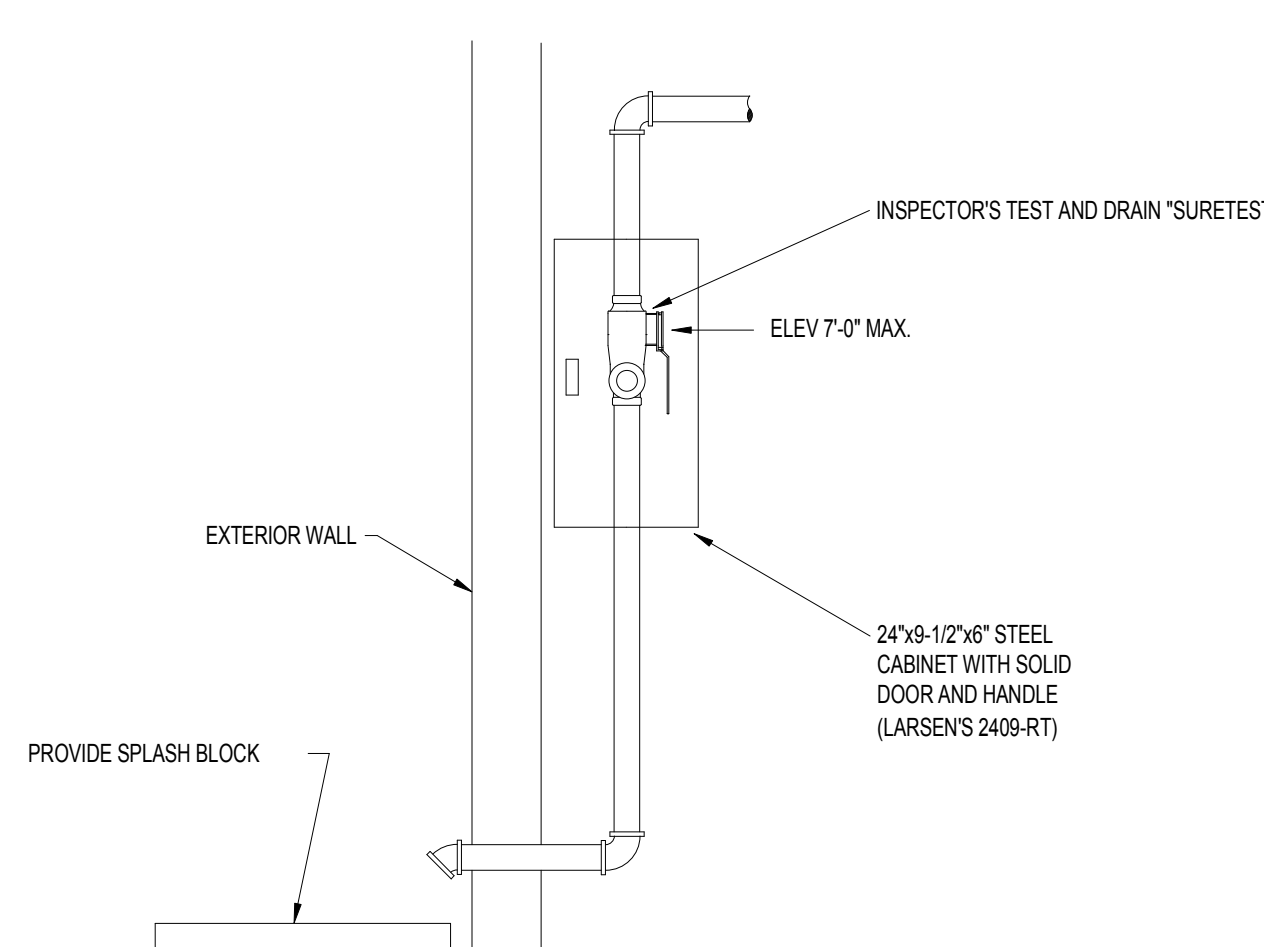
1/8" = 1'-0"



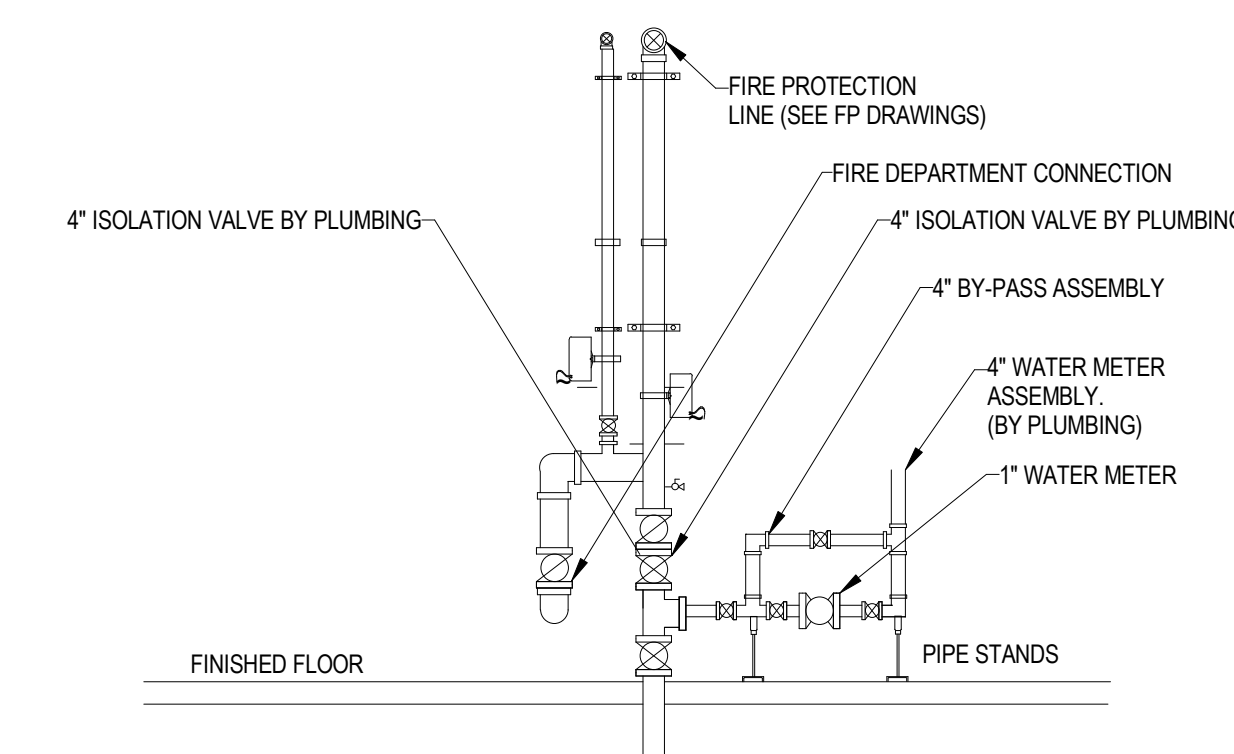




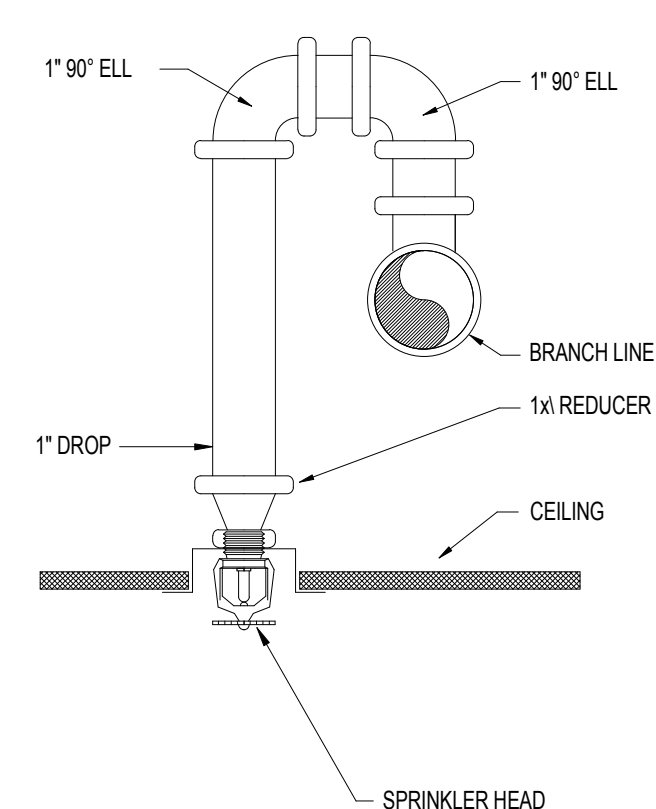
B1 SPRINKLER RISER - WET PIPE SYSTEM
SCALE: NONE



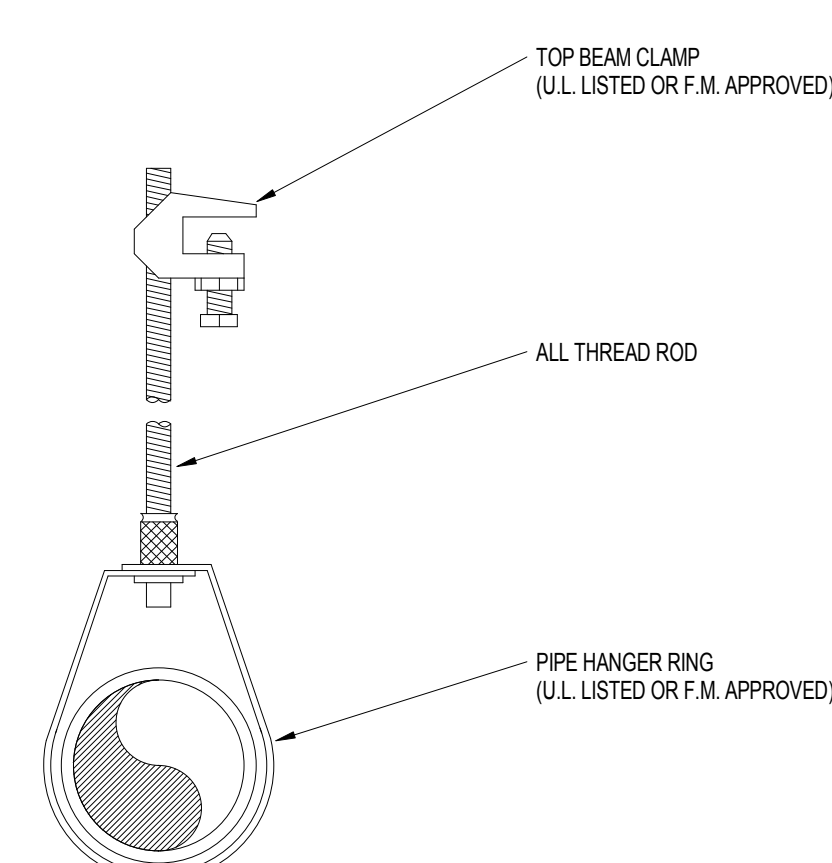
B2 INSPECTOR'S TEST - WET PIPE SYSTEM



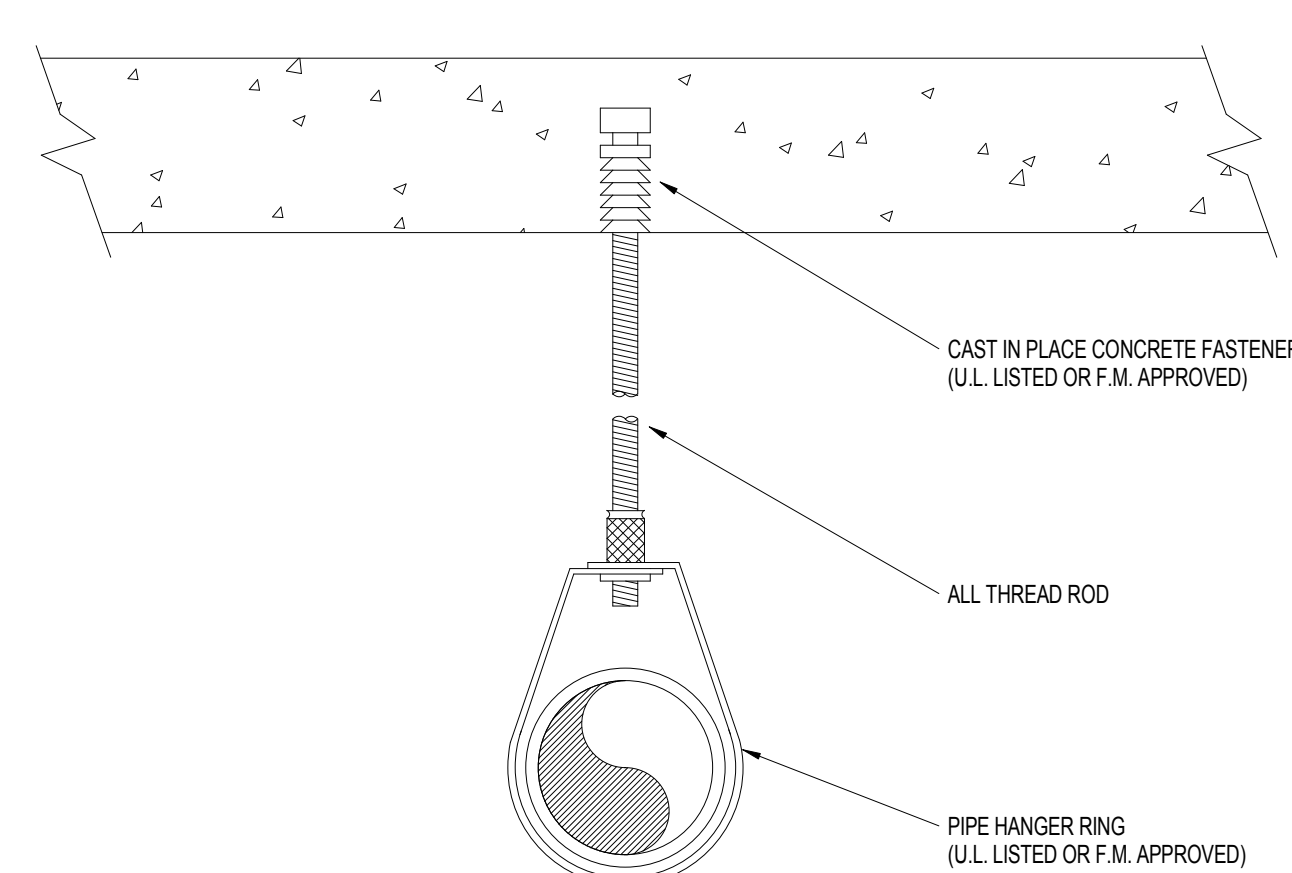
B3 WATER ENTRANCE DETAIL
SCALE: NONE



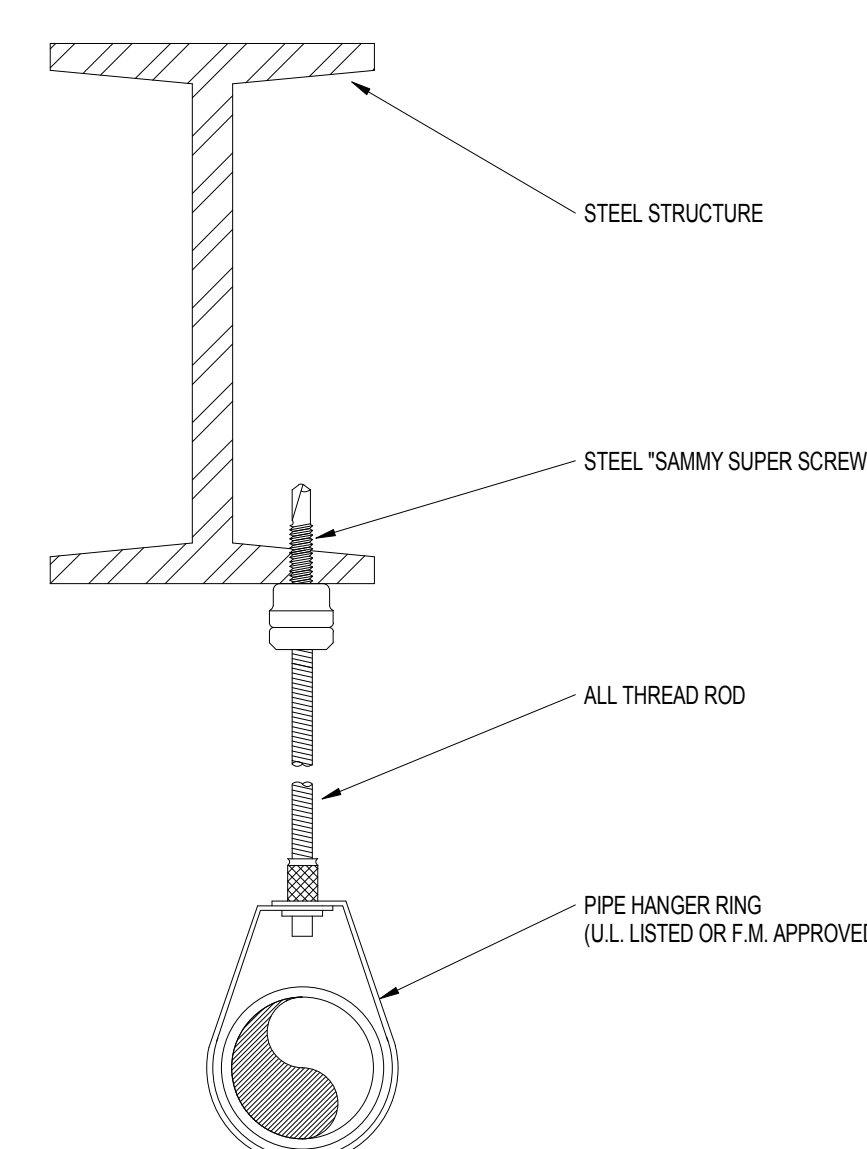
B2 RETURN BEND



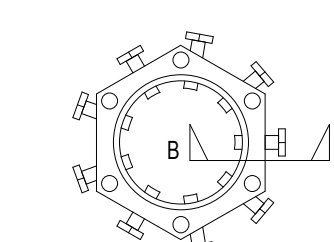
A2 HANGER - STEEL
SCALE: NONE



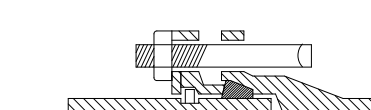
A3 HANGER - CONCRETE
SCALE: NONE



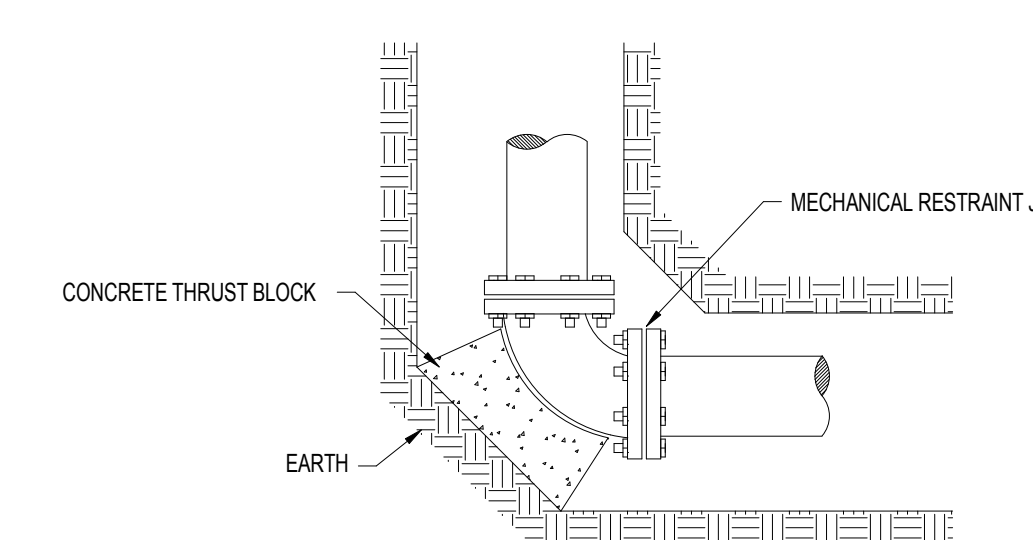
A5 HANGER - STEEL
SCALE: NONE



MECHANICAL RESTRAINT JOINT



DETAIL "BB"



NOTE:
THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED
EARTH. WHERE TRENCH WALLS HAVE BEEN DISTURBED
EXCAVATE ALL LOOSE EARTH AND EXTEND THRUST BLOCK
TO UNDISTURBED EARTH.

PROVIDE EITHER A THRUST BLOCK OR RETAINER GLAND AT EACH TRANSITION.

A4 THRUST BLOCK DETAIL

TABLE 4-7 AREA OF SLURRING FACE OF CONCRETE TUNNEL BUCKLES				
TYPE	1/4 IN. (6.35 mm)	1/2 IN. (12.7 mm)	3/4 IN. (19.0 mm)	TEEL BUCKLE, CAPS
A	0	0	0	35.00 ft. (10.67 m)
B	0	0.08	0.20	0.42
C	0	0.06	0.20	0.42
D	0	0.76	0.34	0.48
E	0	0.1	0.21	0.34
F	0	0.1	0.21	0.34
G	18	18.77	17.0	15.5
H	25	2.52	4.4	5.20
I	25	2.52	4.4	5.20
J	25	2.52	4.4	5.20

NOTE: A= 1/4 IN. (6.35 mm) BUCKLE; B= 1/2 IN. (12.7 mm) BUCKLE; C= 3/4 IN. (19.0 mm) BUCKLE; D= 3/4 IN. (19.0 mm) BUCKLE; E= 3/4 IN. (19.0 mm) BUCKLE; F= 3/4 IN. (19.0 mm) BUCKLE; G= 3/4 IN. (19.0 mm) BUCKLE; H= 3/4 IN. (19.0 mm) BUCKLE; I= 3/4 IN. (19.0 mm) BUCKLE; J= 3/4 IN. (19.0 mm) BUCKLE.

TABLE 4-8
INDEX AT ATTACHMENT OF CAP TO PIPE WALLS

TYPE	1/4 IN. (6.35 mm)	1/2 IN. (12.7 mm)	3/4 IN. (19.0 mm)	TEEL BUCKLE, CAPS
A	4070.55	3762.75	3194.25	5888.5
B	4745.35	1988.50	5345.00	5285.75
C	1444.25	2568.25	1128.75	185.75
D	2773.25	2731.25	2558.50	8438.00
E	3579.25	4534.25	2258.50	1079.75
F	4745.35	1988.50	5345.00	5285.75
G	5765.75	7969.00	7314.75	1285.50
H	5765.75	7969.00	7314.75	1285.50

A5 THRUST BLOCK TABLES

PROJECT INFORMATION:

PROJECT NUMBER: 2016-5051

DATE: 06/30/2017

DRAWN BY: KRS

CHECKED BY: DAK

CHECKED BY: RAK
APPROVED BY: RAK

APPROVED BY: RAK

SCALE: AS NOTED

SET TYPE: BD

SHEE

SHEET NUMBER:



PLUMBING SYMBOLS, ABBREVIATIONS, & SCHEDULES

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS INDICATED HERE ARE USED IN THE DRAWINGS AND MAY NOT APPLY TO THIS PROJECT. ADDITIONAL SYMBOLS MAY BE INDICATED IN THE DRAWINGS.

PLUMBING ABBREVIATIONS

AFF	-	ABOVE FINISHED FLOOR	MBH	-	THOUSANDS OF BTU PER HOUR
AFG	-	ABOVE FINISHED GRADE	MEP	-	MECHANICAL CONTRACTOR
AP	-	ACCESS PANEL	MET	-	MECHANICAL, ELECTRICAL AND PIPING
APPROX	-	APPROXIMATELY	MFR	-	MANUFACTURER
ARCH	-	ARCHITECTURAL	MNL	-	MANUAL
AVG	-	AVERAGE	MISC	-	MISCELLANEOUS
			MTD	-	MOUNTED
			MTG	-	MOUNTING
BUDG	-	BUILDING	NA	-	NOT APPLICABLE
BOT	-	BOTTOM	NG	-	NOT IN CONTRACT
BOP	-	BOTTOM OF PIPE	NO	-	NUMBER
BT	-	BATH TUB	NPS	-	NOMINAL PIPE SIZE
BTU	-	BRITISH THERMAL UNITS	NTS	-	NOT TO SCALE
BTUH	-	BRITISH THERMAL UNITS PER HOUR			
BV	-	BALANCING VALVE			
CAP	-	CEILING ACCESS PANEL	OC	-	ON CENTER
CH	-	CUBIC FEET PER MINUTE	OD	-	OUTSIDE DIAMETER
CFM	-	CUBIC FEET PER HOUR	OFI	-	OWNER FURNISHED, CONTRACTOR INSTALLED
CLG	-	CEILING	OFI	-	OWNER FURNISHED, OWNER INSTALLED
CO	-	CLEANOUT	PC	-	PLUMBING CONTRACTOR
COND	-	CONDUCTOR	PCF	-	POUNDS PER CUBIC FOOT
CONT	-	CONTRACTOR	PD	-	PRESSURE DROP
CTR	-	CENTER	PH	-	PHASE
CJ	-	CUPPER	PLBG	-	PLUMBING
CV	-	CHECK VALVE	POC	-	POINT OF CONNECTION
OW	-	COLD WATER	PP	-	POLYPROPYLENE
OWU	-	WATER FIXTURE UNITS	PPH	-	POUNDS PER HOUR
			PRV	-	PRESSURE RELIEF VALVE
DET	-	DETAIL	PSF	-	POUNDS PER SQUARE FOOT
DFU	-	DRAINAGE FIXTURE UNITS	PSI	-	POUNDS PER SQUARE INCH
DA	-	DIAMETER	PSIA	-	POUNDS PER SQUARE INCH ABSOLUTE
DM	-	DIMENSION	PSIG	-	POUNDS PER SQUARE INCH GAUGE
DN	-	DOWN	PVC	-	POLYVINYL CHLORIDE
DWG	-	DRAWING			
E	-	EXISTING	RD	-	ROOF DRAIN
ELEV	-	ELEVATION	RSC	-	RECESSED
EM	-	EMERGENCY	RF	-	ROOF
EQUIP	-	EQUIPMENT	R	-	ROUGH-IN
ET	-	EXPANSION TANK	RPZ	-	REDUCED PRESSURE ZONE VALVE
ETR	-	EXISTING TO REMAIN	RV	-	RELIEF VALVE
EVH	-	ELECTRIC WATER HEATER			
EXST	-	EXISTING	S	-	SLOPE
			SCH	-	SCHEDULE
F	-	FUTURE	SH	-	SHOWER
FCO	-	FLOOR CLEANOUT	SHT	-	SHEET
FD	-	FLOOR DRAIN	SOG	-	SLAB ON GRADE
FDC	-	FIRE DEPARTMENT CONNECTION	SPEC	-	SPECIFICATION
FPE	-	FINISHED FLOOR ELEVATION	SO	-	SQUARE
FLR	-	FLOOR	SS	-	SERVICE SINK
FP	-	FIREPROOF	SSS	-	STAINLESS STEEL
FFM	-	FEET PER MINUTE	STD	-	STANDARD
FFS	-	FEET PER SECOND	T&P	-	TEMPERATURE AND PRESSURE
FS	-	FLOOR SINK	TBR	-	TO BE REMOVED
FT	-	FEET	TD	-	TRENCH DRAIN
FTG	-	FOOTING	TDFU	-	TOTAL DRAIN FIXTURE UNITS
FU	-	FIXTURE UNITS	TDMP	-	TEMPERATURE
			TOP	-	TOP OF PIPE
G	-	GAS	TOS	-	TOP OF SLAB
GAL	-	GALLON	TSTAT	-	THERMOSTAT
GC	-	GENERAL CONTRACTOR	TWU	-	TOTAL WATER FIXTURE UNITS
GPM	-	GALLONS PER MINUTE	TYP	-	TYPICAL
GPH	-	GALLONS PER HOUR			
HB	-	HOSE BIBB	UNO	-	UNLESS OTHERWISE NOTED
HD	-	HUB DRAIN			
HVAC	-	HEATING, VENTILATING & AIR CONDITIONING	V	-	VENT
HW	-	HOT WATER	VB	-	VACUUM BREAKER
HWFU	-	HOT WATER FIXTURE UNITS	VTR	-	VENT THRU ROOF
HWIR	-	HOT WATER RETURN			
ID	-	INSIDE DIAMETER	W	-	WASTE
IE	-	INVERT ELEVATION	W	-	WITH
IN	-	INCHES	WO	-	WITHOUT
			WHA	-	WATER HAMMER ARRESTOR
			WLC	-	WALL CLEANOUT
KO	-	KNOCK OUT	WC	-	WATER CLOSET
			WF	-	WASH FOUNTAIN
L	-	LAVATORY	WH	-	WATER HEATER
LBS	-	POUNDS	WM	-	WASHING MACHINE
LBRH	-	POUNDS PER HOUR	WOFU	-	WATER SUPPLY FIXTURE UNITS
			WG	-	WATER GAUGE
MAX	-	MAXIMUM			
MB	-	NOP BASIN	YCO	-	YARD CLEAN OUT

PIPE FITTINGS

	FLANGE		ELBOW DOWN
	UNION		ELBOW UP
	ANCHOR		TEE DOWN
	PIPE GUIDE		TEE UP
	TEE BRANCH		PIPE CAP
	LINE CONTINUATION BREAK		VALVE IN VERTICAL
	PLUMBING FIXTURE STOPS		DOUBLE WYE
	PIPELINE STRAINER		WYE
			WYE WITH VENT UP

WATER SUPPLY CALCULATION

USING THE FORMULA, FIND THE PRESSURE AVAILABLE FOR UNIFORM LOSS (PSI/100' OF PIPE)

WHERE: $B = C \times D \times E \times 100 \div A$

A. 8 PRESSURE AVAILABLE FOR UNIFORM LOSS (PSI/100' OF PIPE)

B. 86.0 AVAILABLE PRESSURE AT THE CONTROL VALVE

C. 12.0 PRESSURE NEEDED AT CONTROLLING FIXTURE

D. 19.1 DIFFERENCE IN ELEVATION BETWEEN WATER METER AND CONTROLLING FIXTURE IN FEET @ 4 X 4.34 PSI/FT

E. 0.0 PRESSURE LOSS DUE TO WATER SOFTENERS, WATER TREATMENT DEVICES, INSTANTANEOUS WATER HEATERS, AND BACKFLOW PREVENTORS. CONVENTIONAL WATER HEATERS USUALLY DO NOT HAVE A PRESSURE LOSS.

F. 492.5 DEVELOPED LENGTH FROM WATER METER TO CONTROLLING FIXTURE IN FEET @ 2.0 X 1.5

WITH PRESSURE AVAILABLE FOR UNIFORM LOSS, GO TO APPLICABLE TABLE FOR DISTRIBUTION SIZING.

PIPING SYSTEM LABELS

WATER PIPING SYSTEMS:

---	COLD WATER
---	HOT WATER
---	HOT WATER RETURN
---	NON-POTABLE WATER

SITE PIPING SYSTEMS:

---	SAN	SANITARY SEWER
---	ST	STORM SEWER
---	W	WATER LINE

WASTE AND VENT SYSTEMS:

---	CWV	CLEARWATER VENT
---	CWV	CLEARWATER WASTE
---	OD	OVERFLOW DRAIN LINE
---	ST	STORM
---	SSD	SUBSOIL DRAIN LINE
---	UD	UNDERFLOOR FOR WASTE OR SOIL
---	SSS	SUBSOIL, STORM & FORCE MAIN
---	SV	SANITARY VENT
---	SW	WASTE OR SOIL LINE

DRAINS AND CLEANOUTS

	FLOOR DRAIN		FIXTURE WASTE TRAP
	FLOOR SINK		CLEANOUT
	ROOF DRAIN		CO
	HUB DRAIN		FLOOR CLEANOUT

PIPE VALVES AND SPECIALTIES

	ANGLE VALVE		BACKFLOW PREVENTER
	BALANCING VALVE		PRESSURE GAUGE
	BALL VALVE		THERMOMETER
	BUTTERFLY VALVE		HOB AND WALL HYDRANT
	CHECK VALVE		WATER HAMMER ARRESTOR
	DRAIN VALVE		PRESSURE RELIEF VALVE
	GAS SHUTOFF VALVE		SOLENOID VALVE
	GATE VALVE		

REFERENCE SYMBOLS

	DETAIL REFERENCE TOP DESIGNATES DETAIL NUMBER BOTTOM DESIGNATES SHEET NUMBER		EQUIPMENT NAME AND NUMBER
	SECTION REFERENCE TOP DESIGNATES SECTION NUMBER BOTTOM DESIGNATES SHEET NUMBER		PLAN NOTE NUMBER
	ELEVATION SYMBOL		REVISION NUMBER
			POINT OF CONNECTION

PLUMBING DRAIN AND CLEANOUT SCHEDULE

TAG	MANUFACTURER	MODEL NO.	REMARKS
DD-1	ZURN	2335	SQUARE TOP HEAVY-DUTY DRAIN, OVEN CURED AC RESISTANT EPOXY COATED ALUMINUM BODY WITH BOTTOM OUTLET, TOP MEMBRANE CLAMPING COLLAR, ANTIPOUNDING SLOTS, SEDIMENT BUCKET AND HEAVY-DUTY ANTI-TILT HINGED SLOTTED GRATE WITH STAINLESS STEEL HINGE PINS
FCO	ZURN	Z1400-BP	CAST IRON BODY, ADJUSTABLE FLOOR CLEANOUT WITH NICKEL BRONZE TOP AND GAS AND WATER-TIGHT ABS TAPERED BRONZE PLUG (USE IN FINISHED AREAS)
YCO	ZURN	Z1402	TUR-TOP NON-ADJUSTABLE FLOOR CLEANOUT WITH DURA-COATED CAST IRON BODY, WITH GAS AND WATER-TIGHT ABS TAPERED THREAD PLUG, AND ROUND SCORATED CAST IRON HEAVY-DUTY SECURED COVER AND FRAME.
DS-1	JR. SMITH	SERIES 1770	DOWNSPOUT NOZZLE, POLISHED CAST BRASS CONSTRUCTION WITH CLAMPING RING.

PLUMBING EQUIPMENT SCHEDULE

TAG	MANUFACTURER	MODEL NO.	REMARKS
RD-1	WADE	3000	DURA-COATED CAST IRON BODY, COMBINATION MEMBRANE FLASHING CLAMP/GRVEL GUARD, UNDERDECK CLAMP, ADJUSTABLE EXTENSION, ROOF SUMP RECEIVER, LOW-SILOUETTE CAST IRON DOME.
ORD-1	WADE	3000	DURA-COATED CAST IRON BODY, COMBINATION MEMBRANE FLASHING CLAMP/GRVEL GUARD, UNDERDECK CLAMP, ADJUSTABLE EXTENSION, ROOF SUMP RECEIVER, LOW-SILOUETTE CAST IRON DOME.
SP-1	B&G	MODEL 2EC	1/3 HP, 50 GPM @ 20' FTHD, SINGLE PUMP, SINGLE MECHANICAL SEAL, CAST IRON CONSTRUCTION, STAINLESS STEEL SHUT, 50 FOOT POWER CORD, SINGLE PHASE -115V, OR 208-230 VOLT ALDERON 7410 OIL ALERT.

PLUMBING SHEET INDEX

FP-001	FIRE PROTECTION SYMBOLS, SCHEDULES, AND ABBREVIATIONS
FP-101	FIRST LEVEL PARKING - FIRST FLOOR COMMERCIAL PLAN
FP-102	SECOND LEVEL PARKING PLAN
FP-103	THIRD LEVEL PARKING - SECOND FLOOR COMMERCIAL PLAN
FP-104	FOURTH LEVEL PARKING - COMMERCIAL ROOF PLAN
FP-105	FIFTH LEVEL PARKING PLAN
FP-501	FIRE PROTECTION DETAILS
P-001	PLUMBING SYMBOLS, SCHEDULES, AND ABBREVIATIONS
P-100	BELOW SLAB PLUMBING PLAN
P-101	FIRST LEVEL PARKING - FIRST FLOOR COMMERCIAL PLAN
P-102	SECOND LEVEL PARKING PLAN
P-103	THIRD LEVEL PARKING - SECOND FLOOR COMMERCIAL PLAN
P-104	FOURTH LEVEL PARKING - COMMERCIAL ROOF PLAN
P-105	FIFTH LEVEL PARKING PLAN
P-501	PLUMBING DETAILS
P-601	PLUMBING ISOMETRIC
P-602	PLUMBING ISOMETRIC



B1 BELOW SLAB PLUMBING PLAN

1/8" = 1'-0"

INSTALL 4" DRAIN TILE ON EITHER
SIDE OF A/C TUNNEL. SEE STRUCTURAL
DRAWINGS FOR DETAILS OF TILE LOCATION
AND CAST IN PLACE SUMP DEPRESSIONS
(NO SUMP PUMP REQUIRED)

FINISHED FLOOR ELEVATIONS - 852.00

INVERT ELEVATION = 848.3'

GARAGE WASH-DOWN
DIVERTER VALVES

2" CONDENSATE
TO TRAP

6" ST.
BYPASS FOR ANNUAL
CLEANING

6" ST

6" ST UP TO DD-1

6" ST UP TO DD-1

6" ST UP TO DD-1

6" ST UP TO DD-1

6" ST UP TO DD-1

6" ST UP TO DD-1

6" ST UP TO DD-1

6" ST UP TO DD-1

6" ST UP TO DD-1

6" ST UP TO DD-1

6" ST UP TO DD-1

6" ST UP TO DD-1

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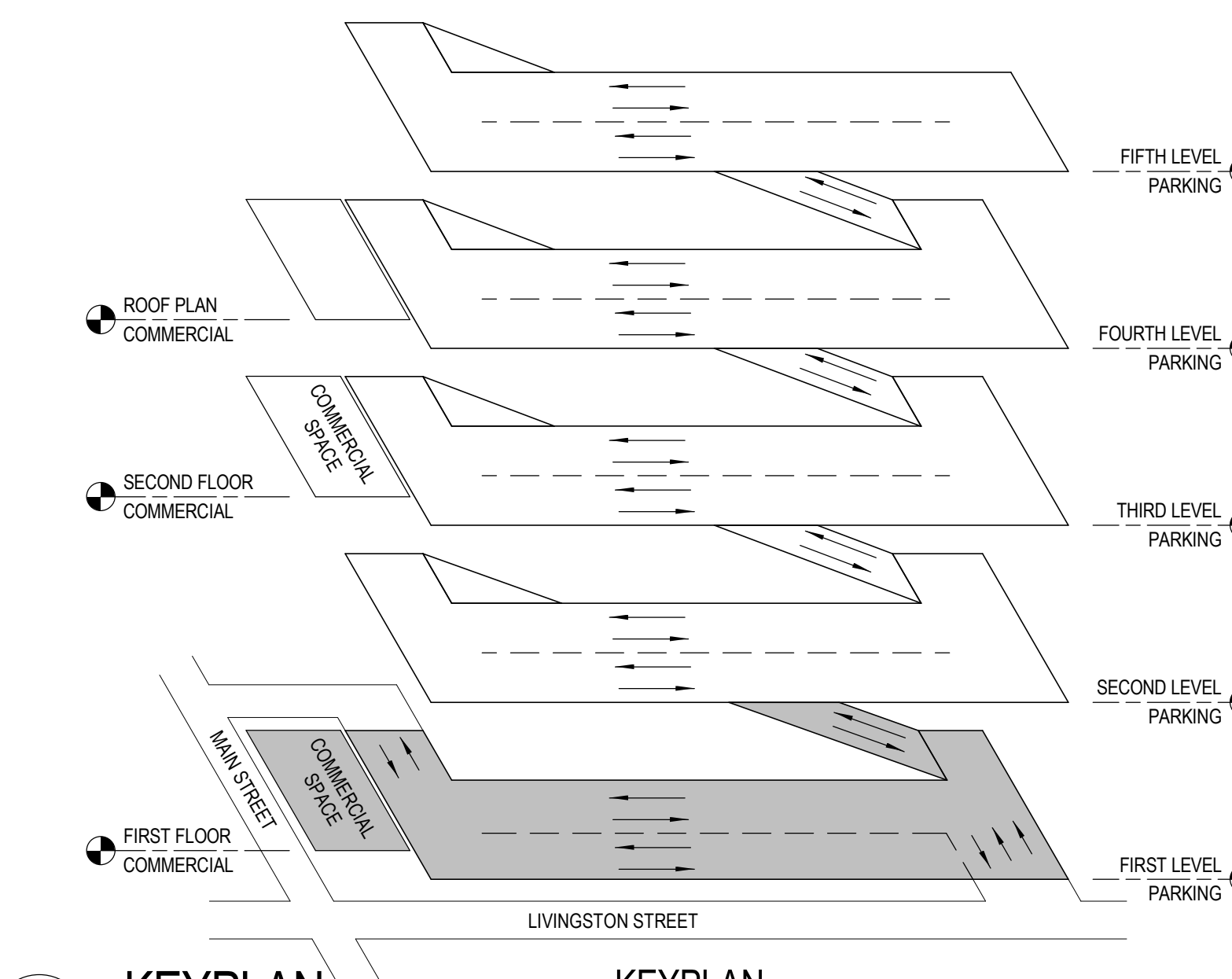
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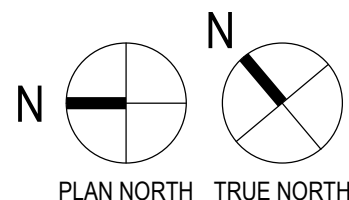
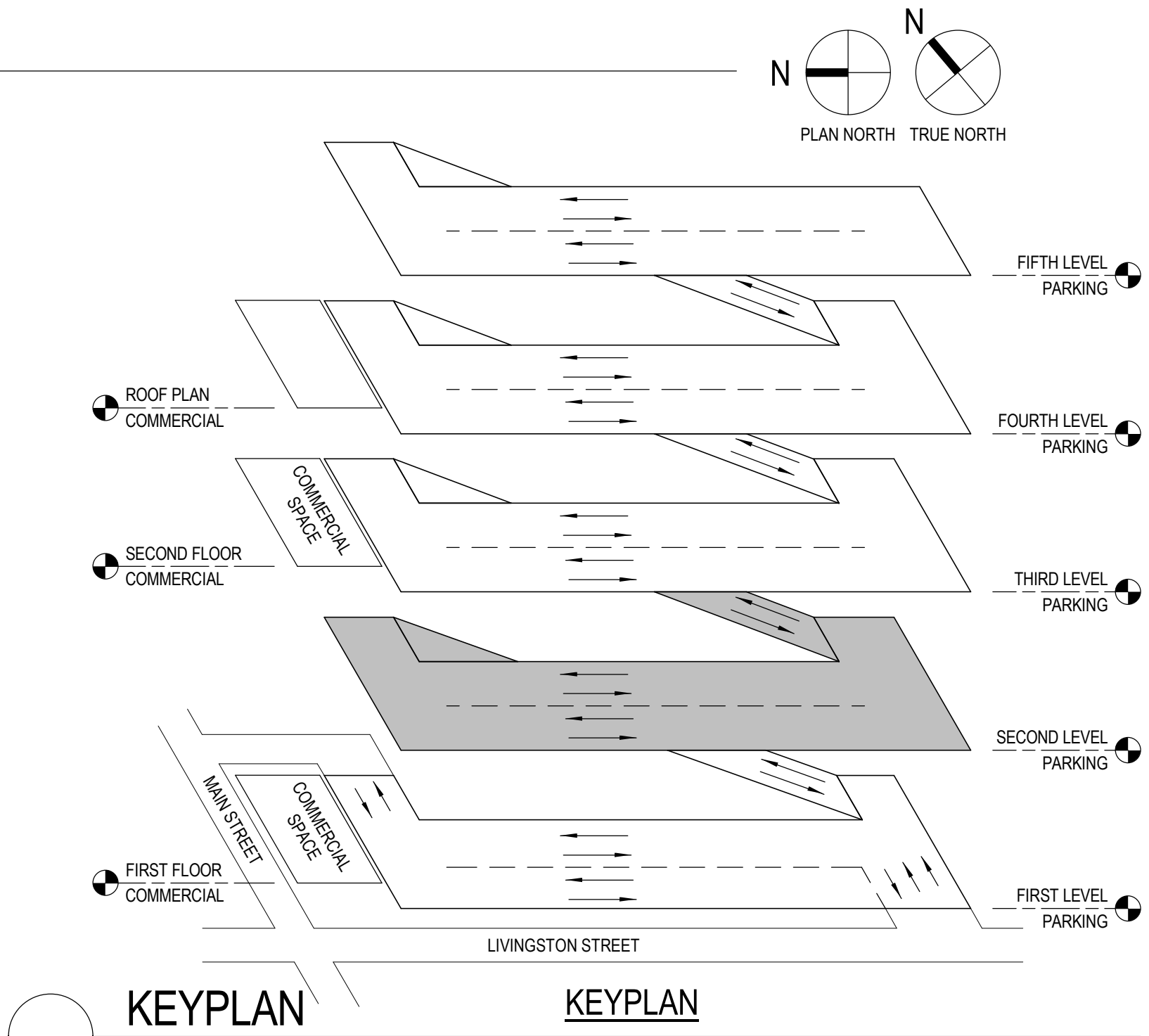
6" ST UP



KEYPLAN KEYPLAN



B1 SECOND PARKING LEVEL PLAN
1/8" = 1'-0"



5126 West Terrace Drive,
Suite 111
Madison, WI 53718-8346
608 / 242 1550
608 / 242 0787 fax

www.graef-usa.com

CONSULTANTS:

PROJECT TITLE:
CAPITOL EAST PARKING GARAGE

211 SOUTH LIVINGSTON STREET, MADISON, WI 53703
MUNIS NUMBER 1627
CONTRACT NUMBER 7951

CLIENT:
CITY OF MADISON PARKING UTILITY
215 MARTIN LUTHER KING, JR BLVD
MADISON, WISCONSIN 53701-2086



ISSUE:

NO DATE DESCRIPTION

PROJECT INFORMATION:

PROJECT NUMBER: 2016-5051

DATE: 06/30/2017

DRAWN BY: MRK

CHECKED BY: RAK

APPROVED BY: RAK

SCALE: AS NOTED

SET TYPE: BD

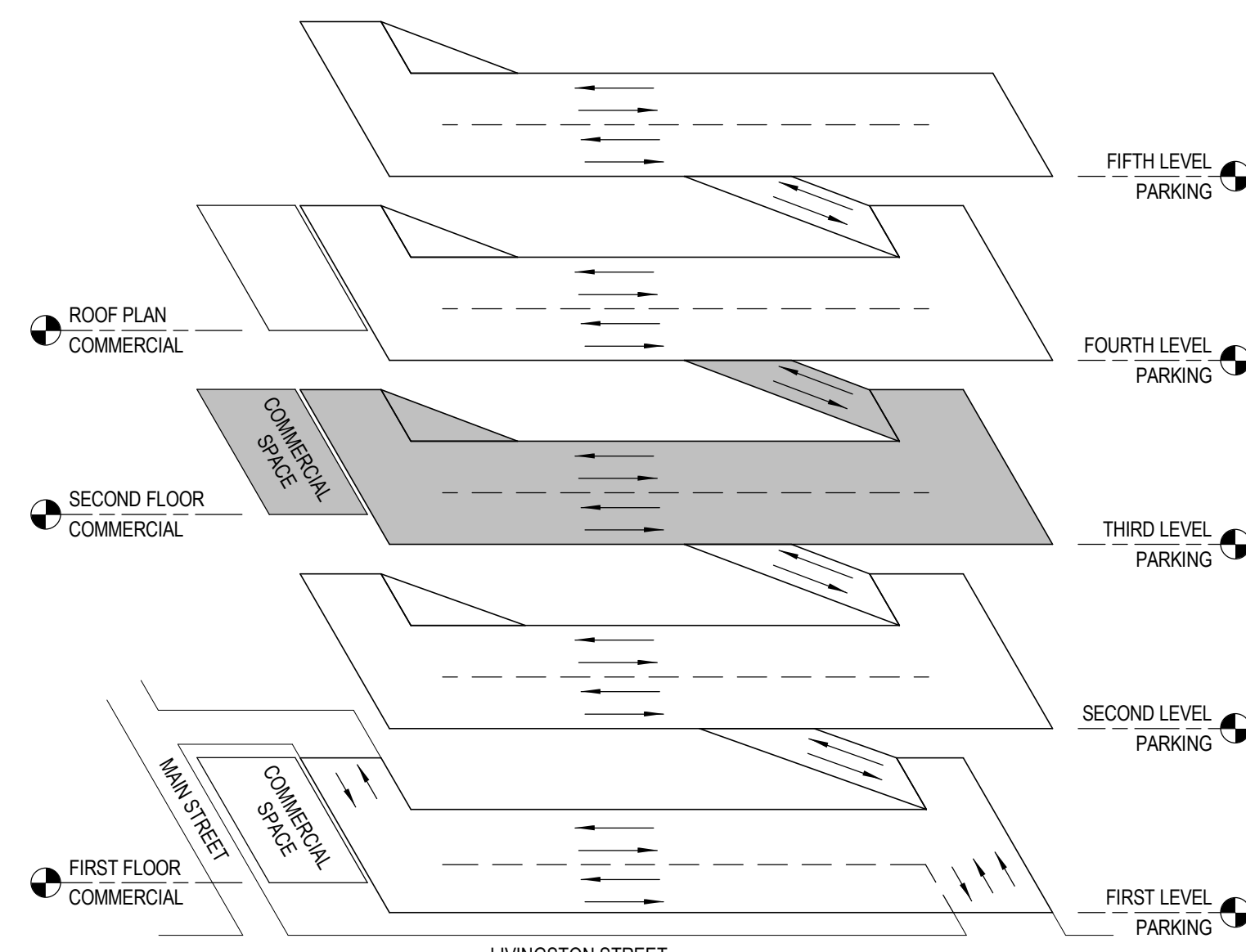
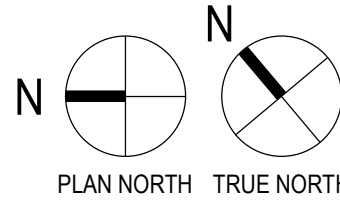
SHEET TITLE:

THIRD LEVEL PARKING - SECOND
FLOOR COMMERCIAL PLAN

SHEET NUMBER:

B1 THIRD PARKING LEVEL / SECOND FLOOR PLUMBING PLAN

1/8" = 1'-0"

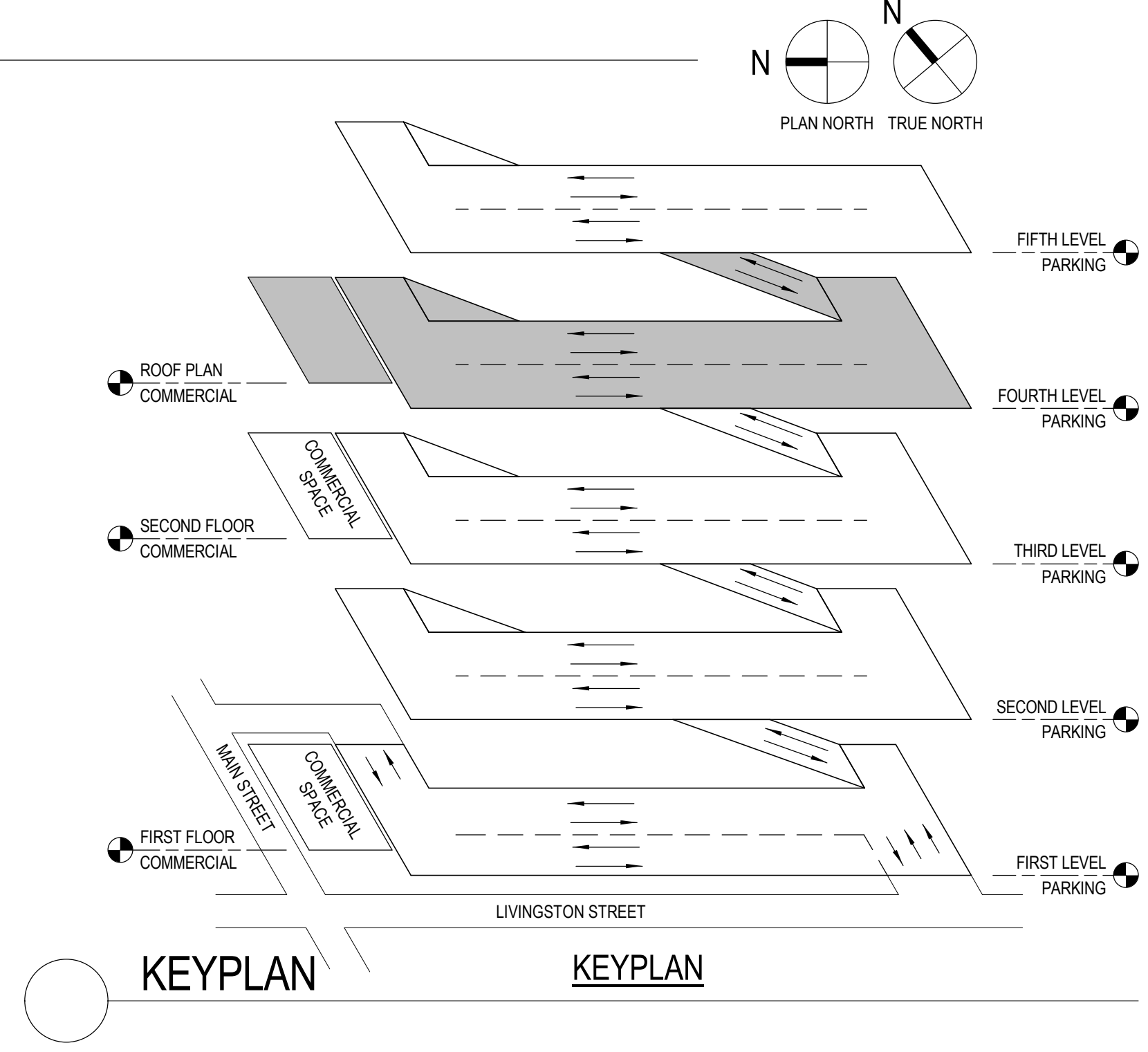


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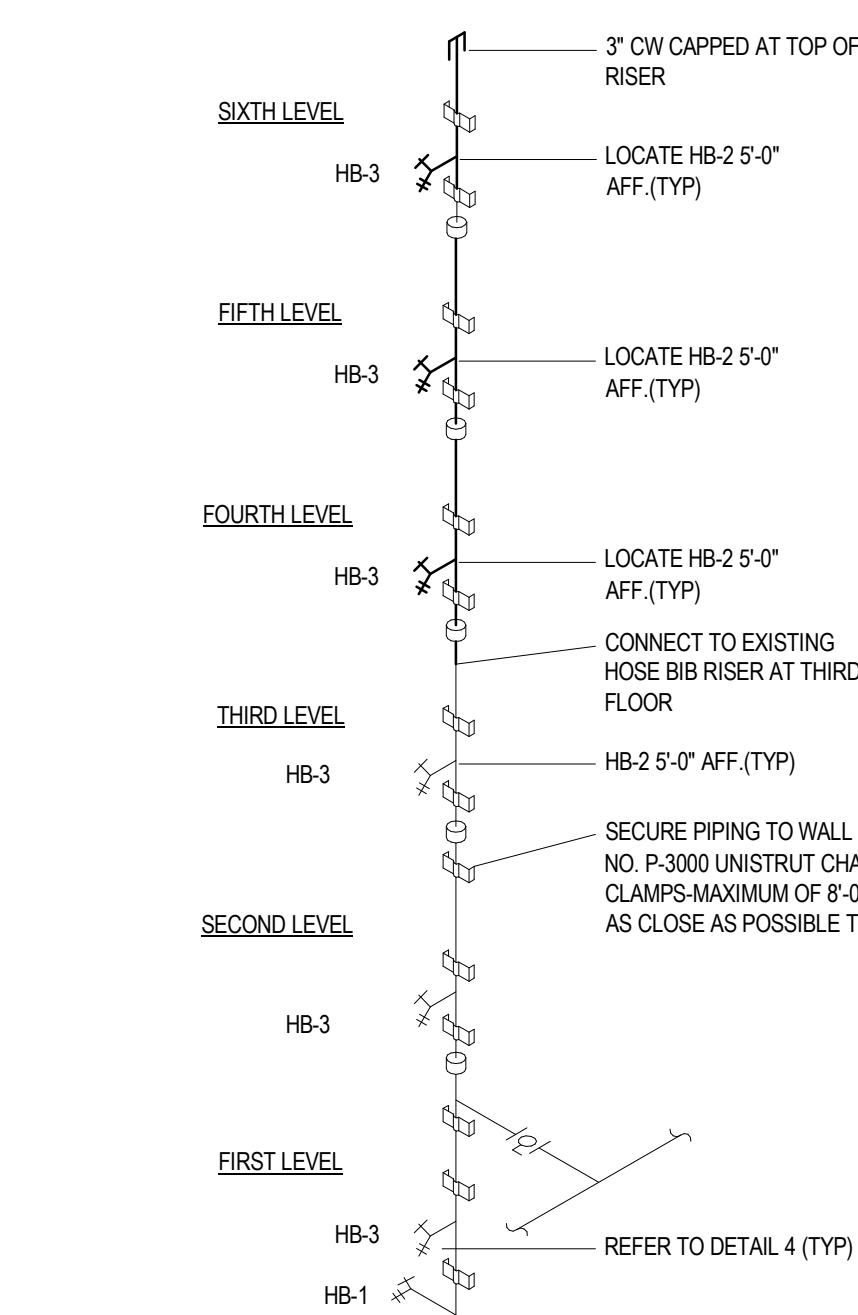
KEYPLAN



B1 FOURTH PARKING LEVEL PLUMBING PLAN
1/8" = 1'-0"

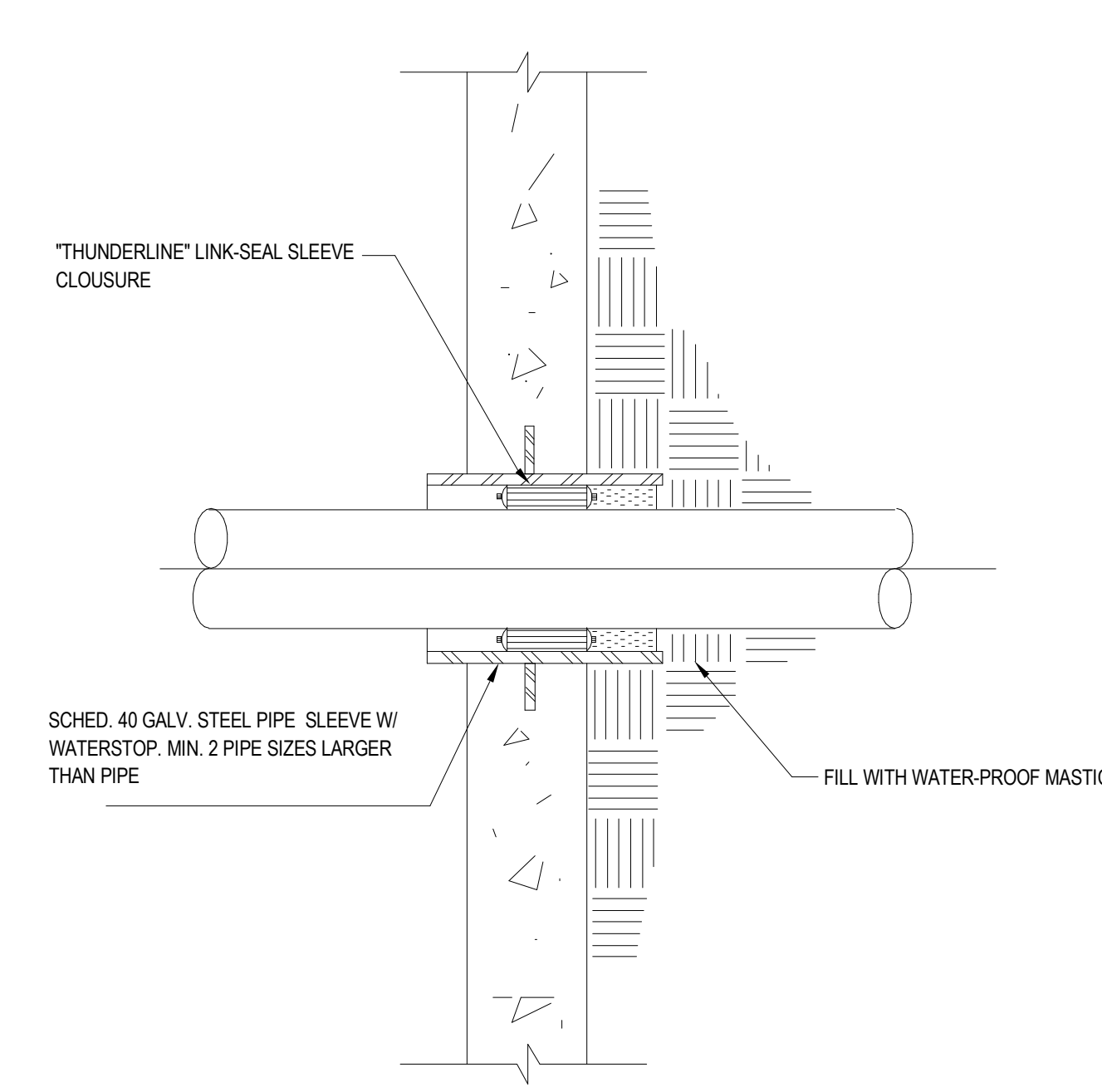






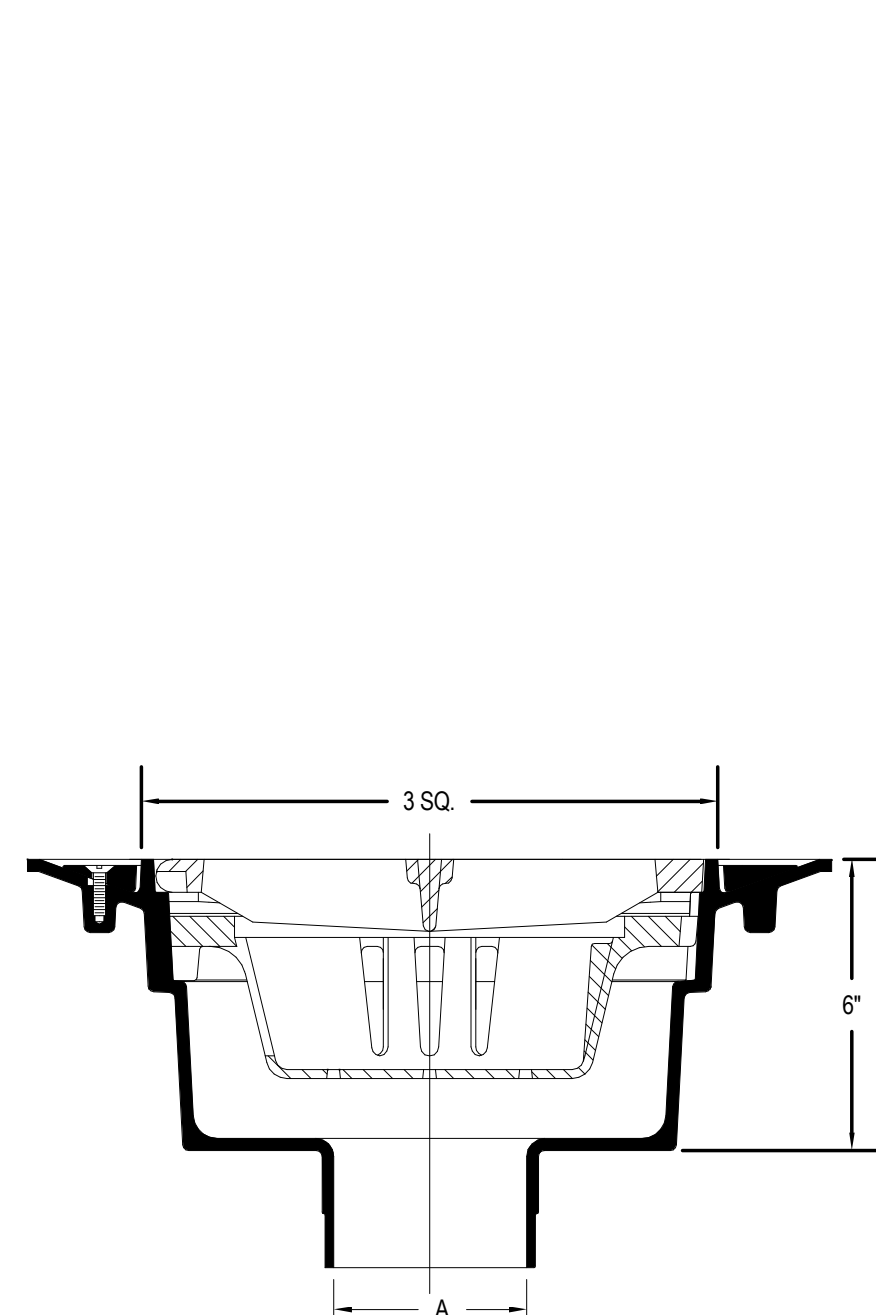
C1 TYPICAL HOSE BIBB RISER

SCALE: NTS



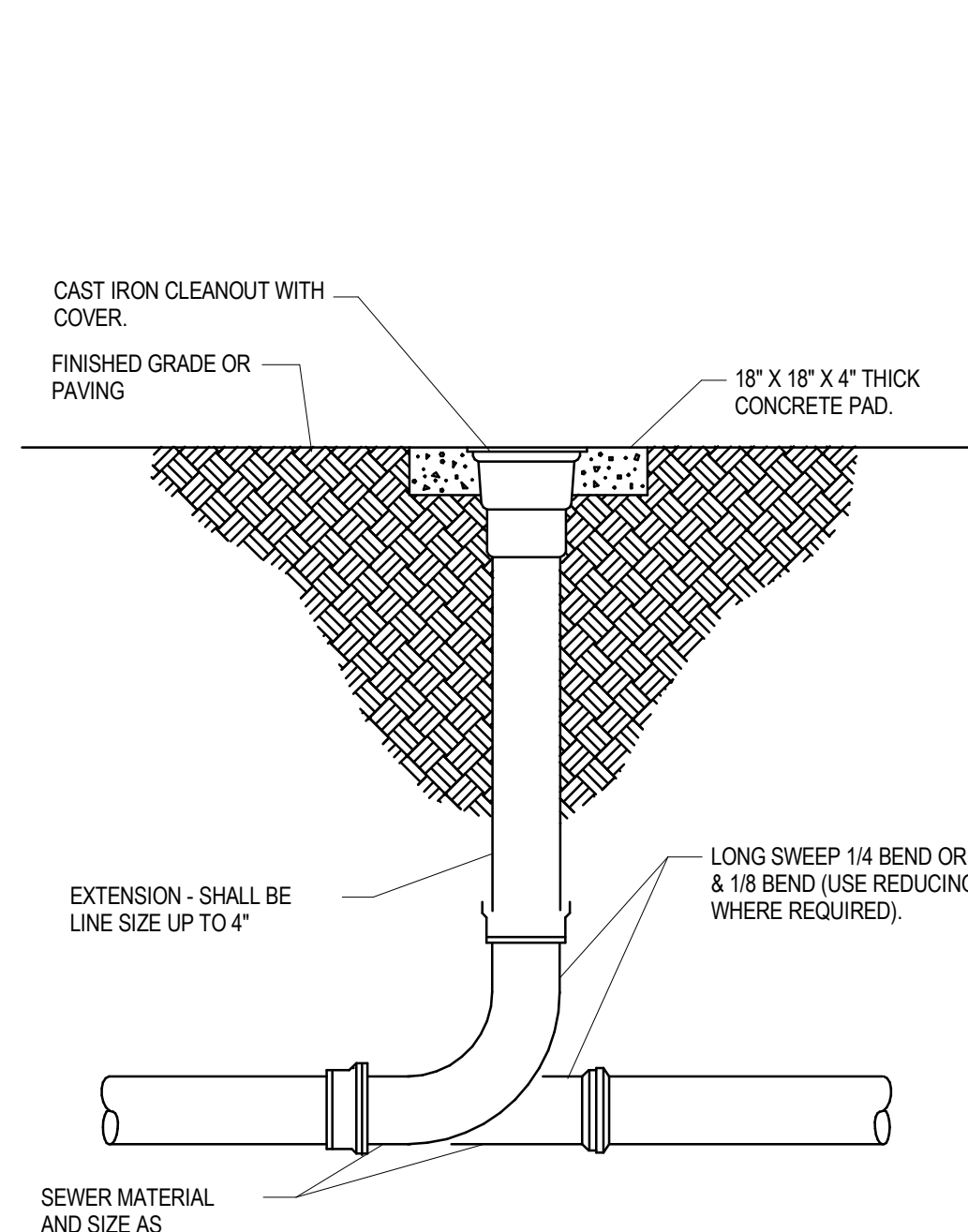
C2 PIPE PENETRATION DETAIL

SCALE: NTS



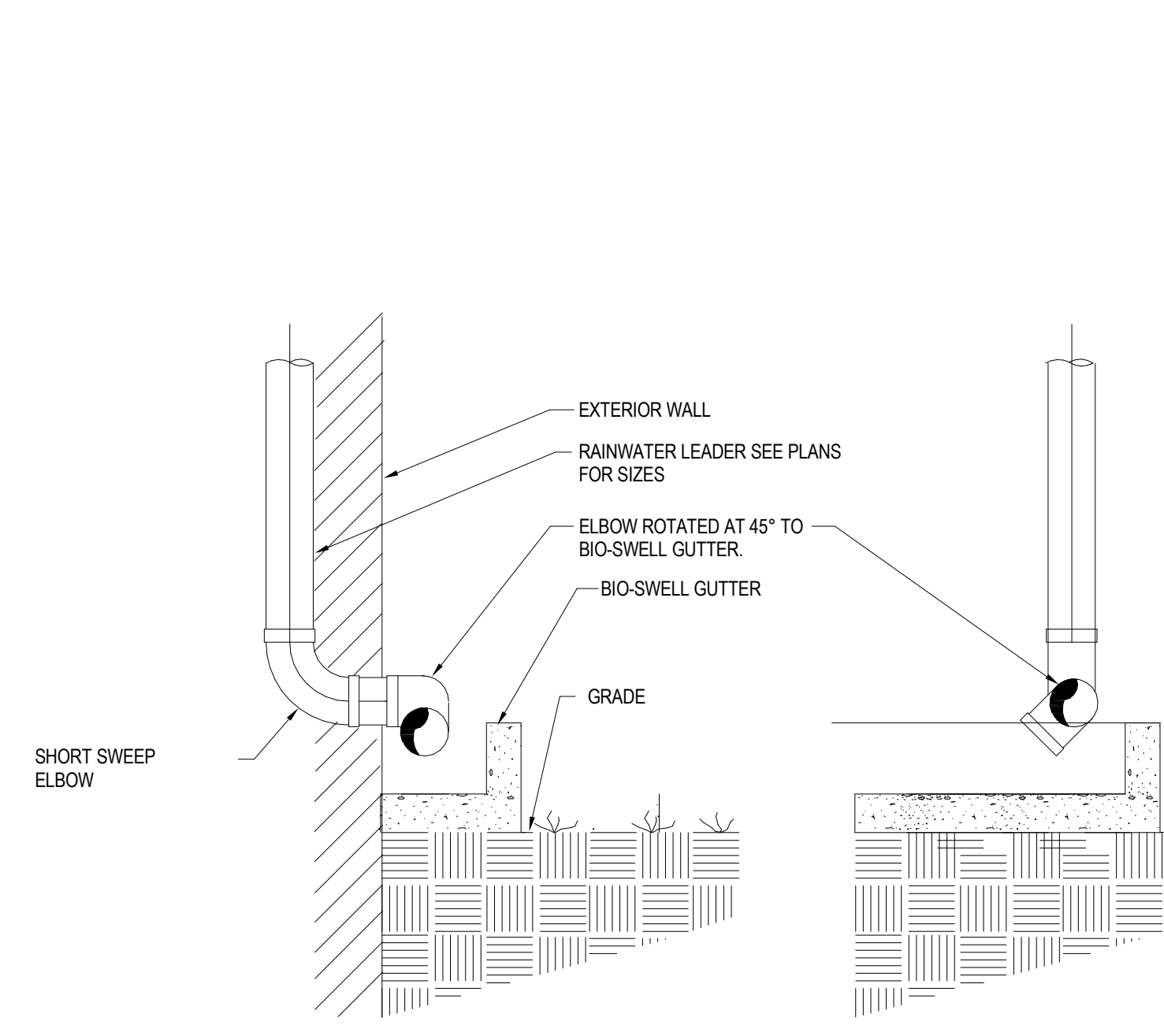
C3 DECK DRAIN DD-1 DETAIL

SCALE: NTS



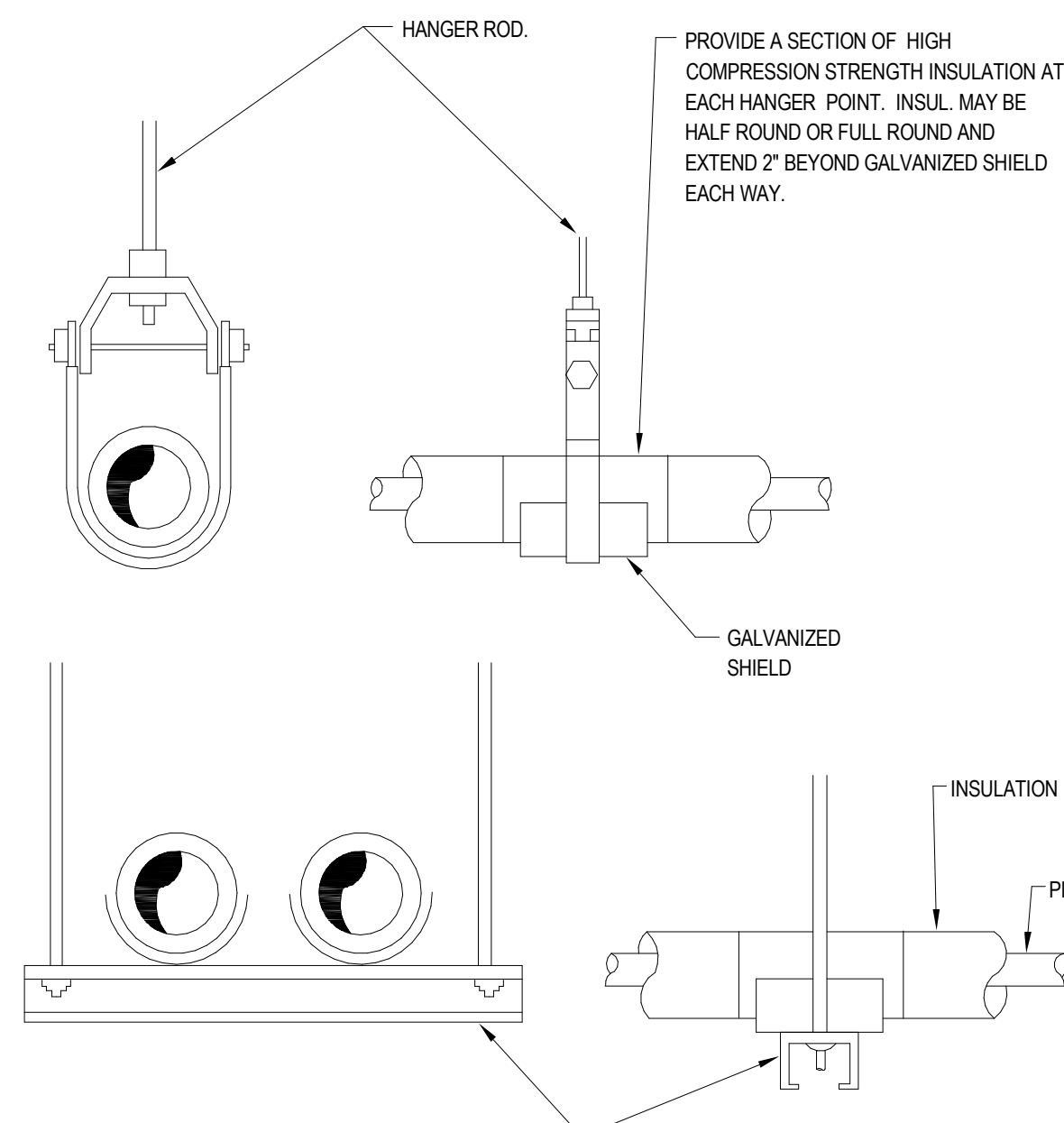
C4 EXTERIOR CLEANOUT DETAIL

SCALE: NTS



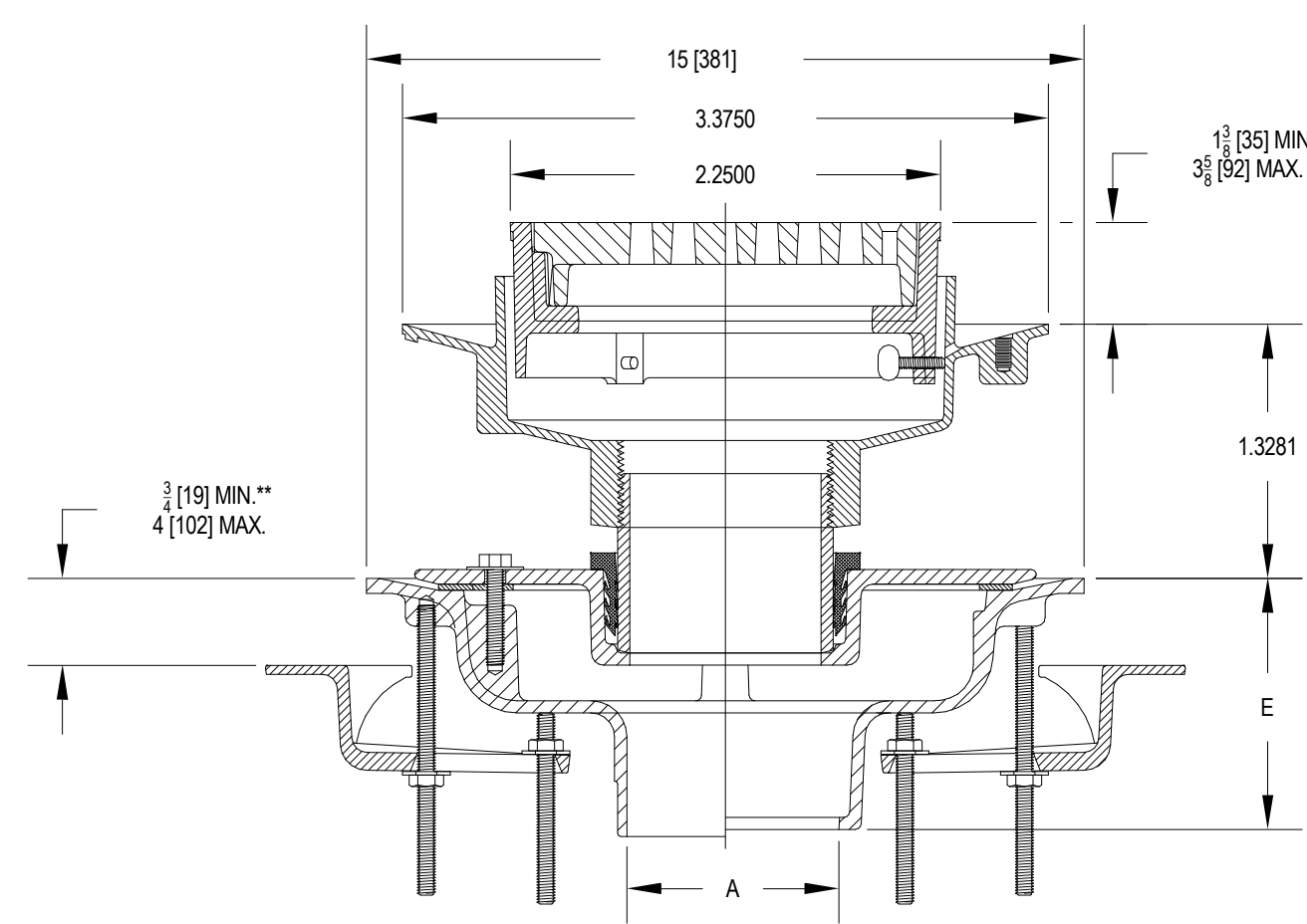
C5 BIO-SWELL DRAIN DETAIL

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



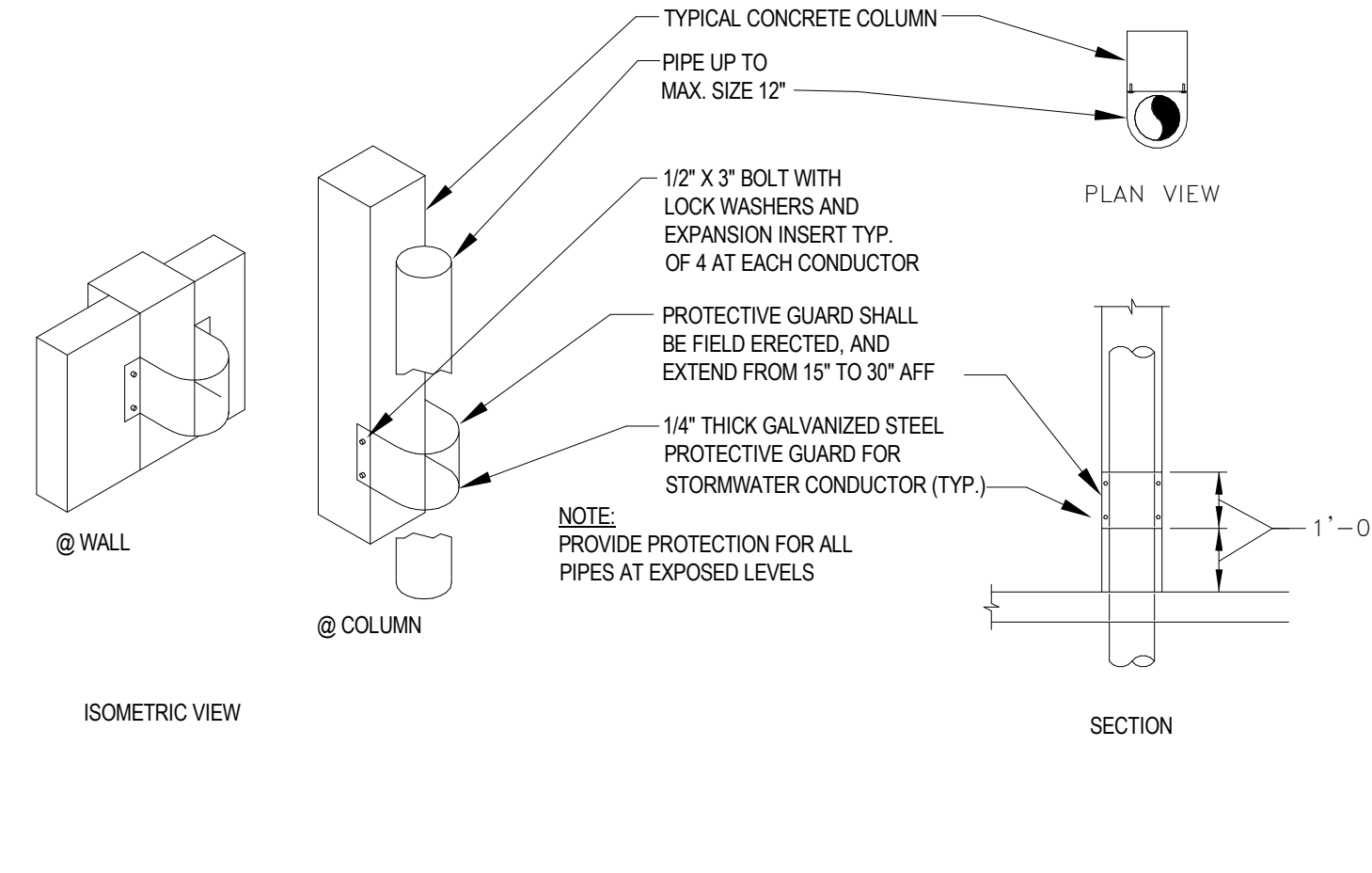
B1 WATER PIPE HANGER DETAIL

SCALE: NTS



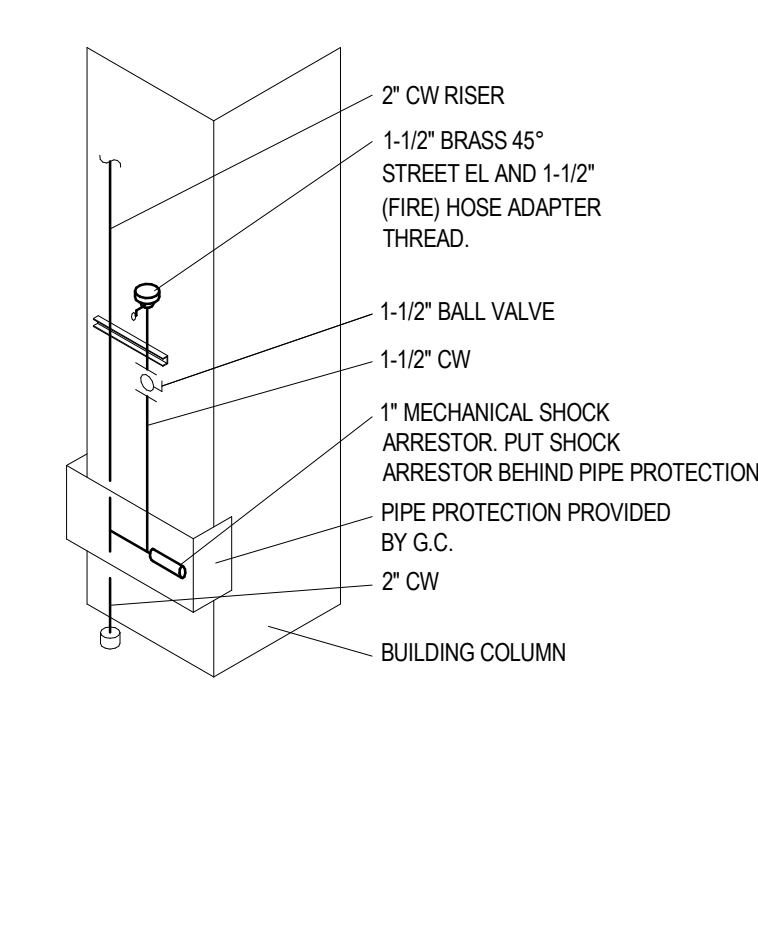
B2 DECK DRAIN - DD-2 DETAIL

SCALE: NTS



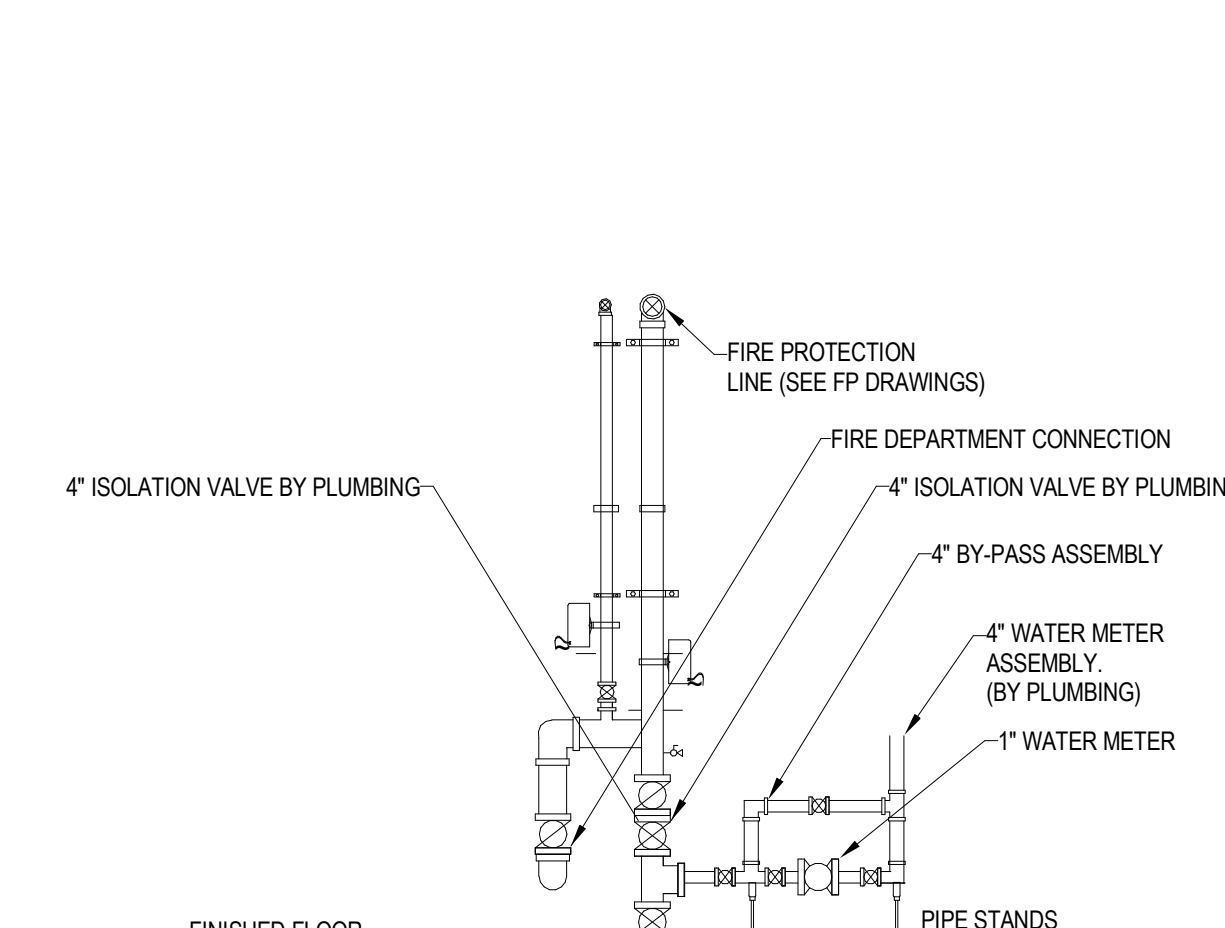
B4 PIPE PARKING GUARD DETAIL

SCALE: NTS



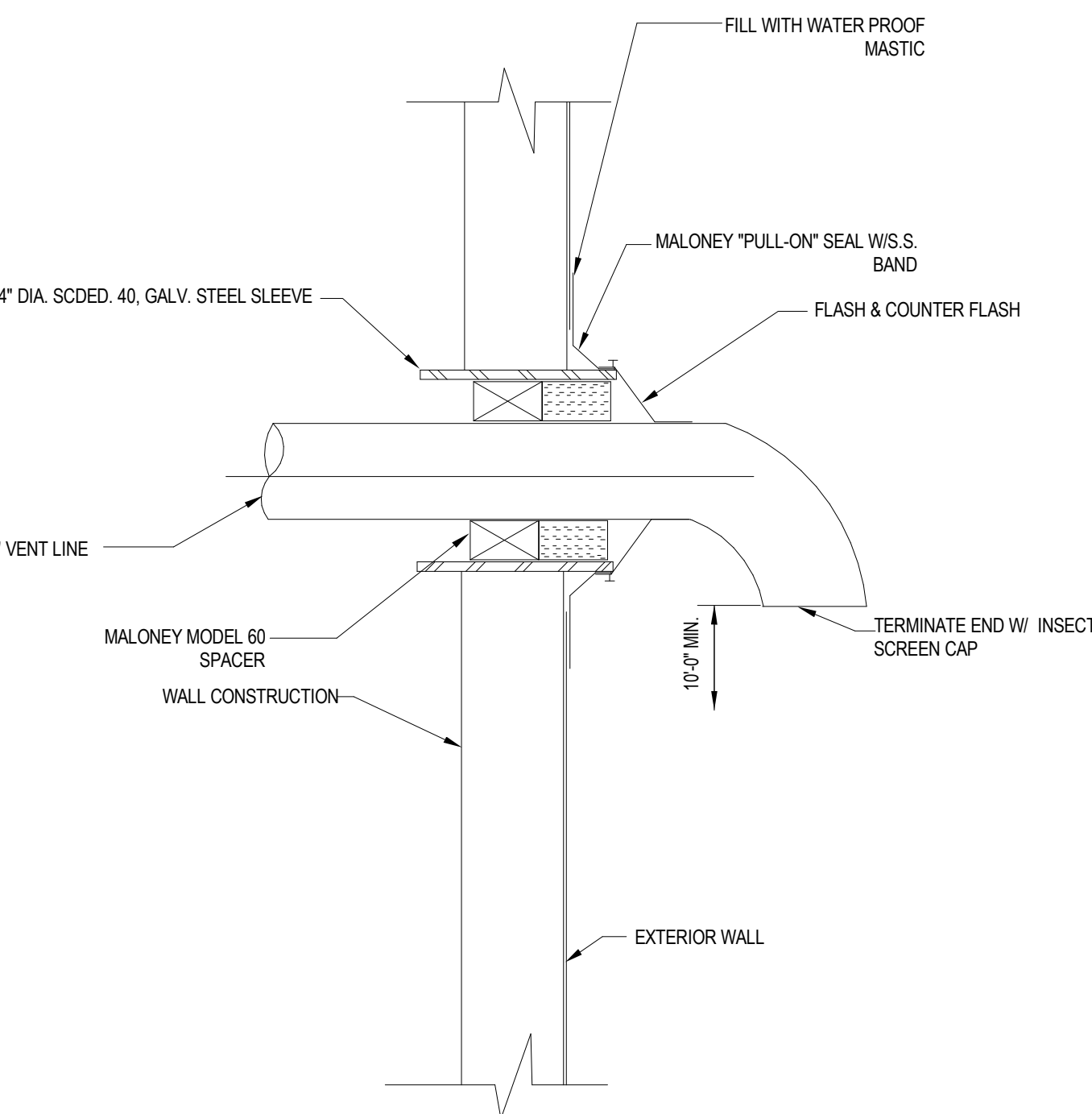
B5 1-1/2" HOSE BIB DETAILS (HB-3)

SCALE: NTS



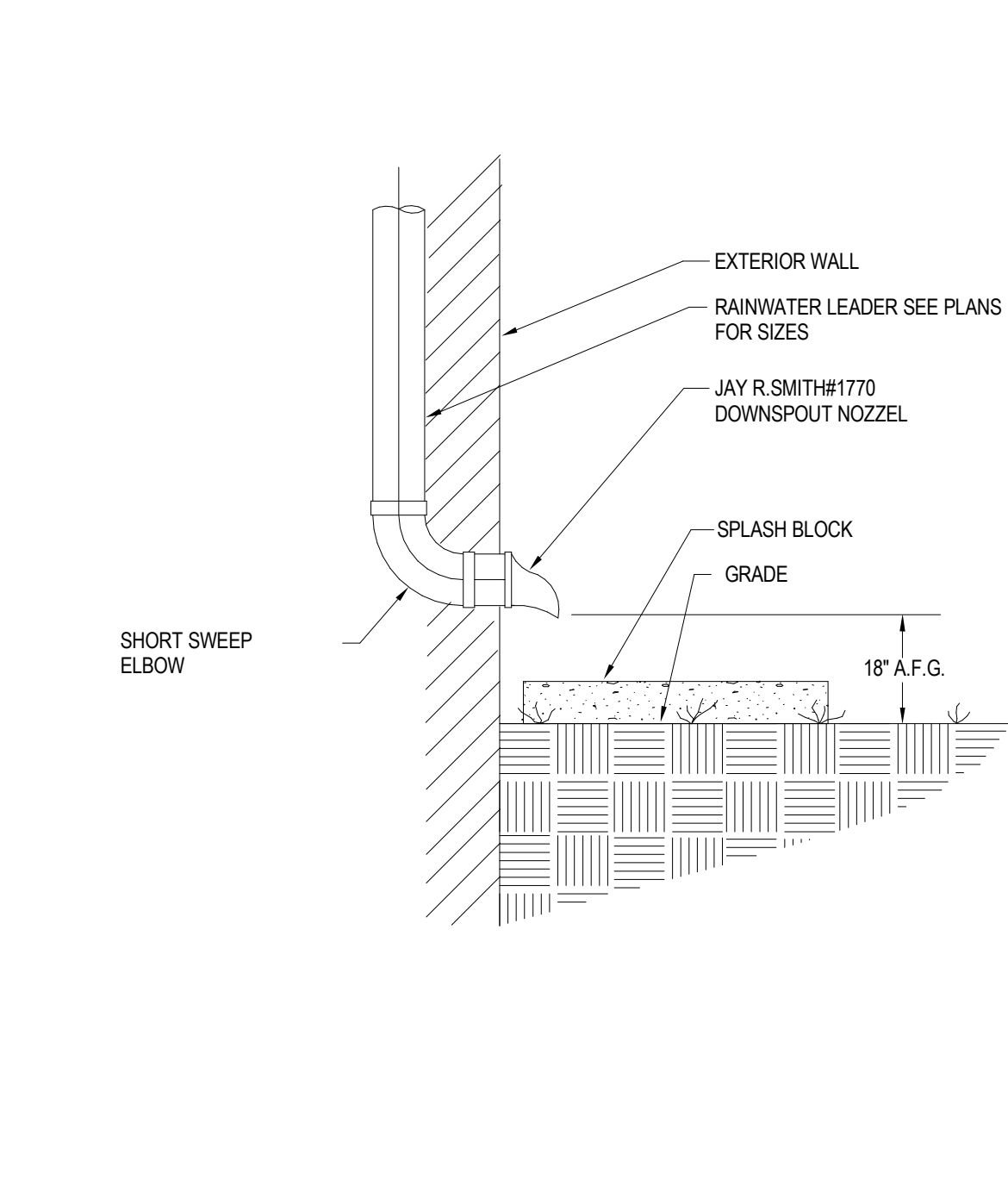
B6 WATER ENTRANCE DETAIL

1/2" = 1'-0"



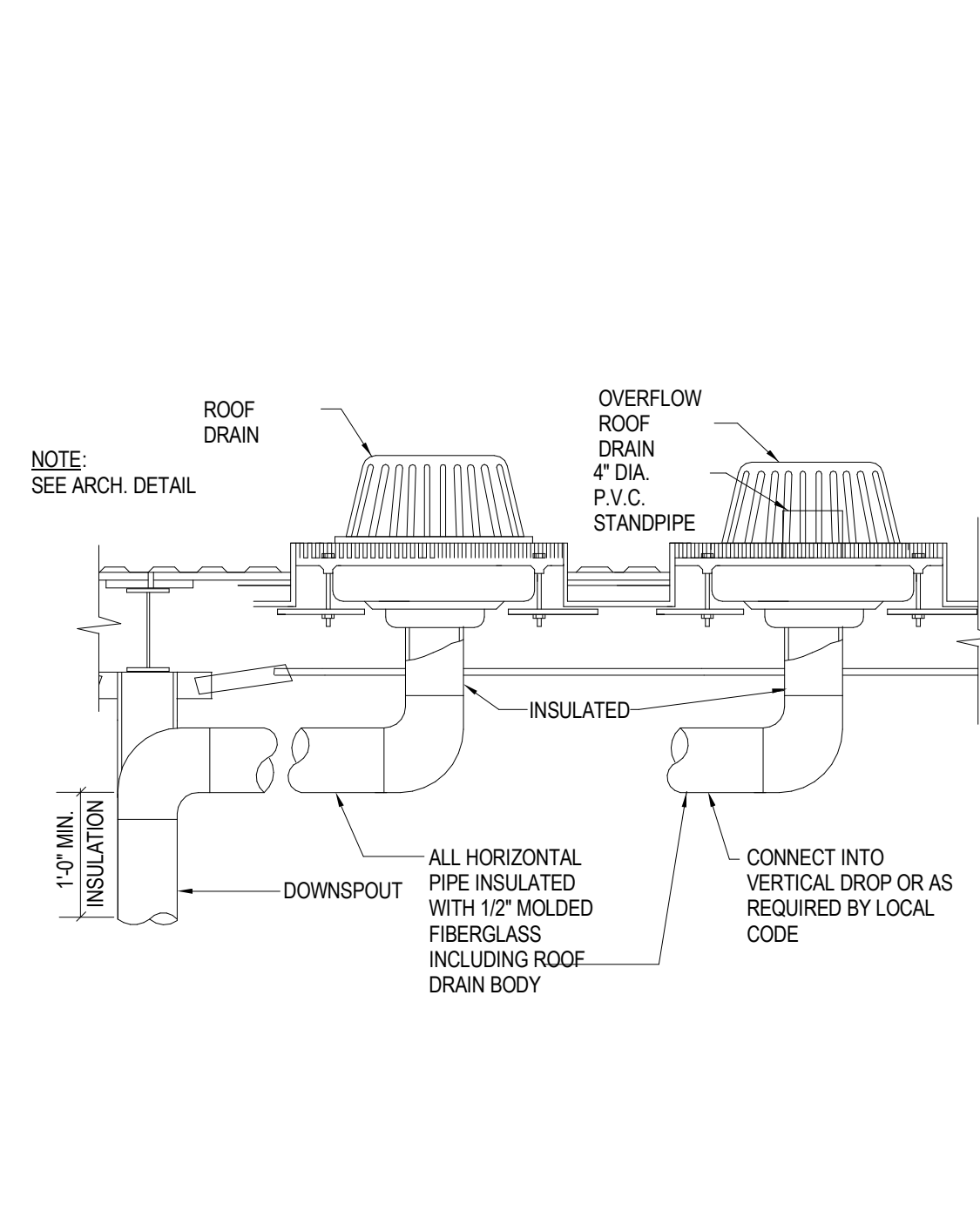
A1 SANITARY VENT PIPE THROUGH WALL

SCALE: NTS



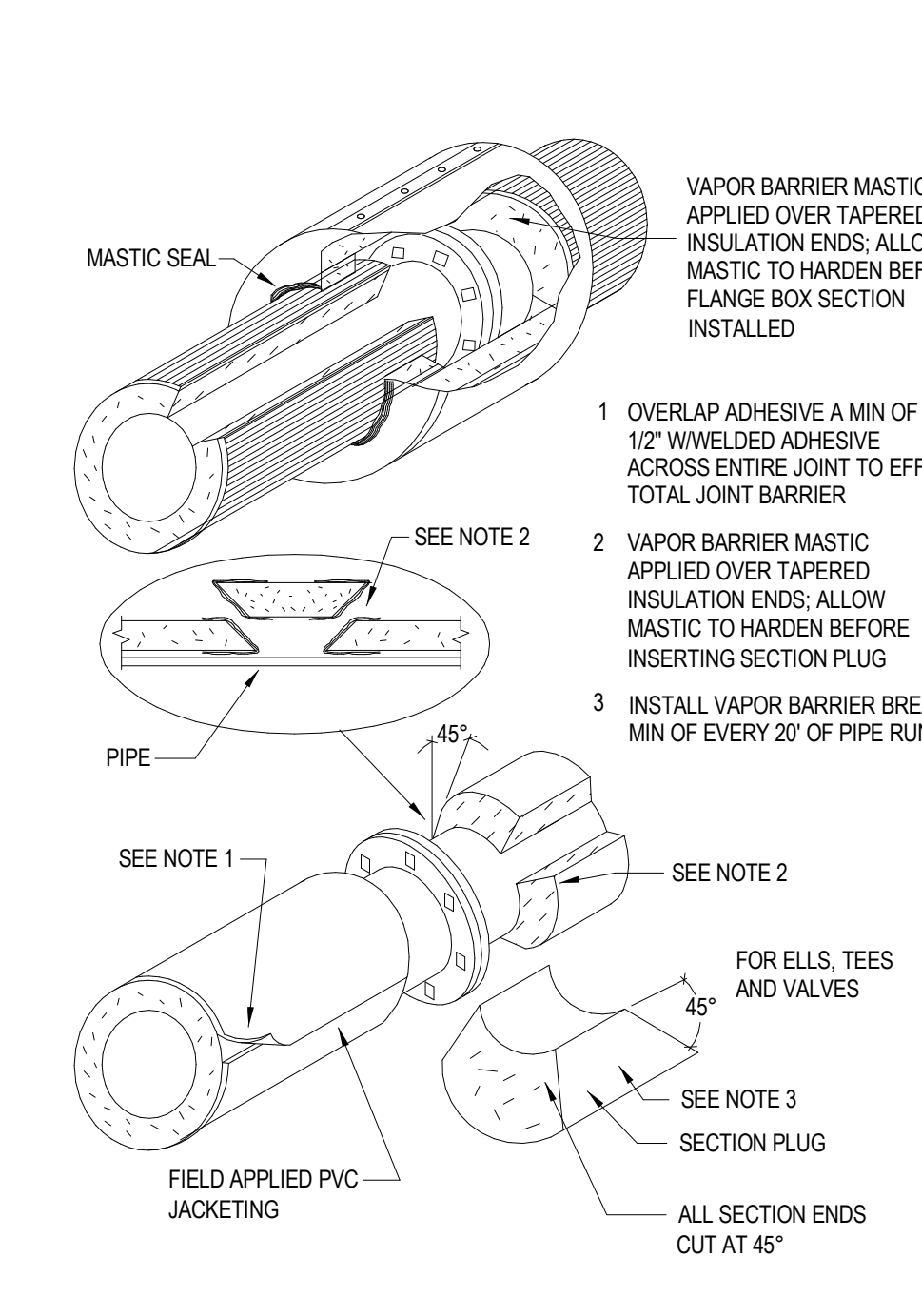
A2 DOWNSPOUT NOZZLE DETAIL

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



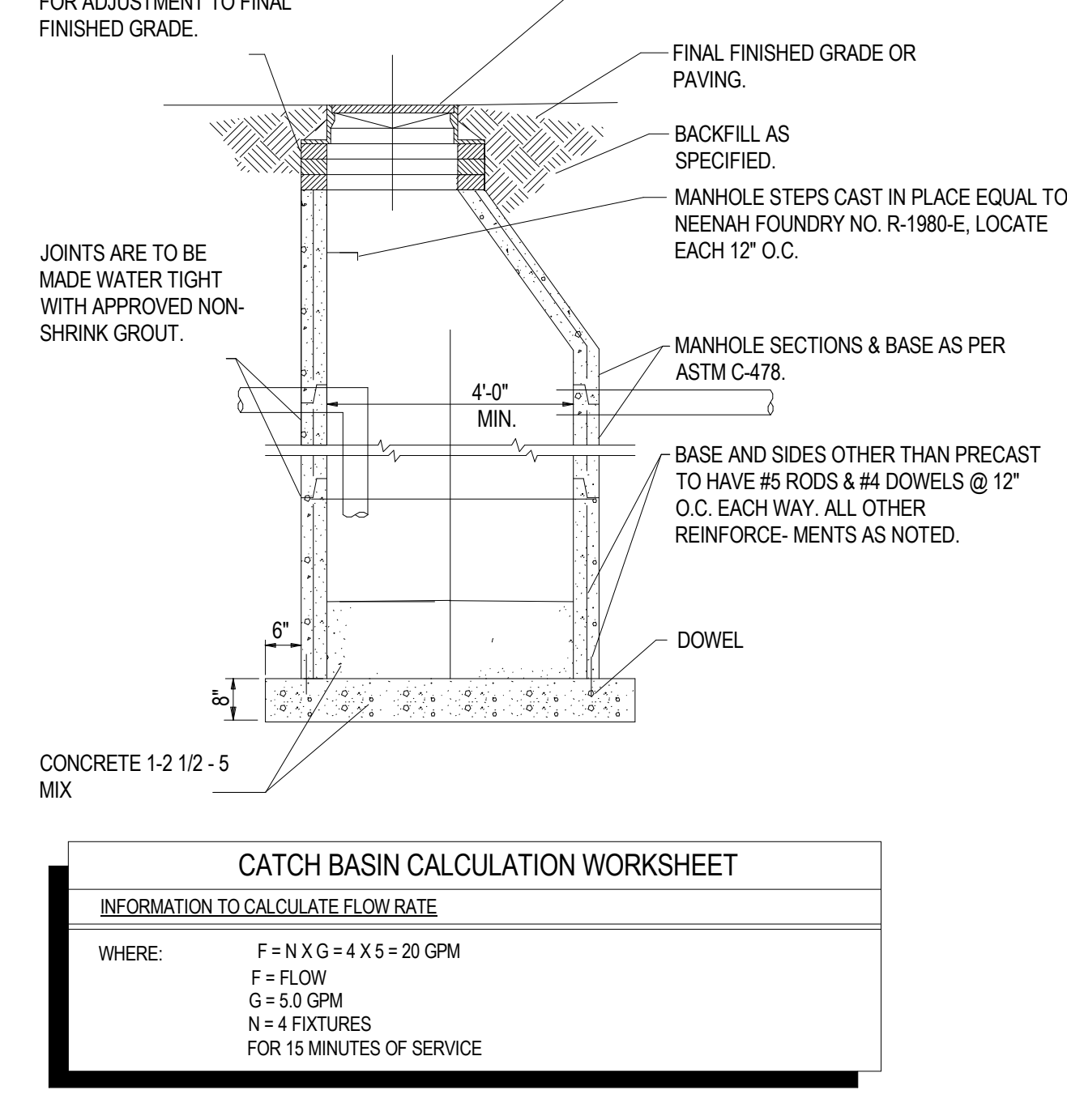
A3 ROOF DRAIN AND OVERFLOW DRAIN

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



A4 PIPE AND INSULATION VAPOR BARRIER

SCALE: NTS



A5 CATCH BASIN DETAIL

1/2" = 1'-0"

CATCH BASIN CALCULATION WORKSHEET	
INFORMATION TO CALCULATE FLOW RATE	
WHERE:	F = N X G + 4 X S + 20 GPM
	F = FLOW
	G = 1.0 GPM
	N = # FIXTURES
	S = 10 MINUTES OF SERVICE

NOTE: CALCULATIONS BASED ON FLOW FROM HOSE BIBS IN GARAGE.

