

LWO DEVELOPMENT, LLC
EASTGATE APARTMENTS
 OWATONNA, MN



INDEX OF DRAWINGS	
SHEET NUMBER	SHEET NAME
GENERAL	
G100	COVER SHEET
G101	TITLE SHEET
G102	TYPICAL EXTERIOR ASSEMBLIES
G103	TYPICAL INTERIOR ASSEMBLIES
G110	LIFE SAFETY PLANS
G111	LIFE SAFETY PLANS
G120	MOUNTING HEIGHTS

INDEX OF DRAWINGS	
SHEET NUMBER	SHEET NAME
CIVIL	
C101	REMOVALS PLAN
C201	CIVIL SITE PLAN
C301	GRADING PLAN
C401	UTILITY PLAN
C501	EROSION CONTROL PLAN

INDEX OF DRAWINGS	
SHEET NUMBER	SHEET NAME
STRUCTURAL	
S000	GENERAL STRUCTURAL NOTES
S001	GENERAL STRUCTURAL NOTES CONT.
S100	FOOTING & FOUNDATION PLAN
S101	LEVEL 1 FRAMING PLAN
S102	LEVEL 2 FRAMING PLAN
S103	LEVEL 3 FRAMING PLAN
S104	ROOF FRAMING PLAN
S500	FOUNDATION SECTIONS & DETAILS
S501	FOUNDATION SECTIONS & DETAILS
S700	PRECAST FRAMING SECTIONS & DETAILS
S710	WOOD FRAMING SECTIONS & DETAILS
S711	WOOD FRAMING SECTIONS & DETAILS

INDEX OF DRAWINGS	
SHEET NUMBER	SHEET NAME
ARCHITECTURAL	
A010	SITE PLAN
A200	GROUND FLOOR PLAN
A201	FIRST FLOOR PLAN
A202	SECOND FLOOR PLAN
A203	THIRD FLOOR PLAN
A204	ROOF PLAN
A210	ENLARGED PLANS AND ELEVATIONS
A211	UNIT PLANS & ELEVATIONS
A212	UNIT PLANS & ELEVATIONS
A213	UNIT PLANS & ELEVATIONS
A214	UNIT PLANS & ELEVATIONS
A215	UNIT PLANS & ELEVATIONS
A216	UNIT PLANS & ELEVATIONS
A217	UNIT PLANS & ELEVATIONS
A218	UNIT PLANS & ELEVATIONS
A220	DOOR SCHEDULE
A301	EXTERIOR ELEVATIONS
A302	EXTERIOR ELEVATIONS
A310	GLAZING ELEVATIONS
A311	GLAZING DETAILS
A401	BUILDING SECTIONS
A420	VERTICAL CIRCULATION
A421	VERTICAL CIRCULATION
A422	VERTICAL CIRCULATION
A501	EXTERIOR WALL SECTIONS
A502	EXTERIOR WALL SECTIONS
A601	FINISH SCHEDULE
A611	DETAILS
A620	CASEWORK SCHEDULE
A621	CASEWORK SCHEDULE
A700	GROUND FLOOR RCP
A701	FIRST FLOOR RCP
A702	SECOND FLOOR RCP
A703	THIRD FLOOR RCP

INDEX OF DRAWINGS	
SHEET NUMBER	SHEET NAME
PLUMBING	
P001	PLUMBING SYMBOLS AND LEGEND
P200.1	GROUND FLOOR PLUMBING PLAN - SANITARY/STORM
P200.2	GROUND FLOOR PLUMBING PLAN - DOMESTIC WATER
P201	FIRST FLOOR PLUMBING PLAN
P202	SECOND FLOOR PLUMBING PLAN
P203	THIRD FLOOR PLUMBING PLAN
P301	PLUMBING ISOMETRICS
P302	PLUMBING ISOMETRICS
P701	PLUMBING DETAILS
P702	PLUMBING DETAILS
P801	PLUMBING SCHEDULES

INDEX OF DRAWINGS	
SHEET NUMBER	SHEET NAME
MECHANICAL	
M001	MECHANICAL SYMBOLS AND LEGEND
M300	GROUND FLOOR HVAC PLAN
M301	FIRST FLOOR HVAC PLAN
M302	SECOND FLOOR HVAC PLAN
M303	THIRD FLOOR HVAC PLAN
M400	ENLARGED UNIT HVAC PLANS
M401	ENLARGED UNIT HVAC PLANS
M501	MECHANICAL ROOF PLAN
M701	MECHANICAL DETAILS
M702	MECHANICAL DETAILS
M801	MECHANICAL SCHEDULES

INDEX OF DRAWINGS	
SHEET NUMBER	SHEET NAME
ELECTRICAL	
E0.00	ELECTRICAL SYMBOLS AND LEGEND
E2.00	ELECTRICAL SITE PLAN
E3.01	GROUND FLOOR PLAN
E3.02	FIRST FLOOR PLAN
E3.03	SECOND FLOOR PLAN
E3.04	THIRD FLOOR PLAN
E6.01	UNIT PLANS
E6.02	UNIT PLANS
E6.03	ENLARGED FLOOR PLANS



Key Name	LIST OF ABBREVIATIONS DESCRIPTION
A/E	ARCHITECT/ENGINEER
AC	ALTERNATING CURRENT
ACI	AMERICAN CONCRETE INSTITUTE
ACM	ASBESTOS CONTAINING MATERIAL
ACT	ACOUSTICAL CEILING TILE
ADA	AMERICANS W/ DISABILITIES ACT
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
ALUM	ALUMINIUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ARCH	ARCHITECT
ASI	ARCHITECTURAL SUPPLEMENTAL INSTRUCTION
AWI	AMERICAN WOODWORKING INSTITUTE
BD	BOARD
BLDG	BUILDING
BM	BEAM
BTU	BEARING
BTU	BRITISH THERMAL UNITS
BUR	BUILT UP ROOFING
CB	CABINET
CAB	CATCH BASIN
CG	CORNER GUARD
CI	CAST IRON
CP	CAST IN PLACE
CJ	CONTROL JOINT
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
CONC	CONCRETE
CPT	CARPET
CSMT	CASEMENT
CSWK	CASEWORK
CT	CERAMIC TILE
CUH	CABINET UNIT HEATER
CWT	CERAMIC WALL TILE
DEMO	DEMOLITION
DEPT	DEPARTMENT
DF	DRINKING FOUNTAIN
DA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIST	DISTANCE
DOC	DOCUMENT
DR	DOOR
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
EA	EACH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
ELEC	ELECTRIC
ELEV	ELEVATION/ELEVATION
EP	EPOXY PAINT
EQ	EQUAL
EQUIP	EQUIPMENT
EWAC	ELECTRIC WATER COOLER
EXIST	EXISTING
FD	FLOOR DRAIN
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FEE	FURNITURE, FIXTURE, AND EQUIPMENT
FHC	FIRE HOSE CABINET
FIN	FINISH
FLR	FLOOR
FND	FOUNDATION
FTG	FOOTING
FWC	FABRIC WALL COVERING
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GEN	GENERAL
GL	GLASS OR GLAZING
GWB	GYPSPUM WALL BOARD
HB	HOSE BIB
HCP	HANDICAP
HDW	HARDWARE
HDWD	HARDWOOD
HMI	HOLLOW METAL
HORZ	HORIZONTAL
HT	HEIGHT
IBC	INTERNATIONAL BUILDING CODE
INSUL	INSULATION
JAN	JANITOR
LAM	LAMINATE
LAV	LAVATORY
MAS	MASONRY
MB	MARKERBOARD
MDF	MEDIUM DENSITY FIBERBOARD
MECH	MECHANICAL
MH	MANHOLE
ML	MATCHLINE
MTL	METAL
MTL STD	METAL STUD
NC	NON COMBUSTIBLE
NIC	NOT IN CONTRACT
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
OH	OVERHEAD
OSB	ORIENTED STRAND BOARD
PB	PARTICLE BOARD
PC	PRECAST
PLAM	PLASTIC LAMINATE
PLAST	PLASTER
PLYWD	PLYWOOD
PREV	PREVIOUS
PT	PAINT
PTD	PAPER TOWEL DISPENSER
RAD	RADIUS
REIN	REINFORCEMENT

Key Name	LIST OF ABBREVIATIONS DESCRIPTION
REQ'D	REQUIRED
REV	REVERSE
RM	ROOM
RO	ROUGH OPENING
RTU	ROOF TOP UNIT
SD	SMOKE DETECTOR
SECT	SECTION
SHT	SHEET
SM	SMILAR
SPD	SOAP DISPENSER
SPEC	SPECIFICATIONS
SQ	SQUARE
SUSP	SUSPENDED
TC	THIN COAT
TEMP	TEMPORARY/TEMPERATURE
TO	TOP OF
TP	TOILET PARTITIONS
TRD	TOILET PAPER DISPENSER
TRD	TREATED
TS	TRANSITION STRIP
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
VCT	VINYL COMPOSITION TILE
W/	WITH
WD	WOOD
WDDW	WINDOW

MATERIAL ID	SPEC. SECTION & DESCRIPTION
06 1000	ROUGH CARPENTRY
AIR BAR-1	07 2500 - AIR BARRIER, MECHANICALLY FASTENED
BRCK TIE	04 2000 - FACE BRICK
BRCK	04 2000 - FACE BRICK
CAST UNDLMT-1	03 5400 - GYPSUM BASED UNDERLAYMENT
CER TILE-10	09 3000 - CERAMIC WALL TILE
CMU-1	04 2000 - NORMAL WEIGHT CMU
COAT HOOK-1	10 2800 - SINGLE PRONG COAT HOOK
CRTN ROD-1	10 2800 - SHOWER CURTAIN ROD, STRAIGHT
DISHWASHER-1	11 3100 - DISHWASHER
DRYER-1	11 3100 - CLOTHES DRYER
EPDM-2	07 3300 - FULLY ADHERED EPDM ROOFING SYSTEM
FIRE CAB-1	10 4400 - FIRE EXTINGUISHER CABINET
FR STOP	07 8400 - THROUGH PENETRATION FIRESTOPPING
FRIDGE-1	11 3100 - REFRIGERATOR
GYP BD-1	09 2116 - 5/8" FIRE-RATED TYPE 'X' GYPSUM BOARD
GYP BD-4	09 2116 - 5/8" FIRE-RATED TYPE 'X' GYPSUM BOARD
GYP BD-5	09 2116 - 1/2" FIRE-RATED TYPE 'X' MOLD-RESISTANT GYPSUM BOARD
GYP BD-20	09 2116 - 1" FIRE-RATED TYPE 'X' GYPSUM SHAFT LINER
INSUL-1	07 2100 - EXTRUDED POLYSTYRENE INSULATION W/ DRAINAGE CHANNELS
INSUL-15	07 2100 - POLYISOCYANURATE INSULATION, FOIL FACED
INSUL-20	07 2100 - UNFACED ROCK WOOL BATT INSULATION
INSUL-22	07 2100 - POLYISOCYANURATE BOARD INSULATION
INSUL-23	07 2100 - ROCK WOOL EXTERIOR CAVITY BOARD INSULATION
INSUL-33	07 2126 - BULK CELLULOSE FIBER INSULATION FOR PNEUMATIC PLACEMENT
INSUL-34	07 2126 - BULK FIBERGLASS INSULATION FOR PNEUMATIC PLACEMENT
INSUL-36	07 2119 - CLOSED CELL SPRAY FOAM INSULATION
INSUL-40	07 2100 - POLYISOCYANURATE NAL-BASE INSULATION
INSUL-45	07 2100 - POLYISOCYANURATE BOARD INSULATION
INSUL-50	07 5300 - FLAT POLYISOCYANURATE ROOF INSULATION
INSUL-53	07 5300 - TAPERED POLYISO OVER FLAT POLYISO ROOF INSULATION
INSUL-80	09 2116 - ACOUSTICAL BATT INSULATION
MAS ACC-2	04 2000 - POLYMER MESH HEAD JOINT WEEP
MAS ACC-5	04 2000 - CAVITY MORTAR CONTROL MESH
MED CAB-1	10 2800 - MEDICINE CABINET, SURFACE MOUNTED
MET FAB-50	05 5913 - METAL BALCONIES
MET FURG-4	09 2116 - RESILIENT FURRING CHANNELS
MET STUD-2	09 2116 - NON-LOAD BEARING STEEL STUDS, 20 GA.
MET STUD-5	09 2116 - C-H SHAFWALL STUDS
MICROWAVE-1	11 3100 - MICROWAVE W/ RANGE HOOD
MIRROR-50	10 2800 - FRAMELESS MIRROR
PAVER-1	07 5300 - CONCRETE ROOF PAVER
RANGE-1	11 3100 - RANGE
RF UNDLMT-3	07 2500 - SYNTHETIC ROOFING UNDERLAYMENT
RF UNDLMT-5	07 2500 - SELF-ADHERING ICE/WATER SHIELD
RF VENT-2	07 2113 - SCOFFIT/JOIST STRIP VENT
ROBE HOOK-1	10 2800 - ROBE HOOK
SEALANT-1	07 9200 - JOINT SEALANT OR CAULKING
SEALANT-2	07 9200 - JOINT SEALANT OR CAULKING WITH BACKER ROD
SHINGLE-1	07 2113 - LAMINATED FIBERGLASS SHINGLES
SIDING-10	07 4646 - FIBER CEMENT LAP SIDING
SIDING-11	07 4646 - FIBER CEMENT SHINGLE SIDING
SIDING-15	07 4646 - FIBER CEMENT PANEL
SIDING-20	07 4646 - MANUFACTURED WOOD TRIM OR FIBER CEMENT BOARD TRIM
SIDING-70	07 4623 - MANUFACTURED WOOD SHIP-LAP SIDING OR FIBER CEMENT LAP SIDING
SIDING-71	07 4623 - MANUFACTURED WOOD SHINGLE SIDING OR FIBER CEMENT SHINGLE SIDING
SIGN-1	10 1400 - SIGNS
SMF-2	07 6200 - PREFINISHED ALUMINUM FLASHING
SMF-3	07 6200 - GALVANIZED STEEL FLASHING
SOAP DISP-3	10 2800 - SOAP DISPENSER, WALL MOUNTED
SOLID SURF-20	12 3600 - 1/2" SOLID SURFACING
TOWEL BAR-1	10 2800 - TOWEL BAR, 1" DIAMETER, STAINLESS STEEL
TWF-1	04 2000 - 40 MIL SELF-ADHERING MEMBRANE W/ STAINLESS STEEL DRIP
VPR RET-1	07 2500 - 6 MIL POLY VAPOR RETARDER SHEET
VPR RET-4	03 3000 - 15 MIL UNDERSLAB VAPOR RETARDER
VPR RET-10	07 2500 - VAPOR RETARDER, SELF-ADHERED OR LIQUID APPLIED
WASHER-1	11 3100 - WASHING MACHINE
WD BKG	06 1000 - WOOD BLOCKING
WD SHTG-1	06 1000 - FLOOR SHEATHING, 3/4" STURD-I-FLOOR, EXPOSURE 1, TRG
WD SHTG-10	06 1000 - 19/32" PLYWOOD ROOF SHEATHING
WD SHTG-14	06 1000 - 5/8" PLYWOOD ROOF SHEATHING
WD SHTG-20	06 1000 - 15/32" PLYWOOD WALL SHEATHING
WD SHTG-26	06 1000 - 3/4" PLYWOOD WALL SHEATHING
WD SHTG-34	06 1000 - 3/4" PLYWOOD GRADE C-C
WTR PPF-2	07 1300 - SELF-ADHERING RUBBERIZED ASPHALT SHEETS

DESIGN TEAM

Architect
JLG Architects
322 N 1st Ave. #600
Minneapolis, MN 55401
P: 612.746.4260
Contact: Jesse Hadley

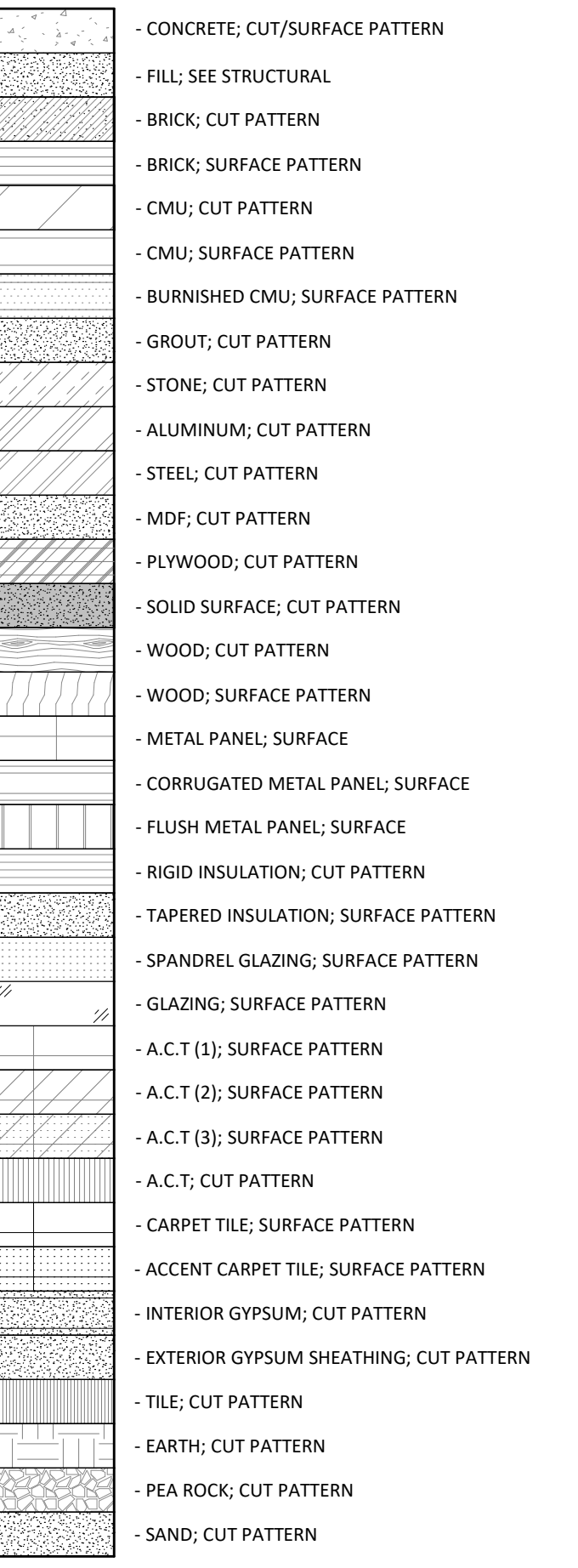
Civil Engineer
Design Tree Engineering
3339 West St. Germain, Suite 250
St. Cloud, MN 56301
P: 320.217.5557
Contact: Dan Folsom

Structural Engineer
Reigstad Engineers
192 West 9th Street
St. Paul, MN 55102
P: 651.292.1123
Contact: Jared Reigstad

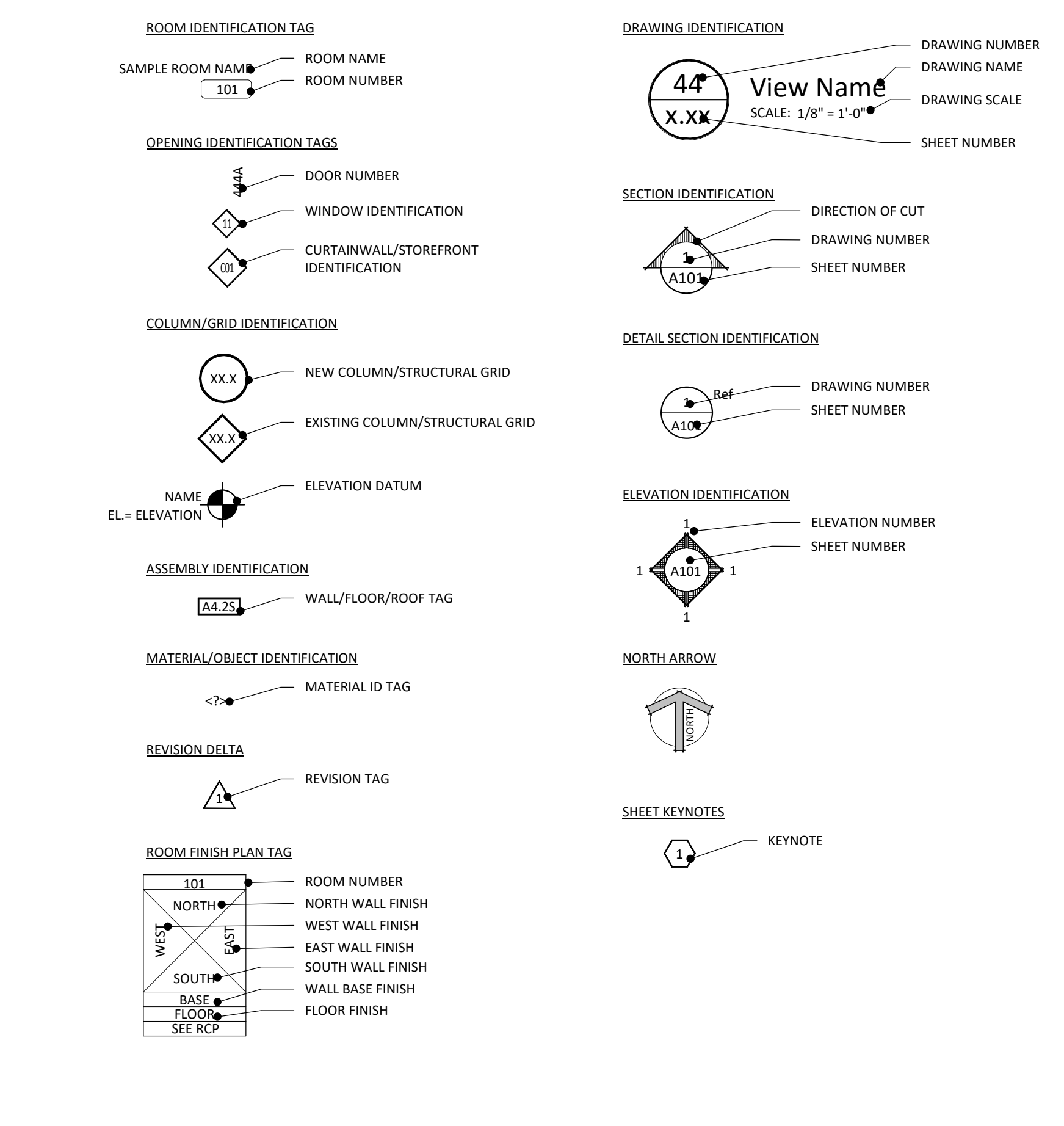
Mechanical Engineer
Design Tree Engineering
21308 John Millers Drive, Suite 104
Rogers, MN 55374
P: 320.227.0213
Contact: Robert Schuster

Electrical Engineer
Design Tree Engineering
21308 John Millers Drive, Suite 104
Rogers, MN 55374
P: 320.227.0213
Contact: Aaron Mueller

MATERIAL INDEX



SYMBOLS LEGEND



PROJECT GENERAL NOTES

- FIRST LEVEL ELEVATION OF 100'-0" NOTED ON ARCHITECTURAL AND STRUCTURAL DRAWINGS EQUALS ELEVATION OF 144'-0" NOTED ON CIVIL DRAWINGS.
- THE OWNER'S NORMAL OPERATIONS WILL BE CONTINUED DURING CONSTRUCTION. THE CONSTRUCTION SHALL NOT INTERFERE WITH THESE OPERATIONS IN ANY WAY WITHOUT THE OWNER'S EXPRESSED CONSENT.
- IT SHALL BE EACH TRADE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND FAMILIARIZE HIMSELF/HERSELF WITH ALL EXISTING CONDITIONS. EACH CONTRACTOR SHALL TAKE ALL NECESSARY FIELD MEASUREMENTS AND OTHERWISE VERIFY ALL DIMENSIONS AND EXISTING CONSTRUCTION CONDITIONS INDICATED AND/OR SHOWN ON THE DRAWINGS. SHOULD ANY ERROR OR INCONSISTENCY EXIST, THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK AFFECTED THEREBY UNTIL REPORTING THE SAME TO THE ARCHITECT AND THE OWNER REPRESENTATIVE FOR CLARIFICATION AND/OR CORRECTION.
- DIMENSIONS FOLLOWED BY "/>



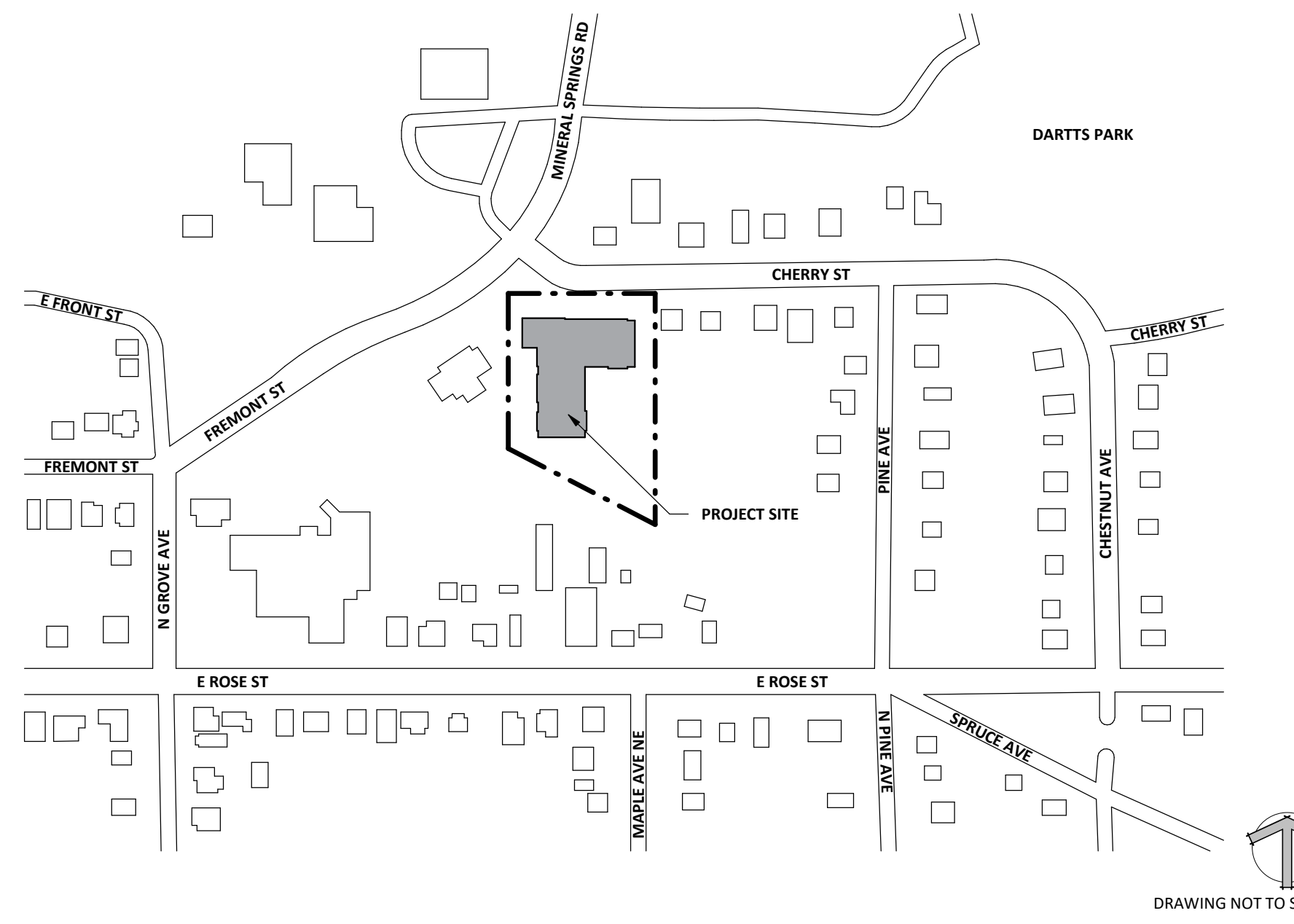
322 1st Ave N, Suite #600
Minneapolis, MN 55401
phone: 612.746.4260
Facsimile: 612.746.4754
www.jlgarchitects.com
copyright © 2020

NO.	DESCRIPTION	DATE

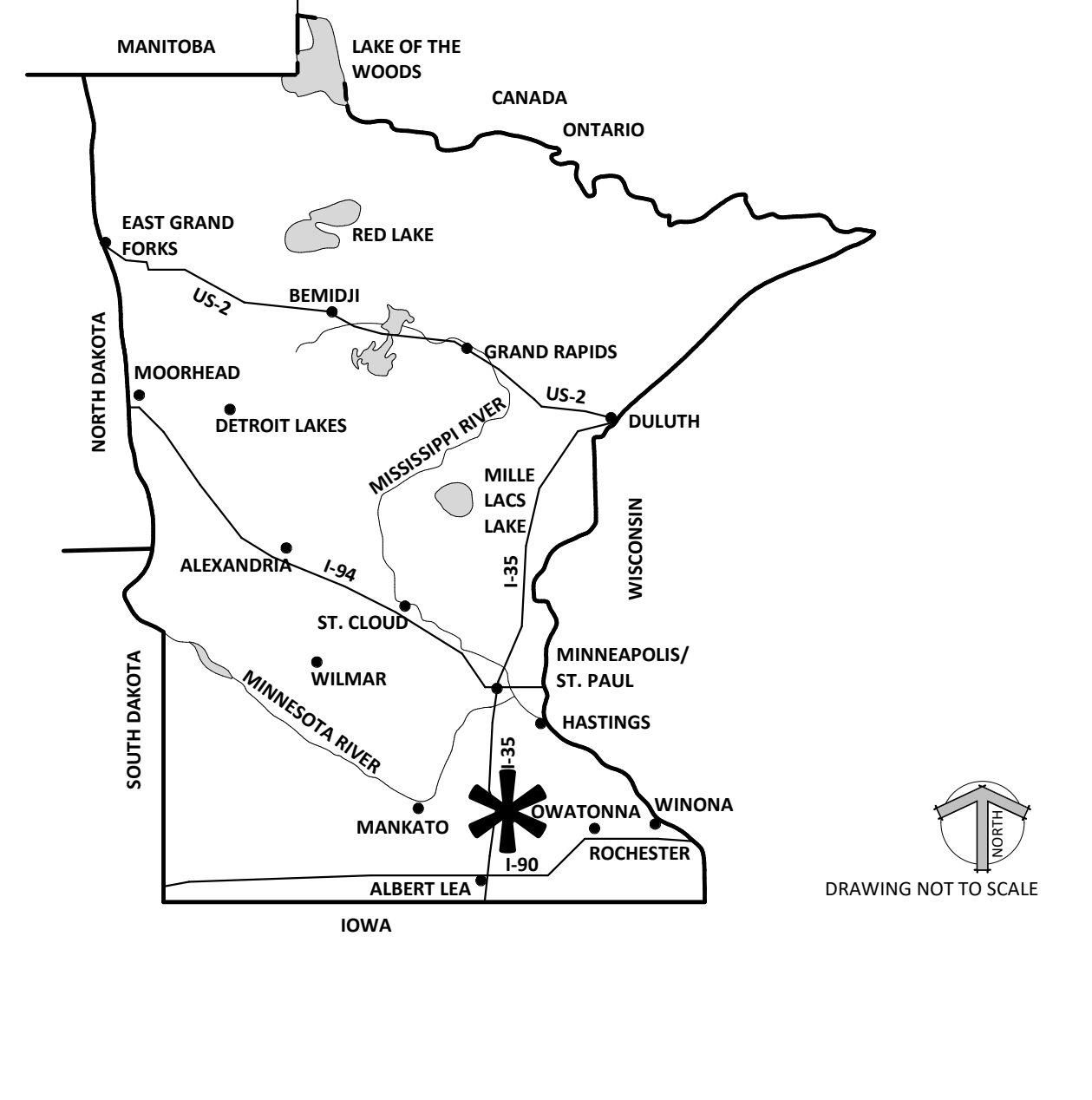
ADD ALTERNATE LIST

- ALTERNATE #1** Acoust-Mat Underlayment – provide at resilient flooring locations
ALTERNATE #2 Putty Pads – provide at electrical outlets at all demising wall locations
ALTERNATE #3 Acoustic Wall Assemblies – provide a total of 2 layers of Gyp BD-1 on each side of Partition Type WCB.1
ALTERNATE #4 Optional Landscape Plan – provide additional landscaping per alternate Landscape Plan on Sheet L103
ALTERNATE #5 Gas Grill and Patio – provide gas grill and patio per Landscape Plan on Sheet L101
ALTERNATE #6 Privacy Fence – provide privacy fence per Landscape Plan on Sheet L101
ALTERNATE #7 Brick Gable End – provide brick in lieu of siding on center gable end located on West Elevation (see 7A/A301)
ALTERNATE #8 Balconies – omit balconies at all apartment unit locations except Unit Type 1C, 2E, and 2G
ALTERNATE #9 Balcony Swing Doors – provide out-swing doors with low profile threshold in lieu of sliding doors at all apartment units
ALTERNATE #10 Ground Improvement – provide rammed aggregate base system
ALTERNATE #11 Siding Material – provide LP SmartSide in lieu of fiber cement board
ALTERNATE #12 Appliances – provide stainless steel appliances by contractor
ALTERNATE #13 Kitchen Islands – provide movable stainless steel kitchen island in lieu of built-in cabinetry
ALTERNATE #14 Wall sconces – provide wall sconce at each apartment unit entry with an allowance of \$100/fixture material cost (provide installed cost)

PROJECT VICINITY MAP - OWATONNA



PROJECT VICINITY MAP - MN

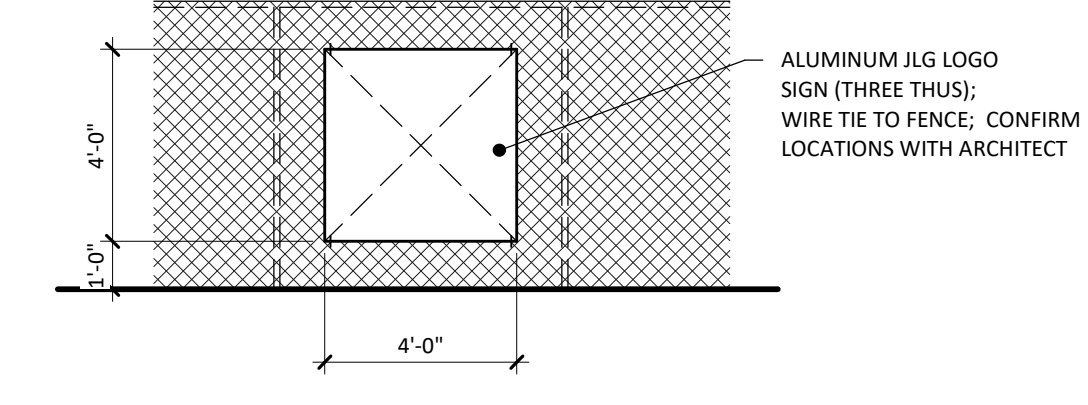
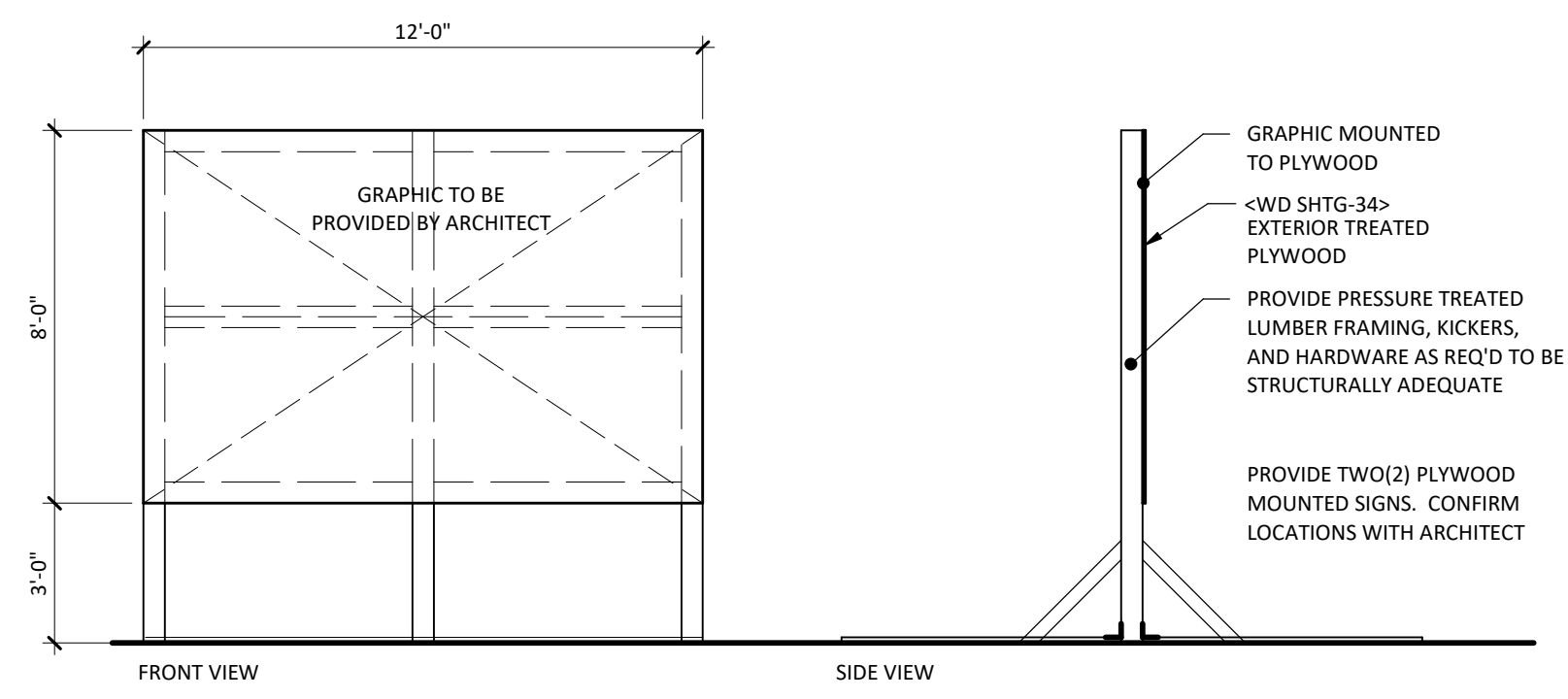


LWO DEVELOPMENT, LLC
EASTGATE APARTMENTS
 OWATONNA, MN

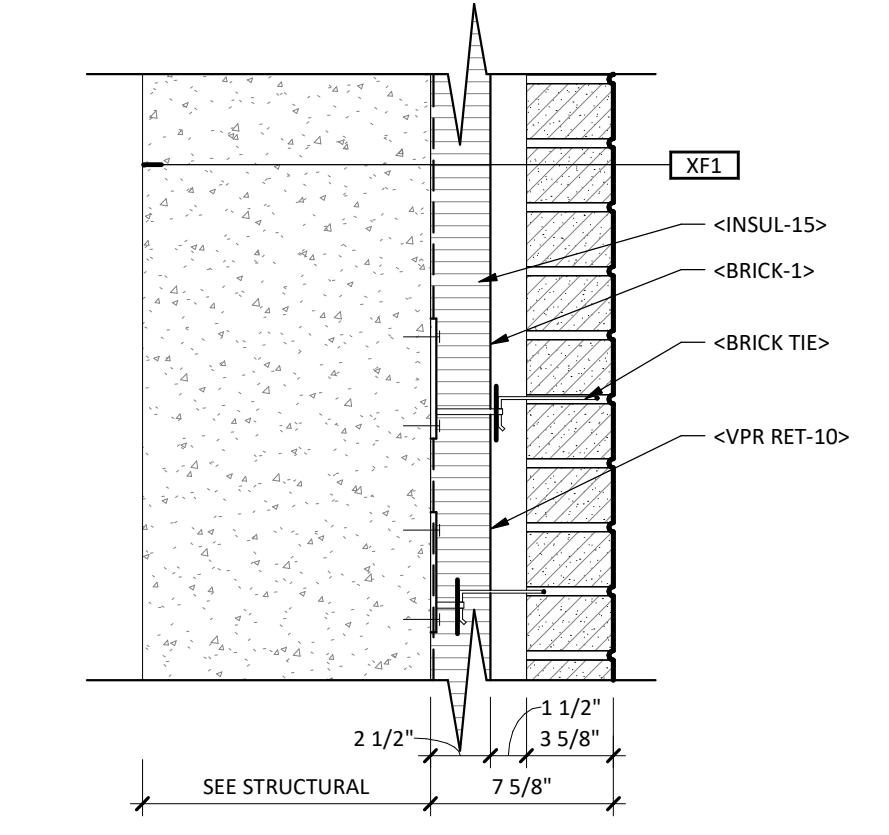
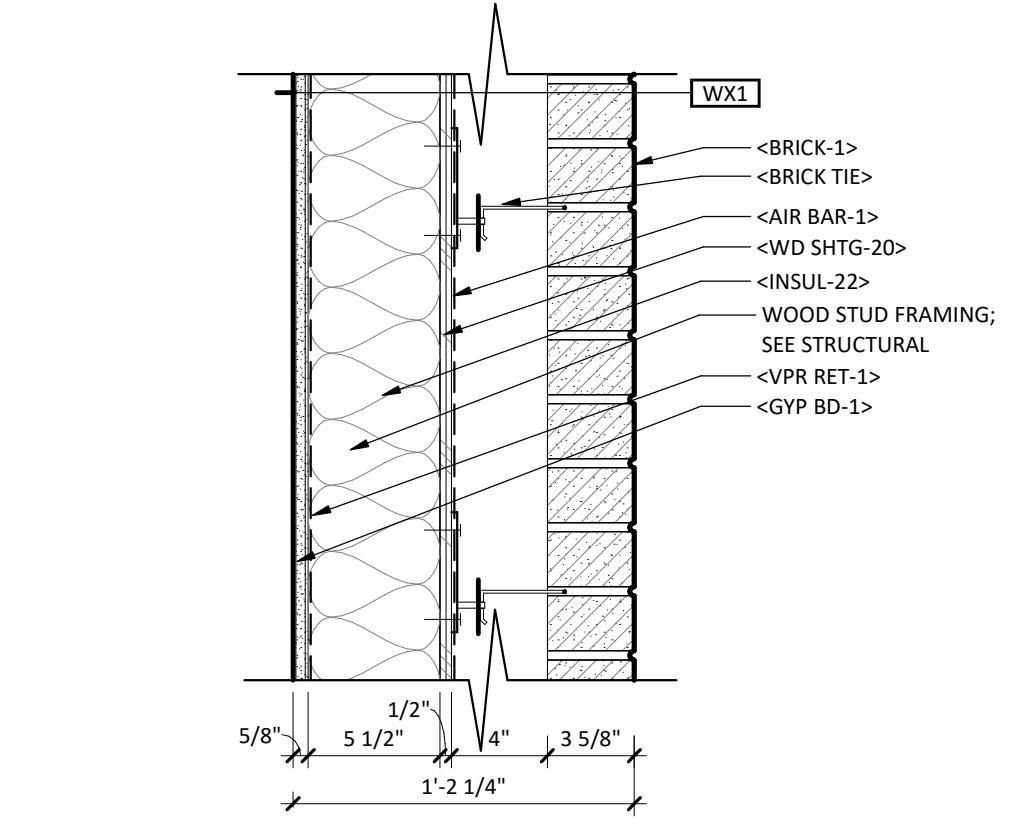
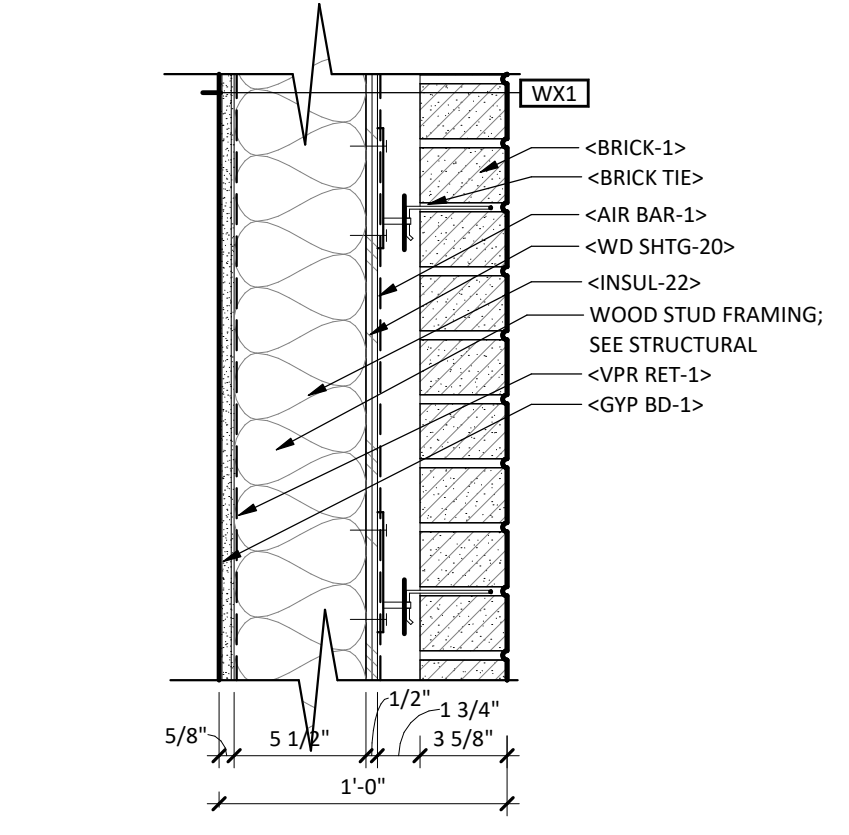
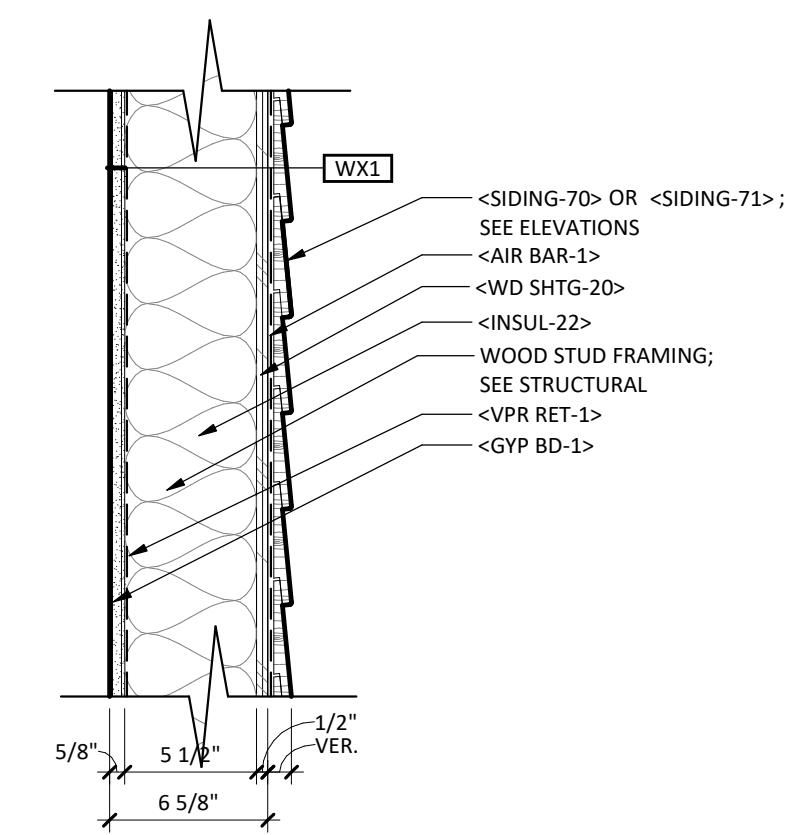
DATE: 04/27/2020
 PHASE: 100% DESIGN DEVELOPMENT
 PROJECT: 181226
 SHEET: G101
 TITLE SHEET

SHEET MATERIAL ID LIST

MATERIAL ID	SPEC SECTION & DESCRIPTION
AIR BAR-1	07 2500 - AIR BARRIER, MECHANICALLY FASTENED
BRICK-1	04 2000 - BRICK TIE
BRICK-1	04 2000 - FACE BRICK
EPDM-2	07 5300 - FULLY ADHERED EPDM ROOFING SYSTEM
GYP BD-1	09 2116 - 5/8" FIRE-RATED TYPE 'X' GYPSUM BOARD
GYP BD-4	09 2116 - 5/8" FIRE-RATED TYPE 'C' GYPSUM BOARD
INSUL-1	07 2100 - EXTRUDED POLYSTYRENE INSULATION W/ DRAINAGE CHANNELS
INSUL-15	07 2100 - POLYISOCYANURATE INSULATION, FOIL FACED
INSUL-22	
INSUL-33	07 2126 - BULK CELLULOSE FIBER INSULATION FOR PNEUMATIC PLACEMENT
INSUL-50	07 5300 - FLAT POLYISOCYANURATE ROOF INSULATION
INSUL-51	07 5300 - TAPERED POLYISO OVER FLAT POLYISO ROOF INSULATION
MET FURG-4	09 2116 - RESILIENT FURRING CHANNELS
PAVER-1	07 5300 - CONCRETE ROOF PAVER
RF UNDLMT-3	07 2500 - SYNTHETIC ROOFING UNDERLAYMENT
RF UNDLMT-5	07 2500 - SELF-ADHERING ICE/WATER SHIELD
SHINGLE-1	07 3113 - LAMINATED FIBERGLASS SHINGLES
SIDING-70	07 4623 - MANUFACTURED WOOD SHIP-LAP SIDING OR FIBER CEMENT LAP SIDING
SIDING-71	07 4623 - MANUFACTURED WOOD SHINGLE SIDING OR FIBER CEMENT SHINGLE SIDING
VPR RET-1	07 2300 - 6 MIL POLY VAPOR RETARDER SHEET
VPR RET-4	03 3000 - 15 MIL UNDERSLAB VAPOR RETARDER
VPR RET-10	07 2500 - VAPOR RETARDER, SELF-ADHERED OR LIQUID APPLIED
WD SHTG-10	06 1000 - 19/32" PLYWOOD ROOF SHEATHING
WD SHTG-14	06 1000 - 5/8" PLYWOOD ROOF SHEATHING
WD SHTG-20	06 1000 - 15/32" PLYWOOD WALL SHEATHING
WD SHTG-34	06 1000 - 3/4" PLYWOOD, GRADE C C
WTR PRF-2	07 1300 - SELF-ADHERING RUBBERIZED ASPHALT SHEETS



4D PROJECT SIGN REQUIREMENTS
 SCALE: 1/4" = 1'-0"



WALL TYPE 'WX1'

WALL TAG	R-VALUE (PROVIDED)	R-VALUE (REQUIRED)	UL LISTING	RATING	COMMENTS
WX1	R-20		U356	1HR	

WALL TYPE 'WX2'

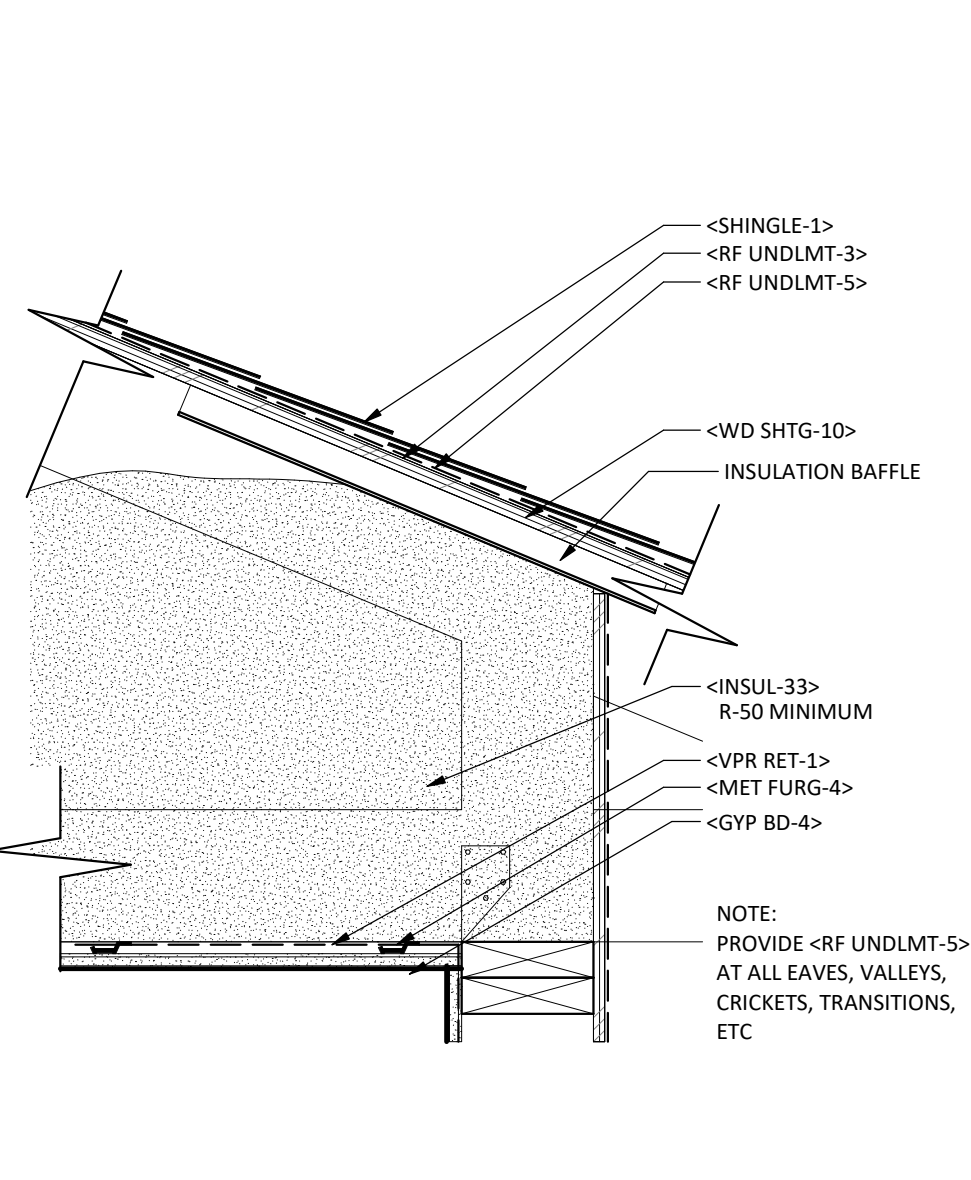
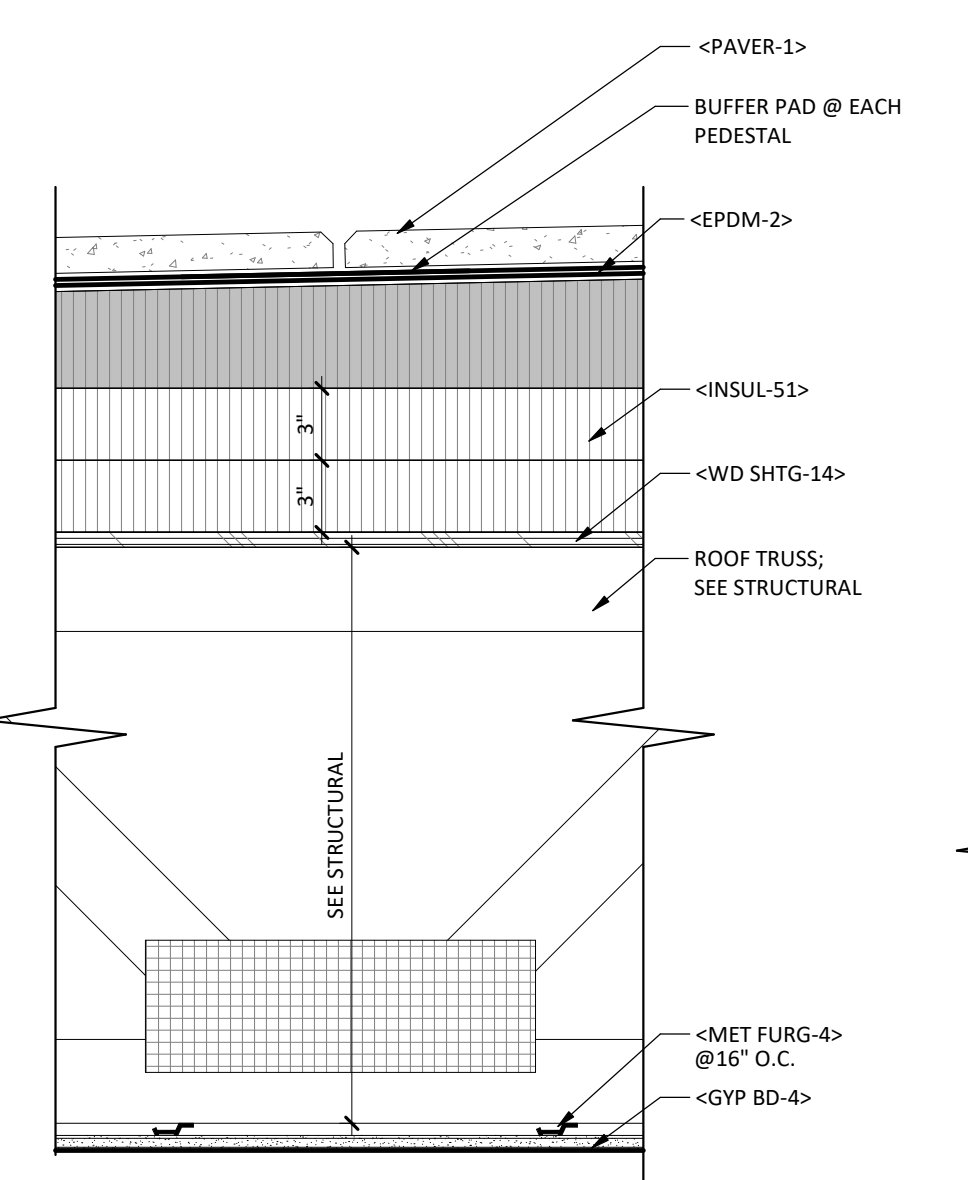
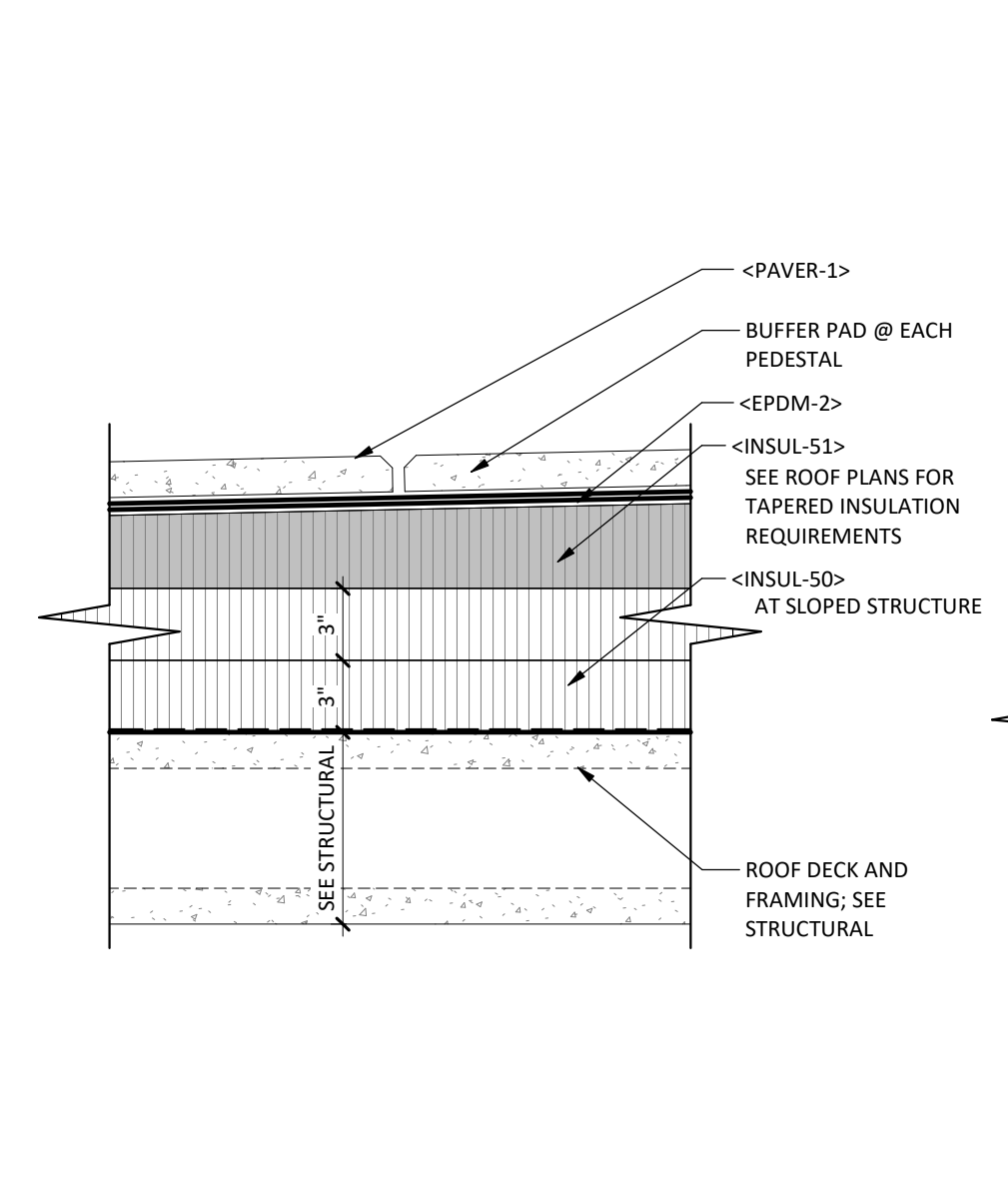
WALL TAG	R-VALUE (PROVIDED)	R-VALUE (REQUIRED)	UL LISTING	RATING	COMMENTS
WX2	R-20		U356	1HR	

WALL TYPE 'WX3'

WALL TAG	R-VALUE (PROVIDED)	R-VALUE (REQUIRED)	UL LISTING	RATING	COMMENTS
WX3	R-20		U356	1HR	

WALL TYPE 'XF1'

WALL TAG	R-VALUE (PROVIDED)	R-VALUE (REQUIRED)	UL LISTING	RATING	COMMENTS
XF1	R-15.5	R-15		3HR	



ROOF TYPE 'RF2'

ROOF TAG	R-VALUE (REQUIRED)	R-VALUE (PROVIDED)	GYB BD THICK	RATING	UL LISTING
RF2	R-30	R-34.8			

ROOF TYPE 'RF4'

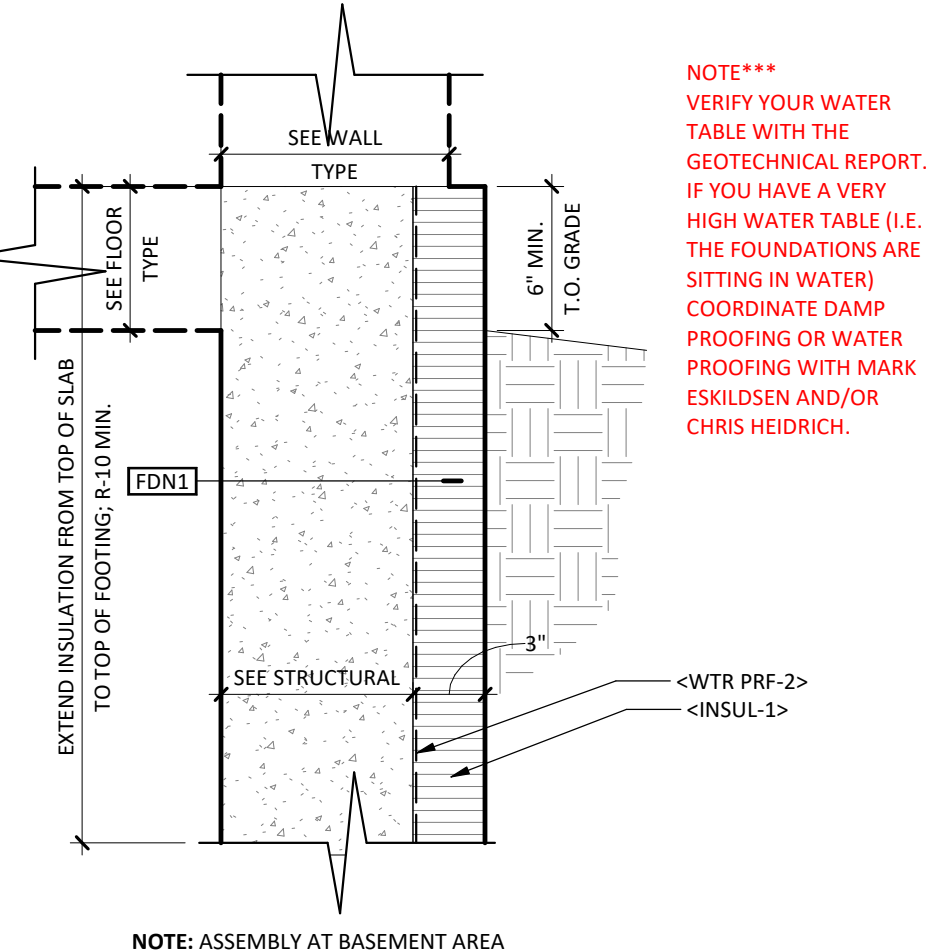
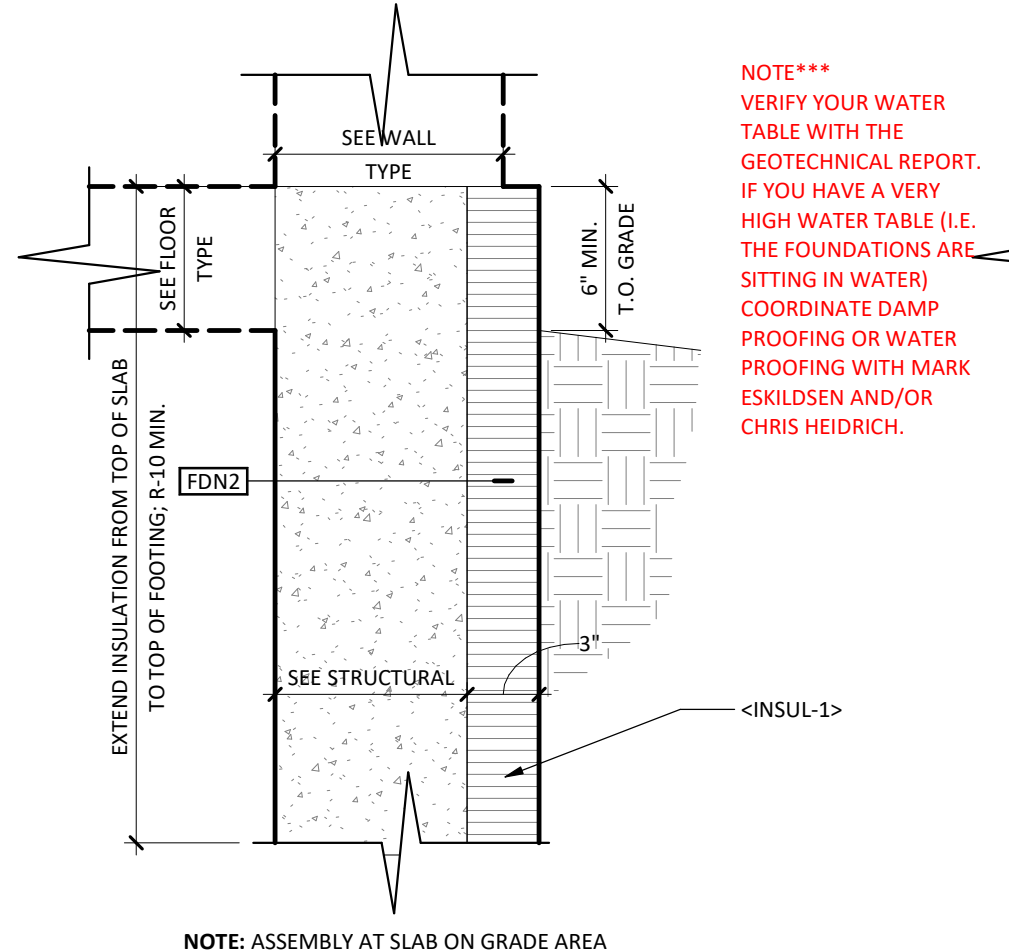
ROOF TAG	R-VALUE (REQUIRED)	R-VALUE (PROVIDED)	GYB BD THICK	RATING	UL LISTING
RF4	R-30	R-34.8			

ROOF TYPE 'RF3'

ROOF TAG	R-VALUE (REQUIRED)	R-VALUE (PROVIDED)	GYB BD THICK	RATING	UL LISTING
RF3	R-49	R-50 LOOSE FILL	NA/SEE RCP	1 HR	PS31

FLOOR TYPE 'FL1'

TYPE	INSUL THICK.	G.B. THICK	RATING	UL NO.	COMMENTS
FL1					



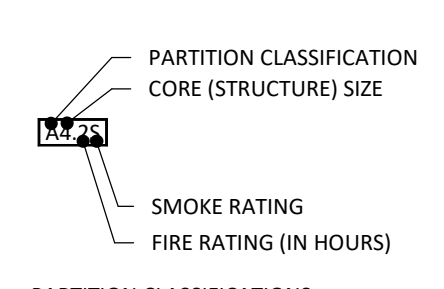
WALL TYPE 'FDN1'

WALL TAG	R-VALUE (PROVIDED)	R-VALUE (REQUIRED)	UL LISTING	RATING	COMMENTS
FDN1	R-15	R-15			

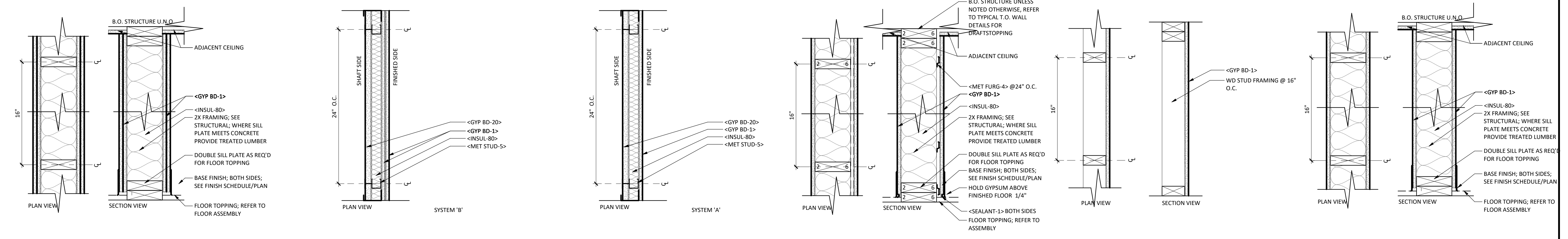
SHEET MATERIAL ID LIST

MATERIAL ID	SPEC SECTION & DESCRIPTION
CAST UNDLMNT-1	03 5400 - GYPSUM BASED UNDERLAYMENT
GYP BD-1	09 2116 - 5/8" FIRE-RATED TYPE 'X' GYPSUM BOARD
GYP BD-4	09 2116 - 5/8" FIRE-RATED TYPE 'C' GYPSUM BOARD
GYP BD-20	09 2116 - 1" FIRE-RATED TYPE 'X' GYPSUM BOARD
INSUL-33	07 2126 - BULK CELLULOSE FIBER INSULATION FOR PNEUMATIC PLACEMENT
INSUL-80	09 2116 - ACOUSTICAL BATT INSULATION
MET FURG-4	09 2116 - RESILIENT FURRING CHANNELS
MET STUD-5	09 2116 - C-H SHAFTHALL STUDS
SEALANT-1	07 9200 - JOINT SEALANT OR CAULKING
WD SHTG-1	06 1000 - FLOOR SHEATHING, 3/4" STURO-I-FLOOR, EXPOSURE 1, T&G

INTERIOR PARTITION LEGEND



- PARTITION CLASSIFICATIONS:**
- A ACOUSTIC FULL HEIGHT GYP. BD. WALL
 - F SINGLE SIDED GYP. BD. WALLS
 - M MASONRY WALLS
 - P PARTITION WALLS (TERMINATE 6" ABOVE CEILING)
 - S SHAFTHALLS



PARTITION TYPE 'WS'

WALL TAG	STUD SIZE & SPACING	WIDTH	INSUL THICK	RATING	UL NO.	COMMENTS
WS6.2	3 1/2" W.S. @ 16" O.C.	0' - 8"	FILL CAVITY	2HR	U301	

PARTITION TYPE 'S'

WALL TAG	STUD SIZE & SPACING	WIDTH	INSUL THICK	RATING	UL NO.	COMMENTS
S2.18	2 1/2" CH @ 24" O.C.	0' - 3 3/4"	FILL CAVITY	2HR	U415 SYSTEM 'B'	STC 39

PARTITION TYPE 'WC'

WALL TAG	STUD SIZE & SPACING	WIDTH	G.B. THK (EA. SIDE)	INSUL THICK	RATING	UL NO.	COMMENTS
WC6.1	2x8 W.S. @ 16" O.C.	0' - 7 1/4"	5/8"	FILL CAVITY	1HR	U311	

PARTITION TYPE 'WF'

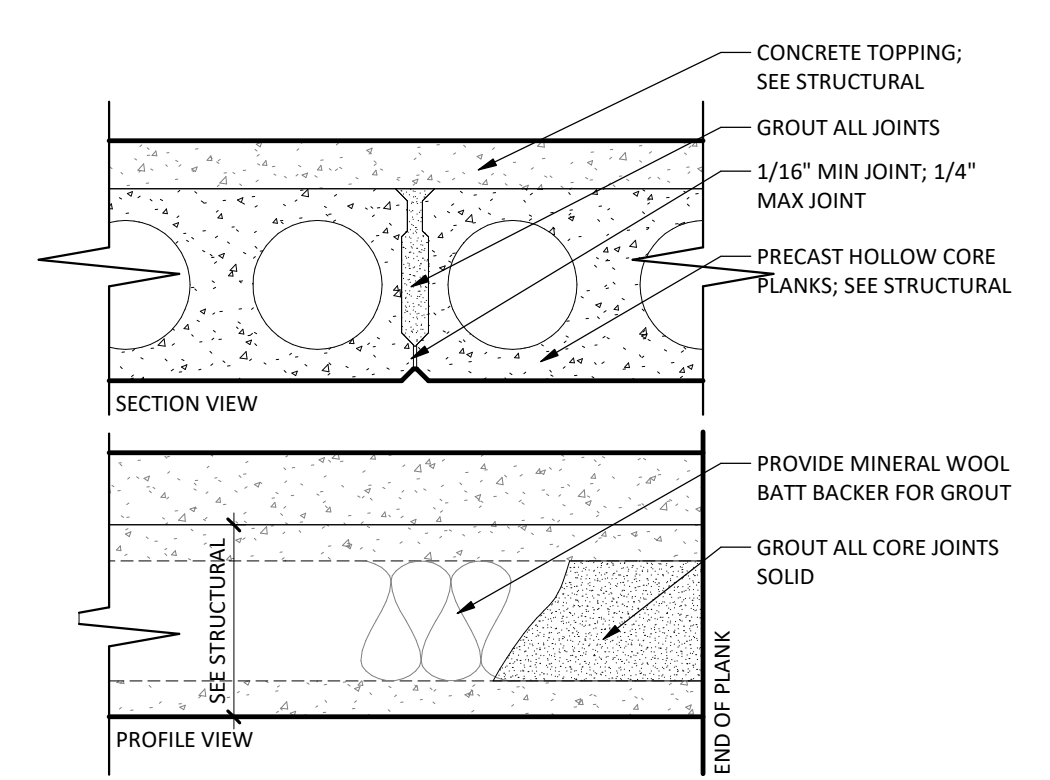
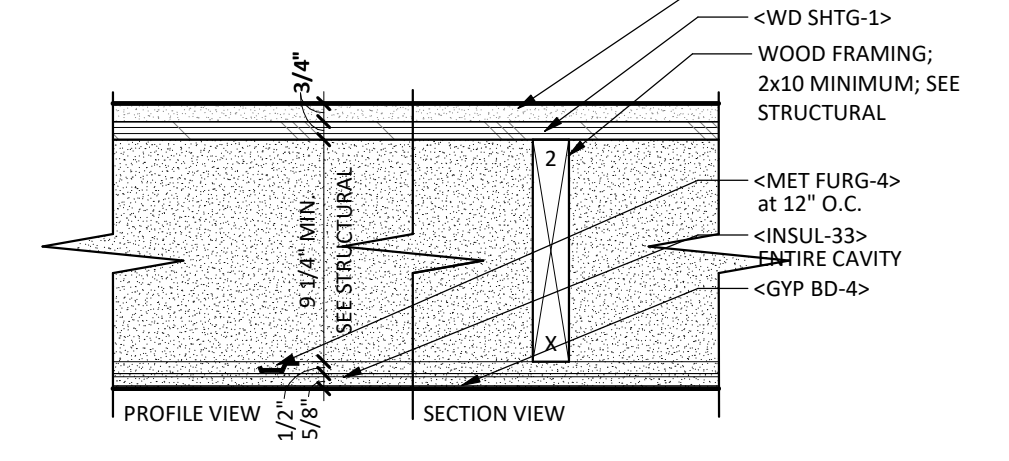
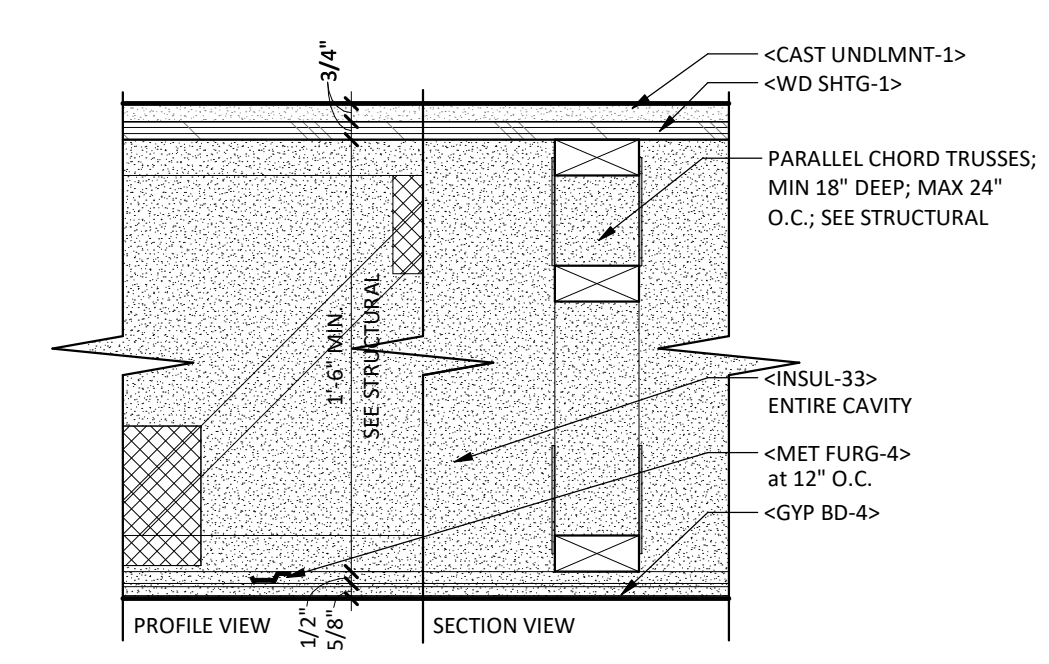
WALL TAG	STUD SIZE & SPACING	WIDTH	G.B. THK (EA. SIDE)	INSUL THICK	RATING	UL NO.	COMMENTS
WF4	3 1/2" W.S. @ 16" O.C.	0' - 4 1/8"	5/8"	N/A	0HR	-	
WF6	5 1/2" W.S. @ 16" O.C.	0' - 6 1/8"	5/8"	N/A	0HR	-	

PARTITION TYPE 'WA'

WALL TAG	STUD SIZE & SPACING	WIDTH	G.B. THK (EA. SIDE)	INSUL THICK	RATING	UL NO.	COMMENTS
WA4	3 1/2" W.S. @ 16" O.C.	0' - 4 3/4"	5/8"	FILL CAVITY	0HR	-	
WA6	5 1/2" W.S. @ 16" O.C.	0' - 6 3/4"	5/8"	FILL CAVITY	0HR	-	
WA6.1	5 1/2" W.S. @ 16" O.C.	0' - 6 3/4"	5/8"	FILL CAVITY	1HR	U305	LIMITED USE, POOR SOUND TRANSMISSION

WC/U311

STC	TEST REF.	NOTE: TABLE INDICATES LAB TEST RESULTS. FIELD TEST RESULTS WILL BE 5 LESS THEN LISTED LAB TEST RESULTS.
50	BBN 760903	



FLOOR TYPE 'FL4'

TYPE	INSUL THICK.	G.B. THICK	RATING	UL NO.	STC/IC	COMMENTS
FL4	3 1/2"	5/8" TYPE 'C'	1 HR	L563	SEE CHART	

FLOOR TYPE 'FL5'

TYPE	INSUL THICK.	G.B. THICK	RATING	UL NO.	STC/IC	COMMENTS
FL5	-	-	1 HR	L502	SEE CHART	

FLOOR TYPE 'FL6'

TYPE	INSUL THICK.	G.B. THICK	RATING	UL NO.	STC/IC	COMMENTS
FL6	-	-	3 HR	J901	-/-	

UL L563

FINISH FLOOR	STC	TEST REF.	IIC	TEST REF.	NOTE: TABLE INDICATES LAB TEST RESULTS. FIELD TEST RESULTS WILL BE 5 LESS THEN LISTED LAB TEST RESULTS.
CPT & PAD	60-64	RAL OT04-01	81	RAL OT04-06	
CUSH. VINYL	60-64	RAL OT04-03	55	RAL OT04-04	
ENG. WD.	60-64	RAL OT04-05	55	RAL OT04-04	
CER. TILE	60-64	RAL OT04-07	54	RAL OT04-12	
SHT. VINYL	60-64	RAL OT04-11	53	RAL OT04-02	

UL L502

FINISH FLOOR	STC	TEST REF.	IIC	TEST REF.	NOTE: TABLE INDICATES LAB TEST RESULTS. FIELD TEST RESULTS WILL BE 5 POINTS LESS THAN LISTED LAB TEST RESULTS.
CPT & PAD	55-59	G&H BW-10 MT	73	G&H BW-10 MT	

CONCRETE TOPPING

RATING HR	TOPPING THICKNESS
3	2"

CODE / ZONING REVIEW

TOPIC	IBC REFERENCE	RESPONSE
01 - BUILDING STATISTICS:		
1.010	Site / Lot Area	Lot 170104211: 0.212 acres Lot 170104212: 0.114 acres Lot 171220514: 0.518 acres Lot 171220501: 0.200 acres Lot 171220502: 0.200 acres Lot 171220511: 1.086 acres Lot 171220512: 0.271 acres Lot 171220511: 0.199 acres
1.020	Ground Building Area	16,449 SF
1.030	Level One Building Area	15,520 SF
1.040	Level Two Building Area	15,543 SF
1.050	Level Three Building Area	13,095 SF
1.060	Total Building Area	60,567 SF
1.070	Building Height	47' (Assume 1st floor 6' above grade plane, verify with civil)
02 - ZONING / SITE REQUIREMENTS:		
2.010	Zoning District	B-2 Community Business
2.020	Building Use	Multi-Family Housing
2.030	Density/FAR	Minimum lot size of 1,700 s.f. per unit (61,200 s.f.)
2.040	Front Yard Setback	30' - Structures in excess of 3 stories or 35 ft. are permitted as conditional uses. For each additional story over 3 stories or for each additional 10ft. and side yard setback requirements shall be increased 5ft.
2.050	Side Yard Setback	10' - A side yard that directly abuts residential district shall be increased 10 additional feet over the minimum stated.
2.060	Rear Yard Setback	20'
2.070	Site Coverage Restrictions	
2.080	Height Restrictions	35' or 3 stories.
2.090	Parking Requirements	A)30' parking requires 45.6 ft wall to wall min. width and 11 ft. isles 45' parking requires 52.5 ft wall to wall min. width and 13 ft. isles 60' parking requires 60.0 ft wall to wall min. width and 18 ft. isles 90' parking requires 62.0 ft wall to wall min. width and 24 ft. isles B)Multiple-family dwelling: studio and one bedroom require one stall per unit and two bedroom and greater require a minimum of two stalls per unit; and C)Elderly (senior citizen) housing: reservation of area equal to one parking space per unit. Initial development is, however, required of only one-half space per unit and said number of spaces can continue until such time as the City Council considers a need for additional parking spaces has been demonstrated. Business District: Screening from abutting residential districts shall be provided in the following instances: public utility buildings and structures, convenience food, car wash, motor fuel station, major auto repair, tire and battery stores and service, open and outdoor storage, service, sales and rentals, greenhouse and all open off-street parking areas of five or more spaces.
2.100	Landscaping	
2.110	Possible Variances	
2.120	Other Notes / Requirements	
03 - BUILDING CODE ANALYSIS - APPLICABLE GOVERNING CODES:		
3.010	Building Code	2020 MN State Building Code; Minnesota Rules, Chapter 1300 & 1305 (2018 IBC)
3.020	Fire Code	2020 MN State Fire Code
3.030	Mechanical Code	2020 MN State Mechanical and Fuel Gas Code
3.040	Energy Code	2015 Minnesota Residential Energy Code
3.050	Plumbing Code	2015 Minnesota Plumbing Code
3.060	Electrical Code	2014 National Electrical Code with MN amendments; Effective date July 1st, 2014
3.070	Elevator Code	2015 MN State Elevator and Related Devices Code; MN Rules Chapter 1307.
3.080	Accessibility Code	2020 Minnesota Energy Code
3.090	Life Safety Code (NFPA)	
04 - BUILDING CLASSIFICATION AND LIMITATIONS:		
4.010	Occupancy Classification by Code	R-2 Apartment houses S-2 Enclosed parking garage B Business (including assembly spaces with occupant load less than 50).
4.020	Occupancy Separation(s)	S-2/R-2: Reduced to 1 hour for private vehicles (note B) S-2/B: Reduced to 1 hour for private vehicles (note B) B/R-2: non-separated uses, but one hour partition required per 708.
4.030	Non-Separated Uses	
4.040	Incidental Use Areas	
4.050	Automatic Sprinkler System	NFPA 13 within S-2 occupancy, per 903.2.10 NFPA 13R within R-2 and B occupancies.
4.060	Construction Type	V-A
4.070	Buildings on the Same Lot	N/A
4.080	Max Allowable Area Basic Limit	12,000 s.f. (based on most restrictive occupancy, R)
4.090	Allowable Area Increase for Frontage	20,466 s.f. allowable area with frontage increase
4.100	Allowable Area Increase for Sprinkler	W = 544 ft. (287' + 68 ft. (307') / 612 ft. = 28.22' L = 612' / 612' = 2508.2070' + 70.55' 12,000 x 70.55% = 8,466 R-2 - 4 stories, 60' (NFPA 13R) R-3 - 3 stories, 50' (when not sprinklered NFPA 13)
4.110	Area Increase Formula	
4.120	Maximum Allowable Height Basic Limit	None.
4.130	Maximum Allowable Height with Modifications	No.
4.140	Is This a High Rise Classification	No.
4.150	Mixed Occupancy Area Calculation	S-2 separated occupancy. B/R-2 non-separated occupancies.
4.160	Special Requirements Based on Occupancy	
05 - FIRE RESTRICTIVE REQUIREMENTS:		
5.010	Construction Type	V-A
5.020	Structural Frame	1
5.030	Exterior Bearing Walls	1 1 HR MIN - Not less than that required by Fire Separation Distance: Fire Separation Distance x Occupancy < 5 feet n/a > 5 feet, but < 10 feet n/a > 10 feet, but < 30 feet 1 hour at east lot line > 30 feet 0
5.040	Interior Bearing Walls	1 (See also occupancy separations and other requirements for fire-resistance ratings)
5.050	Interior Supporting Roof Bearing Walls	1 (See also occupancy separations and other requirements for fire-resistance ratings)
5.060	Nonbearing Exterior Walls	0 (See also occupancy separations and other requirements for fire-resistance ratings)
5.070	Nonbearing Interior Walls	0 (See also occupancy separations and other requirements for fire-resistance ratings)
5.080	Floor Construction	1
5.090	Roof Construction	1
5.100	Exterior Wall Projections	
5.110	Exterior Wall Openings	70% at east lot line, unlimited elsewhere.
5.120	Exterior Wall Parapets	None required.
5.130	Fire Walls	None required.
5.140	Fire Barriers	
5.150	Shaft Enclosures	2 hour (connecting 4 stories) Includes trash chute and trash room.
5.160	Elevator Lobby	Not required. Hoistway opening protection required per 3006.3
5.170	Exit Enclosures	
5.180	Exit Passageway	
5.190	Horizontal Exit	
5.200	Atriums	N/A
5.210	Incidental Use Areas	
5.220	Control Areas	
5.230	Separation of Mixed Occ.	2 hour between S-2 and R-2; 2 hour between B and R-2
5.240	Exterior Walls	
5.250	Fire Partitions	
5.260	Dwelling Unit Demising Walls	1 Hour
5.270	Corridor Walls	1/2 Hour
5.280	Elevator Lobby Walls	
5.290	Horizontal Assemblies	2 hour between S-2 and R-2; 1 hour between each dwelling unit
5.300	Penetrations	
5.310	Joint Systems	
5.320	Structural Members	
5.330	Opening Protectives	Corridors: 20 min. 1-hour partitions: 45 min. 2-hour shafts: 90 min.
5.340	Ducts/Transfer Openings	
5.350	Concealed Spaces	
5.360	Fireblocking	
5.370	Draftstopping - Floor and Ceiling	At dwelling unit separations and one side of corridor.
5.380	Draftstopping in Attic	Between every 2 units not exceeding 3,000 s.f. and one side of corridor.
06 - EGRESS REQUIREMENTS:		
6.010	Occupancy	Chapter 10 R-2, S-2, B
6.020	Occupant Load	Chapter 10 R-2: 203 B: 54 S-2: 68
6.030	Accessible Means of Egress	Chapter 10 Where more than one means of egress is req'd (by Section 1015.1 or 1019.1) from any accessible space, not less than two accessible means of egress are req'd. To be accessible means of egress, must have area of refuge.
6.040	Exit Stairways	Chapter 10 See Code - special requirements such as standby power and area of refuge.
6.050	Elevators	Chapter 10
6.060	Minimum Ceiling Height	Chapter 10 7'-6" min.
6.070	Minimum Door Height Clearance	Chapter 10 80" min.
6.080	Stairway Width	Chapter 10 44" required, 45" actual (minimum).
6.090	Stairway Headroom	Chapter 10 80" min.
6.100	Max Height Between Landings	Chapter 10 12'-0"
6.110	Handrails	Chapter 10 Required both sides of stairs.
6.120	Stair Run/Rise	Chapter 10 11" min, 7" max.
6.130	Ramps	
6.140	Common Path of Egress	Chapter 10 R-2: 125' B: 100' S-2: 100'
6.150	Exit Access	Chapter 10 2 required from each story.
6.160	Exit Access Travel Distance	Chapter 10 R-2: 250' max. B: 200' max. S-2: 300' max.
07 - ACCESSIBILITY:		
7.010	Building Entrances	Chapter 11 60% of building entrances must be accessible
7.020	Public Restrooms	Chapter 11 See Plumbing Chapter
7.030	Dwelling Unit Requirements	Chapter 11 List quantity per IBC
7.040	Type Accessible Quantity	Chapter 11 N/A
7.050	Type A Quantity	Chapter 11 1 (2%), plus all units to meet Universal Design standards per MHFA.
7.060	Type B Quantity	Chapter 11 35, plus all units to meet Universal Design standards. Refer to unit plans for designation of Option A or Option B Toilet Rooms.
7.070	Type C Quantity	Chapter 11 N/A
7.080	Communication Features	
08 - INTERIOR ENVIRONMENT:		

CODE / ZONING REVIEW

TOPIC	IBC REFERENCE	RESPONSE
8.010	Ventilation	
8.020	Temperature Control	System must provide 68 degree temp at a point 3ft above floor on the design heating day.
8.030	Lighting	
8.040	Sound Transmission	Common interior walls, partitions, and floor ceiling assemblies between adj dwelling units or between dwelling units and public spaces. Air-borne sound: STC > 50 STC (45 Field STC) - tested in accordance with ASTM E 90. Treat openings, penetrations, etc. to maintain rating (except entry doors). Structure-borne sound: IIC > 50 STC (45 Field IIC) - per ASTM E 492 Refer to MHFA requirements in addition to IBC Chapter 12.
8.050	Interior Space Dimensions	
8.060	Access to Unoccupied Spaces	
8.070	Surrounding Materials	
09 - ENERGY EFFICIENCY:		
9.010	Chapter 13	2015 MN Residential Energy Code for 3 story multi-family.
10 - STRUCTURAL AND SPECIAL TESTING:		
10.010	Item Requiring Testing	
10.020	Required Standard	
10.030	Type of Inspector	
10.040	Frequency	
10.050	Responsible for Inspections	
11 - PLUMBING FIXTURE REQUIREMENTS:		
11.010	Laundry (inks)	Chapter 29 Men = 1; Women = 1
11.020	Water Closets (Toilets)	Chapter 29 Men = 1; Women = 1
11.030	Urinals	Chapter 29
11.040	Drinking Fountains	Chapter 29 1

UNIT MATRIX

UNIT NAME	UNIT TYPE	UNIT SF	ACC. TYPE	TOTAL	1ST FLOOR	2ND FLOOR	3RD FLOOR	PERCENTAGE
UNIT 1A	1 BEDROOM	740 SF	TYPE B	3	2	1	1	22%
UNIT 1B	1 BEDROOM	770 SF	TYPE B	3	1	1	1	
UNIT 1C	1 BEDROOM	740 SF	TYPE B	1	1	-	-	
UNIT 1D	1 BEDROOM	746 SF	TYPE A	1	1	-	-	
UNIT 2A	2 BEDROOM	971 SF	TYPE B, OPT. A	8	2	3	3	78%
UNIT 2B	2 BEDROOM	1,003 SF	TYPE B, OPT. A	5	2	2	1	
UNIT 2C	2 BEDROOM	997 SF	TYPE B, OPT. A	6	2	2	2	
UNIT 2D	2 BEDROOM	1,065 SF	TYPE B, OPT. B	4	2	2	-	
UNIT 2E	2 BEDROOM	1,001 SF	TYPE B, OPT. B	2	1	1	-	
UNIT 2F	2 BEDROOM	988 SF	TYPE B, OPT. A	1	-	1	-	
UNIT 2G	2 BEDROOM	1,127 SF	TYPE B, OPT. B	1	-	-	1	
UNIT 2H	2 BEDROOM	1,222 SF	TYPE B, OPT. B	1	-	-	1	
TOTAL UNITS:				36	13	13	10	

NOTES:
 • UNIT SF'S ARE CALCULATED USING THE EXTERIOR FACE OF SHEATHING, CENTER OF DEMISING WALL STUDS, AND CENTER OF CORRIDOR STUDS.
 • TYPE 'A' UNITS IS ROOM NUMBER 105.
 • 2% OF UNITS ARE REQUIRED TO BE 'TYPE A' ACCESSIBLE. 2% OF 36 TOTAL UNITS IS 0.72 UNITS, OR 1 UNIT.

PARKING SUMMARY

PARKING GARAGE	36*
SITE PARKING	25**
PROOF OF PARKING	5
TOTAL	66

*ONE ACCESSIBLE STALL INCLUDED
 **TWO ACCESSIBLE STALL INCLUDED

SHEET MATERIAL ID LIST

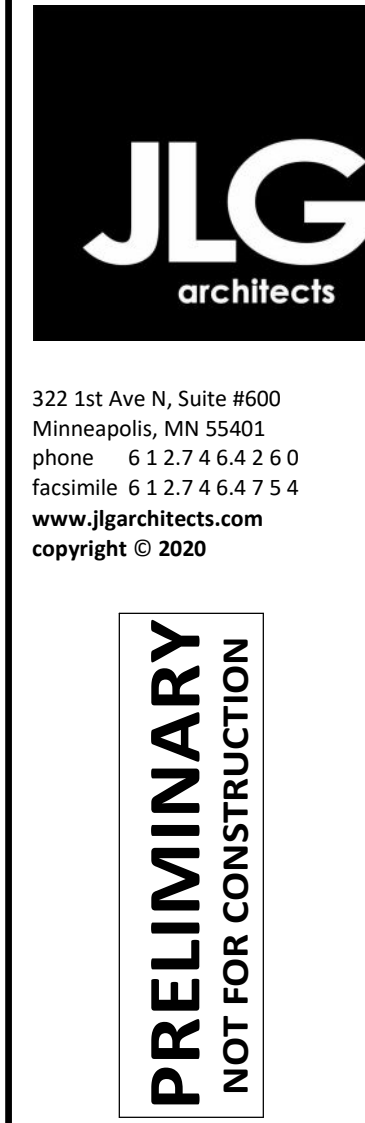
MATERIAL ID	SPEC SECTION & DESCRIPTION
FIRE CAB-1	10 4400 - FIRE EXTINGUISHER CABINET

Travel Distance	Path ID	Level
88'-9"	0A	
122'-6"	0B	
130'-1"	1A	
130'-1"	1B	
130'-3"	2A	
130'-1"	2B	
116'-4"	03	
135'-3"	04	
135'-6"	3B	

LIFE SAFETY LEGEND

- 1-HOUR RATED WALL
- 1-HOUR RATED WALL (SMOKE)
- 2-HOUR RATED WALL
- 3-HOUR RATED WALL
- 4-HOUR RATED WALL

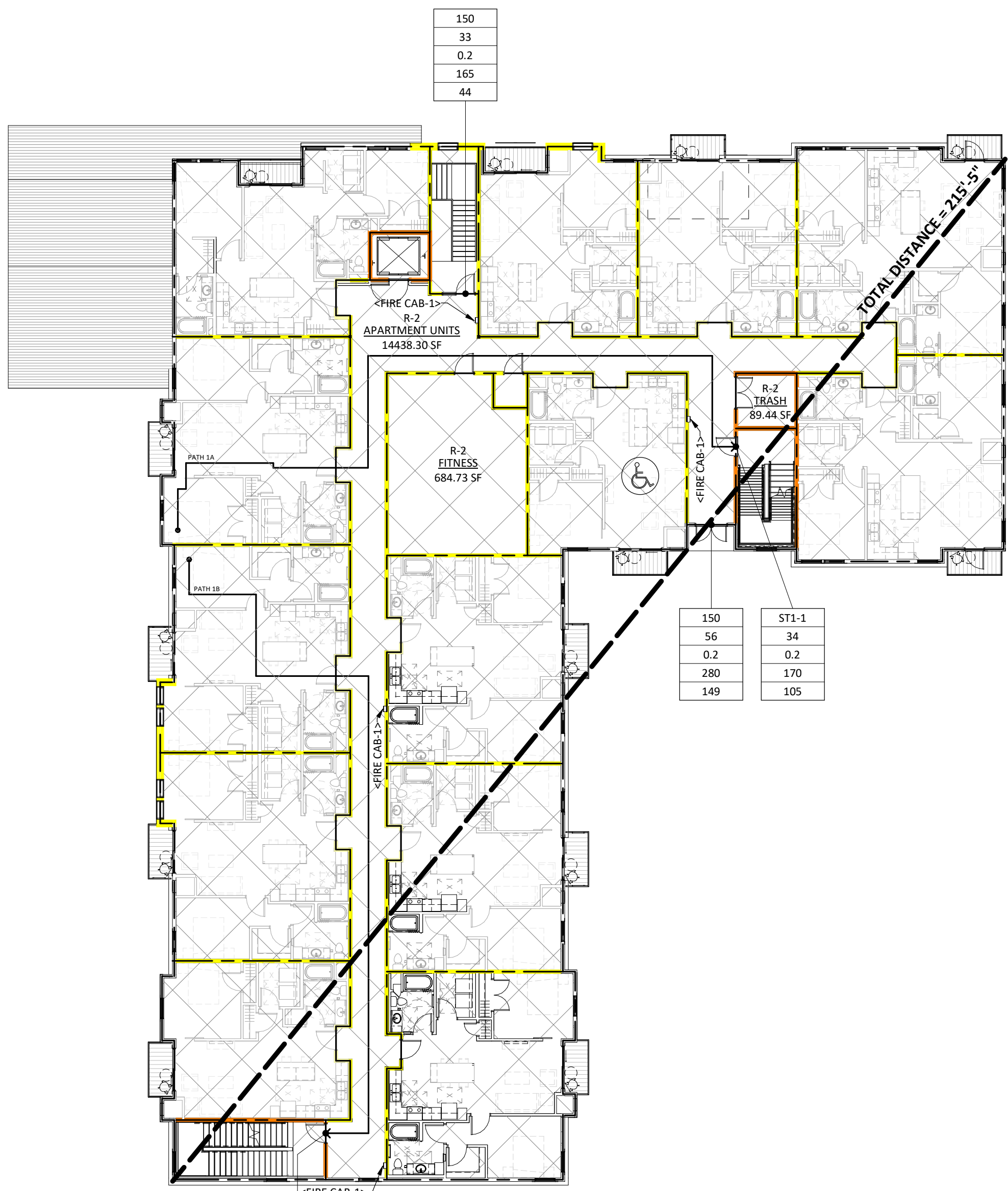
- | | |
|----------|---------------------|
| NUMBER | ← ELEMENT ID NUMBER |
| WIDTH | ← EGRESS WIDTH |
| FACTOR | ← EGRESS FACTOR |
| CAPACITY | ← EGRESS CAPACITY |
| LOAD | ← EGRESS LOAD |



322 1st Ave N, Suite #600
 Minneapolis, MN 55401
 phone: 612.746.4260
 Facsimile: 612.746.4754
 www.jlgarchitects.com
 copyright © 2020

PRELIMINARY
NOT FOR CONSTRUCTION

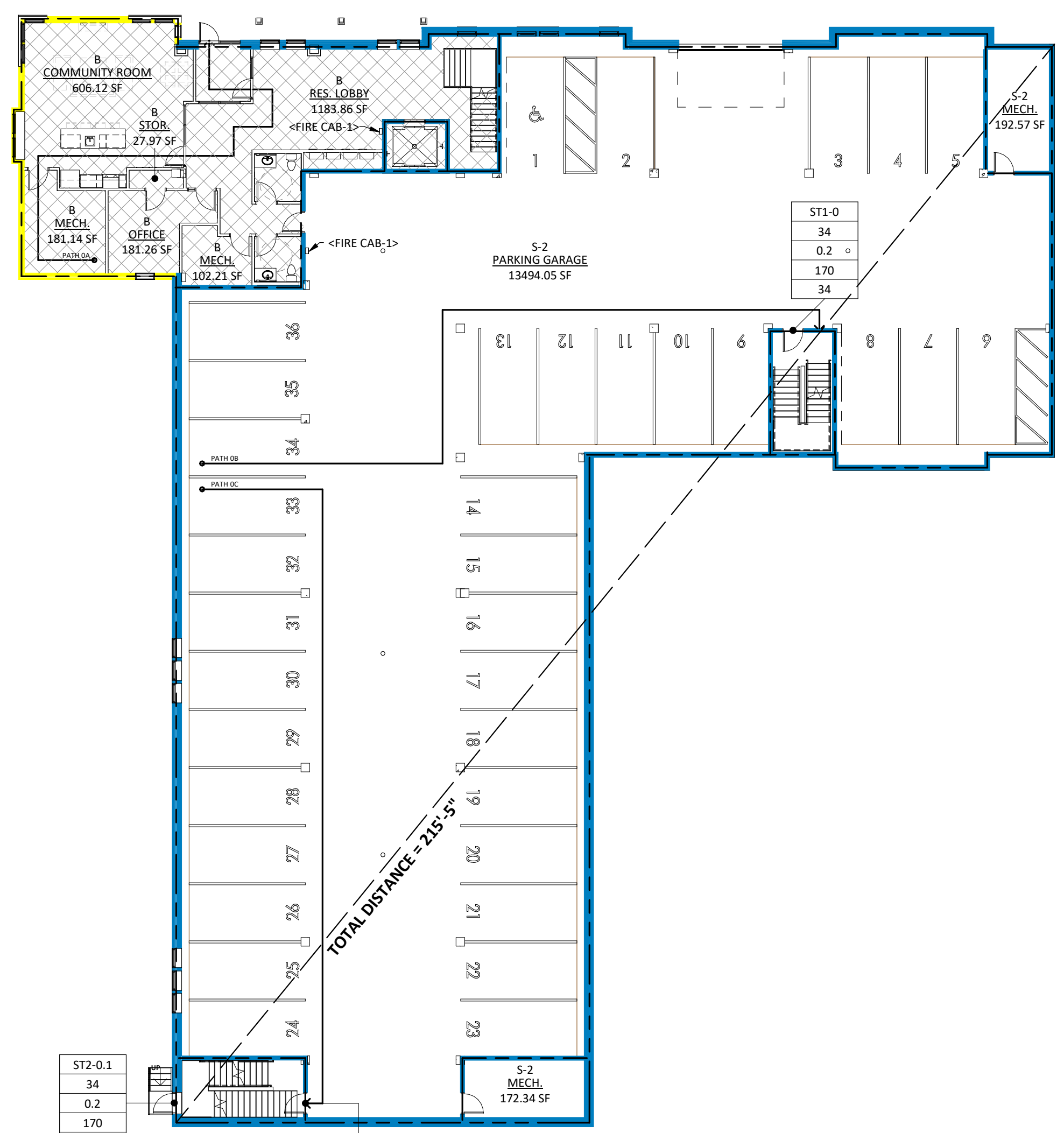
NO.	DESCRIPTION	DATE



2A G110 FIRST FLOOR
 SCALE: 1/16" = 1'-0"

FIRST FLOOR AREA SCHEDULE

NUMBER	NAME	AREA	OCCUPANCY CLASSIFICATION (IBC CHAPTER 3)	FUNCTION OF SPACE	IBC CHAPTER 10		OCCUPANT LOAD		REMARKS
					FLOOR AREA PER OCCUPANT	SF PER OCC. MEASUREMENT	FIXED SEATS	MAX. ALLOWABLE OCCUPANT LOAD	
R-2	APARTMENT UNITS	14,438 SF	R-2	RESIDENTIAL	200 GROSS	0	73		
R-2	FITNESS	685 SF	R-2	EXERCISE ROOM	50 GROSS	0	14		
R-2	TRASH	89.59 SF	R-2	ACCESSORY STORAGE, MECH EQUIPMENT ROOM	300 GROSS	0	1		
		15,212 SF				0	88		



1A G110 GROUND FLOOR
 SCALE: 1/16" = 1'-0"

GROUND FLOOR AREA SCHEDULE

NUMBER	NAME	AREA	OCCUPANCY CLASSIFICATION (IBC CHAPTER 3)	FUNCTION OF SPACE	IBC CHAPTER 10		OCCUPANT LOAD		REMARKS
					FLOOR AREA PER OCCUPANT	SF PER OCC. MEASUREMENT	FIXED SEATS	MAX. ALLOWABLE OCCUPANT LOAD	
B	RES. LOBBY	1,184 SF	B	BUSINESS AREA	100 GROSS	0	12		
B	COMMUNITY ROOM	606 SF	B	ASSEMBLY - W/O FIXED SEATING - UNCONCENTRATED	15 NET	0	41		
B	MECH.	181 SF	B	ACCESSORY STORAGE, MECH EQUIPMENT ROOM	300 GROSS	0	1		
B	OFFICE	181 SF	B	BUSINESS AREA	100 GROSS	0	2		
B	MECH.	102 SF	B	ACCESSORY STORAGE, MECH EQUIPMENT ROOM	300 GROSS	0	1		
B	STOR.	28 SF	B	ACCESSORY STORAGE, MECH EQUIPMENT ROOM	300 GROSS	0	1		
S-2	PARKING GARAGE	13,494 SF	S-2	PARKING GARAGES	200 GROSS	0	68		
S-2	MECH.	193 SF	S-2	ACCESSORY STORAGE, MECH EQUIPMENT ROOM	300 GROSS	0	1		
S-2	MECH.	172 SF	S-2	ACCESSORY STORAGE, MECH EQUIPMENT ROOM	300 GROSS	0	1		
		16,142 SF				0	126		

LWO DEVELOPMENT, LLC
EASTGATE APARTMENTS
 OWATONNA, MN

DATE: 04/27/2020
 PHASE: 100% DESIGN
 DEVELOPMENT

PROJECT: 18126

SHEET: **G110**
 LIFE SAFETY PLANS

CODE / ZONING REVIEW

TOPIC	IBC REFERENCE	RESPONSE
01 - BUILDING STATISTICS:		
1.010	Site / Lot Area	Lot 170104211: 0.212 acres Lot 170104212: 0.114 acres Lot 171220514: 0.518 acres Lot 171220501: 0.200 acres Lot 171220502: 0.200 acres Lot 171220511: 1.086 acres Lot 171220512: 0.271 acres Lot 171220511: 0.199 acres 16,449 SF
1.020	Ground Building Area	15,520 SF
1.030	Level One Building Area	15,543 SF
1.040	Level Two Building Area	13,095 SF
1.050	Level Three Building Area	60,561 SF
1.060	Total Building Area	47' (Assume 1st floor 6' above grade plane, verify with civil)
1.070	Building Height	
02 - ZONING / SITE REQUIREMENTS:		
2.010	Zoning District	B-2 Community Business
2.020	Building Use	Multi-Family Housing
2.030	Density/FAR	Minimum lot size of 1,700 s.f. per unit (61,200 s.f.)
2.040	Front Yard Setback	30' - Structures in excess of 3 stories or 35 ft. are permitted as conditional uses. For each additional story over 3 stories or for each additional 10ft. and side yard setback requirements shall be increased 5ft.
2.050	Side Yard Setback	10' - A side yard that directly abuts residential district shall be increased 10 additional feet over the minimum stated.
2.060	Rear Yard Setback	20'
2.070	Site Coverage Restrictions	
2.080	Height Restrictions	35' or 3 stories.
2.090	Parking Requirements	A)30' parking requires 45.6 ft wall to wall min. width and 11 ft. isles 45' parking requires 52.5 ft wall to wall min. width and 13 ft. isles 60' parking requires 60.0 ft wall to wall min. width and 18 ft. isles 90' parking requires 62.0 ft wall to wall min. width and 24 ft. isles B)Multiple-family dwelling: studio and one bedroom require one stall per unit and two bedroom and greater require a minimum of two stalls per unit; and C)Elderly (senior citizen) housing: reservation of area equal to one parking space per unit. Initial development is, however, required of only one-half space per unit and said number of spaces can continue until such time as the City Council considers a need for additional parking spaces has been demonstrated. Business District: Screening from abutting residential districts shall be provided in the following instances: public utility buildings and structures, convenience food, car wash, motor fuel station, major auto repair, tire and battery stores and service, open and outdoor storage, service, sales and rentals, greenhouse and all open off-street parking areas of five or more spaces.
2.100	Landscaping	
2.110	Possible Variances	
2.120	Other Notes / Requirements	
03 - BUILDING CODE ANALYSIS - APPLICABLE GOVERNING CODES:		
3.010	Building Code	2020 MN State Building Code; Minnesota Rules, Chapter 1300 & 1305 (2018 IBC)
3.020	Fire Code	2020 MN State Fire Code
3.030	Mechanical Code	2020 MN State Mechanical and Fuel Gas Code
3.040	Energy Code	2015 Minnesota Residential Energy Code
3.050	Plumbing Code	2015 Minnesota Plumbing Code
3.060	Electrical Code	2014 National Electrical Code with MN amendments; Effective date July 1st, 2014
3.070	Elevator Code	2015 MN State Elevator and Related Devices Code; MN Rules Chapter 1307.
3.080	Accessibility Code	2020 Minnesota Energy Code
3.090	Life Safety Code (NFPA)	
04 - BUILDING CLASSIFICATION AND LIMITATIONS:		
4.010	Occupancy Classification by Code	R-2 Apartment houses S-2 Enclosed parking garage B Business (including assembly spaces with occupant load less than 50). S-2/R-2: Reduced to 1 hour for private vehicles (note b) S-2/B: Reduced to 1 hour for private vehicles (note b) B/R-2: non-separated uses, but one hour partition required per 708.
4.020	Occupancy Separation(a)	
4.030	Non-Separated Uses	
4.040	Incidental Use Areas	NFPA 13 within S-2 occupancy, per 903.2.10 NFPA 13R within R-2 and B occupancies.
4.050	Automatic Sprinkler System	V-A
4.060	Construction Type	N/A
4.070	Buildings on the Same Lot	
4.080	Max Allowable Area Basic Limit	12,000 s.f. (based on most restrictive occupancy, R)
4.090	Allowable Area Increase for Frontage	20,466 s.f. allowable area with frontage increase
4.100	Allowable Area Increase for Sprinkler	W = 544 ft. (287' + 68 ft. (307')/612 ft. = 28.22' L = 612 ft. (2508.20/4 + 70.55' 12,000 x 70.55% = 8,466
4.110	Area Increase Formula	R-2 = 4 stories, 60' (NFPA 13R) R-3 = 3 stories, 50' (when not sprinklered NFPA 13)
4.120	Maximum Allowable Height Basic Limit	None.
4.130	Maximum Allowable Height with Modifications	No.
4.140	Is This a High Rise Classification	No.
4.150	Mixed Occupancy Area Calculation	S-2 separated occupancy. B/R-2 non-separated occupancies.
4.160	Special Requirements Based on Occupancy	
05 - FIRE RESTRICTIVE REQUIREMENTS:		
5.010	Construction Type	V-A
5.020	Structural Frame	1
5.030	Exterior Bearing Walls	1 HR MIN - Not less than that required by Fire Separation Distance: Fire Separation Distance x Occupancy < 5 feet n/a > 5 feet, but < 10 feet n/a > 10 feet, but < 30 feet 1 hour at east lot line > 30 feet 0
5.040	Interior Bearing Walls	1 (See also occupancy separations and other requirements for fire-resistance ratings)
5.050	Interior Supporting Roof Bearing Walls	1 (See also occupancy separations and other requirements for fire-resistance ratings)
5.060	Nonbearing Exterior Walls	0 (See also occupancy separations and other requirements for fire-resistance ratings)
5.070	Nonbearing Interior Walls	0 (See also occupancy separations and other requirements for fire-resistance ratings)
5.080	Floor Construction	1
5.090	Roof Construction	1
5.100	Exterior Wall Projections	
5.110	Exterior Wall Openings	70% at east lot line, unlimited elsewhere.
5.120	Exterior Wall Parapet	None required.
5.130	Fire Walls	None required.
5.140	Fire Barriers	
5.150	Shaft Enclosures	2 hour (connecting stories) Includes trash chute and trash room.
5.160	Elevator Lobby	Not required. Hoistway opening protection required per 3006.3
5.170	Exit Enclosures	
5.180	Exit Passageway	
5.190	Horizontal Exit	
5.200	Atriums	N/A
5.210	Incidental Use Areas	
5.220	Control Areas	
5.230	Separation of Mixed Occ.	2 hour between S-2 and R-2; 2 hour between B and R-2
5.240	Exterior Walls	
5.250	Fire Partitions	
5.260	Dwelling Unit Demising Walls	1 Hour
5.270	Corridor Walls	1/2 Hour
5.280	Elevator Lobby Walls	
5.290	Horizontal Assemblies	2 hour between S-2 and R-2; 1 hour between each dwelling unit
5.300	Penetrations	
5.310	Joint Systems	
5.320	Structural Members	
5.330	Opening Protectives	Corridors: 20 min. 1-hour partitions: 45 min. 2-hour shafts: 90 min.
5.340	Ducts/Transfer Openings	
5.350	Concealed Spaces	
5.360	Fireblocking	
5.370	Draftstopping - Floor and Ceiling	At dwelling unit separations and one side of corridor.
5.380	Draftstopping in Attic	Between every 2 units not exceeding 3,000 s.f. and one side of corridor.
06 - EGRESS REQUIREMENTS:		
6.010	Occupancy	Chapter 10 R-2, S-2, B
6.020	Occupant Load	Chapter 10 R-2: 203 B-54 S-2: 68
6.030	Accessible Means of Egress	Chapter 10 Where more than one means of egress is req'd (by Section 1015.1 or 1019.1) from any accessible space, not less than two accessible means of egress are req'd. To be accessible means of egress, must have area of refuge.
6.040	Exit Stairways	Chapter 10 See Code - special requirements such as standby power and area of refuge.
6.050	Elevators	Chapter 10 7'-6" min.
6.060	Minimum Ceiling Height	Chapter 10 80" min.
6.070	Minimum Door Height Clearance	Chapter 10 44" required, 45" actual (minimum).
6.080	Stairway Width	Chapter 10 80" min.
6.090	Stairway Headroom	Chapter 10 12'-0"
6.100	Max Height Between Landings	Chapter 10 Required both sides of stairs.
6.110	Handrails	Chapter 10 11" min, 7" max.
6.120	Stair Run/Rise	Chapter 10 R-2: 125" B-100" S-2: 100"
6.130	Ramps	Chapter 10 2 required from each story.
6.140	Common Path of Egress	Chapter 10 R-2: 250' max. B-200' max. S-2: 300' max.
6.150	Exit Access	
6.160	Exit Access Travel Distance	
07 - ACCESSIBILITY:		
7.010	Building Entrances	Chapter 11 60% of building entrances must be accessible
7.020	Public Restrooms	Chapter 11 See Plumbing Chapter
7.030	Dwelling Unit Requirements	Chapter 11 List quantity per IBC
7.040	Type Accessible Quantity	Chapter 11 N/A
7.050	Type A Quantity	Chapter 11 1 (2%), plus all units to meet Universal Design standards per MHFA.
7.060	Type B Quantity	Chapter 11 35, plus all units to meet Universal Design standards. Refer to unit plans for designation of Option A or Option B Toilet Rooms.
7.070	Type C Quantity	Chapter 11 N/A
7.080	Communication Features	
08 - INTERIOR ENVIRONMENT:		

CODE / ZONING REVIEW

TOPIC	IBC REFERENCE	RESPONSE
8.010	Ventilation	
8.020	Temperature Control	System must provide 68 degree temp at a point 3ft above floor on the design heating day.
8.030	Lighting	
8.040	Sound Transmission	Common interior walls, partitions, and floor ceiling assemblies between adj dwelling units or between dwelling units and public spaces. Air-borne sound: STC > 50 STC (45 Field STC) - tested in accordance with ASTM E 90. Treat openings, penetrations, etc. to maintain rating (except entry doors). Structure-borne sound: IIC > 50 STC (45 Field IIC) - per ASTM E 492 Refer to MHFA requirements in addition to IBC Chapter 12.
8.050	Interior Space Dimensions	
8.060	Access to Unoccupied Spaces	
8.070	Surrounding Materials	
09 - ENERGY EFFICIENCY:		
9.010	Chapter 13	2015 MN Residential Energy Code for 3 story multi-family.
10 - STRUCTURAL AND SPECIAL TESTING:		
10.010	Item Requiring Testing	
10.020	Required Standard	
10.030	Type of Inspector	
10.040	Frequency	
10.050	Responsible for Inspections	
11 - PLUMBING FIXTURE REQUIREMENTS:		
11.010	Laundry (inks)	Chapter 29 Men = 1; Women = 1
11.020	Water Closets (Toilets)	Chapter 29 Men = 1; Women = 1
11.030	Urinals	Chapter 29
11.040	Drinking Fountains	Chapter 29 1

UNIT MATRIX

UNIT NAME	UNIT TYPE	UNIT SF	ACC. TYPE	TOTAL	1ST FLOOR	2ND FLOOR	3RD FLOOR	PERCENTAGE
UNIT 1A	1 BEDROOM	740 SF	TYPE B	3	2	1	1	22%
UNIT 1B	1 BEDROOM	770 SF	TYPE B	3	1	1	1	
UNIT 1C	1 BEDROOM	740 SF	TYPE B	1	1	-	-	
UNIT 1D	1 BEDROOM	746 SF	TYPE A	1	1	-	-	
UNIT 2A	2 BEDROOM	971 SF	TYPE B, OPT. A	8	2	3	3	78%
UNIT 2B	2 BEDROOM	1,003 SF	TYPE B, OPT. A	5	2	2	1	
UNIT 2C	2 BEDROOM	997 SF	TYPE B, OPT. A	6	2	2	2	
UNIT 2D	2 BEDROOM	1,065 SF	TYPE B, OPT. B	4	2	2	-	
UNIT 2E	2 BEDROOM	1,001 SF	TYPE B, OPT. B	2	1	1	-	
UNIT 2F	2 BEDROOM	988 SF	TYPE B, OPT. A	1	-	1	-	
UNIT 2G	2 BEDROOM	1,127 SF	TYPE B, OPT. B	1	-	-	1	
UNIT 2H	2 BEDROOM	1,222 SF	TYPE B, OPT. B	1	-	-	1	
TOTAL UNITS:				36	13	13	10	

NOTES: • UNIT SF'S ARE CALCULATED USING THE EXTERIOR FACE OF SHEATHING, CENTER OF DEMISING WALL STUDS, AND CENTER OF CORRIDOR STUDS.
• TYPE 'A' UNITS IS ROOM NUMBER 105.
• 2% OF UNITS ARE REQUIRED TO BE 'TYPE A' ACCESSIBLE. 2% OF 36 TOTAL UNITS IS 0.72 UNITS, OR 1 UNIT.

SHEET MATERIAL ID LIST

MATERIAL ID	SPEC SECTION & DESCRIPTION
FIRE CAB-1	10 4400 - FIRE EXTINGUISHER CABINET

TRAVEL DISTANCE

Travel Distance	Path ID	Level
88'-9"	0B	
122'-4"	0B	
136'-1"	1A	
130'-1"	1B	
135'-3"	2A	
130'-1"	2B	
116'-4"	03	
135'-3"	3A	
135'-6"	3B	

LIFE SAFETY LEGEND

1 HOUR RATED WALL	1 HOUR RATED WALL (SMOKE)
2 HOUR RATED WALL	3 HOUR RATED WALL
4 HOUR RATED WALL	

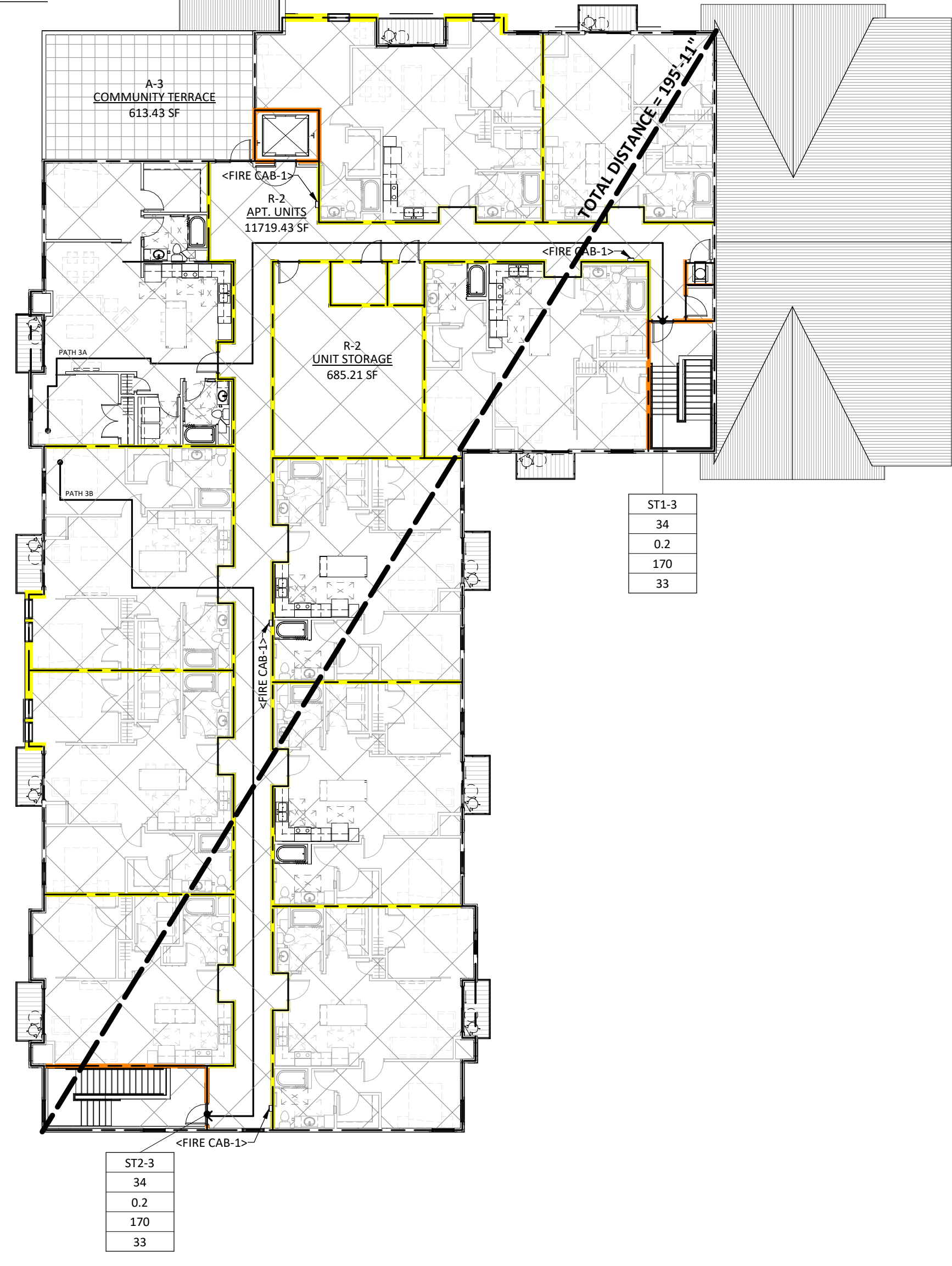
NUMBER - ELEMENT ID NUMBER
WIDTH - EGRESS WIDTH
FACTOR - EGRESS FACTOR
CAPACITY - EGRESS CAPACITY
LOAD - EGRESS LOAD



PRELIMINARY
NOT FOR CONSTRUCTION

REVISION SCHEDULE

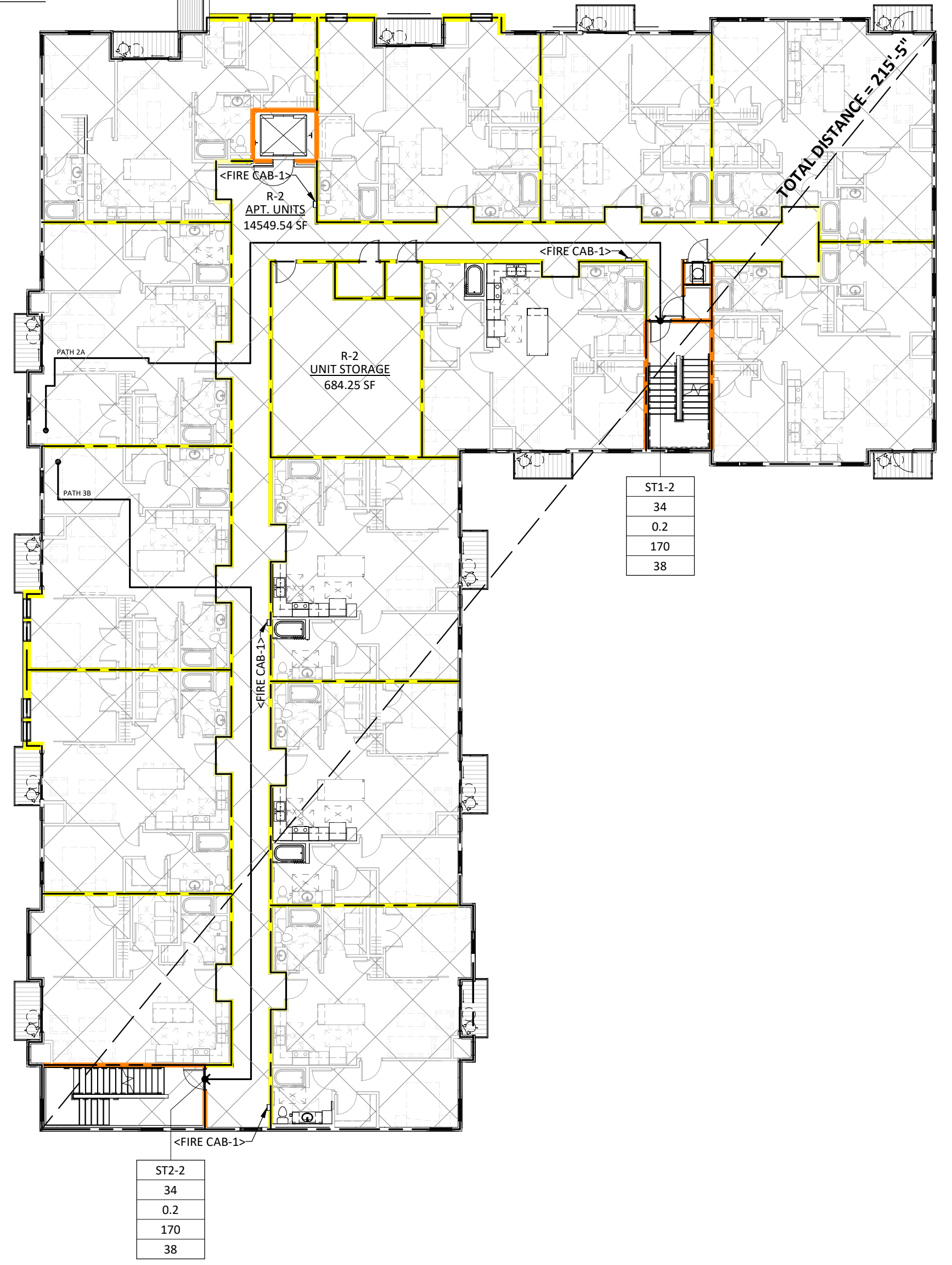
NO.	DESCRIPTION	DATE



2A G111 THIRD FLOOR
SCALE: 1/16" = 1'-0"

THIRD FLOOR FLOOR AREA SCHEDULE

NUMBER	NAME	AREA	OCCUPANCY CLASSIFICATION (IBC CHAPTER 3)	FUNCTION OF SPACE	IBC CHAPTER 10		OCCUPANT LOAD		REMARKS
					FLOOR AREA PER OCCUPANT	SF PER OCC. MEASUREMENT	FIXED SEATS	MAX. ALLOWABLE OCCUPANT LOAD	
A-3	COMMUNITY TERRACE	613 SF	A-3	ASSEMBLY - W/O FIXED SEATING - UNCONCENTRATED	15	NET	0	41	
R-2	UNIT STORAGE	685 SF	R-2	ACCESSORY STORAGE, MECH EQUIPMENT ROOM	300	GROSS	0	3	
R-2	APT. UNITS	11,719 SF	R-2	RESIDENTIAL	200	GROSS	0	59	
		13,018 SF					0	103	



1A G111 SECOND FLOOR
SCALE: 1/16" = 1'-0"

SECOND FLOOR FLOOR AREA SCHEDULE

NUMBER	NAME	AREA	OCCUPANCY CLASSIFICATION (IBC CHAPTER 3)	FUNCTION OF SPACE	IBC CHAPTER 10		OCCUPANT LOAD		REMARKS
					FLOOR AREA PER OCCUPANT	SF PER OCC. MEASUREMENT	FIXED SEATS	MAX. ALLOWABLE OCCUPANT LOAD	
R-2	UNIT STORAGE	684 SF	R-2	ACCESSORY STORAGE, MECH EQUIPMENT ROOM	300	GROSS	0	3	
R-2	APT. UNITS	14,550 SF	R-2	RESIDENTIAL	200	GROSS	0	73	
		15,234 SF					0	76	

LWO DEVELOPMENT, LLC
EASTGATE APARTMENTS
OWATONNA, MN

DATE: 04/27/2020
PHASE: 100% DESIGN DEVELOPMENT
PROJECT: 18126
SHEET: **G111**
LIFE SAFETY PLANS

MOUNTING HEIGHT...

Value	Note
1	CONTROLS FOR FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE (ACCESSIBLE) OF TOILET AREAS NO MORE THAN 44 IN ABOVE THE FLOOR.
2	INSTALL TOILET PAPER DISPENSERS 19" TO CENTERLINE OF DISPENSER ABOVE FINISHED FLOOR. DISPENSERS THAT CONTROL DELIVERY ARE NOT PERMITTED.
3	HATCHED OR DASHED SPACE INDICATES REQUIRED CLEAR FLOOR SPACE.
4	DOORWAYS SHALL HAVE A MINIMUM CLEAR OPENING OF 32 IN WITH THE DOOR OPEN 90 DEGREES, MEASURED BETWEEN THE FACE OF THE DOOR AND STOP.
5	HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE. LEVER OPERATED MECHANISMS, PUSH-TYPE MECHANISMS, AND U-SHAPED HANDLES ARE ACCEPTABLE DESIGNS.
6	GRAB BARS SHALL BE PROVIDED AT ALL ACCESSIBLE TOILET AREAS. MOUNT AT HEIGHT SHOWN AND DO NOT OBSTRUCT ANY REQUIRED CLEARANCES.
7	A CLEAR FLOOR SPACE OF 30IN BY 48IN SHALL BE PROVIDED TO ALLOW FORWARD APPROACH. URINAL SHIELDS THAT DO NOT EXTEND BEYOND THE FRONT END OF THE URINAL RIM MAY BE PROVIDED WITH 29 IN CLEARANCE BETWEEN THEM.
8	URINALS SHALL BE WALL-HUNG WITH AN ELONGATED RIM AT A MAXIMUM OF 17 IN ABOVE THE FLOOR.
9	FLUSH CONTROLS SHALL BE HAND OPERATED OR AUTOMATIC AND MOUNTED NO MORE THAN 44 IN ABOVE THE FLOOR.
10	CONTROLS
11	A CLEAR FLOOR SPACE OF 30IN BY 48IN SHALL BE PROVIDED TO ALLOW FORWARD APPROACH.
12	HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.
14	SHOWER STALL SIZE SHALL BE 36IN BY 36IN MINIMUM. CLEAR FLOOR SPACE SHALL BE 36IN MINIMUM IN DWELLING UNIT.
15	A SEAT SHALL BE PROVIDED IN SHOWER STALLS 36IN BY 36IN AS INDICATED ABOVE. THE SEAT SHALL BE ON THE WALL OPPOSITE THE CONTROLS. STRUCTURAL STRENGTH OF SEATS AND THE ATTACHMENT MUST COMPLY WITH CODE.
16	A SHOWER SPRAY UNIT WITH A HOSE AT LEAST 60IN LONG THAT CAN BE USED BOTH AS A FIXED SHOWER HEAD AND AS A HAND-HELD SHOWER SHALL BE PROVIDED.

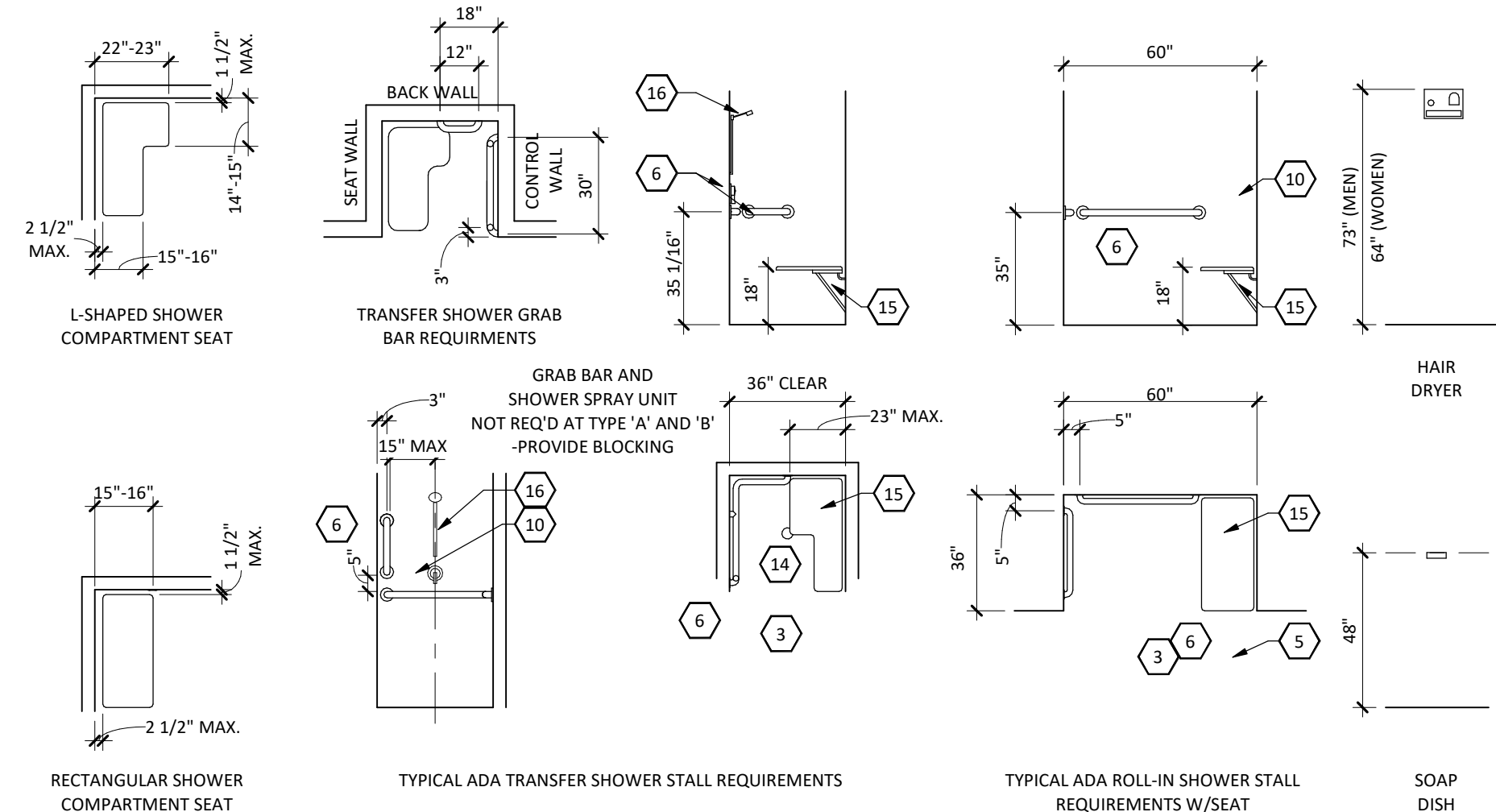
JLG architects

322 1st Ave N, Suite #600
 Minneapolis, MN 55401
 phone: 612.746.4260
 Facsimile: 612.746.4754
 www.jlgarchitects.com
 copyright © 2020

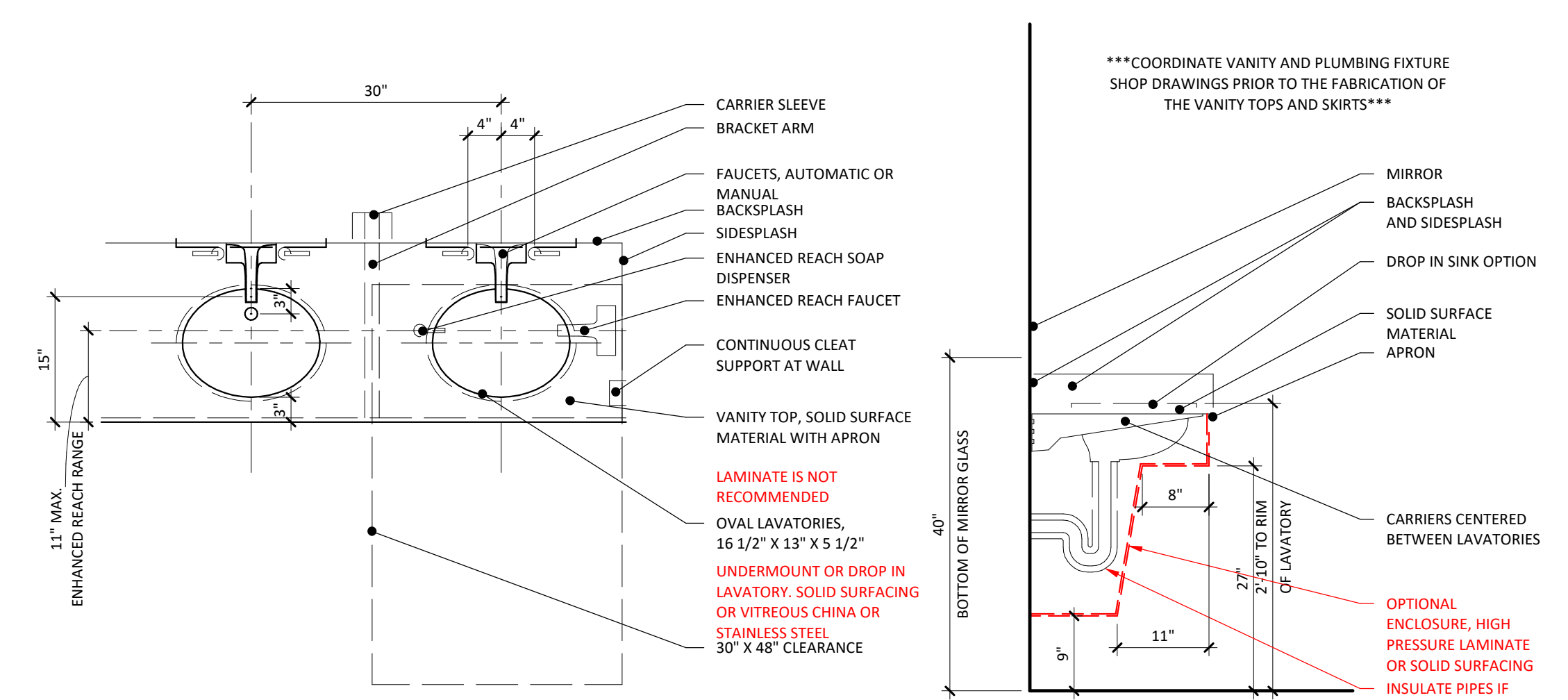
PRELIMINARY
 NOT FOR CONSTRUCTION

REVISION SCHEDULE

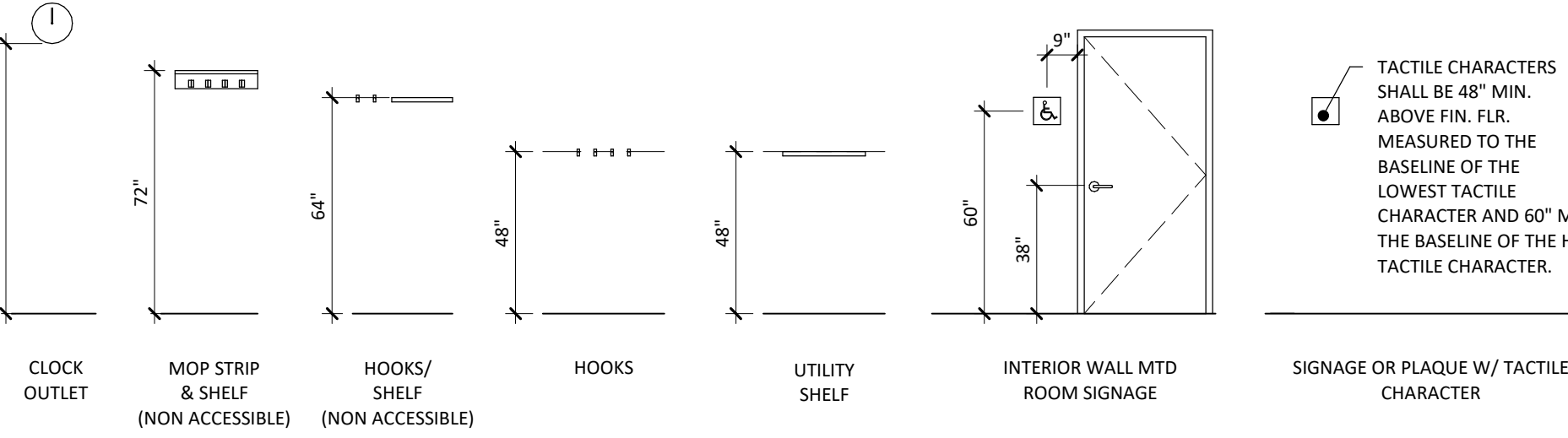
NO.	DESCRIPTION	DATE



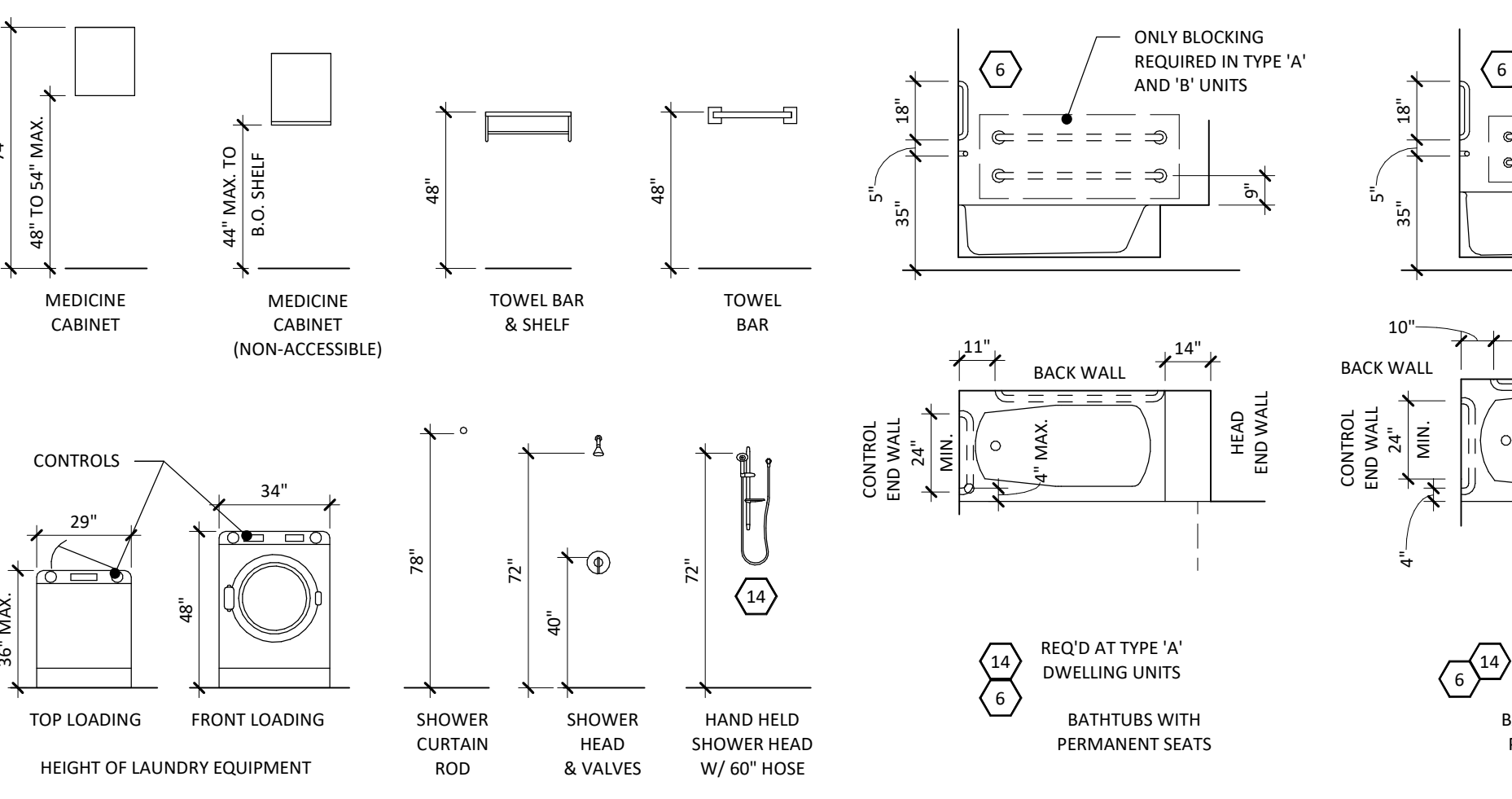
MOUNTING HEIGHTS - SHOWERS



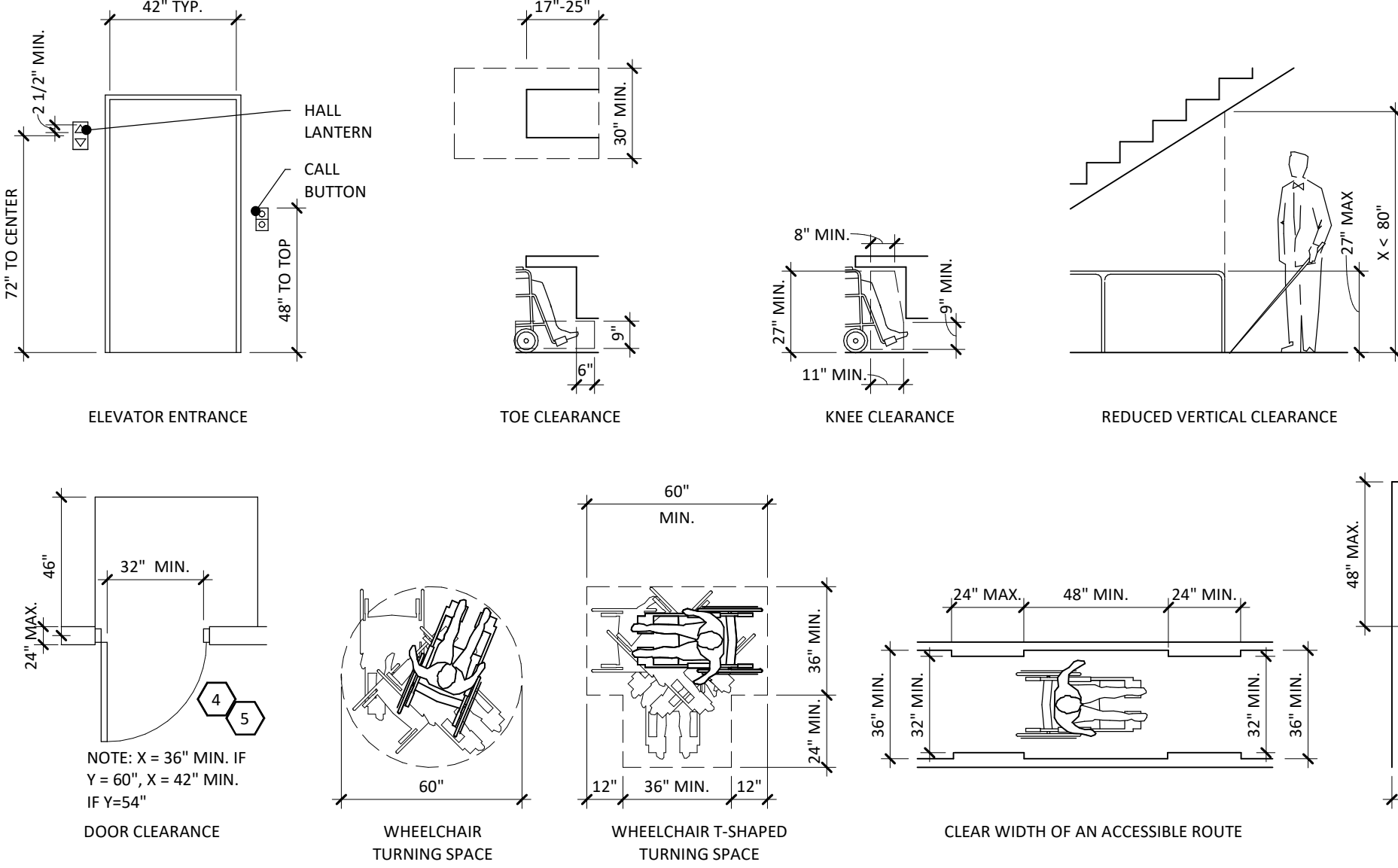
MOUNTING HEIGHTS - TYPICAL VANITIES



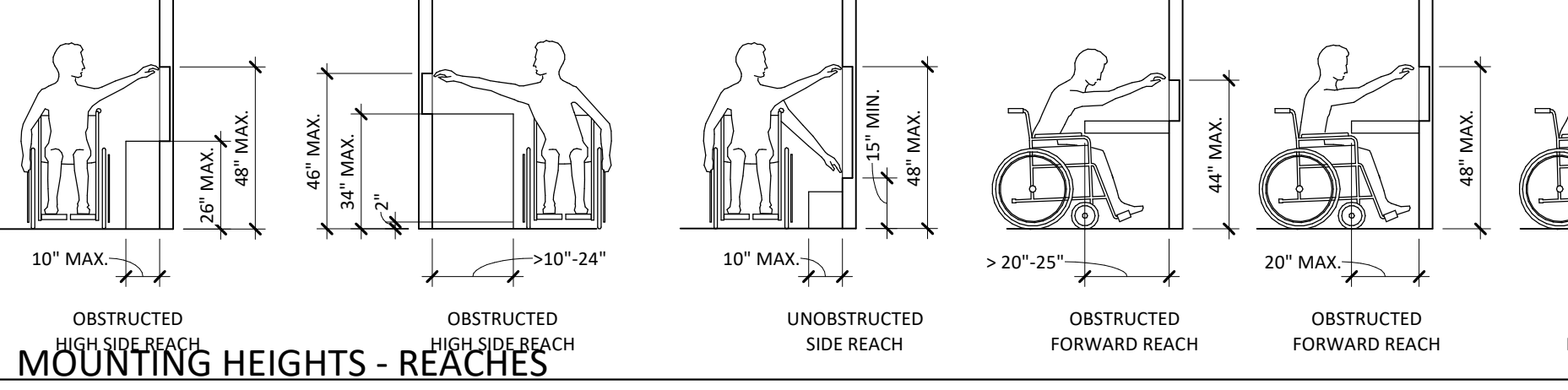
MOUNTING HEIGHTS - MISCELLANEOUS



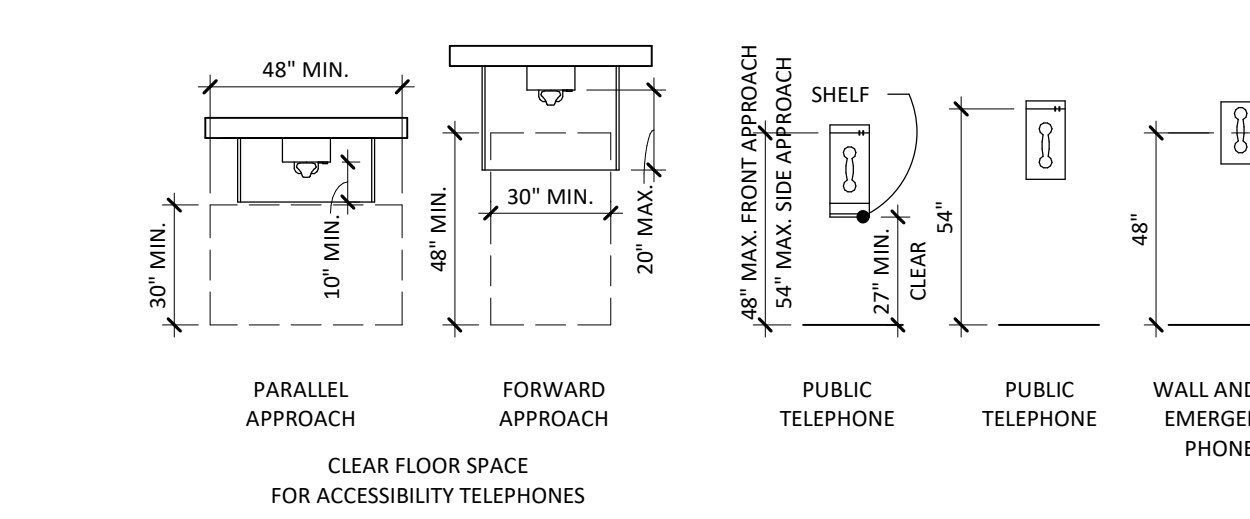
MOUNTING HEIGHTS - RESIDENTIAL



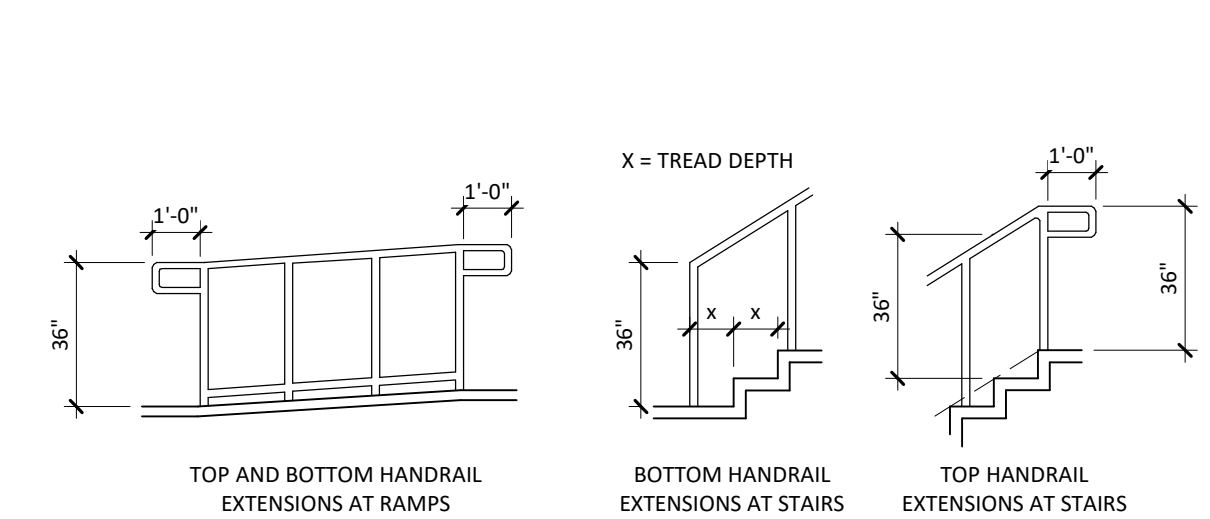
MOUNTING HEIGHTS AND HORIZONTAL CLEARANCES



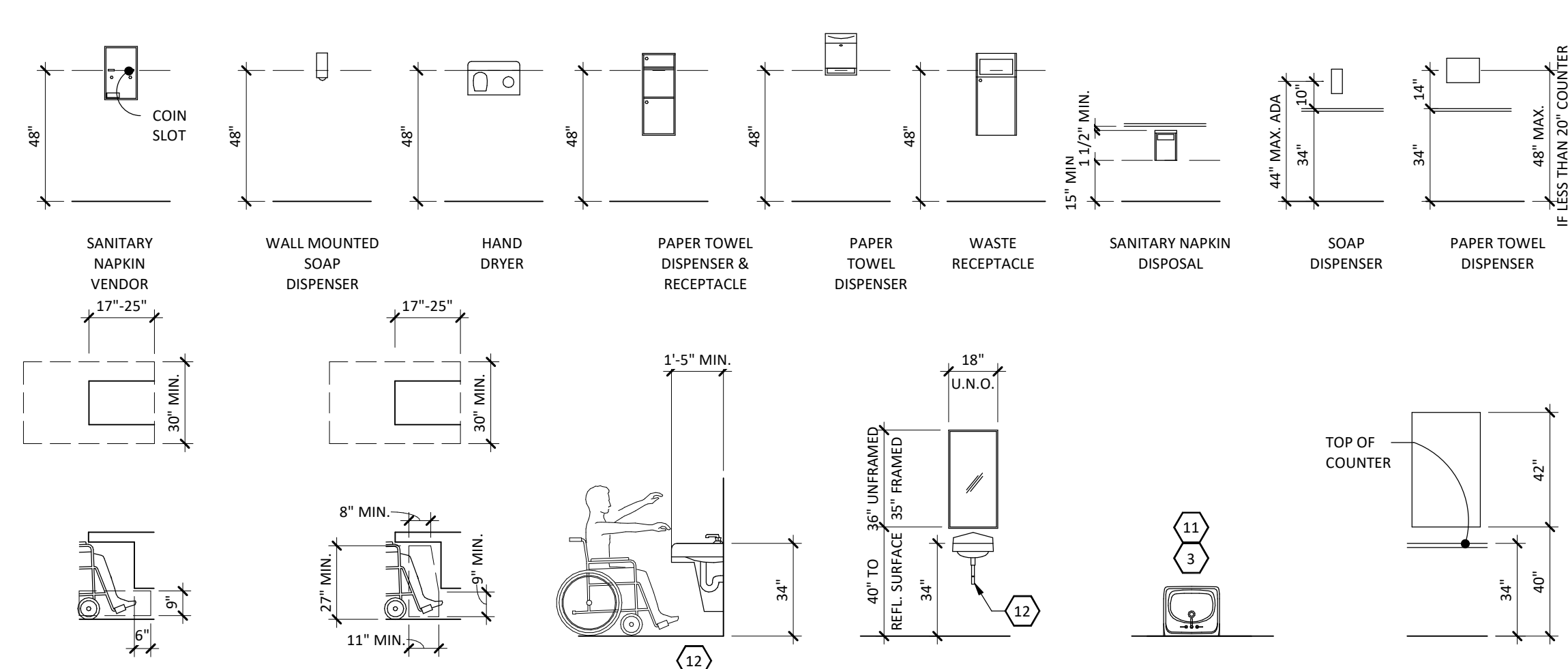
MOUNTING HEIGHTS - REACHES



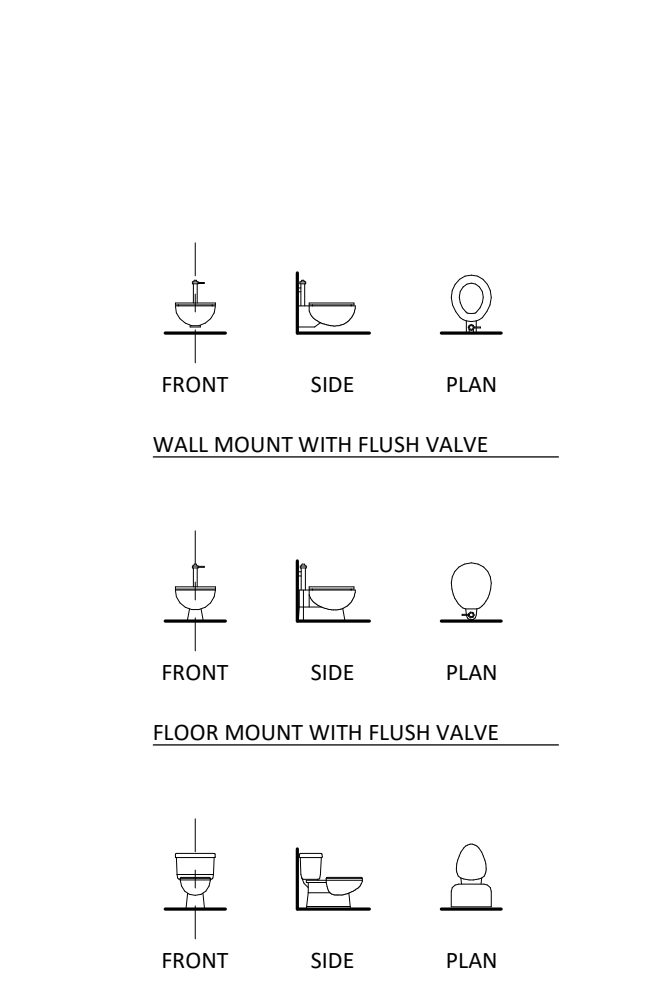
MOUNTING HEIGHTS - COMMUNICATIONS



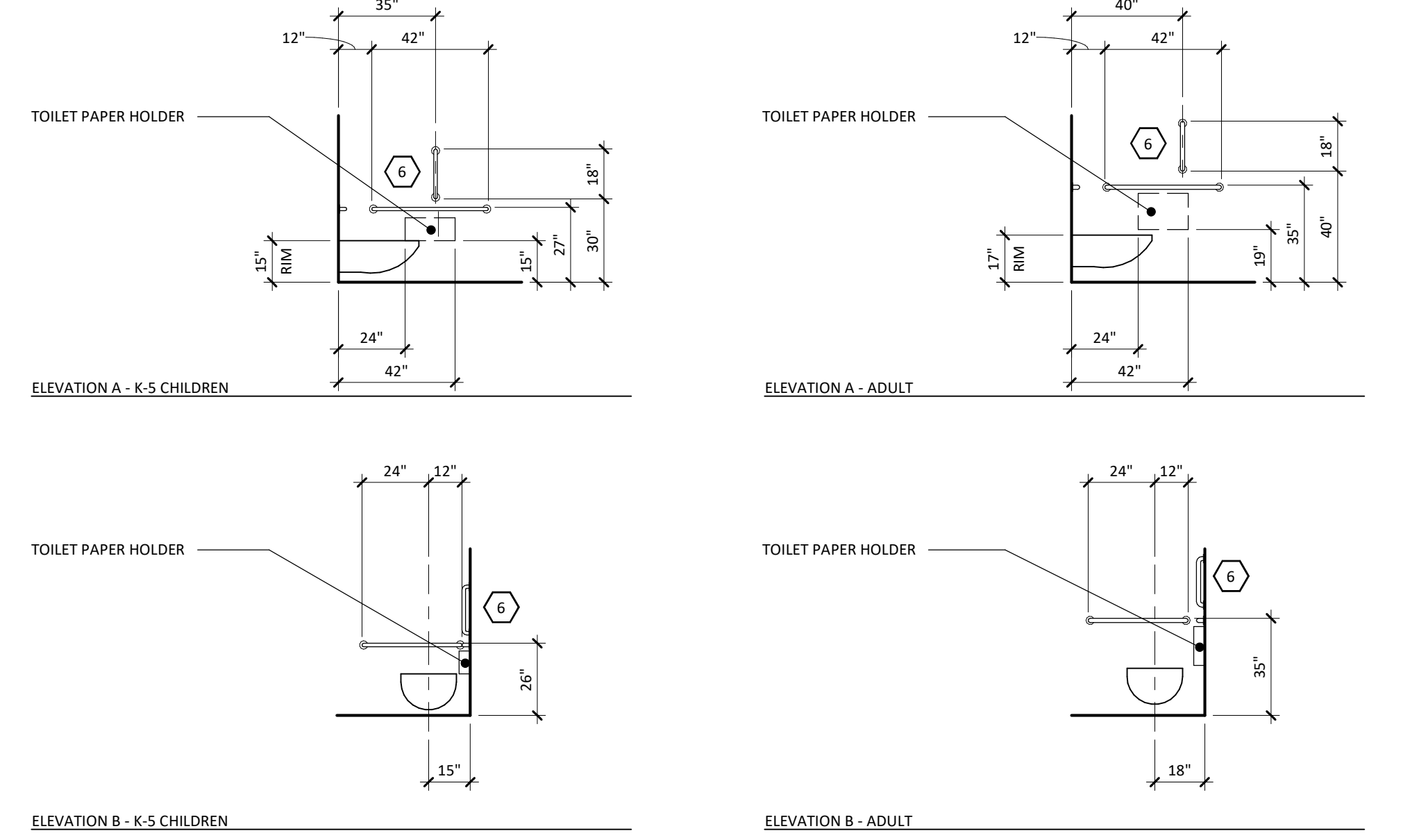
MOUNTING HEIGHTS - RAILING EXTENSIONS



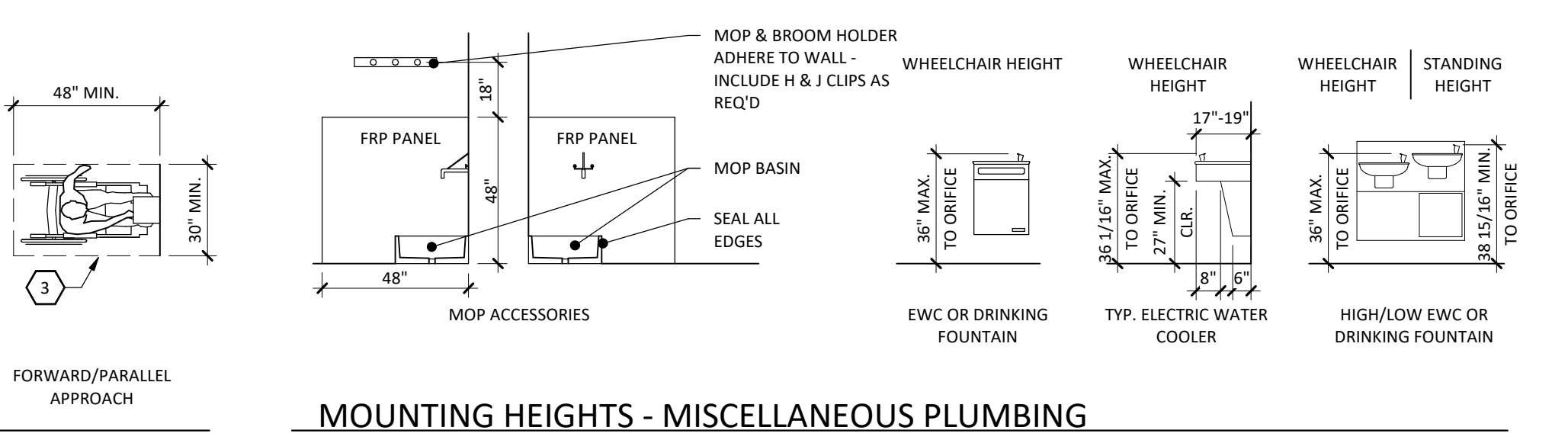
MOUNTING HEIGHTS - TOILET ROOMS



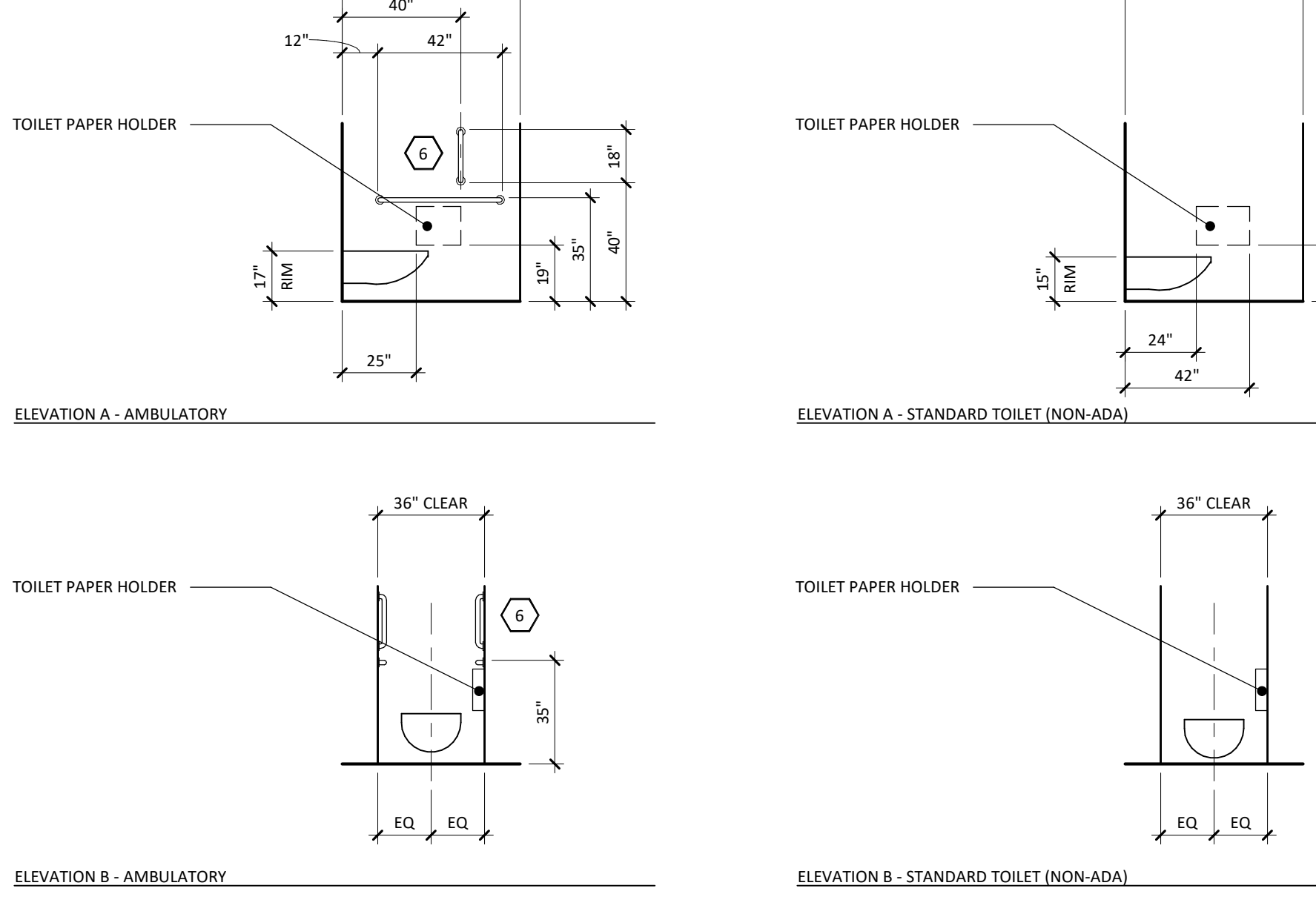
WATER CLOSET TYPES



MOUNTING HEIGHTS - TOILETS AND GRAB BARS



MOUNTING HEIGHTS - MISCELLANEOUS PLUMBING



MOUNTING HEIGHTS - FIRE PROTECTION

LWO DEVELOPMENT, LLC
EASTGATE APARTMENTS
 OWATONNA, MN

DATE: 04/27/2020
 PHASE: 100% DESIGN DEVELOPMENT
 PROJECT: 18126
 SHEET: G120
 MOUNTING HEIGHTS