

# ADA Restroom Renovations at Paul Villasenor Library 525 N Mt Vernon Ave., San Bernardino, CA 92411 & Howard Rowe Library 108 E Marshall Blvd., San Bernardino, CA 92404

**PROJECT OWNER**

CITY OF SAN BERNARDINO DEPARTMENT OF PUBLIC WORKS  
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E-MAIL: FELIX\_JA@SBCITY.ORG

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FAX: 909-335-7299  
E-MAIL: KOSWALT@MILLER-AIP.COM

**ELECTRICAL AND PLUMBING**

ADE CONSULTING  
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FAX:  
E-MAIL: adetitle24@gmail.com

--A-- AB anchor bolt ABV above AC asphaltic concrete A/C air conditioning ADD addendum AGG aggregate ALT alternate ALUM aluminum APPROX approximate ARCH architect(ural) AUTO automatic	--H-- HB hose bibb HC hollow core HD heavy duty HDR header HDW hardware HGT height HM hollow metal HOR horizontal HTG heating HWAC heating / ventilating air conditioning HWD hardwood	--S-- S south SC solid core SCH schedule SD storm drain SEC section SH shelf, shelving SHT sheet SIM similar SPEC specification(s) SPK speaker SQ square SS stainless steel ST steel STIA station STD standard STO storage STR structural SUS suspended SYM symmetry(cal) SYS system
--B-- BD board BEL below BET between BIT bituminous BLDG building BLK block BLKG blocking BM bench mark BOT bottom BRG bearing BRZ bronze BUR built up roofing BW both ways	--I-- ID inside diameter INCL include(ing) INSUL insulate(ion) INT interior INW inward JST joint JT joint KIT kitchen KO knockout	--T-- TEL telephone TRG tongue & groove TRK track(less) TV television TYP typical
--C-- CAB cabinet CAD cadmium CB catch basin CEM cement CER ceramic CFT cubic foot CI cast iron CIR circle CIRC circumference CLG ceiling CLR contract limit line CLL clear(ance) CLS closure CMU centimeter CON concrete masonry unit COL column COMB combination COMP composition CONC concrete CONT continuous/ continue CONTR contract(or) CONST construction CORR corrugated CPR copper CPT carpet(ed) CYD cubic yard	--L-- LAB laboratory LAM laminate(d) LAV lavatory LBL label LH left hand LL live load LT light LTL lintel LW lightweight	--U-- UNO unless noted otherwise UR ural
--D-- DEMO demolish, demolition DH double hung DIA diagonal DIAM diameter DIM dimension DIV division DR door DS downspout DTL detail DWG drawing DWR drawer	--M-- MAS masonry MAX maximum MB machine bolt MBR member MC medicine cabinet MECH mechanic MED medium MET metal MFR manufacture(er) MH manhole MIN minimum MIR mirror MISC miscellaneous MLD molding, moulding MM millimeter MT mount(ed, ing) MTL material(s)	--W-- W west W/ with W/O without WC water closet WD wood WH water heater WI wrought iron WIN window WPT working point WR water repellent WFW welded wire fabric
--E-- E east EF each face ELEV elevation ELEC electric(al) EMER emergency ENC enclosure EP electrical panelboard EQ equal EQUIP equipment EST estimate EWC electric water cooler EXIST existing EXHST exhaust EXP exposed EXT exterior	--N-- N north NAT natural NIC not in contract NOM nominal NTS not to scale	--S-- S south SC solid core SCH schedule SD storm drain SEC section SH shelf, shelving SHT sheet SIM similar SPEC specification(s) SPK speaker SQ square SS stainless steel ST steel STIA station STD standard STO storage STR structural SUS suspended SYM symmetry(cal) SYS system
--F-- FA fire alarm FD floor drain FE fire extinguisher FFE finished floor elevation FFL finished floor line FIN finish(ed) FLR floor(ing) FLUOR fluorescent FND foundation FTG footing	--O-- OA overall OBSC obscure OC on center OD outside diameter OH overhead OPG opening OPP opposite	--V-- VERT vertical VIN vinyl
--G-- GA gage, gauge GI galvanized iron GL glass, glazing GP galvanized pipe GYP-BO gypsum board GRD grade, grading GSS galvanized steel GV galvanized	--P-- PAR parallel PB panic bar PCC precast concrete PCF pounds per cubic foot PED pedestal PERF perforate(d) PRE-FAB prefabricate(d) PFL pounds per linear foot PIP poured in place PL property line PLT plate PISTER plaster PLYMD plywood PNL panel PNT paint(ed) PSF pounds per square foot PSI pounds per square inch PT point PVC polyvinyl chloride	--R-- RA return air RAD radius RCP reinforced concrete pipe RD roof drain REFR refrigerator REG register REM remove RET return RTG roofing RH right hand RM room RO rough opening ROW right of way

**TITLE / OWNER**

**BUILDING DATA:**

TENANT IMPROVEMENT AREA: 343 SQ FT  
TOTAL BUILDING AREA: 8,273 SQ FT

TYPE OF CONSTRUCTION: V-1 HR  
OCCUPANCY CLASSIFICATION: A  
AUTOMATIC FIRE SPRINKLERS: NONE  
NATURE OF BUSINESS: LIBRARY

**CODE DATA:**

ALL CONSTRUCTION SHALL MEET THE MINIMUM REQUIREMENTS OF THE:  
• 2019 CALIFORNIA BUILDING CODE, VOLUMES 1 AND 2  
• 2019 CALIFORNIA PLUMBING CODE  
• 2019 CALIFORNIA MECHANICAL CODE  
• 2019 CALIFORNIA ELECTRICAL CODE  
• 2019 CALIFORNIA ENERGY CODE  
• 2019 CALIFORNIA GREEN BUILDING CODE  
• 2019 CALIFORNIA FIRE CODE  
• 2019 CALIFORNIA REFERENCED STANDARDS CODE

**LEGAL DESCRIPTION:**

APN: 0138-122-30

**PROJECT DESCRIPTION:**

343 SQ FT INTERIOR TENANT IMPROVEMENT WITHIN AN EXISTING LIBRARY. IMPROVEMENTS INCLUDE NEW INTERIOR NON-BEARING METAL STUD PARTITIONS AND MINOR ELECTRICAL, MECHANICAL AND PLUMBING IMPROVEMENTS TO MAKE THE RESTROOMS COMPLIANT WITH ACCESSIBILITY REQUIREMENTS. THE MAIN ELECTRICAL SERVICE AND HVAC EQUIPMENT IS EXISTING TO REMAIN. IMPROVEMENTS ARE LIMITED TO INTERIOR WORK ONLY.

**GENERAL NOTES:**

1. QUANTITIES LISTED IN THESE DOCUMENTS ARE FOR AGENCY APPROVAL ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES FOR BIDDING PURPOSES.

**BUILDING DATA:**

TENANT IMPROVEMENT AREA: 135 SQ FT  
TOTAL BUILDING AREA: 8,567 SQ FT

TYPE OF CONSTRUCTION: V-1 HR  
OCCUPANCY CLASSIFICATION: A  
AUTOMATIC FIRE SPRINKLERS: NONE  
NATURE OF BUSINESS: LIBRARY

**CODE DATA:**

ALL CONSTRUCTION SHALL MEET THE MINIMUM REQUIREMENTS OF THE:  
• 2019 CALIFORNIA BUILDING CODE, VOLUMES 1 AND 2  
• 2019 CALIFORNIA PLUMBING CODE  
• 2019 CALIFORNIA MECHANICAL CODE  
• 2019 CALIFORNIA ELECTRICAL CODE  
• 2019 CALIFORNIA ENERGY CODE  
• 2019 CALIFORNIA GREEN BUILDING CODE  
• 2019 CALIFORNIA FIRE CODE  
• 2019 CALIFORNIA REFERENCED STANDARDS CODE

**LEGAL DESCRIPTION:**

APN: 0153-071-01

**PROJECT DESCRIPTION:**

135 SQ FT INTERIOR TENANT IMPROVEMENT WITHIN AN EXISTING LIBRARY. IMPROVEMENTS INCLUDE NEW INTERIOR NON-BEARING METAL STUD PARTITIONS AND MINOR ELECTRICAL, MECHANICAL AND PLUMBING IMPROVEMENTS TO MAKE THE RESTROOMS COMPLIANT WITH ACCESSIBILITY REQUIREMENTS. THE MAIN ELECTRICAL SERVICE AND HVAC EQUIPMENT IS EXISTING TO REMAIN. IMPROVEMENTS ARE LIMITED TO INTERIOR WORK ONLY.

**GENERAL NOTES:**

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SHEET NUMBER	SHEET NAME
G-001	GENERAL INFORMATION
G-002	ACCESSIBILITY COMPLIANCE NOTES AND DETAILS
G-003	ACCESSIBILITY COMPLIANCE NOTES AND DETAILS
G-004	CALGREEN REQUIREMENTS
G-005	CALGREEN REQUIREMENTS
G-006	CALGREEN REQUIREMENTS
A-101	DEMOLITION AND FLOOR PLAN FOR ROWE LIBRARY
A-102	DEMOLITION CEILING AND REFLECTED CEILING FOR ROWE LIBRARY
A-103	ENLARGEMENT PLANS AND INTERIOR ELEVATIONS FOR ROWE LIBRARY
A-201	DEMOLITION AND FLOOR PLAN FOR VILLASENOR LIBRARY
A-202	DEMOLITION CEILING AND REFLECTED CEILING FOR VILLASENOR LIBRARY
A-203	ENLARGEMENT PLANS AND INTERIOR ELEVATIONS FOR VILLASENOR LIBRARY
A-501	DETAILS
A-601	DOOR & FINISH SCHEDULES
E-101	ELECTRICAL GENERAL NOTES FOR ROWE LIBRARY
E-102	ELECTRICAL POWER AND LIGHTING PLAN FOR ROWE LIBRARY
E-103	TITLE 24 FOR ROWE LIBRARY
E-201	ELECTRICAL GENERAL NOTES FOR VILLASENOR LIBRARY
E-202	ELECTRICAL POWER AND LIGHTING PLAN FOR VILLASENOR LIBRARY
E-203	TITLE 24 FOR VILLASENOR LIBRARY
M-101	MECHANICAL PLAN FOR ROWE LIBRARY
M-201	MECHANICAL PLAN FOR VILLASENOR LIBRARY
P-101	PLUMBING GENERAL NOTES FOR ROWE LIBRARY
P-102	PLUMBING PLAN FOR ROWE LIBRARY
P-201	PLUMBING GENERAL NOTES FOR VILLASENOR LIBRARY
P-202	PLUMBING PLAN FOR VILLASENOR LIBRARY

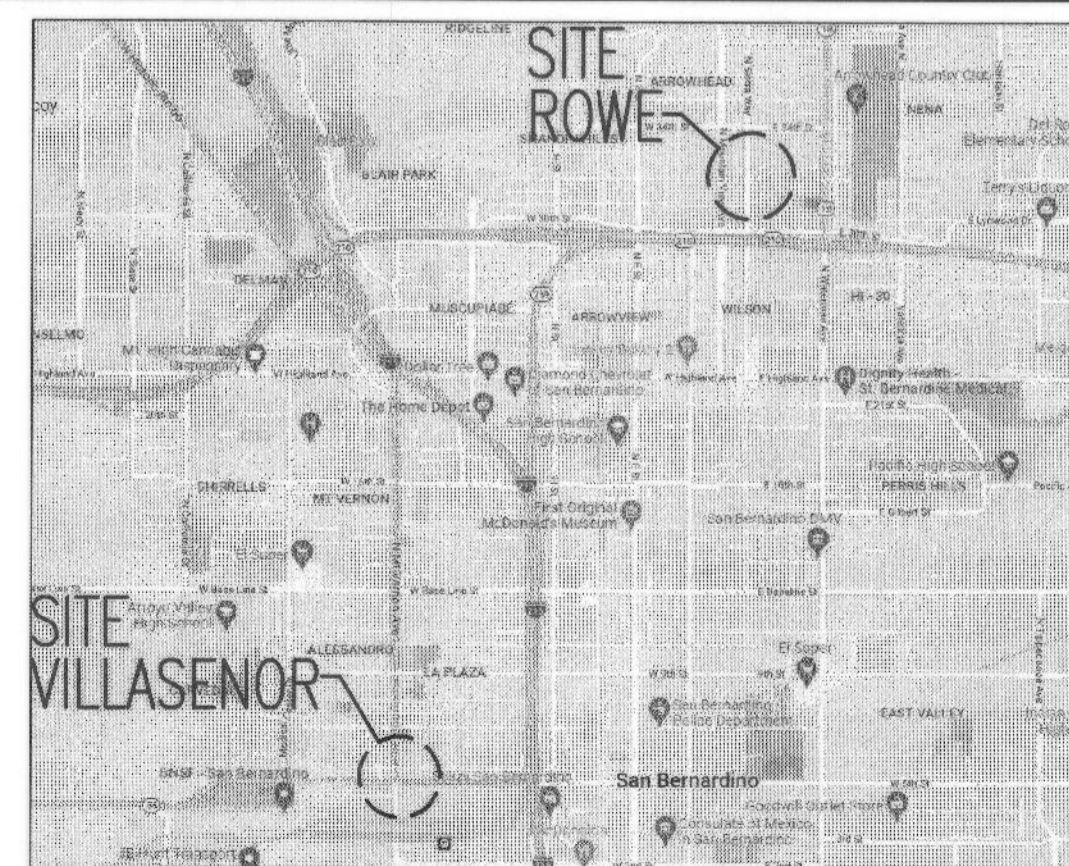
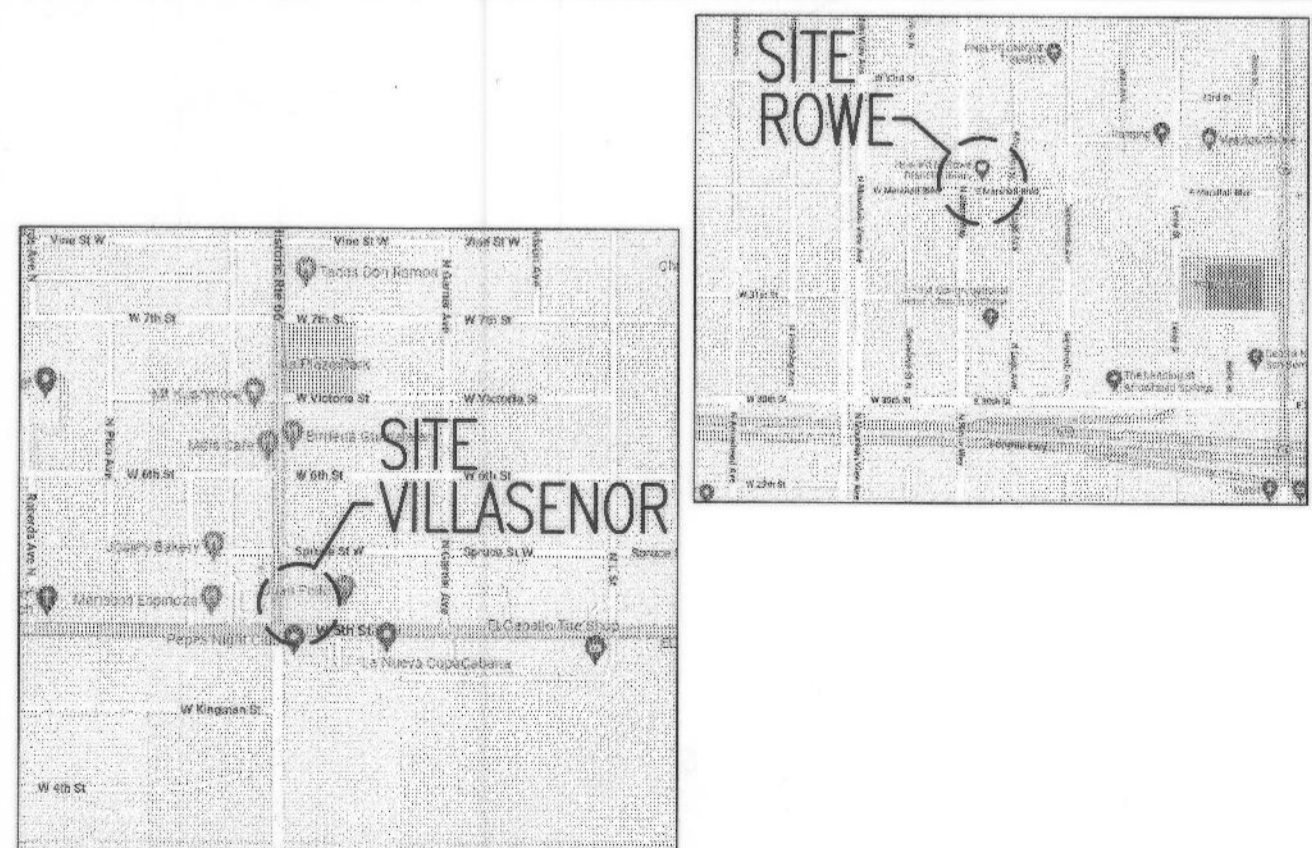
**VILLASENOR LIBRARY**

**ROWE LIBRARY**

**PROJECT INFORMATION**

**SHEET INDEX**

**DIRECTORY**



	SECTION SHEET NUMBER		HEIGHT ABOVE FINISH FLOOR (U.N.O.)
	ROOM NAME		ROOM NUMBER
	DETAIL SHEET NUMBER		KEYNOTE NUMBER
	EXTERIOR ELEVATION SHEET NUMBER		DOOR LETTER ROOM NUMBER
	WALL LETTER		DOOR NUMBER (ALTERNATE SYMBOL)
	INTERIOR ELEVATION SHEET NUMBER		WINDOW TYPE
	DRAWING REVISION		

**ABBREVIATIONS**

**VICINITY MAP**

**LOCATION MAP**

**SYMBOLS**

**STANDARD CITY NOTES**

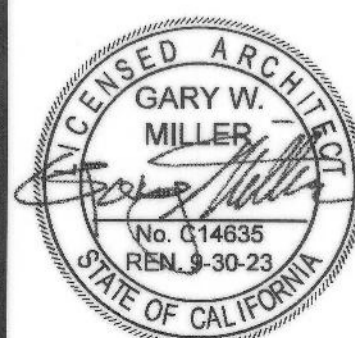
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SAN BERNARDINO, CA 92404

PAUL VILLASENOR BRANCH LIBRARY  
525 N MT VERNON AVE  
SAN BERNARDINO, CA 92411

**MILLER**  
interiors  
planning

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Redlands, CA 92374  
Phone: (909) 335-7400  
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MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

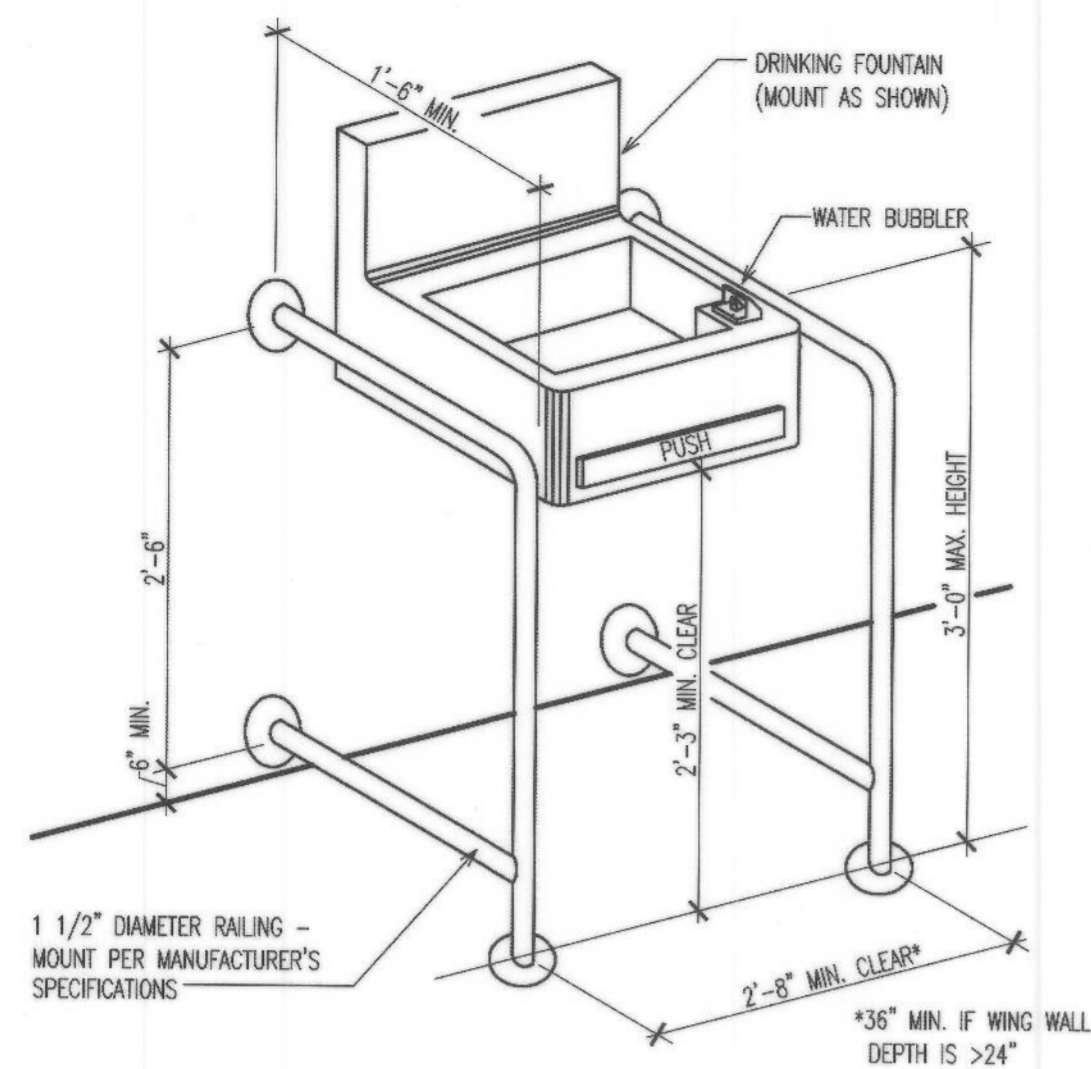
APPROVED: *Alex Qishita* 2018-2022  
CITY ENGINEER: ALEX QISHITA  
REGISTERED CIVIL ENGINEER NO. 66702  
DRAWN BY:  
CHECKED BY:  
RECOMMENDED BY:

CITY OF SAN BERNARDINO  
DEPARTMENT OF PUBLIC WORKS

**TITLE SHEET**  
FOR  
**ROWE LIBRARY AND  
VILLASENOR LIBRARY**

**G-001**

DRAWING NO. 13476  
SHEET 1 OF 26 SHEETS  
FOR CITY USE ONLY: FILE NO. C.I.P. NO. W.O. NO.



**NON-ALCOVE TYPE**  
(REMODELS ONLY)

**NOTES:**

1. THE SPOUT SHALL PROVIDE A FLOW OF WATER A MINIMUM OF 4" HIGH
2. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5LBF.
3. DRINKING FOUNTAINS SHALL BE A MINIMUM OF 18" DEEP (FRONT TO BACK DIMENSION).

**WARNING FOR THE VISION IMPAIRED AT A PROJECTED DRINKING FOUNTAIN CAN BE PROVIDED BY EITHER OF THE FOLLOWING MEANS (FOR REMODELS ONLY):**

A: THE SURFACE OF THE FLOOR OR GROUND AT THE DRINKING FOUNTAIN CAN BE OF CONTRASTING COLOR WITH A TEXTURE THAT DIFFERS IN RESILIENCY WITH THE ADJACENT FINISHED FLOOR MATERIAL. IT MUST BE DETECTABLE BY A CANE. THE DIFFERING TEXTURE SHALL EXTEND FROM THE WALL TO ONE FOOT BEYOND THE FRONT EDGE OF THE DRINKING FOUNTAIN AND ONE FOOT BEYOND EACH SIDE OF THE FOUNTAIN.

OR

B: INSTALL WING WALLS ON EACH SIDE OF THE DRINKING FOUNTAIN. THESE SHALL PROJECT OUT FROM THE WALL A MINIMUM OF 18" (WING WALLS SHALL EXTEND AT LEAST 6" BEYOND THE FRONT EDGE OF THE FOUNTAIN). PROVIDE A 32" CLEAR SPACE BETWEEN THE WING WALLS.

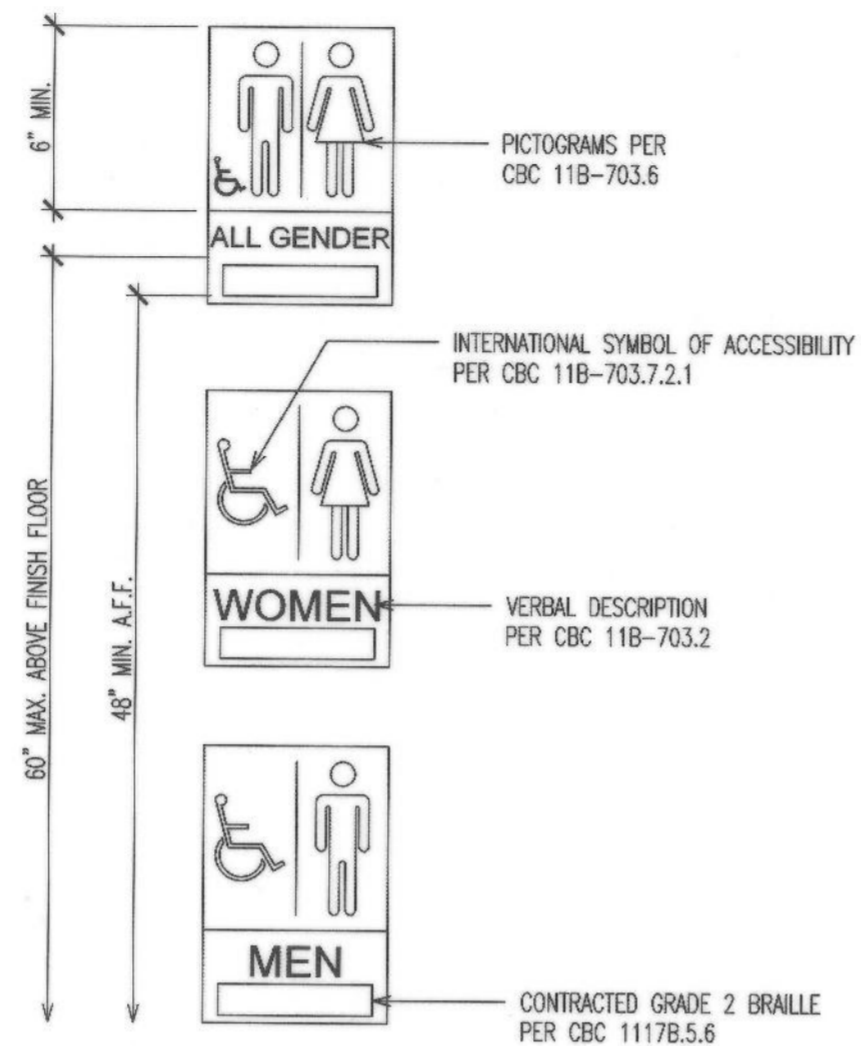
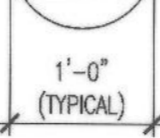
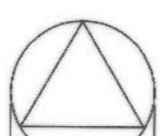
DOORWAYS LEADING TO MEN'S SANITARY FACILITIES SHALL BE IDENTIFIED BY AN EQUILATERAL TRIANGLE, 1/4" THICK WITH EDGES 12" LONG AND A VERTEX POINTING UPWARD.



DOORWAYS LEADING TO WOMEN'S SANITARY FACILITIES SHALL BE IDENTIFIED BY A CIRCLE, 1/4" THICK AND 12" IN DIAMETER.

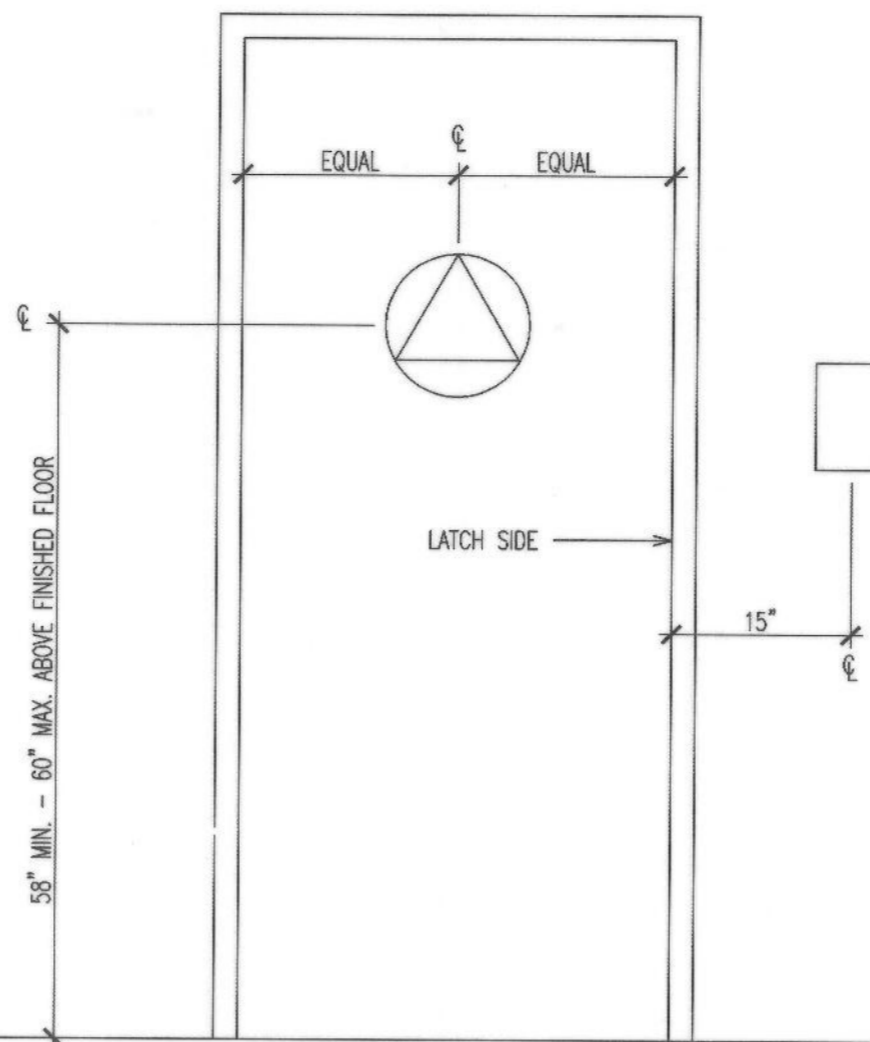


DOORWAYS LEADING TO ALL GENDER SANITARY FACILITIES SHALL BE IDENTIFIED BY A CIRCLE 1/4" THICK AND 12" IN DIAMETER WITH A 1/4" TRIANGLE SUPERIMPOSED ON THE CIRCLE AND WITHIN THE 12" DIAMETER.



**NOTES:**

1. THE COLOR OF THE GEOMETRIC IDENTIFICATION SYMBOLS SHALL CONTRAST WITH THE COLOR OF THE DOOR OR SURFACE ON WHICH THEY ARE MOUNTED, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND.
2. WHERE PERMANENT IDENTIFICATION SIGNS ARE PROVIDED FOR ROOMS AND SPACES, SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR.
3. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE, INCLUDING DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLY ON THE RIGHT. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR.
4. REFER TO CBC CHAPTER 11B, DIVISION 7 FOR SPECIFIC REQUIREMENTS REGARDING PROPORTIONS FOR VISUAL AND RAISED CHARACTERS AND BRAILLE.
5. THE COLOR OF THE TRIANGLE SYMBOL SHALL CONTRAST WITH THE COLOR OF THE CIRCLE SYMBOL, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND. THE COLOR OF THE CIRCLE SYMBOL SHALL CONTRAST WITH THE COLOR OF THE DOOR OR SURFACE ON WHICH THE COMBINED CIRCLE AND TRIANGLE SYMBOL IS MOUNTED, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND.



**NOTES**

1. SHARP OR ABRASIVE SURFACES ARE NOT PERMITTED UNDER LAVATORIES.
2. FAUCET CONTROLS AND OPERATING MECHANISMS ARE REQUIRED TO BE OPERABLE W/ ONE HAND AND CANNOT REQUIRE GRASPING, PINCHING OR TWISTING OF THE WRIST.
3. THE FORCE REQUIRED TO ACTIVATE THE CONTROLS SHALL NOT EXCEED 5 FT/LBS.. SELF CLOSING VALVES ARE ALLOWED BUT SHALL REMAIN OPEN FOR AT LEAST 10 SECONDS.
4. GRAB BARS SHALL BE 1 1/4" TO 1 1/2" IN DIAMETER W/ 1 1/2" CLEARANCE FROM WALL.
5. GRAB BAR FASTENERS AND MOUNTING SUPPORTS SHALL BE ABLE TO WITHSTAND 250 FT/LBS. IN BENDING SHEAR AND TENSION.
6. CONTROLS FOR FLUSH VALVE SHALL BE MOUNTED ON THE WATER CLOSET W/ NO MORE THAN 44" ABOVE FINISH FLOOR.

IN OTHER THAN DWELLING UNITS,

TOILET ROOM FLOORS SHALL HAVE A SMOOTH HARD, NONABSORBENT SURFACE SUCH AS PORTLAND CEMENT, CONCRETE, CERAMIC TILE OR OTHER APPROVED MATERIAL WHICH EXTENDS UPWARD ONTO THE WALLS AT LEAST 5 INCHES. WALLS WITHIN WATER CLOSET COMPARTMENTS AND WALLS WITHIN 24 INCHES OF THE FRONT AND SIDES OF URINALS SHALL BE SIMILARLY FINISHED TO A HEIGHT OF 48 INCHES AND, EXCEPT FOR STRUCTURAL ELEMENTS, THE MATERIALS USED IN SUCH WALLS SHALL BE A TYPE WHICH IS NOT ADVERSELY AFFECTED BY MOISTURE.

**GENERAL CONSIDERATIONS**

**ACCESSIBILITY STANDARDS**

THE FOLLOWING STANDARDS FOR BARRIER FREE DESIGN SHALL BE INCORPORATED INTO THE PROJECT SITE AND BUILDING AS DESCRIBED BY THE 2016 CALIFORNIA BUILDING CODE (TITLE 24 & CALIFORNIA CODE OF REGULATION), AMERICANS WITH DISABILITIES ACT (ADA) WITH CABO/ANSI SECTIONS AND DIAGRAMS ARE PROVIDED FOR QUICK REFERENCE INTERPRETATION OF THESE CODES AND REGULATIONS AND INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

**ENTRANCE SIGNAGE**

**FINISH AND CONTRAST**

THE CHARACTERS SYMBOLS AND BACKGROUND OF SIGNS SHALL BE EGGSHELL, MATTE OR OTHER NON GLARE FINISH. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.

**LOCATION OF SIGNAGE**

TACTILE SIGNAGE SHALL BE LOCATED ALONGSIDE THE DOOR ON THE LATCH SIDE AND SHALL BE MOUNTED AT 60" ABOVE THE ADJACENT FINISHED FLOOR TO THE CENTERLINE OF THE SIGN. IN LOCATIONS HAVING DOUBLE DOORS, TACTILE SIGNS SHALL BE MOUNTED TO THE RIGHT OF THE RIGHT HAND DOOR, WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE OF THE DOOR, INCLUDING DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL.

**TACTILE SIGNAGE**

1. CHARACTER WIDTH TO HEIGHT RATIO BETWEEN 3:5 AND 1:1 WITH A 1.5 AND 1:10 STROKE WIDTH TO HEIGHT RATIO.
2. CONTRASTING COLORED CHARACTER AND SYMBOLS ON A MATTE FINISHED BACKGROUND.
3. LETTERS AND NUMBERS ON SIGNS SHALL BE RAISED 1/32" MINIMUM AND SHALL BE SANS-SERIF UPPERCASE CHARACTER ACCOMPANIED BY GRADE 2 BRAILLE.
4. RAISED SYMBOLS OR CHARACTERS SHALL BE A MINIMUM OF 5/8" HIGH.

**PLUMBING NOTES**

MAXIMUM FLUSH VOLUMES AND FLOW RATED: FAUCET - 2.2 GPM (SINKS & LAVS), 1.6 GPF (WATER CLOSETS). FITTINGS MANUFACTURED ON OR AFTER MARCH 20, 1992 SHALL BE MARKED WITH THESE FLOW RATINGS AND CERTIFIED BY THE CALIFORNIA ENERGY COMMISSION

FAUCET CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE THE CONTROLS SHALL NOT EXCEED 5 POUNDS. LEVER-OPERATED, PUSH-TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE ACCEPTABLE. HAND-OPERATED METERING FAUCETS SHALL REMAIN OPEN FOR 10 SECONDS MINIMUM

**ELECTRICAL NOTES**

CONTROLS AND SWITCHES SHALL NOT BE LOCATED MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX, NOR LESS THAN 15 INCHES MEASURED BOTTOM OF THE OUTLET BOX, TO THE FINISH FLOOR LEVEL. CBC 11B-308.1.1.

ELECTRICAL RECEPTACLE OUTLETS (30 AMPS OR LESS) SHALL NOT BE LOCATED MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX, NOR LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE OUTLET BOX, TO FINISH FLOOR LEVEL. CBC 11B-308.1.2.

**WALKS AND SIDEWALKS**

CONTINUOUS SURFACES  
WALKS AND SIDEWALKS SHALL HAVE A CONTINUOUS COMMON SURFACE, NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/2 INCHES, AND SHALL BE A MINIMUM OF 48 INCHES IN WIDTH. SURFACES SHALL BE SLIP RESISTANT AS FOLLOWS:

SLOPES OF 6 PERCENT AND GREATER  
SURFACES WITH A SLOPE OF 6 PERCENT GRADIENT SHALL BE SLIP RESISTANT.

SLOPES LESS THAN 6 PERCENT  
SURFACES WITH A SLOPE OF LESS THAN 6 PERCENT GRADIENT SHALL BE AT LEAST AS SLIP RESISTANT AS THAT DESCRIBED AS A MEDIUM SALT FINISH.

SURFACE CROSS SLOPES  
SURFACE CROSS SLOPES SHALL NOT EXCEED 1/4 INCH PER FOOT EXCEPT WHEN THE ENFORCING AGENCY FINDS THAT DUE TO LOCAL CONDITIONS IT CREATES AN UNREASONABLE HARDSHIP, THE CROSS SLOPE SHALL BE TO A MAXIMUM OF 1/2 INCH PER FOOT FOR DISTANCES NOT TO EXCEED 20 FEET.

GRATINGS  
WALKS, SIDEWALKS AND PEDESTRIAN WAYS SHALL BE FREE FROM GRATINGS WHENEVER POSSIBLE. FOR GRATINGS LOCATED IN THE SURFACES OF THESE AREAS, GRID OPENINGS IN GRATINGS SHALL BE 1/2 INCHES IN THE DIRECTION OF TRAFFIC FLOW.

FIVE PERCENT GRADIENT  
SLOPE IN THE DIRECTION OF TRAVEL OF ANY WALK SHALL BE 1 VERTICAL TO 20 HORIZONTAL (5% GRADIENT). IF WALK EXCEEDS THIS STANDARD IT SHALL COMPLY WITH PROVISIONS OF THE C.B.C., PEDESTRIAN RAMPS.

CHANGES IN LEVEL  
ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE SHALL NOT EXCEED 1/2 INCH WHEN CHANGES IN LEVEL DO OCCUR LEVEL 2:1 EXCEPT EXCEPT THAT LEVEL CHANGES NOT EXCEEDING 1/4 INCH MAY BE VERTICAL.

WALKS WITH CONTINUOUS GRADIENTS  
ALL WALKS WITH CONTINUOUS GRADIENT SHALL HAVE LEVEL AREAS AT LEAST 5 FEET IN LENGTH AT INTERVALS OF AT LEAST EVERY 400 FEET.

SHEET: A-101 & A-103

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

4

SHEET: A-101 & A-103

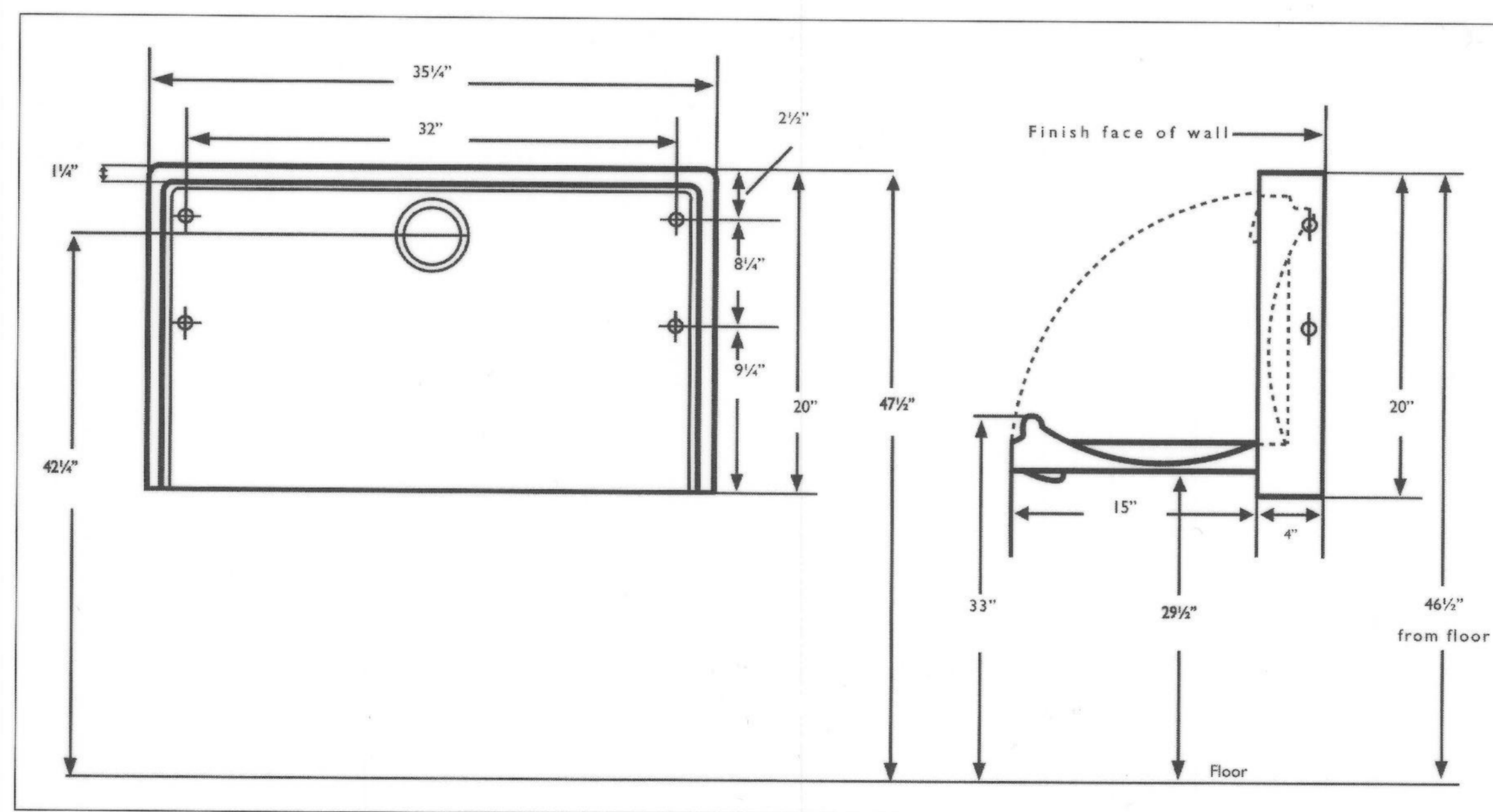
SCALE: 3/4" = 1'-0"

3

SHEET: A-101 & A-201

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

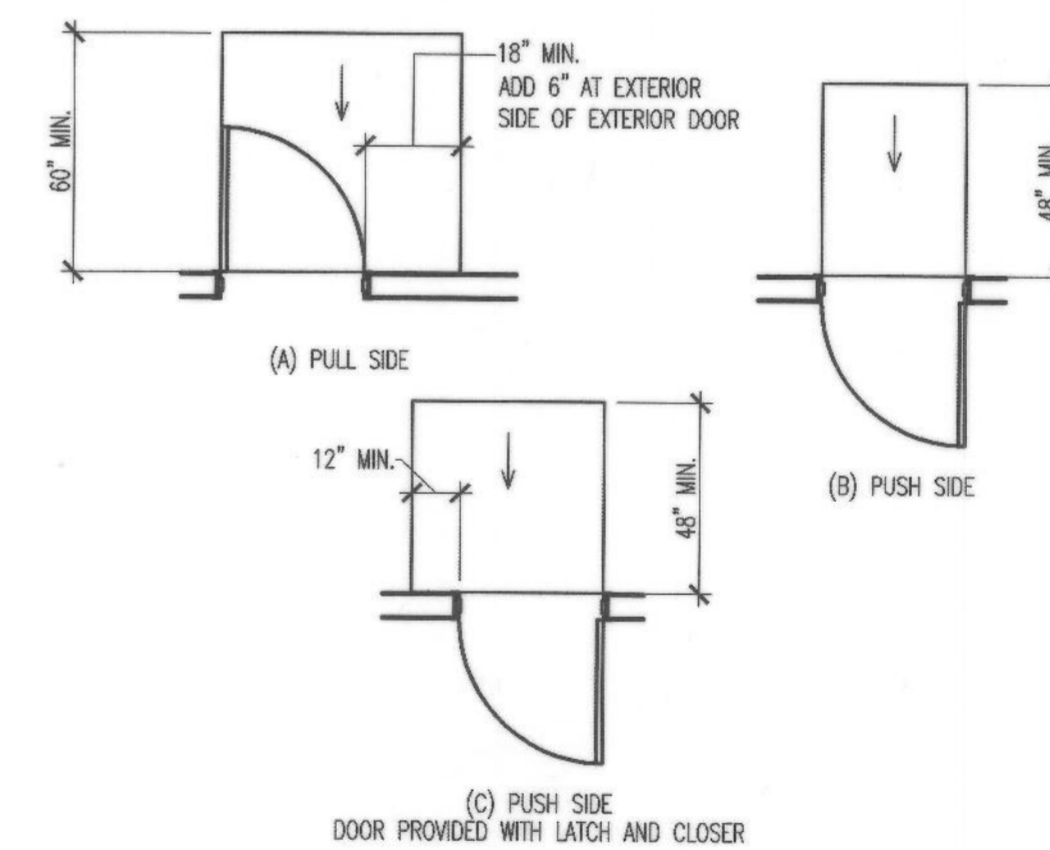
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SHEET: A-103 & A-203

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

6



SHEET: A-101 & A-201

SCALE: 1" = 1'-0"

2

Underground Service Alert

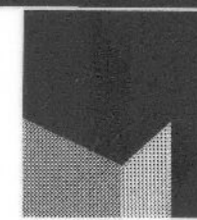


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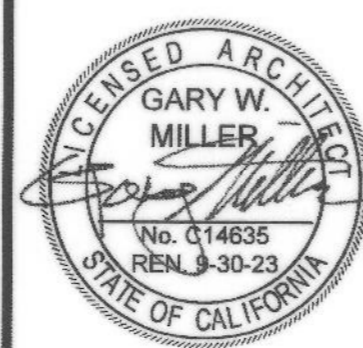
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SAN BERNARDINO, CA 92411



architecture  
interiors  
planning

**MILLER**

1177 Idaho Street, Suite 200  
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info@millar-arp.com



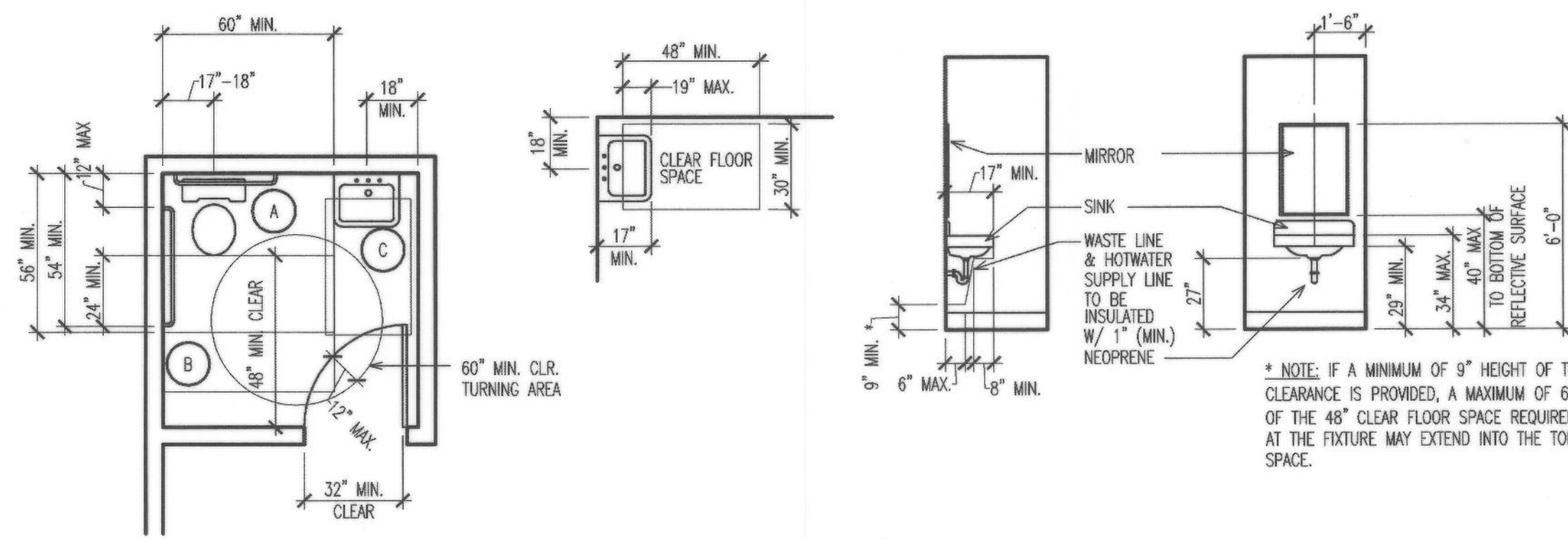
MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED *9/12/2018*  
*Alex Qishita* 2018  
2022  
CITY ENGINEER: ALEX QISHITA  
REGISTERED CIVIL ENGINEER NO. 66702  
DRAWN BY:  
CHECKED BY:  
RECOMMENDED BY:

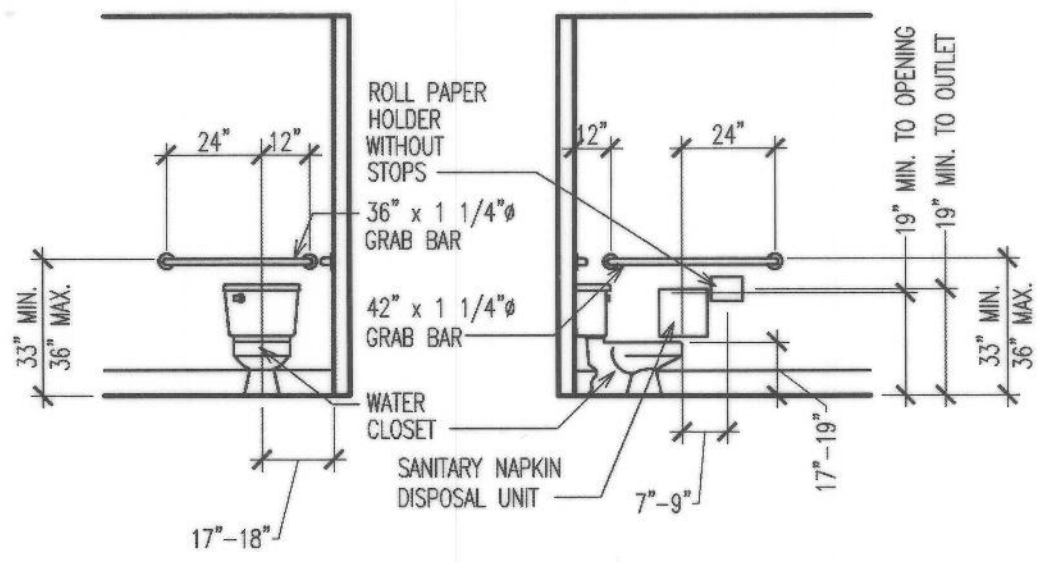
**CITY OF SAN BERNARDINO**  
DEPARTMENT OF PUBLIC WORKS  
**ADA DETAILS**  
FOR  
**ROWE LIBRARY AND  
VILASENOR LIBRARY**

DRAWING NO. 13476  
SHEET 2 OF 26 SHEETS  
FOR CITY USE ONLY: FILE NO. C.I.P. NO. W.O. NO.



- A 60" x 56" CLEAR SPACE AT WATER CLOSET
- B 60" x 48" CLEAR SPACE IN FRONT OF WATER CLOSET
- C 48" x 30" CLEAR SPACE AT LAVATORY

\* NOTE: DOORS SHALL NOT SWING INTO THE CLEAR FLOOR SPACE OF CLEARANCE REQUIRED FOR ANY FIXTURE. EXC. 2: WHERE THE TOILET ROOM OR BATHING ROOM IS FOR INDIVIDUAL USE AND A CLEAR FLOOR SPACE COMPLYING WITH SECTION 11B-305.3 IS PROVIDED WITHIN THE ROOM BEYOND THE ARC OF THE DOOR SWING, DOORS SHALL BE PERMITTED TO SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE REQUIRED FOR ANY FIXTURE.



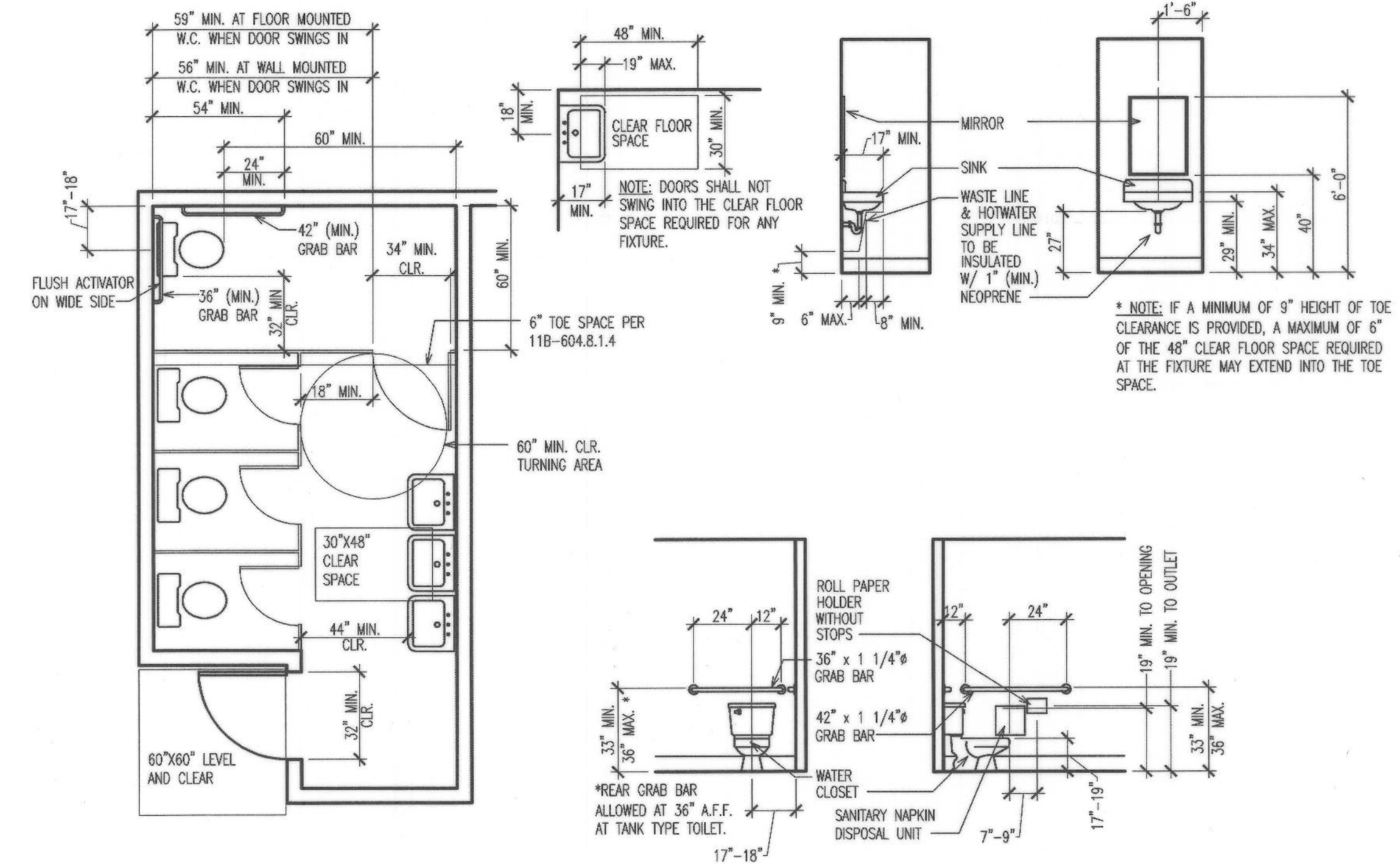
\* NOTE: GRAB BAR DIMENSIONS ARE MEASURED FROM FINISH TO TOP OF GRAB BAR GRIPPING SURFACE

NOTE:  
PLAN AND ELEVATIONS ARE GENERIC TO SHOW FIXTURE MOUNTING LOCATIONS ONLY. SEE PLANS FOR ACTUAL ROOM CONDITIONS.

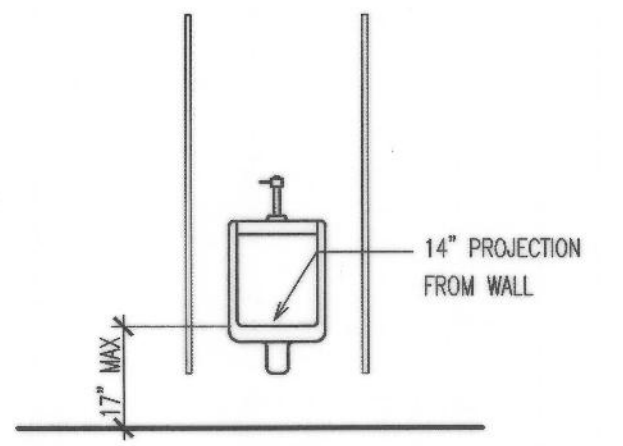
SHEET: A-101

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

2



NOTE:  
PLAN AND ELEVATIONS ARE GENERIC TO SHOW FIXTURE MOUNTING LOCATIONS ONLY. SEE PLANS FOR ACTUAL ROOM CONDITIONS.



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

1

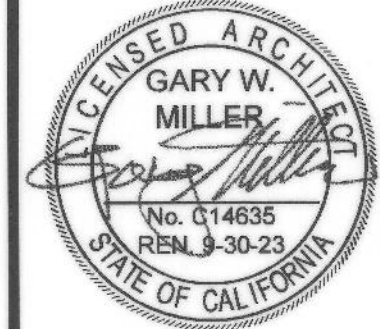


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PAUL VILLASENOR BRANCH LIBRARY  
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info@miller-arp.com



MARK	REVISIONS	BY	APPR DATE

BENCH MARK: **G-002**

APPROVED 9/22 2018  
Alex Qishta 2022

CITY ENGINEER: ALEX QISHTA  
REGISTERED CIVIL ENGINEER NO. 66702

DRAWN BY:

CHECKED BY:

RECOMMENDED BY:

**CITY OF SAN BERNARDINO**  
DEPARTMENT OF PUBLIC WORKS

**ADA DETAILS**

FOR  
**ROWE LIBRARY AND  
VILLASENOR LIBRARY**

G-003

FOR CITY USE ONLY: FILE NO. C.I.P. NO. W.O. NO.

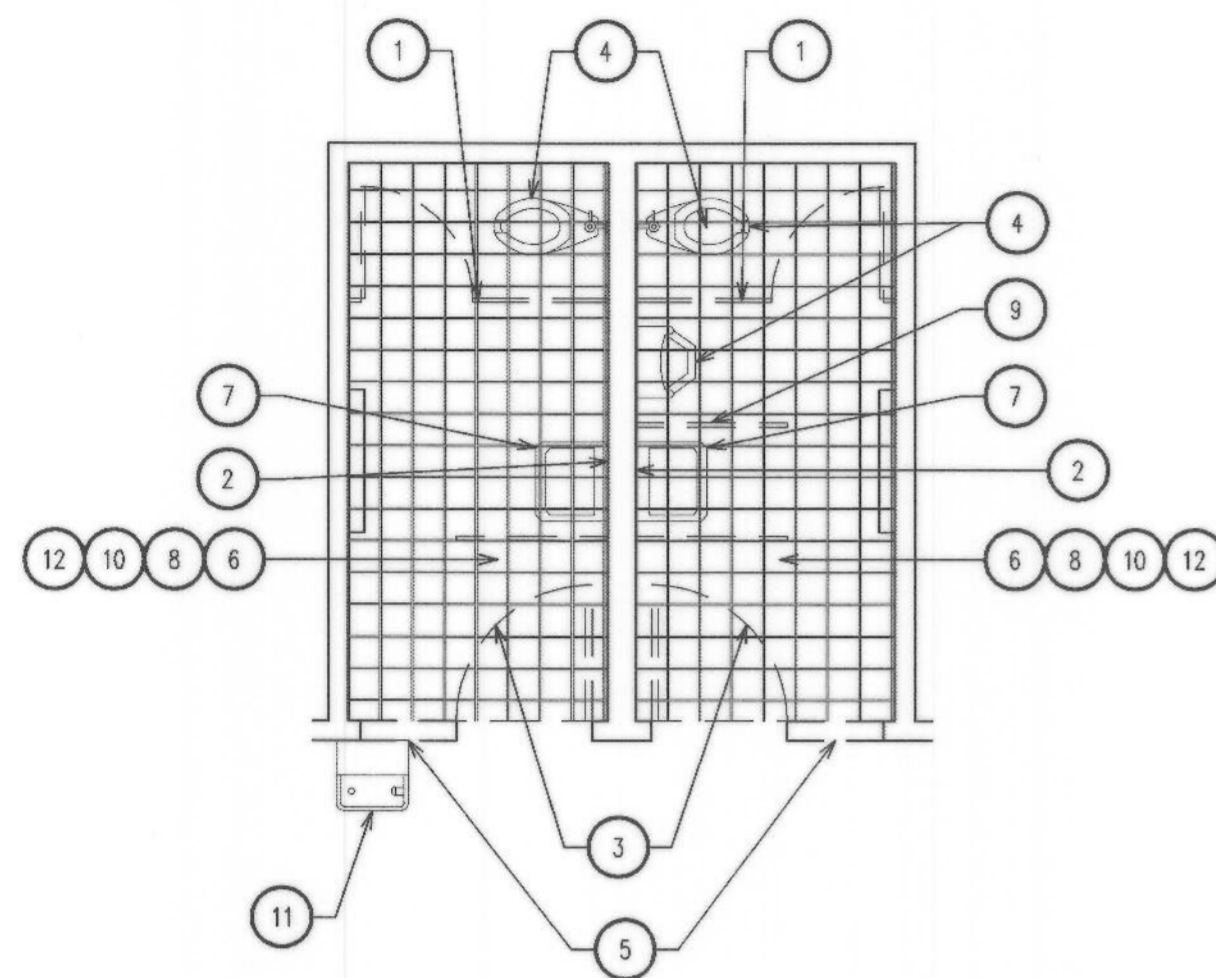
DRAWING NO. 13476

SHEET 3 OF 26 SHEETS









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

1

GENERAL NOTES:

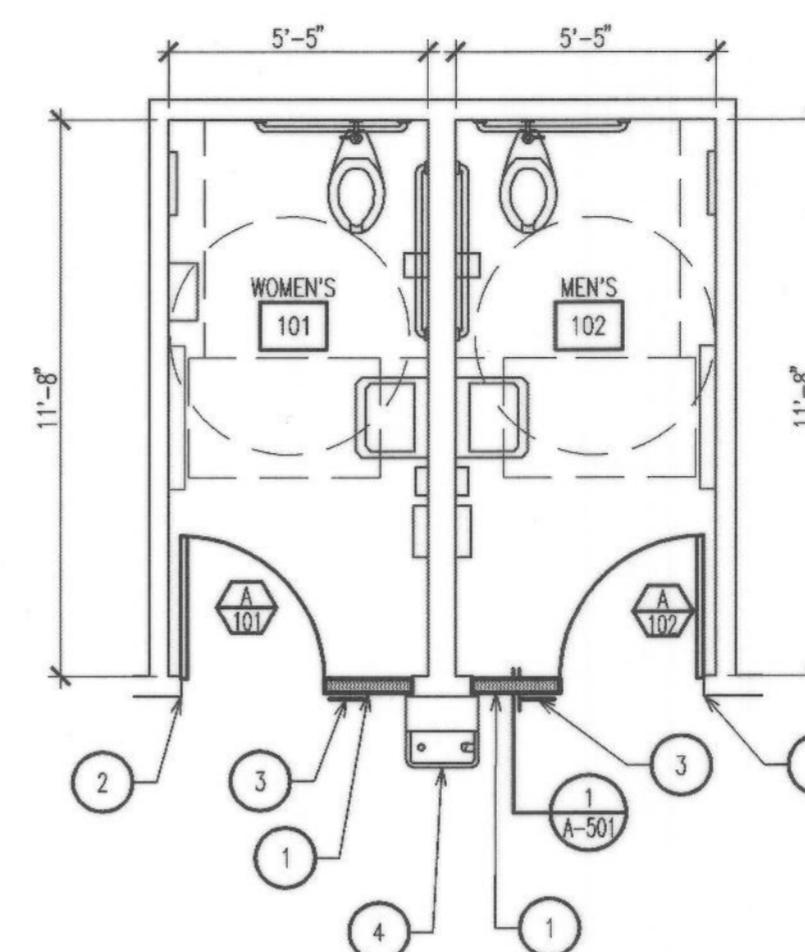
1. PROTECT ALL AREAS FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW AND EXISTING CONSTRUCTION, STRUCTURE OR EQUIPMENT SHALL BE REPAIRED OR REPLACED.
2. ALL EXISTING AREAS TO REMAIN THAT ARE DAMAGED BY DEMOLITION OR NEW CONSTRUCTION WORK SHALL BE PATCHED TO MATCH EXISTING ADJACENT AREA IN MATERIAL, FINISH AND COLOR.
3. EXCESS DOORS, HARDWARE, LIGHTING FIXTURES, ELECTRICAL FITTINGS, CARPETS AND OTHER SALVAGEABLE MATERIAL TO BE STORED OR DISPOSED OF AS DIRECTED BY THE BUILDING OWNER.
4. ANY PROJECTING OR SURFACE MOUNTED ITEMS BEING ABANDONED SHALL BE REMOVED, CAPPED AND CONCEALED BEHIND FINISHED SURFACES UNLESS OTHERWISE NOTED.
5. IN ALL AREAS WHERE DEMOLITION CAUSES UNEVENNESS OR VOIDS IN THE FLOOR, PATCH AND LEVEL THE FLOOR WITH THE EXISTING SLAB AND/OR ADJACENT SURFACE PRIOR TO INSTALLATION OF FINISH FLOOR.
6. BRACE AND SUPPORT EXISTING WORK PRIOR TO AND DURING DEMOLITION AND NEW CONSTRUCTION UNTIL IT IS SAFE TO REMOVE SUCH BRACING AND SUPPORT.
7. REMOVE DAMAGED PLASTER AND DRYWALL BEADS AND BEADS AT EXISTING CORNERS WHERE NEW PARTITIONS ALIGN WITH EXISTING FINISH.
8. UPON COMPLETION OF THE DEMOLITION WORK, ENSURE ALL AREAS ARE LEFT IN BROOM CLEAN CONDITION.

KEY NOTES: (X)

1. REMOVE TOILET PARTITION
2. REMOVE MIRROR
3. REMOVE DOOR, DOOR FRAME AND HARDWARE
4. REMOVE PLUMBING FIXTURE
5. REMOVE PORTION OF WALL TO ACCOMMODATE NEW DOOR
6. REMOVE TILE FLOORING AND BASE
7. REMOVE SINK AND CAP WATER AND WASTE LINES
8. REMOVE ALL RESTROOM ACCESSORIES AND GRAB BARS
9. REMOVE URINAL PARTITION
10. REMOVE ALL WALL TILE AND BACKER BOARD
11. REMOVE DRINKING FOUNTAIN AND CAP WATER AND WASTE LINE
12. SAWCUT AND REMOVE CONCRETE SLAB AS NECESSARY TO ACCOMMODATE INSTALLATION OF NEW WASTE LINE CONFIGURATION. REFER TO PLUMBING PLANS.

LEGEND:

- EXISTING WALL TO REMAIN
- WALL TO BE REMOVED
- REMOVE DOOR, FRAME AND HARDWARE
- REMOVE ALL PLUMBING FIXTURES
- REMOVE CERAMIC TILE AND BASE. REMOVE ALL GROUT AND MASTIC RESIDUE AND CLEAN FLOOR SURFACE FOR INSTALLATION OF FLOORING.



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

2

GENERAL NOTES:

1. SEE DETAIL 10/A-501 FOR TYPICAL ACCESSORY MOUNTING BLOCKING.
2. VERIFY EXISTING CONSTRUCTION WITHIN SCOPE OF WORK TO ENSURE CONFORMANCE WITH NOTED RATINGS AND LOCAL CODES. RETROFIT NONCONFORMING CONSTRUCTION AS REQUIRED.
3. ALL NEW WORK SHALL CONFORM TO BUILDING STANDARD, UNLESS NOTED OTHERWISE.
4. PREPARE ALL SURFACES AS REQUIRED TO RECEIVE NEW FINISH.
5. FINISH: PREPARE SUB-FLOOR AND LEAVE IN BROOM CLEAN CONDITION IN ORDER TO RECEIVE CARPET OR OTHER FLOORING. FLOOR SHALL BE LEVEL AND FREE OF DIPS, DIMPLES AND JOINTS THAT WOULD SHOW THROUGH FINISHED INSTALLATION.
6. REFER TO SHEET A-501 FOR TYPICAL FRAMING DETAILS.

KEY NOTES: (X)

1. WALL INFILL FINISH NEW SURFACE TO MATCH ADJACENT SURFACE.
2. PATCH AND REPAIR WALL AFTER REMOVAL OF DOOR FRAME. FINISH NEW SURFACE TO MATCH ADJACENT SURFACE.
3. RESTROOM SIGNAGE. SEE DETAIL 5/G-002.
4. DRINKING FOUNTAIN/BOTTLE FILLER WITH METAL RAILING RETURNS. SEE DETAIL 4/G-002.

LEGEND:

- EXISTING WALL TO REMAIN
- NEW METAL STUD WALL

WALL SCHEDULE:

W-1 3 5/8" METAL STUDS AT 16" O.C. W/ FIBERGLASS BATT SOUND INSULATION (TYPICAL INTERIOR WALL UNLESS NOTED OTHERWISE)  
5/8" TYPE "X" GYPSUM BOARD EACH SIDE. SEE DETAILS 1/A-501 FOR TYPICAL PARTITION SECTION

STUD MEMBER	STUD SIZE		GAUGE	STUD SPACING		TOP AND BOTTOM TRACK	
	DEPTH	WIDTH		12"	16"	MEMBER	GAUGE
				ALLOWABLE HEIGHT	ALLOWABLE HEIGHT		
362S162-33	3 5/8"	1 5/8"	20	15'-0"	12'-6"	362T162-43	18
362S162-43	3 5/8"	1 5/8"	18	18'-2"	16'-5"	362T200-54	16
362S162-54	3 5/8"	1 5/8"	16	19'-5"	17'-7"	362T200-54	16
362S162-68	3 5/8"	1 5/8"	14	20'-9"	18'-10"	362T200-68	14
600S162-33	6"	1 5/8"	20	16'-0"	14'-6"	600T200-43	18
600S162-43	6"	1 5/8"	18	28'-4"	25'-10"	600T200-54	16
600S162-54	6"	1 5/8"	16	30'-4"	27'-8"	600T200-54	16
600S162-68	6"	1 5/8"	14	32'-8"	24'-8"	600T200-68	14

NOTE: WALL MUST BE FULLY SHEATHED (GYPSUM BOARD) BOTH SIDES OR BRIDGING IS REQUIRED. STUD DESIGN CONSIDERS 5psf INTERIOR WIND LOAD. ICC-ES REPORT ESR-3064 OR EQUAL.

Underground Service Alert  
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REGISTERED ARCHITECT  
GARY W. MILLER  
No. C14835  
REN-9-30-23  
STATE OF CALIFORNIA

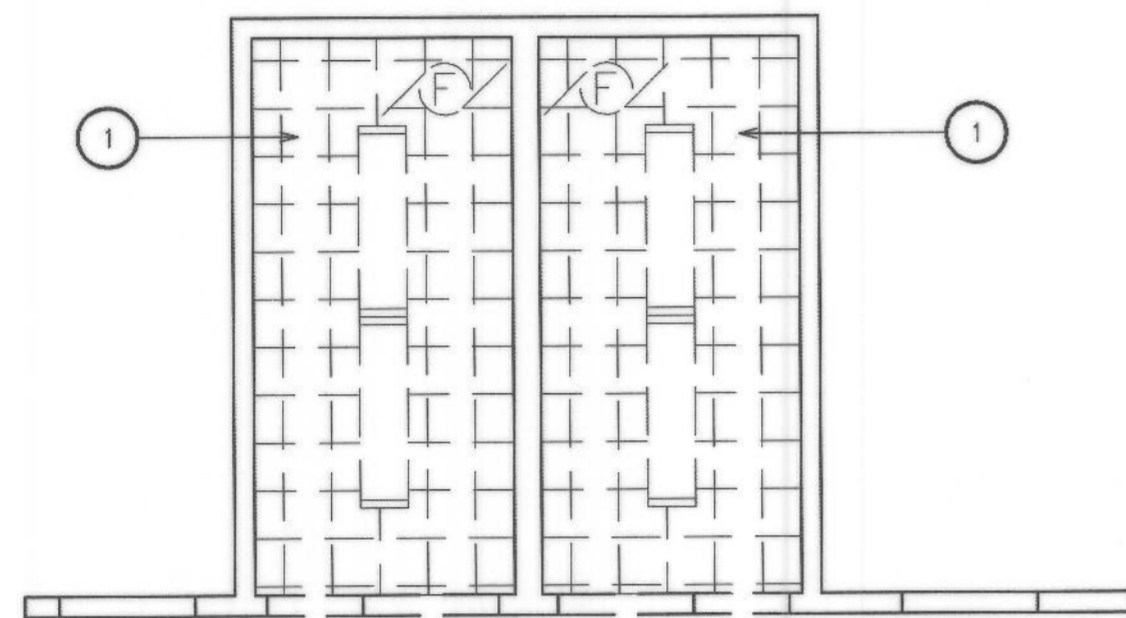
MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED: *Alex Qishta* 2018/2022  
CITY ENGINEER: ALEX QISHTA  
REGISTERED CIVIL ENGINEER NO. 66702  
DRAWN BY:  
CHECKED BY:  
RECOMMENDED BY:

CITY OF SAN BERNARDINO  
DEPARTMENT OF PUBLIC WORKS  
**DEMOLITION PLAN AND FLOOR PLAN**  
FOR  
**ROWE LIBRARY**  
A-101

DRAWING NO. 13476  
SHEET 7 OF 26 SHEETS  
FOR CITY USE ONLY: FILE NO. C.I.P. NO. W.O. NO.



DEMOLITION REFLECTED CEILING PLAN

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



**GENERAL NOTES:**

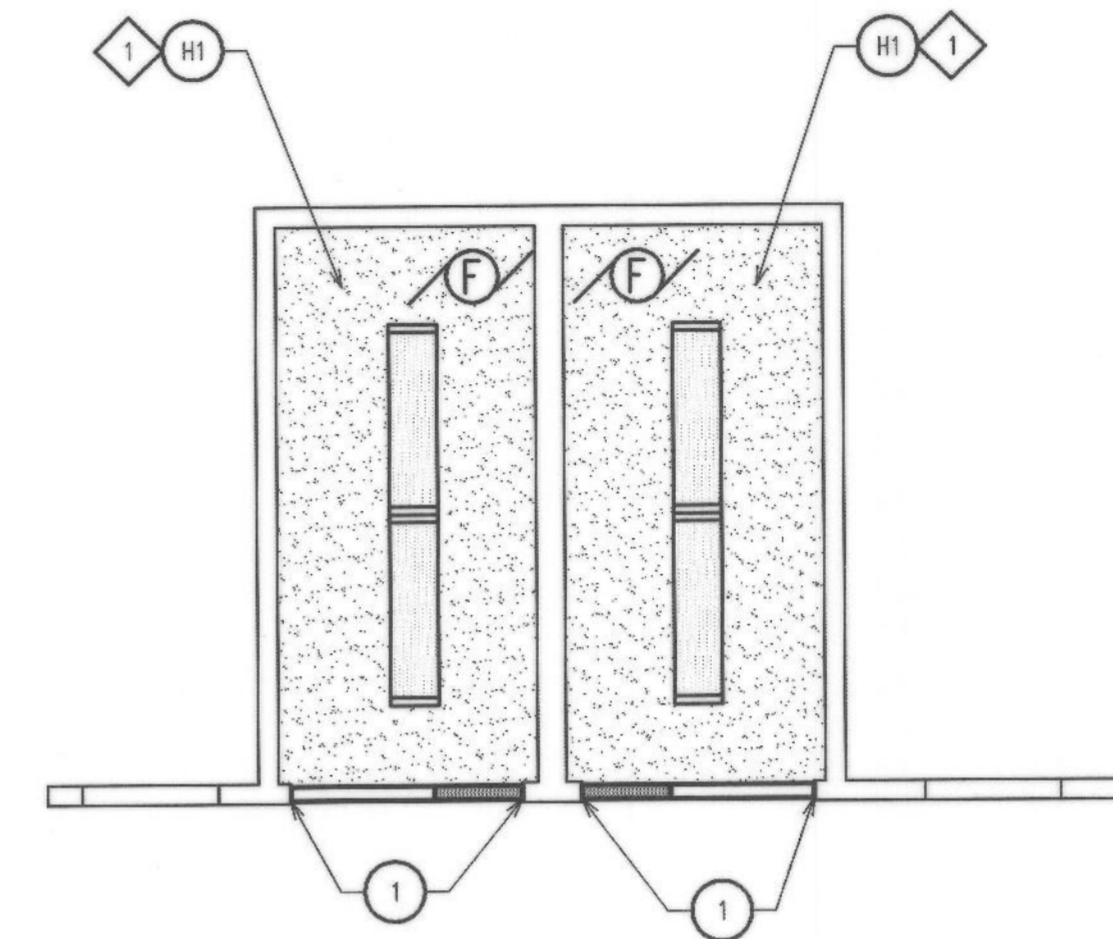
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4. ANY PROJECTING OR SURFACE MOUNTED ITEMS BEING ABANDONED SHALL BE REMOVED, CAPPED AND CONCEALED BEHIND FINISHED SURFACES UNLESS OTHERWISE NOTED.
5. IN ALL AREAS WHERE DEMOLITION CAUSES UNEVENNESS OR VOIDS IN THE FLOOR, PATCH AND LEVEL THE FLOOR WITH THE EXISTING SLAB AND/OR ADJACENT SURFACE PRIOR TO INSTALLATION OF FINISH FLOOR.
6. REMOVE DAMAGED PLASTER AND DRYWALL BEADS AND BEADS AT EXISTING CORNERS WHERE NEW PARTITIONS ALIGN WITH EXISTING FINISH.
7. UPON COMPLETION OF THE DEMOLITION WORK, ENSURE ALL AREAS ARE LEFT IN BROOM CLEAN CONDITION.

**KEY NOTES:** (X)

1. REMOVE GLUED ON CEILING TILE AND ALL RESIDUAL MASTIC FROM CEILING SUBSTRATE.

**LEGEND:**

- ++ ++ REMOVE CEILING TILES
- ++ ++ REMOVE 1x4 FIXTURE
- ⊘ REMOVE EXHAUST FAN



REFLECTED CEILING PLAN

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



**GENERAL NOTES:**

1. VERIFY EXISTING CONSTRUCTION WITHIN SCOPE OF WORK TO ENSURE CONFORMANCE WITH NOTED RATINGS AND LOCAL CODES. RETROFIT NONCONFORMING CONSTRUCTION AS REQUIRED.
2. ALL NEW WORK SHALL CONFORM TO BUILDING STANDARD, UNLESS NOTED OTHERWISE.
3. PREPARE ALL SURFACES AS REQUIRED TO RECEIVE NEW FINISH.

**KEY NOTES:** (X)

1. PATCH AND REPAIR CEILING AFTER REMOVAL OF DOOR AND FRAMING AND FINISH TO MATCH ADJACENT SURFACE.

**LEGEND:**

- ▨ GYPSUM BOARD - PAINTED
- ▨ SURFACE MOUNTED FIXTURE

⊘ EXHAUST FAN

**CEILING FINISH LEGEND:**

- ⬠ GYPSUM BOARD - TEXTURED AND PAINTED

**CEILING HEIGHT LEGEND:**

- H1 8'-0" (TYPICAL UNLESS NOTED OTHERWISE)

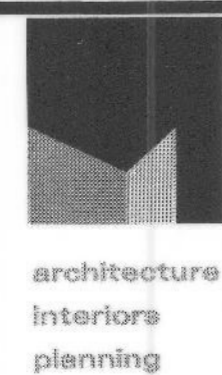
Underground Service Alert



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422-4133

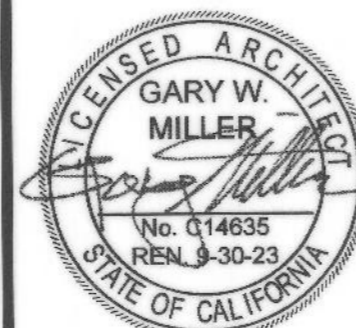
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MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED *Alex Qishta* 9/22 2018  
2022

CITY ENGINEER: ALEX QISHTA  
REGISTERED CIVIL ENGINEER NO. 66702

DRAWN BY:

CHECKED BY:

RECOMMENDED BY:

**CITY OF SAN BERNARDINO**  
DEPARTMENT OF PUBLIC WORKS

**DEMOLITION CEILING PLAN  
AND REFLECTED CEILING PLAN**  
FOR  
**ROWE LIBRARY**

**A-102**

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C.I.P. NO.

DRAWING NO.  
13416

SHEET 8 OF  
26 SHEETS

W.O. NO.

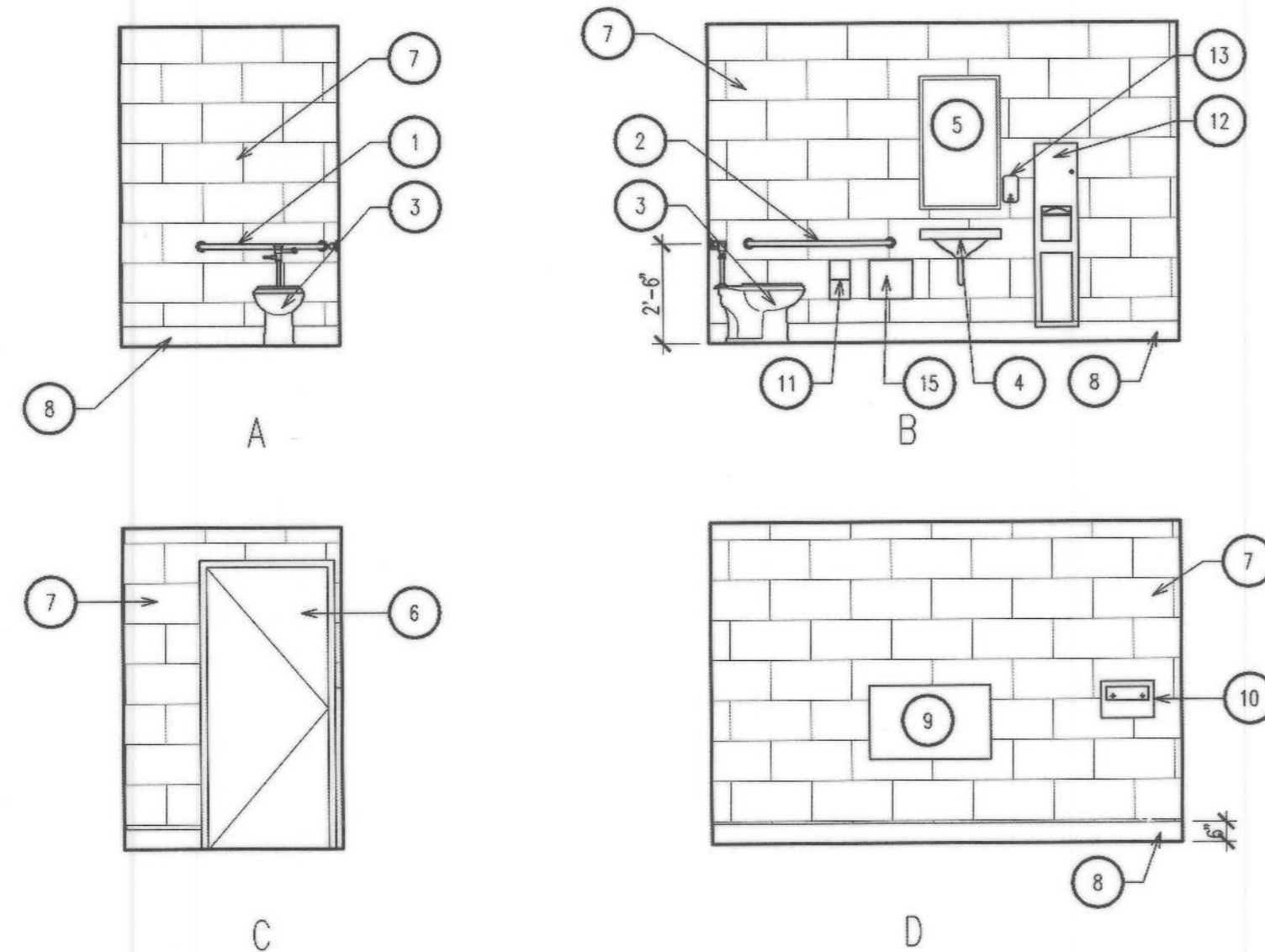


**GENERAL NOTES:**

1. REFER TO SPECIFICATIONS FOR COLORS AND MATERIALS
2. REFER TO SHEET A-601 FOR FLOOR, BASE, WALL FINISHES
3. REFER TO DETAIL 2 SHEET G-003 FOR TYPICAL DIMENSIONS, NOTES AND MOUNTING HEIGHTS FOR ALL RESTROOMS.
4. COORDINATE BACKING FOR FUTURE WALL MOUNTED EQUIPMENT WITH OWNER.
5. PROVIDE BACKING FOR ALL WALL MOUNTED EQUIPMENT - SEE DETAIL 10/A-501

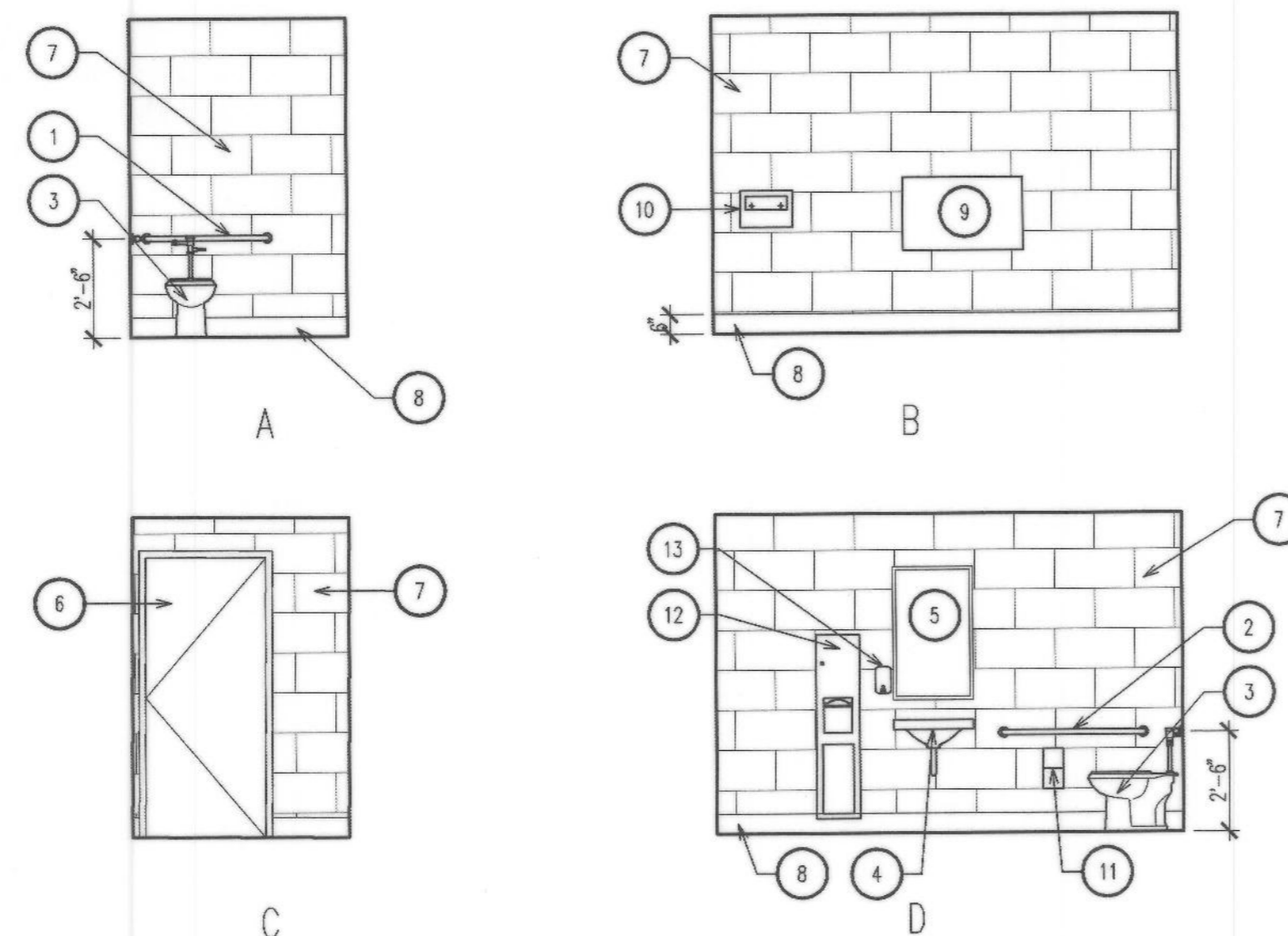
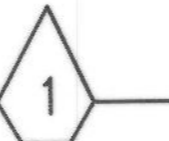
**KEY NOTES:** (X)

1. 36" GRAB BAR
2. 42" GRAB BAR
3. ADA ACCESSIBLE TOILET
4. ADA ACCESSIBLE SINK
5. MIRROR
6. DOOR
7. 12x24 CERAMIC TILE.
8. CERAMIC TILE BASE.
9. BABY CHANGING STATION. SEE DETAIL 6/G-002
10. SURFACE MOUNTED TOILET SEAT COVER DISPENSER
11. SURFACE MOUNTED DOUBLE ROLL TOILET PAPER DISPENSER
12. SURFACE MOUNTED PAPER TOWEL DISPENSER AND WASTE RECEPTACLE
13. SURFACE MOUNTED SOAP DISPENSER
14. 60" DIAMETER CLEAR TURNING AREA
15. SURFACE MOUNTED SANITARY NAPKIN DISPOSAL
16. 30x48 CLEAR SPACE
17. DRINKING FOUNTAIN/BOTTLE FILLER WITH METAL RAIL RETURNS. SEE DETAIL 4/G-002
18. SIGNAGE. SEE DETAIL 4/G-002



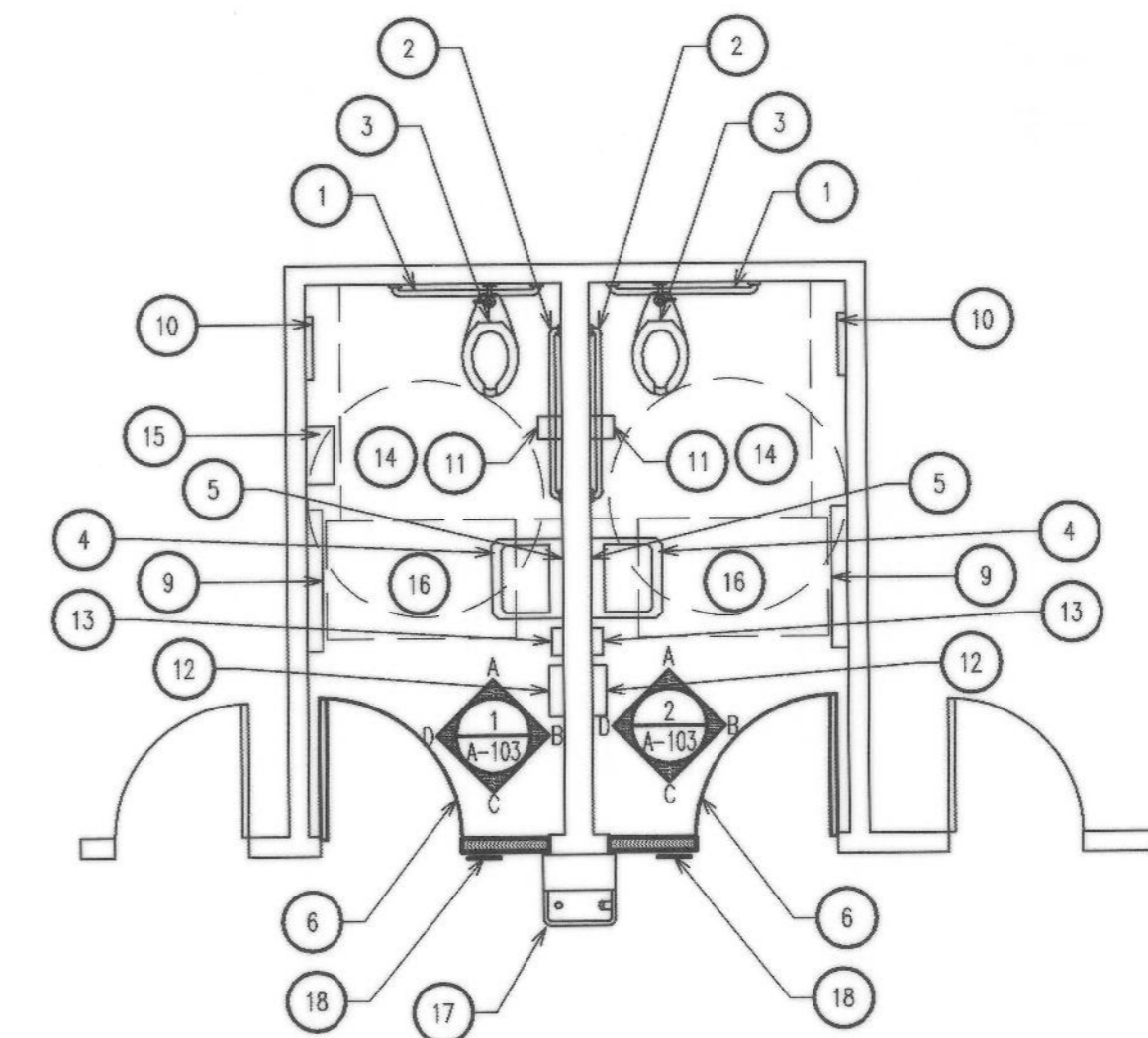
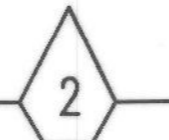
**INTERIOR ELEVATIONS - WOMENS' RESTROOM**

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



**INTERIOR ELEVATIONS - MENS' RESTROOM**

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



**ENLARGED PLAN - MEN'S RESTROOM, WOMEN'S RESTROOM**

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



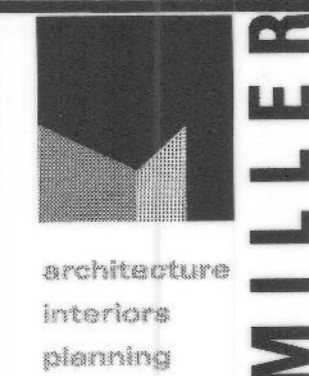
Underground Service Alert



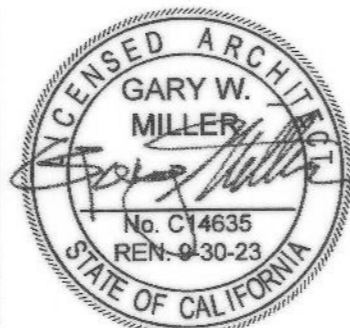
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BENCH MARK:				

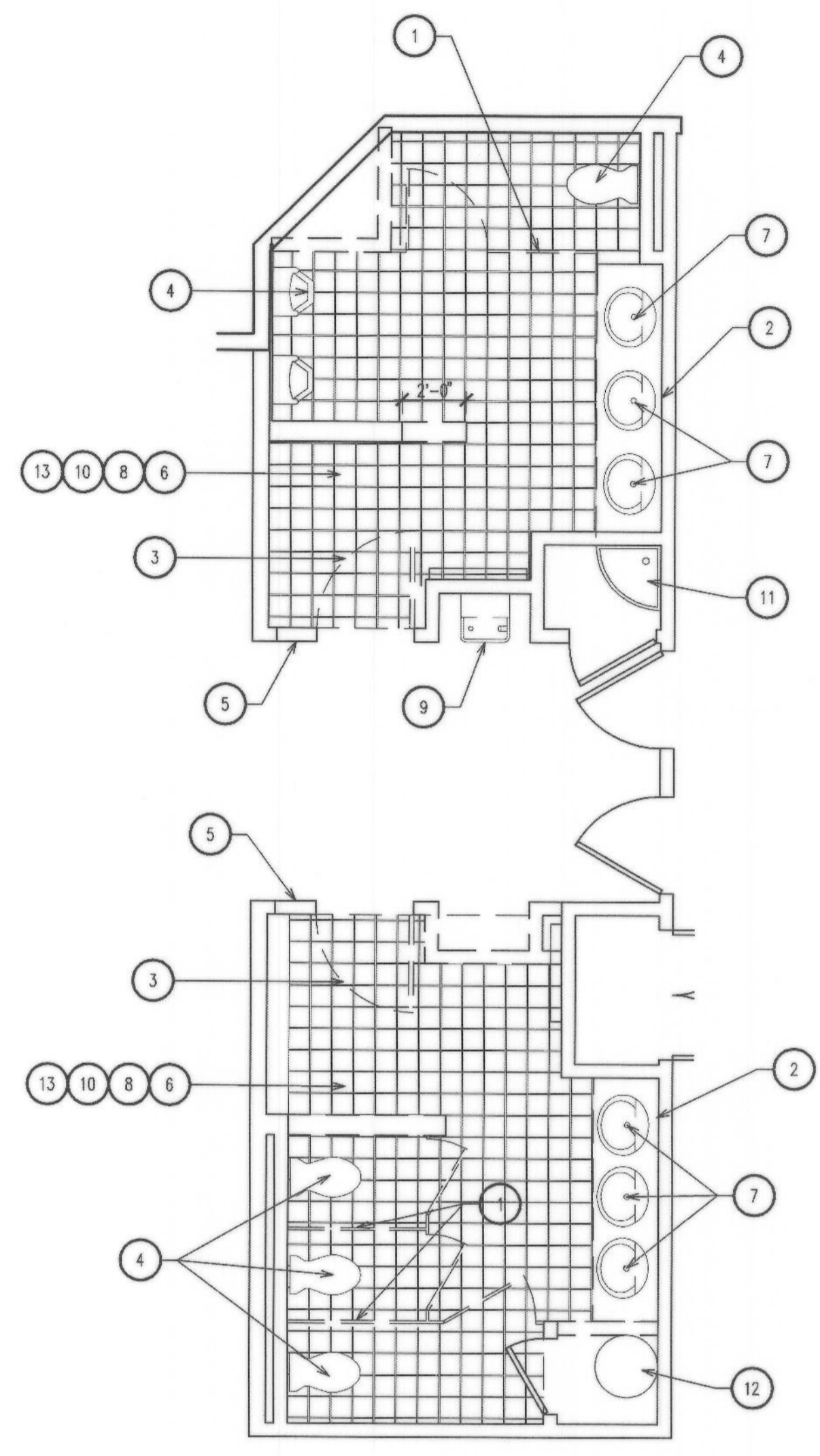
APPROVED: *[Signature]* 9/22 2018  
2022  
CITY ENGINEER: ALEX QISHTA  
REGISTERED CIVIL ENGINEER NO. 66702  
DRAWN BY:  
CHECKED BY:  
RECOMMENDED BY:

**CITY OF SAN BERNARDINO**  
DEPARTMENT OF PUBLIC WORKS  
**ENLARGED PLANS AND INTERIOR ELEVATIONS**  
FOR  
**ROWE LIBRARY**

A-103

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DRAWING NO. 13476  
SHEET 9 OF 26 SHEETS



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

1

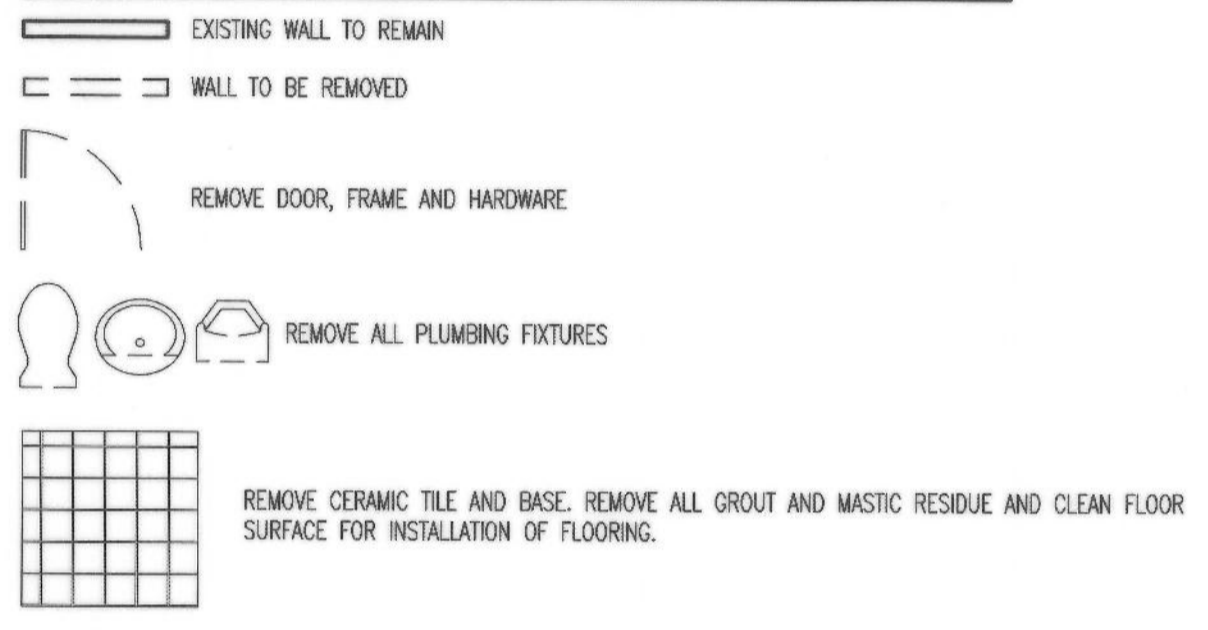
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7. REMOVE DAMAGED PLASTER AND DRYWALL BEADS AND BEADS AT EXISTING CORNERS WHERE NEW PARTITIONS ALIGN WITH EXISTING FINISH.
8. UPON COMPLETION OF THE DEMOLITION WORK, ENSURE ALL AREAS ARE LEFT IN BROOM CLEAN CONDITION.

KEY NOTES: (X)

1. REMOVE TOILET PARTITION
2. REMOVE MIRROR
3. REMOVE DOOR, DOOR FRAME AND HARDWARE
4. REMOVE PLUMBING FIXTURE
5. REMOVE WALL TO ACCOMMODATE NEW DOOR
6. REMOVE TILE FLOORING AND BASE
7. REMOVE SINK AND CAP LINES
8. REMOVE ALL RESTROOM ACCESSORIES AND GRAB BARS
9. REMOVE DRINKING FOUNTAIN
10. REMOVE ALL WALL TILE AND BACKER BOARD
11. (E) MOP SINK
12. (E) WATER HEATER
13. SAWCUT AND REMOVE CONCRETE SLAB AS NECESSARY TO ACCOMMODATE INSTALLATION OF NEW WASTE LINE CONFIGURATION. REFER TO PLUMBING PLANS.

LEGEND:



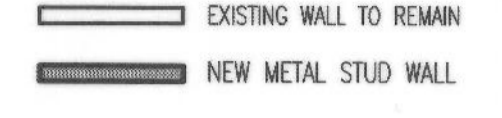
GENERAL NOTES:

1. SEE DETAIL 10/A-501 FOR TYPICAL ACCESSORY MOUNTING BLOCKING.
2. VERIFY EXISTING CONSTRUCTION WITHIN SCOPE OF WORK TO ENSURE CONFORMANCE WITH NOTED RATINGS AND LOCAL CODES. RETROFIT NONCONFORMING CONSTRUCTION AS REQUIRED.
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6. REFER TO SHEET A-501 FOR TYPICAL FRAMING DETAILS.

KEY NOTES: (X)

1. WALL INFILL FINISH NEW SURFACE TO MATCH ADJACENT SURFACE.
2. PATCH AND REPAIR WALL AFTER REMOVAL OF DOOR FRAME. FINISH NEW SURFACE TO MATCH ADJACENT SURFACE.
3. RESTROOM SIGNAGE. SEE DETAIL 5/C-202
4. PATCH AND REPAIR CARPET TILE WITH OWNER PROVIDED CARPET
5. DRINKING FOUNTAIN/BOTTLE FILLER
6. (E) MOP SINK
7. (E) WATER HEATER
8. (E) WALL TO REMAIN

LEGEND:



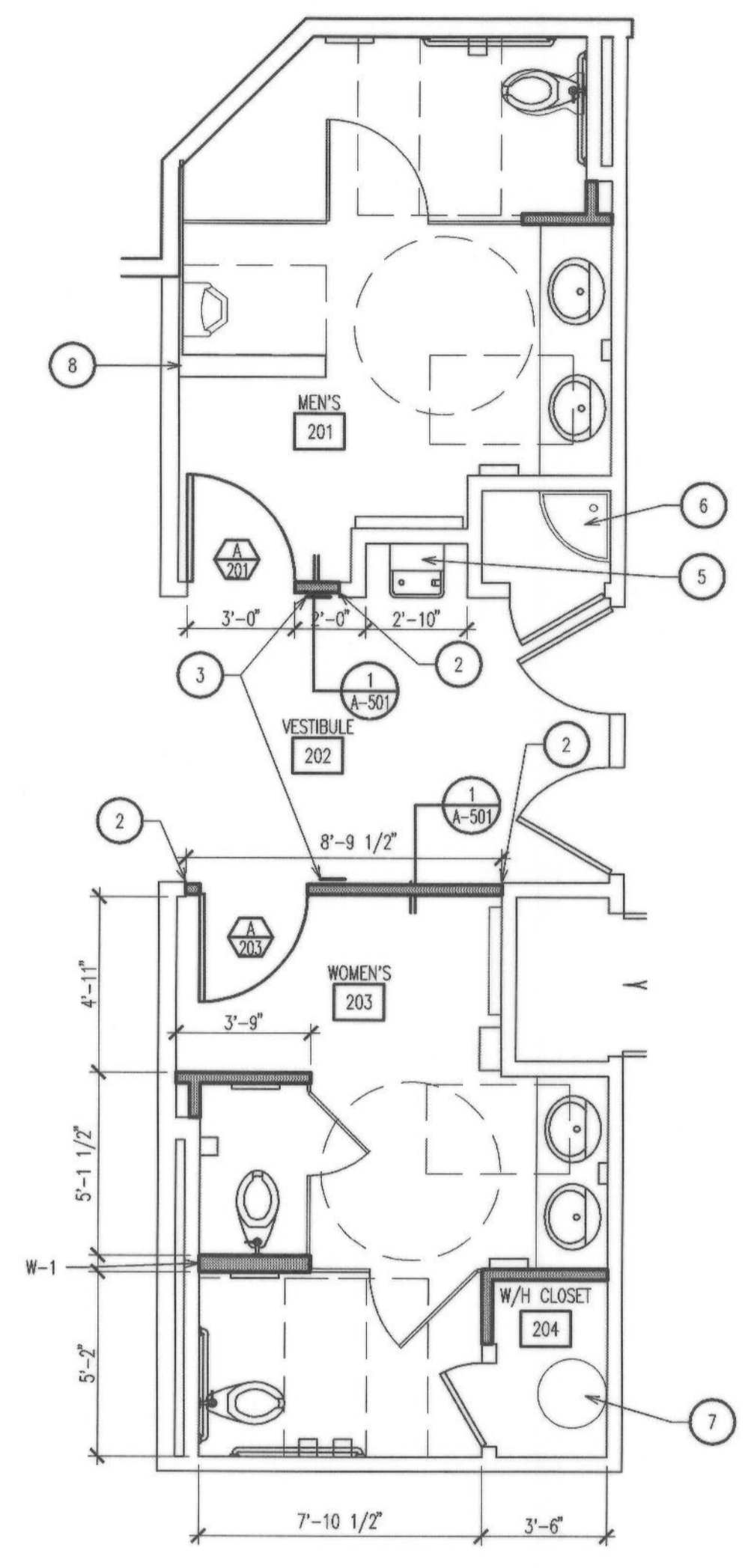
WALL SCHEDULE:

W-1 6" METAL STUDS AT 16" O.C. W/ FIBERGLASS BATT SOUND INSULATION  
5/8" TYPE "X" GYPSUM BOARD EACH SIDE. SEE DETAILS 1/A-501 FOR TYPICAL PARTITION SECTION

W-2 3 5/8" METAL STUDS AT 16" O.C. W/ FIBERGLASS BATT SOUND INSULATION  
(TYPICAL INTERIOR WALL UNLESS NOTED OTHERWISE)  
5/8" TYPE "X" GYPSUM BOARD EACH SIDE. SEE DETAILS 1/A-501 FOR TYPICAL PARTITION SECTION

STUD MEMBER	STUD SIZE		GAUGE	STUD SPACING		TOP AND BOTTOM TRACK	
	DEPTH	WIDTH		12"	16"	MEMBER	GAUGE
				ALLOWABLE HEIGHT			
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NOTE: WALL MUST BE FULLY SHEATHED (GYPSUM BOARD) BOTH SIDES OR BRIDGING IS REQUIRED. STUD DESIGN CONSIDERS 5psf INTERIOR WIND LOAD. ICC-ES REPORT ESR-3064 OR EQUAL.



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

2

Underground Service Alert  
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SAN BERNARDINO, CA 92411

**MILLER**  
architecture interiors planning  
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Redlands, CA 92374  
Phone: (909) 335-7400  
Fax: (909) 335-7299  
Info@miller-aip.com

LICENSED ARCHITECT  
GARY W. MILLER  
No. 014835  
REN. 9-30-23  
STATE OF CALIFORNIA

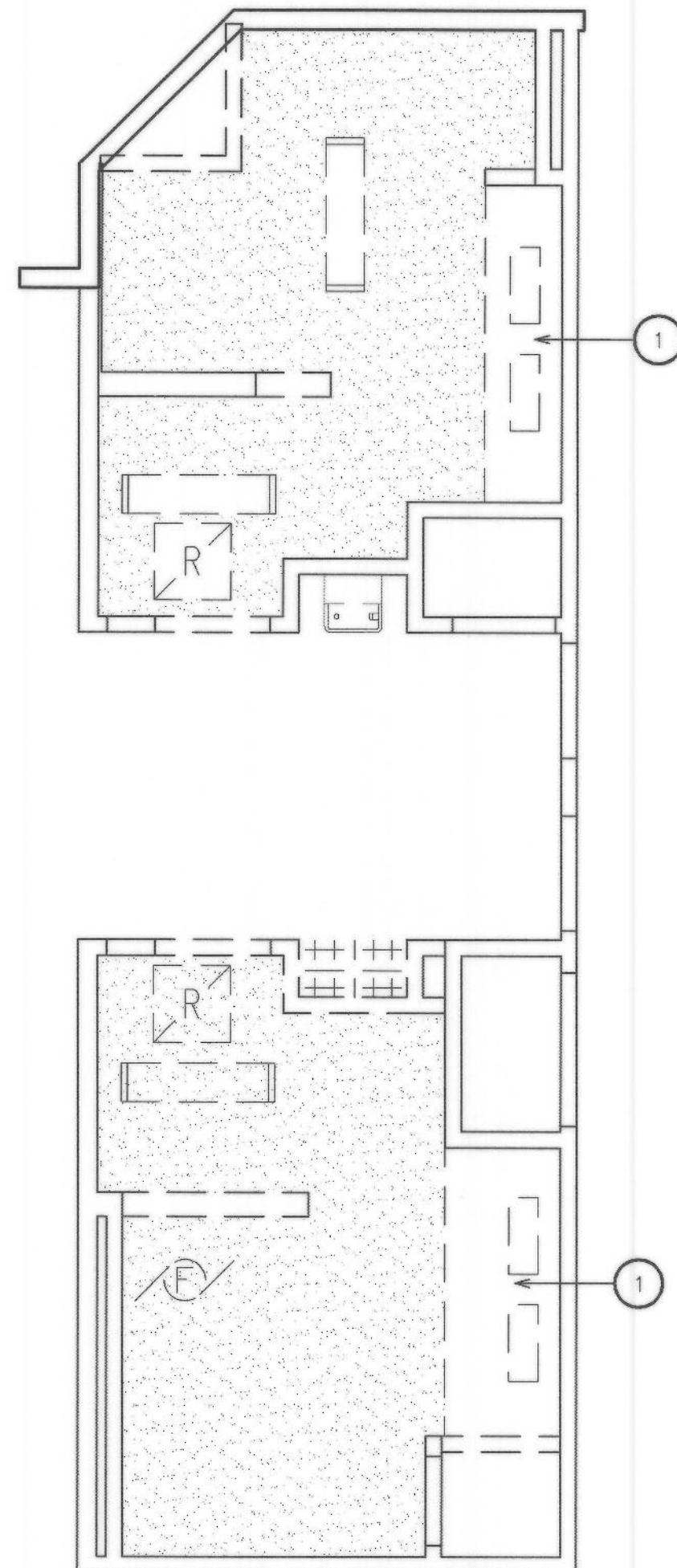
MARK	REVISIONS	BY	APPR	DATE

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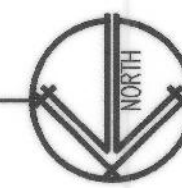
APPROVED: 9/22/2018  
2022  
CITY ENGINEER: ALEX QISHTA  
REGISTERED CIVIL ENGINEER NO. 66702  
DRAWN BY:  
CHECKED BY:  
RECOMMENDED BY:

CITY OF SAN BERNARDINO  
DEPARTMENT OF PUBLIC WORKS  
**DEMOLITION PLAN AND FLOOR PLAN**  
FOR  
VILASENOR LIBRARY  
A-201  
FOR CITY USE ONLY: FILE NO. C.I.P. NO. W.O. NO.

DRAWING NO. 13470  
SHEET 10 OF 26 SHEETS



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



**GENERAL NOTES:**

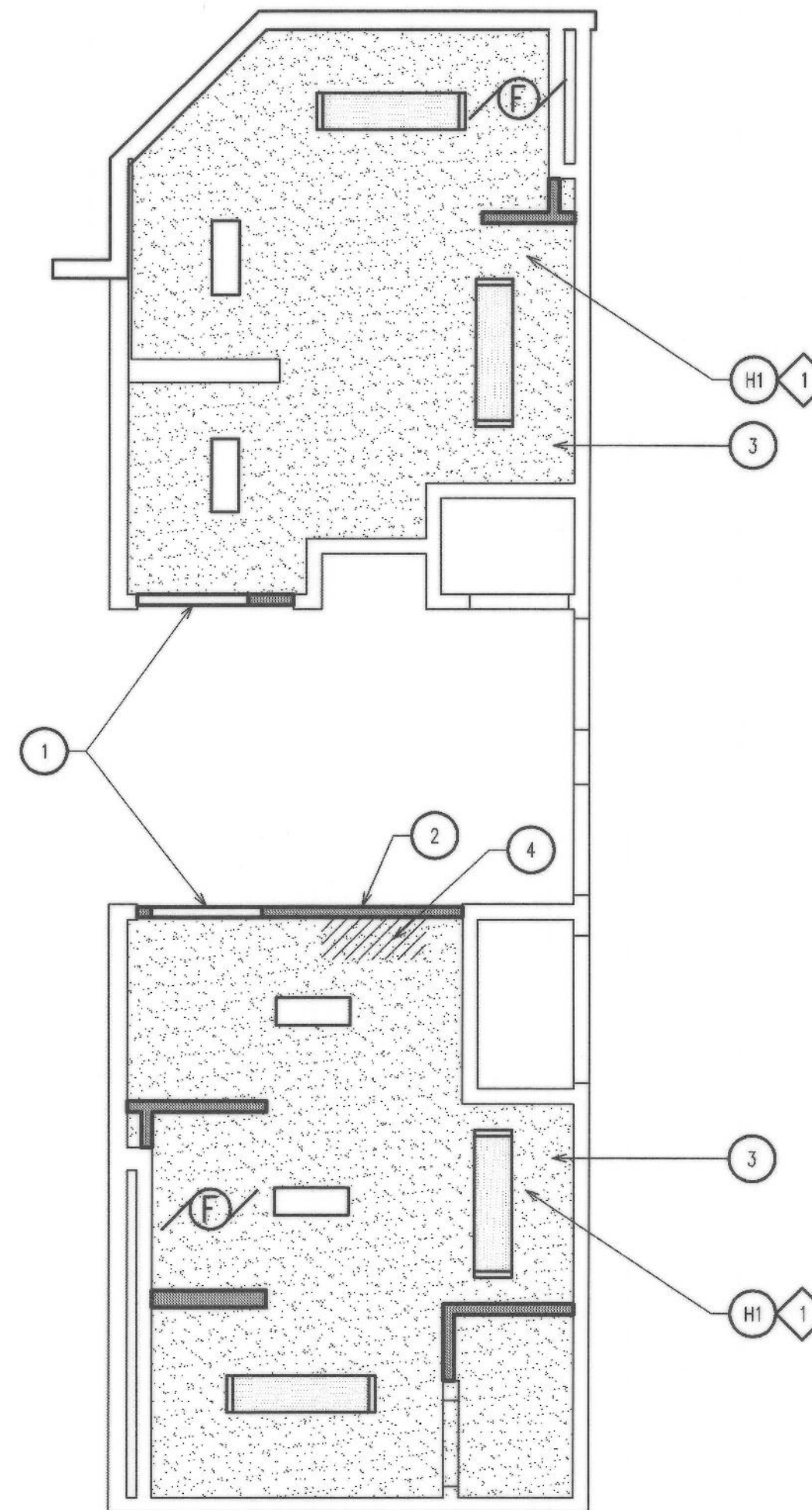
1. PROTECT ALL AREAS FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW AND EXISTING CONSTRUCTION, STRUCTURE OR EQUIPMENT SHALL BE REPAIRED OR REPLACED.
2. ALL EXISTING AREAS TO REMAIN THAT ARE DAMAGED BY DEMOLITION OR NEW CONSTRUCTION WORK SHALL BE PATCHED TO MATCH EXISTING ADJACENT AREA IN MATERIAL, FINISH AND COLOR.
3. EXCESS DOORS, HARDWARE, LIGHTING FIXTURES, ELECTRICAL FITTINGS, CARPETS AND OTHER SALVAGEABLE MATERIAL TO BE STORED OR DISPOSED OF AS DIRECTED BY THE BUILDING OWNER.
4. ANY PROJECTING OR SURFACE MOUNTED ITEMS BEING ABANDONED SHALL BE REMOVED, CAPPED AND CONCEALED BEHIND FINISHED SURFACES UNLESS OTHERWISE NOTED.
5. IN ALL AREAS WHERE DEMOLITION CAUSES UNEVENNESS OR VOIDS IN THE FLOOR, PATCH AND LEVEL THE FLOOR WITH THE EXISTING SLAB AND/OR ADJACENT SURFACE PRIOR TO INSTALLATION OF FINISH FLOOR.
6. BRACE AND SUPPORT EXISTING WORK PRIOR TO AND DURING DEMOLITION AND NEW CONSTRUCTION UNTIL IT IS SAFE TO REMOVE SUCH BRACING AND SUPPORT.
7. REMOVE DAMAGED PLASTER AND DRYWALL BEADS AND BEADS AT EXISTING CORNERS WHERE NEW PARTITIONS ALIGN WITH EXISTING FINISH.
8. UPON COMPLETION OF THE DEMOLITION WORK, ENSURE ALL AREAS ARE LEFT IN BROOM CLEAN CONDITION.

**KEY NOTES:** (X)

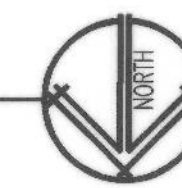
1. REMOVE LIGHTING SOFFIT

**LEGEND:**

- +++ ACUSTIC CEILING TILE TO BE REMOVED
- +++ ACUSTIC CEILING TILE TO BE REMOVED
- EXISTING GYPSUM BOARD
- REMOVE 1x4 FIXTURE
- REMOVE EXHAUST FAN
- MECHANICAL REGISTERS TO BE REMOVED



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



**GENERAL NOTES:**

1. VERIFY EXISTING CONSTRUCTION WITHIN SCOPE OF WORK TO ENSURE CONFORMANCE WITH NOTED RATINGS AND LOCAL CODES. RETROFIT NONCONFORMING CONSTRUCTION AS REQUIRED.
2. ALL NEW WORK SHALL CONFORM TO BUILDING STANDARD, UNLESS NOTED OTHERWISE.
3. PREPARE ALL SURFACES AS REQUIRED TO RECEIVE NEW FINISH.

**KEY NOTES:** (X)

1. PATCH AND REPAIR WALL/CEILING ABOVE THE DOOR AFTER RELOCATION OF CAMERA/EXIT SIGN
2. PATCH AND REPAIR ACOUSTIC GRID AS NECESSARY TO ACCOMMODATE NEW VESTIBULE
3. PATCH AND REPAIR EXISTING GYPSUM BOARD TO MATCH ADJACENT SURFACE
4. PATCH AND REPAIR EXISTING GYPSUM BOARD SURFACE AFTER REMOVAL OF CEILING TILE TO MATCH ADJACENT CEILING SURFACE

**LEGEND:**

- (E) GYPSUM BOARD - PAINTED
- GYPSUM BOARD - PAINTED
- SURFACE MOUNTED FIXTURE
- SURFACE MOUNTED FIXTURE
- EXHAUST FAN
- MECHANICAL REGISTERS

**CEILING FINISH LEGEND:**

- GYPSUM BOARD- TEXTURED AND PAINTED

**CEILING HEIGHT LEGEND:**

- 8'-0" (TYPICAL UNLESS NOTED OTHERWISE)

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LICENSED ARCHITECT  
GARY W. MILLER  
No. C14635  
REN-930-23  
STATE OF CALIFORNIA

MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED: 9/22 2018-2022  
Alex Qishita  
CITY ENGINEER: ALEX QISHITA  
REGISTERED CIVIL ENGINEER NO. 66702  
DRAWN BY:  
CHECKED BY:  
RECOMMENDED BY:

**CITY OF SAN BERNARDINO**  
DEPARTMENT OF PUBLIC WORKS  
**DEMOLITION CEILING PLAN AND REFLECTED CEILING PLAN**  
FOR  
**VILLASENOR LIBRARY**  
A-202

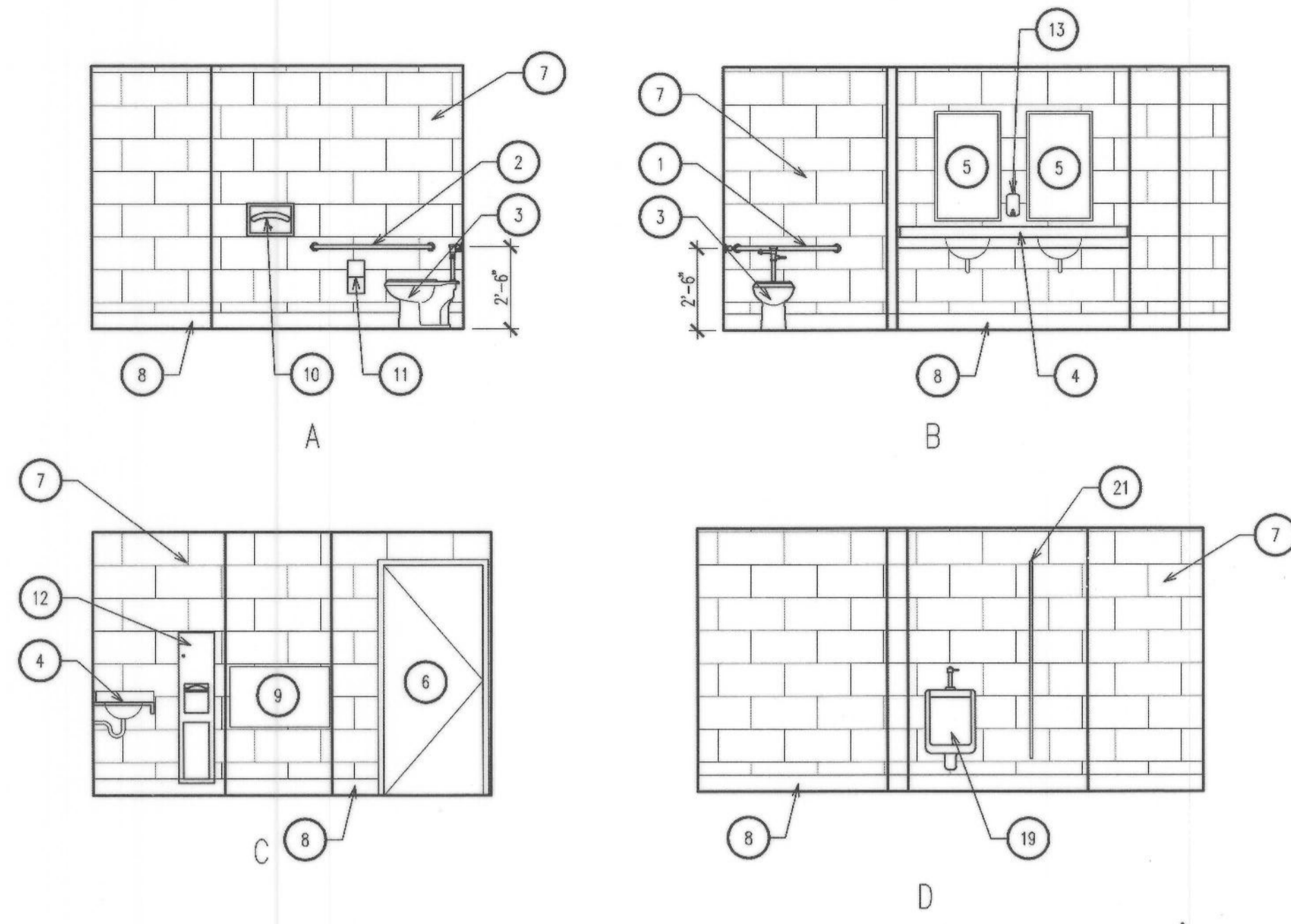
DRAWING NO. 13476  
SHEET 11 OF 26 SHEETS  
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**GENERAL NOTES:**

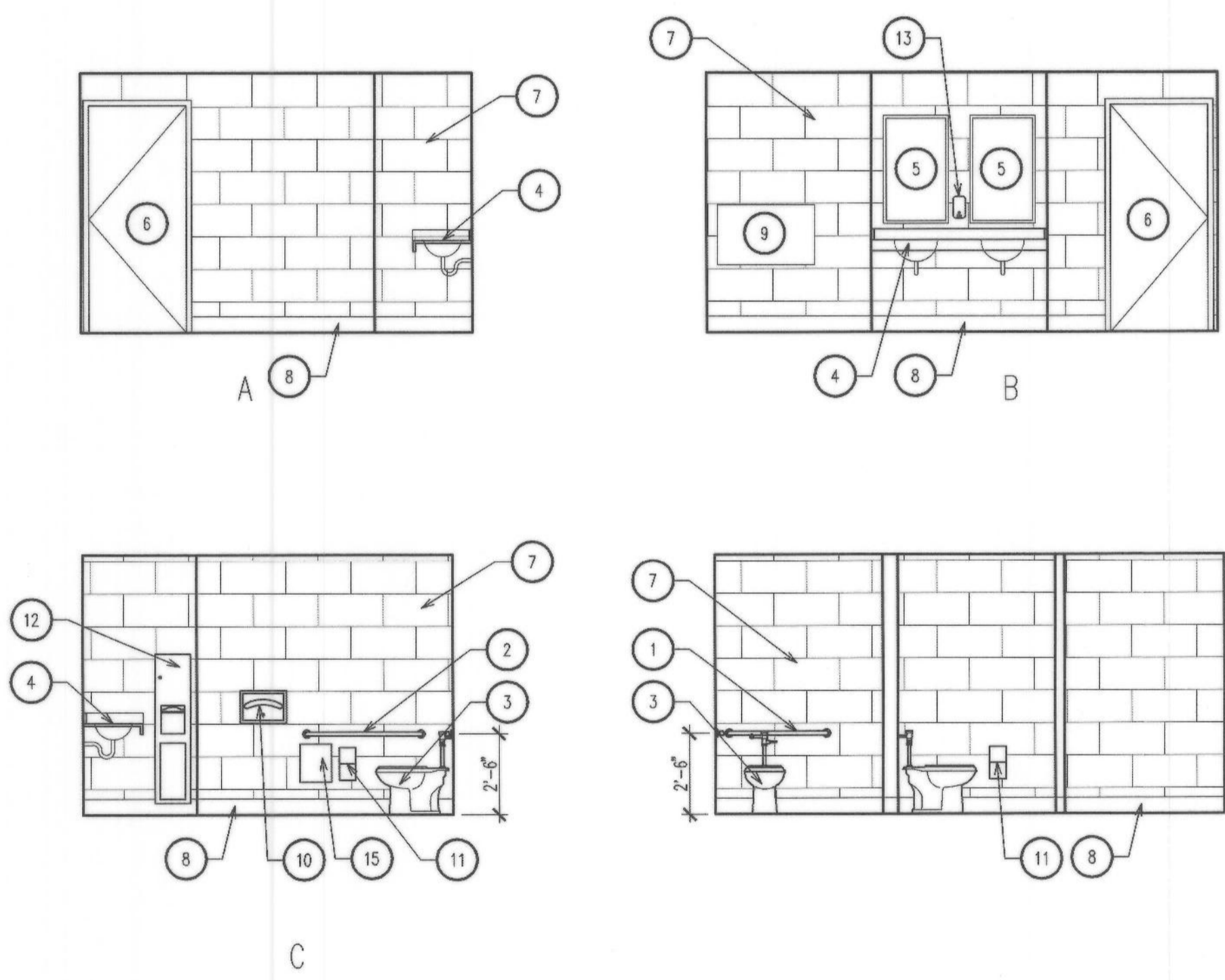
1. REFER TO SPECIFICATIONS FOR COLORS AND MATERIALS
2. REFER TO SHEET A-601 FOR FLOOR, BASE, WALL FINISHES
3. REFER TO DETAIL 4 SHEET G-002 FOR DIMENSIONS, NOTES AND MOUNTING HEIGHTS FOR ALL RESTROOMS.
4. COORDINATE BACKING FOR FUTURE WALL MOUNTED EQUIPMENT WITH OWNER.
5. PROVIDE BACKING FOR ALL WALL MOUNTED EQUIPMENT - SEE DETAIL 10/A-501

**KEY NOTES:**

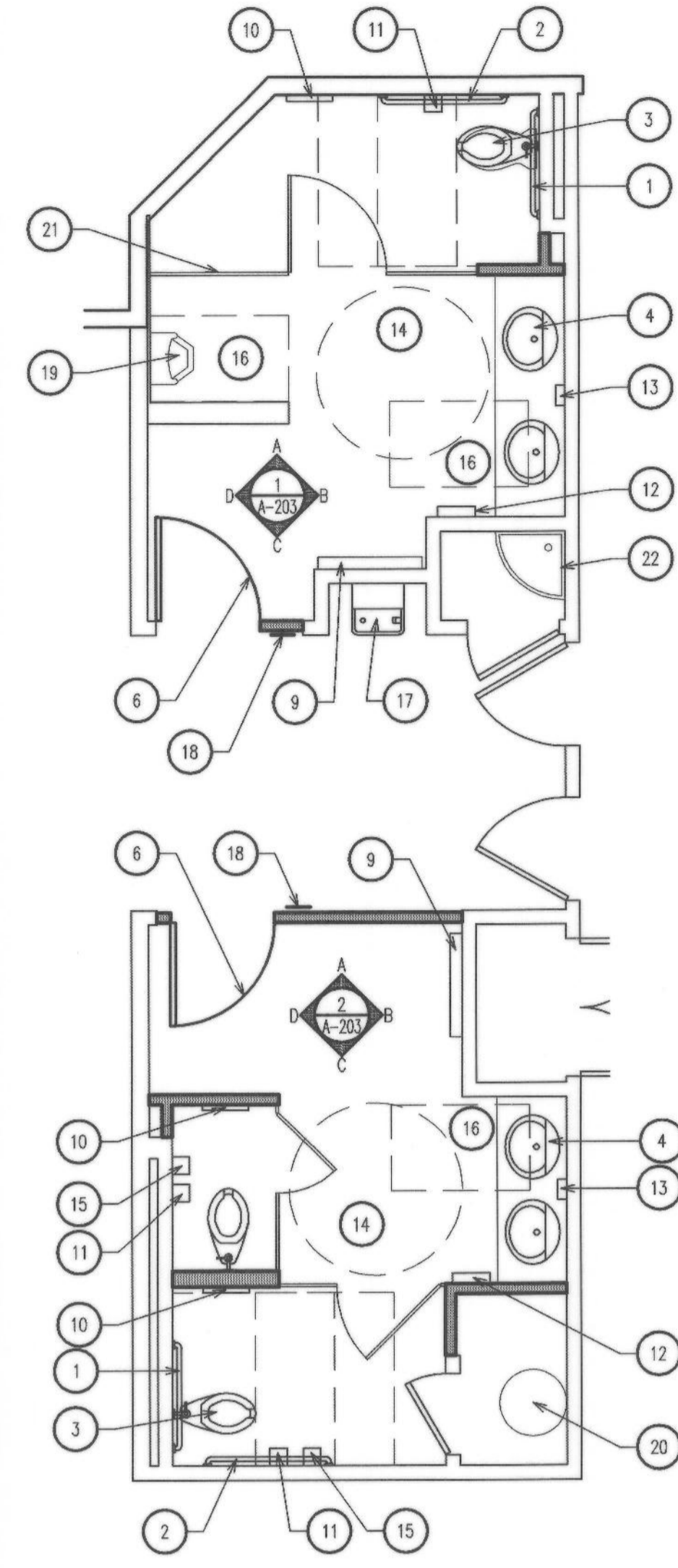
1. 36" GRAB BAR
2. 42" GRAB BAR
3. ADA ACCESSIBLE TOILET
4. COUNTER TOP AND SINK. SEE DETAIL 6/A-501
5. MIRROR
6. DOOR
7. 12x24 CERAMIC TILE.
8. CERAMIC TILE BASE.
9. BABY CHANGING STATION. SEE DETAIL 6/G-002
10. SURFACE MOUNTED TOILET SEAT COVER DISPENSER
11. SURFACE MOUNTED DOUBLE ROLL TOILET PAPER DISPENSER
12. SURFACE MOUNTED PAPER TOWEL DISPENSER AND WASTE RECEPTACLE
13. SURFACE MOUNTED SOAP DISPENSER
14. 60" DIAMETER CLEAR TURNING AREA
15. SURFACE MOUNTED SANITARY NAPKIN DISPOSAL
16. 30x48 CLEAR SPACE
17. DRINKING FOUNTAIN/BOTTLE FILLER
18. SIGNAGE. SEE DETAIL 4/G-002
19. URINAL
20. (E) WATER HEATER. SEE PLUMBING PLANS FOR ADDITIONAL INFORMATION
21. TOILET PARTITION
22. (E) MOP SINK



**INTERIOR ELEVATIONS - MEN'S RESTROOM**  
SCALE: 1/4" = 1'-0"



**INTERIOR ELEVATIONS - WOMEN'S RESTROOM**  
SCALE: 1/4" = 1'-0"



**ENLARGED PLAN - MEN'S RESTROOM, WOMEN'S RESTROOM**  
SCALE: 1/4" = 1'-0"

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**REGISTERED ARCHITECT**  
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REN. 9-30-23  
STATE OF CALIFORNIA

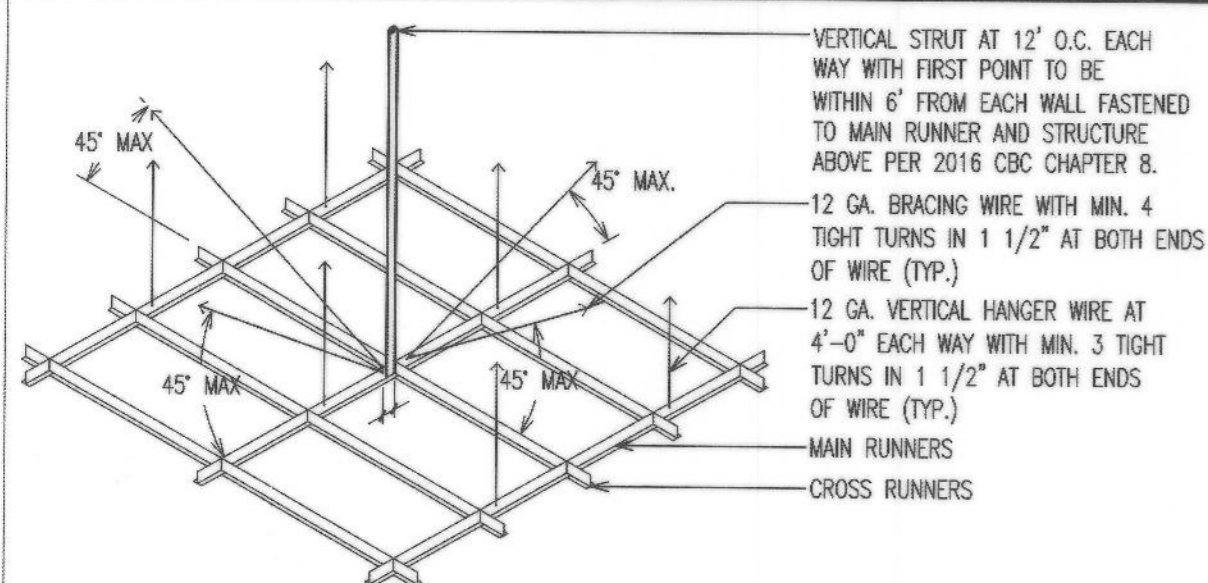
MARK	REVISIONS	BY	APPR	DATE

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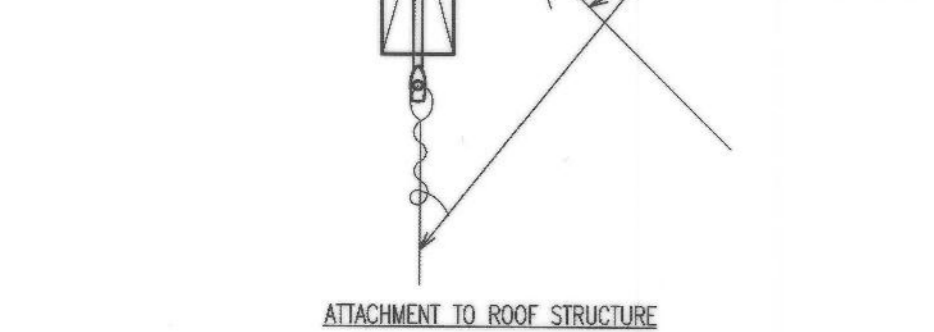
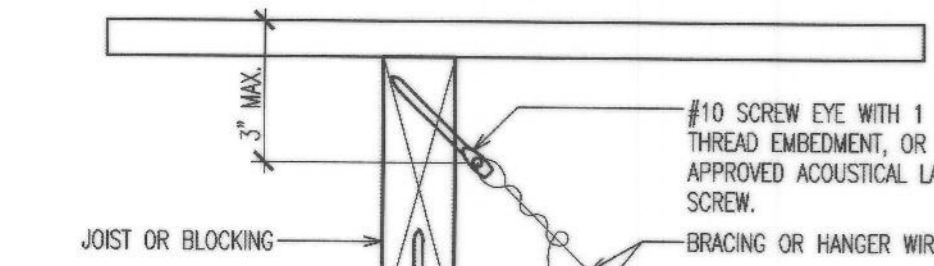
APPROVED 9/22 2018  
Alex Qishita 2022  
CITY ENGINEER: ALEX QISHITA  
REGISTERED CIVIL ENGINEER NO. 66702  
DRAWN BY:  
CHECKED BY:  
RECOMMENDED BY:

**CITY OF SAN BERNARDINO**  
DEPARTMENT OF PUBLIC WORKS  
**ENLARGED PLANS AND INTERIOR ELEVATIONS**  
FOR  
**VILLASENOR LIBRARY**  
A-203

DRAWING NO. 134710  
SHEET 12 OF 26 SHEETS  
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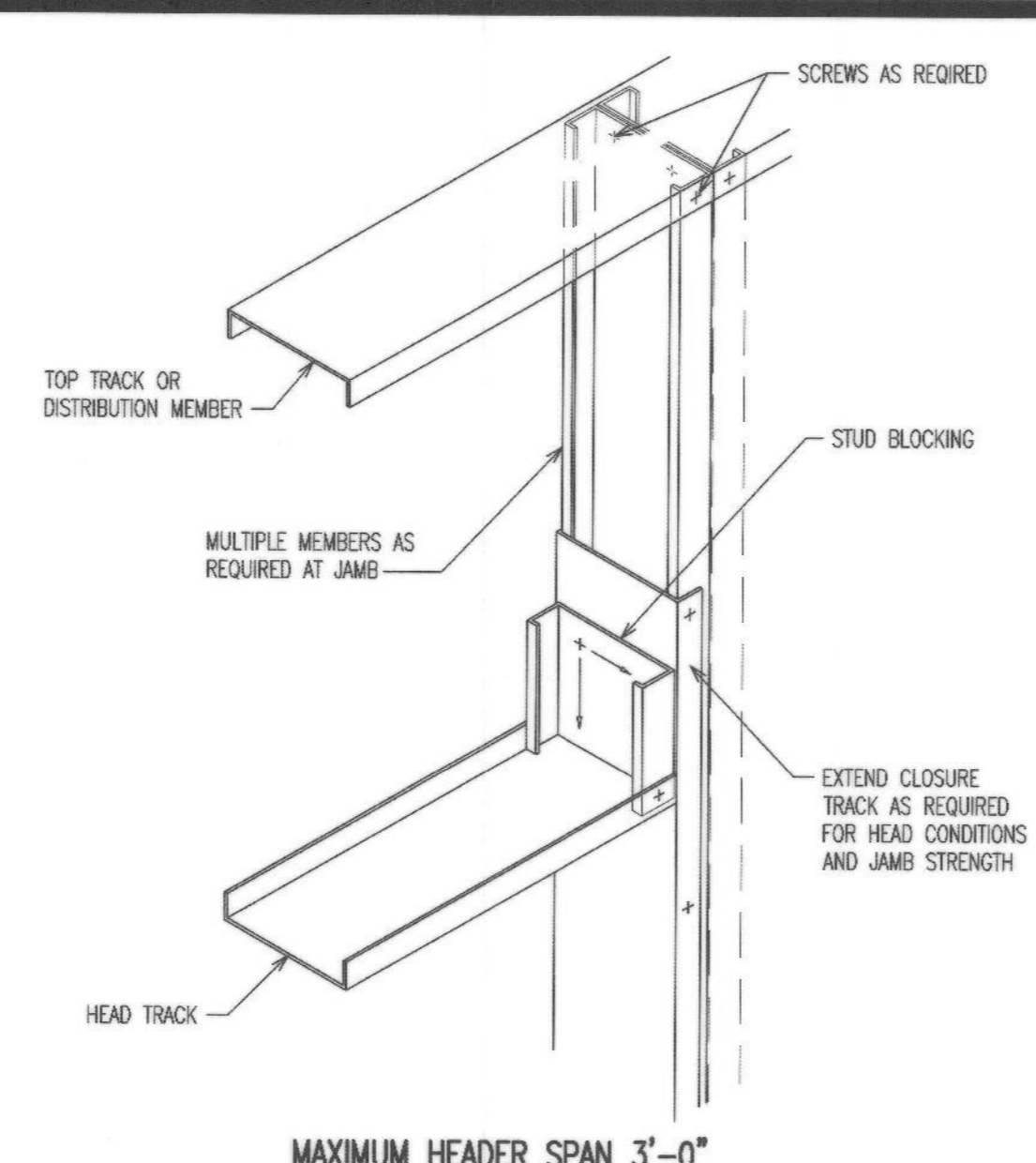
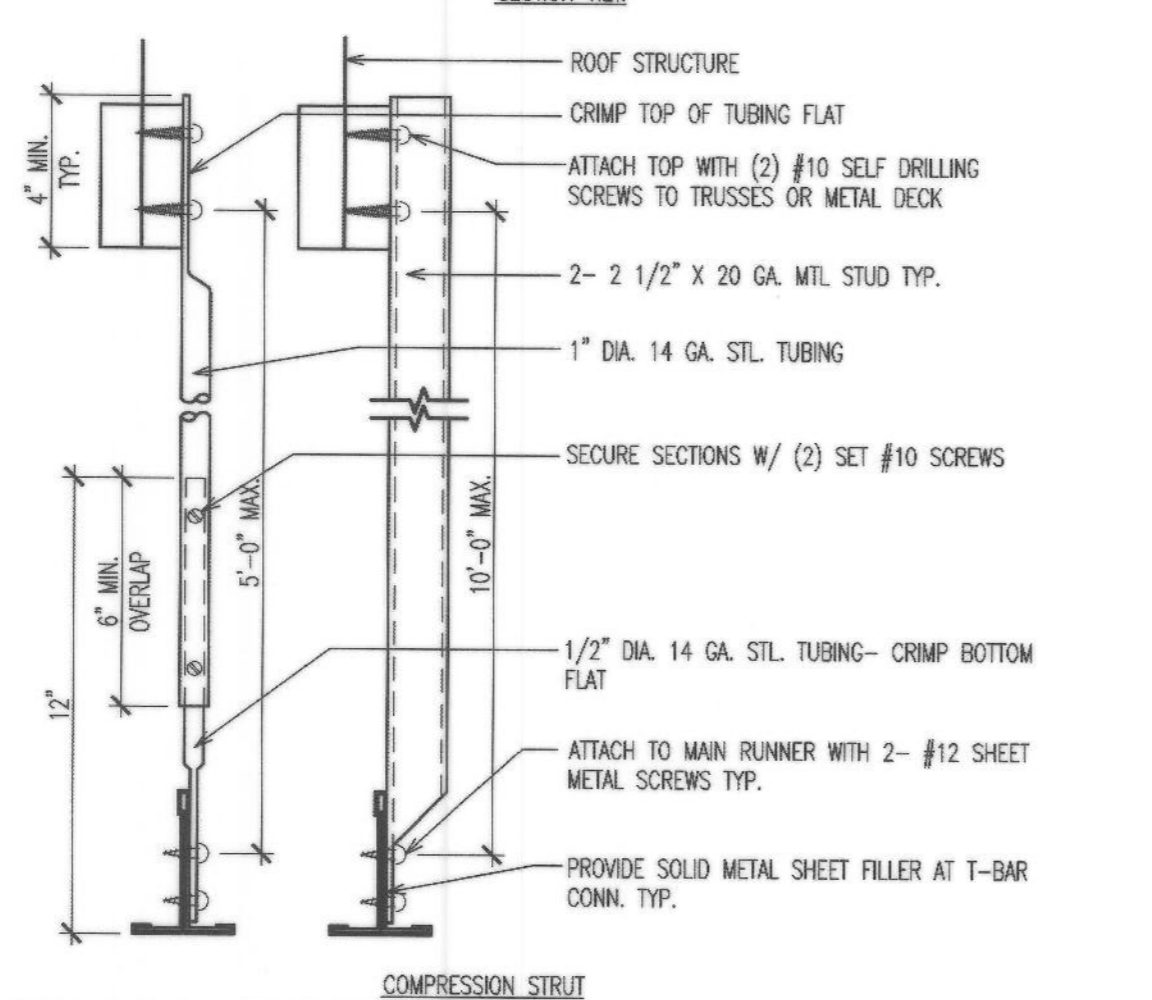
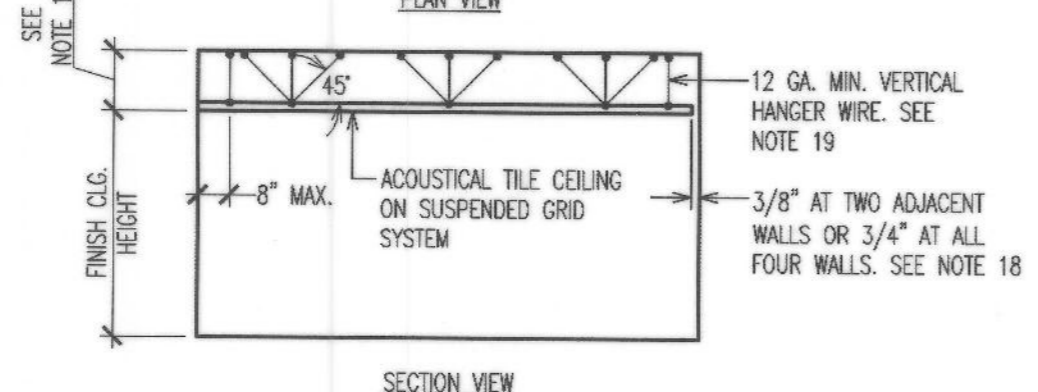
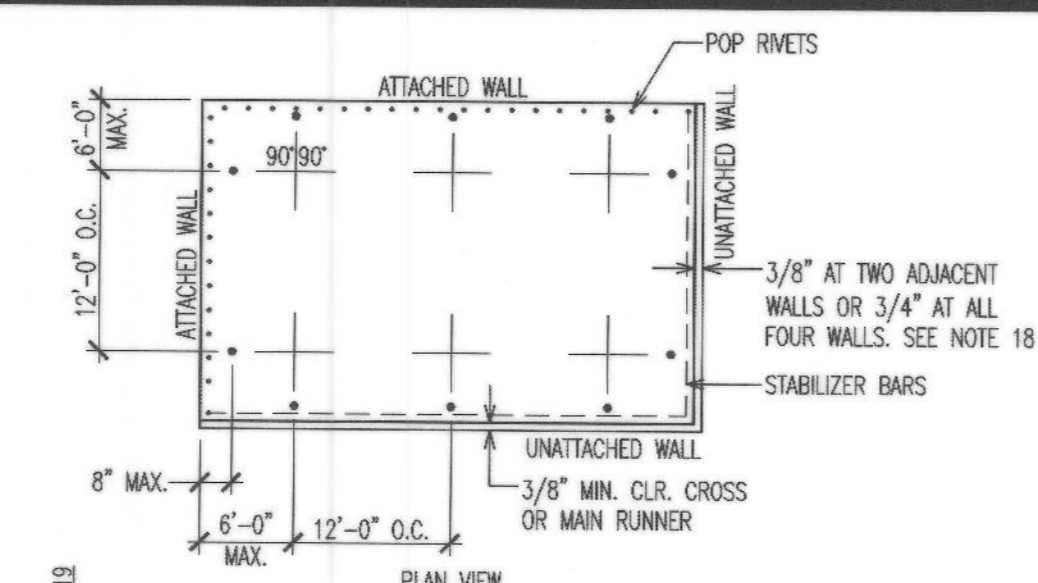


ISOMETRIC VIEW

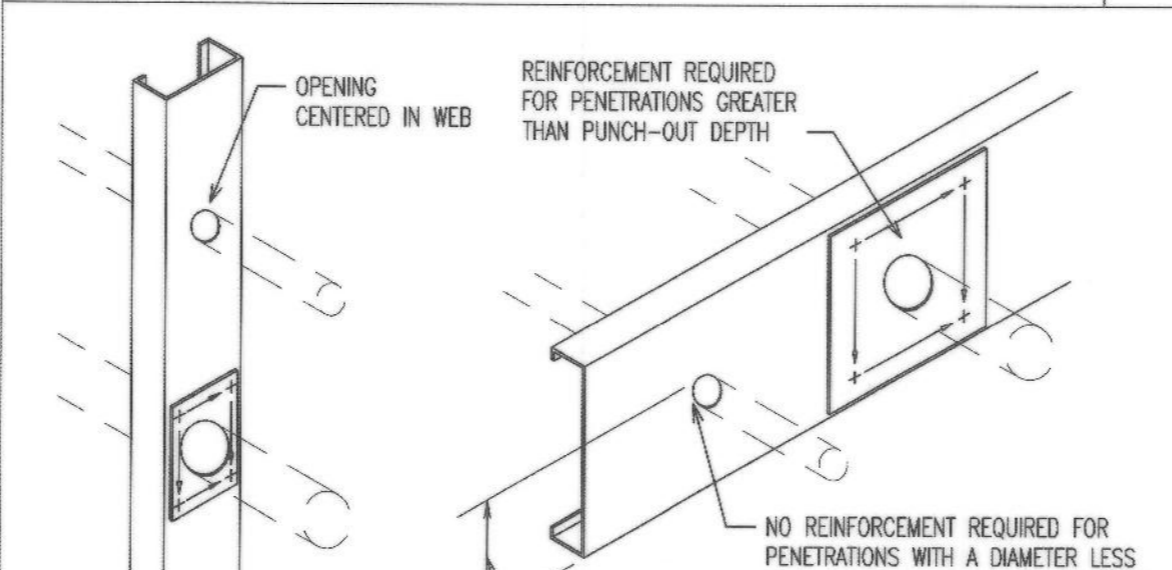


SUSPENDED CEILING NOTES:

- INSTALL SYSTEM IN ACCORDANCE WITH ASTM C635, C636 AND CBC SECTION 1613.1 AND ASCE 7-16.
- CEILING SHALL NOT SUPPORT MATERIAL OR BUILDING COMPONENTS OTHER THAN GRILLES OR LIGHT FIXTURES. DUCTWORK, PLUMBING AND LIKE WORK SHALL HAVE ITS OWN SUPPORT SYSTEM AND SHALL NOT UTILIZE THE CEILING SYSTEM OR SUSPENSION WIRES.
- PROVIDE TRAPAZZE OR OTHER SUPPLEMENTARY SUPPORT MEMBERS AT STRUTS OR BRACES AS REQUIRED AT CEILING BREAKS, SOFFITS OR DISCONTINUOUS AREAS. HANGER WIRES THAT ARE MORE THAN 1' AND 6" OUT OF PLUMB SHALL HAVE COUNTER SLOPING WIRES.
- PROVIDE 12 GAGE HANGER WIRES AT THE END OF MAIN AND CROSS RUNNERS WITHIN 8 INCHES FROM THE SUPPORT OR WITHIN 1/4 OF THE LENGTH OF THE END TEE, WHICHEVER IS LEAST, FOR THE PERIMETER OF THE CEILING AREA.
- CEILING GRID MEMBERS SHALL BE ATTACHED TO NOT MORE THAN 2 ADJACENT WALLS. CEILING GRID MEMBERS SHALL BE AT LEAST 1/2" INCH FREE OF OTHER WALLS.
- AT THE PERIMETER OF THE CEILING AREA WHERE MAIN OR CROSS RUNNERS ARE NOT CONNECTED TO THE ADJACENT WALL, PROVIDE INTERCONNECTION BETWEEN THE RUNNERS AT THE FREE END TO PREVENT LATERAL SPREADING. A METAL STRUT OR A 16-GAGE WIRE WITH A POSITIVE MECHANICAL CONNECTION TO THE RUNNER MAY BE USED. WHERE THE PERPENDICULAR DISTANCE FROM THE WALL TO THE FIRST PARALLEL RUNNER IS 12 INCHES OR LESS, THE INTERLOCK IS NOT REQUIRED.
- SEPARATE ALL CEILING HANGING AND BRACING WIRES AT LEAST 6 INCHES FROM UNBRACED DUCTS, PIPES OR CONDUIT. ATTACH LIGHTWEIGHT ITEMS, SUCH AS SINGLE ELECTRICAL CONDUIT NOT EXCEEDING 3/4 INCHES NOMINAL DIAMETER, TO HANGER WIRES USING APPROVED CONNECTORS.
- ATTACH LIGHT FIXTURES TO THE CEILING GRID RUNNERS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE FIXTURE.
- FLUSH OR RECESSED LIGHT FIXTURES AND AIR TERMINALS OR SERVICES SHALL BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN 4 TAUT 12-GAGE WIRES EACH ATTACHED TO THE FIXTURE AND TO THE STRUCTURE ABOVE.
- THE 4 TAUT 12 GAGE WIRES INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE SHALL BE CAPABLE OF SUPPORTING 4 TIMES THE WEIGHT OF THE UNIT.
- ALL FIXTURES AND AIR TERMINALS OR SERVICES SUPPORTED ON INTERMEDIATE DUTY GRID SYSTEMS SHALL BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN 4 TAUT 12 GAGE WIRES EACH ATTACHED TO THE FIXTURE OR TERMINAL AND TO THE STRUCTURE ABOVE.
- SUPPORT SURFACE MOUNTED LIGHT FIXTURES BY AT LEAST TWO POSITIVE DEVICES WHICH SURROUND THE CEILING RUNNER AND WHICH ARE EACH SUPPORTED FROM THE STRUCTURE ABOVE BY A 12 GAGE WIRE. SPRING CLIPS OR CLAMPS THAT CONNECT ONLY TO THE RUNNER ARE NOT ACCEPTABLE.
- PROVIDE ADDITIONAL SUPPORTS WHEN LIGHT FIXTURES ARE 8 FEET OR LONGER.
- SUPPORT PENDANT MOUNTED LIGHT FIXTURES DIRECTLY FROM THE STRUCTURE ABOVE WITH HANGER WIRES OR CABLES PASSING THROUGH EACH PENDANT HANGER AND CAPABLE OF SUPPORTING 4 TIMES THE WEIGHT OF THE FIXTURE.
- DO NOT ECCENTRICALLY LOAD SYSTEM, OR PRODUCE ROTATION OF RUNNERS.
- INSTALL EDGE ANGLE AT INTERSECTION OF CEILING AND VERTICAL SURFACES, USING LONGEST PRACTICAL LENGTHS. INSTALL IN A SINGLE ALIGNED PLAN WITH THE CEILING GRID. MITER CORNERS. PROVIDE EDGE ANGLES AT JUNCTIONS WITH OTHER INTERRUPTIONS. WHERE ROUND OBSTRUCTIONS OCCUR, PROVIDE PREFORMED CLOSERS TO MATCH EDGE MOLDING.
- FIT ACOUSTIC UNITS IN PLACE, FREE FROM DAMAGED EDGES OR OTHER DEFECTS DETRIMENTAL TO APPEARANCE AND FUNCTION.
- INSTALL ACOUSTIC UNITS LEVEL, IN UNIFORM PLANE, AND FREE FROM TWIST, WARP AND DENTS. REPLACE DAMAGED OR SOILED UNITS.
- PROVIDE FOR COMPLETE ACCESSIBILITY FOR ALL UNITS.
- BRACING WIRES SECURED TO MAIN RUNNERS WITHIN 2" OF THE CROSS RUNNER INTERSECTION AND SPLAYED 90° FROM EACH OTHER AT AN ANGLE NOT EXCEEDING 45° FROM THE PLANE OF THE CEILING.
- FOR ROOMS WITH SPAN IN EITHER DIRECTION LESS THAN 25 FEET, MAIN RUNNERS AND CROSS RUNNERS MAY BE ATTACHED TO THE PERIMETER OF TWO ADJACENT WALLS WITH 3/8" CLEARANCE BETWEEN THE RUNNERS AND THE OTHER TWO WALLS. WHERE SPAN OF THE CEILING SYSTEM BETWEEN PERIMETER WALLS EXCEED 25 FEET IN BOTH DIRECTIONS, A MINIMUM WALL ANGLE SIZE OF AT LEAST 2" HORIZONTAL LEG SHALL BE USED AT PERIMETER WALLS AND INTERIOR FULL HEIGHT PARTITION. THE FIRST TILE SHALL BE 3/4" CLEAR FROM WALL SURFACE.
- WHEN THE DISTANCE BETWEEN THE STRUCTURAL DECK AND THE CEILING EXCEEDS 4 FEET, THE SPACING OF THE VERTICAL HANGERS SHALL NOT EXCEED 2 FEET ON CENTER ALONG THE ENTIRE LENGTH OF THE MEANS OF EGRESS SERVING AN OCCUPANT LOAD OF 30 OR MORE, AND AT LOBBIES ACCESSORY TO GROUP A OCCUPANCIES.
- SPLICE RUNNERS PER MANUFACTURER'S RECOMMENDATIONS.
- CONSTRUCT SUSPENDED CEILING PER ICC REPORT ESR-1308.
- SUSPENDED CEILING TO COMPLY WITH THE FOLLOWING CBC REQUIREMENTS IN CATEGORY D, E AND F INSTALLATIONS:
  - 2" MOLDING (GRID SYSTEMS WITH SPECIALTY OR PROPRIETARY ANGLES AND SUPPORT CLIPS MAY BE ACCEPTABLE AT THE DISCRETION OF THE BUILDING OFFICIAL). ATTACHED GRID ON TWO ADJACENT WALLS WITH POP RIVETS, SCREWS OR OTHER MEANS.
  - 3/4" CLEARANCE AT PERIMETER ON UNATTACHED WALLS AND STABILIZER BARS TO PREVENT THE SPREAD OF MAINS AND BEAMS AND CROSS TEES.
  - HEAVY DUTY GRID
  - EXCEPT WHERE RIGID BRACES ARE USED TO LIMIT LATERAL DEFLECTION, SPRINKLER HEADS AND OTHER PENETRATIONS, PROVIDE A 2" OVERSIZE RING, SLEEVE, OR ADAPTER THROUGH THE CEILING TILE TO ALLOW FOR FREE MOVEMENT OF AT LEAST ONE INCH IN ALL HORIZONTAL DIRECTIONS. ALTERNATIVELY, A SWING JOINT THAT CAN ACCOMMODATE ONE INCH OF CEILING MOVEMENT IN ALL HORIZONTAL DIRECTIONS IS PERMITTED TO BE PROVIDED AT THE TOP OF THE SPRINKLER HEAD EXTENSION.
  - LATERAL FORCE BRACING MAY BE OMITTED FOR SUSPENDED ACOUSTICAL CEILING SYSTEMS WITH A CEILING AREA OF 144 SQUARE FEET OR LESS, WHEN PERIMETER SUPPORT, IN ACCORDANCE WITH ASTM E580 SECTIONS 5.2.2 AND 5.2.3, ARE PROVIDED AND PERIMETER WALLS ARE DESIGNED TO CARRY THE CEILING LATERAL FORCES.

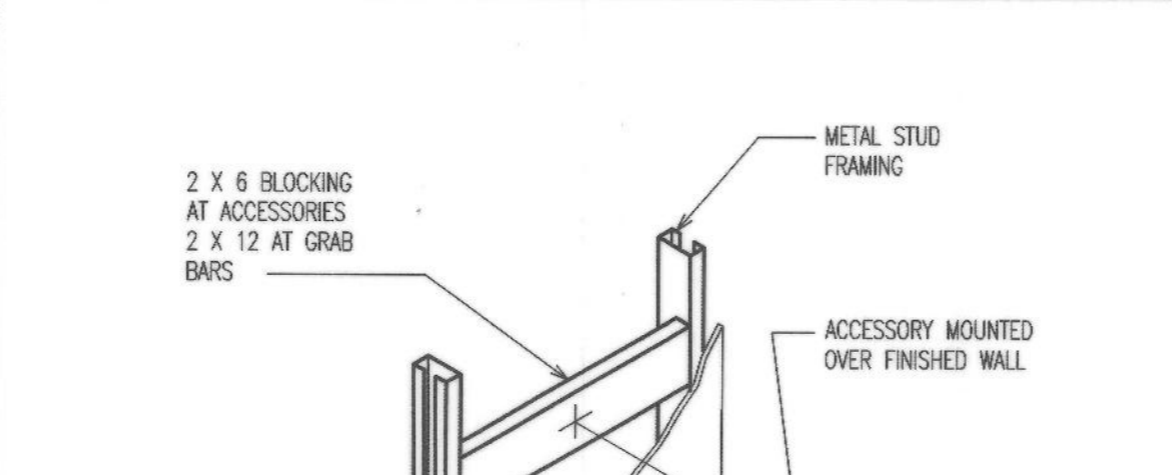


SHEET: A-501 SCALE: 1 1/2" = 1'-0" 7

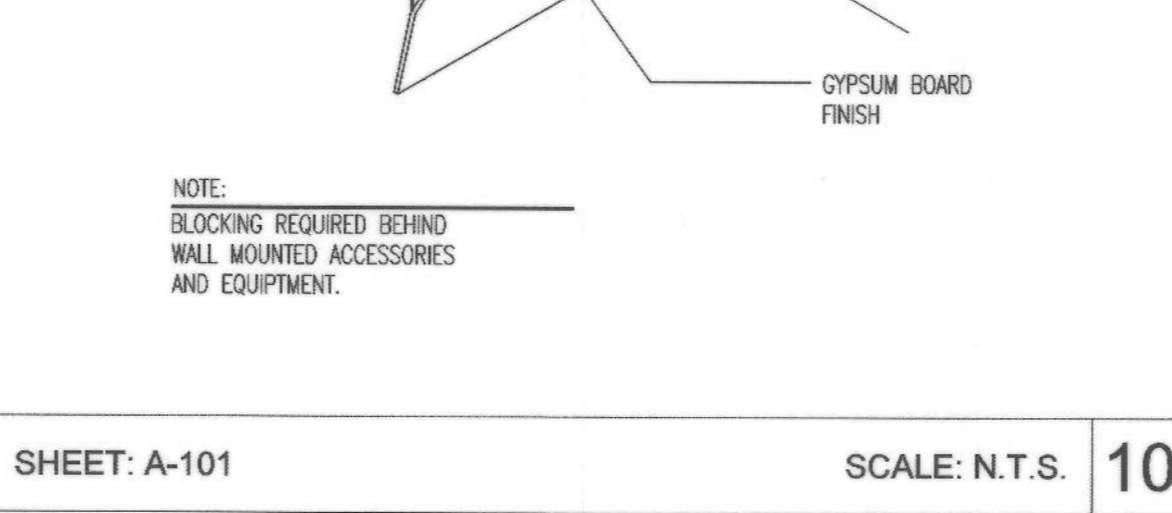


- NOTES:
- FLANGES SHALL NOT BE NOTCHED OR CUT.
  - CAPACITY VERIFICATION BY DESIGN IS REQ'D FOR ANY OPENINGS LOCATED AT CONCENTRATED LOADS AND BEARING ENDS.
  - FOR UNPUNCHED MEMBERS CONSULT THE MANUFACTURER.

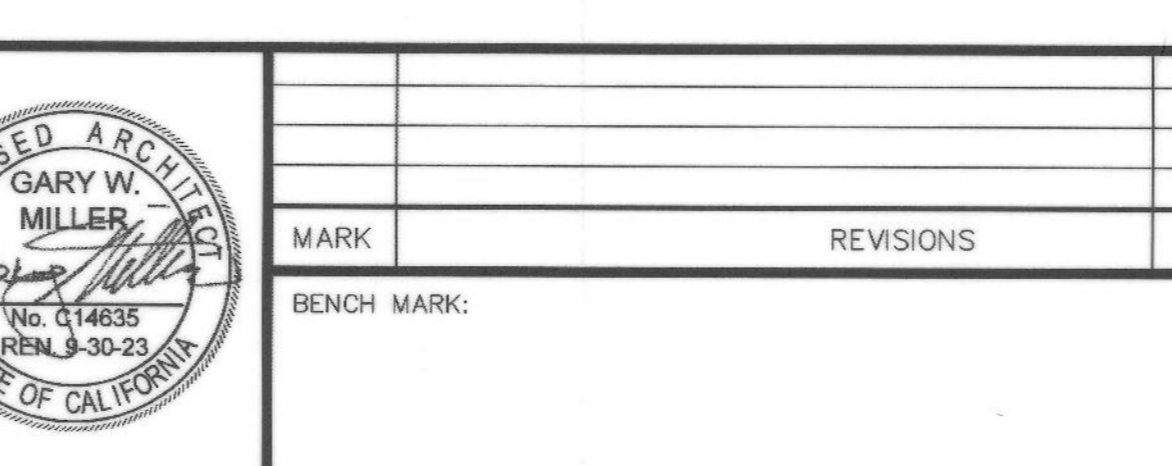
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SHEET: A-101 SCALE: N.T.S. 10

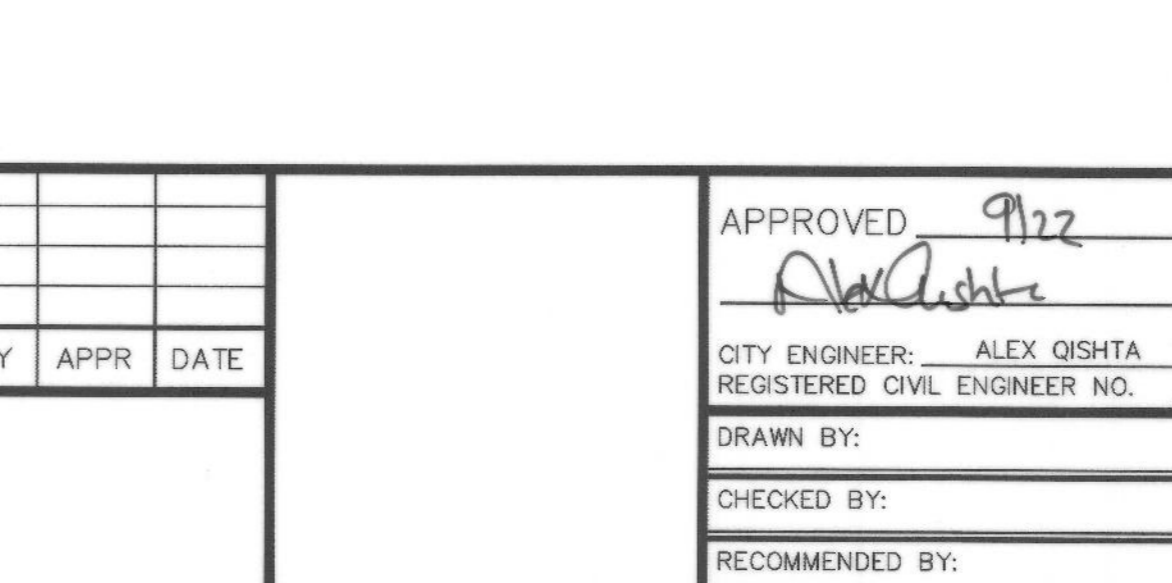
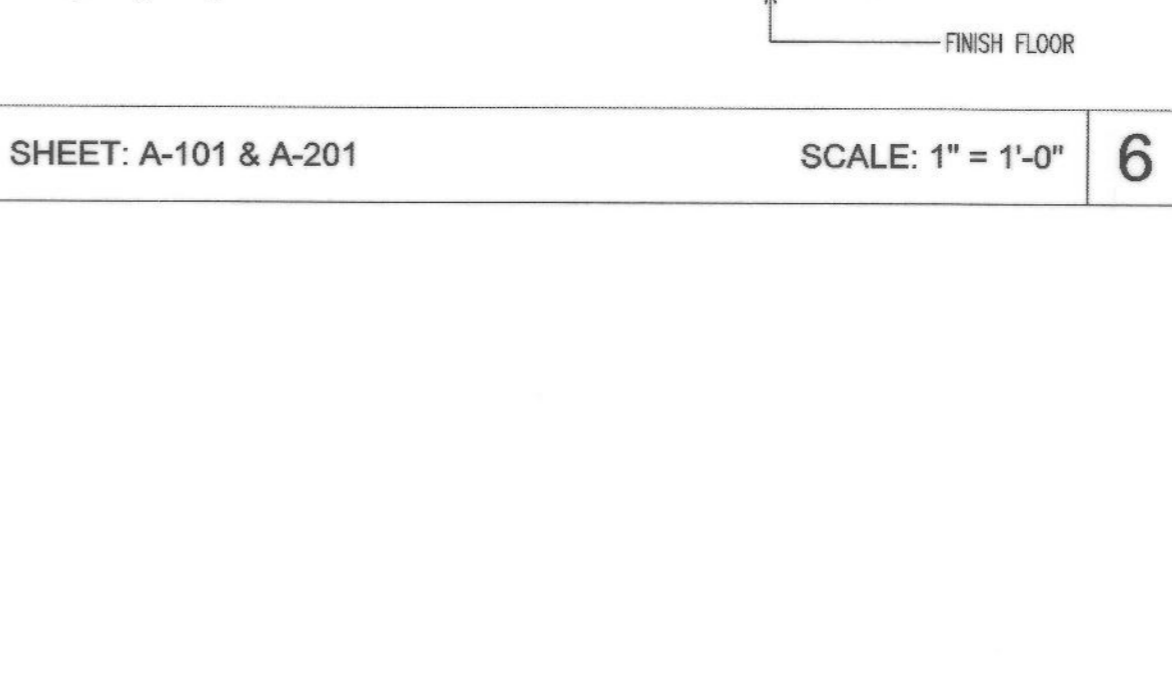
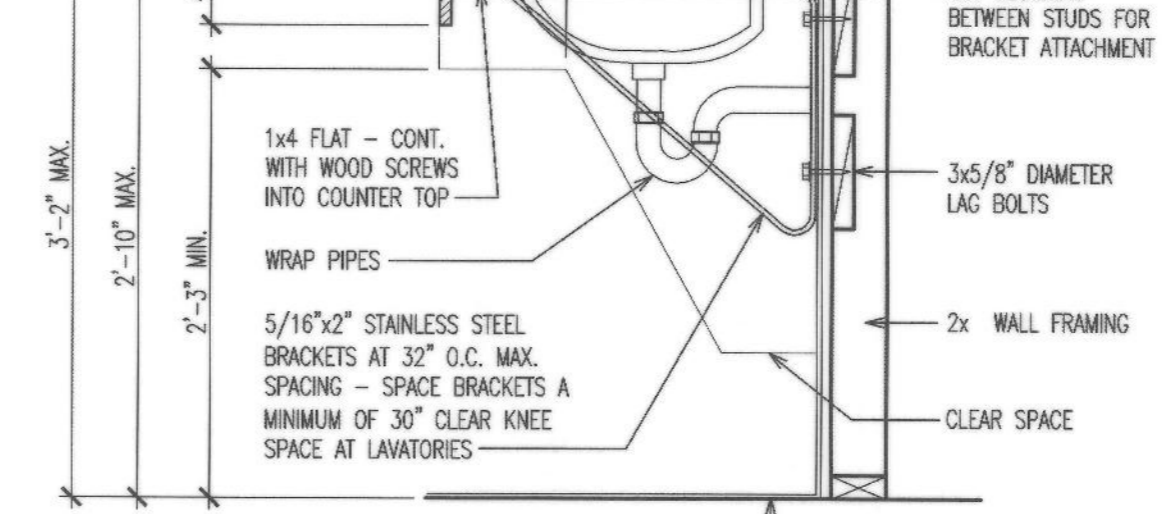
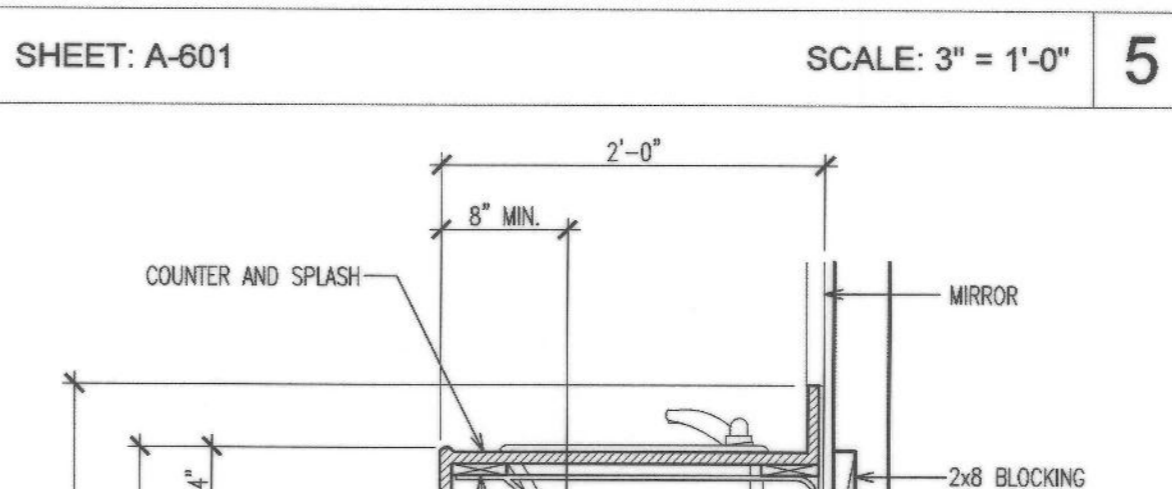
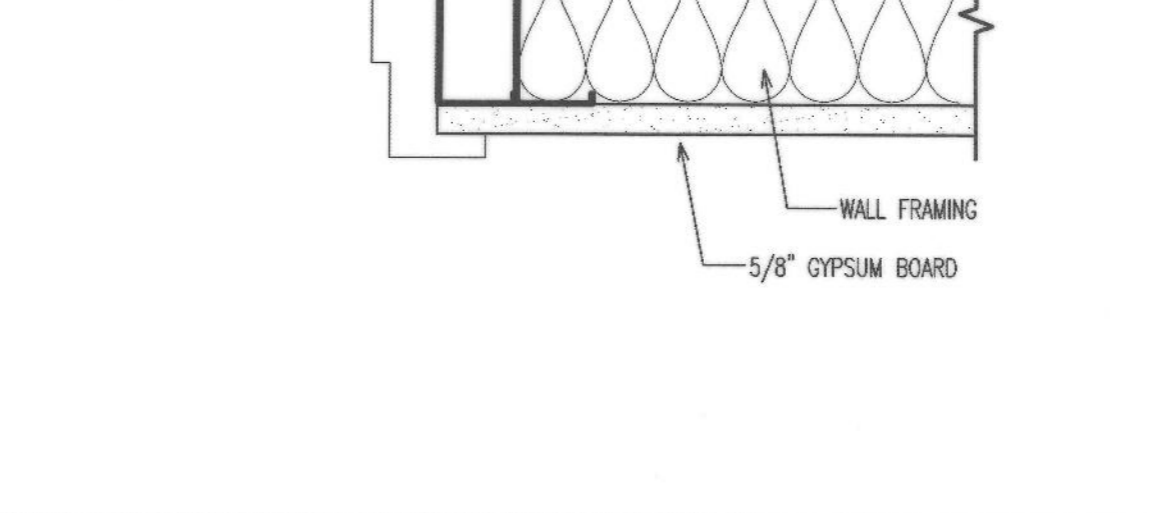
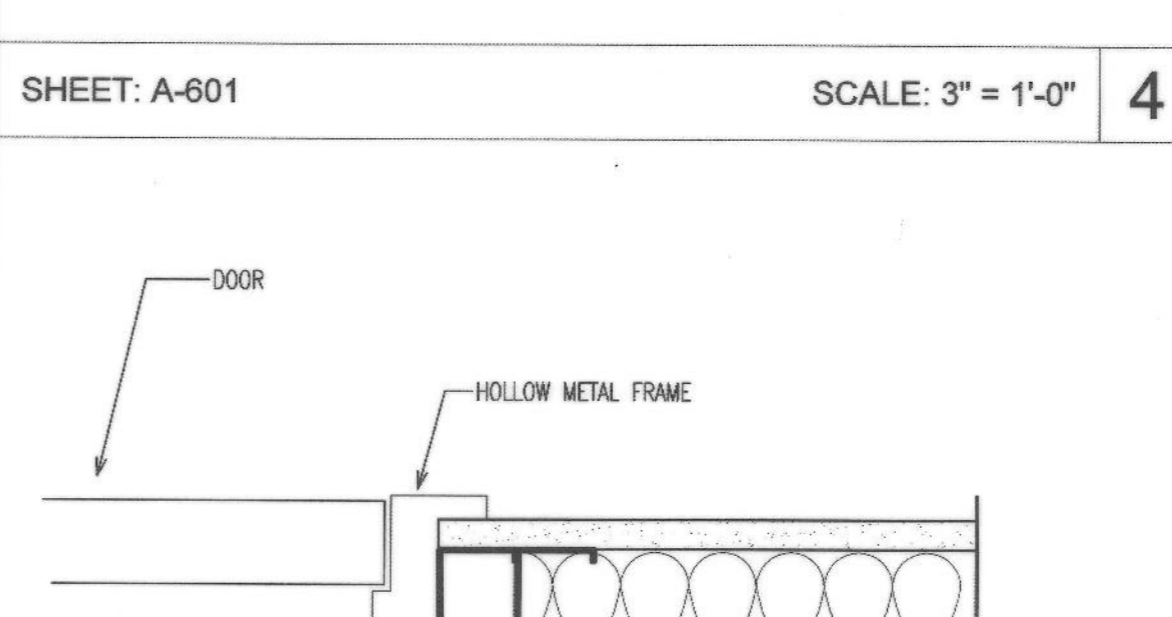
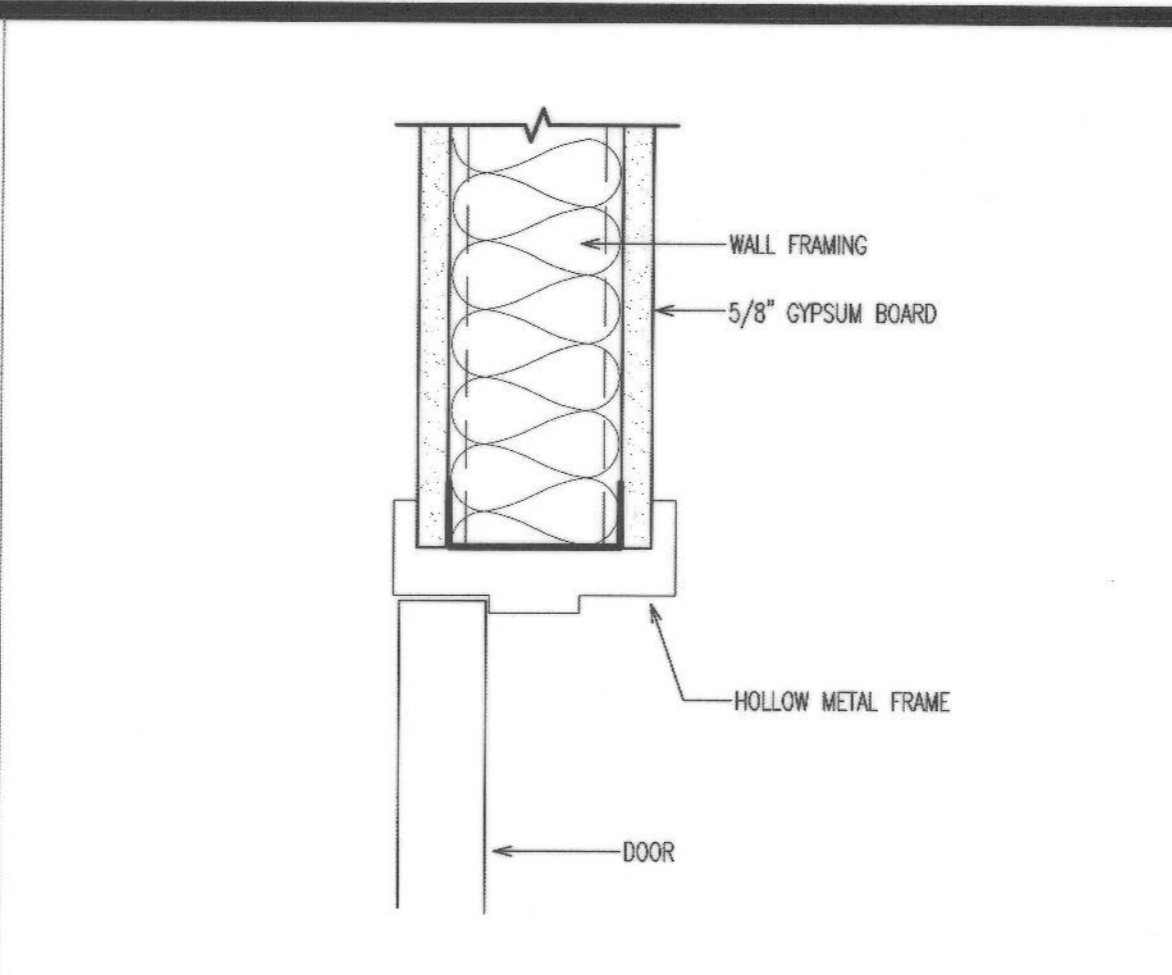


SHEET: A-601 SCALE: 3" = 1'-0" 5



SHEET: A-501 SCALE: 1" = 1'-0" 2

SHEET: A-501 SCALE: 1" = 1'-0" 3



SHEET: A-501 SCALE: 1" = 1'-0" 3

Underground Service Alert

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MILLER architecture interiors planning

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REGISTERED ARCHITECT  
GARY W. MILLER  
No. 014635  
REN. 9-30-21  
STATE OF CALIFORNIA

MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED: [Signature] 2018/2022

CITY ENGINEER: ALEX QISHTA  
REGISTERED CIVIL ENGINEER NO. 66702

DRAWN BY:

CHECKED BY:

RECOMMENDED BY:

CITY OF SAN BERNARDINO  
DEPARTMENT OF PUBLIC WORKS

DETAILS FOR ROWE LIBRARY AND VILLASENOR LIBRARY

A-501

DRAWING NO. 134710

SHEET 13 OF 26 SHEETS

FOR CITY USE ONLY: FILE NO. C.I.P. NO. W.O. NO.

ROWE LIBRARY

FINISH SCHEDULE														
ROOM NUMBER	ROOM	FLOOR MATERIAL		WALLS				WAINSCOT				CEILING MATERIAL	CEILING HEIGHT	REMARKS
		F1	B1	A B		C D		A B		C D				
101	WOMEN'S	F1	B1	W1	W1	W1	W1					C2	8'-0"	R1
102	MEN'S	F1	B1	W1	W1	W1	W1					C2	8'-0"	R1

FLOOR MATERIAL:

F1 12x12 CERAMIC TILE  
F2 EXISTING

BASE MATERIAL:

B1 6" COVED CERAMIC TILE  
B2 EXISTING

WALL MATERIAL:

W1 GYPSUM BOARD - TEXTURED AND PAINTED  
W2 12x24 CERAMIC TILE OVER NEW WATER RESISTANT GYPSUM BOARD  
W3 (E) GYPSUM BOARD - PAINTED

CEILING:

C1 GYPSUM BOARD - TEXTURED AND PAINTED  
C2 (E) GYPSUM BOARD - PAINTED

REMARKS:

R1 SEE INTERIOR ELEVATIONS SHEET A-103 FOR WALL TILE LOCATION

GENERAL NOTES:

- INTERIOR FINISH MATERIALS SHALL COMPLY WITH 2010 CBC CHAPTER 12.
- WATER RESISTANT GYPSUM BOARD COMPLYING WITH 2010 CBC SECTION 2509 TO BE USED IN TOILET ROOMS.
- GYPSUM BOARD TO BE 5/8" TYPE "X" UNLESS NOTED OTHERWISE.

DOOR SCHEDULE															
MARK	ROOM	DOOR				FRAME				FIRE RATING (MINUTS)	REMARKS				
		DOOR TYPE	P=PAIR S=SINGLE	SIZE	DOOR MATERIAL	DOOR FINISH	DETAILS								
							HEAD	JAMB 1	JAMB 2			SILL	FRAME FINISH	FRAME MATERIAL	
A	101	A	-	S	S1	WD	P	4/A-501	5/A-501	5/A-501		P	M		R1,R2,R3,R4
B	102	A	-	S	S1	WD	P	4/A-501	5/A-501	5/A-501		P	M		R1,R2,R3,R4

DOOR:

MATERIAL:  
WD SC WOOD  
AL/GL ALUMINUM/GLASS  
V VINYL  
M METAL  
E EXISTING

FINISH:  
SCF STAIN AND CLEAR FINISH  
P PAINTED  
F FACTORY APPLIED FINISH  
E EXISTING FINISH

SIZE:

S1 3'-0" x 7'-0" x 1 3/4"

REMARKS:

R1 CLOSER  
R2 HANDCAP SIGN  
R3 DOOR GRILLE  
R4 METAL KICK PLATES  
R5 PANIC DEVICE  
R6 SMOKE GASKETS

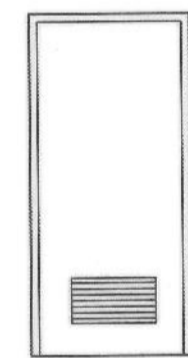
FRAME:

MATERIAL:  
AL ALUMINUM  
HM HOLLOW METAL  
M METAL  
E EXISTING  
PFS TIMELY PRE-FINISHED METAL TO MATCH EXISTING

FINISH:  
P PAINTED  
F FACTORY APPLIED FINISH  
E EXISTING FINISH

GENERAL NOTES:

- EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.
- GLASS AND GLAZING SHALL COMPLY WITH CBC CHAPTER 24.
- MAXIMUM EFFORT TO OPERATE DOORS:  
EXTERIOR - 5.0 LBS  
INTERIOR - 5.0 LBS  
FIRE DOORS - 15.0 LBS
- VERIFY ALL DOOR FRAME THROAT SIZES WITH FINISHED WALL THICKNESS PRIOR TO ORDERING FRAMES.
- FIRE RATED DOORS AND FRAMES SHALL HAVE AN APPROVED LABEL.
- ALL HAND ACTIVATED DOOR OPENING HARDWARE AT LATCHING OR LOCKING DOORS ON THE ACCESSIBLE PATH OF TRAVEL SHALL BE OPERABLE WITH SINGLE EFFORT LEVER TYPE HARDWARE, PANIC BARS, PUSH/PULL ACTIVATING BARS OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE HARDWARE.



DOOR TYPES

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

VILLASENOR LIBRARY

FINISH SCHEDULE														
ROOM NUMBER	ROOM	FLOOR MATERIAL		WALLS				WAINSCOT				CEILING MATERIAL	CEILING HEIGHT	REMARKS
		F1	B1	A B		C D		A B		C D				
201	MEN'S	F1	B1	W1	W1	W1	W1					C2	8'-0"	R1
202	VESTIBULE	F2	B2	W3	W3	W3	W3					C1	8'-0"	
203	WOMEN'S	F1	B1	W1	W1	W1	W1					C2	8'-0"	R1
204	W/H CLOSET	F2	B2	W3	W3	W3	W3					C2	8'-0"	

FLOOR MATERIAL:

F1 12x12 CERAMIC TILE  
F2 EXISTING

BASE MATERIAL:

B1 6" COVED CERAMIC TILE  
B2 EXISTING

WALL MATERIAL:

W1 GYPSUM BOARD - TEXTURED AND PAINTED  
W2 12x24 CERAMIC TILE OVER NEW WATER RESISTANT GYPSUM BOARD  
W3 (E) GYPSUM BOARD - PAINTED

CEILING:

C1 (E) ACOUSTIC CEILING TILE  
C2 (E) GYPSUM BOARD - PAINTED

REMARKS:

R1 SEE INTERIOR ELEVATIONS SHEET A-203 FOR WALL TILE LOCATION

GENERAL NOTES:

- INTERIOR FINISH MATERIALS SHALL COMPLY WITH 2010 CBC CHAPTER 12.
- WATER RESISTANT GYPSUM BOARD COMPLYING WITH 2010 CBC SECTION 2509 TO BE USED IN TOILET ROOMS.
- GYPSUM BOARD TO BE 5/8" TYPE "X" UNLESS NOTED OTHERWISE.

DOOR SCHEDULE															
MARK	ROOM	DOOR				FRAME				FIRE RATING (MINUTS)	REMARKS				
		DOOR TYPE	P=PAIR S=SINGLE	SIZE	DOOR MATERIAL	DOOR FINISH	DETAILS								
							HEAD	JAMB 1	JAMB 2			SILL	FRAME FINISH	FRAME MATERIAL	
A	201	A	-	S	S1	WD	SCF	4/A-501	5/A-501	5/A-501		P	M		R1,R2,R4
B	203	A	-	S	S1	WD	SCF	4/A-501	5/A-501	5/A-501		P	M		R1,R2,R4

DOOR:

MATERIAL:  
WD SC WOOD  
AL/GL ALUMINUM/GLASS  
V VINYL  
M METAL  
E EXISTING

FINISH:  
SCF STAIN AND CLEAR FINISH TO MATCH EXISTING  
P PAINTED  
F FACTORY APPLIED FINISH  
E EXISTING FINISH

SIZE:

S1 3'-0" x 7'-0" x 1 3/4"

REMARKS:

R1 CLOSER  
R2 HANDCAP SIGN  
R3 WEATHERSTRIP  
R4 METAL KICK PLATES  
R5 PANIC DEVICE  
R6 SMOKE GASKETS

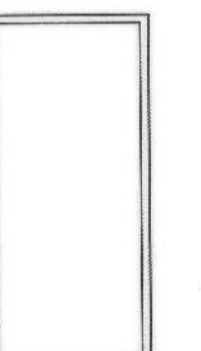
FRAME:

MATERIAL:  
AL ALUMINUM  
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M METAL  
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DOOR TYPES

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

Underground Service Alert

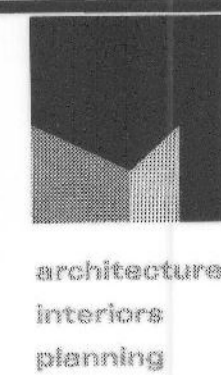


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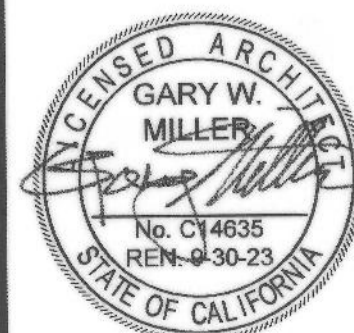
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SAN BERNARDINO, CA 92404

PAUL VILLASENOR BRANCH LIBRARY  
525 N MT VERNON AVE  
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Redlands, CA 92374  
Phone: (909) 335-7400  
Fax: (909) 335-7299  
Info@miller-ajp.com



MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED 9/22/2018  
Alex Qishta 2022

CITY ENGINEER: ALEX QISHTA  
REGISTERED CIVIL ENGINEER NO. 66702

DRAWN BY:

CHECKED BY:

RECOMMENDED BY:

CITY OF SAN BERNARDINO  
DEPARTMENT OF PUBLIC WORKS

DOOR AND FINISH SCHEDULE  
FOR  
ROWE LIBRARY AND  
VILLASENOR LIBRARY

A-601

FOR CITY USE ONLY: FILE NO. C.I.P. NO. W.O. NO.

DRAWING NO. 13476

SHEET 14 OF 26 SHEETS

W.O. NO.

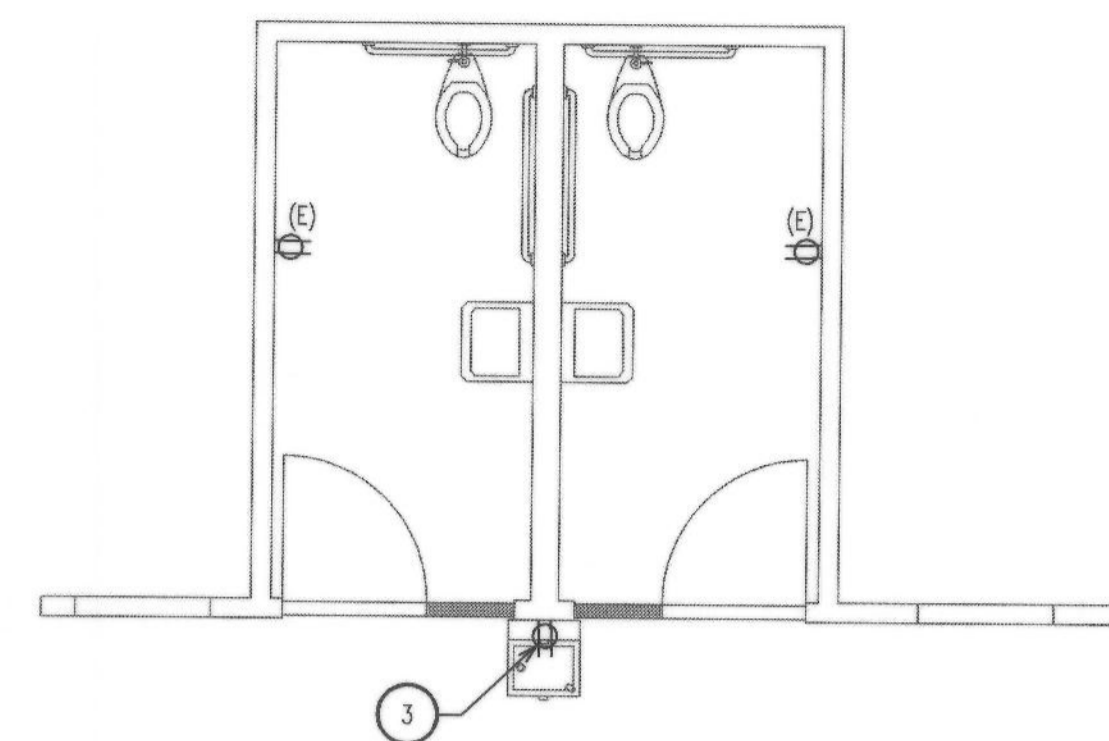


**GENERAL NOTES:**

1. VERIFY EXISTING CONSTRUCTION WITHIN SCOPE OF WORK TO ENSURE CONFORMANCE WITH NOTED RATINGS AND LOCAL CODES. RETROFIT NONCONFORMING CONSTRUCTION AS REQUIRED.
2. RECEPTACLE BOXES MOUNTED AT +48" HEIGHT SHALL BE MOUNTED SO THAT TOP OF RECEPTACLE BOX IS NO MORE THAN +48".

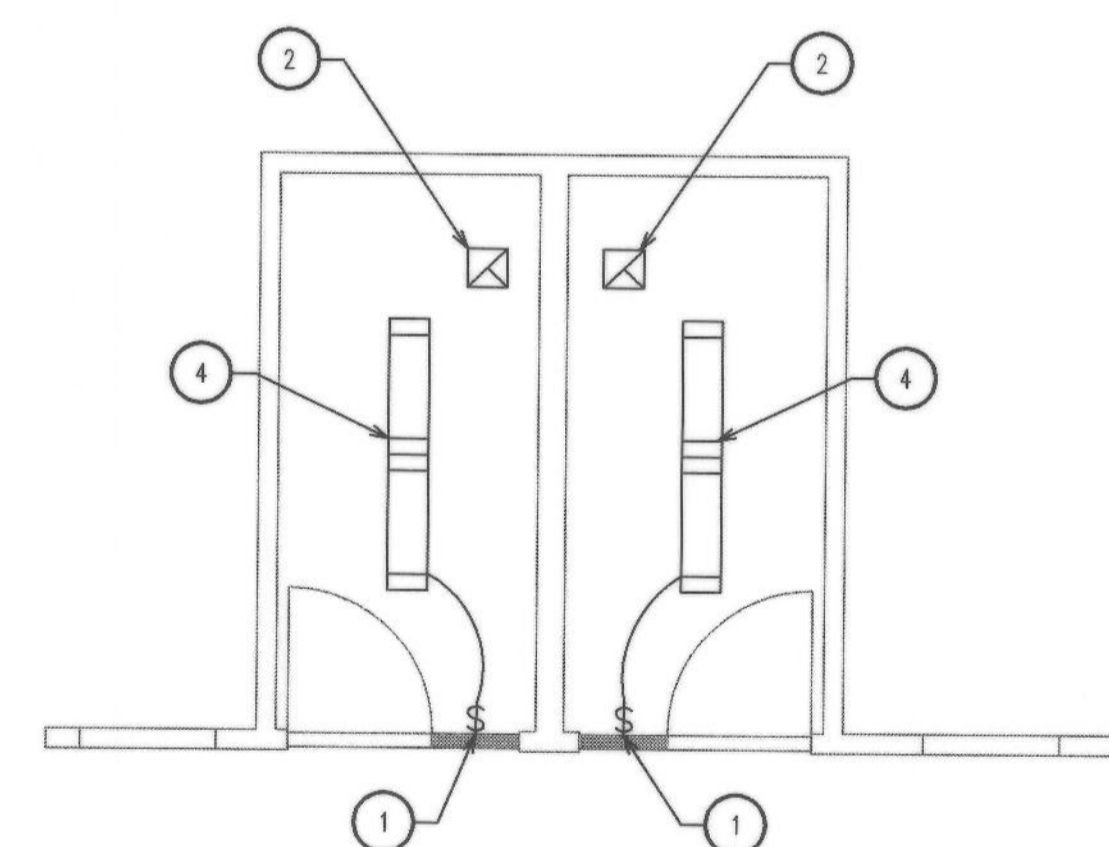
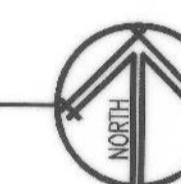
**KEY NOTES:** (X)

1. NEW LIGHT SWITCH PROVIDE NEW MOTION SENSOR LIGHT SWITCH.
2. REPLACED EXHAUST FAN. REFER TO MECHANICAL PLANS FOR SPECS. CONNECT EXHAUST FAN TO LIGHT SWITCH.
3. RELOCATED OUTLET FOR DRINKING FOUNTAIN. LOCATE OUTLET PER DRINKING FOUNTAIN MANUFACTURER SPECIFICATIONS.
4. NEW LIGHT. REFER TO FIXTURE SCHEDULE SHEET E101.



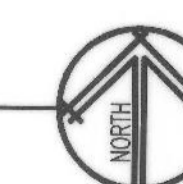
**ELECTRICAL POWER PLAN**

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



**ELECTRICAL LIGHTING PLAN**

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



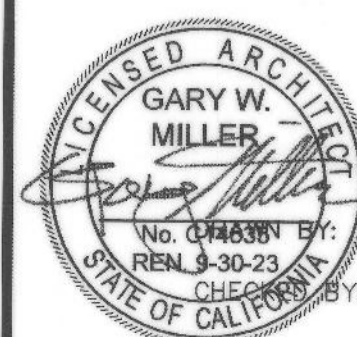
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Redlands, CA 92374  
Phone: (909) 335-7400  
Fax: (909) 335-7299  
Info@miller-aip.com



MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED: *Alex Qishta* 9/22/2018  
2022

CITY ENGINEER: ALEX QISHTA  
REGISTERED CIVIL ENGINEER NO. 66702

DRAWN BY: LS/VM  
CHECKED BY: VM  
RECOMMENDED BY:

**CITY OF SAN BERNARDINO**  
DEPARTMENT OF PUBLIC WORKS

**ELECTRICAL POWER & LIGHTING PLAN**  
FOR  
**ROWE LIBRARY**

E-102

DRAWING NO. 13476  
SHEET 16 OF 26 SHEETS  
W.O. NO.

FOR CITY USE ONLY: FILE NO. C.I.P. NO.





**F. INDOOR LIGHTING FIXTURE SCHEDULE**  
 \*FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per §140.6(a)(4) is adjusted to be 75% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.  
 \*Authority Having Jurisdiction may ask for luminaire cut sheets to confirm wattage used for compliance per §130.0(c). Wattage used must be the maximum rated for the luminaire, not the lamp.

**G. MODULAR LIGHTING SYSTEMS**  
 This section does not apply to this project.

**H. INDOOR LIGHTING CONTROLS (Not including PAFs)**  
 This table includes lighting controls for conditioned and unconditioned spaces. When a control having a \* is shown, the notes section of this table provides more detail on how compliance is achieved. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.

Building Level Controls		Area Level Controls	
01	02	03	04
Mandatory Demand Response §110.12(c)	Shut-off controls §130.1(c)	Field Inspector	
Not Required <= 10,000 SF	Whole Building Auto Time Switch	Pass	Fail
		<input type="checkbox"/>	<input type="checkbox"/>
05	06	07	08
Area Description	Complete Building or Area Category Primary Function Area	Area Controls §130.1(b)	Multi-Level Controls §130.1(b)
Restroom Zone	Restrooms	Manual ON/OFF	Exempt*
			Occupancy Sensor
			N/A
			N/A
			No
			Field Inspector
			Pass
			Fail
			<input type="checkbox"/>
			<input type="checkbox"/>

\*NOTES: Controls with a \* require a note in the space below explaining how compliance is achieved.  
 EX: Conformance 1: Primary/Skylight Daylighting: Exempt because less than 120 watts of general lighting; EXCEPTION 1 to §130.1(d)  
 Restroom Zone Exception 2 to section 130.1(b)  
 Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance  
 Registration Date/Time: Report Version: 2019.1.003  
 Registration Provider: Energysoft Schema Version: rev 20200601

**C. COMPLIANCE RESULTS**  
 If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per §140.6(b)1	Allowed Lighting Power per §140.6(b) (Watts)				Total Allowed (Watts)	Adjusted Lighting Power per §140.6(a) (Watts)			Compliance Results
	01	02	03	04		06	07	08	
	Complete Building Category §140.6(c)1	Area Category §140.6(c)2	Area Category §140.6(c)2S (+)	Tailored §140.6(c)3 (+)	=	Total Designed (Watts)	Adjustments PAF Lighting Control Credits §140.6(a)2 (-)	Total Adjusted (Watts) *Includes Adjustments	05 must be >= 08 §140.6
	(See Table I)	(See Table I)	(See Table J)	(See Table K)	=	(See Table F)	(See Table P)		
Conditioned		99.4	0		=	99	≥	68	0
Unconditioned					=		≥		68
Controls Compliance (See Table H for Details)									COMPLIES
Rated Power Reduction Compliance (See Table Q for Details)									COMPLIES

**D. EXCEPTIONAL CONDITIONS**  
 This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

**E. ADDITIONAL REMARKS**  
 This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

**F. INDOOR LIGHTING FIXTURE SCHEDULE**  
 This table includes all permanent designed lighting and all portable lighting in offices.

Designed Wattage: Conditioned Spaces

01	02	03	04	05	06	07	08	09	10
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change	Watts per luminaire	How is Wattage determined	Total Number of Luminaires	Excluded per §140.6(a)3	Design Watts	Field Inspector
A	LED 17w	No	No	17	Mfr. Spec	4	No	68	Pass
									Fail
									<input type="checkbox"/>
Total Designed Watts: CONDITIONED SPACES									68

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance  
 Registration Date/Time: Report Version: 2019.1.003  
 Registration Provider: Energysoft Schema Version: rev 20200601

**A. GENERAL INFORMATION**

01	02	03	04	05	06
Project Location (city)	San Bernardino	Total Conditioned Floor Area (ft²)	153	Total Unconditioned Floor Area (ft²)	0
Climate Zone	10	Occupancy Types Within Project (select all that apply):		# of Stories (Habitable Above Grade)	1
Support Areas					

**B. PROJECT SCOPE**  
 This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6 or §141.0(b)2 for alterations.

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
	01	02	03	04
My Project Consists of (check all that apply):	Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
<input type="checkbox"/> New Lighting System				
<input type="checkbox"/> New Lighting System - Parking Garage				
<input checked="" type="checkbox"/> Altered Lighting System	Area Category Method	153	Area Category Method	0
Total Area of Work (ft²)	153		0	

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance  
 Registration Date/Time: Report Version: 2019.1.003  
 Registration Provider: Energysoft Schema Version: rev 20200601

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**  
 I certify that this Certificate of Compliance documentation is accurate and complete.  
 Documentation Author Name: Ryan Miranda  
 Company: A.D.E. Consulting  
 Address: 1177 Idaho St. Suite 200A  
 City/State/Zip: Redlands California 92374  
 Phone: (909) 884-9484  
 Signature: Ryan Miranda  
 Date Signed: 2022-02-15  
 CEA/HERS Certification Identification (if applicable):  
 Responsible Designer Name: Steve Murray  
 Company: SPM Architect & Associates  
 Address: 1177 Idaho Street, Suite 200A  
 City/State/Zip: Redlands California 92374  
 Phone: (909) 307-0146

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**  
 I certify the following under penalty of perjury under the laws of the State of California:  
 1. The information provided on this Certificate of Compliance is true and correct.  
 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).  
 3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.  
 4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.  
 5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the building owner provides to the building owner at occupancy.  
 Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance  
 Registration Date/Time: Report Version: 2019.1.003  
 Registration Provider: Energysoft Schema Version: rev 20200601

**Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS**  
 This section does not apply to this project.  
**R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS**  
 This section does not apply to this project.  
**S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)**  
 This section does not apply to this project.

**T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**  
 Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E.  
 Additional Remarks: These documents must be provided to the building inspector during construction and can be found online at [https://www.energy.ca.gov/title24/2019standards/2019\\_compliance\\_documents/Nonresidential\\_Documents/NRCL/](https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCL/)  
 Form/Title: NRCC-LTI-01-E - Must be submitted for all buildings  
 Field Inspector: Pass  Fail

**U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**  
 There are no NRCA forms required for this project.  
 Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance  
 Registration Date/Time: Report Version: 2019.1.003  
 Registration Provider: Energysoft Schema Version: rev 20200601

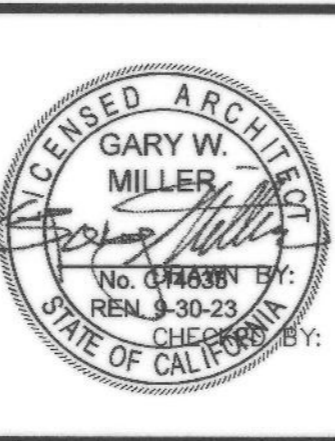
**I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS**  
 Each area complying using the Complete Building or Area Category Methods per §140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per §140.6(c) or adjustments per §140.6(a) are being used.  
 Conditioned Spaces

01	02	03	04	05	06
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Additional Allowance / Adjustment Area Category PAF
Restroom Zone	Restrooms	0.65	153	99.4	No
TOTALS:			153	99.4	See Tables J, or P for detail

**J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM**  
 This section does not apply to this project.  
**K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE**  
 This section does not apply to this project.  
**L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY**  
 This section does not apply to this project.  
**M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING**  
 This section does not apply to this project.  
**N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS**  
 This section does not apply to this project.  
**O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE**  
 This section does not apply to this project.  
**P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))**  
 This section does not apply to this project.  
 Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance  
 Registration Date/Time: Report Version: 2019.1.003  
 Registration Provider: Energysoft Schema Version: rev 20200601



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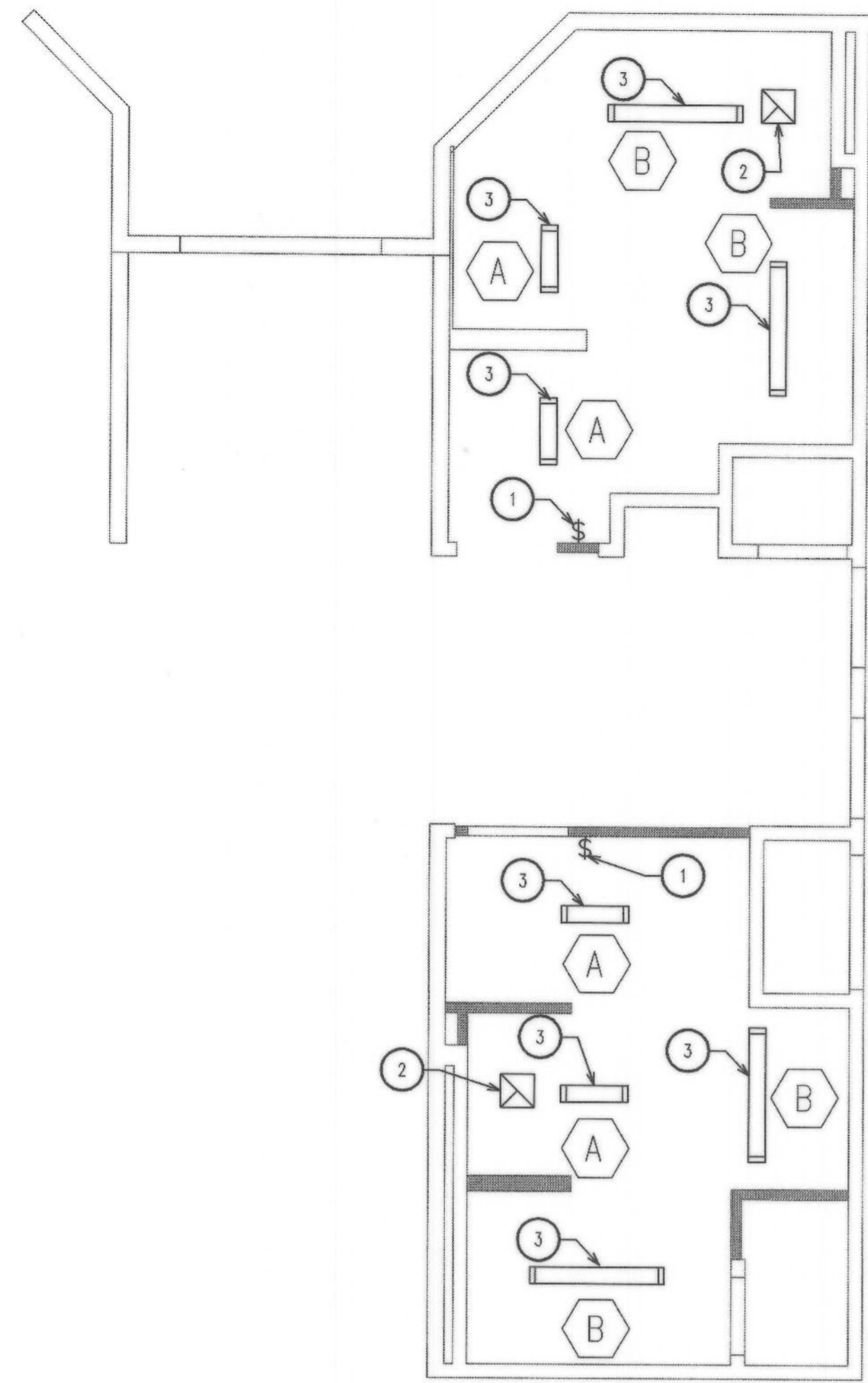
MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED: 9/22 2018-2022  
 CITY ENGINEER: ALEX QISHTA  
 REGISTERED CIVIL ENGINEER NO. 66702  
 DRAWN BY: LS/VM  
 CHECKED BY: VM  
 RECOMMENDED BY:

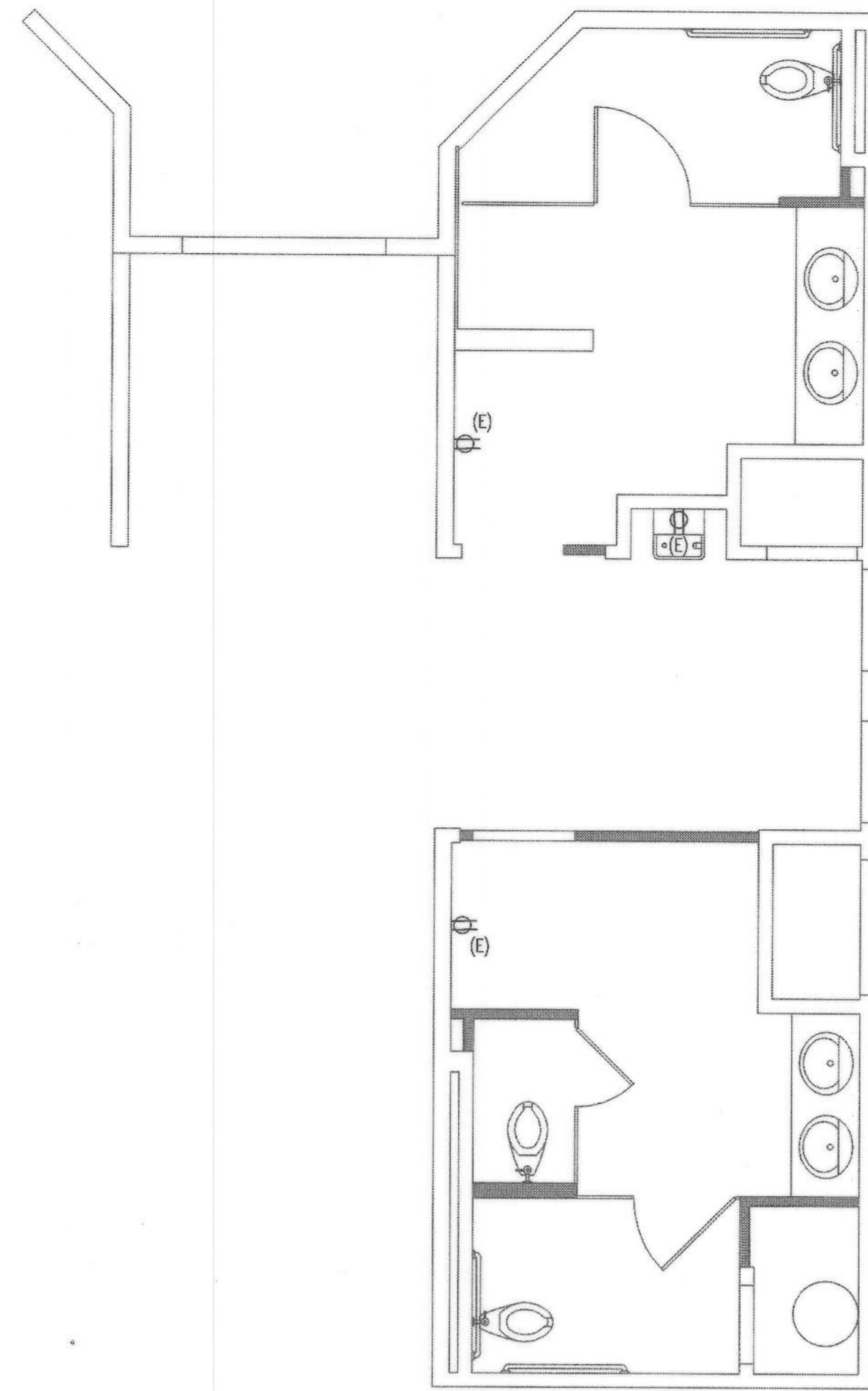
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 DEPARTMENT OF PUBLIC WORKS  
**ENERGY COMPLIANCE FORMS**  
 FOR ROWE LIBRARY  
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 DRAWING NO. 13A76  
 SHEET 17 OF 26 SHEETS  
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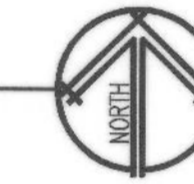
ELECTRICAL LIGHTING PLAN

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



ELECTRICAL POWER PLAN

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



GENERAL NOTES:

1. VERIFY EXISTING CONSTRUCTION WITHIN SCOPE OF WORK TO ENSURE CONFORMANCE WITH NOTED RATINGS AND LOCAL CODES. RETROFIT NONCONFORMING CONSTRUCTION AS REQUIRED.
2. RECEPTACLE BOXES MOUNTED AT +48" HEIGHT SHALL BE MOUNTED SO THAT TOP OF RECEPTACLE BOX IS NO MORE THAN +48".

KEY NOTES: (X)

1. NEW LIGHT SWITCH PROVIDE NEW MOTION SENSOR LIGHT SWITCH.
2. REPLACED EXHAUST FAN. REFER TO MECHANICAL PLANS FOR SPECS. CONNECT EXHAUST FAN TO LIGHT SWITCH.
3. NEW LIGHT. REFER TO FIXTURE SCHEDULE SHEET E201.

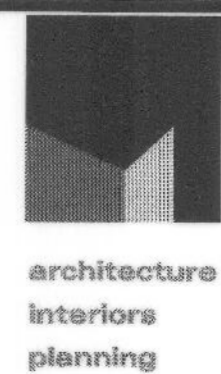
Underground Service Alert



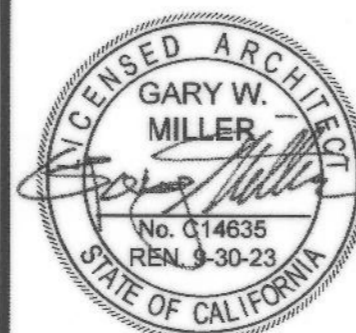
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MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED: *Alex Qishta* 9/22/2022  
CITY ENGINEER: ALEX QISHTA  
REGISTERED CIVIL ENGINEER NO. 66702  
DRAWN BY: LS/VM  
CHECKED BY: VM  
RECOMMENDED BY:

**CITY OF SAN BERNARDINO**  
DEPARTMENT OF PUBLIC WORKS  
**ELECTRICAL POWER & LIGHTING PLAN**  
FOR  
**VILLASENOR LIBRARY**

E-202

DRAWING NO.  
13476

SHEET 19 OF  
26 SHEETS

FOR CITY USE ONLY: FILE NO. C.I.P. NO. W.O. NO.

STATE OF CALIFORNIA  
Indoor Lighting  
NRCCLTI-E CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE  
Project Name: Villaseñor Branch Library TI Report Page: (Page 3 of 6)  
Project Address: 525 N. Mt. Vernon Ave. Date Prepared: 2/15/2022

**F. INDOOR LIGHTING FIXTURE SCHEDULE**

B	LED 25w	No	No	25	Mfr. Spec	4	No	100		
Total Designed Watts: CONDITIONED SPACES 168										

<sup>1</sup>FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per §140.6(a)(1) is adjusted to be 75% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.

<sup>2</sup>Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c). Wattage used must be the maximum rated for the luminaire, not the lamp.

**G. MODULAR LIGHTING SYSTEMS**  
This section does not apply to this project.

**H. INDOOR LIGHTING CONTROLS (Not including PAFs)**  
This table includes lighting controls for conditioned and unconditioned spaces. When a control having a \* is shown, the notes section of this table provides more detail on how compliance is achieved. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.

**Building Level Controls**

01	02	03
Mandatory Demand Response §110.12(c)	Shut-off controls §130.1(c)	Field Inspector
Not Required <= 10,000 SF	Whole Building Auto Time Switch	Pass Fail

**Area Level Controls**

04	05	06	07	08	09	10	11	12
Area Description	Complete Building or Area Category Primary Function Area	Area Controls §130.1(a)	Multi-Level Controls §130.1(b)	Shut-Off Controls §130.1(c)	Primary/Sky Light Daylighting §130.1(d)	Secondary Daylighting §140.6(d)	Interlocked Systems §140.6(a)(1)	Field Inspector
Restroom Zone	Restrooms	Manual ON/OFF	Exempt*	Occupancy Sensor	N/A	N/A	No	Pass Fail

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance  
Registration Date/Time: Report Version: 2019.1.003 Schema Version: rev 20200601  
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STATE OF CALIFORNIA  
Indoor Lighting  
NRCCLTI-E CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE  
Project Name: Villaseñor Branch Library TI Report Page: (Page 2 of 6)  
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**C. COMPLIANCE RESULTS**  
If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per §140.6(b)(1)	Allowed Lighting Power per §140.6(b) (Watts)					Adjusted Lighting Power per §140.6(a) (Watts)			Compliance Results	
	01	02	03	04	05	06	07	08		
Complete Building §140.6(c)(1)	Area Category §140.6(c)(2)	Area Category Additional §140.6(c)(2G) (+)	Tailored §140.6(c)(3) (+)	Total Allowed (Watts)	Total Designed (Watts)	Adjustments PAF Lighting §140.6(a)(2) (-)	Total Adjusted (Watts) *Includes Adjustments	09		
(See Table I)	(See Table I)	(See Table J)	(See Table K)	=	≥	=	=	05 must be >= 08 §140.6		
Conditioned	249.6	0	=	250	≥	168	0	=	168	COMPLIES
Unconditioned					≥					COMPLIES

Controls Compliance (See Table H for Details) COMPLIES  
Rated Power Reduction Compliance (See Table Q for Details) COMPLIES

**D. EXCEPTIONAL CONDITIONS**  
This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

**E. ADDITIONAL REMARKS**  
This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

**F. INDOOR LIGHTING FIXTURE SCHEDULE**  
This table includes all permanent designed lighting and all portable lighting in offices.

Designed Wattage: Conditioned Spaces

01	02	03	04	05	06	07	08	09	10
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change <sup>1</sup>	Watts per luminaire <sup>2</sup>	How is Wattage determined	Total Number of Luminaires	Excluded per §140.6(a)(3)	Design Watts	Field Inspector
A	LED 17w	No	No	17	Mfr. Spec	4	No	68	Pass Fail

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STATE OF CALIFORNIA  
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CERTIFICATE OF COMPLIANCE  
Project Name: Villaseñor Branch Library TI Report Page: (Page 1 of 6)  
Project Address: 525 N. Mt. Vernon Ave. Date Prepared: 2/15/2022

**A. GENERAL INFORMATION**

01	02	03	04	05	06
Project Location (city)	San Bernardino	Total Conditioned Floor Area (ft <sup>2</sup> )	384	Climate Zone	10
Occupancy Types Within Project (select all that apply):		Total Unconditioned Floor Area (ft <sup>2</sup> )	0	# of Stories (Habitable Above Grade)	1

Support Areas

**B. PROJECT SCOPE**  
This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6 or §141.0(b)(2) for alterations.

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
	01	02	03	04
My Project Consists of (check all that apply):	Calculation Method	Area (ft <sup>2</sup> )	Calculation Method	Area (ft <sup>2</sup> )
<input type="checkbox"/> New Lighting System				
<input type="checkbox"/> New Lighting System - Parking Garage				
<input checked="" type="checkbox"/> Altered Lighting System	Area Category Method	384	Area Category Method	0
Total Area of Work (ft <sup>2</sup> )		384		0

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Project Name: Villaseñor Branch Library TI Report Page: (Page 6 of 6)  
Project Address: 525 N. Mt. Vernon Ave. Date Prepared: 2/15/2022

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**  
I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan Miranda  
Signature Date: 2022-02-15  
Company: A.D.E. Consulting  
Address: 1177 Idaho St, Suite 200A  
City/State/Zip: Redlands California 92374  
Phone: (909) 884-9484

**RESPONSIBLE DESIGNER'S DECLARATION STATEMENT**  
I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation that is provided to the building owner at occupancy.

Responsible Designer Name: Steve Murray  
Date Signed: 2022-02-15  
Company: SPM Architect & Associates  
Address: 1177 Idaho Street, Suite 200A  
City/State/Zip: Redlands California 92374  
Phone: (909) 307-0146

Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance  
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**N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS**  
This section does not apply to this project.

**O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE**  
This section does not apply to this project.

**P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))**  
This section does not apply to this project.

**Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS**  
This section does not apply to this project.

**R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS**  
This section does not apply to this project.

**S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)**  
This section does not apply to this project.

**T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**  
Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at [https://www.energy.ca.gov/title24/2019standards/2019\\_compliance\\_documents/Nonresidential\\_Documents/NRC/](https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRC/)

Form/Title: NRCLTI-01-E - Must be submitted for all buildings

Field Inspector: Pass Fail

**U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**  
There are no NRCA forms required for this project.

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**H. INDOOR LIGHTING CONTROLS (Not including PAFs)**

\*NOTES: Controls with a \* require a note in the space below explaining how compliance is achieved.  
EX: Conference 1: Primary/Skylight Daylighting; Exempt because less than 120 watts of general lighting; EXCEPTION 1 to §130.1(d)(2)

Restroom Zone	Exception 2 to Section 130.1(b)	13
		Plan Sheet Showing Daylit Zones:

**I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS**  
Each area complying using the Complete Building or Area Category Methods per §140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per §140.6(c) or adjustments per §140.6(a) are being used.

Conditioned Spaces

01	02	03	04	05	06
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft <sup>2</sup> )	Area (ft <sup>2</sup> )	Allowed Wattage (Watts)	Additional Allowance / Adjustment
Restroom Zone	Restrooms	0.65	384	249.6	No No
TOTALS:			384	249.6	See Tables J, or P for detail

**J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM**  
This section does not apply to this project.

**K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE**  
This section does not apply to this project.

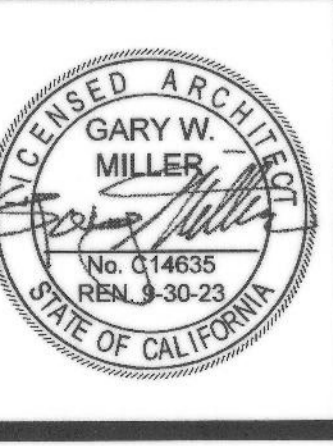
**L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY**  
This section does not apply to this project.

**M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING**  
This section does not apply to this project.

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PAUL VILLASEÑOR BRANCH LIBRARY  
525 N MT VERNON AVE  
SAN BERNARDINO, CA 92411



MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED: Alex Qishita 2018 2022  
CITY ENGINEER: ALEX QISHITA REGISTERED CIVIL ENGINEER NO. 66702  
DRAWN BY: LS/VM  
CHECKED BY: VM  
RECOMMENDED BY:

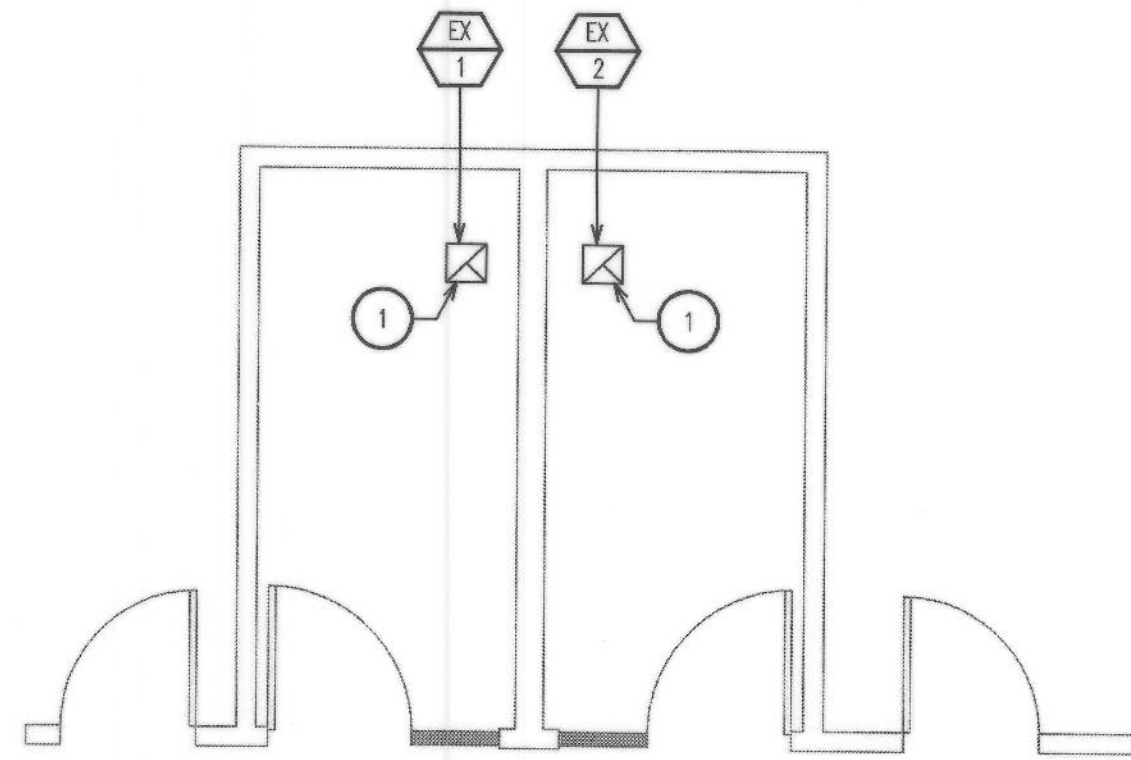
CITY OF SAN BERNARDINO  
DEPARTMENT OF PUBLIC WORKS  
ENERGY COMPLIANCE FORMS FOR VILLASEÑOR LIBRARY  
E-203

DRAWING NO. 13476  
SHEET 20 OF 26 SHEETS  
W.O. NO.

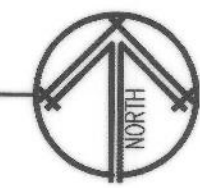
**GENERAL MECHANICAL NOTES**

- PENETRATIONS IN WALLS REQUIRING PROTECTED OPENINGS MUST BE FIRESTOPPED WITH AN APPROVED 3M FIRE BARRIER SEALANT ICC AND UL APPROVED PER 713.3.
  - COPPER OR FERROUS PIPES OR CONDUITS MAY PENETRATE THE WALLS OR PARTITIONS, PROVIDED THEY ARE FIRESTOPPED.
  - OPENINGS FOR STEEL ELECTRICAL OUTLET BOXES NOT EXCEEDING 16 SQUARE INCHES ARE PERMITTED, PROVIDED OPENINGS DO NOT EXCEED AN AGGREGATE AREA OF MORE THAN 100 SQUARE INCHES FOR ANY 100 SQUARE FEET OF WALL OR PARTITIONS. OUTLET BOXES ON OPPOSITE SIDES OF WALLS OR PARTITIONS MUST BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.
  - WHERE WALLS ARE PENETRATED BY OTHER MATERIALS OR WHERE LARGER OPENINGS ARE REQUIRED THAN PERMITTED IN (B) ABOVE, THEY MUST BE QUALIFIED BY TESTS CONDUCTED IN ACCORDANCE WITH SECTION 703.
- CONSTRUCTION OR WORK FOR WHICH A PERMIT IS REQUIRED SHALL BE SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL AND SUCH CONSTRUCTION OR WORK SHALL REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES UNTIL APPROVED. INSPECTIONS CAN BE REQUESTED BY CALLING THE INSPECTION LINE.
- HEATING, VENTILATION AND AIR-CONDITIONING SYSTEMS OF ALL STRUCTURES SHALL BE DESIGNED AND INSTALLED FOR EFFICIENT UTILIZATION OF ENERGY IN ACCORDANCE WITH THE CALIFORNIA ENERGY CODE.
- APPLIANCES, APPURTENANCES AND EQUIPMENT REQUIRED BY THE CMC SHALL BE LISTED AND LABELED FOR THE APPLICATION IN WHICH THEY ARE INSTALLED AND USED (CMC SECTIONS 301.2, 302.1, AND 303.1)
- LABELING SHALL BE IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN CMC 307.0.
- THE VENTILATION AIR DISTRIBUTION SYSTEM SHALL BE PROVIDED WITH MEANS TO ADJUST THE SYSTEM TO ACHIEVE AT LEAST THE MINIMUM VENTILATION AIRFLOW RATE AS REQUIRED BY THE CMC SECTION 403. VENTILATION SYSTEMS SHALL BE BALANCED BY AN APPROVED METHOD. SUCH BALANCING SHALL VERIFY THAT THE VENTILATION SYSTEM IS CAPABLE OF SUPPLYING AND EXHAUSTING THE AIRFLOW RATES REQUIRED BY CMC SECTIONS 403.2. SUCH AIR BALANCE REPORTS SHALL BE PROVIDED TO THE INSPECTOR AT TIME OF INSPECTION. AIR BALANCE REPORTS MAY BE REQUESTED BY THE INSPECTOR DURING ANNUAL INSPECTIONS TO ENSURE ONGOING COMPLIANCE WITH CITY REQUIREMENTS, AND WHEN ISSUES OR CONCERNS REGARDING ODORS ARE BROUGHT TO THE ATTENTION OF THE CITY.
- ALL MECHANICAL EQUIPMENT AND SYSTEMS INSTALLED AS PART OF PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2016 CMC AND THE 2016 CBC, 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE AND 2016 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS.
- PROVIDE 120 VOLT ELECTRICAL OUTLETS WITHIN 25' OF ALL ROOF MOUNTED AND OUTDOOR MECHANICAL EQUIPMENT. (CMC 309) ALL MECH EQUIP. (CMC 309)
- ALL DUCTWORK FOR HEATING AND COOLING SYSTEM OR EVAPORATE COOLING SYSTEM SHALL BE CONDUCTED THROUGH DUCT SYSTEMS CONSTRUCTED OF METAL AS SET FORTH IN SMACNA HVAC DUCT CONSTRUCTION STANDARD - METAL AND FLEXIBLE. FACTORY MADE AIR DUCTS SHALL BE APPROVED FOR THE USE INTENDED OR SHALL COMPLY WITH THE 2016 CMC REFERENCED STANDARDS CHAPTER 17 (CMC 602.1).
- ALL DUCT SMOKE DETECTORS INSTALLED, AS PART OF THIS PROJECT SHALL BE SUPERVISED BY THE BUILDING FIRE DETECTION OR ALARM SYSTEM WHEN THE BUILDING IS EQUIPPED WITH SUCH SYSTEM. LOS ANGELES FIRE DEPARTMENT PREVENTION BUREAU PLAN CHECK APPROVAL AND PERMIT ARE REQUIRED FOR CONNECTION OF DUCT SMOKE DETECTORS TO THE FIRE DETECTION OR ALARM SYSTEM.
- THE REQUIRED SERVICE DISTANCE FROM THE MECHANICAL EQUIPMENT TO SCREENING, PARAPETS, WALLS AND OTHER EQUIPMENT SHALL BE A MINIMUM OF 30"x30" ON THE SERVICE SIDE OF THE EQUIPMENT, OR AS REQUIRED BY THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, IF THE INSTRUCTIONS REQUIRE A GREATER CLEARANCE. (CMC SECTION 304.1)
- EQUIPMENT AND APPLIANCES SHALL BE ACCESSIBLE FOR SERVICE, INSPECTION REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION. SUFFICIENT CLEARANCE SHALL BE MAINTAINED TO PERMIT CLEANING, REPLACEMENT OF FILTERS, BLOWERS, MOTOR CONTROLS AND LUBRICATION OF MOVING PARTS. 30" OF CLEARANCE IN DEPTH, WIDTH, AND HEIGHT SHALL BE PROVIDED TO SERVE THE APPLIANCE OR EQUIPMENT. (CMC 304.1)
- OUTSIDE AIR FOR HEATING OR COOLING SYSTEM SHALL NOT BE TAKEN FROM CLOSER THAN 10'-0" FROM AN APPLIANCE VENT OUTLET, VENT OPENING OF A PLUMBING SYSTEM, OR THE DISCHARGE OUTLET OF EXHAUST FAN, UNLESS THE OUTLET IS 3'-0" ABOVE THE OUTSIDE AIR INLET. (CMC 314.3)
- REFRIGERANT CONTAINING PORTIONS OF A SYSTEM THAT ARE FIELD ERECTED SHALL BE TESTED AND PROVED TIGHT TO THE AUTHORITY HAVING JURISDICTION AFTER COMPLETE INSTALLATION AND BEFORE OPERATION. THE HIGH LOW SIDES OF EACH SYSTEM SHALL BE TESTED AND PROVED TIGHT AT NOT LESS THAN THE LOWER OF THE PRESSURE IN CMC TABLE 1124.2 OR THE SETTING THE PRESSURE RELIEF DEVICE. (CMC 1124.2)

- ONE OF THE FOLLOWING METHODS IS REQUIRED TO COMPLY WITH MECH-3 VENTILATION REQUIREMENTS
  - AIR BALANCING: ALL SPACE CONDITIONING AND VENTILATION SYSTEMS SHALL BE BALANCED TO THE QUANTITIES SPECIFIED IN THESE PLANS, IN ACCORDANCE WITH THE NATIONAL ENVIRONMENTAL BALANCING BUREAU, (NEBB), PROCEDURAL STANDARDS (1983), OR ASSOCIATED AIR BALANCE COUNCIL, (AABC, NATIONAL STANDARDS (1986)
  - OUTSIDE AIR CERTIFICATION: THE SYSTEM SHALL PROVIDE THE MINIMUM OUTSIDE AIR AS SHOWN ON THE MECHANICAL DRAWINGS, AND SHALL BE MEASURED AND CERTIFIED BY THE INSTALLING LICENSED C-20 MECHANICAL CONTRACTOR. (AIR BALANCING SHALL COMPLY TO CGSSC 5.410.1)
- ALL INSTALLED REFRIGERATION PIPING SHALL BE PHOSPHORIC ACID DEOXIDIZED SEAMLESS COPPER. PRESSURE-LIMITING DEVICES SHALL BE CONNECTED BETWEEN THE PRESSURE-IMPOSING ELEMENT AND THE STOP VALVE ON THE DISCHARGE SIDE PER 2016 CMC SECTION 1111.3.
- ALL FIRE AND SMOKE DAMPERS ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S LISTING AND INSTALLATION INSTRUCTIONS. FIRE DAMPERS SHALL BE DYNAMIC TYPE. (CBC 716.3.1, 716.2)
- WHEN THE AUTOMATIC ACTIVATION OF A SMOKE DAMPER OCCURS, THE HVAC SYSTEMS SERVING SUCH DAMPERS SHALL IMMEDIATELY SHUTDOWN. (CMC 606.8)
- FIRE AND SMOKE DAMPER SHALL BE LISTED AND BEAR THE LABEL OF AN APPROVED TESTING AGENCY.
- FIRE DAMPERS SHALL COMPLY WITH THE REQUIREMENTS OF UL 555. ONLY FIRE DAMPERS LABELED FOR USE IN DYNAMIC SYSTEMS SHALL BE INSTALLED IN HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS DESIGNED TO OPERATE WITH FANS ON DURING A FIRE. SMOKE DAMPERS SHALL COMPLY WITH THE REQUIREMENTS OF UL 555S. COMBINATION FIRE AND SMOKE DAMPERS SHALL COMPLY WITH BOTH UL 555 AND UL 555S. CEILING RADIATION DAMPERS SHALL COMPLY WITH REQUIREMENTS OF UL 555C. (CBC 716.3.1)
- FIRE DAMPERS SHALL HAVE A MINIMUM DAMPER RATING OF 1.5 HOURS WHEN INSTALLED IN LESS THAN 3-HOUR FIRE-RESISTANCE RATED ASSEMBLIES. RATINGS FOR DAMPERS INSTALLED IN WALLS RATED AT 3 HOURS OR MORE SHALL HAVE MINIMUM FIRE RATING OF 3 HOURS. (CBC 716.3.2)
- FIRE AND SMOKE DAMPERS SHALL BE PROVIDED WITH APPROVED MEANS OF ACCESS, WHICH IS LARGE ENOUGH TO PERMIT INSPECTION AND MAINTENANCE OF THE DAMPER AND ITS OPERATING PARTS. THE ACCESS OPENING SHALL NOT REDUCE THE FIRE RESISTANCE RATING OF THE ASSEMBLY. FIRE AND SMOKE DAMPER ACCESS POINTS SHALL BE PERMANENTLY IDENTIFIED ON THE EXTERIOR HAVING LETTERS NOT LESS THAN 3/4 INCH HIGH READING "FIRE DAMPER" OR "FIRE/SMOKE DAMPER" (CBC 716.4)
- WHERE A SMOKE DAMPER IS INSTALLED WITHIN A DUCT, A SMOKE DETECTOR SHALL BE INSTALLED IN THE DUCT WITHIN 5 FEET OF THE DAMPER WITH NO AIR INLETS OR OUTLETS BETWEEN THE DETECTOR AND THE DAMPER. THE DETECTOR SHALL BE LISTED FOR THE AIR VELOCITY, TEMPERATURE AND HUMIDITY ANTICIPATED AT THE POINT WHERE IT IS INSTALLED. OTHER THAN IN MECHANICAL SMOKE CONTROL SYSTEMS, DAMPERS SHALL BE CLOSED UPON FAN SHUTDOWN WHERE THE LOCAL SMOKE DETECTOR REQUIRES A MINIMUM VELOCITY TO OPERATE.
- FUEL GAS APPLIANCES AND EQUIPMENT. THE APPROVAL AND INSTALLATION OF FUEL GAS DISTRIBUTION PIPING AND EQUIPMENT, FUEL GAS-FIRED APPLIANCES AND FUEL GAS-FIRED APPLIANCE VENTING SYSTEMS SHALL BE IN ACCORDANCE WITH THE CPC AND CMC.
- LISTED AND LABEL APPLIANCES AND EQUIPMENT REGULATED BY THE CMC SHALL BE LISTED LABELED FOR THE APPLICATION IN WHICH THEY ARE INSTALLED AND USED (CMC SECTIONS 301.2, 302.1, AND 303.1).
- LABELING. LABELING SHALL BE IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN CMC 307.0.
- LABEL INFORMATION. A PERMANENT FACTORY-APPLIED NAMEPLATE SHALL BE AFFIXED TO APPLIANCES ON WHICH SHALL APPEAR IN LEGIBLE LETTERING, THE MANUFACTURER'S NAME OR TRADEMARK, THE MODEL NUMBER, SERIAL NUMBER AND THE SEAL OR MARK OF THE APPROVED AGENCY. A LABEL SHALL ALSO INCLUDE THE FOLLOWING: (CMC SECTION 307)
  - FUEL-BURNING UNITS: HOURLY RATING IN BTU/H (W); TYPE OF FUEL APPROVED FOR USE WITH THE APPLIANCE; AND REQUIRED CLEARANCES.
- FUEL TYPES. FUEL-FIRED APPLIANCES SHALL BE DESIGNED FOR USE WITH THE TYPE OF FUEL TO WHICH THEY WILL BE CONNECTED AND THE ALTITUDE AT WHICH THEY ARE INSTALLED. APPLIANCES THAT COMPRISE PARTS OF THE BUILDING MECHANICAL SYSTEM SHALL NOT BE CONVERTED FOR THE USAGE OF A DIFFERENT FUEL, EXCEPT WHERE APPROVED AND CONVERTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. THE FUEL INPUT RATE SHALL NOT BE INCREASED OR DECREASED BEYOND THE LIMIT RATING FOR THE ALTITUDE AT WHICH THE APPLIANCE IS INSTALLED.



**MECHANICAL PLAN**  
SCALE: 1/4" = 1'-0"



I.D.	MFG./MDL	MECHANICAL			ELECTRICAL			REMARKS
		VOLUME	STATIC PRESS.	MOTOR	VOLT	PHASE		
EX 1	COOK GEMINI MODEL 144	124 CFM	.25	98W	120	1	RDA-6 ADAPTER, CUT & PATCH AS REQUIRED.	
EX 2	COOK GEMINI MODEL 144	124 CFM	.25	98W	120	1	RDA-6 ADAPTER, CUT & PATCH AS REQUIRED.	

**KEY NOTES:** (X)

- REMOVE EXISTING EXHAUST FAN & REPLACE W/ NEW PER SCHEDULE. THIS SHEET. RECONNECT EXISTING DUCT WORK TO EXHAUST FAN, VERIFY EXISTING DUCT SIZE MIN. 6".

**MECHANICAL LEGEND**

SYMBOL	DESCRIPTION	ABBREV.
	SUPPLY DUCT	S.
	RETURN AIR DUCT	R.
	EXHAUST AIR DUCT	E.
	CEILING DIFFUSER 1-2-3 OR 4 WAY THROW	C.D.
	CEILING REGISTER	C.R.
	ACCESS PANEL	A.P.
	FIRE DAMPER	F.D.
	THERMOSTAT	
	SENSOR	
	SMOKE DETECTOR	
	CO2 SENSOR	
	GENERAL CONTRACTOR	G.C.
	POINT OF CONNECTION TO EXISTING	POC
	CUBIC FEET PER MINUTE	CFM

**GENERAL BUILDING REQUIREMENTS**

- ALL CONSTRUCTION AND REMODELING WORK MUST BE PERFORMED BY CA LICENSED CLASS A OR CLASS B CONTRACTORS. ALL BUILDING TRADES WORK MUST BE PERFORMED BY A STATE OF CALIFORNIA LICENSED CONTRACTOR(S).
- BUILDING CODES AND STANDARDS ARE AS FOLLOWS:  
2019 CALIFORNIA MECHANICAL CODE (CMC)

Underground Service Alert  
Call: TOLL FREE  
1-800-422-4133  
TWO WORKING DAYS BEFORE YOU DIG

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SAN BERNARDINO, CA 92404

**MILLER**  
interiors planning  
1177 Idaho Street, Suite 200  
Redlands, CA 92374  
Phone: (909) 335-7400  
Fax: (909) 335-7299  
info@miller-arp.com

LICENSED ARCHITECT  
GARY W. MILLER  
No. 043339 BY:  
REN. 3-30-23  
CHECKED BY:  
STATE OF CALIFORNIA

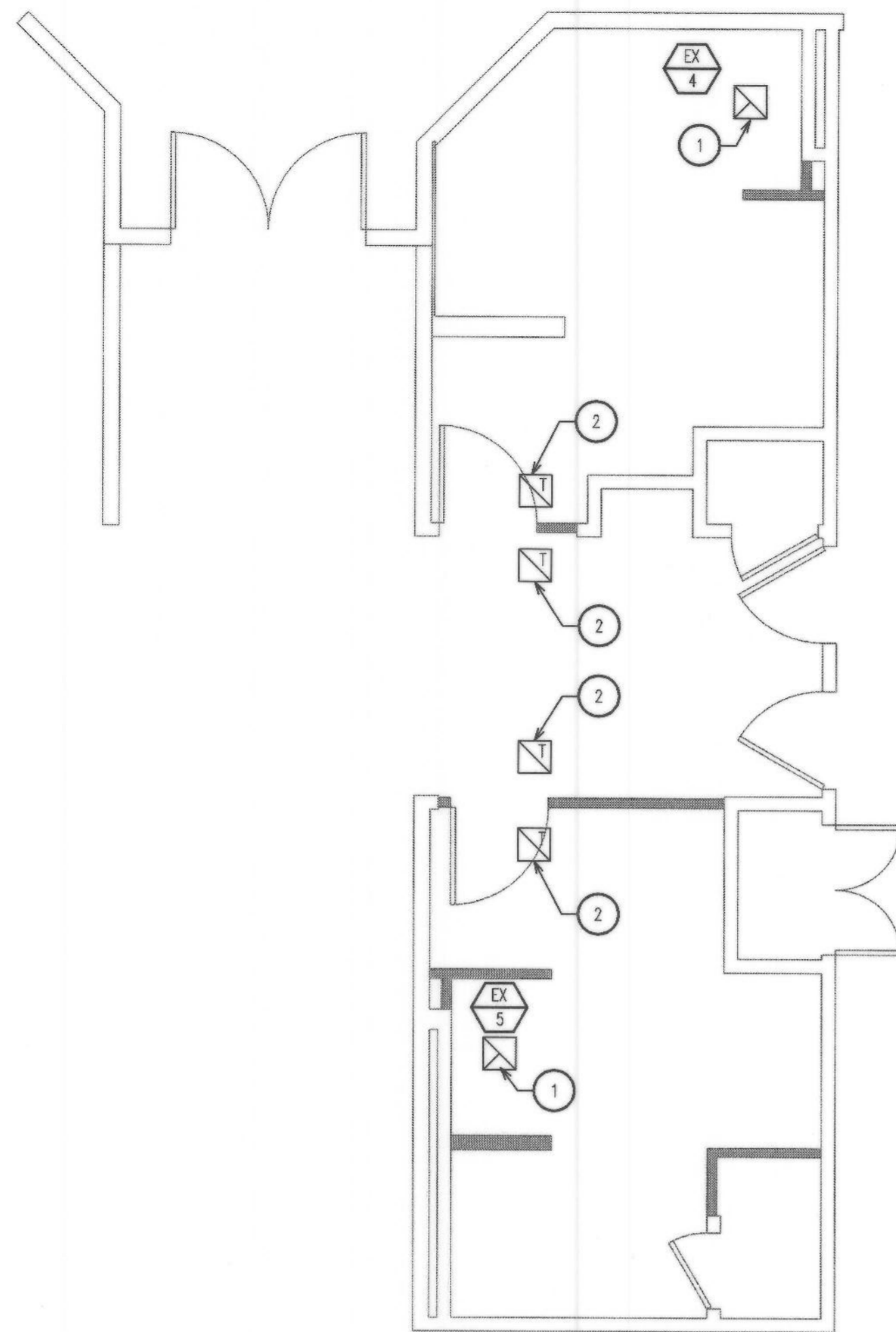
MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED 9/22/2022  
2018  
2022  
CITY ENGINEER: ALEX QISHTA  
REGISTERED CIVIL ENGINEER NO. 66702  
DRAWN BY: LS/vm  
CHECKED BY: VM  
RECOMMENDED BY:

**CITY OF SAN BERNARDINO**  
DEPARTMENT OF PUBLIC WORKS  
**MECHANICAL PLAN**  
FOR  
**ROWE LIBRARY**

DRAWING NO. 13476  
SHEET 27 OF 26 SHEETS  
FOR CITY USE ONLY: FILE NO. C.I.P. NO. W.O. NO.



**MECHANICAL PLAN**  
SCALE: 1/4" = 1'-0"

I.D.	MECHANICAL				ELECTRICAL			REMARKS
	MFG./MDL	VOLUME	STATIC PRESS.	MOTOR	VOLT	PHASE		
EX 4	COOK GEMINI 520	318 CFM	.315	170W	120	1	RDA-6 ADAPTER, 6"ø, 5.1 SONES	
EX 5	COOK GEMINI 520	318 CFM	.315	170W	120	1	RDA-6 ADAPTER, 6"ø, 5.1 SONES	

**GENERAL MECHANICAL NOTES**

- PENETRATIONS IN WALLS REQUIRING PROTECTED OPENINGS MUST BE FIRESTOPPED WITH AN APPROVED 3M FIRE BARRIER SEALANT ICC AND UL APPROVED PER 713.3.  
A. COPPER OR FERROUS PIPES OR CONDUITS MAY PENETRATE THE WALLS OR PARTITIONS, PROVIDED THEY ARE FIRESTOPPED.  
B. OPENINGS FOR STEEL ELECTRICAL OUTLET BOXES NOT EXCEEDING 16 SQUARE INCHES ARE PERMITTED, PROVIDED OPENINGS DO NOT EXCEED AN AGGREGATE AREA OF MORE THAN 100 SQUARE INCHES FOR ANY 100 SQUARE FEET OF WALL OR PARTITIONS. OUTLET BOXES ON OPPOSITE SIDES OF WALLS OR PARTITIONS MUST BE SEPARATED BY A HORIZONTAL DISTANCE OF 24 INCHES.  
C. WHERE WALLS ARE PENETRATED BY OTHER MATERIALS OR WHERE LARGER OPENINGS ARE REQUIRED THAN PERMITTED IN (B) ABOVE, THEY MUST BE QUALIFIED BY TESTS CONDUCTED IN ACCORDANCE WITH SECTION 703.
- CONSTRUCTION OR WORK FOR WHICH A PERMIT IS REQUIRED SHALL BE SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL AND SUCH CONSTRUCTION OR WORK SHALL REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES UNTIL APPROVED. INSPECTIONS CAN BE REQUESTED BY CALLING THE INSPECTION LINE.
- HEATING, VENTILATION AND AIR-CONDITIONING SYSTEMS OF ALL STRUCTURES SHALL BE DESIGNED AND INSTALLED FOR EFFICIENT UTILIZATION OF ENERGY IN ACCORDANCE WITH THE CALIFORNIA ENERGY CODE.
- APPLIANCES, APPURTENANCES AND EQUIPMENT REQUIRED BY THE CMC SHALL BE LISTED AND LABELED FOR THE APPLICATION IN WHICH THEY ARE INSTALLED AND USED (CMC SECTIONS 301.2, 302.1, AND 303.1)
- LABELING SHALL BE IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN CMC 307.0.
- THE VENTILATION AIR DISTRIBUTION SYSTEM SHALL BE PROVIDED WITH MEANS TO ADJUST THE SYSTEM TO ACHIEVE AT LEAST THE MINIMUM VENTILATION AIRFLOW RATE AS REQUIRED BY THE CMC SECTION 403. VENTILATION SYSTEMS SHALL BE BALANCED BY AN APPROVED METHOD. SUCH BALANCING SHALL VERIFY THAT THE VENTILATION SYSTEM IS CAPABLE OF SUPPLYING AND EXHAUSTING THE AIRFLOW RATES REQUIRED BY CMC SECTIONS 403.2. SUCH AIR BALANCE REPORTS SHALL BE PROVIDED TO THE INSPECTOR AT TIME OF INSPECTION. AIR BALANCE REPORTS MAY BE REQUESTED BY THE INSPECTION DURING ANNUAL INSPECTIONS TO ENSURE ONGOING COMPLIANCE WITH CITY REQUIREMENTS, AND WHEN ISSUES OR CONCERNS REGARDING ODORS ARE BROUGHT TO THE ATTENTION OF THE CITY.
- ALL MECHANICAL EQUIPMENT AND SYSTEMS INSTALLED AS PART OF PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2016 CMC AND THE 2016 CBC, 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE AND 2016 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS.
- PROVIDE 120 VOLT ELECTRICAL OUTLETS WITHIN 25' OF ALL ROOF MOUNTED AND OUTDOOR MECHANICAL EQUIPMENT. (CMC 309) ALL MECH EQUIP. (CMC 309)
- ALL DUCTWORK FOR HEATING AND COOLING SYSTEM OR EVAPORATE COOLING SYSTEM SHALL BE CONDUCTED THROUGH DUCT SYSTEMS CONSTRUCTED OF METAL AS SET FORTH IN SMACNA HVAC DUCT CONSTRUCTION STANDARD - METAL AND FLEXIBLE. FACTORY MADE AIR DUCTS SHALL BE APPROVED FOR THE USE INTENDED OR SHALL COMPLY WITH THE 2016 CMC REFERENCED STANDARDS CHAPTER 17 (CMC 602.1).
- ALL DUCT SMOKE DETECTORS INSTALLED, AS PART OF THIS PROJECT SHALL BE SUPERVISED BY THE BUILDING FIRE DETECTION OR ALARM SYSTEM WHEN THE BUILDING IS EQUIPPED WITH SUCH SYSTEM. LOS ANGELES FIRE DEPARTMENT PREVENTION BUREAU PLAN CHECK APPROVAL AND PERMIT ARE REQUIRED FOR CONNECTION OF DUCT SMOKE DETECTORS TO THE FIRE DETECTION OR ALARM SYSTEM.
- THE REQUIRED SERVICE DISTANCE FROM THE MECHANICAL EQUIPMENT TO SCREENING, PARAPETS, WALLS AND OTHER EQUIPMENT SHALL BE A MINIMUM OF 30"x30" ON THE SERVICE SIDE OF THE EQUIPMENT, OR AS REQUIRED BY THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, IF THE INSTRUCTIONS REQUIRE A GREATER CLEARANCE. (CMC SECTION 304.1)
- EQUIPMENT AND APPLIANCES SHALL BE ACCESSIBLE FOR SERVICE, INSPECTION REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION. SUFFICIENT CLEARANCE SHALL BE MAINTAINED TO PERMIT CLEANING, REPLACEMENT OF FILTERS, BLOWERS, MOTOR CONTROLS AND LUBRICATION OF MOVING PARTS. 30" OF CLEARANCE IN DEPTH, WIDTH, AND HEIGHT SHALL BE PROVIDED TO SERVE THE APPLIANCE OR EQUIPMENT. (CMC 304.1)
- OUTSIDE AIR FOR HEATING OR COOLING SYSTEM SHALL NOT BE TAKEN FROM CLOSER THAN 10'-0" FROM AN APPLIANCE VENT OUTLET, VENT OPENING OF A PLUMBING SYSTEM, OR THE DISCHARGE OUTLET OF EXHAUST FAN, UNLESS THE OUTLET IS 3'-0" ABOVE THE OUTSIDE AIR INLET. (CMC 314.3)
- REFRIGERANT CONTAINING PORTIONS OF A SYSTEM THAT ARE FIELD ERRECTED SHALL BE TESTED AND PROVED TIGHT TO THE AUTHORITY HAVING JURISDICTION AFTER COMPLETE INSTALLATION AND BEFORE OPERATION. THE HIGH LOW SIDES OF EACH SYSTEM SHALL BE TESTED AND PROVED TIGHT AT NOT LESS THAN THE LOWER OF THE PRESSURE IN CMC TABLE 1124.2 OR THE SETTING THE PRESSURE RELIEF DEVICE. (CMC 1124.2)

- ONE OF THE FOLLOWING METHODS IS REQUIRED TO COMPLY WITH MECH-3 VENTILATION REQUIREMENTS  
A. AIR BALANCING: ALL SPACE CONDITIONING AND VENTILATION SYSTEMS SHALL BE BALANCED TO THE QUANTITIES SPECIFIED IN THESE PLANS, IN ACCORDANCE WITH THE NATIONAL ENVIRONMENTAL BALANCING BUREAU, (NEBB), PROCEDURAL STANDARDS (1983), OR ASSOCIATED AIR BALANCE COUNCIL, (AABC, NATIONAL STANDARDS (1986)  
B. OUTSIDE AIR CERTIFICATION: THE SYSTEM SHALL PROVIDE THE MINIMUM OUTSIDE AIR AS SHOWN ON THE MECHANICAL DRAWINGS, AND SHALL BE MEASURED AND CERTIFIED BY THE INSTALLING LICENSED C-20 MECHANICAL CONTRACTOR. (AIR BALANCING SHALL COMPLY TO CGSBC 5.410.1)
- ALL INSTALLED REFRIGERATION PIPING SHALL BE PHOSPHORIC ACID DEOXIDIZED SEAMLESS COPPER. PRESSURE-LIMITING DEVICES SHALL BE CONNECTED BETWEEN THE PRESSURE-IMPOSING ELEMENT AND THE STOP VALVE ON THE DISCHARGE SIDE PER 2016 CMC SECTION 1111.3.
- ALL FIRE AND SMOKE DAMPERS ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S LISTING AND INSTALLATION INSTRUCTIONS. FIRE DAMPERS SHALL BE DYNAMIC TYPE. (CBC 716.3.1, 716.2)
- WHEN THE AUTOMATIC ACTIVATION OF A SMOKE DAMPER OCCURS, THE HVAC SYSTEMS SERVING SUCH DAMPERS SHALL IMMEDIATELY SHUTDOWN. (CMC 606.8)
- FIRE AND SMOKE DAMPER SHALL BE LISTED AND BEAR THE LABEL OF AN APPROVED TESTING AGENCY.
- FIRE DAMPERS SHALL COMPLY WITH THE REQUIREMENTS OF UL 555. ONLY FIRE DAMPERS LABELED FOR USE IN DYNAMIC SYSTEMS SHALL BE INSTALLED IN HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS DESIGNED TO OPERATE WITH FANS ON DURING A FIRE. SMOKE DAMPERS SHALL COMPLY WITH THE REQUIREMENTS OF UL 555S. COMBINATION FIRE AND SMOKE DAMPERS SHALL COMPLY WITH BOTH UL 555 AND UL 555S. CEILING RADIATION DAMPERS SHALL COMPLY WITH REQUIREMENTS OF UL 555C. (CBC 716.3.1)
- FIRE DAMPERS SHALL HAVE A MINIMUM DAMPER RATING OF 1.5 HOURS WHEN INSTALLED IN LESS THAN 3-HOUR FIRE-RESISTANCE RATED ASSEMBLIES. RATINGS FOR DAMPERS INSTALLED IN WALLS RATED AT 3 HOURS OR MORE SHALL HAVE MINIMUM FIRE RATING OF 3 HOURS. (CBC 716.3.2)
- FIRE AND SMOKE DAMPERS SHALL BE PROVIDED WITH APPROVED MEANS OF ACCESS, WHICH IS LARGE ENOUGH TO PERMIT INSPECTION AND MAINTENANCE OF THE DAMPER AND ITS OPERATING PARTS. THE ACCESS OPENING SHALL NOT REDUCE THE FIRE RESISTANCE RATING OF THE ASSEMBLY. FIRE AND SMOKE DAMPER ACCESS POINTS SHALL BE PERMANENTLY IDENTIFIED ON THE EXTERIOR HAVING LETTERS NOT LESS THAN 1/2 INCH HIGH READING "FIRE DAMPER" OR "FIRE/SMOKE DAMPER"(CBC 716.4)
- WHERE A SMOKE DAMPER IS INSTALLED WITHIN A DUCT, A SMOKE DETECTOR SHALL BE INSTALLED IN THE DUCT WITHIN 5 FEET OF THE DAMPER WITH NO AIR INLETS OR OUTLETS BETWEEN THE DETECTOR AND THE DAMPER. THE DETECTOR SHALL BE LISTED FOR THE AIR VELOCITY, TEMPERATURE AND HUMIDITY ANTICIPATED AT THE POINT WHERE IT IS INSTALLED. OTHER THAN IN MECHANICAL SMOKE CONTROL SYSTEMS DAMPERS SHALL BE CLOSED UPON FAN SHUTDOWN WHERE THE LOCAL SMOKE DETECTOR REQUIRES A MINIMUM VELOCITY TO OPERATE.
- FUEL GAS APPLIANCES AND EQUIPMENT, THE APPROVAL AND INSTALLATION OF FUEL GAS DISTRIBUTION PIPING AND EQUIPMENT, FUEL GAS-FIRED APPLIANCES AND FUEL GAS-FIRED APPLIANCE VENTING SYSTEMS SHALL BE IN ACCORDANCE WITH THE CPC AND CMC.
- LISTED AND LABEL APPLIANCES, APPURTENANCES AND EQUIPMENT REGULATED BY THE CMC SHALL BE LISTED LABELED FOR THE APPLICATION IN WHICH THEY ARE INSTALLED AND USED (CMC SECTIONS 301.2, 302.1, AND 303.1).
- LABELING. LABELING SHALL BE IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN CMC 307.0.
- LABEL INFORMATION. A PERMANENT FACTORY-APPLIED NAMEPLATE SHALL BE AFFIXED TO APPLIANCES ON WHICH SHALL APPEAR IN LEGIBLE LETTERING, THE MANUFACTURER'S NAME OR TRADEMARK, THE MODEL NUMBER, SERIAL NUMBER AND THE SEAL OR MARK OF THE APPROVED AGENCY. A LABEL SHALL ALSO INCLUDE THE FOLLOWING: (CMC SECTION 307)  
#FUEL-BURNING UNITS: HOURLY RATING IN BTU/H (W); TYPE OF FUEL APPROVED FOR USE WITH THE APPLIANCE; AND REQUIRED CLEARANCES.
- FUEL TYPES. FUEL-FIRED APPLIANCES SHALL BE DESIGNED FOR USE WITH THE TYPE OF FUEL TO WHICH THEY WILL BE CONNECTED AND THE ALTITUDE AT WHICH THEY ARE INSTALLED. APPLIANCES THAT COMPRISE PARTS OF THE BUILDING MECHANICAL SYSTEM SHALL NOT BE CONVERTED FOR THE USAGE OF A DIFFERENT FUEL, EXCEPT WHERE APPROVED AND CONVERTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. THE FUEL INPUT RATE SHALL NOT BE INCREASED OR DECREASED BEYOND THE LIMIT RATING FOR THE ALTITUDE AT WHICH THE APPLIANCE IS INSTALLED.

**KEY NOTES:** (X)

- REMOVE EXISTING EXHAUST FAN & REPLACE W/ NEW PER SCHEDULE, THIS SHEET. RECONNECT EXISTING DUCT WORK TO EXHAUST FAN, VERIFY EXISTING DUCT SIZE MIN. 6"ø.
- EXISTING TRANSFER AIR GRILLS TO REMAIN.

**MECHANICAL LEGEND**

SYMBOL	DESCRIPTION	ABBREV.
	SUPPLY DUCT	S.
	RETURN AIR DUCT	R.
	EXHAUST AIR DUCT	E.
	CEILING DIFFUSER 1-2-3 OR 4 WAY THROW	C.D.
	CEILING REGISTER	C.R.
	ACCESS PANEL	A.P.
	FIRE DAMPER	F.D.
	THERMOSTAT	T.
	SENSOR	S.
	SMOKE DETECTOR	SD.
	CO2 SENSOR	CO2
	GENERAL CONTRACTOR	G.C.
	POINT OF CONNECTION TO EXISTING	POC
	CUBIC FEET PER MINUTE	CFM

**GENERAL BUILDING REQUIREMENTS**

- ALL CONSTRUCTION AND REMODELING WORK MUST BE PERFORMED BY CA LICENSED CLASS A OR CLASS B CONTRACTORS. ALL BUILDING TRADES WORK MUST BE PERFORMED BY A STATE OF CALIFORNIA LICENSED CONTRACTOR(S).
- BUILDING CODES AND STANDARDS ARE AS FOLLOWS:  
2019 CALIFORNIA MECHANICAL CODE (CMC)

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Redlands, CA 92374  
Phone: (909) 335-7400  
Fax: (909) 335-7299  
info@miller-aip.com

LICENSED ARCHITECT  
GARY W. MILLER  
No. 014635  
REEL 9-30-23  
STATE OF CALIFORNIA

MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED *9/22/2018*  
*Alex Qishta*  
2018  
2022  
CITY ENGINEER: ALEX QISHTA  
REGISTERED CIVIL ENGINEER NO. 66702  
DRAWN BY: LS/vm  
CHECKED BY: vm  
RECOMMENDED BY:

**CITY OF SAN BERNARDINO**  
DEPARTMENT OF PUBLIC WORKS  
**MECHANICAL PLAN**  
FOR  
**VILLASENOR LIBRARY**  
M-201

DRAWING NO.  
13476  
SHEET 22 OF  
26 SHEETS  
FOR CITY USE ONLY: FILE NO. C.I.P. NO. W.O. NO.

HOT WATER PIPE INSULATION SCHEDULE						
FLUID TEMP. RANGE (°F)	CONDUCTIVITY RANGE (BTU-IN./HR./SQ.FT.)	INSULATION MEAN RATING TEMP.	NOMINAL PIPE DIAMETER (IN.) REQUIRED INSULATION (IN.)			
			<1"	1" TO <1.5"	1.5" TO <4"	4" TO <8"
SPACE HEATING, HOT WATER SYSTEMS (STEAM, STEAM CONDENSATE AND HOT WATER) AND SERVICE WATER HEATING SYSTEMS						
ABOVE 350	32-34	250	4.5	5.0	5.0	5.0
251-350	29-31	200	3.0	4.0	4.5	4.5
201-250	27-30	150	2.5	2.5	3.0	3.0
141-200	25-29	125	1.5	1.5	2.0	2.0
105-140	24-28	100	1.0	1.5	1.5	1.5

INSULATION SHALL BE PROVIDED ON ALL HOT WATER AND CIRCULATING PIPING AND THE FIRST 5 FEET ON THE COLD WATER FROM THE WATER HEATER.

INSTALL APPROVED TEMPERATURE MIXING VALVES AT PLUMBING FIXTURES THAT REQUIRE 110° F. WATER PER CPC AND CALIFORNIA ENERGY CODE.

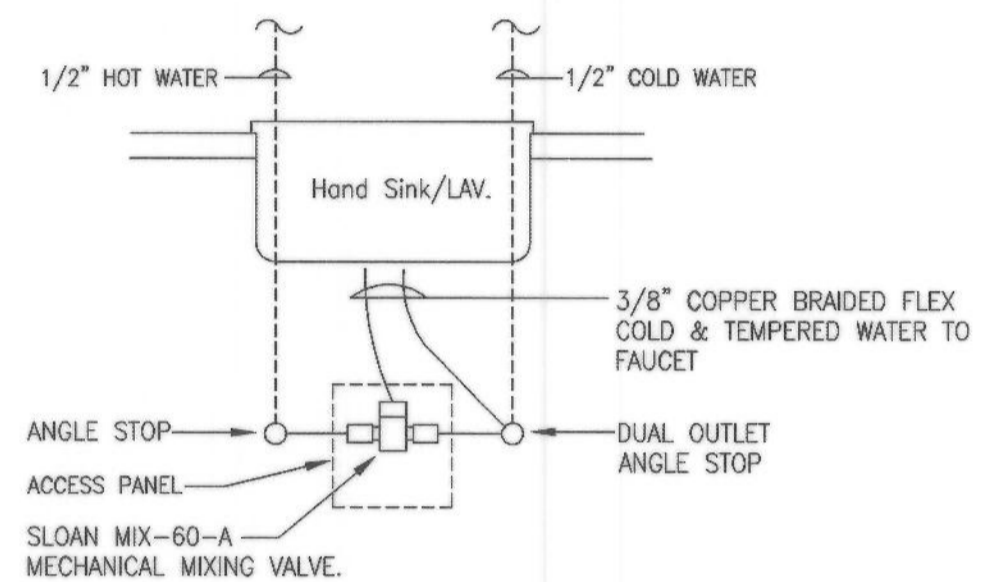
ALL SERVICE WATER HEATING EQUIPMENT TO BE IN COMPLIANCE WITH THE MODEL ENERGY CODE REQUIREMENTS AND LABELED.

A CERTIFICATE OF INSTALLATION FORM FOR WATER HEATING SYSTEM PER 2013 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AFTER THE INSTALLATION OF WATER HEATER(S) AND HOT WATER DISTRIBUTION SYSTEM(S).

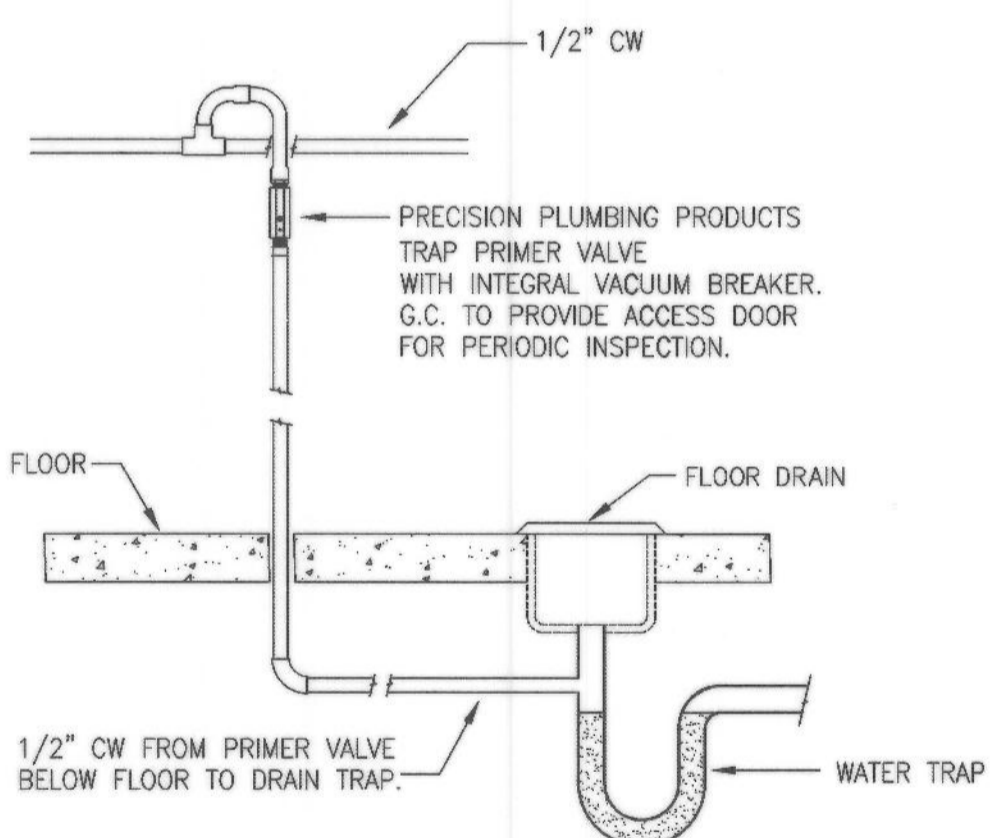
WITHIN 90 DAYS AFTER THE ENFORCEMENT AGENCY ISSUES A PERMANENT FINAL OCCUPANCY PERMIT, THE BUILDER SHALL PROVIDE RECORD DRAWINGS WITH COPIES OF THE COMPLETED, SIGNED, SUBMITTED COMPLIANCE DOCUMENTS; OPERATING AND MAINTENANCE INFORMATION FOR ALL APPLICABLE MATERIAL, COMPONENTS, AND DEVICES INSTALLED TO THE BUILDING OWNER AT OCCUPANCY.

PLUMBING EQUIPMENT SCHEDULE						
#	DESCRIPTION	W	V	CW	HW	REMARKS
LAV-1	LAVATORY	2"	2"	1/2"	1/2"	MODEL: LUCERNE 03.012 OR APPROVED EQUAL. WALL HUNG, VITREOUS CHINA, WHITE, 4" O.C. FAUCET HOLE, W/ AMERICAN STANDARD INNSBROOK SELECTRONIC SENSOR FAUCET 6053
WC-1	WATER CLOSET ADA COMPLIANT	3"	2"	1"	-	MODEL: MADERA FLOWISE 3461.528 OR APPROVED EQUAL. DESCRIPTION: 15-1/2" HEIGHT 1.28 GPF FLUSHOMETER TOILET SYSTEM W/SELECTRONIC FLUSH VALVE, ELONGATED BOWL, VITREOUS CHINA, WHITE, W/SEAT COVER 5901.100 HEAVY DUTY, & SELECTRONIC FLUSH VALVE 6065.121
FD-1	FLOOR DRAIN	2"	2"	-	-	MODEL: ZURN E21. DESCRIPTION: 6" X 6" SQUARE STRAINER, WITH 1/2" TRAP PRIMER CONNECTION OR APPROVED EQUAL
WHA-1	WATER HAMMER ARRESTOR			VARIES	-	MODEL: ZURN Z1700. DESCRIPTION: SHOKTROL WATER HAMMER ARRESTOR, STAINLESS STEEL CONSTRUCTION. SIZED ACCORDING TO FIXTURE UNITS OR APPROVED EQUAL.
DF-1	DRINKING FOUNTAIN	2"	2"	1/2"		MODEL: ELKAY LVRC8WSK. DESCRIPTION: ezH2O VANDAL-RESISTANT BOTTLE FILING STATION & SINGLE COOLER DRINKING FOUNTAIN WITH FILTERED REFRIGERATED WATER, STAINLESS STEEL CONSTRUCTION.

- ### GENERAL PLUMBING NOTES
- All soil piping to be cast iron or ABS where local codes permit. Vent piping may be galvanized steel, cast iron, copper or ABS as local codes permit (verify). Soil and vent piping to slope a minimum of 1/4" per foot unless noted otherwise. ABS not allowed in fire rated construction. Waste risers above slab serving floor(s) above to be cast iron.
  - Domestic site water piping to be schedule 80 PVC below ground, water and condensate piping above grade to be type 'L' hard copper wrought copper fittings. Solder and flux shall contain no lead. Solder and flux with containing lead shall not be used in potable water systems per Sec. 316.1.3, 2016 CPC.
  - All materials and equipment shall be new and unused unless specified on plans. Contractor to use only qualified labor and supervision for the installation of materials and equipment.
  - All work shall conform with the 2016 CPC and all local codes. No work shall be covered until it has been inspected, tested and approved by inspector.
  - Contractor shall make utility connections and provide permits per contract. Any additional fees and permits will be at extra cost.
  - Contractor shall verify size, depth, location and adequacy of all utilities including meter location and sewer inverts prior to start of work.
  - Contractor shall install cleanouts where indicated on plans and as required by local codes and authorities. Clean out to grade shall be in Brooks box or equal.
  - Coordinate work with all trades to avoid conflict and interferences.
  - Verify all rough-in heights and locations with general contractor and/or architect.
  - All pipes below ground shall be located away from bearing footings or as indicated on structural plans.
  - Install reduced pressure backflow preventer as indicated on plans or as required by local codes. Where street pressure exceeds 80 P.S.I. install approved pressure regulating valve with relief valve and strainer per code.
  - Contractor shall verify that equipment and fixtures will physically fit in the locations indicated.
  - All penetrations of fire rated assemblies shall be made with non-combustible material of an equal fire rating and shall be completely stopped. Refer to architectural plans to identify fire rated assemblies.
  - Contractor shall include (but not limited to) all piping, valves, fittings and fixture supports associated with each new fixture.
  - Each fixture shall have its own shut off valve(s). Valves to be located below or adjacent to the fixture it serves. General contractor to provide access panel when valves are within a wall or above the ceiling. All stub out heights and locations to be verified.
  - All gas piping to be schedule 40 black steel with threaded malleable fittings. Final connection to each gas appliance shall be with an approved flexible connection and shut off valve. When the gas connection to the appliance is within the appliance cabinet the connection shall have a rigid threaded nipple, length as required, extending from the connection through the cabinet. Flexible connection shall not enter the cabinet.
  - All valves, unions, etc., shall be the same size as the piping unless otherwise specified. Unions shall be installed after each screw type valve and prior to equipment connections. Install isolation unions at all connections between dissimilar metals.
  - All plumbing vents shall terminate not less than ten feet away from or at least 3 feet above any window of door opening, fresh air intake nor less than 1 foot from a verticle surface.
  - Insulate all exposed drain piping below lavatories and sinks with "Armaflex".
  - Compressed air piping may be copper or galv. steel. Verify with general contractor or owner.
  - All pipes discharging to floor sinks shall have the minimum air gap as required by the current CPC and local codes.
  - Contractor shall be responsible for the entire scope of work as outlined per the contract. Final testing procedures and connections are to conform to the current codes.
  - Contractor shall provide owner with all required manuals for the proper maintenance and operation of equipment.
  - These plans are of schematic form and are drawn for maximum clarity. Changes may be necessary for convience, obstructions, economics and efficiency.



MIXING VALVE MV-1



NOTE:  
DO NOT DIRECT CONNECT PRIMER VALVE TO WATER LINE.  
FIELD VERIFY TRAP PRIMER LOCATION. ACCESS PANEL BY G.C.

TRAP PRIMER DETAIL

- ### INDOOR WATER USE
- A. METERS  
SEPARATE METERS OR METERING DEVICES SHALL BE INSTALLED FOR BUILDINGS IN EXCESS OF 50,000 SQUARE FEET FOR THE USES DESCRIBED IN 1, 2 AND 3 BELOW. (SEC. 5.303.1)
- FOR EACH INDIVIDUAL LEASED RENTED OR OTHER TENANT SPACE WITHIN THE BUILDING PROJECTED TO CONSUME MORE THAN 100 GALLON PER DAY.
  - FOR SPACES USED FOR LAUNDRY OR CLEANERS, RESTAURANT OR FOOD SERVICE, MEDICAL OR DENTAL OFFICE, LABORATORY, OR BEAUTY SALON OR BARBER SHOP PROJECTED TO CONSUME MORE THAN 100 GALLONS PER DAY.
  - FOR ANY BUILDING WITHIN A PROJECT OR SPACE WITHIN A BUILDING THAT IS PROJECTED TO CONSUME MORE THAN 100 GALLONS PER DAY.
- B. TWENTY PERCENT SAVINGS.  
A SCHEDULE OF PLUMBING FIXTURES AND FIXTURE FITTINGS THAT WILL REDUCE THE OVERALL USE OF POTABLE WATER WITHIN THE BUILDINGS BY 20% SHALL BE PROVIDED. THE REDUCTION SHALL BE BASED ON THE MAXIMUM ALLOWABLE WATER USE PER PLUMBING FIXTURE AND FITTINGS AS REQUIRED BY THE CALIFORNIA BUILDING STANDARDS CODE. THE 20% REDUCTION IN POTABLE WATER USE SHALL BE DEMONSTRATED BY ONE OF THE FOLLOWING METHODS:
- EACH PLUMBING FIXTURE AND FITTING SHALL MEET THE 20% REDUCED FLOW RATE SPECIFIED IN TABLE 5.303.2.3, OR
  - A CALCULATION DEMONSTRATING A 20% REDUCTION IN THE BUILDING WATER USE BASELINE AS ESTABLISHED IN TABLE 5.303.2.2 SHALL BE PROVIDED. 5.303.2
- C. MULTIPLE SHOWER HEADS SERVING ONE SHOWER.  
WHEN SINGLE SHOWER FIXTURES ARE SERVED BY MORE THAN ONE SHOWER HEAD, THE COMBINED FLOW RATE OF ALL THE SHOWER HEADS SHALL NOT EXCEED THE MAXIMUM FLOW RATES SPECIFIED IN THE 20% REDUCTION COLUMN CONTAINED IN TABLE 5.303.2.3 OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY ONE SHOWER HEAD TO BE IN OPERATION AT A TIME.  
EXCEPTION: THE MAXIMUM FLOW RATE FOR SHOWER HEADS WHEN USING THE CALCULATION METHOD SPECIFIED IN THE 20% SAVING ITEM #2 ABOVE IS 2.5 GPM @ 80 PSI. 5.303.2.1.
- D. WASTE WATER REDUCTION.  
EACH BUILDING SHALL REDUCE BY 20% WASTE WATER BY ONE OF THE FOLLOWING METHODS:
- THE INSTALLATION OF WATER CONSERVING FIXTURES (TOILETS, URINALS).
  - UTILIZING NON-POTABLE WATER SYSTEMS (CAPTURED RAINWATER, GRAYWATER) COMPLYING WITH THE CALIFORNIA PLUMBING CODE.
- E. PLUMBING FIXTURES AND FITTINGS.  
PLUMBING FIXTURES (TOILETS, URINALS) AND FITTINGS (FAUCETS, SHOWER HEADS) SHALL MEET THE STANDARDS REFERENCED IN TABLE 5.303.6.

FIXTURE FLOW RATES		
FIXTURE TYPE	BASELINE FLOW RATE	MAXIMUM FLOW RATE AT 20% REDUCTION
SHOWERHEADS	2.5 GPM @ 80 PSI	2 GPM @ 80 PSI
LAVATORY FAUCETS - NONRESIDENTIAL	0.5 GPM @ 60 PSI	0.4 GPM @ 60 PSI
KITCHEN FAUCETS	2.2 GPM @ 60 PSI	1.8 GPM @ 60 PSI
WASH FOUNTAINS	2.2 RIM SPACE (in)/20 GPM @ 60 PSI	1.8 RIM SPACE (in)/20 GPM @ 60 PSI
METERING FAUCETS	0.25 GALLONS/CYCLE	0.2 GALLONS/CYCLE
METERING FAUCETS FOR WASH FOUNTAINS	.25 RIM SPACE (in)/20 GPM @ 60 PSI	.20 RIM SPACE (in)/20 GPM @ 60 PSI
GRAVITY TANK TYPE WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH
FLUSHOMETER TANK WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH
FLUSHOMETER VALVE WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH
ELECTROMECHANICAL HYDRAULIC WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH
URINALS	1.0 GALLONS/FLUSH	0.5 GALLONS/FLUSH

MATERIAL SPECIFICATIONS								
SERVICES	SOH 40 ABS DWV	CAST IRON NO-HUB	CALV STEEL SCH 40	BLACK STEEL SCH 40	TYPE M COPPER	TYPE L COPPER	TYPE K COPPER	REMARKS
	BELOW GROUND							
HOT WATER	ABOVE GROUND							
	BELOW GROUND							
WASTE	ABOVE GROUND							
	BELOW GROUND							
VENT	ABOVE GROUND							
	BELOW GROUND							
INDIRECT WASTE	INDOOR							
	OUTDOOR							
NATURAL GAS	INDOOR							PAINTED WITH RUST INHIBITING PAINT
	OUTDOOR							
STORM DRAIN	ABOVE GROUND							
	BELOW GROUND							
CO2	ABOVE GROUND							SILVER BRAZED; NITROGEN PURGED
CO2 VENT	ABOVE GROUND							SILVER BRAZED; NITROGEN PURGED

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SAN BERNARDINO, CA 92404

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1177 Idaho Street, Suite 200  
Redlands, CA 92374  
Phone: (909) 335-7400  
Fax: (909) 335-7299  
info@miller-aip.com

REGISTERED ARCHITECT  
GARY W. MILLER  
No. 074381  
REN. 9-30-23  
CHECKED BY: [Signature]  
STATE OF CALIFORNIA

MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED 9/22/2022  
[Signature]  
CITY ENGINEER: ALEX QISHTA  
REGISTERED CIVIL ENGINEER NO. 66702  
DRAWN BY: LS/vm  
CHECKED BY: vm  
RECOMMENDED BY:

**CITY OF SAN BERNARDINO**  
DEPARTMENT OF PUBLIC WORKS  
PLUMBING GENERAL NOTES FOR ROWE LIBRARY  
P-101

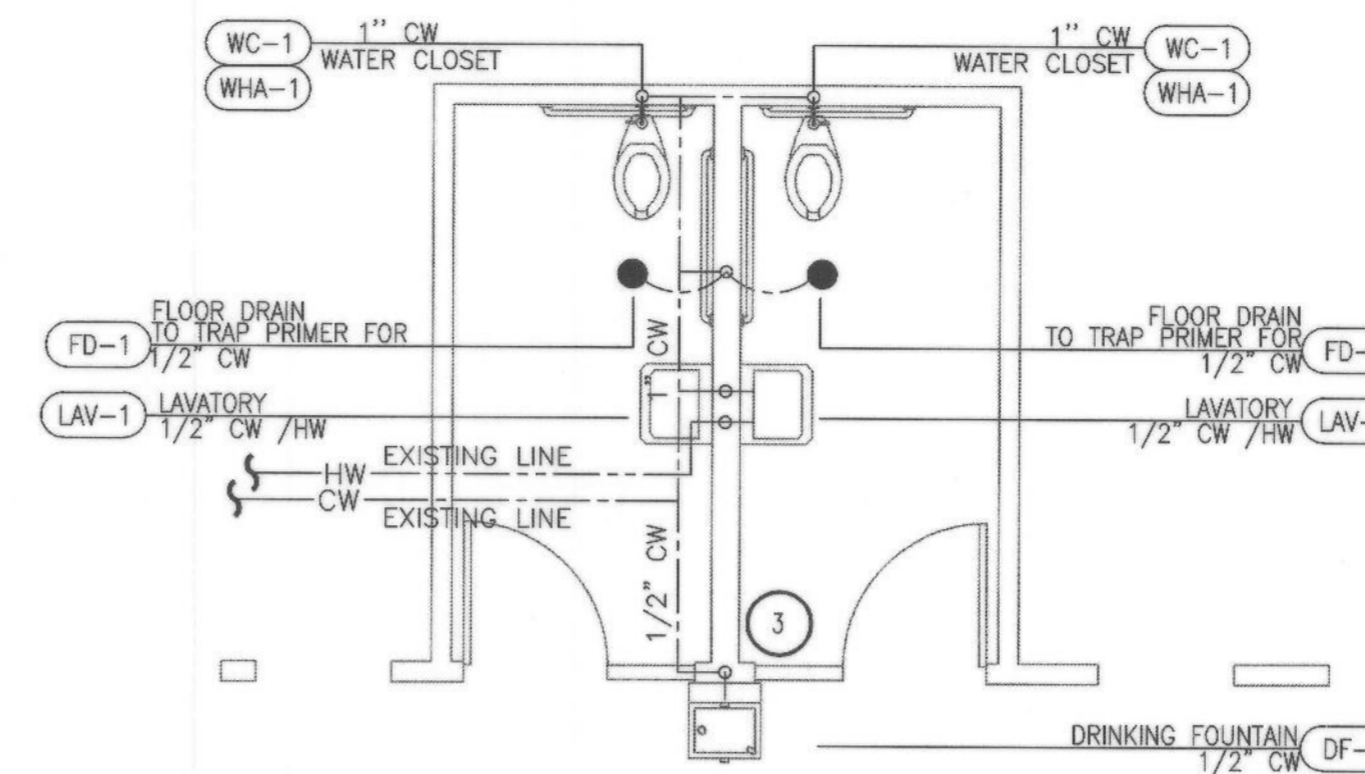
DRAWING NO. 13476  
SHEET 23 OF 26 SHEETS  
W.O. NO.

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3. PIPE SLEEVE THROUGH FOOTING SHALL BE PVC.
4. THE TRANSITION FROM BELOW GROUND POTABLE COLD WATER MATERIAL TO ABOVE GROUND POTABLE COLD WATER MATERIAL SHALL OCCUR ABOVE THE SLAB.
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6. CUT EXISTING CONCRETE SLAB AS NECESSARY FOR NEW PLUMBING LINE.
7. PLUMBING CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS, LOCATIONS, AND PIPE SIZES OF COLD / HOT WATER LINES AND POINT OF CONNECTIONS.
8. PLUMBING CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS, LOCATIONS, AND PIPE SIZES OF WASTE AND VENT LINES AND POINT OF CONNECTIONS.

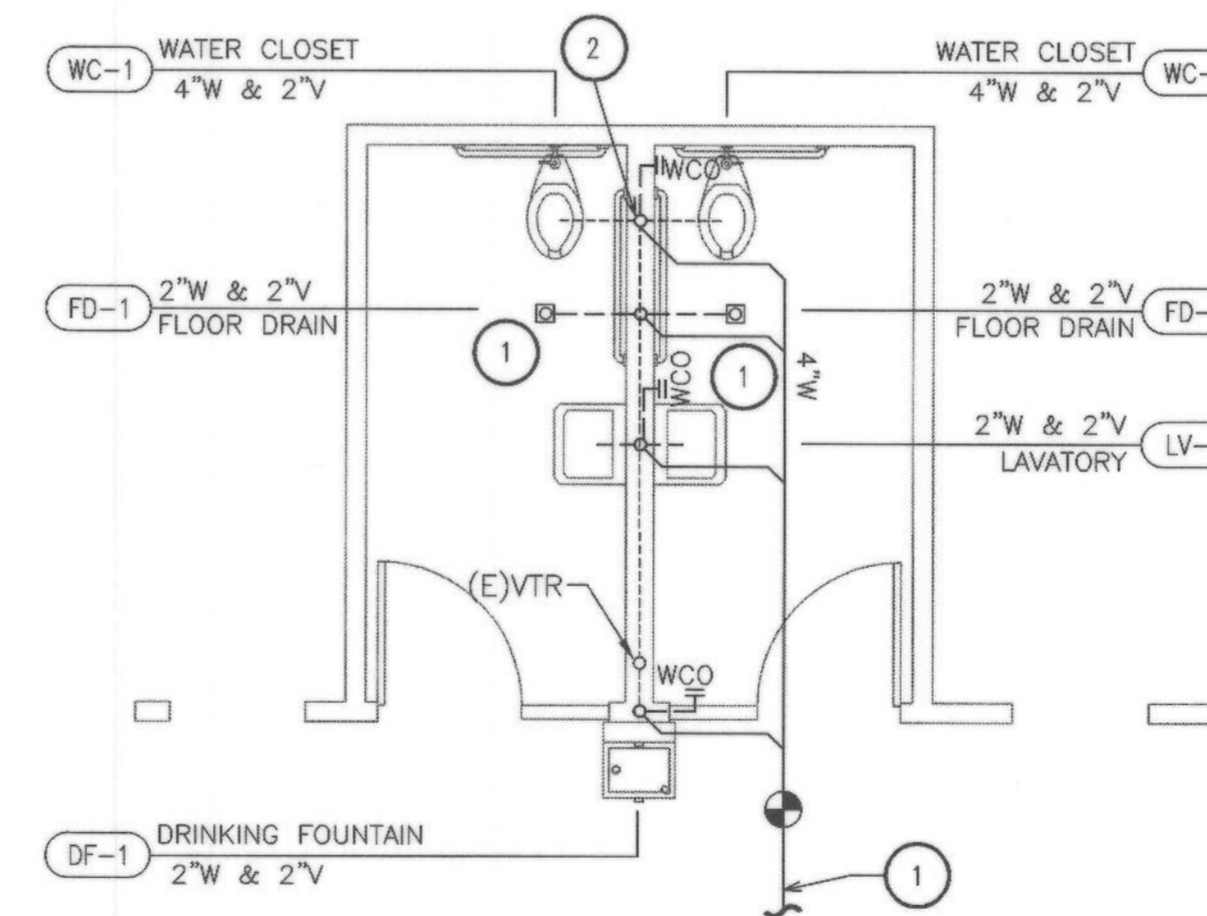
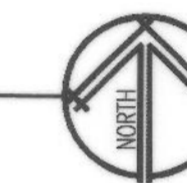
**KEY NOTES:** (X)

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2. CONNECT NEW VENT LINE TO EXISTING VENT LINE THRU ROOF. VERIFY EXISTING CONDITIONS AND LOCATION OF HOT WATER LINE.
3. CONNECT NEW COLD WATER LINE TO EXISTING COLD WATER LINE SYSTEM. VERIFY EXISTING CONDITIONS AND LOCATION OF COLD WATER LINE.



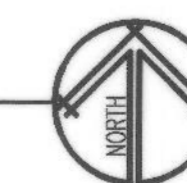
**PLUMBING WATER SUPPLY**

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



**PLUMBING WASTE**

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



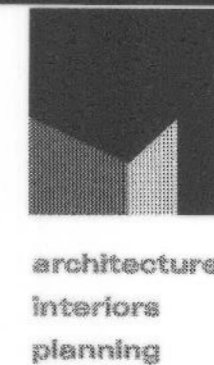
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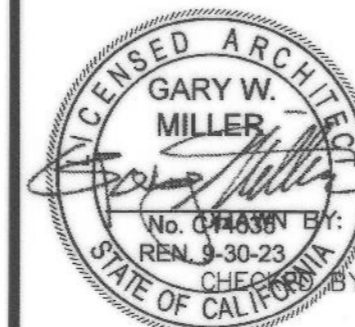
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MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED: *Alex Qishita* 9/22/2022

CITY ENGINEER: ALEX QISHITA  
REGISTERED CIVIL ENGINEER NO. 66702

DRAWN BY: LS/VM

CHECKED BY: VM

RECOMMENDED BY:

**CITY OF SAN BERNARDINO**  
DEPARTMENT OF PUBLIC WORKS

**PLUMBING PLAN**  
FOR  
**ROWE LIBRARY**

P-102

DRAWING NO. 13476  
SHEET 24 OF 26 SHEETS  
W.O. NO.

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HOT WATER PIPE INSULATION SCHEDULE						
FLUID TEMP. RANGE (°F)	CONDUCTIVITY RANGE (BTU-IN./HR./SQ.FT.)	INSULATION MEAN RATING TEMP.	NOMINAL PIPE DIAMETER (IN.) REQUIRED INSULATION (IN.)			
			<1"	1" TO <1.5"	1.5" TO <4"	4" TO <8" AND LARGER
SPACE HEATING, HOT WATER SYSTEMS (STEAM, STEAM CONDENSATE AND HOT WATER) AND SERVICE WATER HEATING SYSTEMS						
ABOVE 350	.32-.34	250	4.5	5.0	5.0	5.0
251-350	.29-.31	200	3.0	4.0	4.5	4.5
201-250	.27-.30	150	2.5	2.5	3.0	3.0
141-200	.25-.29	125	1.5	1.5	2.0	2.0
105-140	.24-.28	100	1.0	1.5	1.5	1.5

INSULATION SHALL BE PROVIDED ON ALL HOT WATER AND CIRCULATING PIPING AND THE FIRST 5 FEET ON THE COLD WATER FROM THE WATER HEATER.

INSTALL APPROVED TEMPERATURE MIXING VALVES AT PLUMBING FIXTURES THAT REQUIRE 110° F. WATER PER CPC AND CALIFORNIA ENERGY CODE.

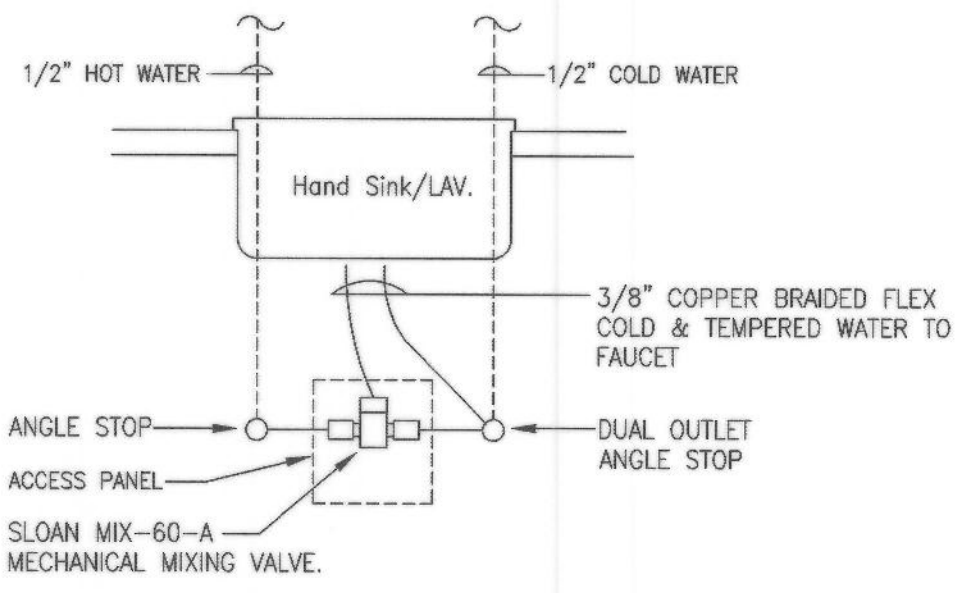
ALL SERVICE WATER HEATING EQUIPMENT TO BE IN COMPLIANCE WITH THE MODEL ENERGY CODE REQUIREMENTS AND LABELED.

A CERTIFICATE OF INSTALLATION FORM FOR WATER HEATING SYSTEM PER 2013 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT AFTER THE INSTALLATION OF WATER HEATER(S) AND HOT WATER DISTRIBUTION SYSTEM(S).

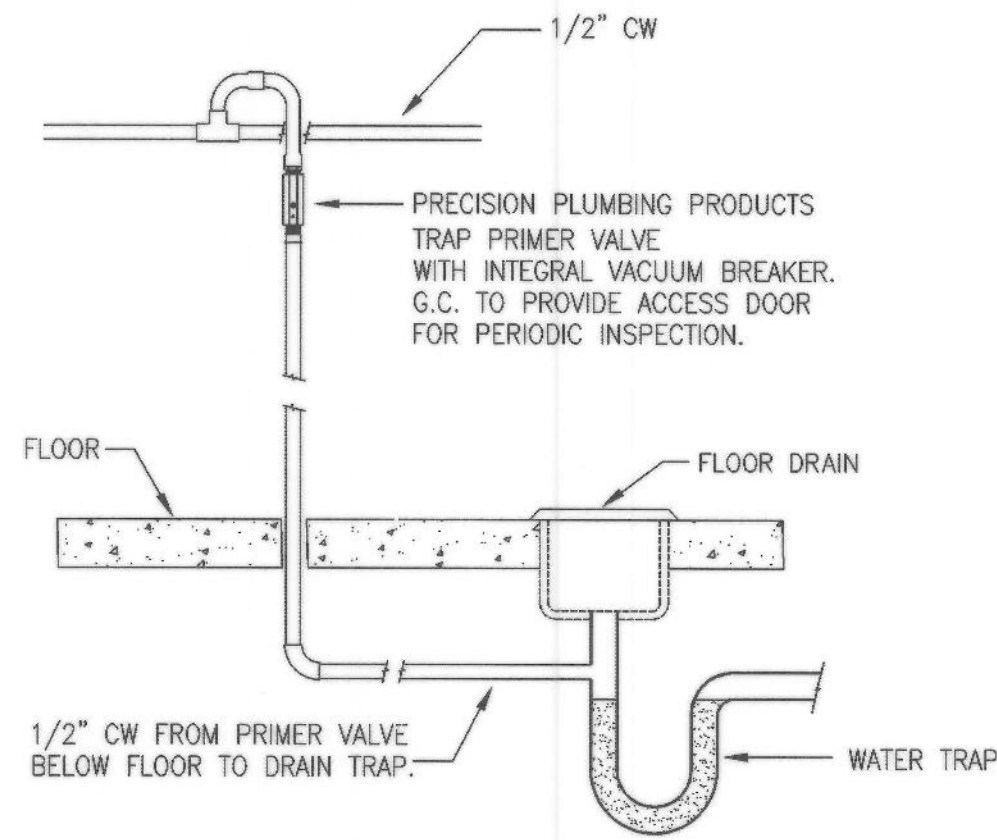
WITHIN 90 DAYS AFTER THE ENFORCEMENT AGENCY ISSUES A PERMANENT FINAL OCCUPANCY PERMIT, THE BUILDER SHALL PROVIDE RECORD DRAWINGS WITH COPIES OF THE COMPLETED, SIGNED, SUBMITTED COMPLIANCE DOCUMENTS; OPERATING AND MAINTENANCE INFORMATION FOR ALL APPLICABLE MATERIAL, COMPONENTS, AND DEVICES INSTALLED TO THE BUILDING OWNER AT OCCUPANCY.

PLUMBING EQUIPMENT SCHEDULE						
#	DESCRIPTION	W	V	CW	HW	REMARKS
LAV-1	LAVATORY	2"	2"	1/2"	1/2"	MODEL: RONDALYN 0491.019 APPROVED EQUAL. WALL HUNG, VITREOUS CHINA, WHITE, 4" O.C. FAUCET HOLE, W/ AMERICAN STANDARD INNSBROOK ELECTRONIC SENSOR FAUCET 6053
WC-1	WATER CLOSET ADA COMPLIANT	3"	2"	1"	-	MODEL: AFWALL MILLENNIUM FLOWSE 3351.01 OR APPROVED EQUAL. DESCRIPTION: 16-1/2" HEIGHT 1.28 GPF FLUSHMETER TOILET SYSTEM W/ELECTRONIC FLUSH VALVE, ELONGATED BOWL, VITREOUS CHINA, WHITE, W/SEAT COVER 5901.100 HEAVY DUTY, & ELECTRONIC FLUSH VALVE 6065.121
WC-2	WATER CLOSET	3"	2"	1"	-	MODEL: MADERA FLOWSE 3451.528 OR APPROVED EQUAL. DESCRIPTION: 15" HEIGHT 1.28 GPF FLUSHMETER TOILET SYSTEM W/ELECTRONIC FLUSH VALVE, ELONGATED BOWL, VITREOUS CHINA, WHITE, W/SEAT COVER 5901.100 HEAVY DUTY, & ELECTRONIC FLUSH VALVE 6065.121
UR-1	URINAL	2"	2"	1"	-	MODEL: AMERICAN STANDARD 6590.505 WASHBROOK FLOWSE HIGH EFFICIENCY URINAL SYSTEM WITH AMERICAN STANDARD 6063.051 ELECTRONIC FLUSH VALVE OR APPROVED EQUAL VITREOUS CHINA, 0.125 GPF
TP-1	TRAP PRIMER VALVE	-	-	1/2"	-	MODEL: PRECISION PLUMBING PRODUCTS PR-500 OR APPROVED EQUAL. DESCRIPTION: PRESSURE DROP ACTIVATED TRAP PRIMER
FD-1	FLOOR DRAIN	2"	2"	-	-	MODEL: ZURN EZ1. DESCRIPTION: 6" X 6" SQUARE STRAINER, WITH 1/2" TRAP PRIMER CONNECTION OR APPROVED EQUAL
WHA-1	WATER HAMMER ARRESTOR	-	-	VARIES	-	MODEL: ZURN Z1700. DESCRIPTION: SHOKTROL WATER HAMMER ARRESTOR, STAINLESS STEEL CONSTRUCTION. SIZED ACCORDING TO FIXTURE UNITS OR APPROVED EQUAL.
DF-1	DRINKING FOUNTAIN	2"	2"	1/2"	-	MODEL: ELKAY LVRCBWSK. DESCRIPTION: ezH2O VANDAL-RESISTANT BOTTLE FILLING STATION & SINGLE COOLER DRINKING FOUNTAIN WITH FILTERED REFRIGERATED WATER, STAINLESS STEEL CONSTRUCTION.

- ### GENERAL PLUMBING NOTES
- All soil piping to be cast iron or ABS where local codes permit. Vent piping may be galvanized steel, cast iron, copper or ABS as local codes permit (verify). Soil and vent piping to slope a minimum of 1/4" per foot unless noted otherwise. ABS not allowed in fire rated construction. Waste risers above slab serving floor(s) above to be cast iron.
  - Domestic site water piping to be schedule 80 PVC below ground, water and condensate piping above grade to be type "L" hard copper wrought copper fittings. Solder and flux shall contain no lead. Solder and flux with containing lead shall not be used in potable water systems per Sec. 316.1.3, 2016 CPC.
  - All materials and equipment shall be new and unused unless specified on plans. Contractor to use only qualified labor and supervision for the installation of materials and equipment.
  - All work shall conform with the 2016 CPC and all local codes. No work shall be covered until it has been inspected, tested and approved by all local.
  - Contractor shall make utility connections and provide permits per contract. Any additional fees and permits will be at extra cost.
  - Contractor shall verify size, depth, location and adequacy of all utilities including meter location and sewer inverts prior to start of work.
  - Contractor shall install cleanouts where indicated on plans and as required by local codes and authorities. Clean out to grade shall be in Brooks box or equal.
  - Coordinate work with all trades to avoid conflict and interferences.
  - Verify all rough-in heights and locations with general contractor and/or architect.
  - All pipes below ground shall be located away from bearing footings or as indicated on structural plans.
  - Install reduced pressure backflow preventer as indicated on plans or as required by local codes. Where street pressure exceeds 80 P.S.I. install approved pressure regulating valve with relief valve and strainer per code.
  - Contractor shall verify that equipment and fixtures will physically fit in the locations indicated.
  - All penetrations of fire rated assemblies shall be made with non-combustible material of an equal fire rating and shall be completely stopped. Refer to architectural plans to identify fire rated assemblies.
  - Contractor shall include (but not limited to) all piping, valves, fittings and fixture supports associated with each new fixture.
  - Each fixture shall have its own shut off valve(s). Valves to be located below or adjacent to the fixture it serves. General contractor to provide access panel when valves are within a wall or above the ceiling. All stub out heights and locations to be verified.
  - All gas piping to be schedule 40 black steel with threaded malleable fittings. Final connection to each gas appliance shall be with an approved flexible connection and shut off valve. When the gas connection to the appliance is within the appliance cabinet the connection shall have a rigid threaded nipple, length as required, extending from the connection through the cabinet. Flexible connection shall not enter the cabinet.
  - All valves, unions, etc., shall be the same size as the piping unless otherwise specified. Unions shall be installed after each screw type valve and prior to equipment connections. Install isolation unions at all connections between dissimilar metals.
  - All plumbing vents shall terminate not less than ten feet away from or at least 3 feet above any window of door opening, fresh air intake nor less than 1 foot from a verticle surface.
  - Insulate all exposed drain piping below lavatories and sinks with "Armatflex."
  - Compressed air piping may be copper or galv. steel. Verify with general contractor or owner.
  - All pipes discharging to floor sinks shall have the minimum air gap as required by the current CPC and local codes.
  - Contractor shall be responsible for the entire scope of work as outlined per the contract. Final testing procedures and connections are to conform to the current codes.
  - Contractor shall provide owner with all required manuals for the proper maintenance and operation of equipment.
  - These plans are of schematic form and are drawn for maximum clarity. Changes may be necessary for convenience, obstructions, economics and efficiency.



MIXING VALVE MV-1



NOTE:  
DO NOT DIRECT CONNECT PRIMER VALVE TO WATER LINE.  
FIELD VERIFY TRAP PRIMER LOCATION. ACCESS PANEL BY G.C.

TRAP PRIMER DETAIL

- ### INDOOR WATER USE
- A. METERS  
SEPARATE METERS OR METERING DEVICES SHALL BE INSTALLED FOR BUILDINGS IN EXCESS OF 50,000 SQUARE FEET FOR THE USES DESCRIBED IN 1, 2 AND 3 BELOW. (SEC. 5.303.1)
- FOR EACH INDIVIDUAL LEASED RENTED OR OTHER TENANT SPACE WITHIN THE BUILDING PROJECTED TO CONSUME MORE THAN 100 GALLON PER DAY.
  - FOR SPACES USED FOR LAUNDRY OR CLEANERS, RESTAURANT OR FOOD SERVICE, MEDICAL OR DENTAL OFFICE, LABORATORY, OR BEAUTY SALON OR BARBER SHOP PROJECTED TO CONSUME MORE THAN 100 GALLONS PER DAY.
  - FOR ANY BUILDING WITHIN A PROJECT OR SPACE WITHIN A BUILDING THAT IS PROJECTED TO CONSUME MORE THAN 100 GALLONS PER DAY.
- B. TWENTY PERCENT SAVINGS.  
A SCHEDULE OF PLUMBING FIXTURES AND FIXTURE FITTINGS THAT WILL REDUCE THE OVERALL USE OF POTABLE WATER WITHIN THE BUILDINGS BY 20% SHALL BE PROVIDED. THE REDUCTION SHALL BE BASED ON THE MAXIMUM ALLOWABLE WATER USE PER PLUMBING FIXTURE AND FITTINGS AS REQUIRED BY THE CALIFORNIA BUILDING STANDARDS CODE. THE 20% REDUCTION IN POTABLE WATER USE SHALL BE DEMONSTRATED BY ONE OF THE FOLLOWING METHODS:
- EACH PLUMBING FIXTURE AND FITTING SHALL MEET THE 20% REDUCED FLOW RATE SPECIFIED IN TABLE 5.303.2.3, OR
  - A CALCULATION DEMONSTRATING A 20% REDUCTION IN THE BUILDING WATER USE BASELINE AS ESTABLISHED IN TABLE 5.303.2.2 SHALL BE PROVIDED. 5.303.2
- C. MULTIPLE SHOWER HEADS SERVING ONE SHOWER.  
WHEN SINGLE SHOWER FIXTURES ARE SERVED BY MORE THAN ONE SHOWER HEAD, THE COMBINED FLOW RATE OF ALL THE SHOWER HEADS SHALL NOT EXCEED THE MAXIMUM FLOW RATES SPECIFIED IN THE 20% REDUCTION COLUMN CONTAINED IN TABLE 5.303.2.3 OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY ONE SHOWER HEAD TO BE IN OPERATION AT A TIME.  
EXCEPTION: THE MAXIMUM FLOW RATE FOR SHOWER HEADS WHEN USING THE CALCULATION METHOD SPECIFIED IN THE 20% SAVING ITEM #2 ABOVE IS 2.5 GPM @ 80 PSI. 5.303.2.1.
- D. WASTE WATER REDUCTION.  
EACH BUILDING SHALL REDUCE BY 20% WASTE WATER BY ONE OF THE FOLLOWING METHODS:
- THE INSTALLATION OF WATER CONSERVING FIXTURES (TOILETS, URINALS).
  - UTILIZING NON-POTABLE WATER SYSTEMS (CAPTURED RAINWATER, GRAYWATER) COMPLYING WITH THE CALIFORNIA PLUMBING CODE.
- E. PLUMBING FIXTURES AND FITTINGS.  
PLUMBING FIXTURES (TOILETS, URINALS) AND FITTINGS (FAUCETS, SHOWER HEADS) SHALL MEET THE STANDARDS REFERENCED IN TABLE 5.303.6.

FIXTURE FLOW RATES		
FIXTURE TYPE	BASELINE FLOW RATE	MAXIMUM FLOW RATE AT 20% REDUCTION
SHOWERHEADS	2.5 GPM @ 80 PSI	2 GPM @ 80 PSI
LAVATORY FAUCETS - NONRESIDENTIAL	0.5 GPM @ 60 PSI	0.4 GPM @ 60 PSI
KITCHEN FAUCETS	2.2 GPM @ 60 PSI	1.8 GPM @ 60 PSI
WASH FOUNTAINS	2.2 RIM SPACE (in)/20 GPM @ 60 PSI	1.8 RIM SPACE (in)/20 GPM @ 60 PSI
METERING FAUCETS	0.25 GALLONS/CYCLE	0.2 GALLONS/CYCLE
METERING FAUCETS FOR WASH FOUNTAINS	.25 RIM SPACE (in)/20 GPM @ 60 PSI	.20 RIM SPACE (in)/20 GPM @ 60 PSI
GRAVITY TANK TYPE WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH
FLUSHMETER TANK WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH
FLUSHMETER VALVE WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH
ELECTROMECHANICAL HYDRAULIC WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH
URINALS	1.0 GALLONS/FLUSH	0.5 GALLONS/FLUSH

MATERIAL SPECIFICATIONS								
SERVICES	SCH 40 ABS DWV	CAST IRON NO-HUB	GALV STEEL SCH 40	BLACK STEEL SCH 40	TYPE M COPPER	TYPE L COPPER	TYPE K COPPER	REMARKS
COLD WATER	ABOVE GROUND							
	BELOW GROUND							
HOT WATER	ABOVE GROUND							
	BELOW GROUND							
WASTE	ABOVE GROUND							
	BELOW GROUND							
VENT	ABOVE GROUND							
	BELOW GROUND							
INDIRECT WASTE	INDOOR							
	OUTDOOR							
NATURAL GAS	INDOOR							PAINTED WITH RUST INHIBITING PAINT
	OUTDOOR							
STORM DRAIN	ABOVE GROUND							
	BELOW GROUND							
CO2	ABOVE GROUND							SILVER BRAZED; NITROGEN PURGED
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LICENSED ARCHITECT  
GARY W. MILLER  
No. 014838N Exp. 01-30-23  
CALIFORNIA STATE OF CALIFORNIA

MARK	REVISIONS	BY	APPR	DATE

BENCH MARK:

APPROVED  
*Alex Qishta*  
9/22/2018  
2022

CITY ENGINEER: ALEX QISHTA  
REGISTERED CIVIL ENGINEER NO. 66702

DRAWN BY: LS/VM

CHECKED BY: VM

RECOMMENDED BY:

CITY OF SAN BERNARDINO  
DEPARTMENT OF PUBLIC WORKS

PLUMBING  
GENERAL NOTES  
FOR  
ROWE LIBRARY

P-201

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DRAWING NO.  
13476

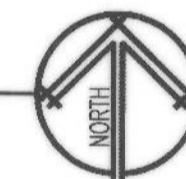
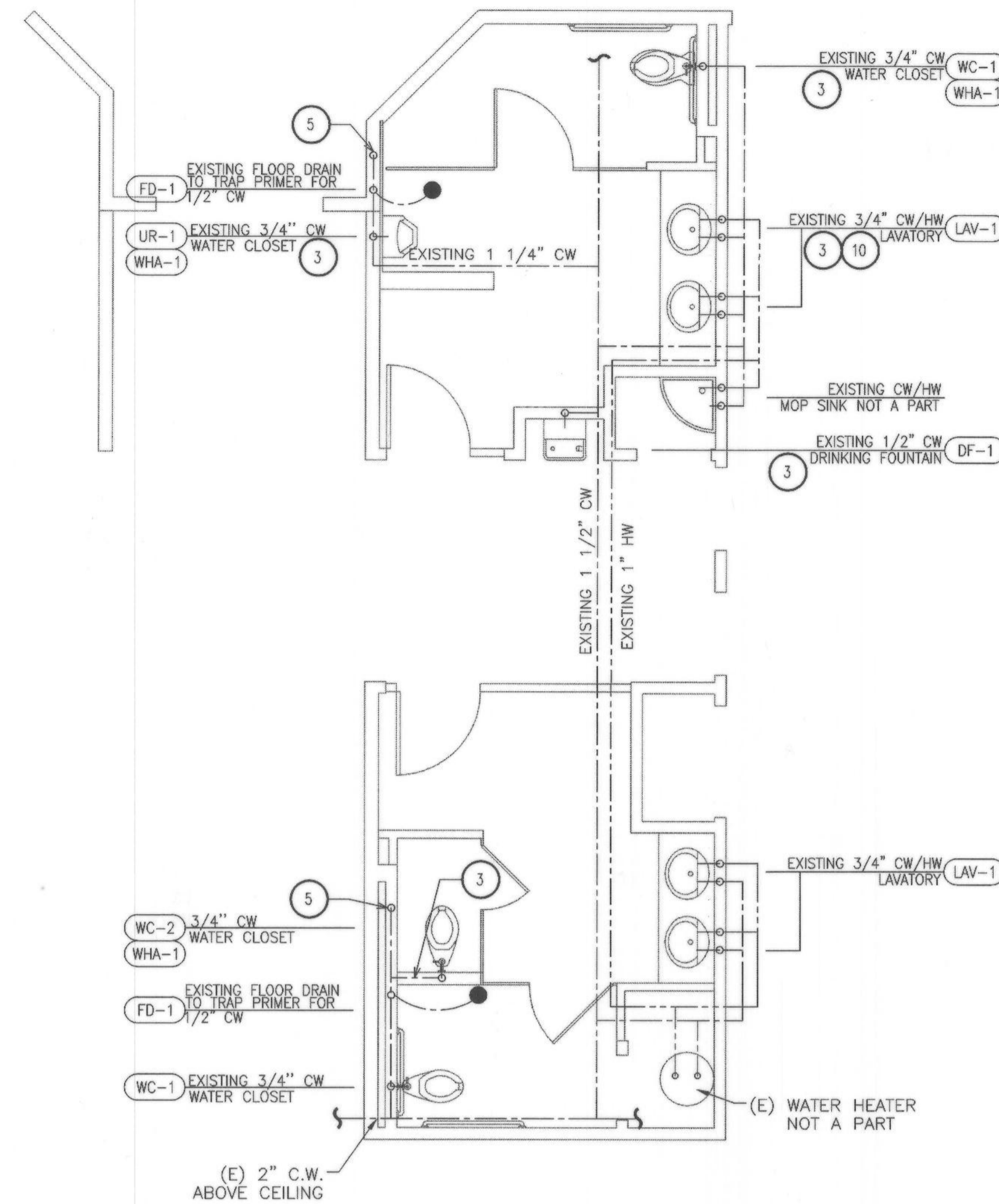
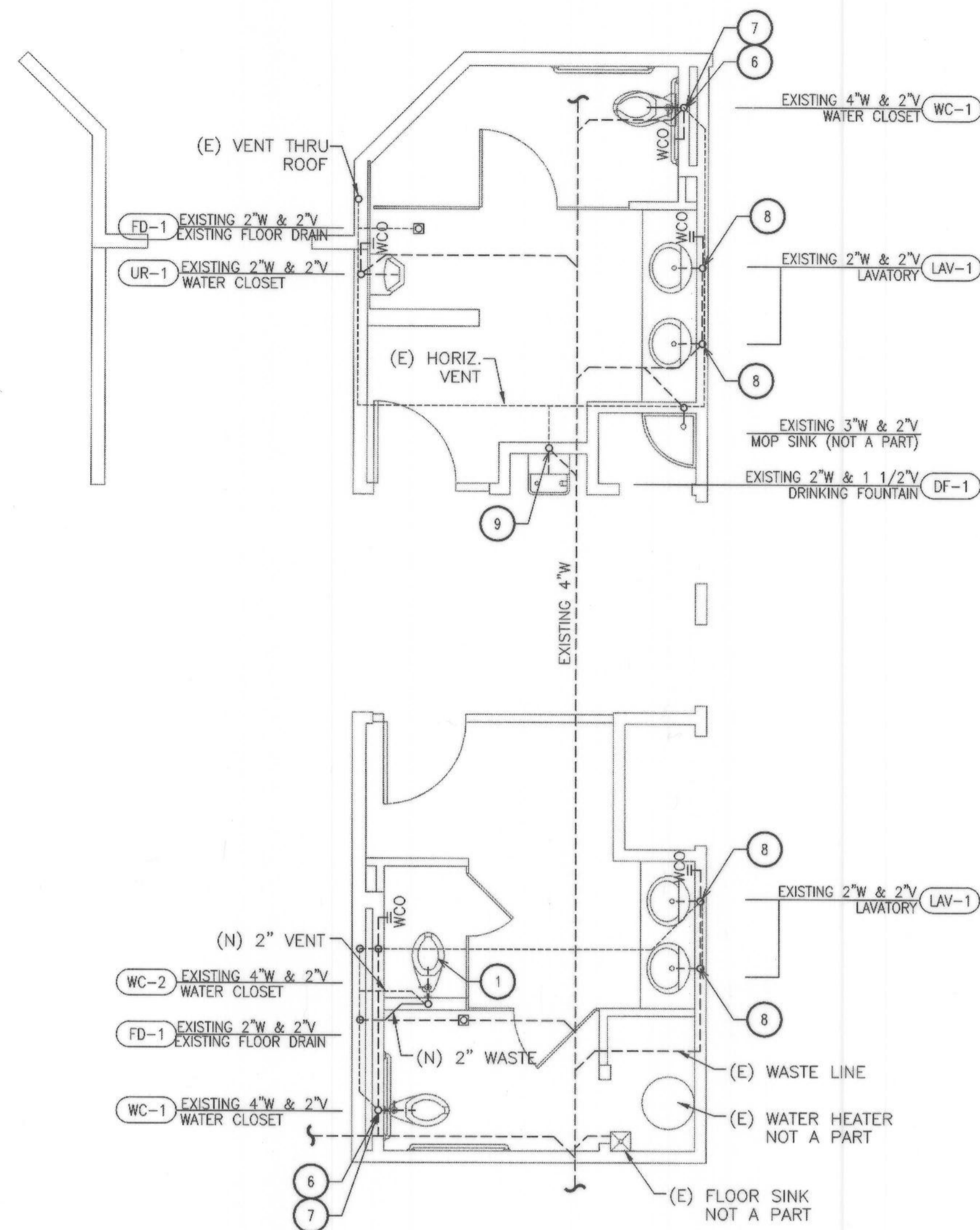
SHEET 25 OF 26 SHEETS

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2. CONNECT NEW VENT LINE TO EXISTING VENT LINE THRU ROOF.
3. RECONFIGURE AND CONNECT NEW COLD WATER LINE TO EXISTING COLD WATER LINE SYSTEM. VERIFY EXISTING CONDITIONS AND LOCATION OF COLD WATER LINE.
4. CONNECT NEW VENT LINE TO EXISTING VENT LINE THRU ROOF. VERIFY EXISTING CONDITIONS AND LOCATION OF HOT WATER LINE.
5. CAP OFF EXISTING COLD WATER LINE. VERIFY EXISTING CONDITIONS AND LOCATION OF COLD WATER LINE.
6. EXISTING ACCESS PANEL TO REMAIN.
7. RELOCATE OR REPLACE EXISTING PLUMBING WASTE LINE IF NECESSARY FOR NEW WATER CLOSET.
8. RELOCATE OR REPLACE EXISTING PLUMBING WASTE LINE IF NECESSARY FOR NEW LAVATORY.
9. RELOCATE OR REPLACE EXISTING PLUMBING WASTE LINE IF NECESSARY FOR NEW DRINKING FOUNTAIN.
10. RECONFIGURE AND CONNECT NEW COLD WATER LINE TO EXISTING COLD WATER LINE SYSTEM. VERIFY EXISTING CONDITIONS AND LOCATION OF HOT WATER LINE.



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RECOMMENDED BY:

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DEPARTMENT OF PUBLIC WORKS

**PLUMBING PLAN**  
FOR  
**VILLASENOR LIBRARY**

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DRAWING NO. 13476

SHEET 26 OF 26 SHEETS