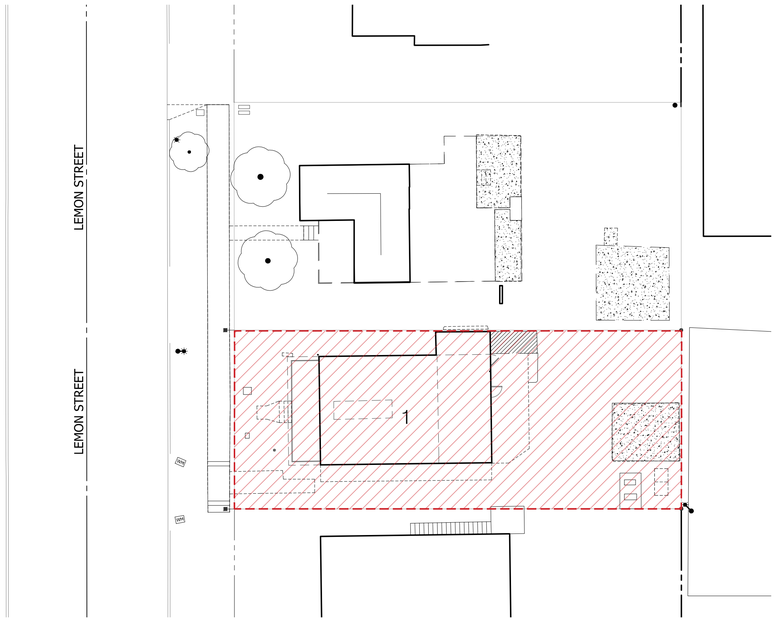

KEY MAP
1/16" = 1'-0"

1 HARADA HOUSE

HARADA HOUSE
PHASE II
50% CONSTRUCTION DOCUMENTS

PROJECT TITLE

PROJECT TITLE:

ARCHITECTURAL DESIGN SERVICES FOR REHABILITATION OF THE NATIONAL HISTORIC LANDMARK HARADA HOUSE AND CONSTRUCTION OF THE INTERPRETIVE CENTER

AGREEMENT No. P20AP00361

OWNER:

CITY OF RIVERSIDE

PROJECT ADDRESS:

3356 LEMON ST, RIVERSIDE, CA 92501

DESIGN STAGE:

50% CONSTRUCTION DOCUMENTS

ARCHITECTS & ENGINEERS

ARCHITECT:

KRITZINGER+RAO
117 EAST COLORADO BLVD ST. SUITE 600,
PASADENA, CA. 91105
T (626) 219-1785

CIVIL & STRUCTURAL ENGINEER

C.W. HOWE
4358 SEPULVEDA BLVD.
CULVER CITY, CA 90034

MEP / FA / FS & LIGTHING

BUDLONG
700 N GLENDALE AVE. SUITE 520
GLENDALE, CA 91105

HISTORIC PRESERVATION

JM RESEARCH & CONSULTING
4076 BROCKTON AVE. SUITE 201
RIVERSIDE, CA 92501

LANDSCAPE ARCHITECT

RHA LANDSCAPE ARCHITECTS
6840 INDIANA AVE. SUITE 100
RIVERSIDE, CA 92506

PROPERTY DATA

PROJECT DESCRIPTION

PHASE II SCOPE INCLUDES STABILIZATION, REPAIR, RESTORATION OF ALL EXTERIOR AND INTERIOR FINISH MATERIAL, STRUCTURAL RETROFIT, NEW INSULATION, NEW ROOFING, MECHANICAL, PLUMBING AND ELECTRICAL UPGRADES, ACCESSIBILITY, SITE LANDSCAPE, FENCING AND SIGNAGE.

LEGAL DESCRIPTION

A.P.N.	213.121.005
DATE BUILT	CIRCA 1870-1880
HISTORIC	YES
ZONE	DSP-RES
BLGD TYPE	V-B
OCCUPANCY	R-3 AND U (GARAGE)
SPRINKLERED	NO
SQUARE FOOTAGE	
LOT	3,996 SQ FT
FIRST FLOOR	1041 SQ FT
SECOND FLOOR	813 SQ FT
SHED TO BE DISMANTLED	53 SQ FT

VICINITY MAP

PROJECT SITE

1 RIVERSIDE CONVENTION CENTER
2 MISSION IN
3 PUBLIC LIBRARY
4 RIVERSIDE CITY HALL

Ⓟ PUBLIC PARKING

HERITAGE SQUARE HISTORIC DISTRICT

APPLICABLE CODES

- 2025 CALIFORNIA BUILDING CODE
- 2025 CALIFORNIA ELECTRICAL CODE
- 2025 CALIFORNIA MECHANICAL CODE
- 2025 CALIFORNIA PLUMBING CODE
- 2025 CALIFORNIA ENERGY CODE
- 2025 CALIFORNIA FIRE CODE
- 2025 CALIFORNIA HISTORICAL BUILDING CODE
- 2025 CALIFORNIA EXISTING BUILDING CODE
- 2025 CALIFORNIA GREEN BUILDING STANDARDS CODE
- 2025 CALIFORNIA REFERENCE STANDARDS CODE
- 2025 CALIFORNIA RESIDENTIAL CODE
- 2025 CITY OF RIVERSIDE MUNICIPAL CODE
- 2020 CITY OF RIVERSIDE STANDARD DRAWINGS
- 2010 ADA STANDARDS

REVISIONS

Date

December 15, 2025

SHEET INDEX

SHEET No.	SHEET TITLE
INDEX	INDEX
	GENERAL NOTES
G-001	GENERAL NOTES
TOTAL SHEETS	1
SHEET No.	SHEET TITLE
	SURVEY
SURVEY	TOPOGRAPHIC SURVEY
TOTAL SHEETS	1
SHEET No.	SHEET TITLE
	CIVIL DRAWINGS
CX	PRELIMINARY GRADING PLAN
TOTAL SHEETS	1
SHEET No.	SHEET TITLE
	LANDSCAPE DRAWINGS
L-1	CONCEPTUAL LANDSCAPE MASTER PLAN
TOTAL SHEETS	1
SHEET No.	SHEET TITLE
	STRUCTURAL DRAWINGS
S2	BASEMENT FOUNDATION PLAN
S3	LOW ROOF FRAMING/SECOND FLOOR FRAMING PLAN
S4	ROOF FRAMING PLAN
TOTAL SHEETS	3
SHEET No.	SHEET TITLE
	ARCHITECTURAL DRAWINGS
A-001	PROPOSED SITE PLAN
A-101	PROPOSED FIRST FLOOR PLAN
A-102	PROPOSED SECOND FLOOR PLAN
A-201	PROPOSED ELEVATIONS
A-202	PROPOSED ELEVATIONS
A-203	INTERIOR ELEVATIONS
A-204	INTERIOR ELEVATIONS
A-205	INTERIOR ELEVATIONS
A-206	INTERIOR ELEVATIONS
A-207	INTERIOR ELEVATIONS
A-208	INTERIOR ELEVATIONS
A-209	INTERIOR ELEVATIONS
A-210	INTERIOR ELEVATIONS
A-301	PROPOSED SECTIONS
A-302	PROPOSED SECTIONS
A-303	PROPOSED SECTIONS
A-304	PROPOSED SECTIONS
A-601	SCHEDULES
A-602	SCHEDULES
A-603	SCHEDULES
A-604	SCHEDULES
TOTAL SHEETS	21
SHEET No.	SHEET TITLE
	MECHANICAL DRAWINGS
M-0.1	MECHANICAL FRONT SHEET
M-1.1	MECHANICAL FIRST FLOOR PLAN
M-1.2	MECHANICAL SECOND FLOOR PLAN
TOTAL SHEETS	3
SHEET No.	SHEET TITLE
	PLUMBING DRAWINGS
P-0.1	PLUMBING FRONT SHEET
P-0.2	GENERAL NOTES
P-2.1	PLUMBING COLD AND HOT WATER FIRST FLOOR PLAN
P-2.1	PLUMBING COLD AND HOT WATER SECOND FLOOR PLAN
TOTAL SHEETS	4
SHEET No.	SHEET TITLE
	ELECTRICAL DRAWINGS
E-0.1	ELECTRICAL FRONT SHEET
E-2.1	ELECTRICAL SITE POWER PLAN
E-2.2	ELECTRICAL FIRST FLOOR POWER PLAN
E-2.3	ELECTRICAL SECOND FLOOR POWER PLAN
TOTAL SHEETS	4
TOTAL SET	27

Architect

K&R design inc.
LOS ANGELES, CALIFORNIA
WWW.KRITZINGER-RAO.COM

117 EAST COLORADO BLVD.
SUITE 600,
LOS ANGELES, CA 90013
T: 626.219.1785
www. kritzinger-rao.com

Consultants

Civil & Structural Engineer
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4358 Sepulveda Blvd. Culver City, CA 90034
Tel: (310)838-0383
www.cwhowe.com

MEP / FA / FS & Ligthing
BUDLONG
700 N Glendale Ave. Suite 520, Glendale, CA 91105
www.budlong.com

Historic Preservation
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4076 Brockton Ave. Suite 201, Riverside, CA 92501
Tel: (951)233-6897

Landscape Architect
RHA LANDSCAPE ARCHITECTS
6840 Indiana Ave. Suite 100, Riverside, CA 92506
Tel: (951)781-1930
www. rhala.com

Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

NOT FOR CONSTRUCTION

Project Title

HARADA HOUSE
PHASE 2

Sheet Title

INDEX

Design Stage

50% CONSTRUCTION DOCUMENTS

Project Address

3342 & 3356 Lemon Street
Riverside, CA
92501

Scale

N/A

Date

December 15, 2025

Sheet Number

INDEX

GENERAL NOTES

PROPOSED ELEVATIONS

- REMOVE EXTERIOR WOOD SIDING IN PHASES, REPAIR DAMAGE PIECES. INSTALL BATT INSULATTION AND REINSTALL ORIGINAL SIDING AFTER RESTORATION.

LEGEND

- PROPERTY LINE
- SETBACK LINE
- CENTER LINE
- 200.0 (E) GROUND CONTOUR
- 200.0 NEW GROUND CONTOUR
- X (E) CHAINLINK FENCE
- D EXISTING CHAINLINK FENCE TO BE REMOVED
- EXISTING WOOD FENCE TO REMAIN
- HISTORIC MATERIALS/ CONSTRUCTION TO BE RETAINED
- HISTORIC MATERIALS TO BE DISMANTLED AND SALVAGED
- EXISTING CONCRETE CURB/GUTTER/SIDEWALK
- EXISTING MATERIALS/ CONSTRUCTION TO BE REMOVED
- EXISTING CONCRETE PAVEMENT/PATIO/ WALKWAY TO BE REMOVED
- G EXISTING GAS LINE
- G EXISTING GAS LINE TO BE REMOVED
- W EXISTING WATER LINE
- W EXISTING WATER LINE TO BE REMOVED
- S EXISTING SEWER LINE
- S EXISTING SEWER LINE TO BE REMOVED
- E EXISTING OVERHEAD ELECTRICAL LINE
- UGE EXISTING UNDERGROUND ELECTRICAL LINE
- E EXISTING OVERHEAD ELECTRICAL TO BE REMOVED
- SD EXISTING STORM DRAIN
- WM EXISTING WATER METER
- E EXISTING ELECTRICAL METER
- G EXISTING GAS METER TO BE REMOVED
- PP EXISTING POWER POLE
- TPP TEMPORARY POWER POLE

Architect

K&R design inc.
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WWW.KRITZINGER-RAO.COM

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Landscape Architect
RHA LANDSCAPE ARCHITECTS
6840 Indiana Ave. Suite 100, Riverside, CA 92506
Tel: (951)781-1930
www. rhala.com

Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

NOT FOR CONSTRUCTION

Project Title

HARADA HOUSE
PHASE 2

Sheet Title

GENERAL NOTES

Design Stage

50% CONSTRUCTION DOCUMENTS

Project Address

3342 & 3356 Lemon Street
Riverside, CA
92501

Scale

3/16"= 1'-0"

Date

December 15, 2025

Sheet Number

G-001

PROPERTY LEGAL DESCRIPTION

3356 LEMON STREET
APN: 213-121-005

THAT PORTION OF BLOCK 3, RANGE 4 OF THE TOWN OF RIVERSIDE, AS SHOWN BY MAP ON FILE IN BOOK 7, PAGE 17 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT ON THE EASTE-RLY LINE OF LEMON STREET, 125 FEET NORTHERLY FROM THE SOUTHWESTERLY CORNER OF SAID BLOCK 3, RANGE 4; THENCE RUNNING AT RIGHT ANGLES EASTERLY, PARALLEL WITH THE NORTHERLY LINE OF FOURTH STREET, 100 FEET; THENCE AT RIGHT ANGLES NORTHERLY AND PARALLEL WITH THE EASTERLY LINE OF LEMON STREET, 40 FEET; THENCE AT RIGHT ANGLES WESTERLY, PARALLEL WITH THE NORTHERLY LINE OF FOURTH STREET, 100 FEET TO THE EASTERLY LINE OF LEMON STREET; THENCE AT RIGHT ANGLES SOUTHERLY ALONG THE EASTERLY LINE OF LEMON STREET, 40 FEET TO THE POINT OF COMMENCEMENT.

BASIS OF BEARINGS

CITY OF RIVERSIDE SURVEY CONTROL
STATION: 2036
LOCATION: INTERSECTION OF LIME STREET AND FOURTH STREET
HORIZONTAL DATUM: NAD83

STATION: 5468 (AKA BM I7-R3)
LOCATION: NE CORNER OF LIME STREET AND THIRD STREET
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NGVD 29
ELAVATION: 860.433

BASIS OF ELEVATIONS

CITY OF RIVERSIDE VERTICAL CONTROL BENCHMARK
ID: BM I7-R3
DESCRIPTION: PK NAIL AND CITY ENGINEER TAG, BACK OF CATCH BASIN
LOCATION: NORTHEAST CORNER OF LIME STREET AND THIRD STREET
DATUM: NGVD 29
ELEVATION: 860.433 FEET

NOTE

THIS MAP OF EXISTING IMPROVEMENTS AND/OR TOPOGRAPHY WAS FIELD SURVEYED BASED ON REQUIREMENTS FOR DESIGN OF A SPECIFIC PROJECT AND SOME AREAS MAY HAVE GREATER OR LESSER DETAIL BASED ON PROJECT REQUIREMENTS. THIS MAP IS INTENDED FOR USE ONLY AS A DESIGN AID FOR THAT PROJECT. CHANGES IN THE SCOPE, DESIGNER, OR SIGNIFICANT DELAYS IN DESIGN AND/OR CONSTRUCTION MAY REQUIRE UPDATE OF THE MAPPING.

THE PROPERTY BOUNDARY SHOWN HEREON IS THE RESULT OF A PRECISE RETRACEMENT OF THE PROPERTY DESCRIBED ABOVE. A PROCEDURE OF SURVEY DEPICTING PHYSICAL EVIDENCE AND MEASUREMENT DATA IS AVAILABLE FOR REVIEW UPON REQUEST.

THE LOCATION OF UTILITIES SHOWN ON THIS MAP IS FROM SURFACE INFORMATION GATHERED DURING THE FIELD SURVEY. THE PRECISE LOCATION AND DEPTH OF LINES AND FACILITIES MUST BE DETERMINED BY FIELD EXPLORATION PRIOR TO EXCAVATION.

LEGEND

	PROPERTY LINE
	CENTER LINE
	LOT LINE
	RIGHT OF WAY
N55°42'50"E 80.96'	BOUNDARY LINE DATA (BEARING/DISTANCE)
■	FOUND LEAD & DISC "LS3090" PER ROS 110/42 SET AT OFFSET SHOWN
●	FOUND 1" PIPE "LS 3090" PER ROS 110/42
	EDGE OF CONCRETE
	CURB & GUTTER
	CMU WALL
CONC	CONCRETE SURFACE
S	SEWER LINE
W	WATER LINE
G	GAS LINE
T	TELECOMM LINE
	FENCE: WOOD
	FENCE: CHAIN-LINK
	VALVE
	TREE (TRUNK TO SCALE)
371.04	SPOT ELEVATION
25	GROUND CONTOUR (5' INTERVAL)
24	GROUND CONTOUR (1' INTERVAL)
FLOW	(NOTE: LABEL ORIENTATION INDICATES POSITIVE SLOPE)

ABBREVIATIONS

AP	ANGLE POINT	GRND	GROUND
ASPH	ASPHALT	MH	MANHOLE
BLDG	BUILDING	PP	UTILITY POLE
CIP	CAST IN PLACE	(R)	RADIAL BEARING
CMU	CONCRETE MASONRY UNIT	ROW	RIGHT OF WAY
CONC	CONCRETE	SS	SANITARY SEWER
DI	DRAIN INLET	TC	TOP OF CURB
EL	ELEVATION	TG	TOP OF GRATE (DRAIN)
FF	FINISHED FLOOR	TW	TOP OF WALL
FL	FLOWLINE	TYP	TYPICAL
FNC	FENCE	U/G	UNDERGROUND
GB	GRADE BREAK	WM	WATER METER

8' 4' 0 8' 16'
SCALE IN FEET

PROFESSIONAL LAND SURVEYOR
VERNON V. FRANCE
No. 7927
STATE OF CALIFORNIA

METROPOLITAN MAPPING
3712 30TH STREET
SAN DIEGO, CA 92104
(619) 431-5250
metromap.sd@gmail.com

REVISIONS:

TOPOGRAPHIC SURVEY

HARADA HOUSE
3356 LEMON STREET
RIVERSIDE, CA 92501

SURVEY DATE
MARCH 17, 2023

MAP/DRAWING DATE
MAY 4, 2023

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

DRAWN BY: VF

JOB No:

SHEET TITLE:

PRECISE GRADING AND DRAINAGE PLAN

HARADA HOUSE
3356 LEMON STREET
RIVERSIDE, CA 92501

GRADING:

1. ALL GRADING SHALL CONFORM TO THE RIVERSIDE MUNICIPAL CODE, TITLE 17 AND THE CURRENT CITY ADOPTED EDITION OF THE CALIFORNIA BUILDING CODE.

2. ALL PROVISIONS OF THE PRELIMINARY SOILS REPORT PREPARED BY _____, DATED _____ SHALL BE COMPLIED WITH DURING GRADING OPERATIONS. CITY BUSINESS TAX CERTIF. NO. _____, EXP. DATE _____.

3. THIS PLAN IS FOR GRADING PURPOSES ONLY AND IS NOT TO BE USED FOR THE PURPOSE OF CONSTRUCTING ON SITE OR OFF-SITE IMPROVEMENTS. ISSUANCE OF A PERMIT BASED ON THIS PLAN DOES NOT CONSTITUTE APPROVAL OF DRIVEWAY LOCATIONS OR SIZES, PARKING LOT STRUCTURAL SECTIONS OR LAYOUT, ADA-RELATED REQUIREMENTS, BUILDING LOCATIONS OR FOUNDATIONS, WALLS, CURBING, OFF-SITE DRAINAGE FACILITIES OR OTHER ITEMS NOT RELATED DIRECTLY TO THE BASIC GRADING OPERATION. ON-SITE IMPROVEMENTS SHALL BE CONSTRUCTED FROM APPROVED BUILDING PERMIT PLANS. OFF-SITE IMPROVEMENTS SHALL BE CONSTRUCTED FROM PLANS APPROVED FOR THIS PURPOSE BY THE PUBLIC WORKS DEPARTMENT.

4. CERTIFICATION FROM THE REGISTERED (CIVIL ENGINEER/ARCHITECT/LANDSCAPE ARCHITECT) STATING THAT THE GRADING HAS BEEN COMPLETED PER THE APPROVED PLAN, AND A COMPACTION REPORT FROM THE SOIL ENGINEER FOR FILL AREAS ARE REQUIRED PRIOR TO BUILDING PERMITS BEING ISSUED.

5. CONTRACTOR IS RESPONSIBLE FOR EROSION, DUST AND TEMPORARY DRAINAGE CONTROL DURING GRADING OPERATIONS.
   a. ALL MANUFACTURED SLOPES IN EXCESS OF 5 FEET IN VERTICAL HEIGHT ARE TO BE PROTECTED FROM EROSION DURING ROUGH GRADING OPERATIONS AND, THEREAFTER, UNTIL INSTALLATION OF FINAL GROUNDCOVER. (SEE LANDSCAPE PLANS FOR FINAL GROUNDCOVER).
   b. ALL SLOPE PROTECTION SWALES TO BE CONSTRUCTED AT THE SAME TIME AS BANKS ARE GRADED.
   c. THE DEVELOPER AND HIS CONTRACTOR ARE RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF THE EROSION CONTROL MEASURES SHOWN ON THIS PLAN AND SWPPP AND ALSO TO PROVIDE ANY ADDITIONAL EROSION CONTROL MEASURES (E.G., HYDROSEEDING, MULCHING OF STRAW, GRAVEL-BAGGING, DIVERSION DITCHES, RETENTION BASINS, ETC.) DICTATED BY FIELD CONDITIONS TO PREVENT EROSION AND/OR THE INTRODUCTION OF DIRT, MUD OR DEBRIS INTO EXISTING PUBLIC STREETS AND/OR ONTO ADJACENT PROPERTIES DURING ANY PHASE OF CONSTRUCTION OPERATIONS. SPECIAL ATTENTION SHALL BE GIVEN TO ADDITIONAL EROSION CONTROL MEASURES NOTED ABOVE DURING THE PERIOD OCTOBER 1 TO MAY 31.
   d. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK BERMS AND CHECK DAMS. SILT AND DEBRIS SHALL BE REMOVED FROM CITY OF RIVERSIDE STREETS. THIS REQUIREMENT SHALL REMAIN IN EFFECT UNTIL CITY ACCEPTANCE OF THIS PROJECT.

6. ANY ON-SITE RETAINING WALLS SHOWN ON THIS PLAN THAT ARE UNDER 3 FEET IN HEIGHT AND SUPPORT A SURCHARGE OR THAT ARE OVER 3 FEET IN HEIGHT REQUIRE SEPARATE REVIEW, APPROVAL AND A BUILDING PERMIT FROM THE BUILDING AND SAFETY DIVISION, COMMUNITY DEVELOPMENT DEPARTMENT. ANY NECESSARY RETAINING WALLS ON THE PERIMETER OF THIS SITE SHALL BE IN PLACE AND APPROVED BY THE BUILDING INSPECTOR PRIOR TO ISSUANCE OF THE GRADING PERMIT. APPROVED SEQUENCED GRADING WITH 1 1/2:1 MAXIMUM SLOPES TO WITHIN 2 FEET OF THE ADJACENT PROPERTY LINE MAY BE ACCEPTABLE TO ALLOW FOR ISSUANCE OF A GRADING PERMIT PRIOR TO COMPLETION OF ANY NECESSARY PERIMETER RETAINING WALLS. (IF NO RETAINING WALLS ARE SHOWN ON THE PLAN, DO NOT PUT THIS NOTE ON PLAN.)

7. ANY IMPROVEMENTS CONSTRUCTED IN THE PUBLIC RIGHT-OF-WAY WILL REQUIRE A SEPARATE CONSTRUCTION PERMIT AND INSPECTION FROM THE PUBLIC WORKS DEPARTMENT.

8. ANY WALLS, FENCES, STRUCTURES AND/OR APPURTENANCES ADJACENT TO THIS PROJECT ARE TO BE PROTECTED IN PLACE. IF GRADING OPERATIONS DAMAGE OR ADVERSELY AFFECT SAID ITEMS IN ANY WAY, THE CONTRACTOR AND/OR DEVELOPER IS RESPONSIBLE FOR WORKING OUT AN ACCEPTABLE SOLUTION TO THE SATISFACTION OF THE AFFECTED PROPERTY OWNER(S).

9. THE CONTRACTOR/DEVELOPER IS RESPONSIBLE FOR ENSURING THAT RETAINING WALLS DO NOT INTERFERE WITH PROVISION OF UTILITIES.

10. IT IS THE GRADING CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ADEQUATE COMPACTION HAS BEEN ATTAINED ON THE ENTIRE GRADING SITE, INCLUDING FILL AREAS OUTSIDE THE BUILDING PADS AND ON ALL FILL SLOPES.

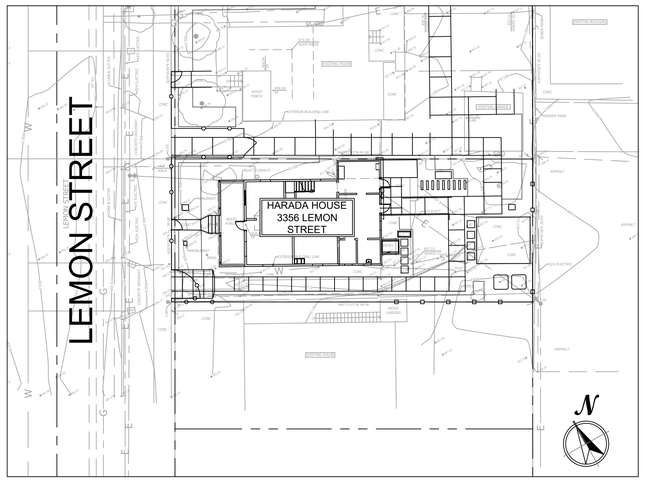
11. IT IS THE SOIL ENGINEER'S RESPONSIBILITY TO OBSERVE AND PERFORM COMPACTION TESTS DURING THE GRADING TO EVALUATE THE PREPARATION OF THE NATURAL GROUND SURFACE TO RECEIVE THE FILL AND THE COMPACTION ATTAINED IN THE FILL, INCLUDING FILL AREAS OUTSIDE THE BUILDING PADS AND ON ALL FILL SLOPES.

12. EARTHWORK QUANTITIES ARE SHOWN FOR GRADING PERMIT PURPOSES ONLY, AND THE CITY OF RIVERSIDE IS NOT RESPONSIBLE FOR THEIR ACCURACY.

13. FOR GRADING OF AREAS OF 1 ACRE OR MORE, A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE KEPT ON-SITE AND MADE AVAILABLE UPON REQUEST OF A REPRESENTATIVE OF THE REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) – SANTA ANA REGION AND/OR THE CITY OF RIVERSIDE.

14. GRADING OPERATIONS SHALL BE LIMITED TO BETWEEN THE HOURS OF 7 A.M. AND 7 P.M. ON WEEKDAYS AND BETWEEN 8 A.M. AND 5 P.M. ON SATURDAYS. NO GRADING WILL BE PERMITTED ON SUNDAY OR FEDERAL HOLIDAYS. (RIVERSIDE MUNICIPAL CODE, 7.35.010, ORDINANCE NO. 6273)

THE ABOVE ITEMS ARE THE MINIMUM INFORMATION REQUIRED FOR SUBMITTING A GRADING PLAN FOR REVIEW. THEREFORE, AFTER REVIEW, ADDITIONAL INFORMATION MAY STILL BE REQUIRED. IN SOME CASES, THE GRADING PLAN WILL BE SUBJECTED TO ENVIRONMENTAL REVIEW PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT. THE PLANNING DIVISION, COMMUNITY DEVELOPMENT DEPARTMENT WILL PERFORM THE ENVIRONMENTAL REVIEW AND WILL INFORM THE APPLICANT IF ADDITIONAL INFORMATION WILL BE REQUIRED.



"STOCKPILING ONLY" GRADING PLANS:

"STOCKPILING ONLY" PLANS WILL BE REVIEWED WITH THE SAME REQUIREMENTS AS REGULAR GRADING PLANS WITH THE FOLLOWING CHANGES.

1. UNLESS OTHERWISE APPROVED, STOCKPILING PERMITS WILL BE ISSUED FOR A PERIOD OF ONE YEAR ONLY. ALL STOCKPILED MATERIAL MUST BE REMOVED PRIOR TO EXPIRATION OF THE PERMIT, OR PROPERLY GRADED AND COMPACTED ON-SITE. A SEPARATE GRADING PLAN AND PERMIT WITH SOILS REPORT IS REQUIRED FOR EITHER CASE UNLESS MATERIAL IS REMOVED OUTSIDE OF THE CITY LIMITS.
2. A PRELIMINARY SOILS REPORT IS NOT REQUIRED FOR REVIEW OF "STOCKPILING ONLY" PLANS.
3. UNLESS OTHERWISE APPROVED, STOCKPILING IS LIMITED TO A MAXIMUM HEIGHT OF 5 FEET FROM EXISTING GROUND ELEVATIONS. (LESS THAN 5 FEET MAY BE REQUIRED SUBJECT TO PLANNING DIVISION, COMMUNITY DEVELOPMENT DEPARTMENT REVIEW.)
4. TOE OF SLOPES TO BE LOCATED A MINIMUM OF 10 FEET FROM ANY PROPERTY LINES.
5. EROSION, DUST AND DRAINAGE CONTROL TO BE MAINTAINED AT ALL TIMES FOR THE DURATION OF THE STOCKPILING. (NOT JUST DURING PLACEMENT OF THE MATERIAL.)

OWNER'S INFORMATION:

NAME: CITY OF RIVERSIDE
ADDRESS: 3900 MAIN STREET
RIVERSIDE, CA 92522
PHONE NUMBER:
EMAIL ADDRESS:

SITE INFORMATION:

ADDRESS:

APN: 213-121-005

LEGAL DESCRIPTION:
THAT PORTION OF BLOCK 3, RANGE 4 OF THE TOWN OF RIVERSIDE, AS SHOWN BY MAP ON FILE IN BOOK 7, PAGE 17 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT ON THE EASTE:RLY LINE OF LEMON STREET, 125 FEET NORTHERLY FROM THE SOUTHWESTERLY CORNER OF SAID BLOCK 3, RANGE 4; THENCE RUNNING AT RIGHT ANGLES EASTERLY, PARALLEL WITH THE NORTHERLY LINE OF FOURTH STREET, 100 FEET; THENCE AT RIGHT ANGLES NORTHERLY AND PARALLEL WITH THE EASTERLY LINE OF LEMON STREET, 40 FEET; THENCE AT RIGHT ANGLES WESTERLY, PARALLEL WITH THE NORTHERLY LINE OF FOURTH STREET, 100 FEET TO THE EASTERLY LINE OF LEMON STREET; THENCE AT RIGHT ANGLES SOUTHERLY ALONG THE EASTERLY LINE OF LEMON STREET, 40 FEET TO THE POINT OF COMMENCEMENT.

SITE ACREAGE: 0.17 ACRES

VICINITY MAP
RIVERSIDE COUNTY
THOMAS GUIDE PAGE 685 GRID H4

LEGEND AND SYMBOLS:

PROPERTY LINE	——— – – ———
CENTERLINE	——— – ———
STORM DRAIN	——— SD ———
SUB DRAIN	——— SUB ———
RIDGE LINE	——— R ———
FLOW LINE	——— · · ———
REMOVE AND RECOMPACTION	- - - - - - - - - - - -
PROP ELEVATION	52.39
EXIST ELEVATION	52.39

ABBREVIATIONS:

BW	BOTTOM OF WALL
EXIST	EXISTING
EG	EDGE OF GUTTER
FG	FINISHED GRADE
FS	FINISHED SURFACE
FL	FLOW LINE
HP	HIGH POINT
INV	INVERT
LF	LINEAR FEET
LP	LOW POINT
PROP	PROPOSED
ROW	RIGHT OF WAY
SD	STORM DRAIN
SPPWC	STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
STD	STANDARD
TC	TOP OF CURB
TG	TOP OF GRATE

SHEET INDEX

SHEET NO.	DESCRIPTION
C1	TITLE SHEET AND GENERAL NOTES
C2	PRECISE GRADING PLAN
C2.1	CROSS SECTIONS
C3	EROSION CONTROL DETAILS

CIVIL ENGINEER:

COMPANY NAME: C.W. HOWE PARTNERS, INC.
OWNER/ENGINEER: KATHERINE BAAD, P.E.
ADDRESS: 4358 SEPULVEDA BLVD
CULVER CITY, CA 90230
PHONE NUMBER: 310-838-0383
EMAIL ADDRESS: OFFICE@CWHOWE.COM
BUSINESS TAX ID:
EXPIRATION DATE;

SOILS ENGINEER:

COMPANY NAME: JOHN R. BYERLY, INC
OWNER/ENGINEER;
ADDRESS: 2257 SOUTH LILAC AVE.
BLOOMINGTON, CA 92316-2903
PHONE NUMBER: 909-877-1324
EMAIL ADDRESS:
BUSINESS TAX ID:
EXPIRATION DATE;

CASE NUMBERS:

PLANNING CASE:
WQMP:
STREET IMPROVEMENTS:
STORM DRAIN IMPROVEMENTS:
SEWER IMPROVEMENTS:

EARTHWORK QUANTITIES	
CUT (RAW)	81.7 CY
FILL (RAW)	18 CY
GROSS AREA	3,998 SF
DISTURBED AREA	3,481 SF

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KRdesign inc.
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Owner

Revisions

Drawn by: JAA / EF
Checked by:

Professional's Stamp
REGISTERED PROFESSIONAL ENGINEER JOHN R. BYERLY No. 27827 CIVIL STATE OF CALIFORNIA
NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE PHASE 2

Sheet Title
TITLE SHEET AND GENERAL NOTES

Design Stage
CONSTRUCTION DEVELOPMENT

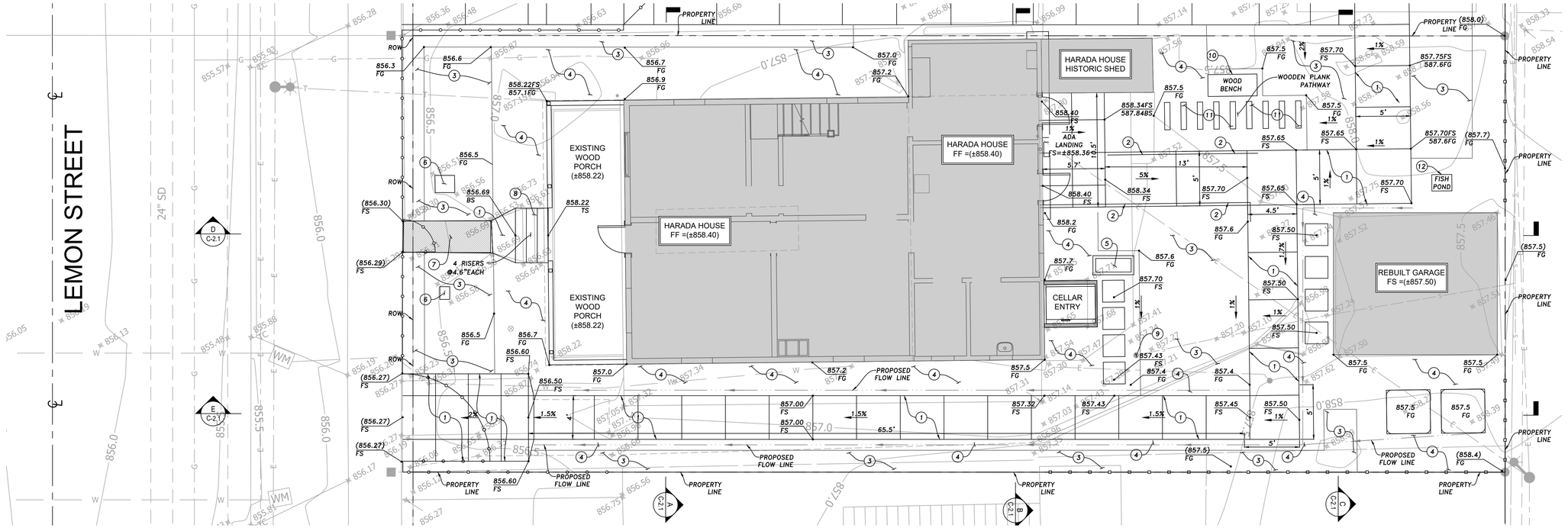
Project Address
3356 & 3342
Lemon Street
Riverside, CA
92501

Scale
1 inch = 5 ft.

Date

Sheet Number
C1

TITLE SHEETS-HARADA.DWG

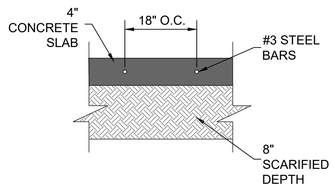


NOTES:

1. REGISTERED DEPUTY GRADING INSPECTOR IS REQUIRED ON GRADING AND FOUNDATION EARTHWORK WHERE SITE EXCEEDS 60,000 SF, CUT OR FILL SLOPES EXCEED 2:1, CUTS EXCEED 40 FT IN HEIGHT AND WITHIN 20 FT OF A PROPERTY LINE, PROJECTS INVOLVE UNUSUAL HAZARDS, SHORING WORK INCLUDING SLOT CUTS.
2. SURVEY SHOWN WAS USED AS A BASIS FOR THIS PLAN AND DESIGN. CONTRACTOR SHOULD VERIFY ALL ELEVATIONS PROPOSED AND EXISTING PRIOR TO CONSTRUCTION AND NOTIFY THIS OFFICE OF ANY DISCREPANCIES.
3. RETAINING WALLS TO BE CONSTRUCTED PER SEPARATE PERMIT.
4. CONTRACTOR SHALL TO THE BEST OF THEIR ABILITIES SHALL INCLUDE THE MINIMUM REQUIREMENTS FOR CONSTRUCTION PROJECTS BY IMPLEMENTING THE BEST MANAGEMENT PRACTICES AS DETAILED IN THE BMP HANDBOOK AND ADOPTED BY THE CITY OF RIVERSIDE.
5. DIRECT ALL ROOF DRAINAGE VIA GRAVITY FLOW AND OUTLET THRU AN APPROVED DEVICE TO AN APPROVED LOCATION.
6. CONTRACTOR TO ALLOW FOR DEMOLITION AND REPLACEMENT OF EXISTING SIDEWALK, CURB AND GUTTER ALONG PROPERTY LINES IF DAMAGED AT LEMON STREET.
7. ALL DAMAGED OR OFF-GRADE CURB, GUTTER, SIDEWALK, DRIVEWAY APPROACH OR A.C. PAVEMENT SHALL BE REPAIRED OR REPLACED.
8. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRES A PUBLIC WORKS PERMIT.
9. CONTRACTOR SHALL PROVIDE A COPY OF PERMIT FROM CALIFORNIA DIVISION OF INDUSTRIAL SAFETY FOR EXCAVATIONS OR TRENCHES OVER 5 FEET VERTICAL CUTS OR WORK THAT MAY JEOPARDIZE WORKERS.
10. DECORATIVE CONCRETE AND HARDSCAPE PER ARCHITECTURAL PLANS.
11. DIMENSIONAL CONTROL PLAN AND STRIPING PLAN PER ARCHITECTURAL PLANS.
12. A PRECONSTRUCTION CONFERENCE SHOULD BE HELD AT THE SITE PRIOR TO THE BEGINNING OF GRADING OPERATIONS WITH THE OWNER, CONTRACTOR, CIVIL ENGINEER AND GEOTECHNICAL ENGINEER IN ATTENDANCE. SPECIAL SOIL HANDLING REQUIREMENTS CAN BE DISCUSSED AT THAT TIME.
13. GRADING SHOULD COMMENCE WITH THE REMOVAL OF ALL EXISTING VEGETATION AND EXISTING IMPROVEMENTS FROM THE AREA TO BE GRADED. ALL EXISTING UNDERGROUND IMPROVEMENTS PLANNED FOR REMOVAL SHOULD BE COMPLETELY EXCAVATED AND THE RESULTING DEPRESSIONS PROPERLY BACKFILLED. DELETERIOUS DEBRIS SUCH AS WOOD AND ROOT STRUCTURES SHOULD BE EXPORTED FROM THE SITE SHOULD NOT BE MIXED WITH THE FILL SOILS. ASPHALT AND CONCRETE SHOULD NOT BE MIXED WITH THE FILL SOILS UNLESS APPROVED BY THE GEOTECHNICAL ENGINEER.
14. POTABLE WATER AND SEWER CONNECTIONS PER CONCEPTUAL PLUMBING PLANS.
15. SEWER CONNECTION ON PUBLIC RIGHT-OF-WAY SHALL REQUIRE A SEPARATE PERMIT FROM ENGINEERING DIVISION.
16. UTILITY TRENCHES SHOULD BE PROPERLY BACKFILLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GREEN BOOK (LATEST EDITION). THE PIPE SHOULD BE BEDDED WITH CLEAN SANDS (SAND EQUIVALENT GREATER THAN 30) TO A DEPTH OF AT LEAST ONE FOOT OVER THE PIPE. THE USE OF GRAVEL IS NOT ACCEPTABLE UNLESS USED IN CONJUNCTION WITH FILTER FABRIC. THE REMAINDER OF THE TRENCH BACKFILL MAY BE DERIVED FROM ONSITE SOIL OR APPROVED IMPORT SOIL, COMPACTED AS NECESSARY, UNTIL THE REQUIRED COMPACTION IS OBTAINED.
17. ALL TRENCH AND FOUNDATION EXCAVATION BOTTOMS MUST BE OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER (A REPRESENTATIVE OF_____), PRIOR TO PLACING BEDDING SANDS, FILL, STEEL, GRAVEL OR CONCRETE.

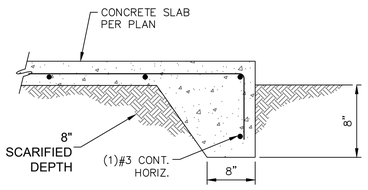
CONSTRUCTION NOTES:

1. PROPOSED CONCRETE WALKWAYS. 4" THICK SLAB WITH #3 REBAR PLACED 16" O.C. EACH WAY AT MID DEPTH. CONTRACTOR TO SCARIFY MINIMUM 8-INCHES BELOW EXISTING GRADE.
2. PROPOSED WALL AND GUARD RAIL PER DETAIL HERE ON.
3. PROPOSED LANDSCAPE PLANTING PER LANDSCAPE PLANS.
4. PROPOSED GRAVEL LANDSCAPE FEATURE. DEPTH OF GRAVEL PER PLAN.
5. PROPOSED PLANTER FEATURE PER LANDSCAPE PLANS.
6. EXISTING MONUMENT SIGNS TO BE REINSTALLED ON RAISED PEDESTAL.
7. PROTECT-IN-PLACE. CONCRETE PATH WITH PAW PRINTS. CONTRACTOR TO PRESERVE CONCRETE SLAB
8. PROPOSED DECK STAIRS PER STRUCTURAL PLANS. BOTTOM LANDING TO BE JOINED TO EXISTING CONCRETE PATH.
9. EXISTING SEWER CLEANOUT TO BE PROTECTED-IN-PLACE.
10. PROPOSED WOOD BENCH TO BE INSTALLED PER LANDSCAPE PLANS.
11. EXISTING WOOD PLANK AND BLACK STONE FEATURE TO BE PROTECTED-IN-PLACE AND REINSTALLED OR REPAIRED AS REQUIRED.
12. PROPOSED FISH POND TO BE INSTALLED PER LANDSCAPE PLAN.

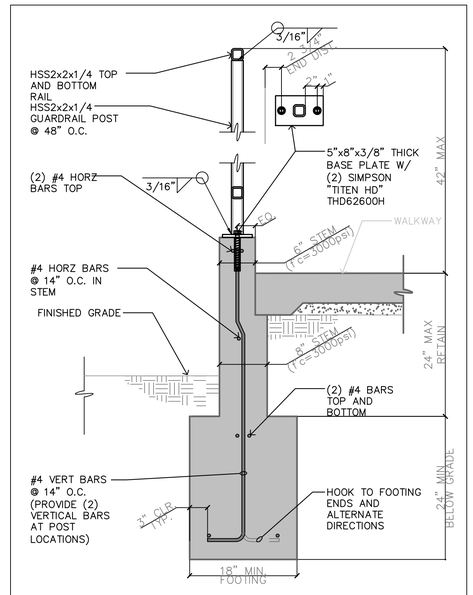


NOTE:
CONSTRUCT 4" PCC SITE WALKWAY WITH #3 BARS PLACED 16" ON CENTER AT MID DEPTH OVER 8" OF SCARIFIED DEPTH PER GEOTECHNICAL REPORT NO. 7691 PAGE 8-11

CONCRETE WALKWAY DETAIL 1



CONCRTE WALKWAY DETAIL 2



WALL AT RAMP W/ GUARDRAIL | 1

NORTH ARROW:

GRAPHIC SCALE
0 5 10
1 inch = 5 ft. (IN FEET)

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Checked by:

Professional's Stamp

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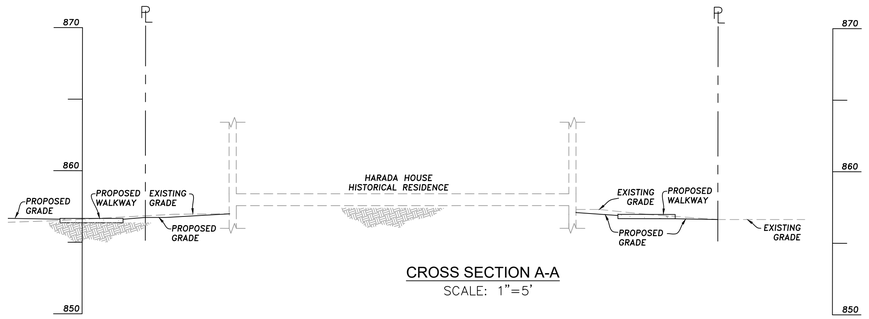
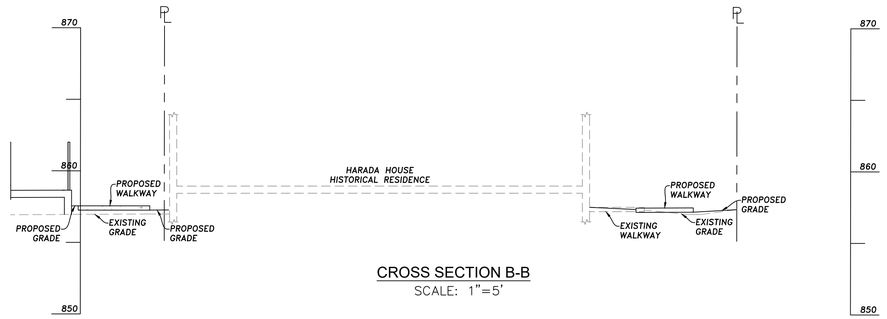
Sheet Number
C2

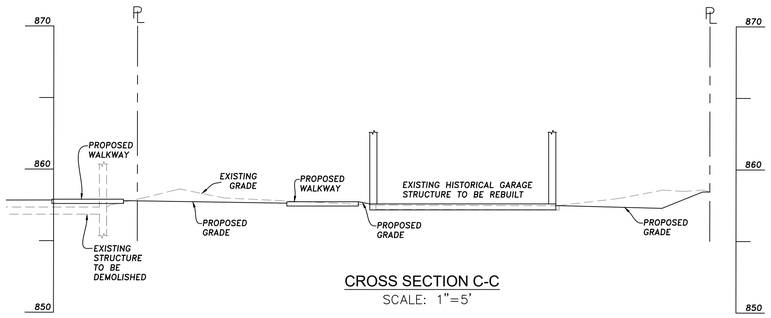
PRECISE GRADING PLAN.DWG



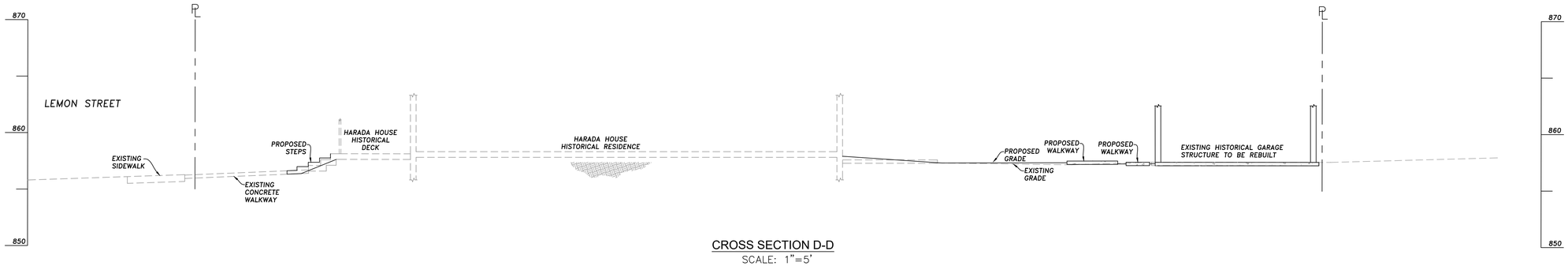
CROSS SECTION A-A
SCALE: 1"=5'



CROSS SECTION B-B
SCALE: 1"=5'



CROSS SECTION C-C
SCALE: 1"=5'



CROSS SECTION D-D
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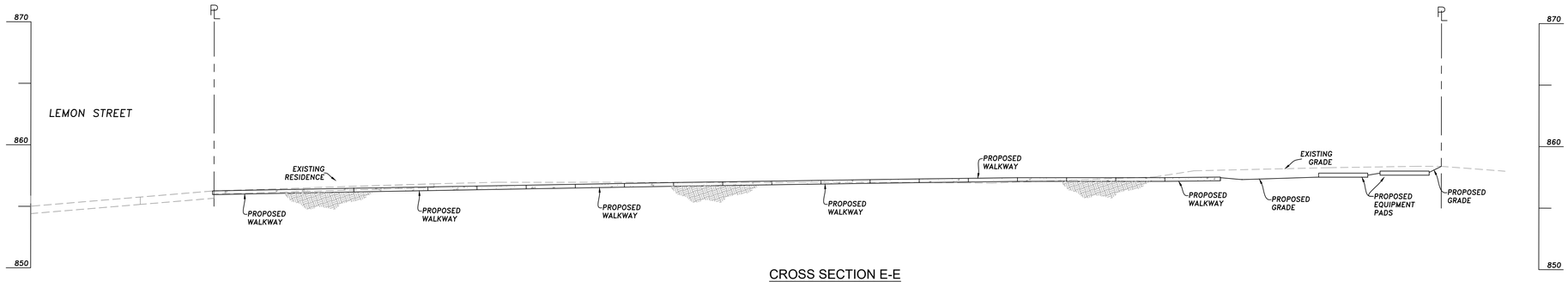

CROSS SECTION E-E
SCALE: 1"=5'

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REGISTERED PROFESSIONAL ENGINEER
TIMOTHY E. FOLEY
EXP. 6/30/27
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STATE OF CALIFORNIA

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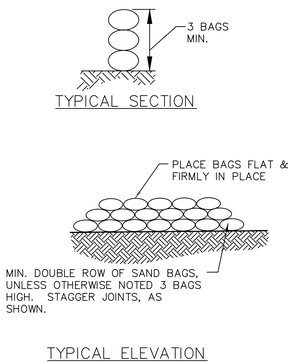
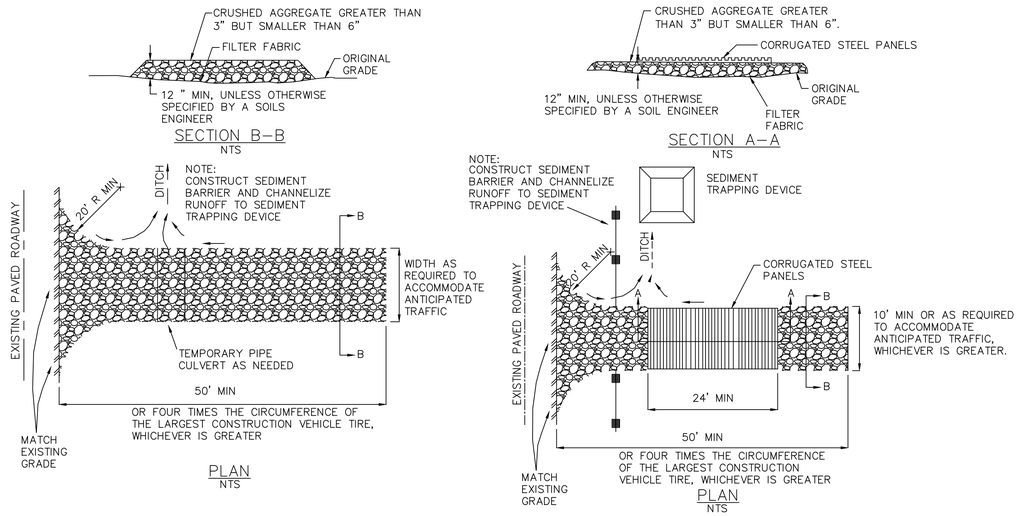
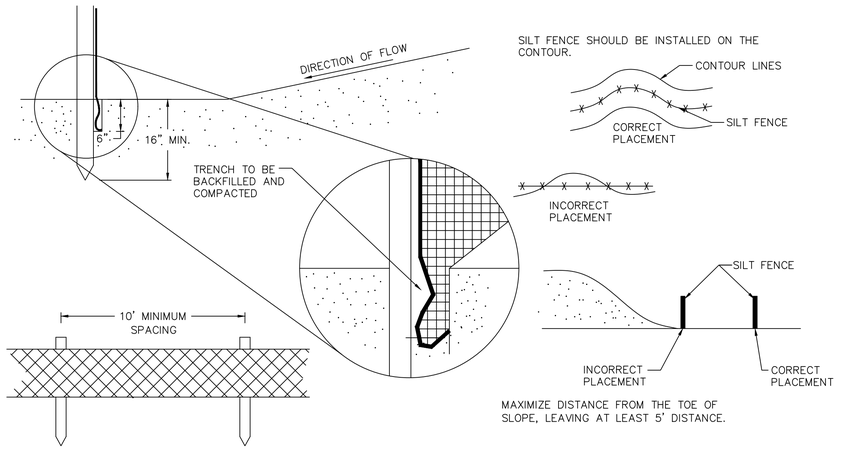
PRECISE GRADING PLAN.DWG



SE-8 SAND BAG BARRIER



TC-1 STABILIZED CONSTRUCTION ENTRANCE



SILT FENCE SPECIFICATIONS

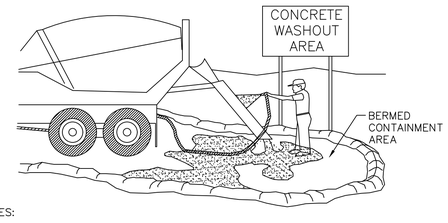
1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.
4. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FT. (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 IN. ABOVE THE ORIGINAL GROUND SURFACE.
7. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM OF 6 IN. DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL ENSURE ADEQUATE UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT THE 8 IN. OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6-IN. DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED.
9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
10. MAINTENANCE – SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE: 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 3) OTHER PRACTICES SHALL BE INSTALLED.

CRITERIA FOR SILT FENCE MATERIALS

1. FENCE POSTS – THE LENGTH SHALL BE A MINIMUM OF 32 IN. LONG. WOOD POSTS WILL BE 2 BY 2 IN. HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT.
2. SILT FENCE FABRIC (SEE CHART BELOW)

FABRIC PROPERTIES	VALUES	TEST METHOD
GRAB TENSILE STRENGTH	90 LB. MINIMUM	ASTM D 1682
MULLEN BURST STRENGTH	190 PSI MINIMUM	ASTM D 3786
SLURRY FLOW RATE	0.3 GAL/MIN/FT MAXIMUM	
EQUIVALENT OPENING SIZE	40-80	US STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY	90% MINIMUM	ASTM-G-26

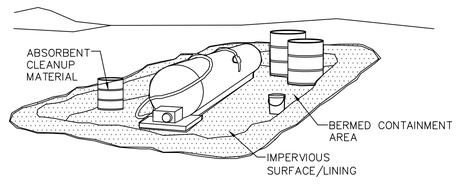
SE-1 SILT FENCE



NOTES:

1. EXCESS AND WASTE CONCRETE SHALL NOT BE WASHED INTO THE STREET OR INTO A DRAINAGE SYSTEM.
2. FOR WASHOUT OF CONCRETE AND MORTAR PRODUCTS, A DESIGNATED CONTAINMENT FACILITY OF SUFFICIENT CAPACITY TO RETAIN LIQUID AND SOLID WASTE SHALL BE PROVIDED ON SITE.
3. SLURRY FROM CONCRETE AND ASPHALT SAW CUTTING SHALL BE VACUUMED OR CONTAINED, DRIED, PICKED UP AND DISPOSED OF PROPERLY.
4. CONCRETE WASHOUT AREA SHALL BE LINED WITH A MINIMUM 10 MIL. POLYETHYLENE SHEETING. REFER TO BMP #WM-8 FROM THE 2003 CALIFORNIA CONSTRUCTION BMP HANDBOOK

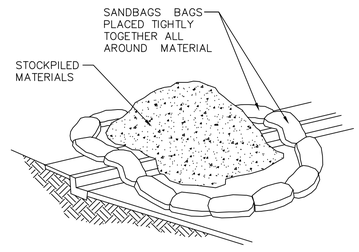
NS-10 CONCRETE WASTE MANAGEMENT



NOTES:

1. FUELING SHALL BE PERFORMED IN A DESIGNATED AREA, AWAY FROM DRAINAGE COURSES.
2. ABSORBENT CLEANUP MATERIAL SHALL BE ON SITE AND USED IMMEDIATELY IN THE EVENT OF A SPILL.

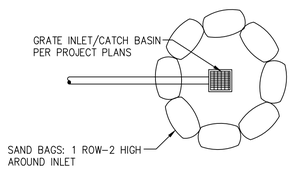
NS-9 VEHICLE/EQUIPMENT FUELING

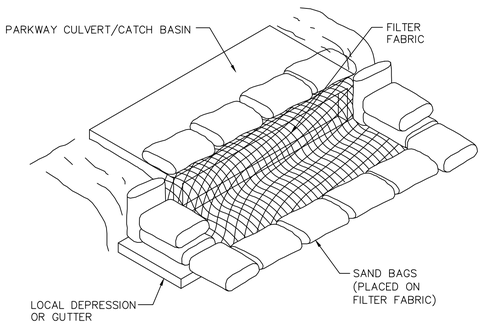


NOTES:

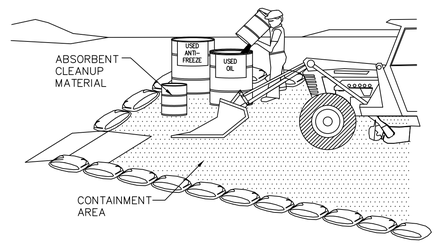
1. DIRT AND OTHER CONSTRUCTION RELATED MATERIALS PLACED IN THE STREET OR ON OTHER IMPERVIOUS SURFACES MUST BE CONTAINED WITH SANDBAGS OR OTHER MEASURES TO PREVENT TRANSPORT TO THE STORMDRAIN SYSTEM.
2. ANY CONSTRUCTION MATERIAL STORED OR STOCKPILED ON-SITE SHALL BE PROTECTED FROM BEING TRANSPORTED BY THE FORCE OF WIND OR WATER.

MATERIAL STORAGE





SE-10 DRAIN INLET PROTECTION



NOTES:

1. LEAKING VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED ON-SITE. EQUIPMENT AND VEHICLES SHALL BE INSPECTED FREQUENTLY FOR LEAKS AND SHALL BE REPAIRED IMMEDIATELY. CLEAN UP SPILLS AND LEAKS PROMPTLY WITH ABSORBENT MATERIALS; DO NOT FLUSH WITH WATER.
2. VEHICLES AND EQUIPMENT SHALL BE MAINTAINED, AND REPAIRED, ON-SITE ONLY IN DESIGNATED AREAS. PREVENT RUN-ON AND RUN-OFF FROM DESIGNATED AREAS. CONTAINMENT DEVICES SHALL BE PROVIDED AND AREAS SHALL BE COVERED IF NECESSARY.
3. DESIGNATE ON-SITE VEHICLE AND EQUIPMENT MAINTENANCE AREAS, AWAY FROM STORM DRAIN INLETS AND WATER COURSES.
4. ALWAYS USE SECONDARY CONTAINMENT, SUCH AS A DRAIN PAN OR DROP CLOTH, TO CATCH SPILLS AND LEAKS WHEN REMOVING OR CHANGING FLUIDS.
5. LEGALLY DISPOSE OF USED OILS, FLUIDS, AND LUBRICANTS.
6. PROVIDE SPILL CONTAINMENT DIKES OR SECONDARY CONTAINMENT AROUND STORED OIL, FUEL, AND CHEMICAL DRUMS.
7. MAINTAIN AN ADEQUATE SUPPLY OF ABSORBENT SPILL CLEANUP MATERIALS IN DESIGNATED AREA.

NS-10 EQUIPMENT REPAIR/MAINTENANCE

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REGISTERED PROFESSIONAL ENGINEER — MATTHEW I. ADAMS — No. 21 — EXP. 12/31/27 — CIVIL — STATE OF CALIFORNIA

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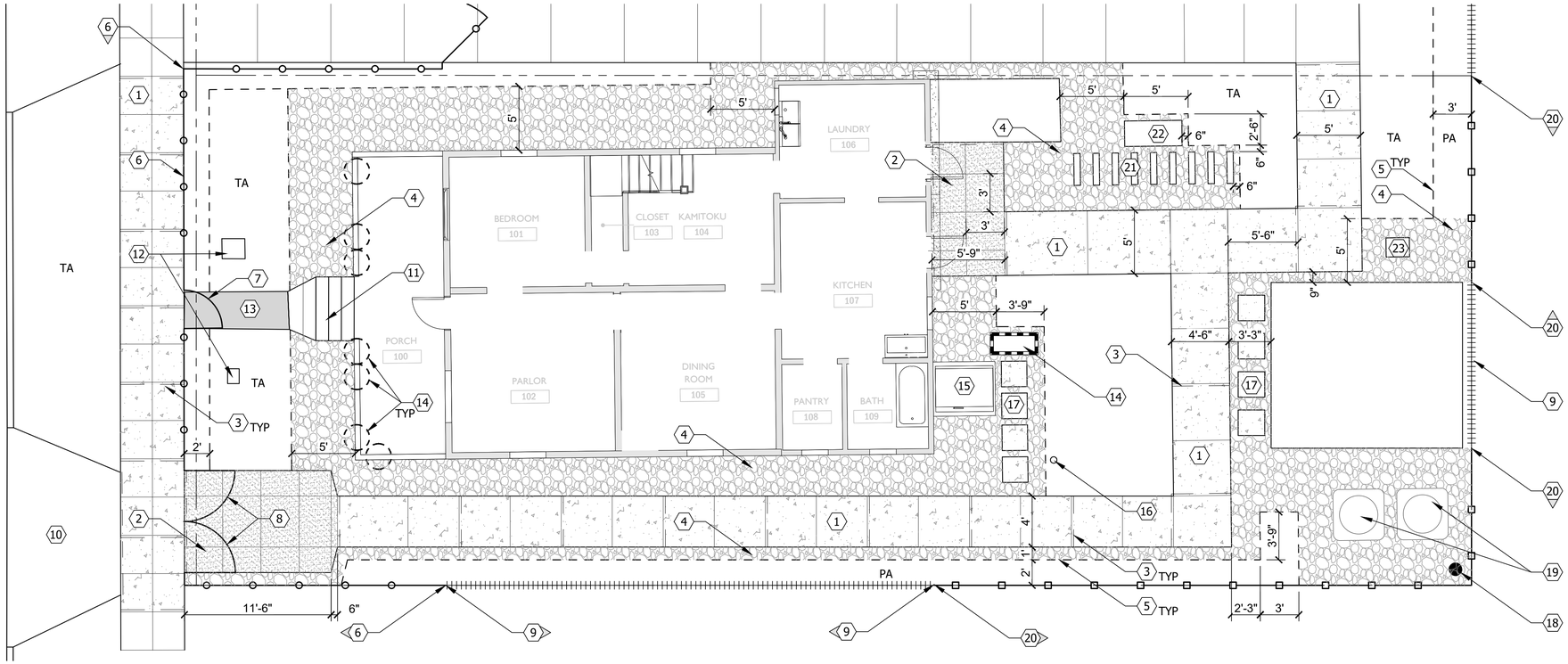
EROSION-HH.DWG

LEMON STREET



CONSTRUCTION LEGEND

BID STATUS	SYM.	QTY.	DESCRIPTION	REMARKS/DETAIL
BASE BID	1	761 SF	CONSTRUCT 4" THICK NATURAL GRAY CONCRETE WITH MEDIUM BROOM FINISH AND 30"O.C. SCORE JOINTS AS SHOWN.	DETAIL 'A', SHEET L-4
BASE BID	2	155 SF	CONSTRUCT 4" THICK NATURAL GRAY CONCRETE WITH ACID ETCH FINISH AND SCORE JOINTS AS SHOWN.	DETAIL 'A', SHEET L-4
BASE BID	3	134 LF	1/2" THICK EXPANSION JOINT	DETAIL 'A', SHEET L-4
BASE BID	4	986 SF	3" THICK LAYER OF 1"-2"DIA. DECORATIVE ROCK, MEXICAN SUNBURST AVAILABLE FROM DECORATIVE STONE SOLUTIONS, 800-699-1878	DETAIL 'B', SHEET L-4
BASE BID	5	239 LF	FURNISH AND INSTALL 3/16" X 4" PERMASTRIP ALUMINUM EDGING WITH BRONZE DURAFLEX FINISH. AVAILABLE THROUGH PERMALOC EDGING 800-356-9660	DETAIL 'C', SHEET L-4 INSTALL PER MANUFACTURER'S RECOMMENDATIONS
BASE BID	6	52 LF	FURNISH AND INSTALL 36" TALL CLASSIC WROUGHT IRON FENCE, TRADITIONAL GRADE - COLOR: BLACK. AVAILABLE THROUGH IRON FENCE SHOP 800-261-2729. ALLOW 12-16 WEEK LEAD TIME.	DETAIL 'D', SHEET L-4 INSTALL PER MANUFACTURER'S RECOMMENDATIONS
BASE BID	7	1 EA	FURNISH AND INSTALL CUSTOM 36" WIDE x 36" TALL CLASSIC WROUGHT IRON GATE, TRADITIONAL GRADE - COLOR: BLACK. AVAILABLE THROUGH IRON FENCE SHOP 800-261-2729. ALLOW 12-16 WEEK LEAD TIME.	DETAIL 'E', SHEET L-4 INSTALL PER MANUFACTURER'S RECOMMENDATIONS
BASE BID	8	1EA	FURNISH AND INSTALL (2) 4 FT WIDE x 36" TALL CLASSIC WROUGHT IRON GATE, TRADITIONAL GRADE - COLOR: BLACK. AVAILABLE THROUGH IRON FENCE SHOP 800-261-2729. ALLOW 12-16 WEEK LEAD TIME.	DETAIL 'E', SHEET L-4 INSTALL PER MANUFACTURER'S RECOMMENDATIONS
BASE BID	9	52 LF	FURNISH AND INSTALL 6 FT TALL REDWOOD PERIMETER FENCE.	DETAIL 'F', SHEET L-4
BASE BID	10	--	EXISTING DRIVE APRON TO REMAIN	FOR REFERENCE ONLY
BASE BID	11	--	WOOD STEPS	PER ARCHITECT'S PLANS
BASE BID	12	--	EXISTING MONUMENT SIGNS TO REMAIN	FOR REFERENCE ONLY
BASE BID	13	--	EXISTING CONCRETE PAVING WITH IMPRINTS, TO REMAIN	FOR REFERENCE ONLY

CONSTRUCTION LEGEND (CONT)

BID STATUS	SYM.	QTY.	DESCRIPTION	REMARKS/DETAIL
BASE BID	14	REFER TO PLANTING PLAN	FURNISH AND INSTALL POTTERY. REFER TO PLANTING PLAN POT SCHEDULE FOR MAKE AND MODEL	REFER TO SHEET L-3 FOR POT SCHEDULE
BASE BID	15	--	EXISTING CELLAR ACCESS, TO REMAIN	FOR REFERENCE ONLY
BASE BID	16	--	EXISTING SEWER CLEAN OUT TO REMAIN	FOR REFERENCE ONLY
BASE BID	17	8 EA	CONSTRUCT 24"SQ X 4" THICK NATURAL GRAY CONCRETE PADS WITH MEDIUM BROOM FINISH.	DETAIL 'A', SHEET L-4
BASE BID	18	--	RELOCATED SECURITY CAMERA	FOR REFERENCE ONLY
BASE BID	19	--	PROPOSED AIR CONDITIONER CONDENSERS	FOR REFERENCE ONLY
BASE BID	20	70 SF	FURNISH AND INSTALL 6 FT TALL DARK WOOD LATTICE FENCE, CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION	DETAIL 'G', SHEET L-4
BASE BID	21	--	EXISTING WOOD PLANK WALKWAY WITH BLACK PEBBLES, TO REMAIN	FOR REFERENCE ONLY
BASE BID	22	--	EXISTING BENCH TO BE RETRIEVED FROM STORAGE, AND SET LEVEL ON 4" THICK CONCRETE PAD	FOR REFERENCE ONLY
BASE BID	23	--	EXISTING GOLDFISH POND TO BE RETRIEVED FROM STORAGE, AND SET LEVEL ON 4" THICK CONCRETE PAD	FOR REFERENCE ONLY

QUANTITIES ARE GIVEN FOR ESTIMATING PURPOSES ONLY. CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING MATERIAL IN ALL AREAS AS DESIGNATED ON PLAN AT NO ADDITIONAL COST TO THE OWNER.

PA = PLANTING AREA
TA = TURF/GRASS AREA

PLAN CROSS REFERENCE:

FOR CORRESPONDING IRRIGATION PLAN, REFER TO SHEET L-2
FOR CORRESPONDING PLANTING PLAN, REFER TO SHEET L-3
FOR CORRESPONDING CONSTRUCTION DETAILS, REFER TO SHEETS L-4

0' 5' 10' 15'

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Owner
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MUSEUM OF RIVERSIDE

Revisions

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Checked by:

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NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE PHASE 2

Sheet Title
CONSTRUCTION PLAN

Design Stage
50% PROGRESS CONSTRUCTION DOCUMENTS

Project Address
3356 Lemon Street
Riverside, CA
92501

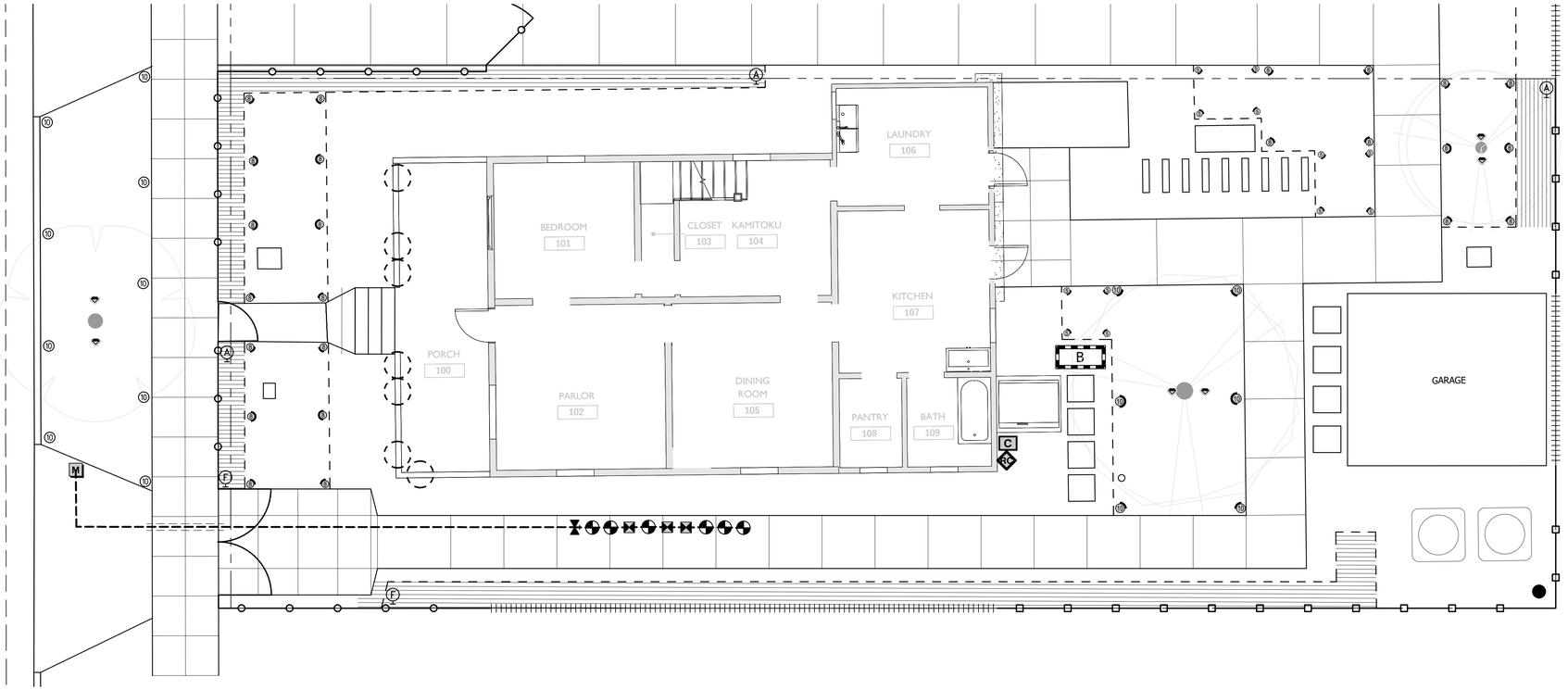
Scale
1"=5'-0"

Date
November 20, 2025

Sheet Number
L-1

25107_CP.DWG

LEMON STREET



IRRIGATION NOTES:

1. LANDSCAPE CONTRACTOR TO VERIFY ALL EXISTING UTILITIES ON JOBSITE PRIOR TO START OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED BY HIS WORK.
2. CONTRACTOR TO PROVIDE CHECK VALVES AT ALL LOW HEAD DRAINAGE LOCATIONS.
3. FINAL UTILITY LOCATIONS TO BE PROVIDED BY UTILITY CONSULTANT. CONTRACTOR TO ADJUST IRRIGATION AROUND THESE STRUCTURES, AS NEEDED.
4. REFER TO SHEETS L-5~6 FOR IRRIGATION DETAILS.
5. CONTRACTOR TO REROUTE IRRIGATION LATERALS AROUND UTILITY VAULTS AS REQUIRED
6. CONTRACTOR LOCATE WEATHER SENSOR ON SOUTH OR WEST FACING WALL.
7. CONTROLLER AND WEATHER SENSOR SHALL BE CONNECTED AND IN OPERATING CONDITION PRIOR TO FINAL INSPECTION.
8. LOCATION OF IRRIGATION LINES AND SYMBOLS ARE DIAGRAMMATIC. ALL IRRIGATION SHALL BE PLACED IN PLANTING AREA EXCEPT WHEN CROSSING PAVEMENT.
9. LOCATION OF IRRIGATION CONTROLLERS TO BE COORDINATED WITH THE MUSEUM.
10. NO CHANGES OR SUBSTITUTIONS TO BE MADE WITHOUT REVISION TO THE PLANS AND APPROVED BY THE CITY OF RIVERSIDE.
11. CONTROLLER AND WEATHER SENSOR SHALL BE CONNECTED AND IN OPERATING CONDITION PRIOR TO FINAL INSPECTION.
12. PRIOR TO BACKFILLING, THE PARTY RESPONSIBLE FOR IRRIGATION INSTALLATION SHALL CONDUCT A PRELIMINARY FIELD INSPECTION OF THE IRRIGATION SYSTEM.
13. AFTER PROJECT INSTALLATION AN AUDIT SHALL BE CONDUCTED BY A CERTIFIED IRRIGATION AUDITOR AND FINDINGS STATED IN A REPORT.
14. POP-UP SPRAY HEADS TO BE LOCATED 24" AWAY FROM HARDSCAPE

DRIP INSTALLATION NOTES:

1. DRIPLINE EMITTERS AND SPACING BETWEEN LINES AS PER IRRIGATION LEGEND.
2. LOCATE FLUSH VALVE AT LOWEST POINTS OF SYSTEM. INSTALL IN PLANTER AREA. SEE FLUSH VALVE DETAIL FOR INSTALLATION.
3. CONNECT DRIPLINE TO PVC WITH PVC TEES AND COMPRESSION FITTINGS. USE COMPRESSION FITTINGS FOR ALL PVC-TO-DRIPLINE CONNECTIONS. GLUE ALL PVC-TO-PVC CONNECTIONS.

NOTE REGARDING SOIL TYPE AND INFILTRATION RATE:

1. PRIOR TO THE INSTALLATION OF THE IRRIGATION, CONTRACTOR IS TO COMMISSION AN AGRONOMIC SOILS REPORT THAT WILL PROVIDE INFORMATION ON THE SITE SOIL TYPE AND WATER INFILTRATION RATE.
2. SUBMIT A COPY OF THE SOILS REPORT TO RHA LANDSCAPE ARCHITECTS.
3. IF THE SITE SOIL INFILTRATION IS LESS THAN 0.45" PER HOUR, CONTRACTOR IS TO CONTACT RHA LANDSCAPE ARCHITECTS FOR ANY DIRECTION REGARDING NECESSARY CHANGES TO THE IRRIGATION DESIGN, EQUIPMENT SPECIFIED OR RUN TIME SCHEDULING PRIOR TO THE START OF THE IRRIGATION INSTALLATION.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI	DETAIL
Q H F	HUNTER PROS-04-PRS30-CV-F 5 SERIES TURF SPRAY, 30 PSI REGULATED 4IN. POP-UP WITH DRAIN CHECK VALVE & FLOGUARD.	30	G/L-5
Q T H F	HUNTER PROS-04-PRS30-CV-F 8 SERIES TURF SPRAY, 30 PSI REGULATED 4IN. POP-UP WITH DRAIN CHECK VALVE & FLOGUARD.	30	G/L-5
Q T H F	HUNTER PROS-04-PRS30-CV-F 10 SERIES TURF SPRAY, 30 PSI REGULATED 4IN. POP-UP WITH DRAIN CHECK VALVE & FLOGUARD.	30	G/L-5
④ ⑥ ⑧ ⑩ ⑫ ⑮ ⑰	HUNTER PROS-04-PRS30-CV-F ADJ SERIES TURF SPRAY, 30 PSI REGULATED 4IN. POP-UP WITH DRAIN CHECK VALVE & FLOGUARD.	30	G/L-5
25 50 10 20	HUNTER PROS-PRS30-04-CV-PCN FLOOD BUBBLER, 4IN. POP-UP, WITH DRAIN CHECK VALVE.	30	H/L-5

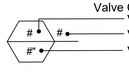
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
	HUNTER ACZ-075-40 DRIP CONTROL KIT, 3/4IN. PGV-ASV VALVE, WITH 3/4IN. HY075 FILTER SYSTEM, AND 40 PSI PRESSURE REGULATOR	F/L-5
F	DRIPLINE FLUSH VALVE INSTALL 3/4" PVC BALL VALVE AT END OF DRIPLINE RUN. INSTALL IN VALVE BOX AT LOWEST POINT IN THE SYSTEM	J/L-5
A	AIR VALVE RELIEF HUNTER PLD-AVR, 1/2IN. MPT CONNECTION. INSTALL IN VALVE BOX AT HIGHEST POINT	E/L-6
	AREA TO RECEIVE DRIPLINE HUNTER HDL-09-12-COP DRIPLINLINE WITH 0.9 GPH EMITTERS AT 12" O.C. DRIPLINE LATERALS SPACED AT 12" APART, OFFSET EMITTERS FOR TRIANGULAR PATTERN.	K/L-5

NOTE:
-NO LOW HEAD DRAINAGE ALLOWED.

-LOCATION OF IRRIGATION LINES AND SYMBOLS ARE DIAGRAMMATIC. ALL IRRIGATION SHALL BE PLACED IN PLANTING AREAS EXCEPT WHEN CROSSING PAVEMENT.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
	HUNTER PGV-ASV PLASTIC ELECTRIC REMOTE CONTROL VALVE. SIZE AS NOTED	E/L-5
	APOLLO VALVES 77CLF10501 BALL VALVE (LEAD FREE), INLET SIZE 1IN.	D/L-5
C	HUNTER P2C-400 CONTROLLER 7-STATION EXPANDED MODULE CONTROLLER, 120 VAC, OUTDOOR/INDOOR MODEL. CONNECT RAIN/FREEZE SENSOR TO CONTROLLER	B/L-5
RC	HUNTER WR-CLIK WIRELESS RAIN/FREEZE CLIK SENSOR, RECEIVER, GUTTER MOUNT	C/L-5
M	WATER METER 1" EXISTING	
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	B/L-6
	IRRIGATION MAINLINE: PVC SCHEDULE 40	B/L-6
	PIPE SLEEVE: PVC SCHEDULE 40 TYPICAL PIPE SLEEVE FOR IRRIGATION PIPE. PIPE SLEEVE SIZES SHALL BE AT LEAST TWICE THE DIAMETER OF THE IRRIGATION PIPING OR WIRE BUNDLE. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.	C/L-6



NOTE: WHEN STATIC PRESSURE EXCEEDS 70 PSI CONTRACTOR SHALL INSTALL A 1" WILKENS 500XL PRESSURE REDUCING VALVE PER DETAIL 'D' ON SHEET L-6.

SCH 40 PVC SLEEVING CHART

1 1/4" SLEEVE	1-4 WIRES	1/2" PIPE
1 1/2" SLEEVE	5-10 WIRES	3/4" PIPE
2" SLEEVE	11-20 WIRES	1" PIPE
2 1/2" SLEEVE	21-30 WIRES	1 1/4" PIPE
3" SLEEVE	31-40 WIRES	1 1/2" PIPE
4" SLEEVE	41-60 WIRES	2" PIPE
6" SLEEVE	61-99 WIRES	2 1/2"/3" PIPE
8" SLEEVE	100+ WIRES	4" PIPE
10" SLEEVE	N/A	6" PIPE

I agree to comply with the criteria of Ordinance No. 859.3 and to apply the criteria for the efficient use of water in the irrigation design plan.

PLAN CROSS REFERENCE:
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FOR CORRESPONDING PLANTING PLAN, REFER TO SHEET L-3
FOR CORRESPONDING IRRIGATION DETAILS, REFER TO SHEETS L-5~6
FOR CORRESPONDING IRRIGATION CALCULATIONS, REFER TO SHEET L-7

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Project Title
HARADA HOUSE PHASE 2

Sheet Title
IRRIGATION PLAN

Design Stage
50% PROGRESS CONSTRUCTION DOCUMENTS

Project Address
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Scale
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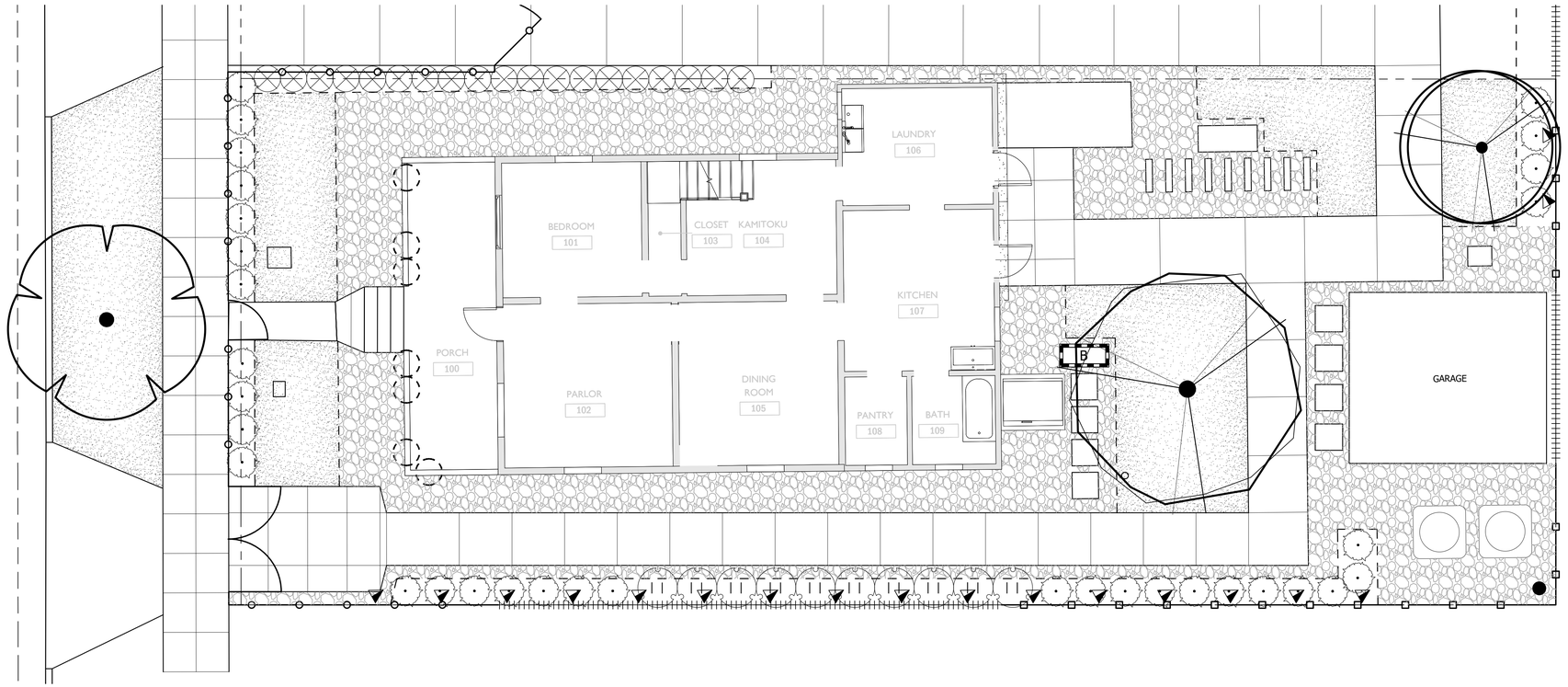
L-2

25107_IP.DWG

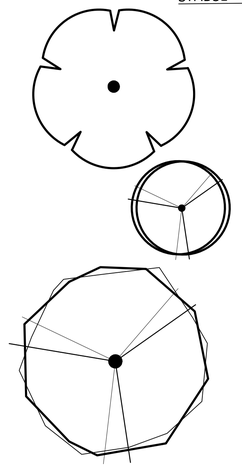
LEMON STREET



PLANTING NOTES:

1. CONTRACTOR TO VERIFY QUANTITIES BASED ON SPACING AND ADD ADDITIONAL PLANT MATERIAL (AT NO ADDITIONAL COST TO THE OWNER) REQUIRED TO MAINTAIN DESIGN INTENT DUE TO EXISTING SITE CONDITIONS NOT ANTICIPATED DURING DESIGN. LANDSCAPE ARCHITECT TO APPROVE FINAL LAYOUT IN FIELD PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF SITE CONDITIONS WHICH PREVENT INSTALLATION PER PLANS AND SPECIFICATIONS.
3. IRRIGATION SYSTEM SHALL BE INSTALLED AND OPERATIONAL PRIOR TO INSTALLATION OF PLANT MATERIAL.
4. TREES AND SHRUBS SHALL BE PLANTED AFTER CONCRETE PLACEMENT, BUT NOT BEFORE IRRIGATION COVERAGE TEST NO.1 HAS BEEN APPROVED. (SEE SPECIFICATIONS).
5. REFER TO SOILS REPORT IN BID DOCUMENTS FOR ACCURATE SOIL AMENDMENTS. BID DOCUMENT SOILS REPORT RECOMMENDATIONS TO TAKE PRECEDENCE OVER PLANTING SPECIFICATION CALLOUTS. REFER TO PLANTING DETAIL SHEET L-8 FOR SOIL MANAGEMENT PLAN REQUIREMENTS. CONTRACTOR SHALL CONDUCT ADDITIONAL AGRONOMIC SOILS TESTING PRIOR TO SOIL AMENDMENT BUT AFTER SLOPE GRADING HAS REACHED SUBSTANTIAL COMPLETION. THE RECOMMENDATIONS OF THE SOIL REPORT SHALL SUPERCEDE THE SOIL PREPARATION AND BACKFILL MIX SPECIFICATIONS (SEE SPECIFICATIONS). THE CONTRACTOR SHALL SUBMIT A COPY OF ALL SOILS REPORTS TO THE LANDSCAPE ARCHITECT PRIOR TO THE MODIFICATION OF THESE SPECIFICATIONS.
6. CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS AND/OR REPLACEMENT OF ANY DAMAGED LANDSCAPE AREAS BEYOND THE LIMIT OF WORK, INCLUDING REPAIRING ANY IRRIGATION LINES/ SPRINKLER HEADS, THAT IS A DIRECT RESULT OF THE LANDSCAPE CONSTRUCTION AND/OR HIS SUB-CONTRACTOR. REPLACEMENT ITEMS SHALL BE EXACT DUPLICATION OF ORIGINAL WORK OR PLANTS, UNLESS OTHERWISE APPROVED BY THE LANDSCAPE ARCHITECT.
7. CLEAN-UP SHALL TAKE PLACE ON A DAILY BASIS UNLESS OTHERWISE APPROVED BY THE OWNER'S REPRESENTATIVE.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ALL GRADES AND FLOW LINES AS SHOWN ON THE GRADING PLAN.
9. TRUNKS OF TREES PLANTED WITHIN TURF AREAS SHALL BE INSTALLED WITH TRUNK GUARDS TO PROTECT FROM MOWERS AND TRIMMERS.
10. NO CHANGES OR SUBSTITUTIONS TO BE MADE WITHOUT REVISION TO THE PLANS AND APPROVED BY THE CITY OF RIVERSIDE.
11. CONTRACTOR SHALL INSTALL DEEPROOT BARRIERS IN ALL AREAS WHERE TREES ARE INSTALLED WITHIN 6' (MIN.) OF HARDSCAPE PER DETAIL 'C', SHEET L-8 AND SHALL BE A MAXIMUM OF 12" DEEP. ROOT BARRIERS SHALL NOT ENCIRCLE THE TREE ROOTBALL BUT SHALL BE LOCATED AT EDGE OF HARDSCAPE AND EXTEND BEYOND CENTER OF TREE A MINIMUM OF 5' IN EACH DIRECTION.
12. SEE DETAIL 'G', SHEET L-8 FOR SHRUB IN POTTERY INSTALLATION DETAIL.

PLANT SCHEDULE



SYMBOL	BOTANICAL NAME / COMMON NAME	SIZE	WUCOLS
	Koelreuteria bipinnata / Golden Rain Tree	24" Box	Mod
	Prunus armeniaca / Apricot	24" Box	Mod
	Prunus persica / Peach	48" Box	Mod

PLANT SCHEDULE

SYMBOL	BOTANICAL NAME / COMMON NAME	SIZE	WUCOLS
	Shrubs / Groundcover		
	Callistemon v. 'Little John' / Dwarf Bottlebrush	5 Gal	Low
	Canna generalis / Red Canna	5 Gal	Mod
	Pittosporum t. 'Dwarf Variegata'	5 Gal	Mod
	Westringia f 'Blue Gem' / Blue Gem Coast Rosemary	5 Gal	Mod
	Marathon	SOD	High
	3" thick layer of 1"-2"dia. Decorative Rock, Mexican Sunburst available from Decorative Stone Solutions, 800-699-1878		
	Vines		
	Ipomoea tricolor / Morning Glory	5 Gal @ 60" o.c.	Mod
A	Japanese Sake or Shoyu 5 Gallon Wooden Keg planters with		
	Aspidistra eliator / Cast Iron Plant	1 Gal	Mod
	Arachniodes s. 'Variegata' / Indian Holly Fern	1 Gal	Mod
B	Raised vegetable garden with		

CITY PLANTING NOTES

1. PRIOR TO ANY PLANTING, email Tree Inspector at gtanaka@riversideca.gov, to schedule inspection to determine precise locations and quantities at time of scheduled site inspection after fine grading and hardscape installation is complete. Planting, staking, irrigation, root barriers, trunk protectors, to Landscape & Forestry specifications.
2. **PLANTING HEIGHT**: Trunk flare area to be installed 2" above final grade keeping all mulch, grass, etc., at least 6" away from trunk base.
3. **TRUNK PROTECTORS**: ArborGard or similar tree trunk protectors. Polyethylene, 0.060" (1.52 mm) thickness.
4. **STAKING**: Trees are to be double-staked outside the root ball, using four 32"-long Cinch-Ties (minimum length) in the following manner: 1) Install tree with nursery stake facing in the direction of either of the two support stakes; 2) remove nursery stake; 3) hold tree trunk at different points to find the spot where the top does not bend over; 4) install two Cinch-Ties, 6" above this point, looping one tie around trunk and attaching tie to one support stake with one galvanized nail; then looping the other tie around trunk and attaching to the other support stake with a galvanized nail; 5) attach remaining two Cinch-Ties to the tree trunk at waist level in the same manner as the first ties.
5. **AUTOMATIC IRRIGATION**: Installation of automatic irrigation system to provide deep-root watering to trees is required.
6. **ROOT BARRIERS**: If tree is located within eight feet of hardscape, install 24-inch deep Root Guides/Barriers, or approved equal, along hardscape; NOT around root ball. The root control barrier shall be an injection molded or extruded modular component made of high-density polyethylene plastic. Root barriers shall be installed vertically along the EDGES of the adjacent hardscape with the root deflecting ribs facing inward away from the hardscape for a total of 12 feet (centered 6 feet either side of trunk) along curb and/or sidewalk edges immediately adjacent to tree. The top of the root barriers shall be even with the top of adjacent curb and sidewalk. Root barriers are to form a barrier along adjacent hardscape. It is very important that panels be installed with tops HORIZONTAL, and the root guiding ribs therefore VERTICAL. Root barriers are also available in rolls.

PLAN CROSS REFERENCE:

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FOR CORRESPONDING IRRIGATION PLAN, REFER TO SHEET L-2
FOR CORRESPONDING PLANTING DETAILS, REFER TO SHEET L-8

0' 5' 10' 15'

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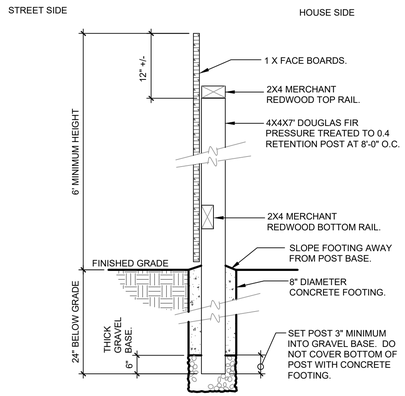
H JAPANESE SAKE / SHOYU 5 GALLON WOODEN KEG

SCALE: N.T.S.



F SOLID PANEL WOOD FENCE

1" = 1'-0"

FX-AMEN-FX-FENC-06

ARCHITECT NOTE: CHECK OFF APPLICABLE SIZE & FINISH DESIRED

SIZE:

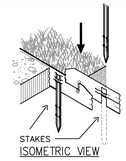
- ☐ ⅛" X 3" (3.2MM X 76MM), 0.072" (1.83MM) THICK w/ 0.135" (3.43MM) EXPOSED TOP LIP ☐ MF ☐ BL
- ☐ ⅛" X 4" (3.2MM X 102MM), 0.072" (1.83MM) THICK w/ 0.135" (3.43MM) EXPOSED TOP LIP ☐ MF ☐ BL ☐ GR ☐ BR ☐ BLANO
- ☒ 3/16" X 4" (4.8MM X 102MM), 0.116" (2.95MM) THICK w/ 0.187" (4.75MM) EXPOSED TOP LIP ☐ MF ☐ BL ☐ GR ☒ BR ☐ BLANO
- ☐ ⅛" X 5½" (3.2MM X 140MM), 0.072" (1.82MM) THICK w/ 0.135" (3.43MM) EXPOSED TOP LIP ☐ MF ☐ BL ☐ GR ☐ BLANO
- ☐ 3/16" X 5½" (4.8MM X 140MM), 0.116" (2.95MM) THICK w/ 0.187" (4.75MM) EXPOSED TOP LIP ☐ MF ☐ BL ☐ GR ☐ BLANO

FINISH LEGEND:

(MF) MILL FINISH–NATURAL ALUMINUM
(BL) BLACK DURAFLEX–MEETS AAMA 2603
(GR) GREEN DURAFLEX–MEETS AAMA 2603
(BR) BRONZE DURAFLEX–MEETS AAMA 2603
(BLANO) BLACK ANODIZED – CLASS II, AA–M10C21A33

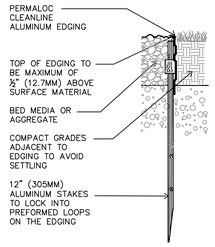
NOTES:

1. INSTALL PER MANUFACTURER'S "INSTALLATION GUIDELINES"
2. 8'–0" (2.44 M) SECTIONS TO INCLUDE (3) 12" (305 MM) ALUMINUM STAKES.
3. 16'–0" (4.88 M) SECTIONS TO INCLUDE (5) 12" (305 MM) ALUMINUM STAKES.
4. CORNERS – CUT BASE EDGING UP HALFWAY AND FORM A CONTINUOUS CORNER.
5. PERMALOC CLEANLINE AS MANUFACTURED BY PERMALOC CORPORATION, HOLLAND MI. (800) 356–9660, (616) 399–9600
6. CONTRACTOR'S NOTE: FOR PRODUCT AND PURCHASING INFORMATION VISIT: WWW.PERMALOC.COM



ISOMETRIC VIEW

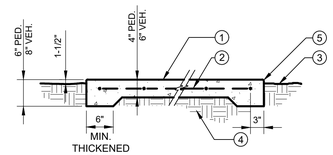
NTS



C 4" ALUMINUM EDGING

3" = 1'-0"

329413.23-02

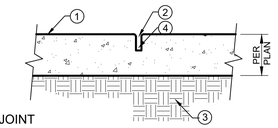


LEGEND

1. CONCRETE PAVING - REFER TO CONSTRUCTION PLAN FOR COLOR AND FINISH
2. #3 REBAR AT 24" O.C. EACH WAY, CENTERED IN SLAB
3. FINISH GRADE
4. COMPACTED SUBGRADE - PER SOILS REPORT
5. 1/4" TOOLED RADIUS

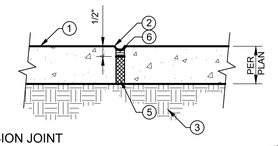
NOTES

A. PAVING THICKNESS, BASE PREPARATION AND REINFORCING ARE SHOWN FOR BID PURPOSES ONLY. VERIFY REQUIREMENTS OF THE SOILS REPORT AND COMPLY.
B. PROVIDE FINISH SAMPLE PER SPECIFICATIONS.

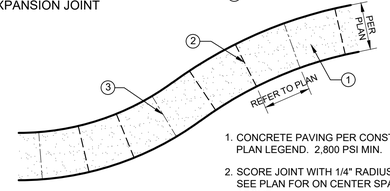


SCORE JOINT

1. CONCRETE PAVING FINISH/COLOR PER PLAN
2. 1/4" RADIUS TROWELED EDGE
3. COMPACTED SUBGRADE PER SOILS REPORT
4. AFTER PRELIMINARY TROWELING, THE CONCRETE SHALL BE PARTED W/ A STRAIGHT EDGE TO A DEPTH OF 1/2 OF THE CONCRETE THICKNESS.
5. 3/8" FOAM EXPANSION JOINT
6. POLYURETHANE CAULKING TO MATCH CONCRETE COLOR, SPRINKLE W/ SAND WHILE STILL WET



EXPANSION JOINT

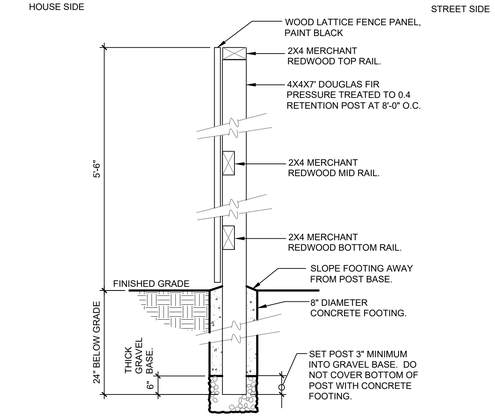


1. CONCRETE PAVING PER CONSTRUCTION PLAN LEGEND. 2,800 PSI MIN.
2. SCORE JOINT WITH 1/4" RADIUS EDGE, SEE PLAN FOR ON CENTER SPACING. SEE ABOVE.
3. EXPANSION JOINT WITH 1/4" RADIUS EDGE EVERY THIRD JOINT. SEE ABOVE.

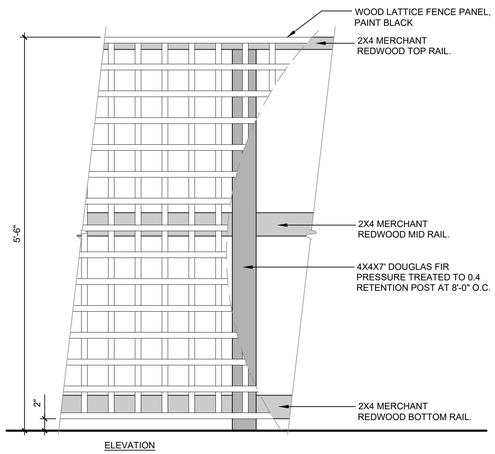
A CONCRETE PAVING WITH JOINTS PER PLAN

3/4" = 1'-0"

321313.13-15



SECTION



ELEVATION

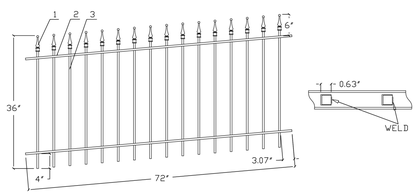
G DARK WOOD LATTICE FENCE

1" = 1'-0"

DETAIL-FILE

3'H X 6'W STRONGHOLD IRON RACKABLE FENCE PANEL
TRADITIONAL GRADE – STYLE #1: CLASSIC

PERIMETER FENCING IRON•FENCE SHOP ESTATE GATES
www.ironfenceshop.com (800) 261-2729



NO.	MATERIAL	QTY
1	CAST IRON FINIAL	16
2	⊓ 1"X1½"X⅛"	2
3	½"X½"X18ga	16

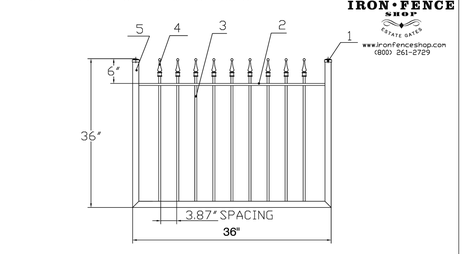
TP0306BI-2R

D CLASSIC WROUGHT IRON FENCE PANEL

SCALE: N.T.S.

3'H X 4'W STRONGHOLD IRON WALK GATE
TRADITIONAL GRADE – STYLE #1: CLASSIC

PERIMETER FENCING IRON•FENCE SHOP ESTATE GATES
www.ironfenceshop.com (800) 261-2729

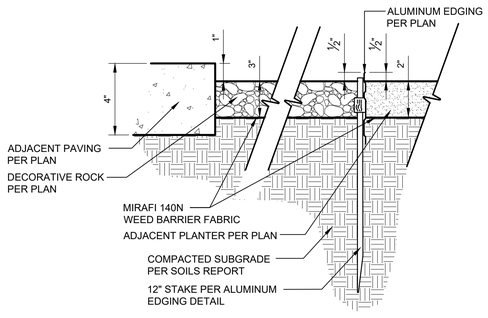


NO.	MATERIAL	QTY
1	CAST IRON CAP	2
2	⊓ 1"X1/2"X1/8"	1
3	1/2"X1/2"X18ga	9
4	CAST IRON FINIAL	9
5	1-1/2"X1-1/2"X14ga	3

TP0304-RG

E CUSTOM CLASSIC WROUGHT IRON GATE (3' x 3')

SCALE: N.T.S.



B DECORATIVE ROCK WITH ALUMINUM EDGING

SCALE: N.T.S.

DETAIL-FILE

Architect

K R design inc.
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RHA LANDSCAPE ARCHITECTS
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Tel: (951)781-1930
www. rhala.com

Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE PHASE 2

Sheet Title
CONSTRUCTION DETAILS

Design Stage
50% PROGRESS CONSTRUCTION DOCUMENTS

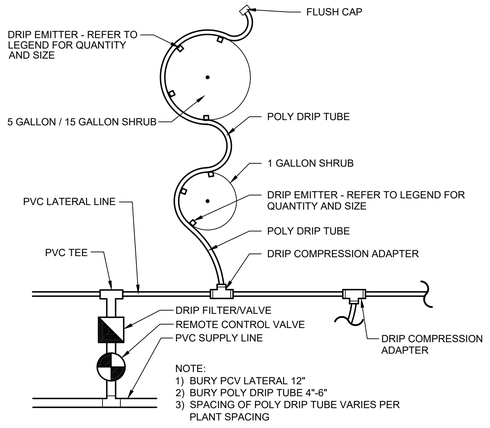
Project Address
3356 Lemon Street
Riverside, CA
92501

Scale
AS NOTED

Date
November 20, 2025

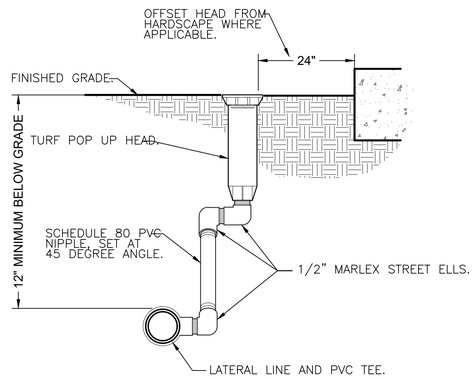
Sheet Number
L-4

25107_CD.DWG



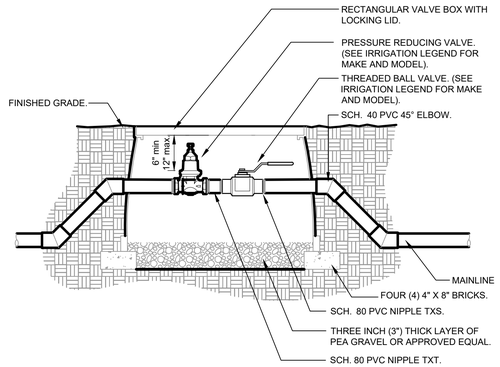
I LANDSCAPE DRIPLINE - PVC TO DRIP TUBE

1" = 1" 328413.13-39



G TURF SPRAY MARLEX ASSEMBLY

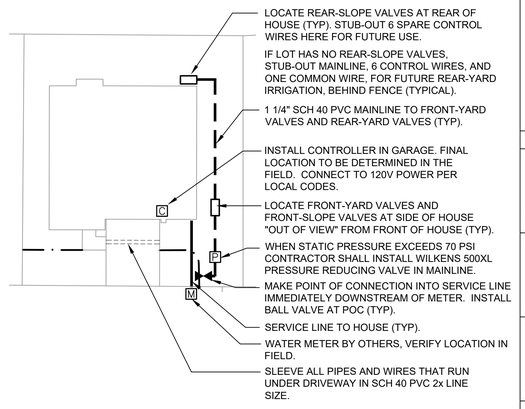
3" = 1'-0" 328403.13-01



NOTES:
1- LOCATE VALVE BOXES IN PLANTER AREAS.
2- ALL THREADED CONNECTIONS TO BE MADE USING TEFLON TAPE..
3- ALL CHANGES IN ELEVATION SHALL BE MADE USING SCH 40 PVC 45° ELBOWS.

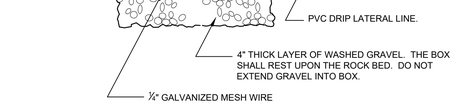
D BALL VALVE - PRESSURE REDUCING VALVE

1 1/2" = 1'-0" 328406.33-24



A RESIDENTIAL POC TYPICAL

328409.73-07



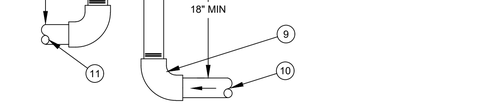
J DRIP FLUSH VALVE

NTS 328413.49-10

NOTE: INSTALL HUNTER FILTER FABRIC SLEEVE- #RZWS-SLEEVE

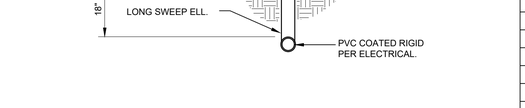
H TREE BUBBLER HUNTER ROOT ASSEMBLY

1" = 1" 328403.53-08



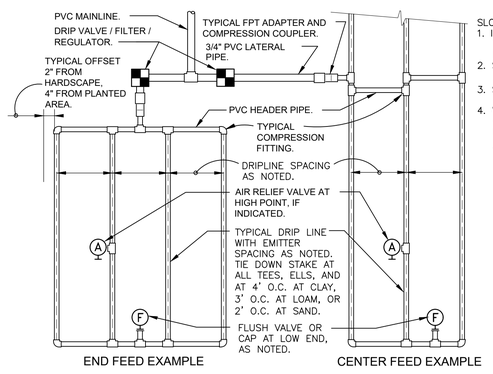
E RCV-AVB ABOVE GRADE

1" = 1" 328406.13-18



B WALL MOUNT CONTROLLER

NTS 328409.13-01



SLOPED CONDITION NOTE:
1. INSTALL AIR RELIEF VALVE AT HIGHEST POINT.
2. SPACING AS NOTED ON TOP ⅔ OF SLOPE.
3. SPACING AT BOTTOM ½ AS NOTED PLUS 25%.
4. WHEN ELEVATION CHANGE IS 10 FT OR MORE, ZONE BOTTOM ⅓ SEPARATELY.

MAXIMUM LATERAL LENGTH (FEET)						
	EMITTER FLOW RATE GPH					
	12" SPACING		18" SPACING		24" SPACING	
PSI	0.6	0.9	0.6	0.9	0.6	0.9
10	125	96	175	135	218	171
20	249	191	350	171	442	340
30	307	236	434	333	550	422
40	350	268	495	380	627	171
50	125	96	175	135	218	171
60	125	96	175	135	218	171

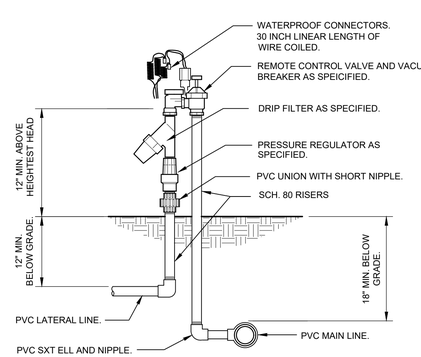
GRID PRECIPITATION RATES (IN/HR)			
		EMITTER FLOW RATE	
EMITTER SPACING	LATERAL SPACING	0.6	0.9
12	12	0.96	1.44
18	18	0.69	1.03
24	24	0.28	0.41

LATERAL FLOW PER 100 FT (GPM)			
EMITTER FLOW	12" SPACING	18" SPACING	24" SPACING
0.6 GPH	1.0 GPM	0.67 GPM	0.50 GPM
0.9 GPH	1.5 GPM	1.0 GPM	0.75 GPM

MAXIMUM FLOW PER ZONE		
	MAX GPM	PSI LOSS
SCHEDULE 40 PVC HEADER SIZE		
1/2"	4.7 GPM	7.7 PSI
3/4"	8.3 GPM	5.6 PSI
1"	13.5 GPM	4.2 PSI
1-1/2"	33.9 GPM	2.9 PSI
2"	52.4 GPM	1.9 PSI
POLY PIPE HEADER SIZE		
1/2"	4.7 GPM	8.8 PSI
3/4"	8.3 GPM	6.3 PSI
1"	3.5 GPM	4.8 PSI
1-1/2"	31.8 GPM	2.9 PSI
2"	52.4 GPM	2.2 PSI

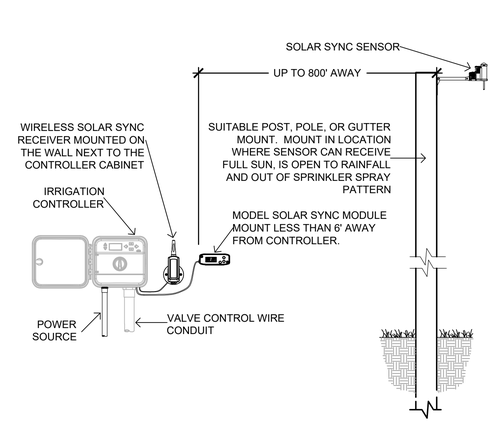
K TYPICAL DRIPLINE LAYOUT REQUIREMENTS

3" = 1'-0" 328413.56-06



F DRIP RCV/AVB/FILTER/REG ABOVE GRADE

1 1/2" = 1'-0" 328413.75-03



C ET SYSTEM

328409.33-16

Architect
KRdesign inc.
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Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp
NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE PHASE 2

Sheet Title
IRRIGATION DETAILS

Design Stage
50% PROGRESS CONSTRUCTION DOCUMENTS

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Riverside, CA
92501

Scale
AS NOTED

Date
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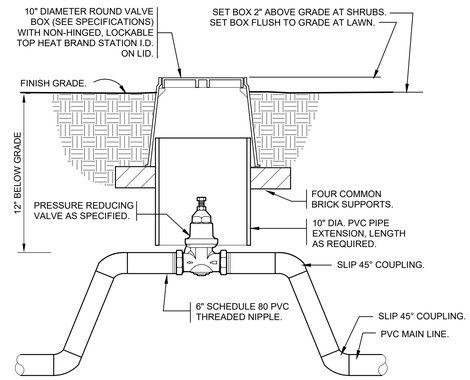
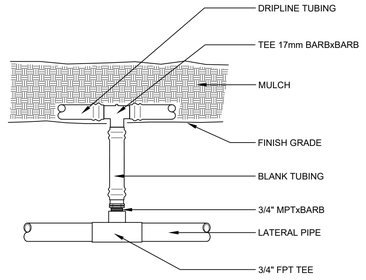
Sheet Number
L-5

25107_ID.DWG



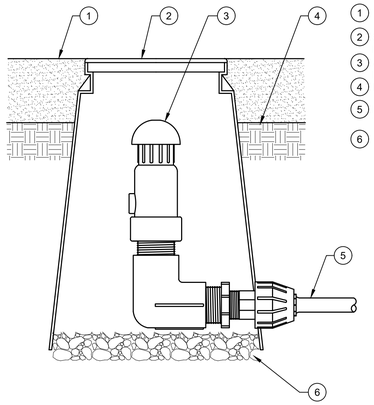
D PRESSURE REDUCING VALVE

328409.73-08



A IN-LINE DRIP CONNECTION

NOT TO SCALE



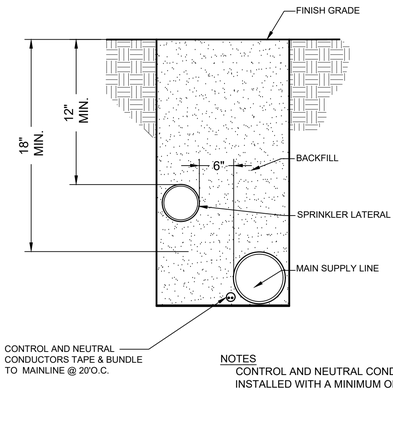
1. TOP OF MULCH
2. SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB-6X
3. AIR RELIEF VALVE KIT: RAIN BIRD X71000
4. FINISH GRADE
5. LANDSCAPE DRIPLINE TUBING
6. 3/4-INCH WASHED GRAVEL

NOTE:
INSTALL AT HIGHEST POINT

E AIR RELIEF VALVE IN SEB-6X BOX

1" = 1"

32 8413.53-01



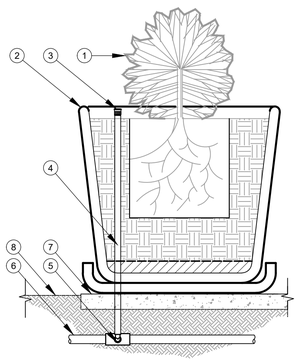
NOTES
CONTROL AND NEUTRAL CONDUCTORS SHALL BE INSTALLED WITH A MINIMUM OF 18" EARTH COVER

B PIPE AND WIRE TRENCH

NTS

328409.76-06

SIDE VIEW



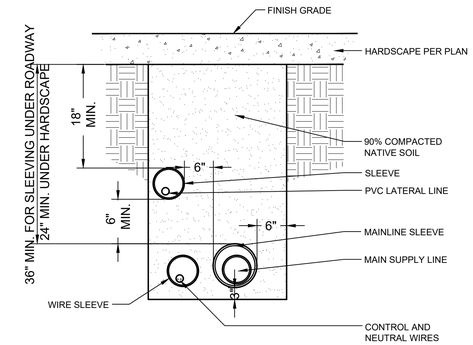
LEGEND
1. PLANT MATERIAL (TYPICAL)
2. RAISED PLANTER
3. FLOOD BUBBLER (REFER TO PLAN) REFER TO PLAN FOR MODEL
4. SWING PIPE ASSEMBLY
5. PVC SCH 40 TEE OR EL
6. LATERAL PIPE
7. HARDSCAPE SURFACE
8. ADJACENT LANDSCAPE PER PLAN

NOTE:
1. WHEN INSTALLING IN EXTREMELY HARD OR CLAY SOILS, ADD ¾" GRAVEL UNDER AND AROUND THE UNIT TO ALLOW FASTER WATER INFILTRATION AND ROOT PENETRATION.

F 1/4" DRIPLINE IN CONTAINER

NTS

DETAIL-FILE



C SLEEVING

1" = 1"

328409.76-05

Architect

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Revisions

SHEET RESERVED FOR
IRRIGATION CALCULATIONS
(TO BE PROVIDED AT 100% SUBMITTAL)

Architect

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Owner

CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

NOT FOR CONSTRUCTION

Project Title

HARADA HOUSE
PHASE 2

Sheet Title

IRRIGATION
CALCULATIONS

Design Stage

50% PROGRESS
CONSTRUCTION
DOCUMENTS

Project Address

3356 Lemon Street
Riverside, CA
92501

Scale

N/A

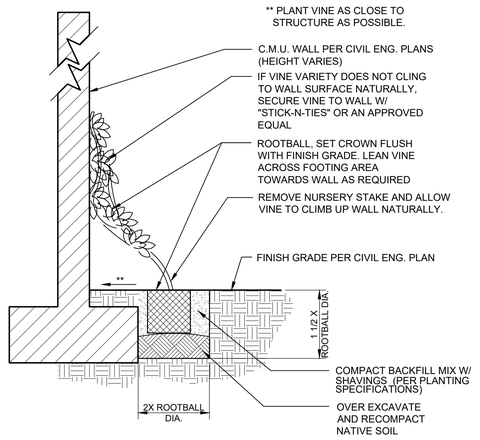
Date

November 20, 2025

Sheet Number

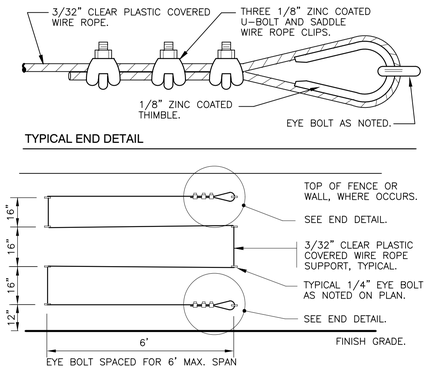
L-7

25107_ID.DWG



E VINE PLANTING NEAR FOOTING

1/4" = 1'-0" 329353-05



F TYPICAL WIRE ROPE SUPPORT FOR VINES

1" = 1'-0" 329333.23-01

Linear Style Planting with DeepRoot Barriers

Determine the correct number of panels to be used. Depending upon the actual planting plan and the number of trees involved the length of linear barrier will vary, but as a general rule of thumb take the anticipated mature canopy diameter of the tree and add 2 feet (61cm). This will be the number of feet necessary for a Linear style planting application. (See chart below.)

A. Choose the barrier that best suits the application. Generally if a sidewalk, patio or driveway is to be protected, 18" (46cm) (LB 18-2) is sufficient depth with 12" (30cm) (LB 12-2) as an alternate choice for non-aggressive, deeper rooting trees. However for curb and gutter protection or more agressive roots 24" (61cm) (UB 24-2) is generally the better choice.

B. Dig the trench to the depth based upon the particular barrier chosen.

C. Install the barrier. When using DeepRoot Linear Barriers simply pull the appropriate number of panels out of the box (they come preassembled) and separate the joiner at the correct length. When installing DeepRoot Universal Barriers in a linear fashion you will need to join the appropriate number of panels together.

D. Next place the barrier in the trench with the vertical ribs facing toward the tree and align in a straight fashion. It is helpful to place the barrier against the hardscape. Use the hardscape as a guide and backfill against the barriers to promote a clean smooth fit to the hardscape. Be sure to keep the barrier's double top edge at least 1/2" (13mm) above grade to ensure roots do not grow over the top.

E. Plant the tree(s). The Linear style offers a more expansive rooting growth area, however adverse soil and drainage conditions may exist in the actual planting area. Take steps to ensure healthy growth of the tree at planting. Consult with a local Arborist for planting tips and recommendations.

F. If the tree(s) will be subject to maintenance work such as lawn mowing or weed trimming we strongly recommend the installation of ArborGard+ Tree Trunk Protectors which is placed around the base of young trees to protect them from damage by weed trimmers, lawn mowers and small rodents.

For additional information please consult the 16 page DeepRoot Product Selection and Installation Guidelines.

For information regarding distributors please call: 1 800 ILV ROOT (458.7668). For help with difficult drainage or other difficult installation questions please call DeepRoot Technical Support at: 1 800 ROOT TEK (766.8835).

For a simple formula to determine the quantity of panels required for a Linear application use:
Estimated Diameter of the Tree Canopy at Maturity + 2' (61cm) = Length of Barrier per Side.

As little as one side of the tree may need barrier for root direction as there may be no hardscape else- where requiring protection.

Note: Linear Barriers (LB 12-2 and LB 18-2) are packaged in 2' (61cm) long panels with pre-attached flexible joiners ready to pull out of the carton and install in one continuous line of up to:

For One Side of Tree

Expected Tree Canopy at Maturity	Number of Feet of Linear Barrier (LB 12 or LB 18)	Optional Universal Barrier (UB) in number of Panels
12' (3.6m) Diameter	+2' (61cm) = 14' (4.2m)	7 Panels
18' (5.5m) Diameter	+2' (61cm) = 20' (6.1m)	10 Panels
24' (7.3m) Diameter	+2' (61cm) = 26' (7.9m)	13 Panels

DeepRoot LB 12-2, LB 18-2 or UB 24-2

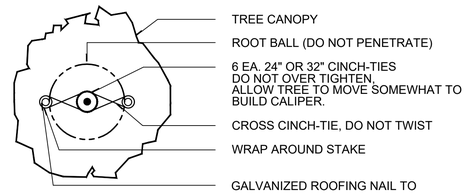
LB 12-2 80' (24 m) per Carton
LB 18-2 52' (16 m) per Carton

Line can be separated at any two foot interval.

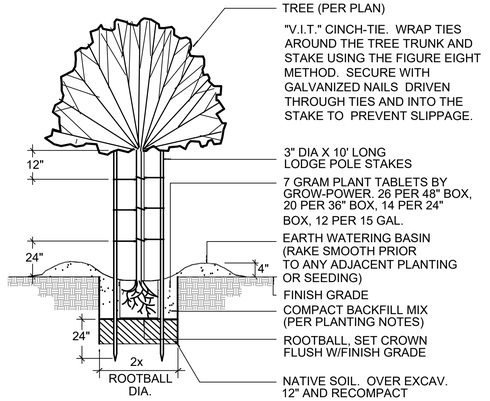
TO BE 24" DEEP ON ALL SIDES

C DEEPROOT BARRIER

1" = 1" 329343.05-02



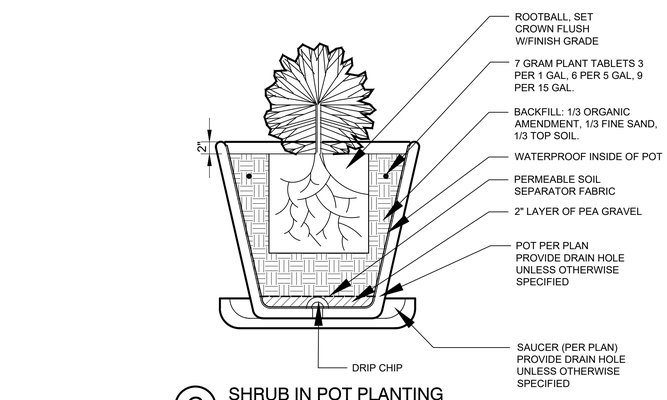
PLAN VIEW



FOR ALL 24" BOX & 15 GAL. TREES, TRIPLE STAKE ALL 36" BOX STANDARD TREES

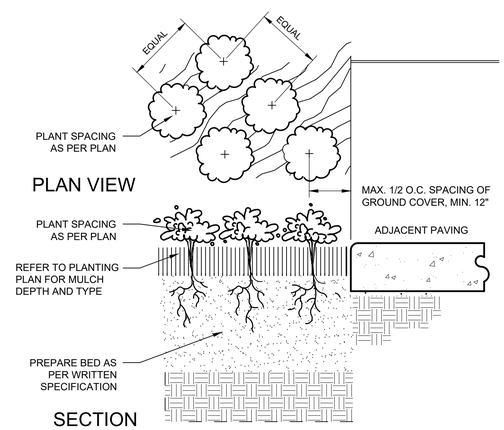
A DOUBLE STAKE TREE

1" = 1" 329343.19-05



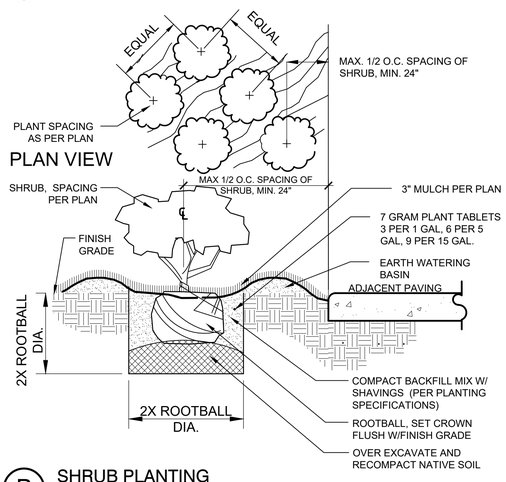
G SHRUB IN POT PLANTING

1" = 1'-0" 329333.13-02



D GROUND COVER SPACING

1" = 1" 329313-03



B SHRUB PLANTING

3/8" = 1'-0" 329333.16-05

Architect

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Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE PHASE 2

Sheet Title
PLANTING DETAILS

Design Stage
50% PROGRESS CONSTRUCTION DOCUMENTS

Project Address
3356 Lemon Street
Riverside, CA
92501

Scale
AS NOTED

Date
November 20, 2025

Sheet Number
L-8

25107_PD.DWG

PAD SCHEDULE

SYMBOL	SIZE	BOTTOM REBAR	TOP REBAR
1	2'-0" x 2'-0" x 14" THICK	(4) #4 EACH WAY	(4) #4 EACH WAY
2	3'-0" x 3'-0" x 14" THICK	(5) #4 EACH WAY	(5) #4 EACH WAY

NOTES:
f'_c = 3,000 PSI W/ CONTINUOUS SPECIAL INSPECTION
Fy = 60,000 PSI

GRADE BEAM SCHEDULE

BEAM	WIDTH	DEPTH	TOP STEEL	BOTT. STEEL	FACE STEEL	TIES
1	18"	24"	(3) #5 BARS	(3) #5 BARS	-	#4 @ 7" O.C.
2	12"	24"	(2) #5 BARS	(2) #5 BARS	-	#4 @ 7" O.C.

NOTES:
f'_c = 3,000 PSI W/ CONTINUOUS SPECIAL INSPECTION
Fy = 60,000 PSI

MAIN HOUSE FOUNDATION PER PHASE 1 STRUCTURAL SHORING PLANS

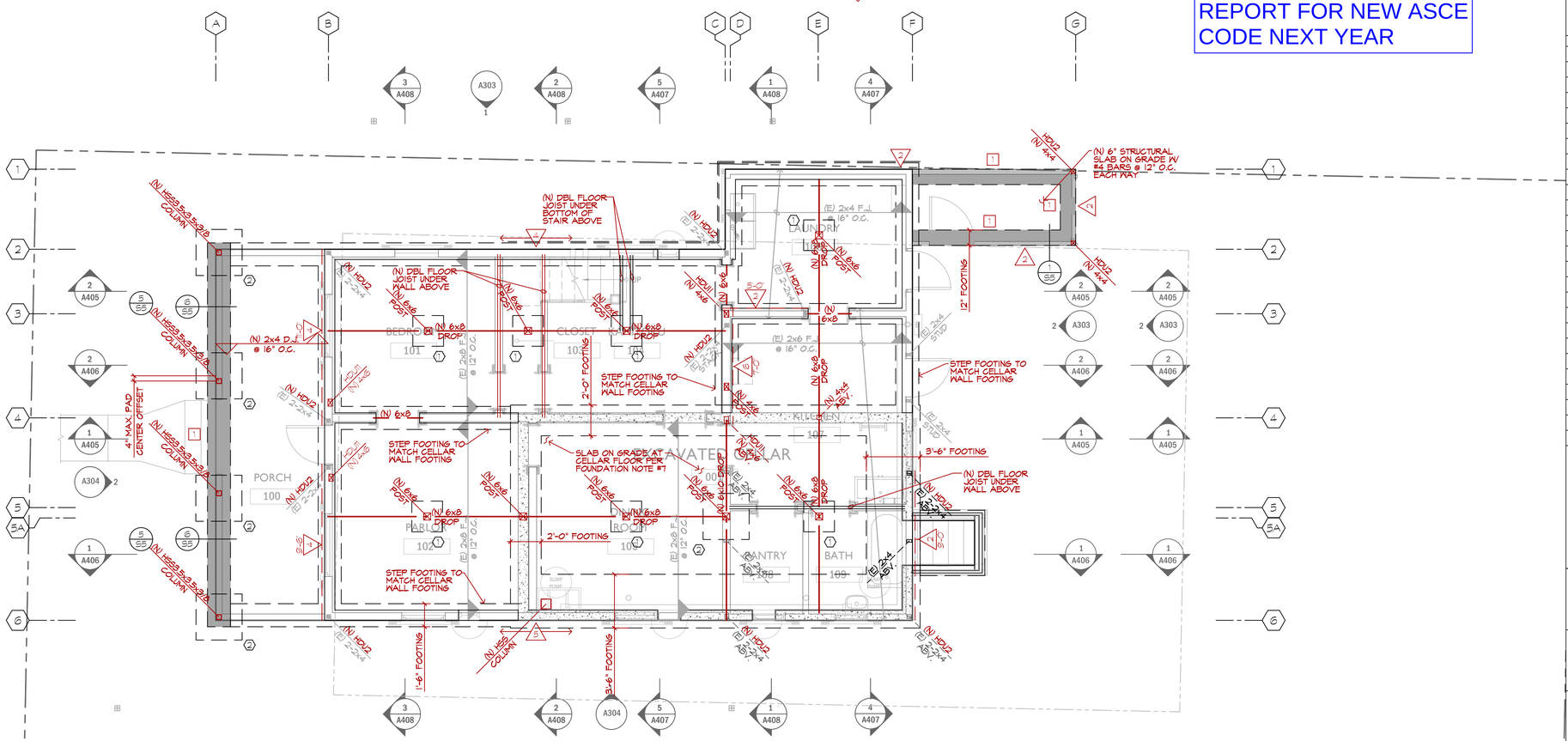
8. SOIL FILE/REPORTS BY JOHN R. BYERLY, INC. WHICH ARE CONSIDERED CONSIDERED A PART OF THESE PLANS.
   A. FILE NO. 9-14575 / REPORT NO. 7681 DATED MARCH 17, 2023
   B. FILE NO. 9-14575 / REPORT NO. 7716 DATED APRIL 03, 2023
   C. FILE NO. 9-14575 / REPORT NO. 7722 DATED APRIL 13, 2023
   D. FILE NO. 9-14575 / REPORT NO. 7736 DATED MAY 05, 2023
9. SOIL ENGINEER FROM JOHN R. BYERLY, INC. TO REVIEW AND APPROVE THESE PLANS BEFORE RECEIVING PERMIT. SOIL ENGINEER TO SIGN THESE PLANS TO VERIFY COMPLIANCE WITH THE SOIL REPORT RECOMMENDATIONS. ALL FOUNDATION EXCAVATIONS MUST BE OBSERVED AND APPROVED BY SOIL ENGINEER PRIOR TO PLACEMENT OF REINFORCING STEEL.
10. BEARING MATERIAL IS COMPETENT NATURAL SOIL MAXIMUM ALLOWABLE BEARING/PASSIVE PRESSURE IS 1500PSF/200PCF. MINIMUM ESTIMATED EMBEDMENT DEPTH IS 5'-0" BELOW EXTERIOR GRADE.
11. SOILS AT SITE HAVE BEEN FOUND TO HAVE NEGLIGIBLE LEVELS OF SOLUBLE SULFATE. CONCRETE IN CONTACT WITH THE ON SITE SOIL SHOULD BE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CALIFORNIA BUILDING CODE. (Fc= 3000PSI MIN.) SOIL SAMPLES SHOULD BE OBTAINED AT THE TIME OF INITIAL GRADING FOR TESTING TO DETERMINE THE SOLUBLE SULFATE CONCENTRATION.
12. EXCAVATIONS SHALL BE MADE IN COMPLIANCE WITH CAL/OSHA REGULATIONS.
13. LEGEND:

= NEW SLAB ON GRADE FOUNDATION
= EXISTING BEAM
= EXISTING DECK JOIST
= EXISTING FLOOR JOIST
= NEW BEAM
= NEW DECK JOIST

FOUNDATION NOTES

1. PAD FOOTING INDICATOR - SEE PAD SCHEDULE FOR SIZE AND REINFORCEMENT.
   GRADE BEAM INDICATOR - SEE GRADE BEAM SCHEDULE FOR SIZE AND REINFORCEMENT.
2. REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, SLAB DEPRESSIONS, CURBS AND ELEVATIONS.
3. REFER TO THE SHEAR WALL SCHEDULE FOR THE ANCHOR BOLT SPACING AND SILL PLATE DIMENSIONS. (MAXIMUM 5/8"ø BOLT SPACING @ 48" O.C.-12" FROM END OF PLATE)
4. FOUNDATION SILL PLATES SHALL BE PRESERVATIVE-TREATED LUMBER. **ALL ANCHOR BOLTS AND OTHER FASTENERS IN PRESERVATIVE-TREATED SILL PLATES SHALL BE GALVANIZED OR STAINLESS STEEL.**
5. PLATE WASHERS
   ALL ANCHOR BOLT SHALL HAVE THE STEEL PLATE WASHERS AS NOTED ON NOTE 11 OF THE SHEAR WALL SCHEDULE.
   1-7/8"
   ANCHOR BOLT
6. ALL THE HOLD DOWNS SHALL BE RE-TIGHTENED JUST PRIOR TO COVERING THE WALL FRAMING.
7. SLAB ON GRADE.
   5" CONCRETE SLAB W/ #4 @ 18" O.C. EA. WAY ON 10 MIL MIN. VAPOR BARRER ON 4" GRAVEL BED ON GRADE, OR PER SOILS REPORT RECOMMENDATION AND CALIFORNIA GREEN BUILDING CODE MINIMUM REQUIREMENTS (SECTION 4.505.2). f'_c = 2500 psi (INCREASE psi FOR MORE CRACK CONTROL) Fy = 40,000 psi
   CONTROL JOINTS SHALL BE LOCATED NO MORE THAN 10' APART IN EACH DIRECTION UNLESS SPECIFIED OTHERWISE BY ARCHITECT.

NEED UPDATED SOILS REPORT FOR NEW ASCE CODE NEXT YEAR



HARADA HOUSE BASEMENT FOUNDATION PLAN

50%CD PROGRESS SET

BACKGROUNDS DATED: OCTOBER 2, 2025

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Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Project Engineer: RG
Drawn by: DJ
Project No.: 25K05

Professional's Stamp
REGISTERED PROFESSIONAL ENGINEER
HEATHER LINER
No. 90027
EXP. 12/31/2027
CIVIL
STATE OF CALIFORNIA
NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE & INTERPRETIVE CENTER
REHABILITATION & CONSTRUCTION ARCHITECTURAL DESIGN PROJECT

Sheet Title
HARADA HOUSE BASEMENT FOUNDATION PLAN

Design Stage
DESIGN DEVELOPMENT

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
1/4" = 1'-0"

Date

Sheet Number
S2

14) INTERIOR STUDS ARE MINIMUM 2"x3-3/4" @ 16" O.C. (VERIFY IN FIELD)
EXTERIOR STUDS ARE MINIMUM 2"x3-3/4" @ 16" O.C. (VERIFY IN FIELD)

15) ALL BEAMS DESIGNATED AS 'STRUTS' TO HAVE PLYWOOD BOUNDARY NAILING.

16) CONTRACTOR TO VERIFY ALL (E) CONDITIONS AND NOTIFY ENGINEER OF RECORD IF THERE OCCUR ANY DISCREPANCIES BETWEEN PLANS AND FIELD CONDITIONS.

17) ◆ = DENOTES DEAD LOAD DEFLECTION
CONTRACTOR AND ARCHITECT TO COORDINATE FRAMING OR CAMBER IN BEAM AS REQUIRED FOR FINISH

◆LL = DENOTES LIVE LOAD DEFLECTION
CONTRACTOR AND ARCHITECT TO COORDINATE FINISHES, TRACKS, WINDOWS, AND DOORS TO ACCOMODATE DEFLECTIONS.
NOTE: LIVE LOAD AND DEAD LOAD DEFLECTIONS ARE ADDITIVE.

18) EXISTING SHEATHING ABOVE CEILING JOIST AND EXISTING 1x STRAIGHT SHEATHING AT ROOF TO BE REMOVED. ROOF TO HAVE ALL NEW SHEATHING PER NOTE #8

19) FOR ALL DETERIORATED EXISTING FRAMING:
-STUD FRAMING TO BE SISTERED WITH 2x DF No. 2, OF MATCH DEPTH
-JOIST FRAMING TO BE SISTERED WITH 1-3/4"x LVL 2.0E, OF MATCH DEPTH

20) AFTER PHASE 1 IS COMPLETE REMOVE "T-11" TEMPORARY SHEATHING ON ONE SIDE OF THE BUILDING. THEN E.O.R. AND ARCHITECT TO INSPECT EXPOSED EXISTING FRAMING, PRIOR TO INSTALLATION OF NEW FRAMING. REPEAT PROCEDURE ON REMAINING SIDES OF BULDING.

7) NEW ROOF DIAPHRAGM MATERIAL AND NAILING:
5/8" CDX PLYWOOD (INDEX 32/16) W/ 10d COMMON NAILS (0.148" DIA x 2-1/4" LONG - EZCODE ID "5") @ 6" O.C. AT PANEL EDGES AND BUILDING PERIMETER (BOUNDARY), AND 12" O.C. @ PANEL FIELDS. ALL EDGES SHALL BE BLOCKED WITH FLAT 2x4's.

8) EXISTING FLOOR DIAPHRAGM MATERIAL AND NAILING:
1x STRAIGHT SHEATHING TO REMAIN.

9) SEE FRAMING SYMBOL KEY OR PLAN FOR JOIST SIZES.

10) MINIMUM HANGERS:
2x JOISTS TO BEAMS: SIMPSON 'U' SERIES
4x BEAMS TO BEAM: HU
6x BEAMS TO BEAM: HUTF
> 6x BEAMS: HW, W

11) TRIMMERS:
1-2x3-3/4" TRIMMER REQUIRED FOR 4x8 HEADERS AND SMALLER, U.N.O.

12) MST — DENOTES HORIZONTAL STRAP BETWEEN WALL TOP PLATES AND BEAM OR DOUBLE JOISTS OR BETWEEN TWO BEAMS OR TOP AT PLATE BREAK - SEE TYPICAL DETAILS AND PLAN. (MST48 MIN. U.N.O.)

13) (N) = NEW MEMBER
F.J. = FLOOR JOIST
F.B. = FLOOR BEAM
(E) = EXISTING MEMBER
R.J. = ROOF JOIST
R.B. = ROOF BEAM
D.J. = DECK JOIST
C.J. = CEILING JOIST
C.B. = CEILING BEAM

= BEAM (SIZE AS NOTED ON PLAN)
= DOUBLE JOIST
= SINGLE JOIST
= ROOF JOISTS
= EXISTING (E) ROOF JOISTS: TRUE 2"x4" R.J. @ 30" O.C., U.N.O.
= EXISTING (E) CEILING JOISTS: 1-3/4"x4" C.J. @ 16" O.C., U.N.O.
= CEILING JOISTS
= EXISTING (E) FLOOR JOISTS: 2x7 F.J. @ 21" O.C., U.N.O.
= EXISTING WALLS TO REMAIN
= LOW WALL

FRAMING PLAN NOTES

1) SHEARWALL INDICATOR - SEE SHEARWALL SCHEDULE.

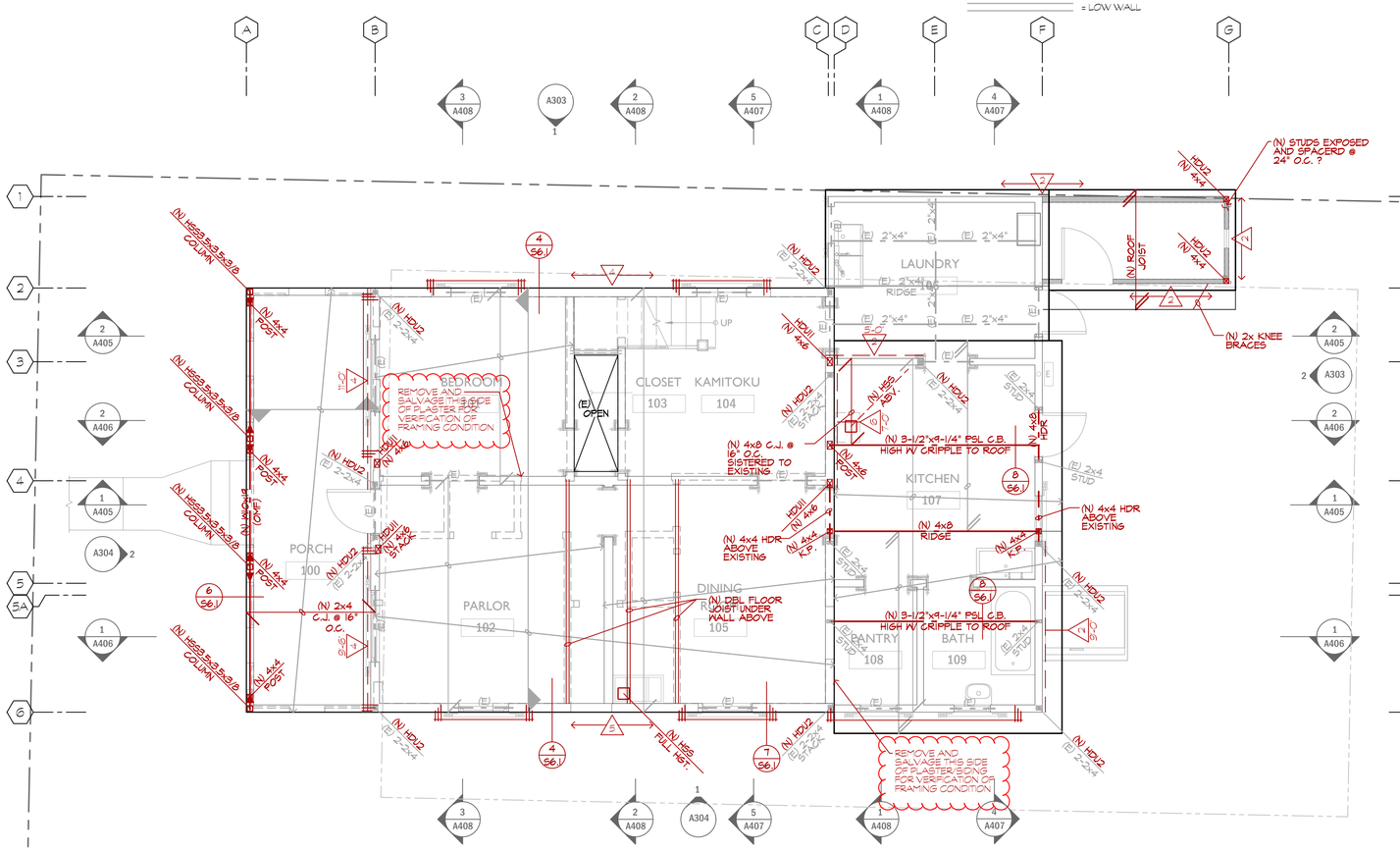
2) 4'-0" — DENOTES LIMITS OF SHEARWALL PLYWOOD TO BE PLACED ON INDICATED SIDE OF WALL.
DENOTES SHEARWALL TO EXTEND ENTIRE WALL LINE.

3) EXISTING PLASTER SHALL BE SALVAGED FOR INTERIOR WALLS WHEN EXPOSING TO VERIFY CONDITION OF EXISTING FRAMING. EXISTING SILL AND TOP PLATE CONNECTION TO BE VERIFIED. ADD 16d's COMMON NAILS @ 6" O.C. BOTTOM SILL AND A35's @ 32" O.C. FOR TOP PLATE.

4) (E) 2"x4" STUD (N) 4"x4" POST — DENOTES POST BELOW ROOF OR FLOOR FRAMING. PROVIDE MULTIPLE STUDS AT ALL BEAMS FOR FULL BEARING UNLESS NOTED OTHERWISE. (2-2x MIN. IF NOT SPECIFIED)
DENOTES POST ABOVE LEVEL SHOWN.
DENOTES POST STACKS DIRECTLY WITH POST ABOVE. PROVIDE SOLID BLOCKING BELOW.
DENOTES KING POST TO BEAM BELOW.

5) PROVIDE NEW DOUBLE FLOOR JOISTS UNDER ALL PARALLEL WALLS AND PROVIDE BLOCKING BELOW ALL PERPENDICULAR WALLS

6) HDU4 (N) 4x4 — HDU2 (N) 4x4 — DENOTES SIMPSON HOLDOWN AND POST IN WALL TO POST IN WALL BEAM, DOUBLE JOIST, OR FOUNDATION BELOW. 2-2x POST MINIMUM IF NOT SPECIFIED.


(N) STUDS EXPOSED AND SPACERD @ 24" O.C. ?
HDU2 (N) 4x4
(N) HSS5.5x3.5x3/8 COLUMN
(N) 4x4 POST
(N) HDU2 (E) 2"x4"
BEDROOM
REMOVE AND SALVAGE THIS SIDE OF PLASTER FOR VERIFICATION OF FRAMING CONDITION
(E) OPEN
CLOSET 103
KAMITOKU 104
LAUNDRY
(E) 2"x4" RIDGE
(N) ROOF JOIST
(N) 2x KNEE BRACES
(N) HDU11 (N) 4x6
(N) HSS5.5x3.5x3/8 COLUMN
(N) 4x4 POST
(E) 2"x4" BRACE (TYP.)
PORCH 100
(N) 2x4 C.J. @ 16" O.C.
PARLOR 102
(N) 4x8 C.J. @ 16" O.C. SISTERED TO EXISTING
(N) HSS5.5x3.5x3/8
(N) 4x8 HDR
(E) 2x4 STUD
KITCHEN 107
(N) 4x8 HDR ABOVE EXISTING
(N) 4x8 RIDGE
(N) 4x4 K.P.
DINING ROOM 105
(N) DBL FLOOR JOIST UNDER WALL ABOVE
(N) 3-1/2"x9-1/4" PSL C.B. HIGH W/ CRIPPLE TO ROOF
PANTRY 108
BATH 109
(N) HSS5.5x3.5x3/8 FULL HT.
REMOVE AND SALVAGE THIS SIDE OF PLASTER/SIDING FOR VERIFICATION OF FRAMING CONDITION
(N) HDU2 (E) 2"x4"
(N) HDU4 (N) 4x4
(N) 4x4 HDR ABOVE EXISTING
(N) 4x4 POST
(N) 2x4 C.J. @ 16" O.C.
(N) 3-1/2"x9-1/4" PSL C.B. HIGH W/ CRIPPLE TO ROOF
(N) HDU2 (E) 2"x4"
(N) HDU4 (N) 4x4
(N) HDU11 (N) 4x6
(N) HSS5.5x3.5x3/8 COLUMN
(N) 4x4 POST
(N) HDU2 (E) 2"x4"
(N) HDU11 (N) 4x6
(N) HDU2 (E) 2"x4"
(N) HDU4 (N) 4x4
(N) 4x4 POST
(N) HSS5.5x3.5x3/8 COLUMN
(N) HDU2 (E) 2"x4"
(N) HDU11 (N) 4x6
(N) 4x4 HDR ABOVE EXISTING
(N) 4x4 K.P.
(N) HDU2 (E) 2"x4"
(N) HSS5.5x3.5x3/8 COLUMN
(N) 4x4 POST
(N) HDU2 (E) 2"x4"
(N) HDU2 (E) 2"x4"
(N) HDU2 (E) 2"x4"

10) (N) = NEW MEMBER (E) = EXISTING MEMBER
R.J. = ROOF JOIST C.J. = CEILING JOIST
R.B. = ROOF BEAM

= BEAM (SIZE AS NOTED ON PLAN)

= DOUBLE JOIST

= SINGLE JOIST

= EXISTING (E) ROOF JOISTS: 2x4" R.J. @ 24" O.C. , U.N.O.

= EXISTING (E) CEILING JOISTS: 2x4" C.J. @ 16" O.C. , U.N.O.

= EXISTING WALLS TO REMAIN

= LOW WALL

11) INTERIOR STUDS ARE MINIMUM 2x3-3/4" @ 16" O.C. (VERIFY IN FIELD)
EXTERIOR STUDS ARE MINIMUM 2x3-3/4" @ 16" O.C. (VERIFY IN FIELD)

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CONTRACTOR AND ARCHITECT TO COORDINATE FRAMING OR CAMBER IN BEAM AS REQUIRED FOR FINISH

= DENOTES LIVE LOAD DEFLECTION
LL CONTRACTOR AND ARCHITECT TO COORDINATE FINISHES, TRACKS, WINDOWS, AND DOORS TO ACCOMMODATE DEFLECTIONS.
NOTE: LIVE LOAD AND DEAD LOAD DEFLECTIONS ARE ADDITIVE.

15) FOR ALL DETERIORATED EXISTING FRAMING:
-STUD FRAMING TO BE SISTERED WITH 2x DF No. 2, OF MATCH DEPTH
-JOIST FRAMING TO BE SISTERED WITH 1-3/4 x LVL 2.0E, OF MATCH DEPTH

16) AFTER PHASE I IS COMPLETE REMOVE 1-11 TEMPORARY SHEATHING ON ONE SIDE OF THE BUILDING. THEN E.O.R. AND ARCHITECT TO INSPECT EXPOSED EXISTING FRAMING, PRIOR TO INSTALLATION OF NEW FRAMING. REPEAT PROCEDURE ON REMAINING SIDES OF BUILDING.

FRAMING PLAN NOTES

1) SHEARWALL INDICATOR - SEE SHEARWALL SCHEDULE.

2) DENOTES LIMITS OF SHEARWALL PLYWOOD TO BE PLACED ON INDICATED SIDE OF WALL.

DENOTES SHEARWALL TO EXTEND ENTIRE WALL LINE.

3) DENOTES POST BELOW ROOF OR FLOOR FRAMING. PROVIDE MULTIPLE STUDS AT ALL BEAMS FOR FULL BEARING UNLESS NOTED OTHERWISE. (2-2x MIN. IF NOT SPECIFIED)

DENOTES KING POST TO BEAM BELOW.

4) DENOTES SIMPSON HOLDOWN AND POST IN WALL TO POST IN WALL, BEAM, DOUBLE JOIST, OR FOUNDATION BELOW. 2-2x POST MINIMUM IF NOT SPECIFIED.

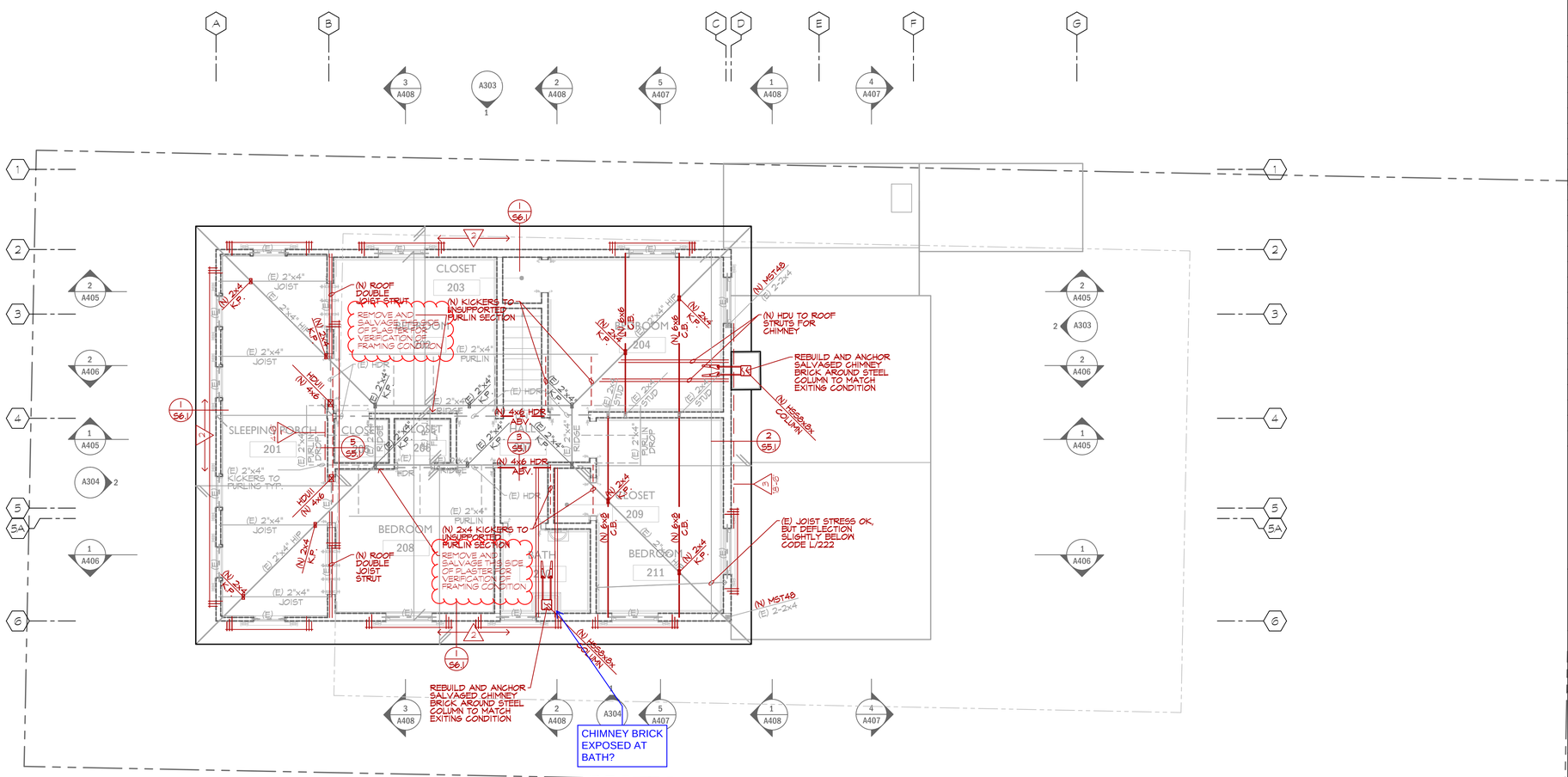
5) NEW ROOF DIAPHRAGM MATERIAL AND NAILING:
5/8" CDX PLYWOOD (INDEX 32/16) W/ 10d COMMON NAILS (0.148" DIA. x 2-1/4" LONG - EZCODE D 15) @ 6" O.C. AT PANEL EDGES AND BUILDING PERIMETER (BOUNDARY), AND 12" O.C. @ PANEL FIELDS.
- EXISTING SHEATHING ABOVE CEILING JOIST AND EXISTING 1x STRAIGHT SHEATHING AT ROOF TO BE REMOVED. ROOF TO HAVE ALL NEW SHEATHING PER NOTE #5

6) SEE FRAMING SYMBOL KEY OR PLAN FOR JOIST SIZES.

7) MINIMUM HANGERS:
2x JOISTS TO BEAMS: SIMPSON 'U' SERIES
4x BEAMS TO BEAM: HU
6x BEAMS TO BEAM: HUTF
> 6x BEAMS: HW, W

8) TRIMMERS:
1-2x3-3/4" TRIMMER REQUIRED FOR ALL HEADERS U.N.O.

9) MST DENOTES HORIZONTAL STRAP BETWEEN WALL TOP PLATES AND BEAM OR DOUBLE JOISTS OR BETWEEN TWO BEAMS AT BREAK - SEE TYPICAL DETAILS AND PLAN. (MST48 MIN. U.N.O.)



HARADA HOUSE ROOF FRAMING PLAN

50%CD PROGRESS SET

BACKGROUNDS DATED: OCTOBER 2, 2025

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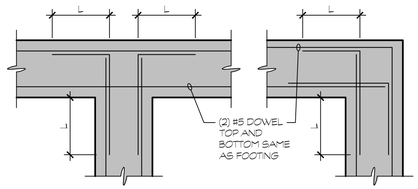
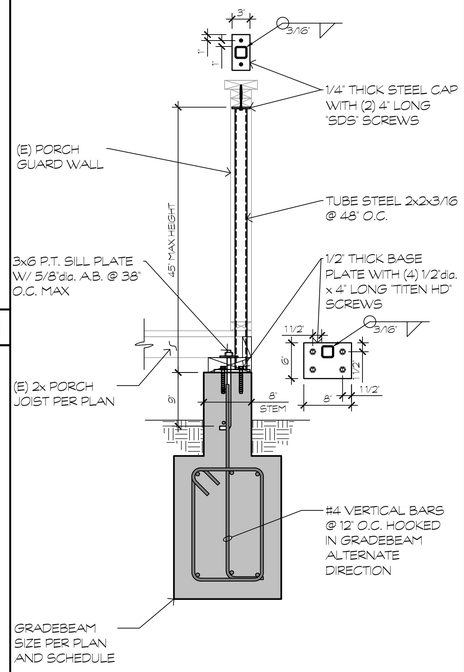
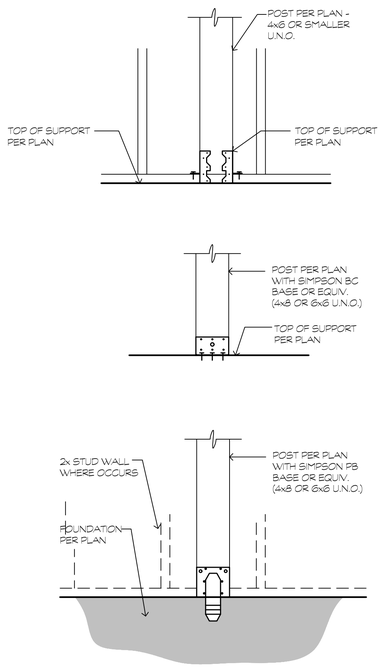
Revisions



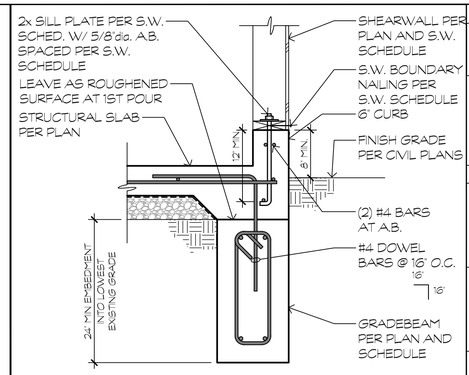
TYPICAL FOOTING INTERSECTIONS AND CORNERS | 9



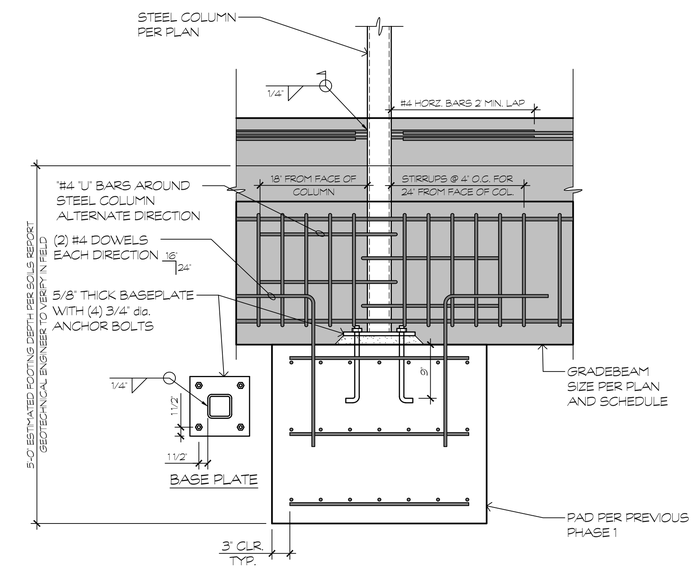
GRADEBEAM FOUNDATION | 6



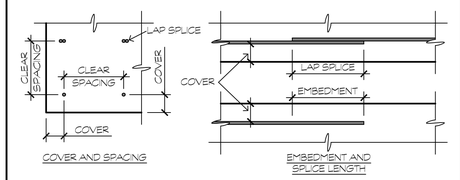
POST BASE CONNECTION - TYP. | 4



NEW 1-STORY SLAB ON GRADE FOUND. | 1



GRADEBEAM AT PORCH | 5



LAP SPLICE AND EMBEDMENT SCHEDULE

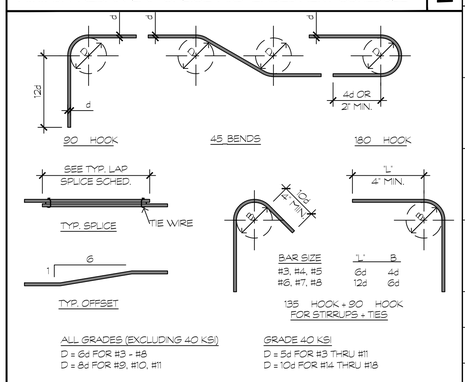
(IN INCHES) (Fy = 60,000 P.S.I.)

MATERIAL	DIMENSION		BAR SIZE							
			#3	#4	#5	#6	#7	#8	#9	#10	#11
HARDROCK CONC. f'c = 3000 P.S.I.	LAP SPLICE	TOP BAR	22	29	38	46	63	83	105	132	163
		OTHER BAR	17	22	28	36	49	64	81	102	125
	EMBEDMENT	TOP BAR	17	22	28	36	49	64	81	102	125
		OTHER BAR	13	17	21	27	37	49	62	78	96
f'c = 4000 P.S.I.	LAP SPLICE	TOP BAR	21	25	32	41	55	72	91	115	141
		OTHER BAR	16	20	24	32	42	55	70	88	108
	EMBEDMENT	TOP BAR	16	20	24	32	42	55	70	88	108
		OTHER BAR	12	15	18	24	32	42	54	68	83
LT. WT. CONC. f'c = 3000 P.S.I.	LAP SPLICE	TOP BAR	29	38	47	60	82	108	137	172	212
		OTHER BAR	22	29	36	46	63	83	105	132	163
	EMBEDMENT	TOP BAR	22	29	36	46	63	83	105	132	163
		OTHER BAR	17	22	28	36	49	64	81	102	125

1) REBAR LENGTHS SHOWN IN THE SCHEDULE SHALL BE INCREASED 50% WHEN COVER IS < OR = 1 BAR DIAMETER OR CLEAR SPACING BETWEEN BARS IS LESS THAN 2 BAR DIAMETERS.

2) 75% OF REBAR LENGTHS SHOWN IN THE SCHEDULE MAY BE USED WHEN COVER IS > 2 BAR DIAMETERS AND CLEAR SPACING BETWEEN BARS IS GREATER THAN 3 BAR DIAMETERS TOP BAR = HORIZONTAL REINFORCING SO PLACED THAT MORE THAN 12" OF CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCING

MINIMUM REBAR LAP SPLICE AND EMBEDMENT SCHEDULE | 2



REINFORCING BAR BENDS AND SPLICES | 3

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MUSEUM OF RIVERSIDE

Revisions

Project Engineer:	RG
Drawn by:	DJ
Project No.:	25K05

Professional's Stamp

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY R. GRAY — EXP. 6/30/27 — CIVIL — STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE & INTERPRETIVE CENTER
REHABILITATION & CONSTRUCTION ARCHITECTURAL DESIGN PROJECT

Sheet Title
ROOF FRAMING PLAN

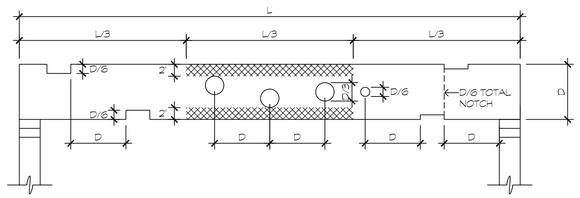
Design Stage
DESIGN DEVELOPMENT

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
1/4" = 1'-0"

Date

Sheet Number
S5

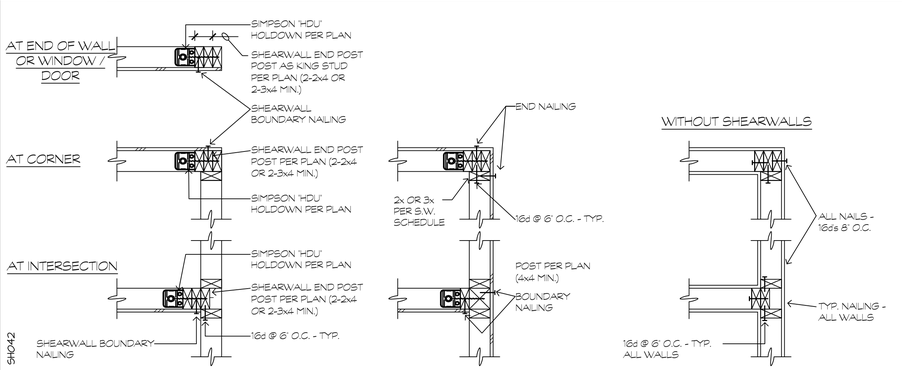


NOTES:
1) D = JOIST OR RAFTER DEPTH
L = JOIST OR RAFTER LENGTH
2) CROSS HATCHING INDICATES AREA WHERE NOTCHES OR HOLES ARE NOT ALLOWED.
3) PREFERRED LOCATION OF NOTCH IS AT TOP OF MEMBER.
4) NO NOTCHES ALLOWED IN TJI WOOD WEB JOISTS.

NOMINAL	ACTUAL	D/6	D/4	D/3
6"	5"	6"	1"	1⅝"
8"	7⅛"	1⅛"	1⅝"	2⅜"
10"	9⅛"	1"	2⅛"	3⅛"
12"	11⅞"	1⅝"	2⅝"	3 3/4"
14"	13⅛"	2⅛"	3⅛"	4 ⅝"

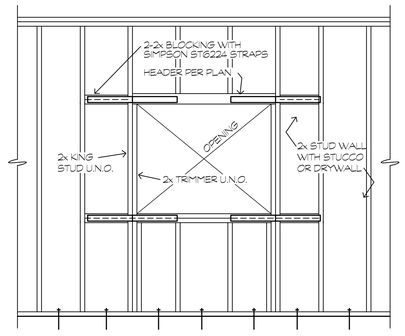
FC003

NOTCHING AND BORING OF JOISTS | 7



SH042

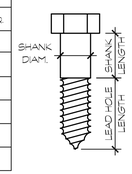
TYPICAL SHEARWALL CORNERS AND INTERSECTIONS | 8



SH034

TYPICAL WINDOW STRAPS - ALL WINDOWS | 10

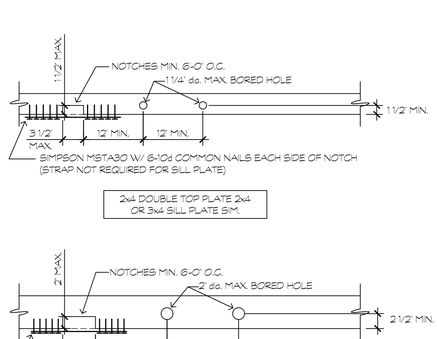
LAG SCREW ASSEMBLY [2,3,4]		
SCREW DIAMETER (IN)	LEAD HOLE [1] DIAMETER (IN.)	
	DOUG. FIR & SO. PINE	RED WOOD
1/4, 5/16, 3/8	NOT REQ.	NOT REQ.
7/16	5/16	1/4
1/2	3/8	5/16
5/8	7/16	3/8
3/4	1/2	7/16
7/8	5/8	1/2
1	3/4	5/8



NOTES:
1. TABLE APPLIES FOR DOUGLAS FIR LARCH, SOUTHER PINE WOODS, AND REWOOD (PER 2012 IBC SEC. 2337).
2. LAG SREWS SHALL BE WRENCH TIGHTENED; HAMMERING OF LAG SCREWS IS NOT PERMITTED.
3. SOAP OR OTHER APPROVED LUBRICANTS SHALL BE USED ON THE THREADED PORTION OF THE LAG SCREW TO PREVENT DAMAGING THE SCREW AND FACILITATE INSERTION.
4. THE SHANK HOLE SHALL HAVE THE SAME DIAMETER AND DEPTH OF PENETRATION AS THE SHANK LENGTH AND DIAMETER.
5. THE LEAD HOLE SHALL HAVE THE SAME DEPTH AS THE THREADED PORTION OF THE LAG SCREW.

FC005-01

LAG SCREW REQUIREMENTS | 11



FC003-02

TYP. NOTCHES AND BORINGS IN TOP AND BOTTOM PLATES | 9

SHEARWALL SCHEDULE PER 2025 CBC (BASED ON 2021 IBC)

	DESCRIPTION				FASTENER (8) (10) (16)				SHEAR TRANSFER				VALUE PLF (6) (7)
									BOTTOM SILL	CLIP	MUD SILL (16)	MUD SILL	
NO.	MATERIALS	2 SIDES	BLOCKED	3x FRMG	SIZE (15)	BOUNDRY	EDGE	FIELD (1)	NAIL / LAG / SDS (2)	A35/LTP4 (3)	⅝" dia. A.B. OR TI-HEADED ROD W EPOXY (5)	UFPIO/URFP (12) RETROFIT PLATE	
A	15/32" STRUCT I PLYWD	NO	YES	NO	8d	6"	6"	12"	16D @ 5"	19"	38" (11)	48"	280
A	15/32" STRUCT I PLYWD	NO	YES	NO	10d	6"	6"	12"	16D @ 4"	15"	32" (11)	32"	312
A	15/32" STRUCT I PLYWD	NO	YES	YES (4)	8d	4"	4"	12"	SDS @ 7" (14)	12"	25" (11)	32"	430
A	15/32" STRUCT I PLYWD	NO	YES	YES (4)	8d	3"	3"	12"	SDS @ 6" (14)	10"	21" (11)	30"	550
A	15/32" STRUCT I PLYWD	NO	YES	YES (4)	10d	3" (8)	3" (8)	12"	SDS @ 4" (14)	8"	16" (11)	24"	612
A	15/32" STRUCT I PLYWD	NO	YES	YES (4)	8d	2" (8)	2" (8)	12"	SDS @ 4" (14)	7"	15" (11)	20"	730
A	15/32" STRUCT I PLYWD	NO	YES	YES (4)	10d	2" (8)	2" (8)	12"	LAGS @ 7" (9)	6"	12" (11)	18"	800

"( )" SEE NOTES

NOTES:
(1) NAILING TO STUDS PER PLAN AT 12" O.C. ALL NAILS TO BE COMMON.
(2) 16D COMMON NAIL TRANSFER THRU BOTTOM SILL OR 3/8" DIA. LAGS - SEE NOTE (9), OR 1/4"x6" SIMPSON SDS SCREWS - SEE NOTE (14).
(3) SIMPSON A35 BENT CLIP OR SIMPSON LTP4 FLAT FRAMING CLIP.
(4) 3x FRAMING REQUIRED AT ALL ADJOINING PANEL EDGES, AND BOTTOM SILL PLATES THAT REST ON CONCRETE OR MASONRY ONLY, EXCEPT DOUBLE TOP-PLATES. MINIMUM 1/2" EDGE NAILING DISTANCE AT PANEL EDGES AND NOT LESS THAN 3/8" FROM EDGE OF CONNECTION MEMBERS. USE 3x MEMBERS AT BOUNDARIES WHEN NAILING SPACED AT 4" O.C. OR LESS.
(5) USE SIMPSON "SET" EPOXY FOR RETROFIT BOLTS - 7" EMBED - WITH SPECIAL INSPECTION.
(6) VALUES PER AF&PA SDPWS-2021.
(7) STRUCTURAL OBSERVATION BY THE STRUCTURAL ENGINEER IS REQUIRED FOR ALL WALLS WITH A VALUE GREATER THAN 300 PLF PERIODIC SPECIAL INSPECTION IS REQUIRED WHEN NAILING OF SHEATHING IS 4" O.C. OR CLOSER PER 2022 CBC SECTION 1705.11
(8) NAILS SHALL BE STAGGERED IN TWO LINES ALONG PANEL EDGES WHEN NAIL SPACING IS 2" O.C. OR WHEN 10d COMMON NAILS SPACED 3" O.C. PENETRATE FRAMING MORE THAN 1-1/2".
(9) AT BOTTOM SILL PLATE FLOOR TRANSFER PROVIDE 3/8" DIAMETER LAG SCREWS WITH CUT WASHERS 3" EMBEDMENT INTO BLOCKING BELOW. HOLES MUST BE PRE-DRILLED. STAGGER LAGS 1/2" MIN. USE MIN. 4x BLOCKING BELOW (OR 3 1/2" LSL BLOCKING)
(10) SHEATHING NAILS AND SCREWS SHALL BE DRIVEN SO THAT THEIR HEAD IS FLUSH WITH THE SURFACE OF THE SHEATHING. PER 2022 CBC SECTION 2304.10.2. IF HEAD PENETRATES SHEATHING MORE THAN 1/16" THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY AND WILL NOT BE APPROVED.
(11) 5/16" X 3" X 3" PLATE WASHERS ARE REQUIRED. A DIAGONALLY SLOTTED HOLE OF 3/16" WIDTH AND 1-3/4" LENGTH IN WASHER IS PERMITTED PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE SLOTTED PLATE WASHER AND NUT PER 2022 CBC 2308.3.1.1
(12) AT RAISED WOOD FOUNDATIONS, WHERE OCCURS, UFPIO SIMPSON RETROFIT PLATE: USE (5) SDS ¼" dia. x 3" WOOD SCREWS INTO SILL PLATE & (2) 1/2" dia. THREADED RODS W/ SIMPSON "SET" EPOXY INTO EXISTING CONCRETE FOUNDATION - EMBED 4 1/2".
(13) WHERE PLYWOOD IS APPLIED ON BOTH SIDES OF SHEARWALL, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS.
(14) AT BOTTOM SILL PLATE FLOOR TRANSFER PROVIDE 1/4"x6" SIMPSON SDS SCREWS WITH 2-3/4" EMBEDMENT INTO BLOCKING BELOW. STAGGER SCREWS 1/2" MIN. USE MIN. 4x BLOCKING BELOW (OR 3 1/2" LSL BLOCKING)
(15) 10d COMMON = 3" X 0.148" (MAY USE ALTERNATE PLYWOOD NAIL= 2-3/8" X 0.148"). 8d COMMON = 2-1/2" X 0.131"
(16) FOUNDATION SILL PLATES SHALL BE PRESSURE-TREATED LUMBER (CBC 2304.12.1.4). ANCHOR BOLTS AND OTHER FASTENERS IN PRESERVATIVE-TREATED SILL PLATES SHALL BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL PER CBC 2304.10.5.1.
(17) CLIPS TO BE ON EACH SIDE OF WALL WITH SPACING PER SCHEDULE.
(18) STUDS MUST BE SPACED A MAXIMUM OF 16" O.C.

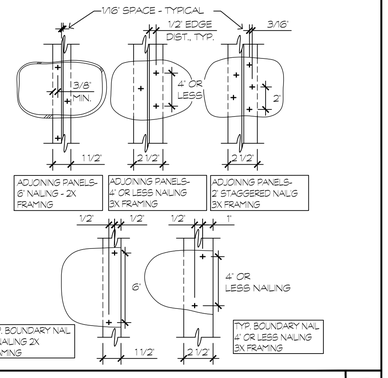
SW-2010 CBC (SDS)

SHEARWALL SCHEDULE | 1

NOTE: NAILS MAY BE REQUIRED TO BE REPLACED WITH SCREWS TO MITIGATE IMPACT RELATED DAMAGE.

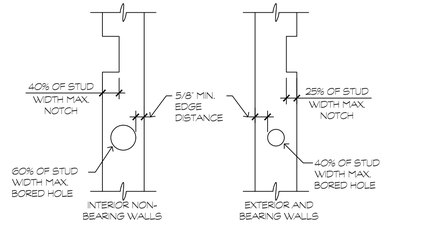
8D AND 10D COMMON NAILS EQUIVALENT: FOR SHEATHING OF SEISMIC SYSTEMS USE SIMPSON "WSNTL" #9 SCREWS OF EQUIVALENT LENGTH OR GREATER (ESR#1472).

COMMON FRAMING NAILS EQUIVALENT: SIMPSON "SDWS" FRAMING SCREWS (ER#-192)



S1005

TYPICAL PLYWOOD NAILING | 5

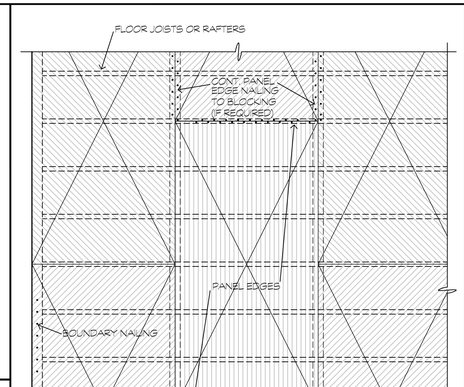


NOTES:
1. NOTCHES AND HOLES SHALL NOT OCCUR AT THE SAME LOCATION ON A STUD
2. ANY STUD MAY BE BORED WITH A MAXIMUM HOLE OF 60% OF THE STUD WIDTH IF THE STUD IS DOUBLED AND ONLY TWO SUCCESIVE STUDS ARE SO BORED.

% OF STUD WIDTH	2x4	2x6
25%	7/8"	1 3/8"
40%	1 3/8"	2 1/8"
60%	2"	3 1/4"

FC002

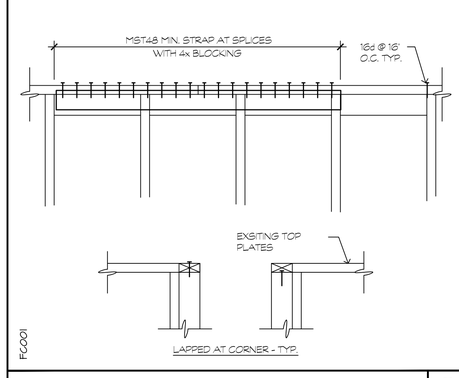
NOTCHING AND BORING OF STUDS | 6



NOTES:
1) PLYWOOD THICKNESS AND GRADE PER PLAN
2) ALL PLYWOOD SHEETS TO BE 4'-0" x 8'-0" EXCEPT WHERE JOB CONDITIONS PROHIBIT.
3) NAILING PER SPECIFICATIONS, FRAMING PLAN NOTES AND TYPICAL PLYWOOD NAILING DETAIL.
4) IF BLOCKED DIAPHRAGM REQUIRED, PROVIDE 2x FULL DEPTH @ 8'-0" O.C. + 3x4 FLAT BLOCKING AT OTHER PANEL EDGES.
5) FRAMING AT ADJOINING PANEL EDGES SHALL BE 3-IN OR WIDER & NAILS SHALL BE STAGGERED WHERE:
   A. NAILS ARE SPACED 2-IN OR 2 1/2-IN ON CENTER
   B. 10d NAILS HAVING PENTRATION INTO FRAMING OF MORE THAN 1 5/8-IN ARE SPACED 3-IN OR LESS ON CENTER

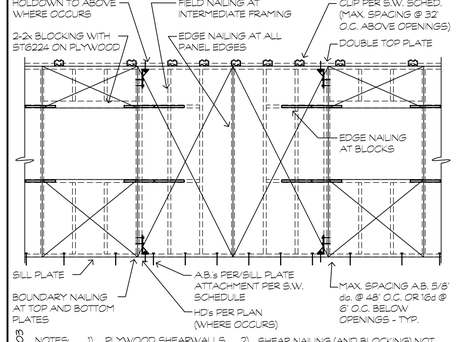
S1004

TYPICAL ROOF SHEATHING | 4



FC001

TYPICAL DOUBLE TOP-PLATE SPLICE AND CORNER LAP | 2



S1003

NOTES: 1) PLYWOOD SHEARWALLS SHALL BE BLOCKED AT ALL PANEL EDGES. 2) SHEAR NAILING (AND BLOCKING) NOT REQUIRED ABOVE OR BELOW OPENINGS UNLESS NOTED OTHERWISE ON PLANS

TYPICAL SHEARWALL NAILING AND STRAPS | 3

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Project No.:	25K05

Professional's Stamp

REGISTERED PROFESSIONAL ENGINEER — THERESA GRACE — EXP. 6/30/2027 — CIVIL — STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE & INTERPRETIVE CENTER
REHABILITATION & CONSTRUCTION ARCHITECTURAL DESIGN PROJECT

Sheet Title
ROOF FRAMING PLAN

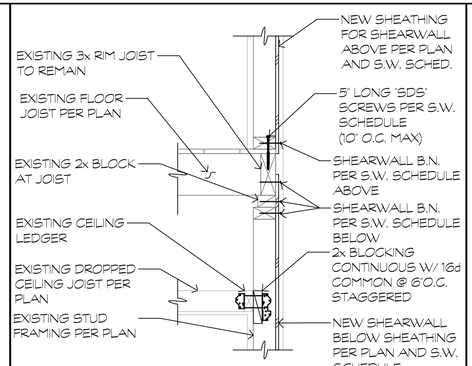
Design Stage
DESIGN DEVELOPMENT

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

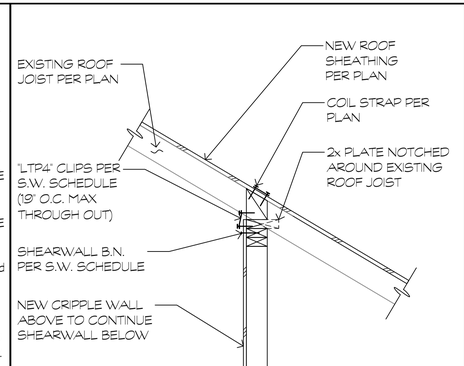
Scale
1/4" = 1'-0"

Date

Sheet Number
S6



10 SHEAR TRANSFER AT FLOOR 7



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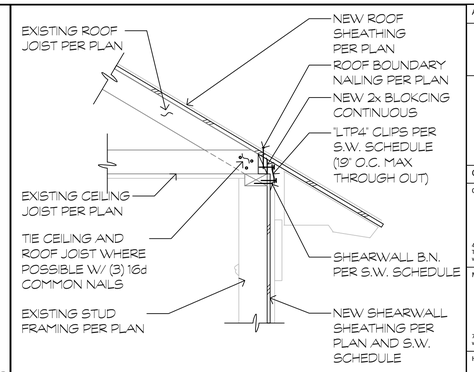

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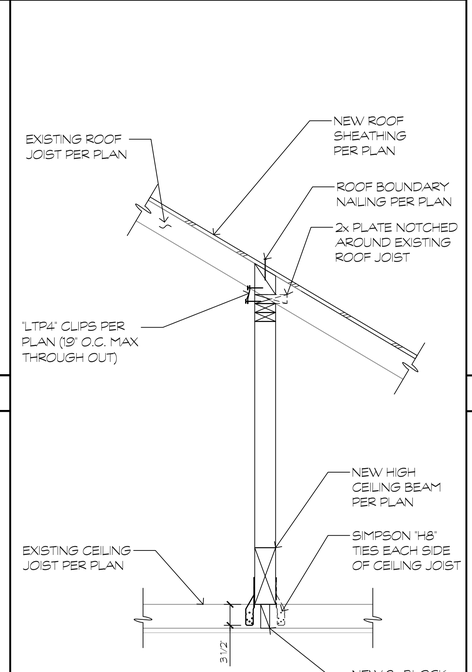

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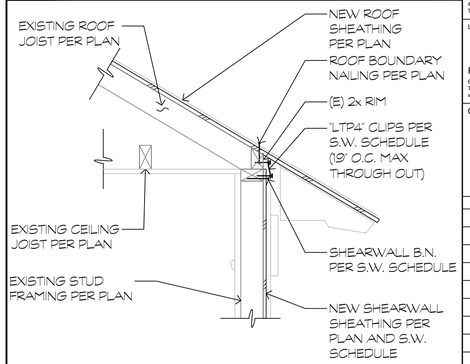
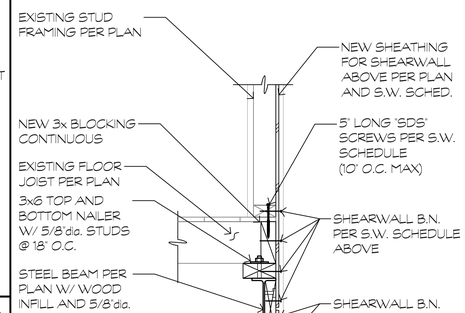
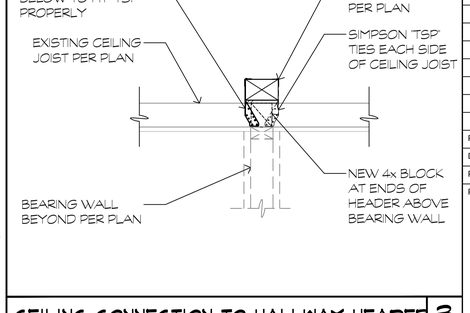
12 HIGH CEILING BEAM ABV. KITCHEN 8



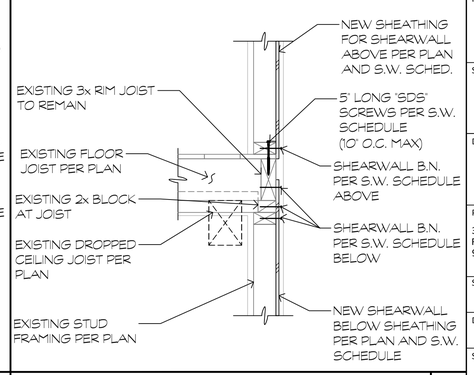
SHEAR TRANSFER AT ROOF EAVE 2



CEILING CONNECTION TO HALLWAY HEADER 3



13 9 SHEAR TRANSFER AT FLOOR ABV. PORCH 6



SHEAR TRANSFER AT FLOOR 4

Architect

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www. rhala.com

Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Project Engineer:	RG
Drawn by:	DJ
Project No.:	25K05

Professional's Stamp

REGISTERED PROFESSIONAL ENGINEER — EXP. 6/30/27 — CIVIL — STATE OF CALIFORNIA

NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE & INTERPRETIVE CENTER
REHABILITATION & CONSTRUCTION ARCHITECTURAL DESIGN PROJECT

Sheet Title
ROOF FRAMING PLAN

Design Stage
DESIGN DEVELOPMENT

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

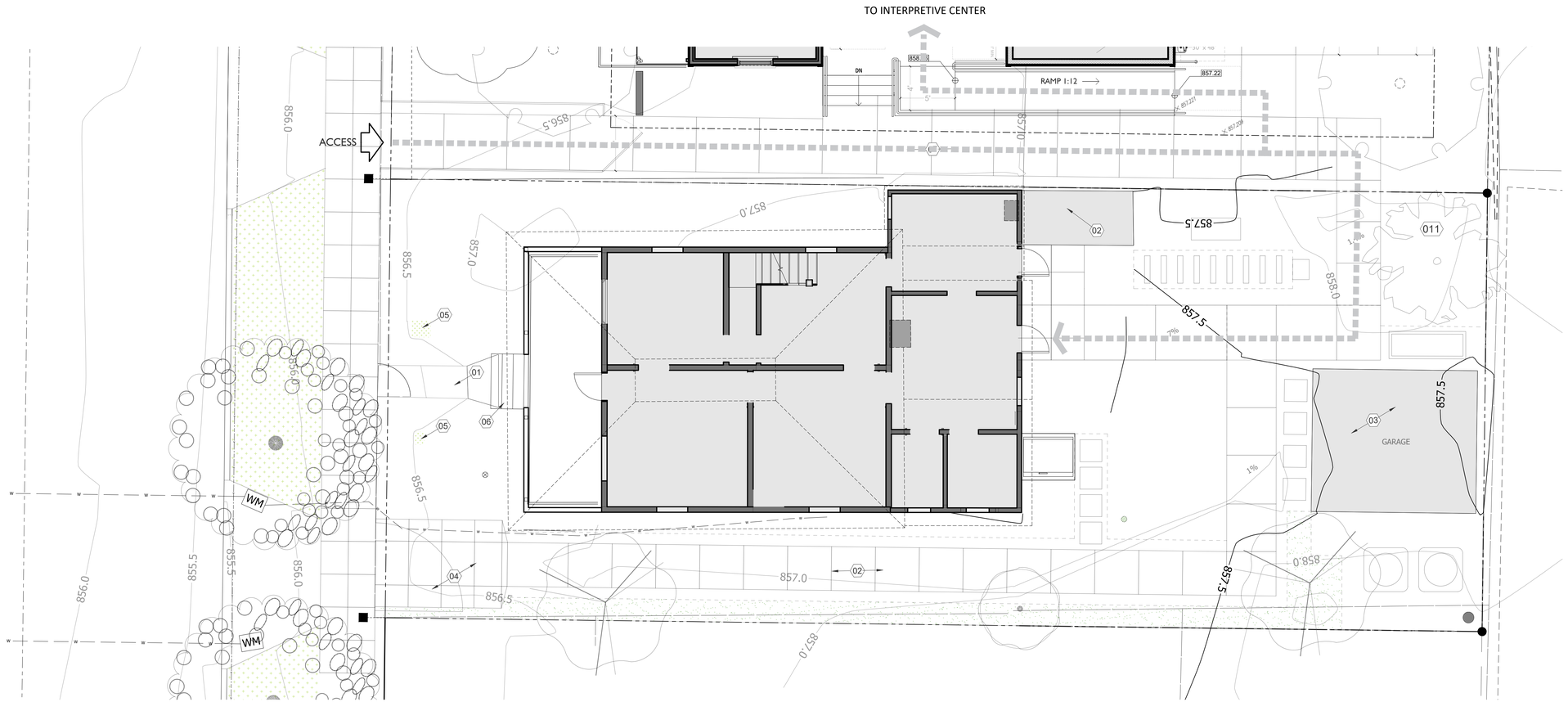
Scale
1" = 1'-0"

Date

Sheet Number
S6.1

KEYNOTES

1. SALVAGED WALKWAY TO BE RESTORED
2. RECONSTRUCT SHED USING SALVAGED MATERIALS (WALL BOARDS, SHED DOOR, WINDOW AND JAMBS, CORNER BOARDS AND ROOF MEMBERS, ETC.) AND DOCUMENTED DIMENSIONS. SEE STRUCTURAL DRAWINGS FOR UPGRADES.
3. RECONSTRUCT NEW SLAB ON GRADE FOR GARAGE RECONSTRUCTION PER STRUCTURAL DRAWINGS (PENDING)
4. NEW CONCRETE PAVING PER CIVIL DARWINGS. COORDINATE WITH LANDSCAPE DRAWINGS.
5. CLEAN & REPAIR USING APPROVED METHODS AND REPLACE SALVAGED MONUMENT
6. NEW STEPS
7. NORTH SITE ACCESS COORDINATED BETWEEN CONTRACTOR AND OWNER DURING CONSTRUCTION



NOTES:

1. FOR HARDSCAPE AND SOFTSCAPE SEE LANDSCAPE PLAN.

(01) FOR DOOR SCHEDULE SEE A-601
(02) FOR WINDOW SCHEDULE SEE A-601
(002) FOR FIXTURE SCHEDULE SEE A-602
(S001) FOR FINISHES SCHEDULE SEE A-602

N

1 SITE PLAN (P)
1/4" = 1'-0"

Architect

K&R design inc.
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Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE PHASE 2

Sheet Title
PROPOSED SITE PLAN

Design Stage
50% CONSTRUCTION DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
1/4"=1'-0"

Date
December 22, 2025

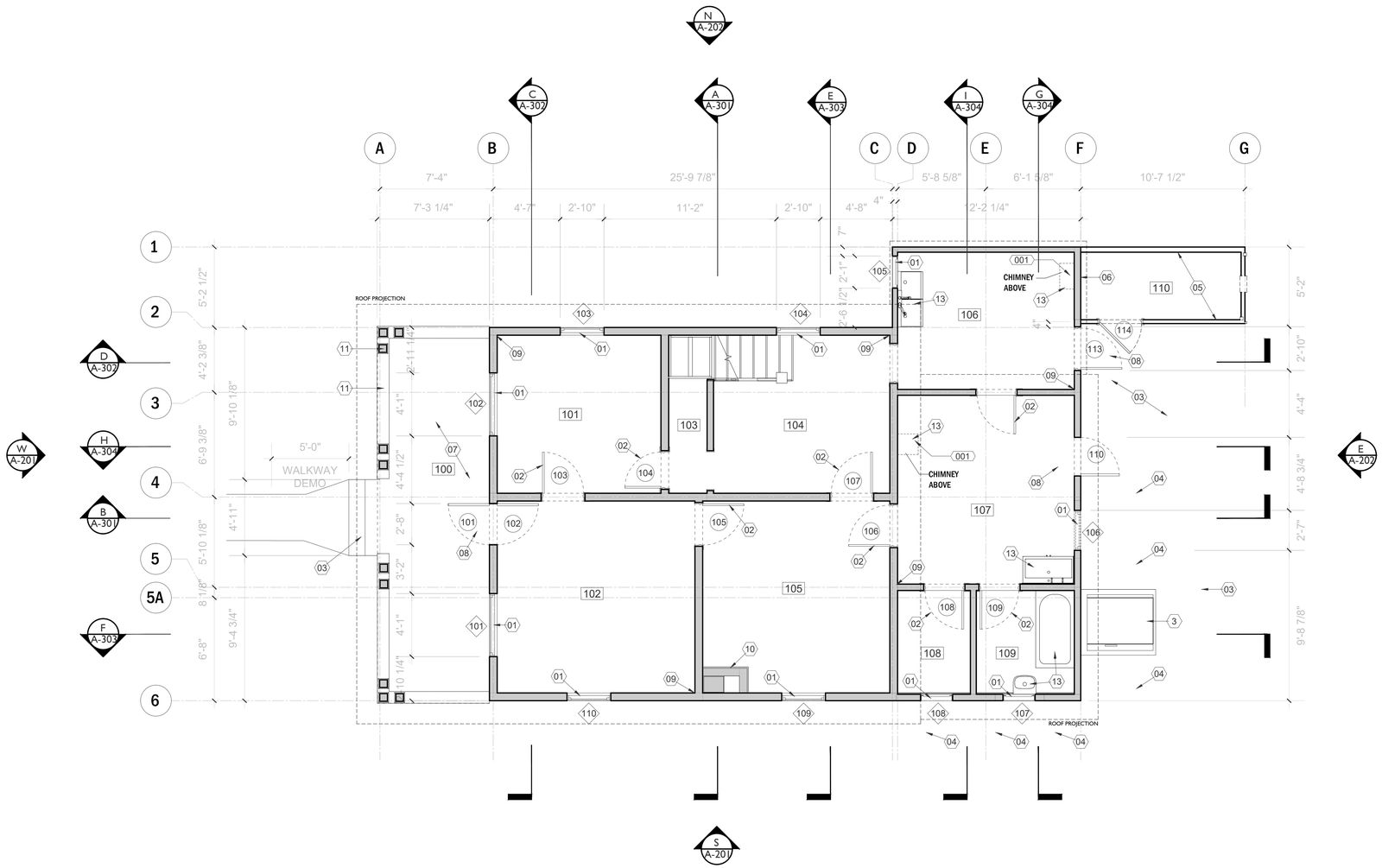
Sheet Number
A-001

KEYNOTES

1. REINSTALL SALVAGED WINDOW SASH, HARDWARE, & SASH WEIGHTS PER SPECS. REPAIR ANY DAMAGE AND REPLACE IN KIND DAMAGED PIECES/AREAS
2. REINSTALL SALVAGED INTERIOR DOORS AND HARDWARE PER SPECS. REPAIR ANY DAMAGE AND REPLACE IN KIND DAMAGED PIECES/AREAS
3. INSTALL NEW CELLAR DOOR PER SPECS
4. REMOVE EXTERIOR STABILIZATION ELEMENTS, REPAIR ANY DEMAGE PER SPECS
5. RECONSTRUCT SHED USING SALVAGED MATERIALS (WALL BOARDS, SHED DOOR, WINDOW AND JAMBS, CORNER BOARDS AND ROOF MEMBERS, ETC.) AND DOCUMENTED DIMENSIONS. SEE STRUCTURAL DRAWINGS FOR UPGRADES.
6. REINSTALL SALVAGED CHILD GRAFFITTI BOARDS AT SHED INTERIOR PER SPECS. REPAIR ANY DAMAGE AND REPLACE IN KIND DAMAGED PIECES/AREAS
7. REINSTALL SALVAGED HISTORIC PORCH WALL STUDS & PLATES, FLOOR BOARDS, INTERIOR WOOD SIDING, POST ENCLOSURE, WALL CAP TRIM, AND CEILING WOOD SIDING PER SPECS. REPAIR ANY DAMAGE AND REPLACE IN KIND DAMAGED PIECES/AREAS
8. REINSTALL SALVAGED EXTERIOR DOOR AND HARDWARE PER SPECS. REPAIR ANY DAMAGE AND REPLACE IN KIND DAMAGED PIECES/AREAS
9. REPAIR ALL BEVEL CUT PLASTER PER SPECS

ROOM ID

100	PORCH
101	BEDROMM
102	PARLOR
103	CLOSET
104	KAMITOKU
105	DINING ROOM
106	LAUNDRY
107	KITCHEN
108	PANTRY
109	BATH
110	STORAGE



N

I FIRST FLOOR (P)

1/4" = 1'-0"

0 5 10 ft

Architect

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Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE PHASE 2

Sheet Title
PROPOSED FIRST FLOOR PLAN

Design Stage
50% CONSTRUCTION DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
1/4"=1'-0"

Date
December 22, 2025

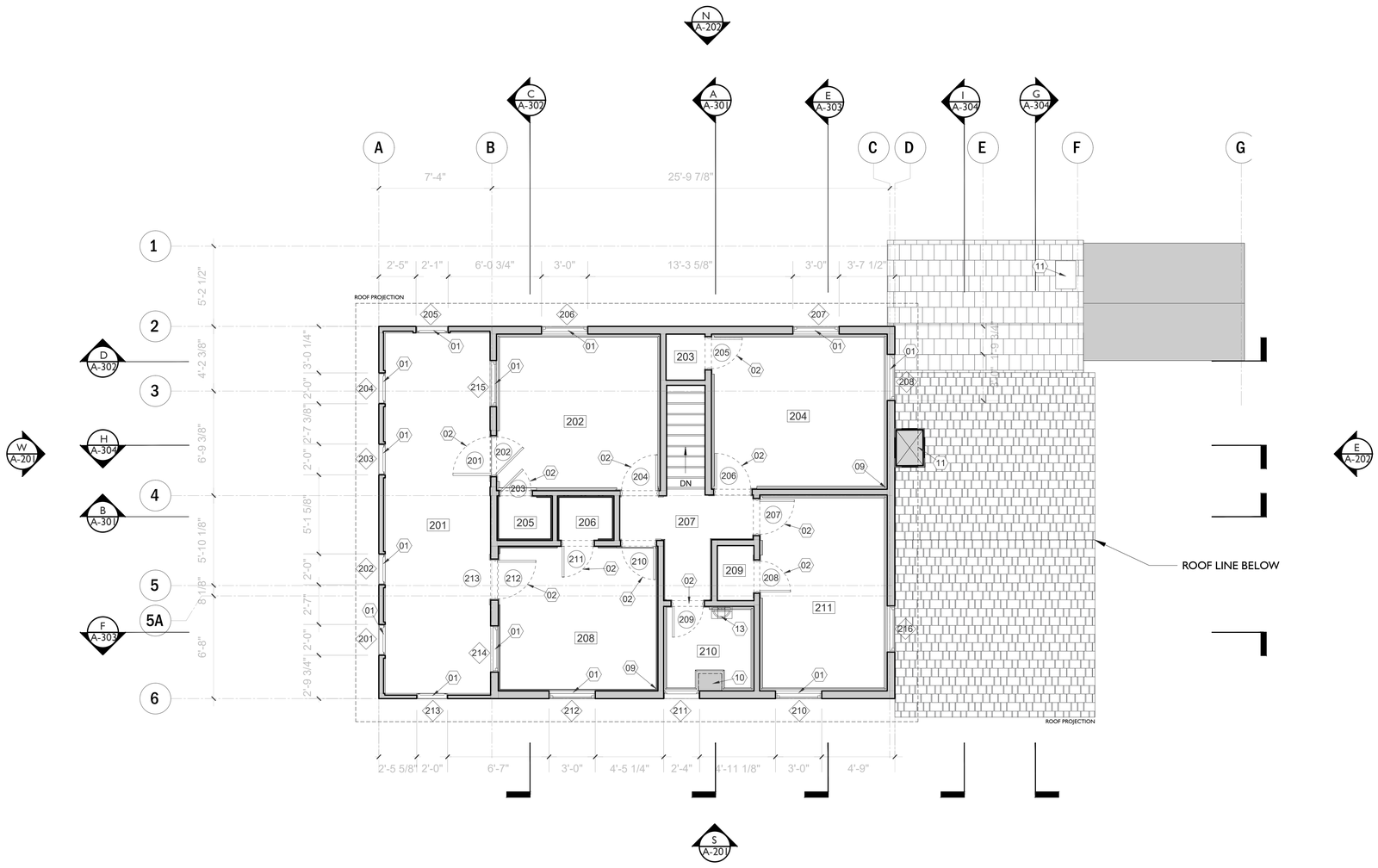
Sheet Number
A-101

KEYNOTES

1. REINSTALL SALVAGED WINDOW SASH, HARDWARE, & SASH WEIGHTS PER SPECS. REPAIR ANY DAMAGE AND REPLACE IN KIND DAMAGED PIECES/AREAS
2. REINSTALL SALVAGED INTERIOR DOORS AND HARDWARE PER SPECS. REPAIR ANY DAMAGE AND REPLACE IN KIND DAMAGED PIECES/AREAS
3. INSTALL NEW CELLAR DOOR PER SPECS
4. REMOVE EXTERIOR STABILIZATION ELEMENTS, REPAIR ANY DEMAGE PER SPECS
5. RECONSTRUCT SHED USING SALVAGED MATERIALS (WALL BOARDS, SHED DOOR, WINDOW AND JAMBS, CORNER BOARDS AND ROOF MEMBERS, ETC.) AND DOCUMENTED DIMENSIONS. SEE STRUCTURAL DRAWINGS FOR UPGRADES.
6. REINSTALL SALVAGED CHILD GRAFFITTI BOARDS AT SHED INTERIOR PER SPECS. REPAIR ANY DAMAGE AND REPLACE IN KIND DAMAGED PIECES/AREAS
7. REINSTALL SALVAGED HISTORIC PORCH WALL STUDS & PLATES, FLOOR BOARDS, INTERIOR WOOD SIDING, POST ENCLOSURE, WALL CAP TRIM, AND CEILING WOOD SIDING PER SPECS. REPAIR ANY DAMAGE AND REPLACE IN KIND DAMAGED PIECES/AREAS
8. REINSTALL SALVAGED EXTERIOR DOOR AND HARDWARE PER SPECS. REPAIR ANY DAMAGE AND REPLACE IN KIND DAMAGED PIECES/AREAS
9. REPAIR ALL BEVEL CUT PLASTER PER SPECS
10. REINSTALL AND RESTORE PLASTER BRICK CHIMNEY WITH SLAVAGED BRICKS ALONG WITH ENCLOSING WALL PER SPECS
11. RECONSTRUCTED CHIMNEY USING SALVAGED BRICKS PER STRUCTURAL

ROOM ID

201	SLEEPING PORCH
202	BEDROOM
203	CLOSET
204	BEDROOM
205	CLOSET
206	CLOSET
207	HALL
208	BEDROOM
209	CLOSET
210	BATH
211	BEDROOM



N

I SECOND FLOOR (P)

1/4" = 1'-0"

0 5 10 ft

Architect

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Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

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NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE
PHASE 2

Sheet Title
PROPOSED
SECOND FLOOR PLAN

Design Stage
50% CONSTRUCTION
DOCUMENTS

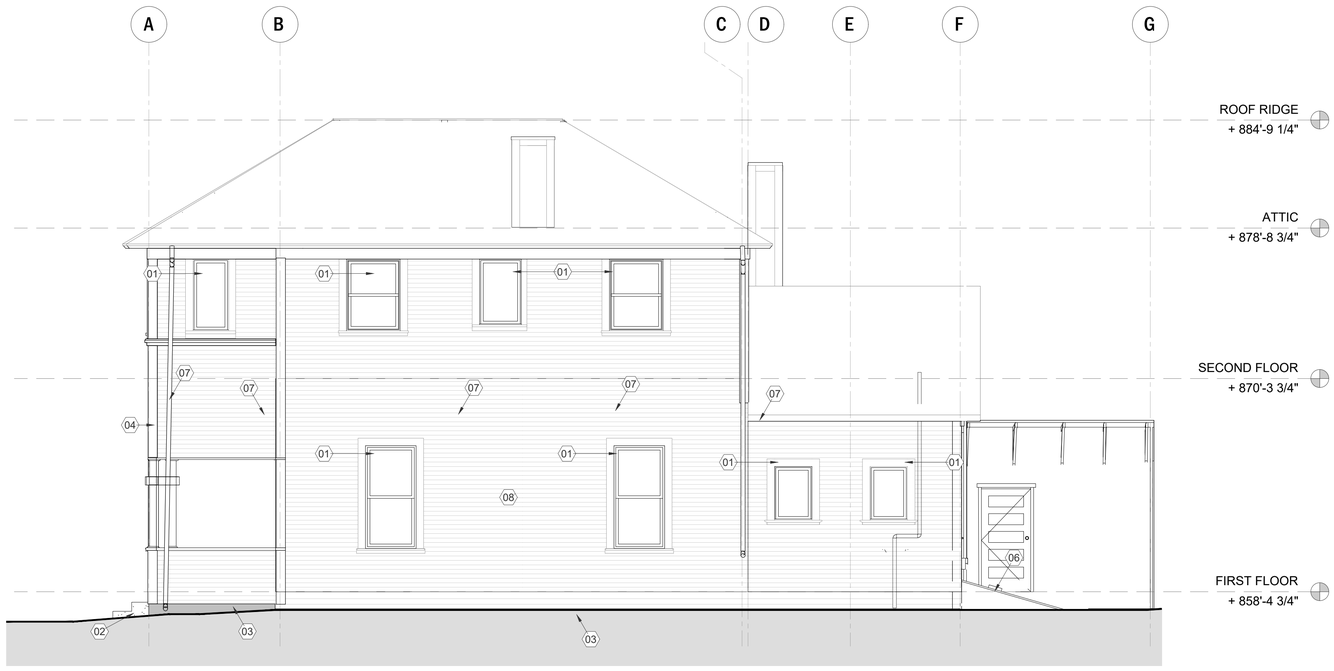
Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
1/4"=1'-0"

Date
December 22, 2025

Sheet Number
A-102

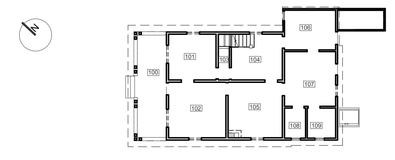
1 WEST ELEVATION (P)
1/4" = 1'-0"



2 SOUTH ELEVATION (P)
1/4" = 1'-0"

KEYNOTES

1. RECONSTRUCTED CHIMNEY USING SALVAGED BRICKS PER STRUCTURAL
2. REPAIR AND RESTORE ALL PENETRATIONS MADE DURING LIFTING & STABILIZATION OPERATIONS
3. CLEAN PREP & PAINT SIDING PER SPECIFICATIONS & FINISH SCHEDULE
4. CLEAN PREP & PAINT TRIM PER SPECIFICATIONS & FINISH SCHEDULE
5. INSTALL NEW ASPHALT SHINGLE ROOF PER SPECIFICATIONS & FINISH SCHEDULE
6. INSTALL NEW GUTTER, DOWNSPOUT AND CATCH BASIN CONNECTED TO DRAINS PER SPECIFICATIONS
7. REPAIR AND RESTORE ALL PENETRATIONS MADE DURING LIFTING & STABILIZATION OPERATIONS
8. REMOVE EXTERIOR WOOD SIDING IN SECTIONS, INSTALL R15 BATT INSULATION. CLEAN, REPAIR,PREP AND PAINT PER SPECIFICATIONS AND REINSTALL THE SALVAGED WOOD SIDING PER THE SIDING KEYING DOCUMENT



3 KEY PLAN
1/16" = 1'-0"

Architect

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Owner
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MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE
PHASE 2

Sheet Title
PROPOSED ELEVATIONS

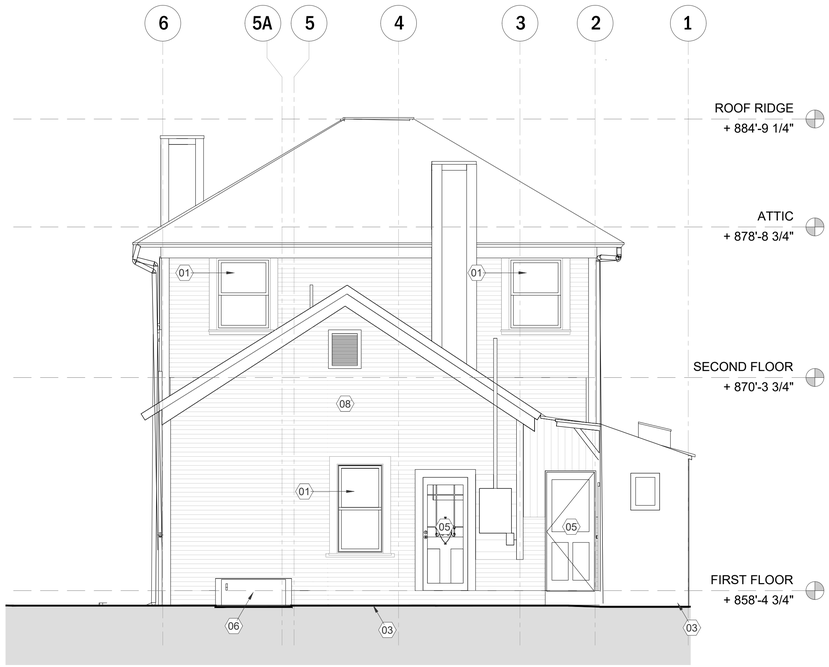
Design Stage
50% CONSTRUCTION DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

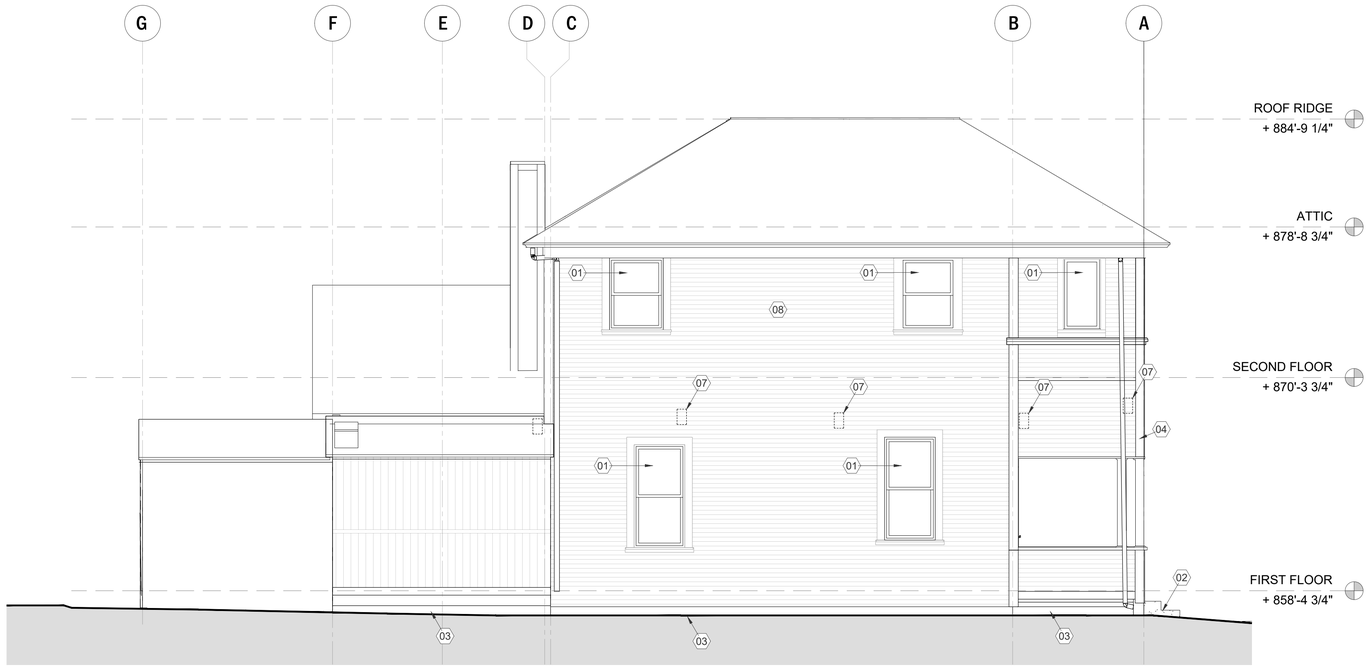
Scale
3/16"=1'-0"

Date
December 15, 2025

Sheet Number
A-201



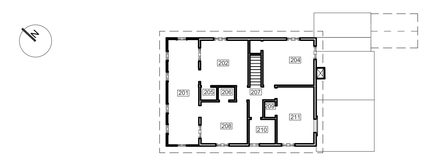
1 EAST ELEVATION (P)
1/4" = 1'-0"



2 NORTH ELEVATION (P)
1/4" = 1'-0"

KEYNOTES

1. RECONSTRUCTED CHIMNEY USING SALVAGED BRICKS PER STRUCTURAL
2. REPAIR AND RESTORE ALL PENETRATIONS MADE DURING LIFTING & STABILIZATION OPERATIONS
3. CLEAN PREP & PAINT SIDING PER SPECIFICATIONS & FINISH SCHEDULE
4. CLEAN PREP & PAINT TRIM PER SPECIFICATIONS & FINISH SCHEDULE
5. INSTALL NEW ASPHALT SHINGLE ROOF PER SPECIFICATIONS & FINISH SCHEDULE
6. INSTALL NEW GUTTER, DOWNSPOUT AND CATCH BASIN CONNECTED TO DRAINS PER SPECIFICATIONS
7. REPAIR AND RESTORE ALL PENETRATIONS MADE DURING LIFTING & STABILIZATION OPERATIONS
8. REMOVE EXTERIOR WOOD SIDING IN SECTIONS, INSTALL R15 BATT INSULATION. CLEAN, REPAIR,PREP AND PAINT PER SPECIFICATIONS AND REINSTALL THE SALVAGED WOOD SIDING PER THE SIDING KEYING DOCUMENT



3 KEY PLAN
1/16" = 1'-0"

Architect
K R design inc.
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Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp
NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE PHASE 2

Sheet Title
PROPOSED ELEVATIONS

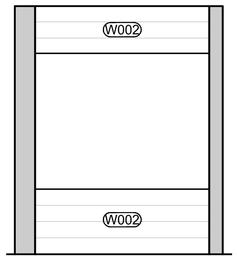
Design Stage
50% CONSTRUCTION DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

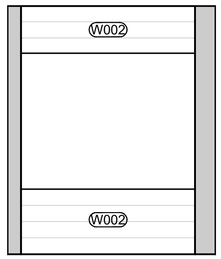
Scale
3/16"=1'-0"

Date
December 15, 2025

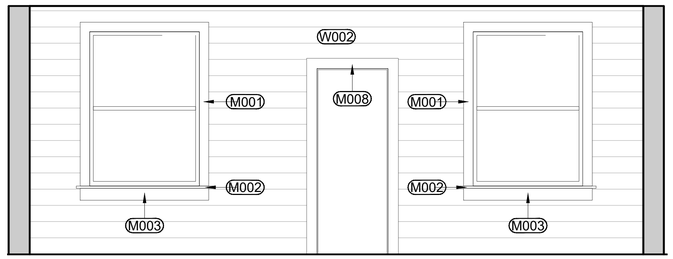
Sheet Number
A-202



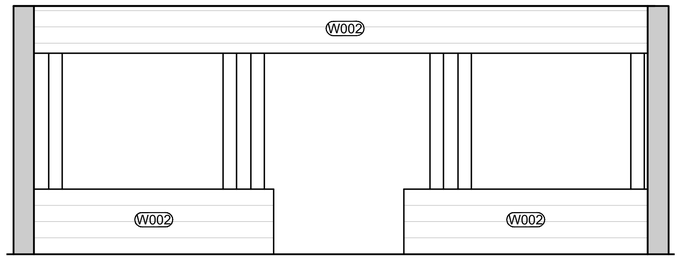
NORTH



SOUTH

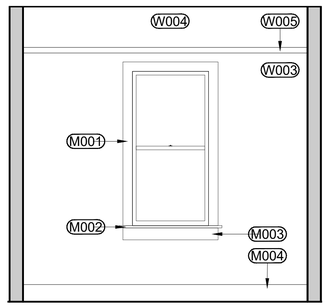


EAST

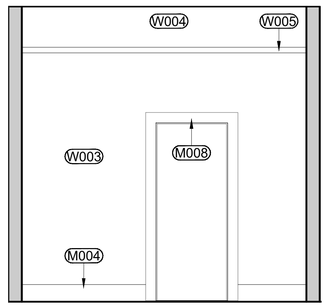


WEST

1 100 PORCH
3/8" = 1'-0"



NORTH



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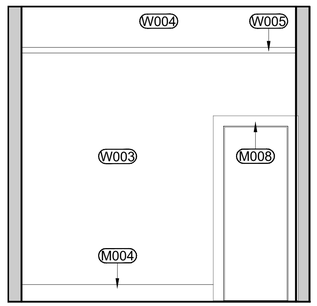

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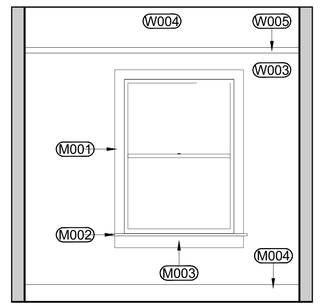

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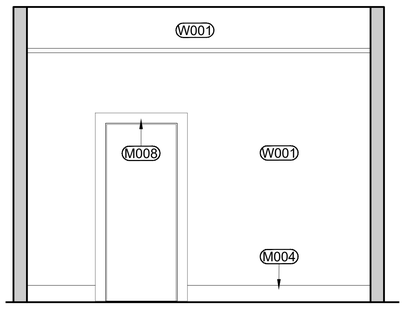
3/8" = 1'-0"



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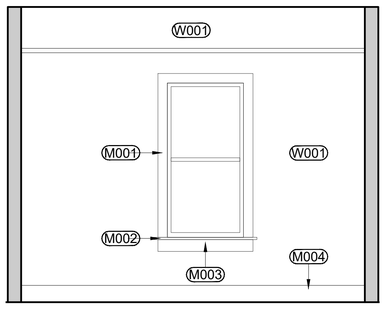

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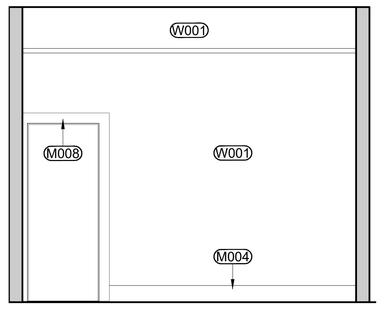

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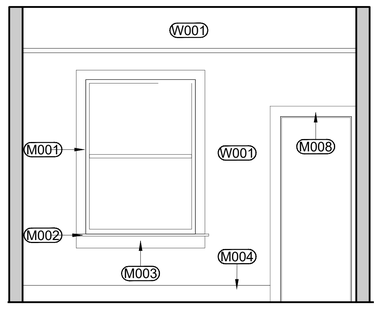

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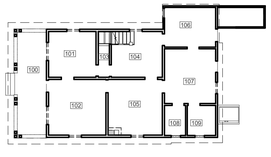
3/8" = 1'-0"



4 KEY PLAN
1/16" = 1'-0"

GENERAL NOTES

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- FOR FINISH SCHEDULE REFER TO PAGE A-604

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Checked by:

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Project Title
HARADA HOUSE
PHASE 2

Sheet Title
INTERIOR ELEVATIONS

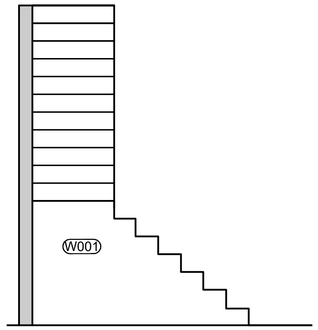
Design Stage
50% CONSTRUCTION DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
3/16"=1'-0"

Date
December 15, 2025

Sheet Number
A-203



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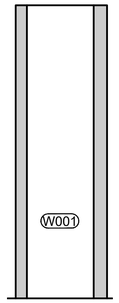

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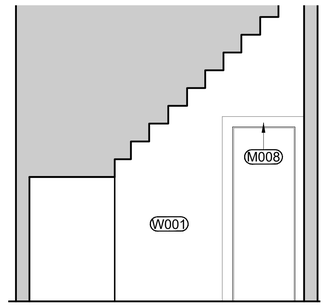

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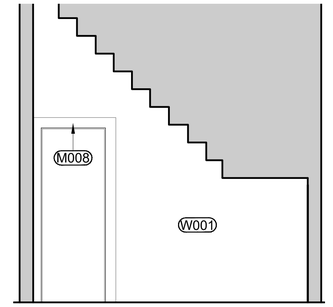

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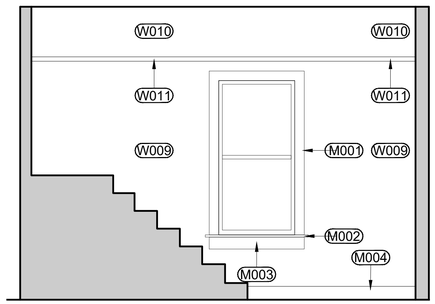
3/8" = 1'-0"



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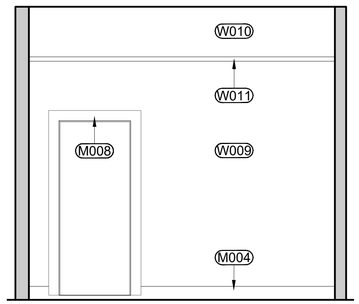

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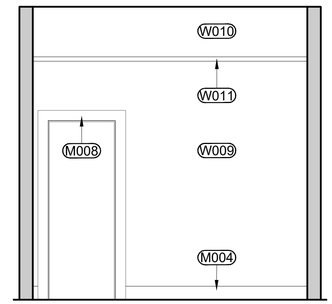

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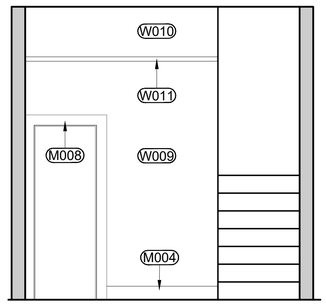
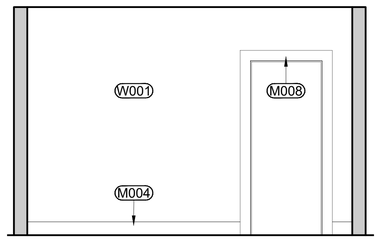


WEST

2 104 KAMITOKU
3/8" = 1'-0"



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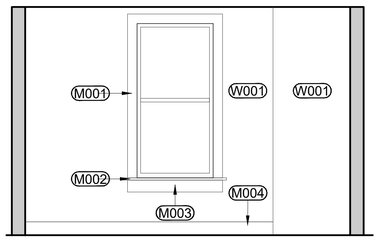

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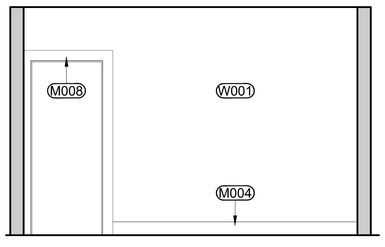

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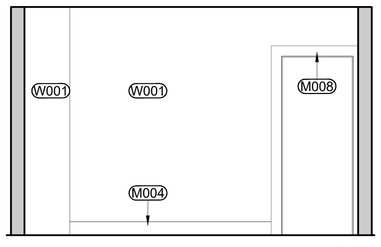

WEST

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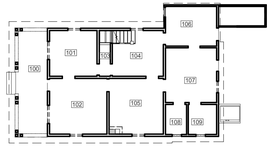
3/8" = 1'-0"



4 KEY PLAN
1/16" = 1'-0"

GENERAL NOTES

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MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

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NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE
PHASE 2

Sheet Title
INTERIOR
ELEVATIONS

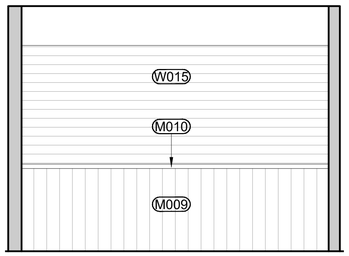
Design Stage
50% CONSTRUCTION
DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
3/16"=1'-0"

Date
December 15, 2025

Sheet Number
A-204



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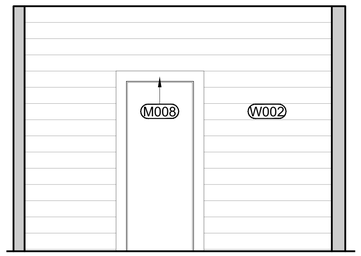

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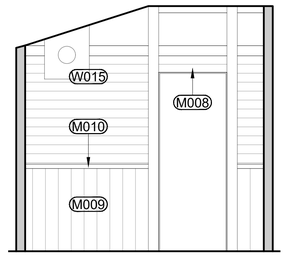

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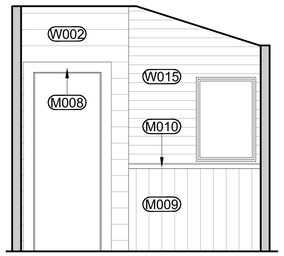

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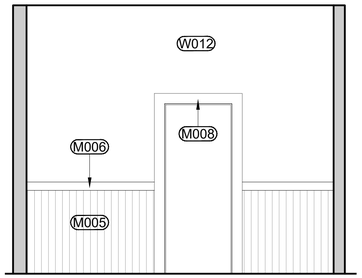

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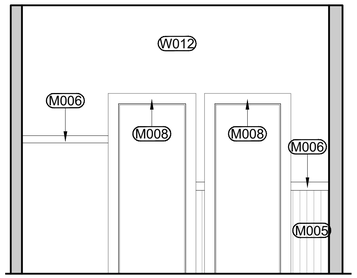

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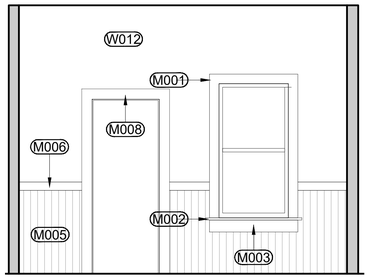

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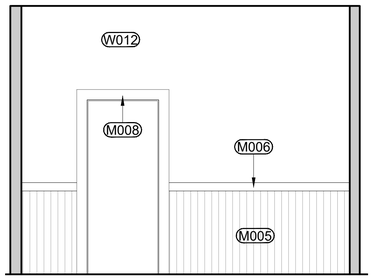

WEST

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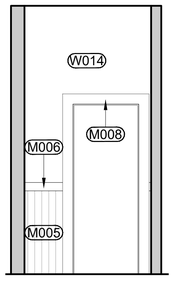

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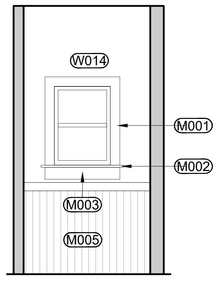

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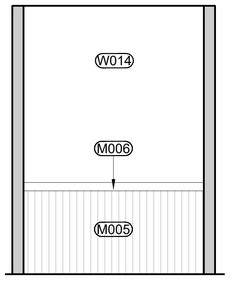

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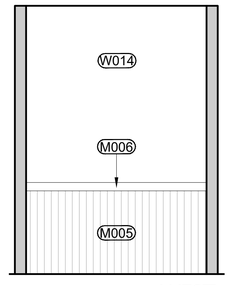

WEST

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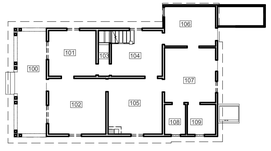

4 KEY PLAN
1/16" = 1'-0"

GENERAL NOTES

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Architect

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Revisions

Drawn by:

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Project Title
HARADA HOUSE PHASE 2

Sheet Title
INTERIOR ELEVATIONS

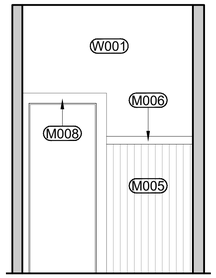
Design Stage
50% CONSTRUCTION DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
3/16"=1'-0"

Date
December 15, 2025

Sheet Number
A-205



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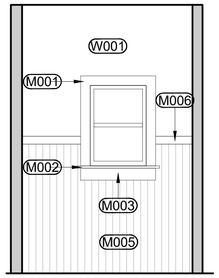

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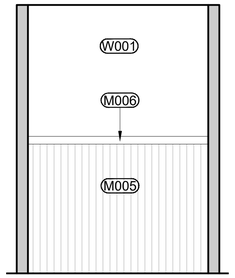

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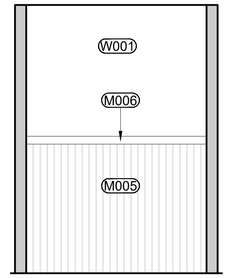

WEST

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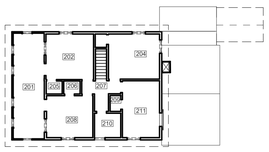

3 KEY PLAN
1/16" = 1'-0"

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Project Title

HARADA HOUSE
PHASE 2

Sheet Title

INTERIOR
ELEVATIONS

Design Stage

50% CONSTRUCTION
DOCUMENTS

Project Address

3342 & 3356 Lemon Street
Riverside, CA
92501

Scale

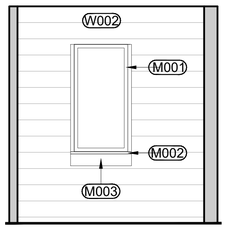
3/16"=1'-0"

Date

December 15, 2025

Sheet Number

A-206



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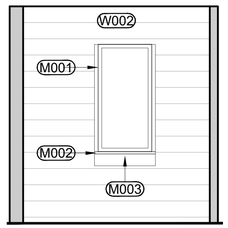

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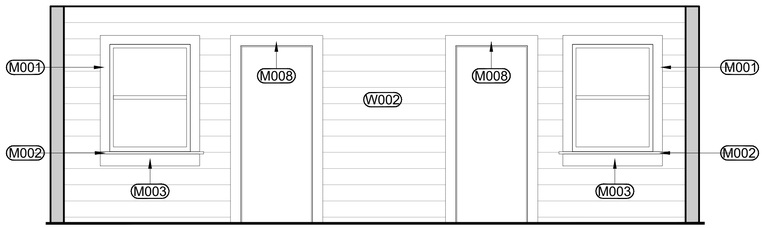

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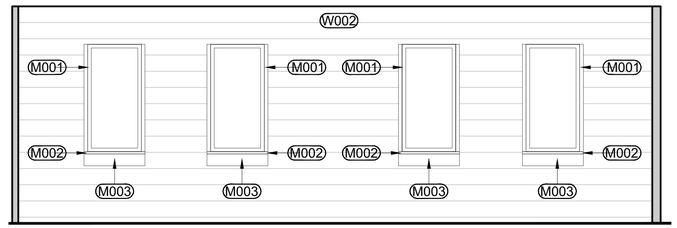

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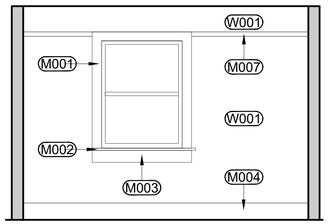
1 201 SLEEPING PORCH
3/8" = 1'-0"



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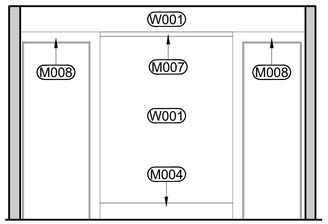

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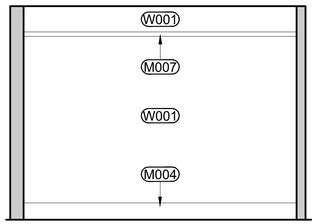

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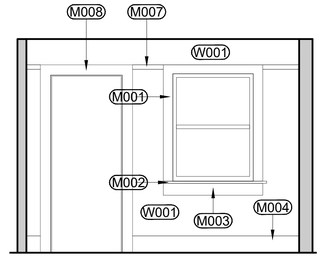

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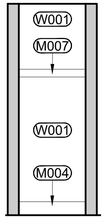
3/8" = 1'-0"



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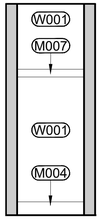

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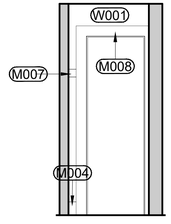

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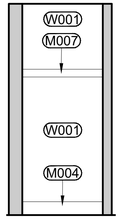

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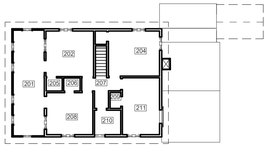
3 203 CLOSET
3/8" = 1'-0"



3 KEY PLAN
1/16" = 1'-0"

GENERAL NOTES

- REPAIR AND RESTORE ALL PENETRATIONS MADE DURING LIFTING & STABILIZATION OPERATIONS
- FOR FINISH SCHEDULE REFER TO PAGE A-604

Architect

K|R design inc.
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Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE
PHASE 2

Sheet Title
INTERIOR
ELEVATIONS

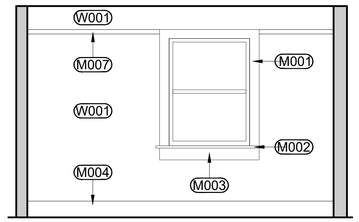
Design Stage
50% CONSTRUCTION
DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
3/16"=1'-0"

Date
December 15, 2025

Sheet Number
A-207



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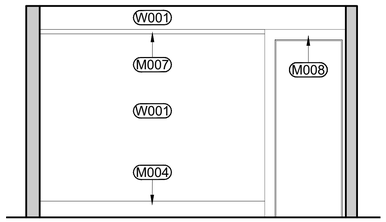

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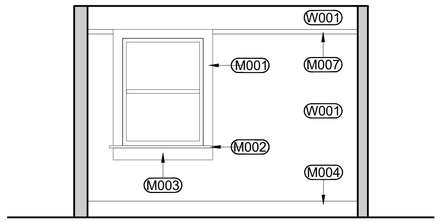

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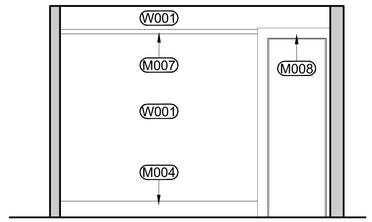

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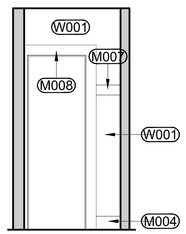

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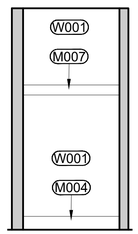

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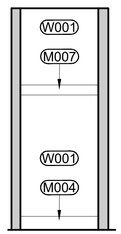

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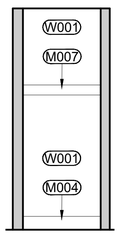

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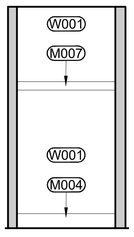

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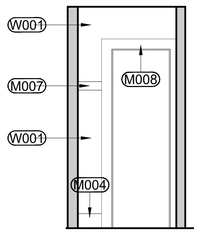

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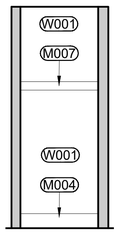

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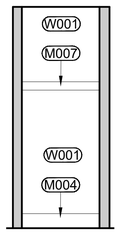

WEST

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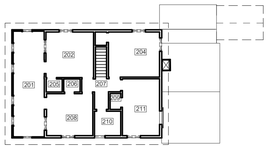

4 — KEY PLAN
1/16" = 1'-0"

GENERAL NOTES

- REPAIR AND RESTORE ALL PENETRATIONS MADE DURING LIFTING & STABILIZATION OPERATIONS
- FOR FINISH SCHEDULE REFER TO PAGE A-604

Architect

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www. rhala.com

Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE PHASE 2

Sheet Title
INTERIOR ELEVATIONS

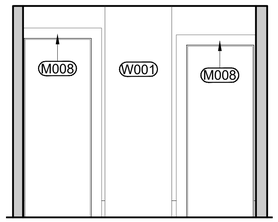
Design Stage
50% CONSTRUCTION DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
3/16"=1'-0"

Date
December 15, 2025

Sheet Number
A-208



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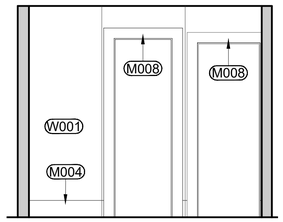

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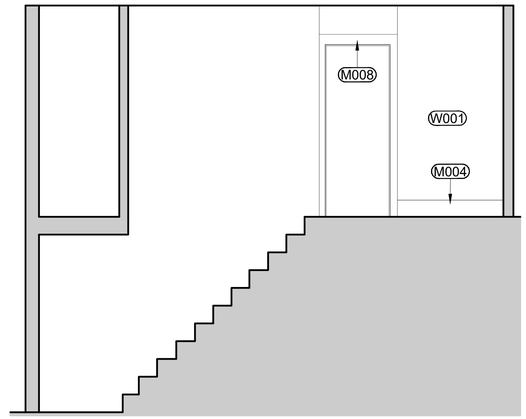

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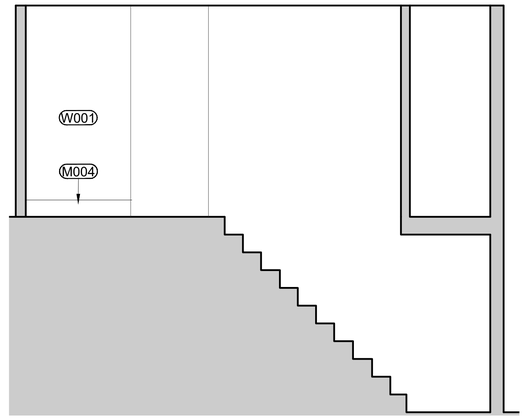

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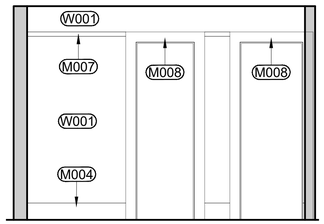
1 207 HALL
3/8"= 1'-0"



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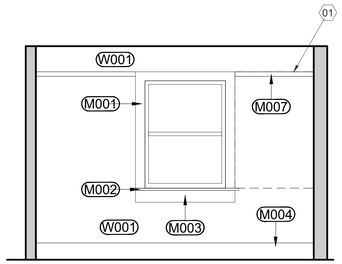

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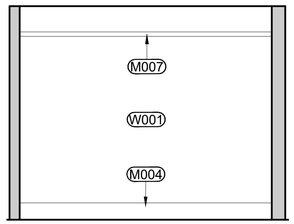

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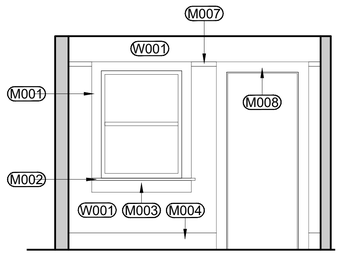

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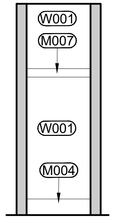
2 208 BEDROOM
3/8"= 1'-0"



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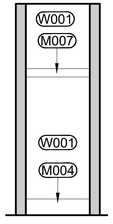

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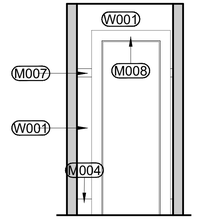

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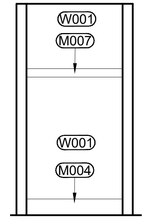
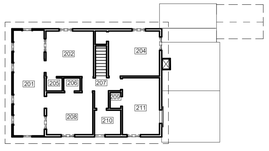


WEST

3 209 CLOSET
3/8"= 1'-0"



4 KEY PLAN
1/16"= 1'-0"

GENERAL NOTES

- REPAIR AND RESTORE ALL PENETRATIONS MADE DURING LIFTING & STABILIZATION OPERATIONS
- FOR FINISH SCHEDULE REFER TO PAGE A-604

KEYNOTES

1 REINSTALL THE INSCRIPTION PANEL PER THE RECOMMENDATION IN THE HARADA INSCRIPTION PANEL TREATMENT REPORT

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CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE PHASE 2

Sheet Title
INTERIOR ELEVATIONS

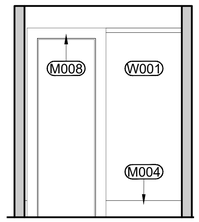
Design Stage
50% CONSTRUCTION DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
3/16"=1'-0"

Date
December 15, 2025

Sheet Number
A-209



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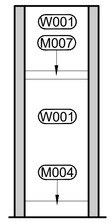

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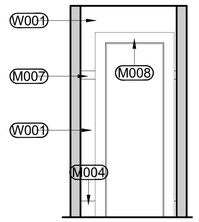

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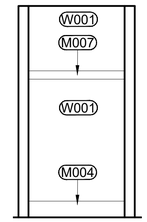

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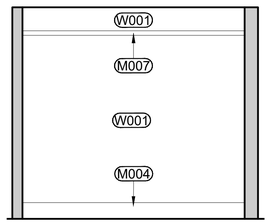

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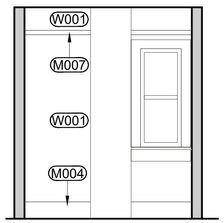

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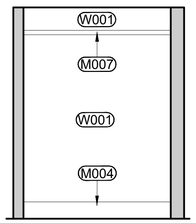

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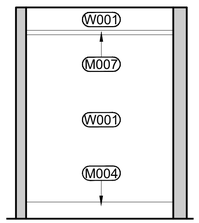
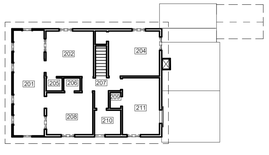


WEST

2 — 211 BEDROOM
3/8"= 1'-0"



4 — KEY PLAN
1/16"= 1'-0"

GENERAL NOTES

- REPAIR AND RESTORE ALL PENETRATIONS MADE DURING LIFTING & STABILIZATION OPERATIONS
- FOR FINISH SCHEDULE REFER TO PAGE A-604

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Project Title
HARADA HOUSE
PHASE 2

Sheet Title
INTERIOR
ELEVATIONS

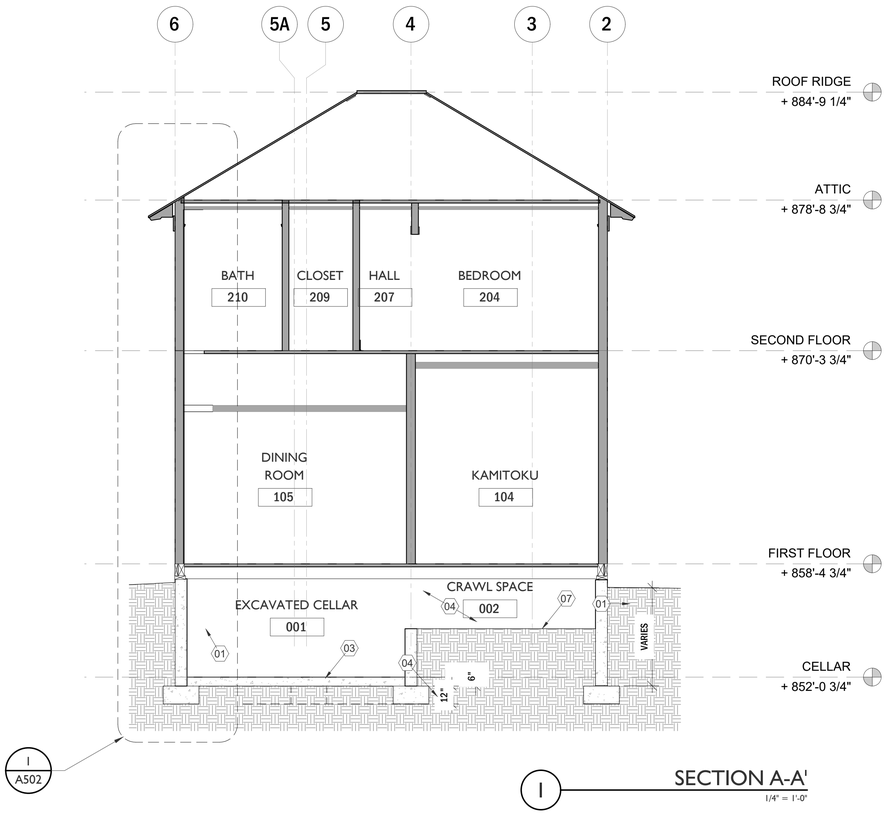
Design Stage
50% CONSTRUCTION
DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

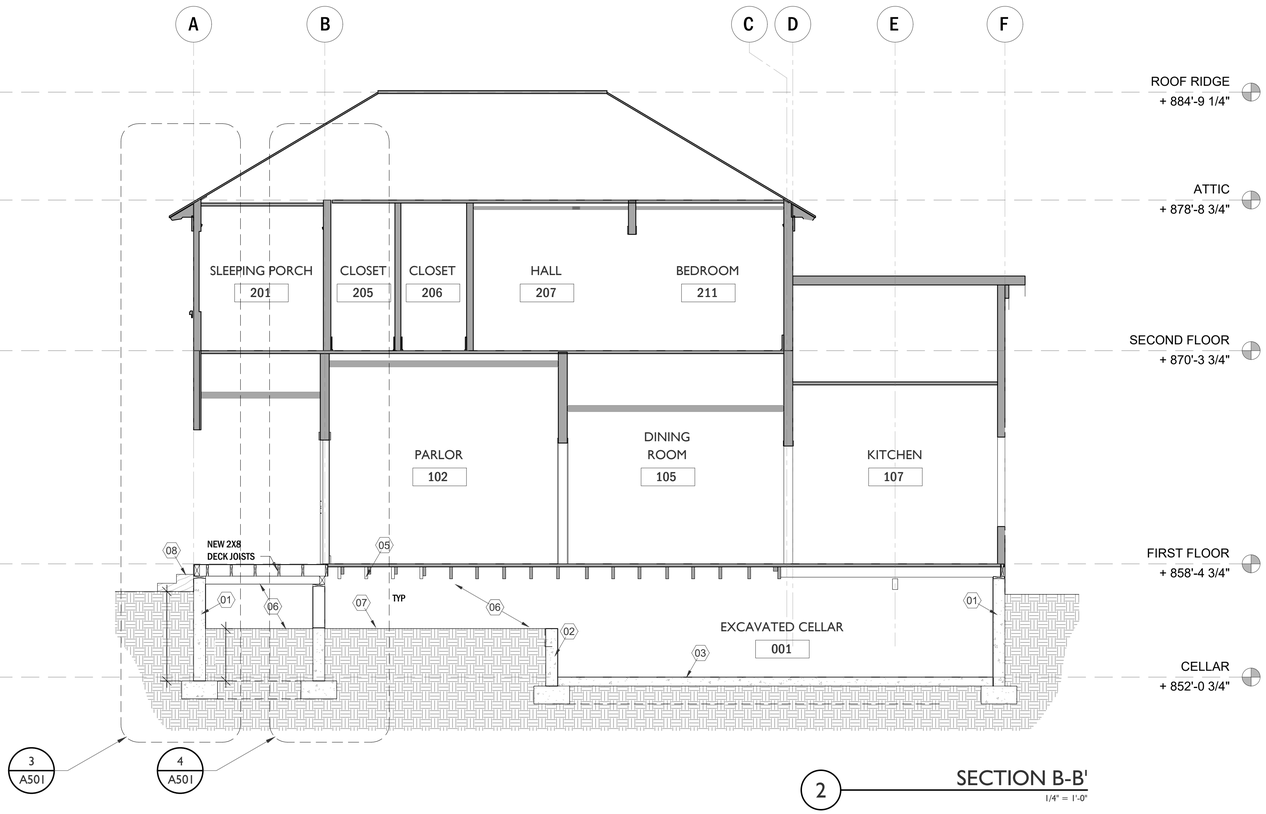
Scale
3/16"=1'-0"

Date
December 15, 2025

Sheet Number
210



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



2 SECTION B-B'
1/4" = 1'-0"

KEYNOTES

1. NEW CONCRETE FOUNDATION STEM WALL & STRIP FOOTING FOUNDATION WITH BRICK LEDGEPER STRUCTURAL DRAWINGS
2. NEW RETAINING WALL & STRIP FOOTING PER STRUCTURAL DRAWINGS. RETAINING WALLS SHALL CONFORM TO CITY OF RIVERSIDE BUILDING DEPARTMENT STANDARD DRAWINGS
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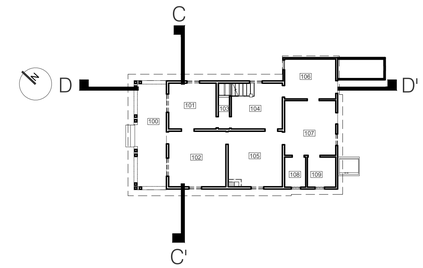

3 KEY PLAN
1/16" = 1'-0"

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Project Title
HARADA HOUSE
PHASE 2

Sheet Title
PROPOSED SECTIONS

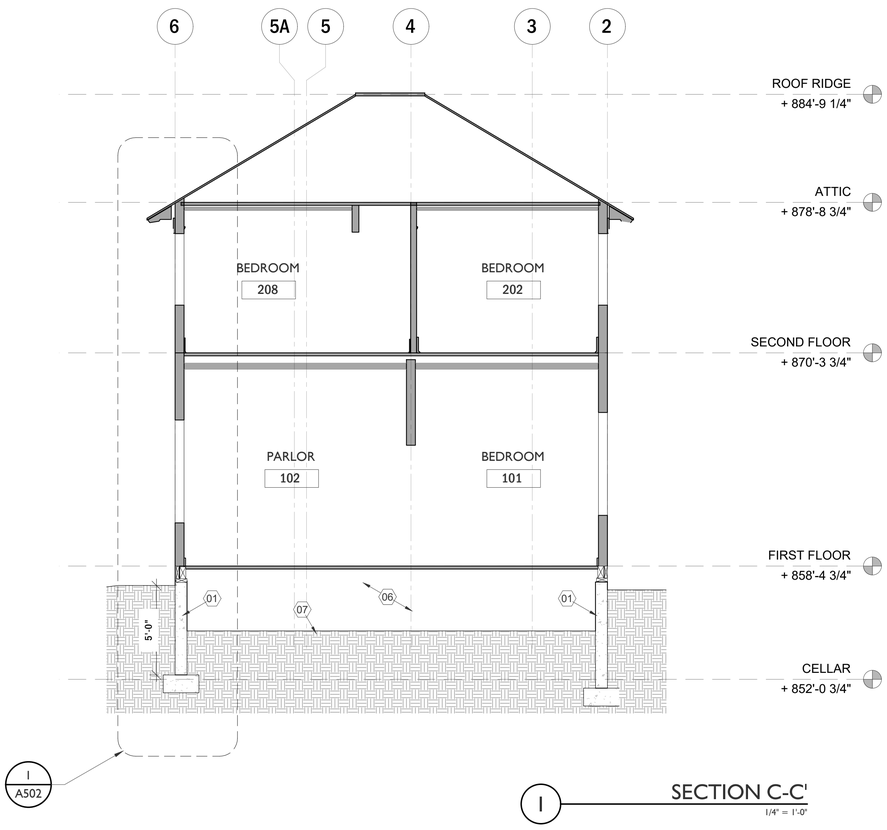
Design Stage
50% CONSTRUCTION DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

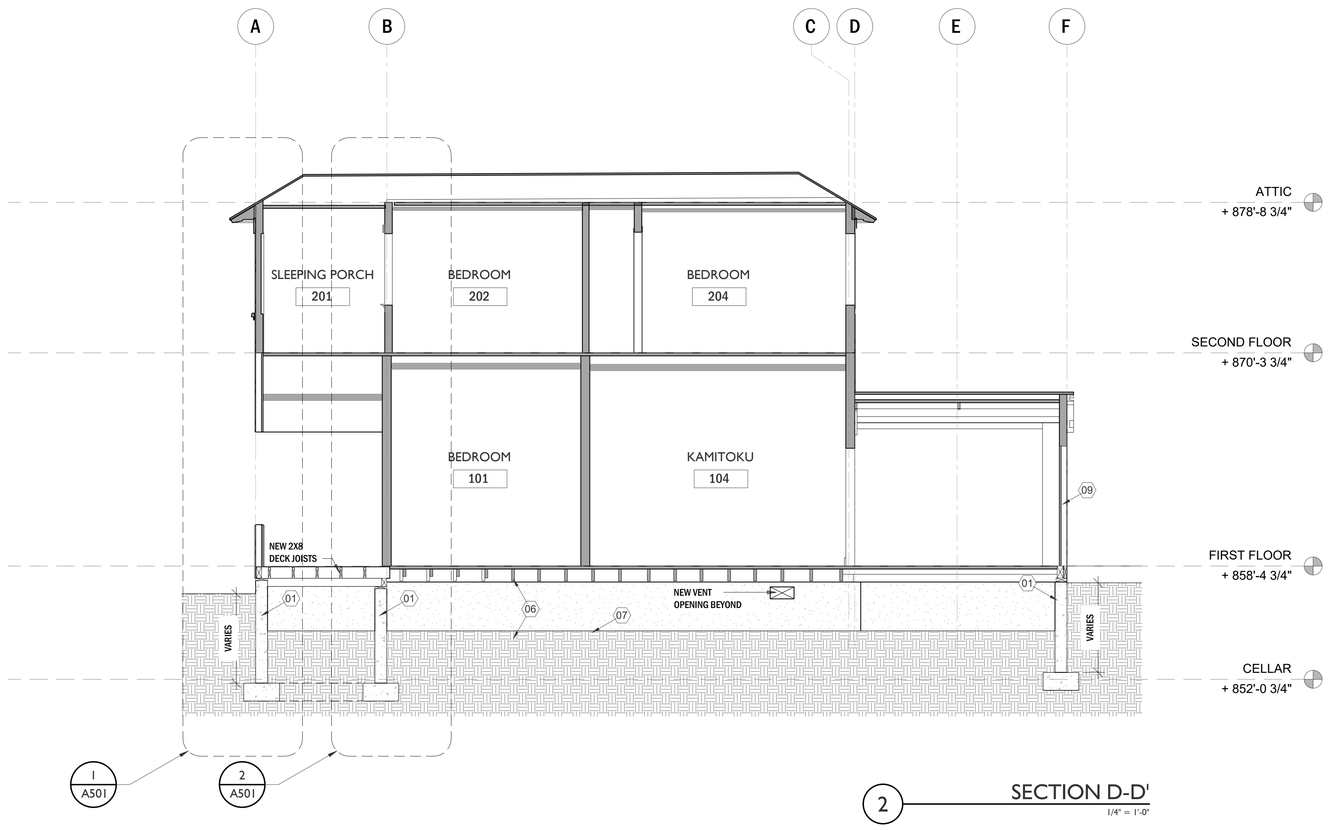
Scale
1/4"=1'-0"

Date
December 22, 2025

Sheet Number
A-301



1 SECTION C-C'
1/4" = 1'-0"



2 SECTION D-D'
1/4" = 1'-0"

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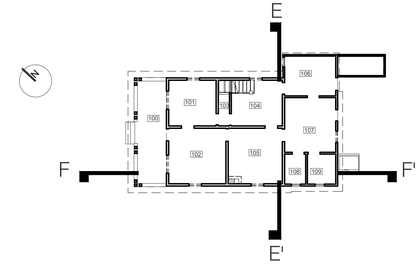

3 KEY PLAN
1/16"= 1'-0"

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Project Title
HARADA HOUSE
PHASE 2

Sheet Title
PROPOSED SECTIONS

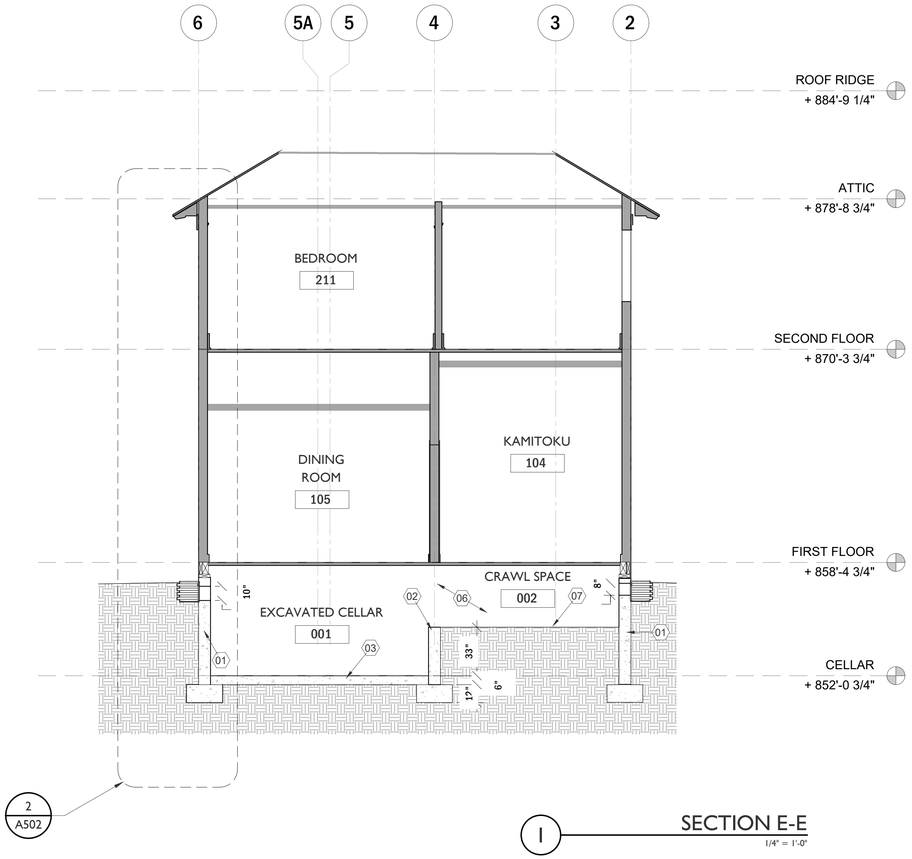
Design Stage
50% CONSTRUCTION DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

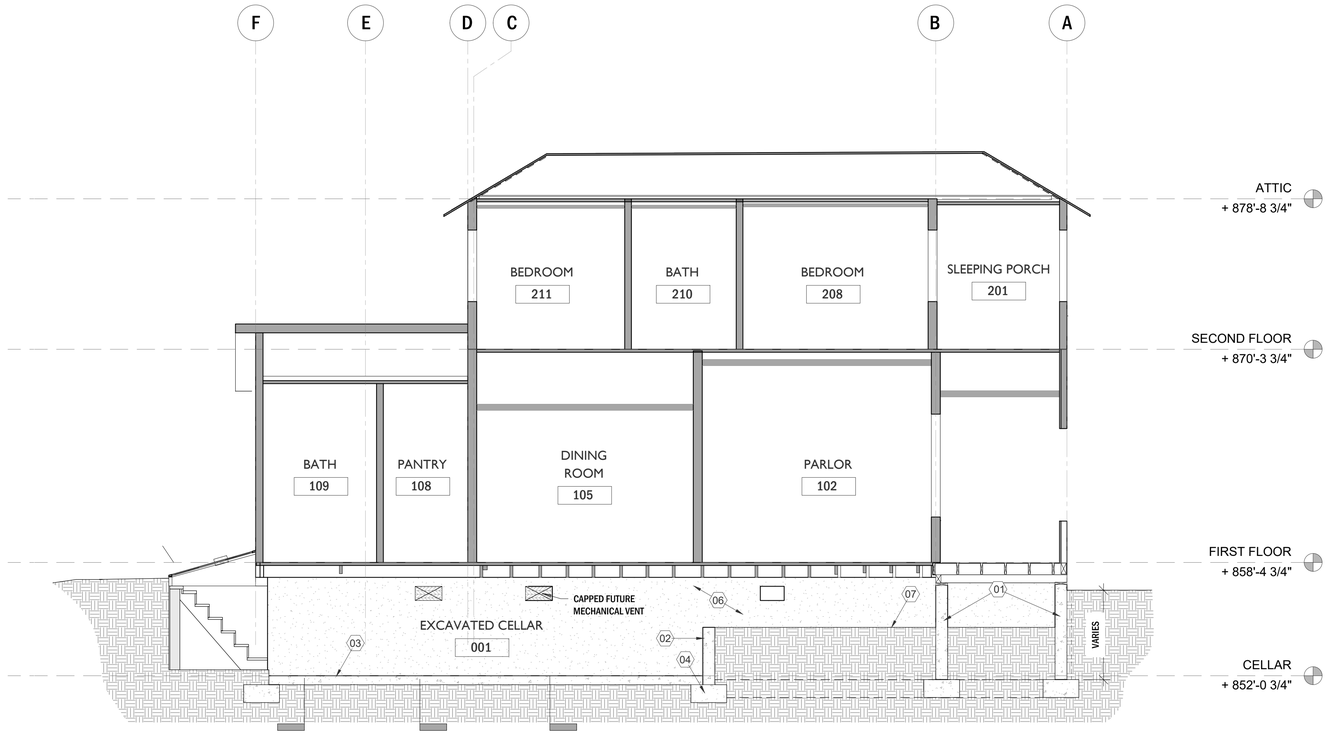
Scale
1/4"=1'-0"

Date
December 22, 2025

Sheet Number
A-302



1 SECTION E-E
1/4" = 1'-0"



2 SECTION F-F'
1/4" = 1'-0"

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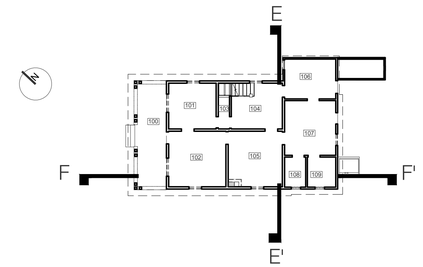

3 KEY PLAN
1/16" = 1'-0"

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Sheet Title
PROPOSED SECTIONS

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Project Address
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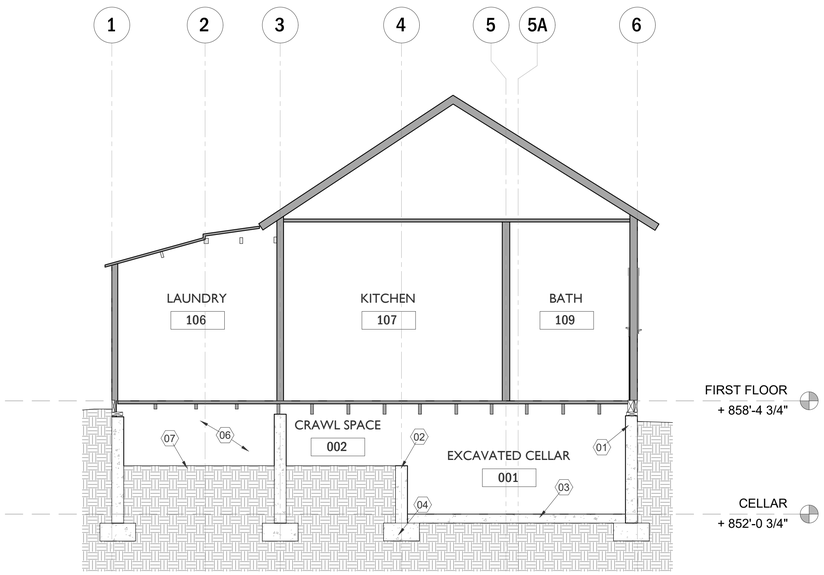
92501

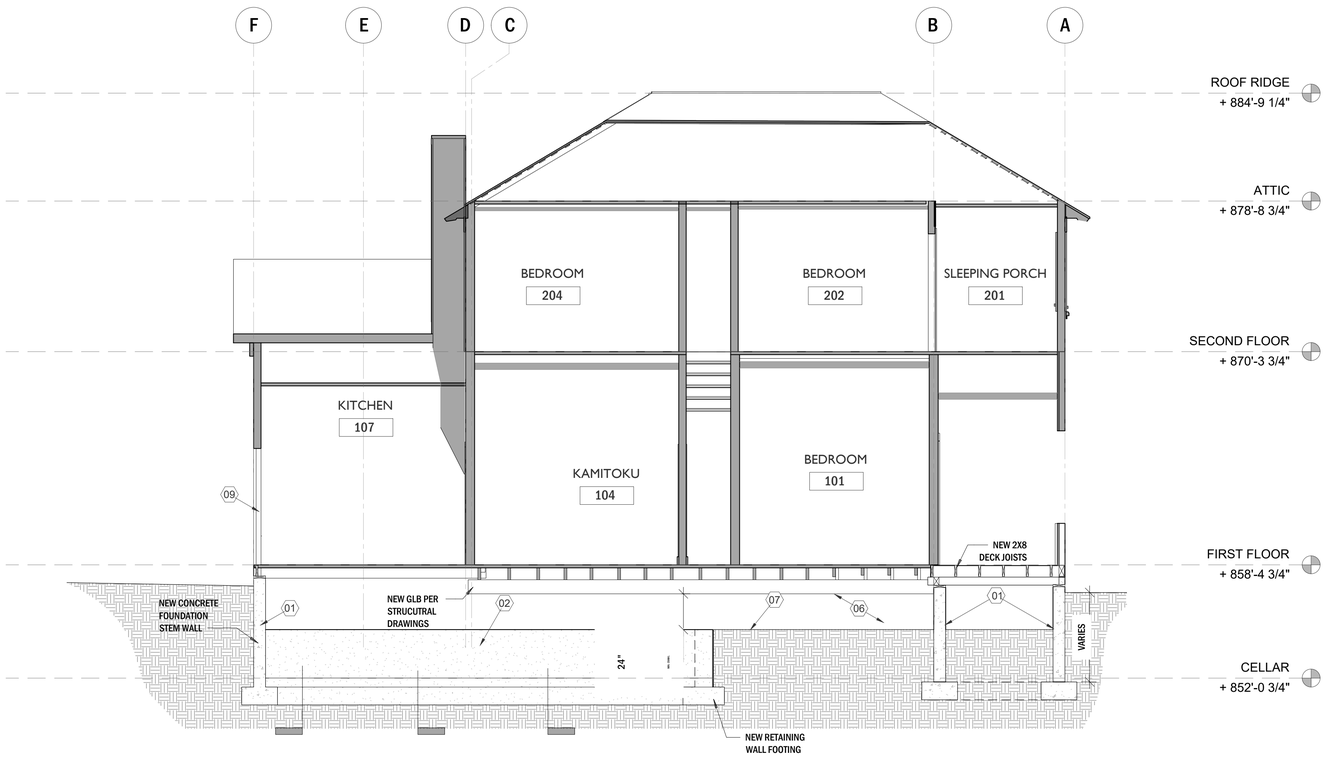
Scale
1/4"=1'-0"

Date
December 22, 2025

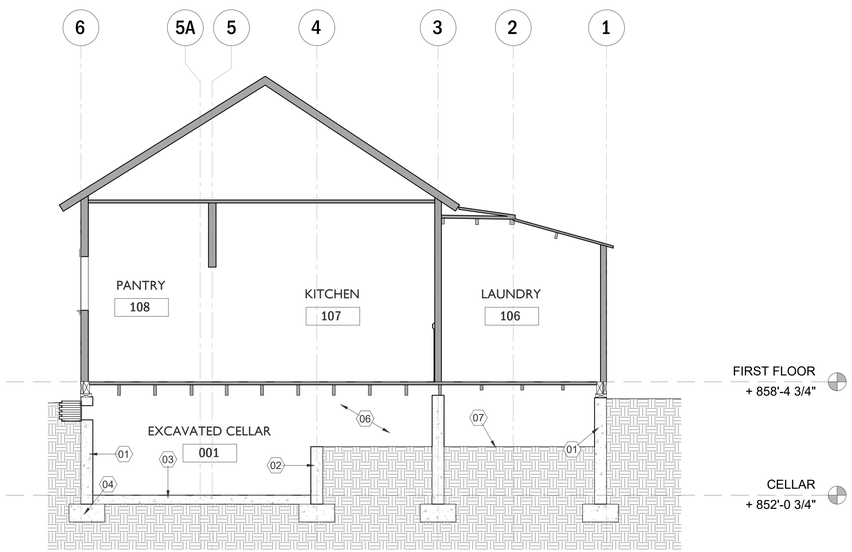
Sheet Number
A-303



1 SECTION G-G'
1/4" = 1'-0"



2 SECTION H-H'
1/4" = 1'-0"



3 SECTION J-J'
1/4" = 1'-0"

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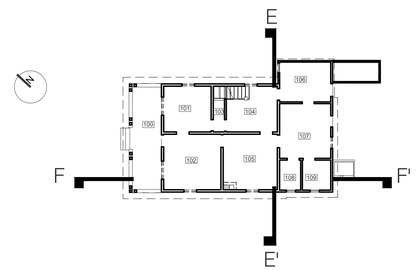

4 KEY PLAN
1/16" = 1'-0"

Architect
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Project Title
HARADA HOUSE
PHASE 2

Sheet Title
PROPOSED SECTIONS

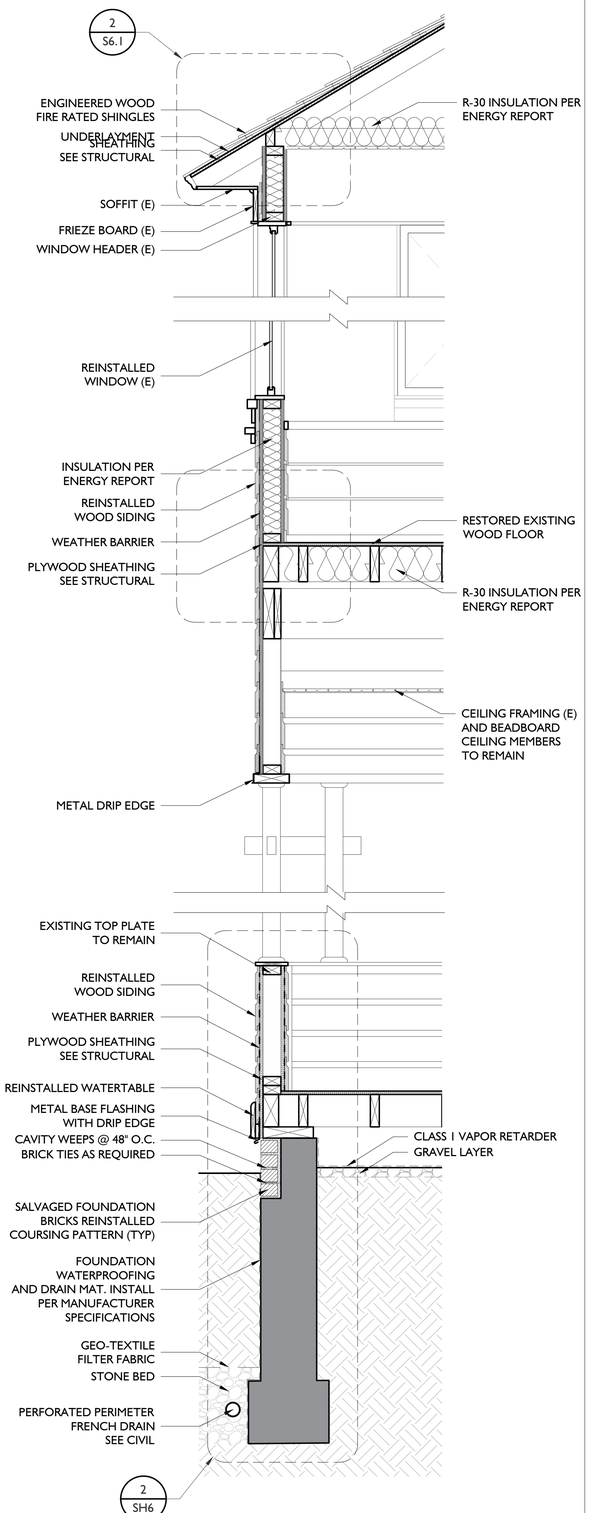
Design Stage
50% CONSTRUCTION DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
1/4"=1'-0"

Date
December 22, 2025

Sheet Number
A-304



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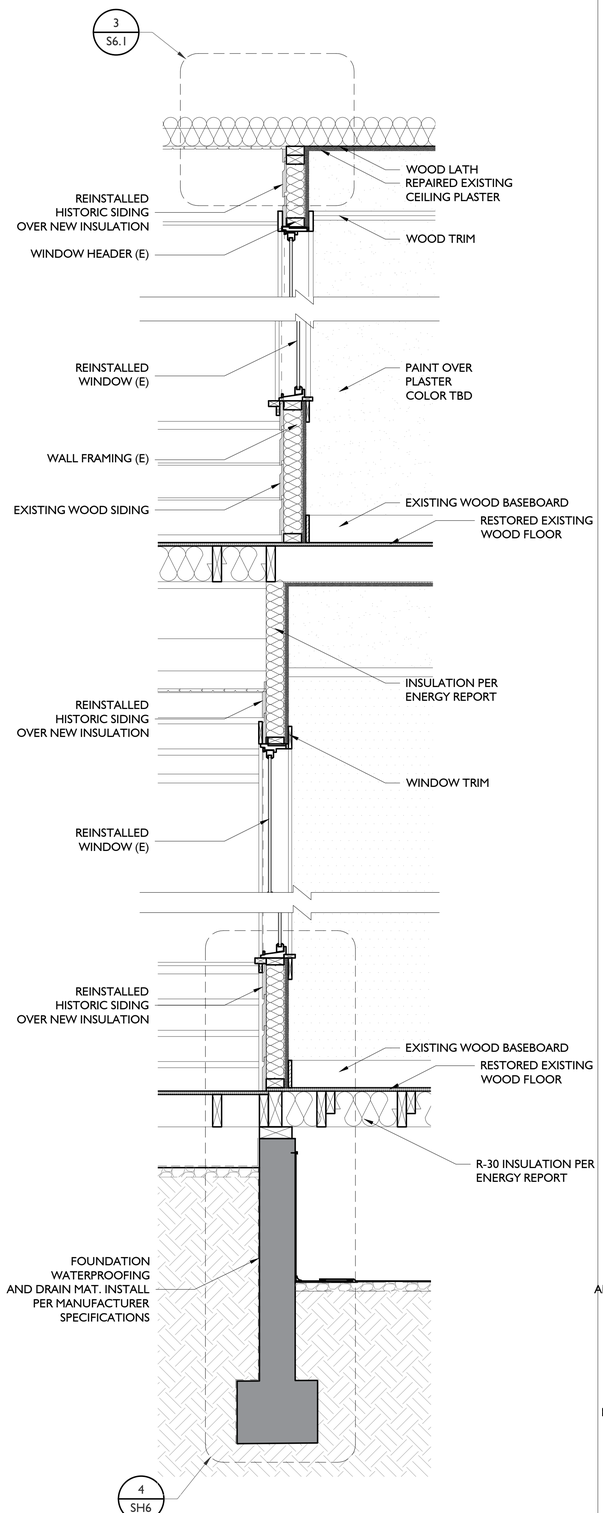
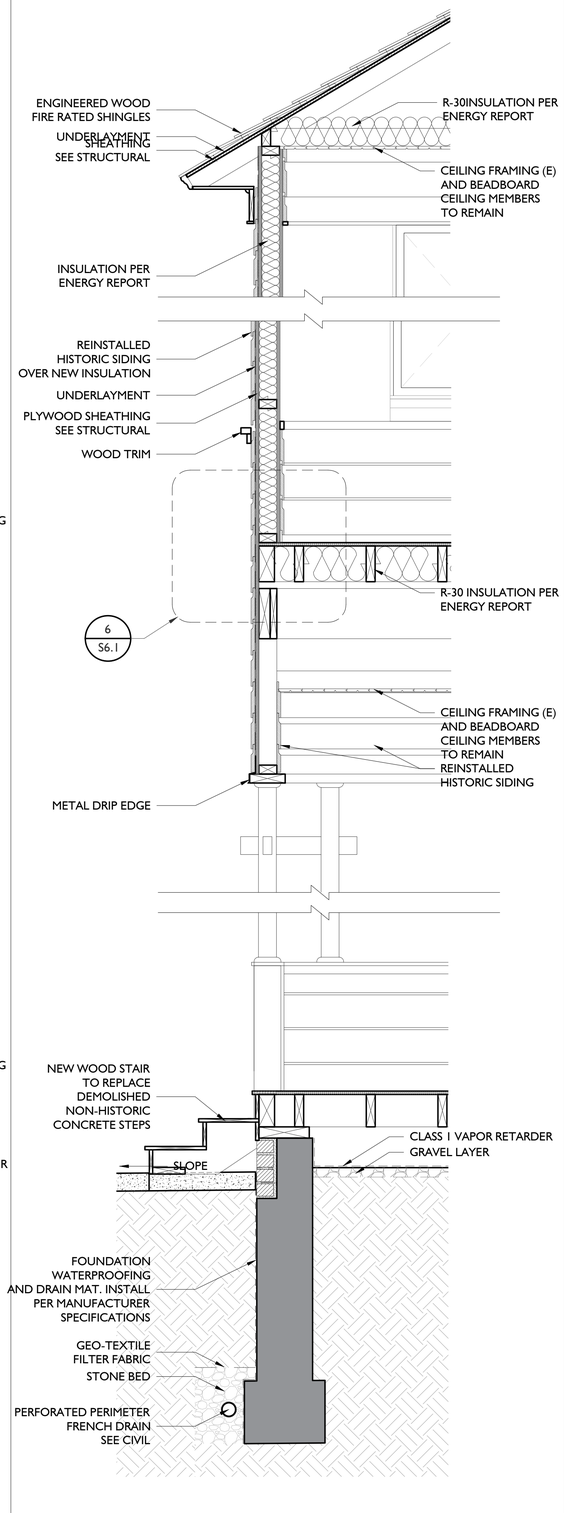
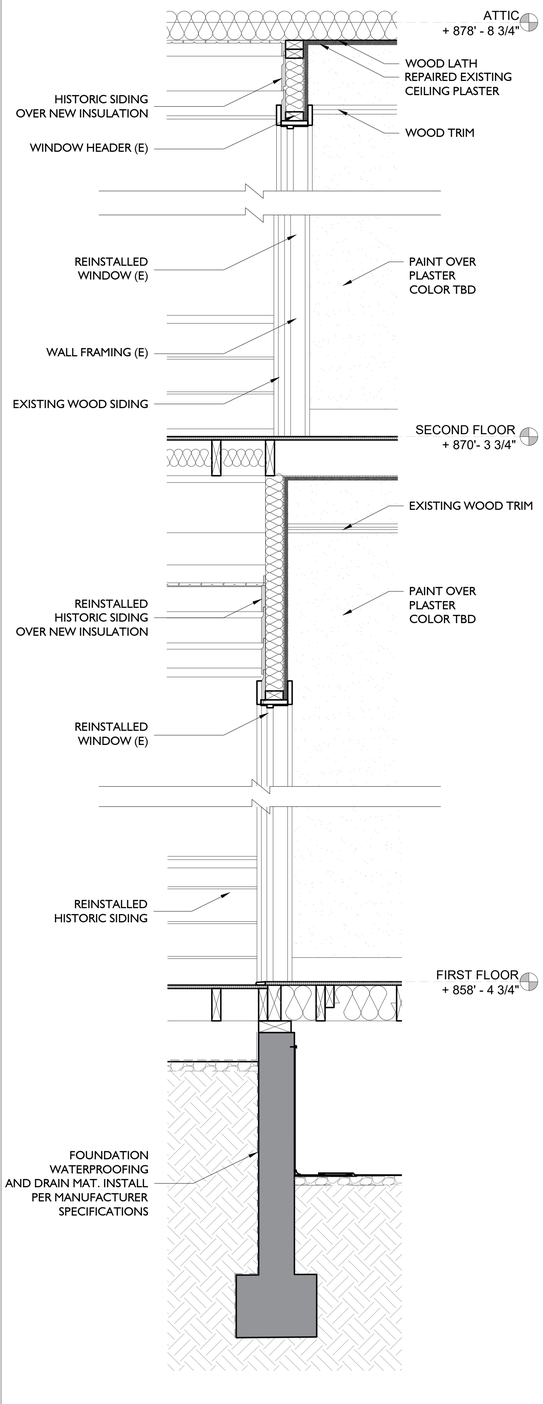


WALL SECTION (INTERIOR) 2



WALL SECTION (EXTERIOR) 3



WALL SECTION (INTERIOR) 4

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Project Title
HARADA HOUSE PHASE 2

Sheet Title
LARGE DETAILS

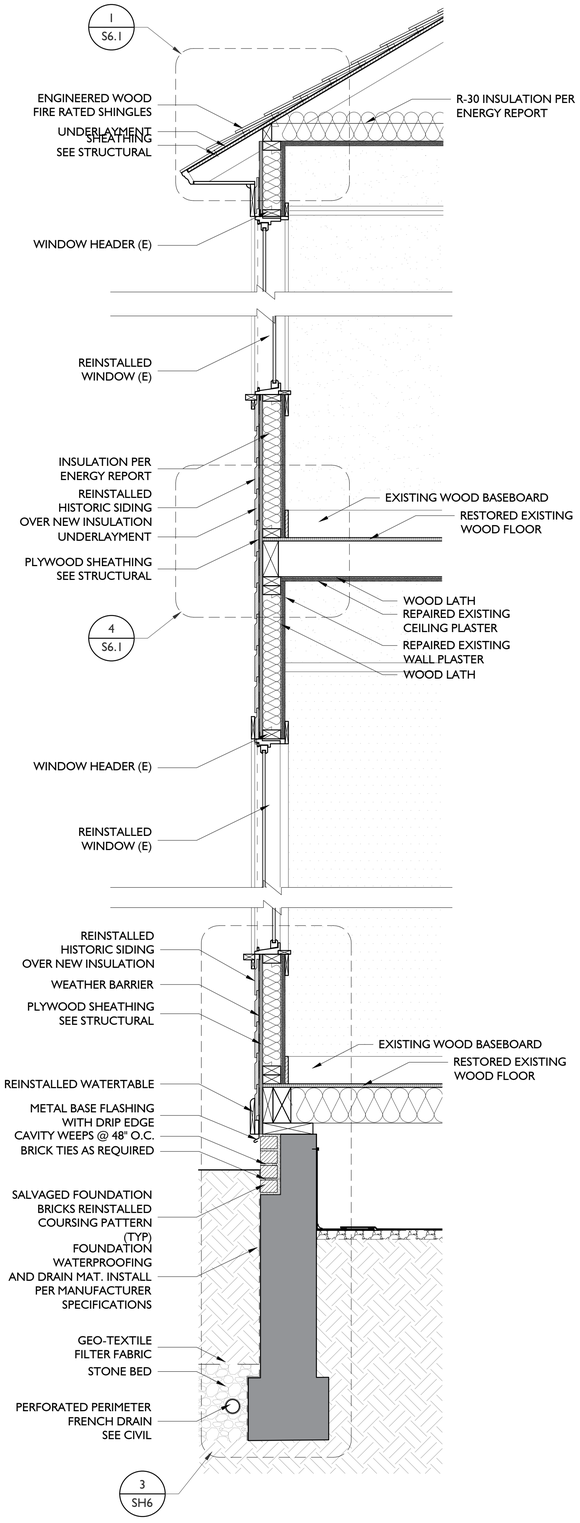
Design Stage
50% CONSTRUCTION DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
3/4"=1'-0"

Date
December 22, 2025

Sheet Number
A-501



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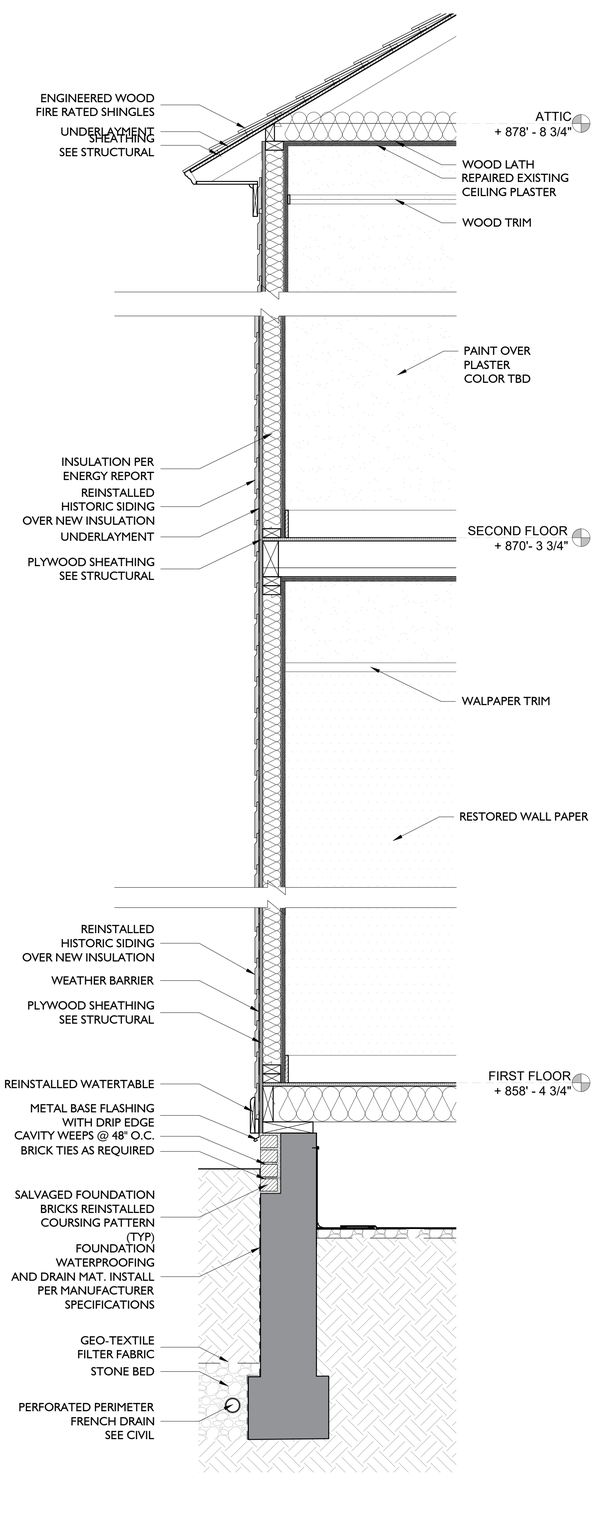

WALL SECTION (EXTERIOR) | 2

Architect

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Date
December 22, 2025

Sheet Number
A-502

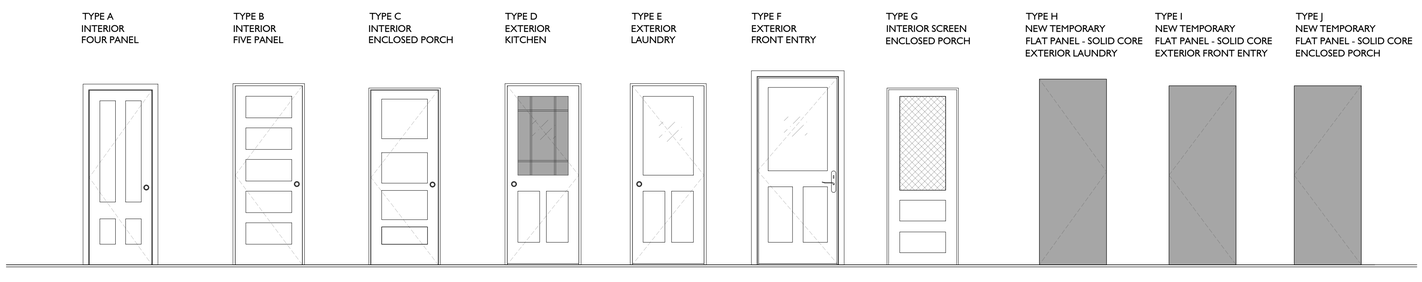
DOOR SCHEDULE

GROUND FLOOR

DOOR MARK	EXISTING/ NEW	TYPE	ROOM	SIZE			DOOR		FRAME		GLASS	MANUFACTURER	REMARKS
				WIDTH	HEIGHT	THK.	MATERIAL	FINISH	MATERIAL	FINISH			
101	E	SWING	100	2'-6"	6'-5"	N/A	WOOD	CLEAR	WOOD	CLEAR	N/A	TBD	PRESERVE HINGES & HARDWARE / NUMBER & STORE
102	E	H	102	"	"	0'-1 3/4"	"	"	"	"	Y	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
103	E	A	101	2'-8"	6'-8"	0'-1 3/8"	"	"	"	"	N/A	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
104	E	A	101	2'-4"	6'-6"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
105	E	A	105	2'-8"	6'-8"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
106	E	A	105	2'-8"	6'-6"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
107	E	A	104	2'-8"	6'-6"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
108	E	A	108	2'-6"	6'-4"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
109	E	A	109	2'-6"	6'-4"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
110	NEW	A	107	2'-6"	6'-6"	0'-1 3/4"	"	"	"	"	Y	"	DOOR TO BE ADA COMPLIANT OPENING TO THE OUTSIDE
111	NEW	-	107	2'-6"	6'-6"	N/A	"	"	"	"	N/A	"	REMOVED
112	E	-	106	2'-8"	6'-4"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE
113	E	-	106	2'-6"	6'-8"	0'-1 3/4"	"	"	"	"	Y	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
114	E	-	110	TBC	TBC	0'-1 3/8"	"	"	"	"	N/A	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
115	NEW	H	102	2'-6"	6'-11"	0'-1 3/4"	N/A	N/A	N/A	N/A	N/A	"	EXISTING HISTORIC JAMB & TRIM IS NOT TO BE DAMAGED IN DOOR INSTALLATION. HARDWARE TO BE INSTALLED AT EXISTING LOCATIONS.
116	NEW	I	106	2'-6"	6'-8"	0'-1 3/4"	"	"	"	"	N/A	"	EXISTING HISTORIC JAMB & TRIM IS NOT TO BE DAMAGED IN DOOR INSTALLATION. HARDWARE TO BE INSTALLED AT EXISTING LOCATIONS.
117	NEW	J	107	2'-6"	6'-6"	0'-1 3/4"	"	"	"	"	N/A	"	EXISTING HISTORIC JAMB & TRIM IS NOT TO BE DAMAGED IN DOOR INSTALLATION. HARDWARE TO BE INSTALLED AT EXISTING LOCATIONS.

SECOND FLOOR

DOOR MARK	EXISTING/ NEW	TYPE	ROOM	SIZE			DOOR		FRAME		GLASS	MANUFACTURER	REMARKS
				WIDTH	HEIGHT	THK.	MATERIAL	FINISH	MATERIAL	FINISH			
201	E	G	201	2'-6"	6'-8"	0'-1 3/4"	"	"	"	"	N/A	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE / SHEAR OVER OPENING
202	E	C	202	2'-6"	6'-8"	0'-1 3/8"	WOOD	CLEAR	WOOD	CLEAR	Y	TBD	PRESERVE HINGES & HARDWARE / NUMBER & STORE
203	E	B	202	2'-0"	6'-6"	0'-1 3/8"	"	"	"	"	N/A	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
204	E	B	202	2'-4"	6'-8"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
205	E	B	204	2'-4"	6'-5"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
206	E	B	204	2'-0"	6'-8"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
207	E	B	211	2'-3"	6'-5"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
208	E	B	211	2'-0"	6'-6"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
209	E	B	210	2'-0"	6'-8"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
210	E	B	208	2'-6"	6'-6"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
211	E	B	208	2'-0"	6'-8"	0'-1 3/8"	"	"	"	"	"	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE
212	E	C	208	2'-6"	6'-8"	0'-1 3/8"	"	"	"	"	Y	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE / SHEAR OVER OPENING / TAG WITH ASSOCIATED LOOSE SCREEN DOOR & STORE
213	E	G	201	2'-6"	6'-8"	0'-1 3/4"	"	"	"	"	N/A	"	PRESERVE HINGES & HARDWARE / NUMBER & STORE / SHEAR OVER OPENING



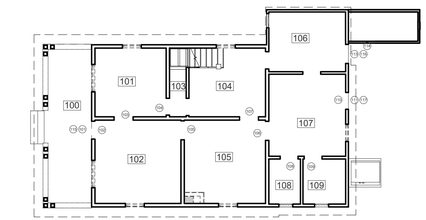
DOOR ELEVATION TYPES

1 DOOR SCHEDULE
N/A

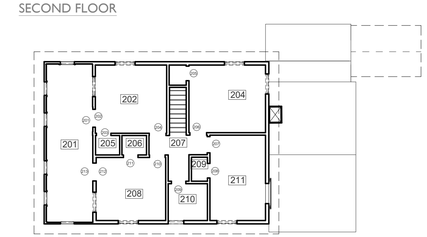
ROOM ID

100	PORCH	201	SLEEPING PORCH
101	BEDROMM	202	BEDROOM
102	PARLOR	203	CLOSET
103	CLOSET	204	BEDROOM
104	KAMITOKU	205	CLOSET
105	DINING ROOM	206	CLOSET
106	LAUNDRY	207	HALL
107	KITCHEN	208	BEDROOM
108	PANTRY	209	CLOSET
109	BATH	210	BATH
110	STORAGE	211	BEDROOM

GROUND FLOOR



SECOND FLOOR



2 KEY PLAN
3/32"= 1'-0"

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Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

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NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE
PHASE 1

Sheet Title
SCHEDULES

Design Stage
50% CONSTRUCTION DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
N/A

Date
December 22, 2025

Sheet Number
A-601

WINDOW SCHEDULE

GROUND FLOOR

MARK	EXISTING / REPLACEMENT / NEW	ROOM	WIDTH	HEIGHT	HEAD HEIGHT	TYPE	OPERATION	MATERIAL	FINISH	GLASS	SPECIFICATION	U-FACTOR	SHGC	MANUFACTURER	MODEL	REMARKS
101	E	102	4'-1"	5'-9"	8'-3 1/2"	A	DOUBLE HUNG	WOOD	TBD	N/A	TBD	N/A	N/A	N/A	N/A	REMOVE SASH & SASH WEIGHTS/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
102	E	101	4'-1"	5'-9"	8'-3 1/2"	A	"	"	"	"	"	"	"	"	"	REMOVE SASH & SASH WEIGHTS/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
103	E	101	2'-10"	5'-9"	8'-7"	B	DOUBLE HUNG	"	"	"	"	"	"	"	"	REMOVE SASH & SASH WEIGHTS/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
104	E	104	2'-10"	5'-9"	8'-2"	B	"	"	"	"	"	"	"	"	"	REMOVE SASH & SASH WEIGHTS/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
105	E	106	2'-1"	3'-0"	6'-5"	C	CASEMENT	"	"	"	"	"	"	"	"	REMOVE SASH/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
106	E	107	2'-7"	5'-0"	7'-1"	B	DOUBLE HUNG	"	"	"	"	"	"	"	"	REMOVE SASH & SASH WEIGHTS/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
107	E	109	2'-1"	3'-0"	7'-0"	C	CASEMENT	"	"	"	"	"	"	"	"	REMOVE SASH/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
108	E	108	2'-1"	3'-0"	7'-0"	C	"	"	"	"	"	"	"	"	"	REMOVE SASH/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
109	E	105	2'-10"	5'-9"	8'-2"	B	DOUBLE HUNG	"	"	"	"	"	"	"	"	REMOVE SASH & SASH WEIGHTS/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
110	E	102	2'-10"	5'-9"	8'-2"	B	"	"	"	"	"	"	"	"	"	REMOVE SASH & SASH WEIGHTS/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE

SECOND FLOOR

MARK	EXISTING / REPLACEMENT / NEW	ROOM	WIDTH	HEIGHT	HEAD HEIGHT	TYPE	OPERATION	MATERIAL	FINISH	GLASS	SPECIFICATION	U-FACTOR	SHGC	MANUFACTURER	MODEL	REMARKS
201	E	201	2'-0"	4'-0"	6'-8"	F	CASEMENT	WOOD	"	N/A	"	N/A	N/A	N/A	N/A	REMOVE SASH/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
202	E	201	2'-0"	4'-0"	6'-8"	F	"	"	"	"	"	"	"	"	"	REMOVE SASH/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
203	E	201	2'-0"	4'-0"	6'-8"	F	"	"	"	"	"	"	"	"	"	REMOVE SASH/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
204	E	201	2'-0"	4'-0"	6'-8"	F	"	"	"	"	"	"	"	"	"	REMOVE SASH/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
205	E	201	2'-1"	4'-0"	6'-8"	F	"	"	"	"	"	"	"	"	"	REMOVE SASH/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
206	E	202	3'-0"	4'-0"	6'-8"	G	DOUBLE HUNG	"	"	"	"	"	"	"	"	REMOVE SASH & SASH WEIGHTS/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
207	E	204	3'-0"	4'-0"	6'-8"	G	"	"	"	"	"	"	"	"	"	REMOVE SASH & SASH WEIGHTS/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
208	E	204	3'-0"	4'-0"	6'-8"	G	"	"	"	"	"	"	"	"	"	REMOVE SASH & SASH WEIGHTS/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
209	E	211	3'-0"	4'-0"	6'-8"	G	"	"	"	"	"	"	"	"	"	REMOVE SASH & SASH WEIGHTS/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
210	E	211	3'-0"	4'-0"	6'-8"	G	"	"	"	"	"	"	"	"	"	REMOVE SASH & SASH WEIGHTS/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
211	E	210	2'-4"	3'-8"	6'-8"	H	CASEMENT	"	"	"	"	"	"	"	"	REMOVE SASH/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
212	E	208	3'-0"	4'-0"	6'-8"	G	DOUBLE HUNG	"	"	"	"	"	"	"	"	REMOVE SASH/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
213	E	201	2'-0"	4'-0"	6'-8"	F	CASEMENT	"	"	"	"	"	"	"	"	REMOVE SASH/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
214	E	208	3'-0"	4'-0"	6'-8"	G	DOUBLE HUNG	"	"	"	"	"	"	"	"	REMOVE SASH/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
215	E	202	3'-0"	4'-0"	6'-8"	G	"	"	"	"	"	"	"	"	"	REMOVE SASH/ NUMBER & STORE/ SHEAR OVER OPENING FOR HOUSE LIFT/ INSTALL VENT OPENING AFTER FOUNDATION WORK IS COMPLETE
216	NEW	211	3'-0"	4'-0"	6'-8"	G	DOUBLE HUNG	WOOD	TBD	LOW-E	TBD	0.3	0.23	TBD	"	TO BE REPLACE IN KIND

TYPE A
ORIGINAL DOUBLE HUNG

TYPE B
ORIGINAL DOUBLE HUNG

TYPE C
ORIGINAL CASEMENT

TYPE D
ORIGINAL DOUBLE HUNG

TYPE E
ORIGINAL CASEMENT

TYPE F
ORIGINAL CASEMENT

TYPE G
ORIGINAL DOUBLE HUNG

TYPE H
ORIGINAL CASEMENT

HEAD HEIGHT 8'-7" (TYP)

HEAD HEIGHT 7'-0" (TYP)

HEAD HEIGHT 6'-8" (TYP)

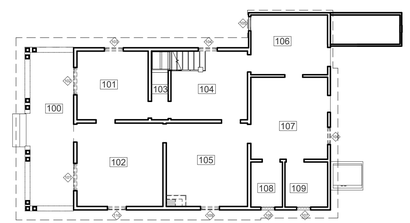
WINDOW ELEVATION TYPES

1 WINDOW SCHEDULE
N/A

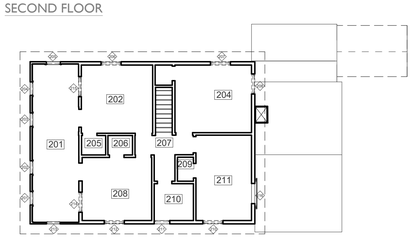
ROOM ID

100	PORCH	201	SLEEPING PORCH
101	BEDROMM	202	BEDROOM
102	PARLOR	203	CLOSET
103	CLOSET	204	BEDROOM
104	KAMITOKU	205	CLOSET
105	DINING ROOM	206	CLOSET
106	LAUNDRY	207	HALL
107	KITCHEN	208	BEDROOM
108	PANTRY	209	CLOSET
109	BATH	210	BATH
110	STORAGE	211	BEDROOM

GROUND FLOOR



SECOND FLOOR



2 KEY PLAN
3/32"= 1'-0"

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Owner
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MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

NOT FOR CONSTRUCTION

Project Title
HARADA HOUSE
PHASE 2

Sheet Title
SCHEDULES

Design Stage
50% CONSTRUCTION DOCUMENTS

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

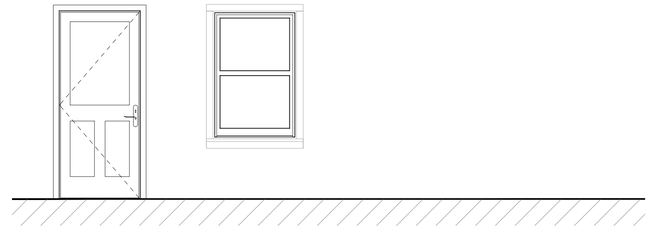
Scale
N/A

Date
December 22, 2025

Sheet Number
A-602

MOLDING SCHEDULE

DOOR MARK	MATERIAL	LOCATION	SIZE	THK.	MATERIAL	FINISH	MANUFACTURER	REMARKS
M001	WINDOW CASING	AS SHOWN			TBD	TBD	TBD	
M002	WINDOW SILL	AS SHOWN			"	"	"	
M003	WINDOW APRON	AS SHOWN			"	"	"	
M004	BASEBOARD	AS SHOWN			"	"	"	
M005	WAINSCOTTING	AS SHOWN			"	"	"	
M006	CHAIR RAIL	AS SHOWN			"	"	"	
M007	PLATE RAIL	AS SHOWN			"	"	"	
M008	DOOR CASING	AS SHOWN			"	"	"	
M009	WAINSCOTTING	AS SHOWN			"	"	"	
M010	CHAIR RAIL	AS SHOWN			"	"	"	



1 MOLDING SCHEDULE
N/A

Architect

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Project Title
HARADA HOUSE
PHASE 2

Sheet Title
SCHEDULES

Design Stage
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Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
N/A

Date
December 15, 2025

Sheet Number
A-603

	FIXTURES SCHEDULE					
#	ITEM	FINISH	COLOR	TYPE	MODEL	SPECIFICATIONS
001	TOILET	PORCELAIN	TBD	FLOOR MOUNTED	TBD	-
002	SINK	"	"	WALL MOUNTED	"	-
003	SINK FAUCET	-	N/A	N/A	"	-
004	TOILET	PORCELAIN	TBD	FLOOR MOUNTED	TBD	-
005	SINK	"	"	WALL MOUNTED	"	-
006	SINK FAUCET	-	N/A	N/A	"	-
007	KITCHEN SINK	STAINLESS STEEL	-	-	"	-
008	KITCHEN SINK FAUCET	-	N/A	-	"	-
009	LAUNDRY SINK	ENAMELED CAST IRON	-	-	"	-
010	LAUNDRY SINK FAUCET	-	N/A	-	"	-
011	FISH POND	N/A	N/A	-	"	-

1 FIXTURE SCHEDULE

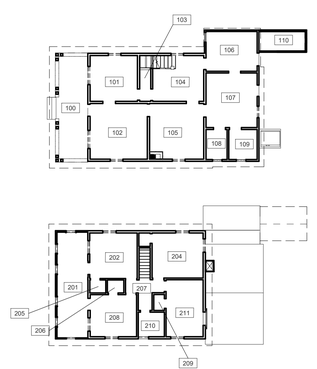
FINISH KEY					
MARK	MATERIAL	LOCATION	TYPE	MANUFACTURER	REMARKS
WALL FINISH					
W001	PLASTER (E)	AS SHOWN	TBD	TBD	PREPARE SURFACE PER MANUFACTURER SPECIFICATION. REMOVE COLOR COAT, REPAIR CRACKS & BLEMISHES, POLISH & APPLY WATER RESISTANT SEALER. SEE FINISH SCHEDULE.
W002	WOOD SIDING (E)	AS SHOWN	"	"	"
W003	WALLPAPER (E)	101	"	"	"
W004	WALLPAPER (E)	101	"	"	"
W005	WALLPAPER RAIL (E)	101	"	"	"
W006	WALLPAPER (E)	102	"	"	"
W007	WALLPAPER (E)	103	"	"	"
W008	WALLPAPER (E)	103	"	"	"
W009	WALLPAPER (E)	104	"	"	"
W010	WALLPAPER (E)	104	"	"	"
W011	WALLPAPER RAIL (E)	104	"	"	"
W012	WALLPAPER (E)	107	"	"	"
W013	WALLPAPER (E)	107	"	"	"
W014	WALLPAPER (E)	108	"	"	"
W015	WOOD SIDING (E)	106	"	"	"
CONCRETE FINISH					
S001	TBD	ACCESS	TBD	TBD	TBD
S002	-	INTERNAL PATHWAY	"	"	"
WOOD FLOORING					
F001	TBD	FIRST FLOOR	TBD	TBD	TBD
F002	TBD	SECOND FLOOR	"	"	"
EXTERIOR FINISH					
W001	TBD	SIDING	TBD	TBD	TBD
W002	"	"	"	"	"
ROOF FINISH					
R001	TBD	ROOF	TBD	TBD	TBD
R002	"	"	"	"	"
R003	"	"	"	"	"

2 FINISH SCHEDULE

KEY PLAN

1/16" = 1'-0"

100	PORCH	201	SLEEP PORCH
101	BEDROOM	202	BEDROOM
102	PARLOR	203	CLOSET
103	CLOSET	204	BEDROOM
104	KAMITOKU	205	CLOSET
105	DINNING ROOM	206	CLOSET
106	LAUNDRY	207	HALL
107	KITCHEN	208	BEDROOM
108	PANTRY	209	CLOSET
109	BATHROOM	210	BATHROOM
110	STORAGE	211	BEDROOM



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Drawn by:

Checked by:

Professional's Stamp

NOT FOR CONSTRUCTION

Project Title

HARADA HOUSE
PHASE 2

Sheet Title

SCHEDULES

Design Stage

50% CONSTRUCTION DOCUMENTS

Project Address

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Riverside, CA
92501

Scale

N/A

Date

December 15, 2025

Sheet Number

A-604

MECHANICAL NOTES

SCOPE OF WORK

1. THE WORK INCLUDED UNDER THIS SECTION CONSISTS OF FURNISHING ALL MATERIALS, EQUIPMENT AND LABOR, AND THE PERFORMING OF ALL FUNCTIONS, EXCEPT AS OTHERWISE SPECIFIED HEREIN OR SHOWN ON THE DRAWINGS TO BE PERFORMED BY OTHERS, AND FOR THE INSTALLATION OF ALL HEATING AND COOLING EQUIPMENT, PIPING AND ALL DUCTWORK, GRILLES, REGISTERS, ETC., INCLUDING ALL CONNECTIONS TO EACH SYSTEM AS SPECIFIED HEREIN AND SHOWN ON THE DRAWINGS. IT SHALL FURTHER INCLUDE FURNISHING AND INSTALLING ALL MISCELLANEOUS ITEMS REQUIRED FOR THE OPERATION OF THE SYSTEM, WHETHER SPECIFICALLY CALLED OUT OR NOT.

2. SPECIAL INSPECTIONS: WHERE THE PLANS INDICATE SPECIAL INSPECTIONS AND REPORT, OR AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION (AHJ), THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, HIRE AN INDEPENDENT THIRD PARTY INSPECTOR OR TESTING AGENCY TO PERFORM THE REQUIRED INSPECTIONS FOR THE TYPES OF WORK REQUIRED OR IDENTIFIED ON THE SPECIAL INSPECTION FORM. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT TO THE REGISTERED DESIGN PROFESSIONAL ENGINEER, PROVIDING TEST RESULTS AND STATING WHETHER THE ITEMS REQUIRING SPECIAL INSPECTION WERE IN COMPLIANCE WITH THE INSPECTION REQUIREMENTS. PROVIDE ADDITIONAL COST FOR ENGINEER'S SEALED LETTER OF APPROVAL.

COORDINATION

1. CONTRACT DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO SHOW APPROXIMATE LOCATIONS. COORDINATE WORK WITH ALL TRADES TO AVOID INTERFERENCE. INSTALLED HVAC WORK WHICH INTERFERES WITH THE WORK OF OTHER TRADES DUE TO LACK OF COORDINATION SHALL BE RE-INSTALLED AT NO ADDITIONAL COST TO THE OWNER.
2. ALL CONTRACTORS SHALL BE RESPONSIBLE FOR COORDINATING WORK WITH OTHER TRADES AFFECTED BY EACH OTHERS WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL FIELD CONDITIONS WHICH MAY AFFECT HIS WORK BEFORE SUBMITTING BIDS.
4. PERFORMANCE OF ALL WORK SHALL BE SCHEDULED AS APPROVED BY THE OWNER. AVOID INTERFERENCE WITH FUNCTIONS IN OTHER PARTS OF THE FACILITY, AND COORDINATE WITH THE WORK OF OTHER TRADES. SERVICES SHALL NOT BE INTERRUPTED WITHOUT WRITTEN PRIOR APPROVAL OF THE OWNER.
5. PROTECT EXISTING BUILDING STRUCTURE AND GROUNDS FROM DAMAGE WHICH MAY OCCUR DURING DEMOLITION WORK. ANY DAMAGE TO THE EXISTING FACILITIES SHALL BE REPAIRED, REPLACED, OR RESTORED TO THE ORIGINAL CONDITION AT NO ADDITIONAL COST AND TO THE SATISFACTION OF THE OWNER.
6. SPACE ABOVE CEILINGS IS CRITICAL - THE CONTRACTOR SHALL VERIFY SPACE ABOVE CEILING & COORDINATE WITH PLUMBING, ELECTRICAL, STRUCTURAL, FIRE PROTECTION, ARCHITECTURAL, AND ALL OTHER TRADES INVOLVED BEFORE COMMENCEMENT OF WORK.

CODES AND PERMITS

1. ALL MATERIALS, EQUIPMENT AND INSTALLATION MUST COMPLY WITH ALL APPLICABLE LAWS, CODES, RULES AND REGULATIONS, REQUIRED BY CITY, COUNTY AND STATE, AS WELL AS FEDERAL REQUIREMENTS.
2. COMBUSTIBLE MATERIALS SHALL NOT BE USED IN A NON-COMBUSTIBLE BUILDING AS DEFINED BY THE BUILDING CODE. COMBUSTIBLE MATERIALS MAY BE PROTECTED AS SPECIFIED BY THE ENGINEER AND ARCHITECT OF RECORD.
3. PERMITS: OBTAIN AND PAY FOR ALL REQUIRED PERMITS, LICENSES AND FEES.
4. INSPECTIONS: FURNISH OWNER WITH CERTIFICATE OF INSPECTION AND APPROVAL BY LOCAL AUTHORITIES PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL WORK MUST BE INSPECTED.

PRODUCTS

1. ALL PRODUCTS SHALL BE NEW AND UNUSED OF ESTABLISHED AND REPUTABLE AMERICAN MANUFACTURERS. ITEMS OF EQUIPMENT USED FOR THE SAME PURPOSE SHALL BE OF THE SAME MANUFACTURER.
2. SYSTEMS SHALL BE COMPLETE AND OPERABLE. ANY ACCESSORIES REQUIRED FOR THE OPERATION OF THE SYSTEM SHALL BE INCLUDED AS THOUGH SPECIFICALLY INDICATED TO BE PROVIDED. SUCH ACCESSORIES INCLUDE BUT ARE NOT LIMITED TO FILTERS, CONDENSATE DRAINS, RELIEF VALVES, SERVICE VALVES, THERMOSTATS, VIBRATION ISOLATORS, ETC. MOTOR STARTERS FOR PREWIRED EQUIPMENT (AND OTHER PROTECTION AND CONTROL DEVICES) ARE ALSO INCLUDED IN THIS SPECIFICATION.
3. SPECIFIC REFERENCE TO A MANUFACTURER'S PRODUCT IS ONLY TO ESTABLISH TYPE, QUALITY, AND PERFORMANCE REQUIRED. THESE QUALIFICATIONS ARE IN ADDITION TO THE REQUIREMENTS SHOWN ON THE DRAWINGS AND SPECIFICATIONS. LISTING OF ALTERNATE EQUIPMENT MANUFACTURERS SHALL NOT BE CONSTRUED AS AN UNCONDITIONAL APPROVAL OF THE PRODUCTS OF THOSE MANUFACTURERS.
4. ACCEPTABLE HVAC EQUIPMENT MANUFACTURERS: AS SPECIFIED ELSEWHERE IN THESE DOCUMENTS.
5. PROVIDE CLEARANCES AS PER MANUFACTURERS RECOMMENDATIONS.

SUBSTITUTIONS

1. SUBSTITUTIONS OF MATERIALS OR PRODUCTS SHOWN HEREIN SHALL BE BY OWNER'S OR ENGINEER'S WRITTEN APPROVAL. ANY DEVIATION FROM THESE DRAWINGS WILL NOT BE ALLOWED.
2. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ANY SUBSTITUTIONS AND COSTS OF CHANGES INCURRED BY OTHER TRADES DUE TO THE SUBSTITUTIONS. OTHER TRADES INCLUDE: ELECTRICAL, PLUMBING, STRUCTURAL, ROOFING, OR ANY TRADE EFFECTED BY THE SUBSTITUTION.

GENERAL REQUIREMENTS FOR CONTROLS AND CONTROL WIRING

1. ALL CONTROL EQUIPMENT, INTEGRAL STARTERS, INTERLOCKING STARTERS, SMOKE DETECTORS, RELAYS, TRANSFORMERS, PANELS AND OTHER DEVICES SHOWN, SPECIFIED OR NEEDED FOR A COMPLETE CONTROL SYSTEM ARE TO BE PROVIDED AND INSTALLED UNDER THIS MECHANICAL DIVISION. COMPONENTS AND WIRING NOT SHOWN, BUT REQUIRED FOR THE PROPER OPERATION OF EQUIPMENT OR CONTROL SYSTEMS, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE PROJECT.
2. POWER WIRING, LOW VOLTAGE WIRING AND RACEWAYS RELATED TO CONTROLS SYSTEMS ARE TO BE PROVIDED AND INSTALLED UNDER THIS MECHANICAL DIVISION.
3. INSTALLATION OF ALL EQUIPMENT, DEVICES AND WIRING SHALL CONFORM TO THE NATIONAL ELECTRIC CODE. ALL CONTROLS SHALL BE FURNISHED AND PROPERLY IDENTIFIED WITH INSTRUCTIONS FOR PROPER CONNECTIONS. RESPONSIBILITY FOR PROPER CONNECTIONS AND OPERATION IS INCLUDED UNDER THE MECHANICAL CONTRACTORS RESPONSIBILITY. VERIFY ALL VOLTAGES, PHASES AND ELECTRICAL CONNECTIONS WITH THE ELECTRICAL CONTRACTOR BEFORE ORDERING ANY EQUIPMENT, AND IF DISCREPANCIES OCCUR, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH ANY WORK.
4. ALL TEMPERATURE CONTROLS ARE TO BE TESTED, ADJUSTED, AND CALIBRATED FOR PROPER OPERATION.
5. COORDINATE EXACT THERMOSTAT AND/OR MOUNTING HEIGHT ABOVE FINISHED FLOOR AND FINAL LOCATION WITH THE OWNER.
6. THERMOSTATS LOCATED ON EXTERIOR WALLS SHALL HAVE AN INSULATED SUB-BASE.

GENERAL NOTES

EQUIPMENT

1. ALL MECHANICAL EQUIPMENT SHALL BE PROPERLY LISTED AND LABELED BY AN APPROVED AGENCY.
2. ALL EQUIPMENT SHALL BE LABELED WITH STEEL TAGS EMBOSSED WITH 1/4" HIGH LETTERS, PERMANENTLY ATTACHED. TAG SHALL CLEARLY INDICATE THE AREA SERVED BY THE EQUIPMENT.
3. MAINTAIN MANUFACTURER'S RECOMMENDATIONS FOR ALL REQUIRED SERVICE CLEARANCES AND INSTALLATION OF EQUIPMENT.

CLEANUP

1. REMOVE AS MUCH DIRT, SCRAP MATERIAL AND DEBRIS AS POSSIBLE, AT THE END OF EACH WORKING DAY TO PREVENT HAZARDOUS CONDITIONS AND EXCESS DUST.

FINAL TESTS

1. AN INDEPENDENT AABC, NEBB OR TABB CERTIFIED CONTRACTOR SHALL BALANCE AIR DISTRIBUTION TO VALUES LISTED ON DRAWINGS. A FINAL COPY OF THE TEST AND BALANCE REPORT SHALL BE PROVIDED TO THE ENGINEER UPON COMPLETION OF THE REPORT. A PROJECT SHALL NOT BE CONSIDERED IN COMPLIANCE WITH THE PLANS AND SPECIFICATIONS UNTIL SUCH A REPORT HAS BEEN PROVIDED TO THE ENGINEER.
2. BEFORE ACCEPTANCE AND FINAL PAYMENT, IT SHALL BE DEMONSTRATED THAT ALL APPARATUSES ARE FUNCTIONING PROPERLY AND EFFICIENTLY. THE CONTRACTOR SHALL MAKE A THOROUGH TEST OF EACH SUPPLY, RETURN, AND EXHAUST SYSTEMS TO ASSURE THAT EACH DIFFUSER AND REGISTER HAS THE PROPER QUANTITY OF AIR IN ACCORDANCE WITH AABC OR NEBB. PROVIDE ADDITIONAL COMFORT BALANCE ADJUSTMENTS PER OWNER/TENANT REQUIREMENTS TO ADDRESS ANY NEEDED VARIATIONS IN DESIGN AIR FLOWS.
3. THE TEST AND BALANCE CONTRACTOR HAS THE RIGHT TO COMMUNICATE ANY INFORMATION TO THE MECHANICAL ENGINEER.

GUARANTEE

1. THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS, EQUIPMENT AND WORKMANSHIP FROM DEFECT OF WORKMANSHIP, AND SHALL REPLACE OR REPAIR WITHOUT ADDITIONAL COST TO THE OWNER ALL DEFECTIVE MATERIAL AND WORKMANSHIP, FOR A PERIOD OF (1) YEAR AFTER COMPLETION AND ACCEPTANCE OR AS CALLED FOR BY SPECIFICATIONS.

CLOSEOUT

1. SUBMIT THE SPECIFIED NUMBER OF COPIES OF SHOP DRAWINGS FOR MATERIALS, FIXTURES AND EQUIPMENT. INDICATE MANUFACTURERS, TRADE NAMES, SPECIFIC MODEL NUMBERS, AND TECHNICAL INFORMATION FOR EACH ITEM BEING FURNISHED.
2. ASSEMBLE OPERATION MANUALS FOR EACH ITEM INSTALLED FURNISH EQUIPMENT CUT SHEET AND CONTROL WIRING DIAGRAMS. SUBMIT COPIES AS DEFINED UNDER GENERAL CONDITIONS.
3. ALL SYSTEMS SHALL BE COMPLETE AND FULLY OPERATIONAL. ACCEPTANCE BY THE OWNER SHALL BE A CONDITION OF THE CONTRACT.
4. ALL MATERIALS, WORKMANSHIP, AND EQUIPMENT SHALL BE GUARANTEED FOR A MINIMUM OF ONE YEAR AFTER SYSTEM ACCEPTANCE.
5. PROVIDE TYPE WRITTEN OPERATING INSTRUCTIONS AND EQUIPMENT WARRANTIES TO THE OWNERS REPRESENTATIVES.
6. CONTRACTOR SHALL FURNISH RECORD SET DRAWINGS CONSISTING OF REPRODUCIBLE CAD FILES UPON COMPLETION OF WORK FOR OWNER'S USE. MINIMUM SCALE SHALL BE 1/8"= 1'-0". THE COMPLETE SET OF RECORD DOCUMENTS SHALL BE IN AN AUTOCAD FORMAT AS REQUIRED BY OWNER, ON COMPACT DISC.
7. CONTRACTOR SHALL MAKE FINAL INSPECTION AND TESTS IN THE PRESENCE OF THE OWNER AND SHALL SUPPLY ALL LABOR, MATERIALS, INSTRUMENTS, AND EQUIPMENT REQUIRED FOR TESTING.

ORDER OF PRECEDENCE OF DOCUMENTS

1. SHOULD A CONFLICT ARISE BETWEEN CONSTRUCTION DOCUMENTS, THE ORDER OF PRECEDENCE SHALL BE:
   - 1.1. SPECIAL PROVISIONS
   - 1.2. GENERAL PROVISIONS
   - 1.3. SPECIFICATIONS
   - 1.4. DETAILS ON DRAWINGS
   - 1.5. PLAN DRAWINGS
2. THE ENGINEER OF RECORD SHALL BE NOTIFIED BEFORE A DECISION IS MADE.

GENERAL NOTES

1. PRIOR TO SUBMITTING BID, MECHANICAL CONTRACTOR SHALL BECOME FULLY ACQUAINTED WITH THE CONDITIONS OF THE PROJECT. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND OTHER DRAWINGS FOR ADDITIONAL REQUIREMENTS WHICH MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ENGINEER AND/OR OWNER OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
2. COORDINATE THE INSTALLATION OF THE MECHANICAL SYSTEMS WITH OTHER TRADES TO ENSURE A NEAT AND ORDERLY INSTALLATION. COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS. ANY MODIFICATIONS REQUIRED DUE TO LACK OF COORDINATION WILL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR AT NO EXTRA COST TO THE OWNER.
3. AVOID DAMAGING SURFACES AND EQUIPMENT DURING WORK. REPAIR DAMAGE CAUSED DURING CONSTRUCTION AT NO EXTRA COST TO THE OWNER.
4. ALL MECHANICAL EQUIPMENT SHOWN ON THE MECHANICAL PLANS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR UNLESS OTHERWISE NOTED. THERMOSTATS, TEMPERATURE SENSORS, HUMIDITY SENSORS AND CARBON DIOXIDE SENSORS SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR, UNLESS NOTED OTHERWISE ON DRAWINGS.
5. MECHANICAL EQUIPMENT AND DUCTWORK ARE SHOWN AT APPROXIMATE LOCATIONS. FIELD MEASURE FINAL DUCTWORK LOCATIONS PRIOR TO FABRICATION AND MAKE ADJUSTMENTS AS REQUIRED TO FIT THE DUCTWORK WITHIN THE AVAILABLE SPACE. VERIFY THAT FINAL EQUIPMENT LOCATIONS MEET MANUFACTURER'S RECOMMENDATIONS REGARDING SERVICE CLEARANCE AND PROPER AIRFLOW CLEARANCE AROUND EQUIPMENT.
6. INDOOR AIR QUALITY MEASURES: PROTECT INSIDE OF (INSTALLED AND DELIVERED) HVAC UNITS FROM EXPOSURE TO DUST, DIRT, PAINT AND MOISTURE. REPLACE INSULATION THAT HAS GOTTEN WET AT ANY TIME DURING CONSTRUCTION, DRYING THE INSULATION IS NOT ACCEPTABLE. SEAL ANY TEARS OR JOINTS OF INTERNAL FIBERGLASS INSULATION. REMOVE DEBRIS FROM CEILING/RETURN AIR PLENUM INCLUDING DUST.
7. OVERHEAD HANGERS AND SUPPORTS FOR EQUIPMENT SHALL BE FASTENED TO BUILDING JOISTS OR BEAMS. DO NOT ATTACH HANGERS AND SUPPORTS TO THE ABOVE FLOOR SLAB OR ROOF.
8. COORDINATE LOCATION OF EQUIPMENT SUPPORTS WITH LOCATION OF EQUIPMENT ACCESS PANELS/DOORS TO ENABLE SERVICE OF EQUIPMENT AND/OR FILTER REPLACEMENT.
9. SEAL PENETRATIONS THROUGH THE BUILDING COMPONENTS IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.
10. LOCATE AND SET TEMPERATURE AND HUMIDITY SENSORS AT LOCATIONS SHOWN ON PLANS. VERIFY EXACT LOCATIONS WITH OWNER PRIOR TO INSTALLATION. INSTALL DEVICES 48" AFF TO MEET ADA REQUIREMENTS UNLESS NOTED OTHERWISE ON DWGS. PROVIDE INSULATED BACKING FOR THERMOSTATS MOUNTED ON EXTERIOR BUILDING WALLS.
11. PROVIDE A NEW SET OF AIR FILTERS IN UNITS PRIOR TO TESTING, ADJUSTING AND BALANCING AND BEFORE TURNING SYSTEM(S) OVER TO OWNER.
12. PLACEMENT AND STARTUP OF THE MECHANICAL UNITS SHALL BE BY THE MECHANICAL CONTRACTOR.
13. EITHER WHEN STORED OR MOVED INTO ROUGH FRAME, HVAC EQUIPMENT OPENINGS AND DUCTS SHALL BE PROTECTED AND PROTECTION SHALL BE MAINTAINED UNTIL FINAL STARTUP OF THE SYSTEM.
14. ALL HVAC UNITS INSTALLED AND OPERATIONAL DURING CONSTRUCTION AND UP TO THE POINT OF OCCUPANCY SHALL BE INSTALLED WITH MERV 13 FILTERS.

CODES AND STANDARDS

CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING PARTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR):

PART 1 2022 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE
PART 2 2022 CALIFORNIA BUILDING CODE (CBC) VOLUME 1 AND 2
PART 3 2022 CALIFORNIA ELECTRICAL CODE (CEC)
PART 4 2022 CALIFORNIA MECHANICAL CODE (CMC)
PART 5 2022 CALIFORNIA PLUMBING CODE (CPC)
PART 6 2022 CALIFORNIA ENERGY CODE (CEC)
PART 7 CURRENTLY VACANT
PART 8 2022 CALIFORNIA HISTORICAL BUILDING CODE
PART 9 2022 CALIFORNIA FIRE CODE (CFC)
PART 10 2022 CALIFORNIA EXISTING BUILDING CODE
PART 11 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
PART 12 2022 CALIFORNIA REFERENCED STANDARDS

PARTIAL LIST OF APPLICABLE STANDARDS:

NFPA 13, AUTOMATIC SPRINKLER SYSTEMS (CALIFORNIA AMENDED)	2022 EDITION
NFPA 14, STANDPIPE SYSTEMS (CALIFORNIA AMENDED)	2024 EDITION
NFPA 17, DRY CHEMICAL EXTINGUISHING SYSTEM	2024 EDITION
NFPA 17A, WET CHEMICAL SYSTEMS	2024 EDITION
NFPA 20, STATIONARY PUMPS	2022 EDITION
NFPA 24, PRIVATE FIRE MAINS (CALIFORNIA AMENDED)	2022 EDITION
NFPA 72, NATIONAL FIRE ALARM CODE (CALIFORNIA AMENDED)	2022 EDITION
(NOTE: SEE UL STANDARD 1971 FOR "VISUAL DEVICES")	
NFPA 80, FIRE DOOR AND OTHER OPENING PROTECTIVES	2022 EDITION
NFPA 253, CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS	2023 EDITION
NFPA 2001 CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2022 EDITION

REFRIGERANT PIPING NOTES

1. REFRIGERANT PIPING MATERIALS AND SIZES SHALL BE PER MANUFACTURER'S RECOMMENDATIONS. VENT ALL ENTRAINED AIR FROM PIPING SYSTEM.
2. REFRIGERANT PIPES PENETRATING FRAMING MEMBERS SHALL BE PROTECTED BY STEEL NAIL PLATES NOT LESS THAN NO. 18 GAUGE (0.0478 INCH) IN THICKNESS. THE NAIL PLATE SHALL EXTEND ALONG THE WALL NOT LESS THAN 1-1/2" BEYOND THE OUTSIDE DIAMETER OF THE PIPE.
3. REFRIGERANT PIPING INSTALLED UNDERGROUND SHALL BE PROTECTED FROM DAMAGE BY PROVIDING WATERTIGHT CASING. REFER TO MANUFACTURER'S INSTALLATION GUIDELINES.

COMMISSIONING NOTES

1. A COMMISSIONING PLAN AND REPORT WHICH MEETS THE REQUIREMENTS OF THE CURRENT CEnC CODE SHALL BE PROVIDED FOR ALL NEW MECHANICAL SYSTEMS UNLESS EXEMPT BY CODE.
2. A COMMISSIONING PLAN SHALL BE DEVELOPED BY A CERTIFIED COMMISSIONING PROFESSIONAL (CCP) AND SHALL INCLUDE THE FOLLOWING ITEMS:
   - 2.1. A NARRATIVE DESCRIPTION OF THE ACTIVITIES THAT WILL BE ACCOMPLISHED DURING EACH PHASE OF COMMISSIONING, INCLUDING THE PERSONNEL INTENDED TO ACCOMPLISH EACH OF THE ACTIVITIES.
   - 2.2. A LISTING OF THE SPECIFIC EQUIPMENT, APPLIANCES OR SYSTEMS TO BE TESTED AND A DESCRIPTION OF THE TESTS TO BE PERFORMED.
   - 2.3. FUNCTIONS TO BE TESTED, INCLUDING, BUT NOT LIMITED TO CALIBRATIONS AND ECONOMIZER CONTROLS.
   - 2.4. CONDITIONS UNDER WHICH THE TEST WILL BE PERFORMED. AT A MINIMUM, TESTING SHALL AFFIRM WINTER AND SUMMER DESIGN CONDITIONS AND FULL OUTSIDE AIR CONDITIONS.
   - 2.5. MEASURABLE CRITERIA FOR PERFORMANCE.
3. PROVIDE A "PRELIMINARY COMMISSIONING REPORT" AND A "FINAL COMMISSIONING REPORT" TO THE OWNER AND MAKE AVAILABLE TO THE CODE OFFICIAL UPON REQUEST.

AIR BALANCING

HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS (INCLUDING) HYDRONIC SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH ONE OF THE FOLLOWING METHODS.

1. AABC NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE.
2. ACCA MANUAL B.
3. ASHRAE 111.
4. NEBB PROCEDURAL STANDARDS FOR TESTING ADJUSTING BALANCING OF ENVIRONMENTAL SYSTEMS.
5. SMACNA HVAC SYSTEMS TESTING, ADJUSTING, AND BALANCING.

MECHANICAL SHEET INDEX

M-0.1	MECHANICAL FRONT SHEET
M-0.2	MECHANICAL LEGEND AND ABBREVIATIONS
M-0.3	MECHANICAL SCHEDULES
M-1.1	MECHANICAL FIRST FLOOR PLAN
M-1.2	MECHANICAL SECOND FLOOR PLAN
M-4.1	MECHANICAL DETAILS
M-4.2	MECHANICAL DETAILS
M-4.3	MECHANICAL DETAILS
M-4.4	MECHANICAL DETAILS
M-4.5	MECHANICAL DETAILS
M-4.6	MECHANICAL DETAILS
M-4.7	MECHANICAL DETAILS
M-4.8	MECHANICAL DETAILS
M-4.9	MECHANICAL DETAILS
M-4.10	MECHANICAL DETAILS
M-4.11	MECHANICAL DETAILS
M-5.1	MECHANICAL CONTROLS
M-6.1	MECHANICAL SPECIFICATIONS
M-6.2	MECHANICAL SPECIFICATIONS
M-7.1	MECHANICAL TITLE- 24 FORMS

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MUSEUM OF RIVERSIDE

Revisions

BUILDING FLUSHOUT

AFTER ALL INTERIOR FINISHES HAVE BEEN INSTALLED, FLUSH OUT THE BUILDING BY SUPPLYING CONTINUOUS VENTILATION WITH ALL AIR HANDLING UNITS AT THEIR MAXIMUM OUTDOOR AIR RATE AND ALL SUPPLY FANS AT THEIR MAXIMUM POSITION AND RATE FOR AT LEAST 14 DAYS.

1. DURING THIS TIME, MAINTAIN AN INTERNAL TEMPERATURE OF AT LEAST 60°F AND RELATIVE HUMIDITY NO HIGHER THAN 60 PERCENT. IF EXTENUATING CIRCUMSTANCES MAKE THESE TEMPERATURE AND HUMIDITY LIMITS UNACHIEVABLE, THE FLUSHOUT MAY BE CONDUCTED UNDER CONDITIONS AS CLOSE AS POSSIBLE TO THESE LIMITS, PROVIDED THAT DOCUMENTATION OF THE EXTENUATING CIRCUMSTANCES IS PROVIDED IN WRITING.
2. OCCUPANCY MAY START AFTER 4 DAYS, PROVIDED FLUSH-OUT CONTINUES FOR THE FULL 14 DAYS. DURING OCCUPIED TIMES, THE THERMAL COMFORT CONDITIONS OF TITLE 24 MUST BE MET.

ROOF MOUNTED EQUIPMENT

1. ACCESS LOCKS, SCREW, AND BOLTS SHALL BE OF CORROSION- RESISTANT MATERIAL.
2. ALL EQUIPMENT SHALL BE PERMANENTLY IDENTIFIED BY TAGGING WITH PHENOLIC OR PERMANENT LABEL ALONG WITH AREA OR SPACE SERVED BY THE EQUIPMENT. BARCODES SHALL ALSO BE PROVIDED FOR EACH EQUIPMENT.
3. THE ROOF CURBS SHALL HAVE HOT DIPPED GALVANIZED FINISH.
4. DUCTWORK CONNECTIONS TO THE EQUIPMENT SHALL BE PROVIDED WITH FLEXIBLE CONNECTORS.

POLLUTANT CONTROL

INDOOR AIR QUALITY DURING CONSTRUCTION

TEMPORARY VENTILATION DURING CONSTRUCTION SHALL BE PROVIDED IN ACCORDANCE WITH THE FOLLOWING:

1. VENTILATION DURING CONSTRUCTION SHALL BE ACHIEVED THROUGH OPENINGS IN THE BUILDING SHELL USING FANS TO PRODUCE NOT LESS THAN THREE AIR CHANGES PER HOUR.
2. THE SUPPLY AND RETURN HVAC SYSTEM OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC SHEET METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUST OR DEBRIS THAT CAN COLLECT IN THE SYSTEM.
3. THE BUILDING WILL BE OCCUPIED DURING DEMOLITION AND CONSTRUCTION, VENTILATION SHALL BE PROVIDED IN ACCORDANCE WITH THE CONTROL MEASURES OF THE SMACNA IAQ GUIDELINES FOR OCCUPIED BUILDINGS DURING CONSTRUCTION.
4. THE PERMANENT HVAC SYSTEM SHALL NO BE USED DURING CONSTRUCTION TO CONDITION AND VENTILATE THE BUILDING WITHIN THE REQUIRED TEMPERATURE RANGE FOR MATERIAL AND EQUIPMENT INSTALLATION. WHERE REQUIRED, A SUPPLEMENTAL HVAC SYSTEM SHALL BE USED DURING CONSTRUCTION.

SHOP DRAWING NOTE

1. PRIOR TO STARTING WORK, SUBMIT SHOP DRAWINGS FOR ALL MECHANICAL EQUIPMENT AND DUCTWORK.
2. CONTRACTOR SHALL PROVIDE FIELD LAYOUT SHOP DRAWINGS FOR ENGINEER REVIEW PRIOR TO FABRICATION AND INSTALLATION. SHOP DRAWING SHALL BE INDUSTRY STANDARD SHOWING ELEVATION HEIGHTS OF ALL NEW AND EXISTING EQUIPMENT. SHOP DRAWINGS SHALL BE COORDINATED WITH VARIOUS TRADES INVOLVED IN THE PROJECT.

OBD	OPPOSED BLADE DAMPER
OAR	OUTSIDE AIR REGISTER
(R)	REMOVE
RA	RETURN AIR
RF	RETURN FAN
RG	RETURN GRILLE
RH	RELATIVE HUMIDITY
(RL)	RELOCATED
RLA	RATED LOAD AMPS
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
RR	RETURN REGISTER
(RS)	REMOVE AND SAVE FOR RELOCATION
SA	SUPPLY AIR
SF	SUPPLY AIR FAN
SP	STATIC PRESSURE
SPEC	SPECIFICATIONS
SR	SUPPLY REGISTER
TD	TEMPERATURE DIFFERENCE
TEMP	TEMPERATURE
TSTAT	THERMOSTAT
TYP	TYPICAL
TSP	TOTAL STATIC PRESSURE
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
UTR	UP THROUGH ROOF
V	VOLT
VENT	VENTILATION
VERT	VERTICAL
VTR	VENT THROUGH ROOF
W/	WITH
W	WATT
WBT	WET BULB TEMPERATURE
WMS	WIRE MESH SCREEN
ZD	ZONE DAMPER

CALGREEN NOTES

NOTE TO CONTRACTORS: THE NOTES BELOW ARE COMPOSITE AND NOT ALL NOTES MAY APPLY TO THIS PROJECT.

1. DEVELOP A WRITTEN PLAN OF PROCEDURES FOR TESTING & ADJUSTING SYSTEMS. SYSTEMS TO BE INCLUDED FOR TESTING & ADJUSTING SHALL INCLUDE, AS APPLICABLE TO THE PROJECT:
   - 1.1. HVAC SYSTEM & CONTROLS
   - 1.2. INDOOR & OUTDOOR LIGHTING & CONTROLS
   - 1.3. WATER HEATING SYSTEMS
   - 1.4. RENEWABLE ENERGY SYSTEMS
   - 1.5. LANDSCAPE IRRIGATION SYSTEMS
   - 1.6. WATER REUSE SYSTEMS
2. PERFORM TESTING & ADJUSTING PROCEDURES IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS & APPLICABLE STANDARDS ON EACH SYSTEM.
3. BEFORE A NEW SPACE CONDITIONING SYSTEM SERVING A BUILDING OR SPACE IS OPERATED FOR NORMAL USE, THE SYSTEM SHOULD BE BALANCED IN ACCORDANCE WITH THE PROCEDURES DEFINED BY THE TESTING ADJUSTING AND BALANCING BUREAU NATIONAL STANDARDS, ETC.
4. AFTER COMPLETION OF TESTING, ADJUST, & BALANCING, PROVIDE A FINAL REPORT OF TESTING SIGNED BY THE INDIVIDUAL RESPONSIBLE FOR PERFORMING THESE SERVICES.
5. PROVIDE THE BUILDING OWNER OR REPRESENTATIVE WITH DETAILED OPERATING & MAINTENANCE INSTRUCTIONS & COPIES OF GUARANTEES/ WARRANTIES FOR EACH SYSTEM.
6. INCLUDE A COPY OF ALL INSPECTION VERIFICATIONS AND REPORTS REQUIRED BY THE ENFORCING AGENCY.
7. THE PERMANENT HVAC SYSTEM SHALL ONLY BE USED DURING CONSTRUCTION IF NECESSARY TO CONDITION THE BUILDING WITHIN THE REQUIRED TEMPERATURE RANGE FOR MATERIAL AND EQUIPMENT INSTALLATION. IF THE HVAC SYSTEM IS USED DURING CONSTRUCTION, USE RETURN AIR FILTERS WITH A MINIMUM EFFICIENCY REPORTING VALUE (MERV) OF 8, BASED ON ASHRAE 52.2-1999, OR AN AVERAGE EFFICIENCY OF 30 PERCENT BASED ON ASHRAE 52.1-1992. REPLACE ALL FILTERS IMMEDIATELY PRIOR TO OCCUPANCY OR AT CONCLUSION OF CONSTRUCTION.
8. IN MECHANICALLY VENTILATED BUILDINGS, PROVIDE REGULARLY OCCUPIED AREAS OF THE BUILDING WITH AIR FILTRATION MEDIA FOR OUTSIDE AND RETURN AIR PRIOR TO OCCUPANCY THAT PROVIDES AT LEAST A MERV OF 8.
9. FOR BUILDINGS EQUIPPED WITH DEMAND CONTROL VENTILATION, CO2 SENSORS & VENTILATION CONTROLS SHALL BE SPECIFIED & INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITION OF THE CALIFORNIA ENERGY CODE, SEC. 121(c).
10. INSTALLATION OF HVAC, REFRIGERATION, & FIRE SUPPRESSION EQUIPMENT SHALL COMPLY WITH SEC. 5.508.1.1 AND 5.508.1.1 AND 5.508.1.2 OF THE CURRENT CALIFORNIA GREEN BUILDING STANDARDS CODE.
11. INSTALL HVAC, REFRIGERATION, & FIRE SUPPRESSION EQUIPMENT THAT DO NOT CONTAIN CFC.
12. INSTALL HVAC, REFRIGERATION, & FIRE SUPPRESSION EQUIPMENT THAT DO NOT CONTAIN HALON.

EQUIP. TYPE / UNIT# | SHEET#	EQUIPMENT REFERENCE, UNIT NUMBER AND SHEET NUMBER
SD	DUCT MOUNTED SMOKE DETECTOR
1	DEMOLITION NOTE #1
1	CONSTRUCTION NOTE #1
	ROOF MOUNTED DUCT SUPPORT
	POINT OF CONNECTION
	POINT OF DISCONNECT

HVAC ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AC	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AH	AIR HANDLING UNIT
BDD	BACK DRAFT DAMPER (WEIGHTED)
BFP	BACKFLOW PREVENTER
BT	BYPASS TIMER
BTUH	BRITISH THERMAL UNITS PER HOUR
CC	COOLING COIL
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
CW	CHILLED WATER
CLG	CEILING
CU	CONDENSING UNIT
CV	CONSTANT VOLUME
CONT.	CONTINUES
CSFD	COMBINATION SMOKE FIRE DAMPER
(D)	EXISTING TO DEMOLISH
DAL	DISCHARGE AIR LOUVER
DB	DECIBELS
DBT	DRY BULB TEMPERATURE
DCV	DEMAND CONTROL VENTILATION (CO2)
DDC	DIRECT DIGITAL CONTROL
DIA	DIAMETER
DN	DOWN
DTR	DOWN THROUGH ROOF
(E)	EXISTING
EA	EACH
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EG	EXHAUST GRILLE
EFF	EFFICIENCY
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM
EMS	ENERGY MANAGEMENT SYSTEM
ER	EXHAUST REGISTER
ESP	EXTERNAL STATIC PRESSURE
(ETR)	EXISTING TO REMAIN
°F	DEGREES, FAHRENHEIT
FAU	FORCED AIR UNIT
FC	FAN COIL UNIT
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FLR	FLOOR
FLA	FULL LOAD AMPS
FPM	FEET PER MINUTE
FT	FEET
FV	FACE VELOCITY
HZ	HERTZ
HPU	HEAT PUMP UNIT
HP	HORSE POWER
HW	HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
IN	INCHES
IN. W.C.	INCHES OF WATER COLUMN
IFM	INDOOR FAN MOTOR
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LRA	LOCKED ROTOR AMPS
MAX	MAXIMUM
MBH	ONE THOUSAND BTUH
MCA	MINIMUM CIRCUIT AMPS
MOCP	MAXIMUM OVER CURRENT PROTECTION
MD	MOTORIZED DAMPER
MIN	MINIMUM
MFS	MAXIMUM FUSE SIZE
MVD	MANUAL VOLUME DAMPER
(N)	NEW
N/A	NOT APPLICABLE
NC	NOISE CRITERIA
NIC	NOT IN CONTRACT
NK	NECK
NO	NUMBER
NTS	NOT TO SCALE
OFM	OUTDOOR FAN MOTOR
OSA	OUTSIDE AIR
OAI	OUTSIDE AIR INTAKE
OAL	OUTSIDE AIR LOUVER

DUCTWORK SYMBOLS

	SUPPLY DUCT RISER IN PLAN
	RETURN DUCT RISER IN PLAN
	EXHAUST DUCT RISER
	RECTANGULAR DUCTWORK (WIDTH x DEPTH)
10x8	RECTANGULAR DUCTWORK (WIDTH x DEPTH)
10x8Ø	FLAT OVAL DUCTWORK
8"Ø	ROUND DUCTWORK (SIZE, DIAMETER)
(L)	1" ACOUSTICALLY LINED DUCTWORK
	SQUARE-THROATED ELBOW W/TURNING VANES
	RADIUS ELBOW
NK= / NK=	RADIUS TEE
NK= / NK=	SQUARE-THROATED TEE
R/D / R/D	CHANGE IN ELEVATION WITH RELATION TO AIR FLOW
	VOLUME DAMPER
	TRANSITION WITH FLAT SIDE
	TRANSITION ON CENTER
	RECTANGULAR-TO-ROUND TRANSITION
	TAKE-OFF TAP TO RECTANGULAR DUCT AND VOLUME DAMPER
	CONICAL TAP TO RECTANGULAR DUCT AND VOLUME DAMPER
CSFD / CSFD	COMBINATION SMOKE/FIRE DAMPER (CSFD)
FD / FD	FIRE DAMPER (FD)
	FLEXIBLE CONNECTOR
	EXISTING DUCTWORK TO REMAIN (DASHED)
	EXISTING TO BE REMOVED (HATCHED)
	NEW DUCTWORK (SOLID)
X(L) / X(L)	(L) NEW LINED DUCTWORK (SOLID)
X(DWL) / X(DWL)	(DWL) NEW DOUBLE WALL LINED DUCTWORK (SOLID)
	NEW FLEXIBLE DUCT (MAXIMUM LENGTH 5'-0")
	ACCESS REQUIRED FOR EQUIPMENT SERVICE
	SIDE WALL REGISTER/GRILLE
	RETURN GRILLE WITH ACOUSTICALLY LINED BOOT
	CEILING DIFFUSER 4-WAY THROW
	CEILING DIFFUSER 3-WAY THROW
	CEILING DIFFUSER 2-WAY THROW
	CEILING DIFFUSER 2-WAY THROW
	CEILING DIFFUSER 1-WAY THROW
	RETURN AIR GRILLE
	EXHAUST GRILLE
T	THERMOSTAT (MAX. 48" A.F.F.)
TS	TEMPERATURE SENSOR (MAX. 48" A.F.F.)
CO_2	CARBON DIOXIDE SENSOR (MAX. 48" A.F.F.)
BT	BYPASS TIMER (MAX. 48" A.F.F.)
	MANUAL VOLUME DAMPER
FAU / D80-1	EQUIPMENT TAG, DESCRIPTION FAU, ROOM NUMBER D80, UNIT NUMBER 1
1 / M-1	DETAIL REFERENCE, DETAIL 1, SHEET NUMBER M-1
DL	DOOR LOUVER MIN. 12x12
DU	DOOR UNDERCUT MAX. 1"
1 / M-1	SECTION REFERENCE, SECTION 1 SHEET M-1

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OUTDOOR HEAT PUMP UNIT SCHEDULE

SYMBOL	SERVICE	LOCATION	MFG'R	MODEL	TOTAL COOLING CAP. MBH	HEATING CAP. MBH	ELECTRICAL DATA @ 60HZ.				SEER2	HSPF2	REFRIG	WT. LBS.	REMARKS
							VOLTS	Ø	MCA	MOCP					
HP 1	FC-1	ON GRADE	CARRIER	MCY-MUB036HS2P-UL	36,000	40,000	208/230	1	36	40	20.30	10.70	R-454B	300	1-3
HP 2	FC-2	ON GRADE	CARRIER	MCY-MUB036HS2P-UL	36,000	40,000	208/230	1	36	40	20.30	10.70	R-454B	300	1-3

FAN COIL UNIT SCHEDULE

SYMBOL	SERVICE	MAKE	MODEL	TYPE	CFM	EXT. S.P. HO $_2$	ENT. AIR °F		COOL CAP MBH	HEAT PUMP	ELECT. DATA			MIN. OSA	WT. LBS.	REMARKS
							D.B.	W.B.	NOMINAL	CAP. MBH	POWER	MCA	MOCP			
FCU 1	FIRST FLOOR	CARRIER	MMD-UB0361VHN-UL	DUCTED	1000	0.60	-	-	36,000	40,000	208/230-1-60	5	6	300	70	1-3
FCU 2	SECOND FLOOR	CARRIER	MMD-UB0361VHN-UL	DUCTED	1000	0.60	-	-	36,000	40,000	208/230-1-60	5	6	300	70	1-3

NOTES:

1. PROVIDE LOW AMBIENT KIT AND T-24 COMPLIANT THERMOSTAT.
2. HEAT PUMP UNIT SHALL BE MOUNTED ON LEVELED PLATFORM ON GRADE.
3. PROVIDE SUCTION AND LIQUID REFRIGERANT LINES BETWEEN FAN COIL AND HEAT PUMP UNIT. SIZE PER MANUFACTURER RECOMMENDATIONS.

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Revisions

Drawn by:

Checked by:

Professional's Stamp

Project Title

HARADA HOUSE
PHASE 2

Sheet Title

MECHANICAL
SCHEDULES

Design Stage

Project Address

3342 & 3356 Lemon Street
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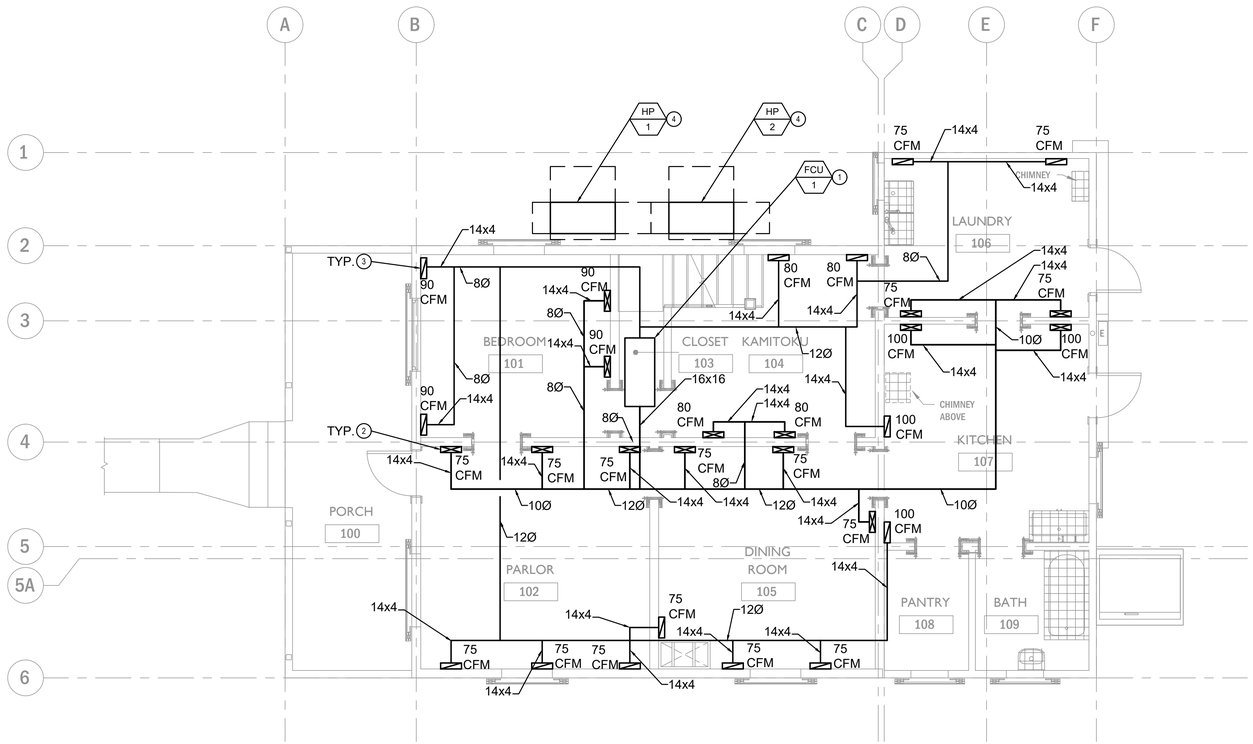
Scale

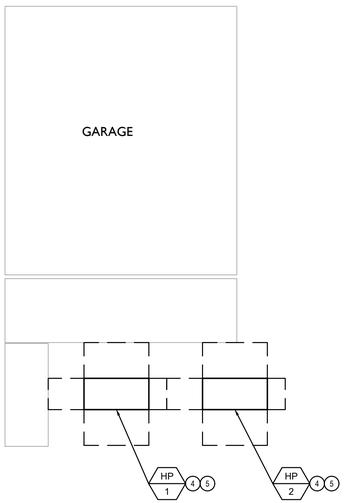
N.T.S

Date

Sheet Number

M-0.3





1/4"=1'-0" 0 2' 4' 8' 12'

MECHANICAL FIRST FLOOR PLAN

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

1 / M-1.1

GENERAL NOTES

NON-RESIDENTIAL PROJECTS

A. ALL DUCT EXPOSED TO CONDITION SPACE SHALL BE LINED INTERNALLY WITH 1 INCH OF ACOUSTICAL LINING.

B. ALL SUPPLY, RETURN AND OUTSIDE AIR DUCT TAKEOFF BRANCHES SHALL BE PROVIDED WITH A VOLUME DAMPER. REMOTE MANUAL CONTROL DAMPER SHALL BE USED WHERE NO ACCESSIBLE CEILING.

C. MECHANICAL SYSTEMS INSTALLATION MUST MAINTAIN INTEGRITY OF WALLS, PARTITIONS AND FLOORS DESIGNATED AS EITHER FIRE RATED OR "SMOKE TIGHT". SEAL AROUND ALL PENETRATIONS THROUGH RATED OR SMOKE TIGHT ASSEMBLIES. COORDINATE WITH GC PLANS AND GENERAL CONTRACTOR WHERE APPLICABLE.

D. ALL THE DUCT SIZES SHOWN IN PLAN ARE WITHOUT DUCT LINING.

E. EXHAUST OUTLET SHALL BE 3-FEET AWAY FROM ANY OPENINGS TO THE BUILDING, MIN 10-FT AWAY FROM OUTSIDE AIR INTAKE, AND 3-FEET AWAY FROM THE PROPERTY LINE.

F. ALL DUCTWORK BETWEEN FLOOR JOISTS SHALL BE PROVIDED WITH FIRE WRAP WITH FIRE RATING SIMILAR TO THE FLOOR CONSTRUCTION.

G. EXISTING CONDITIONS ARE PER AS-BUILT DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BIDDING AND INSTALLATION OF ANY WORK.

H. EXISTING DUCT AND PIPE DIMENSION AND ROUTING SHOWN ON THE PLAN IS BASED ON ASSUMPTION DUE TO LIMITED ACCESS TO THE CEILING SPACE AND MAY VARY FROM ACTUAL SITE CONDITION. CONTRACTOR TO VERIFY SIZES AND ROUTING ON SITE.

I. PROVIDE 1" UNDER CUT AT BATHROOM DOORS.

J. INSTALL BACK-DRAFT DAMPER IN OUTSIDE AIR INTAKE, EXHAUST AIR AND RELIEF AIR DUCTWORK.

K. ALL AIR-DISTRIBUTION SYSTEM DUCTS AND PLENUMS SHALL BE INSTALLED, SEALED, AND INSULATED TO MEET THE REQUIREMENTS OF 2022 CALIFORNIA MECHANICAL CODE SECTIONS 601.0, 602.0, 603.0, 604.0, 605.0 AND "HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE" AS PUBLISHED BY SMACNA.

KEY NOTES

1. INSTALL NEW DUCTED TYPE FAN COIL UNIT WITH ALL RELATED ACCESSORIES MOUNTED IN CRAWL SPACE.
2. 4X14 FLOOR SUPPLY DIFFUSER.
3. 4X14 FLOOR RETURN REGISTER.
4. INSTALL NEW OUTDOOR CONDENSER UNIT WITH ALL RELATED ACCESSORIES.
5. RUN PIPING UNDERGROUND TO FAN COIL UNITS PER MANUFACTURER RECOMMENDATION.

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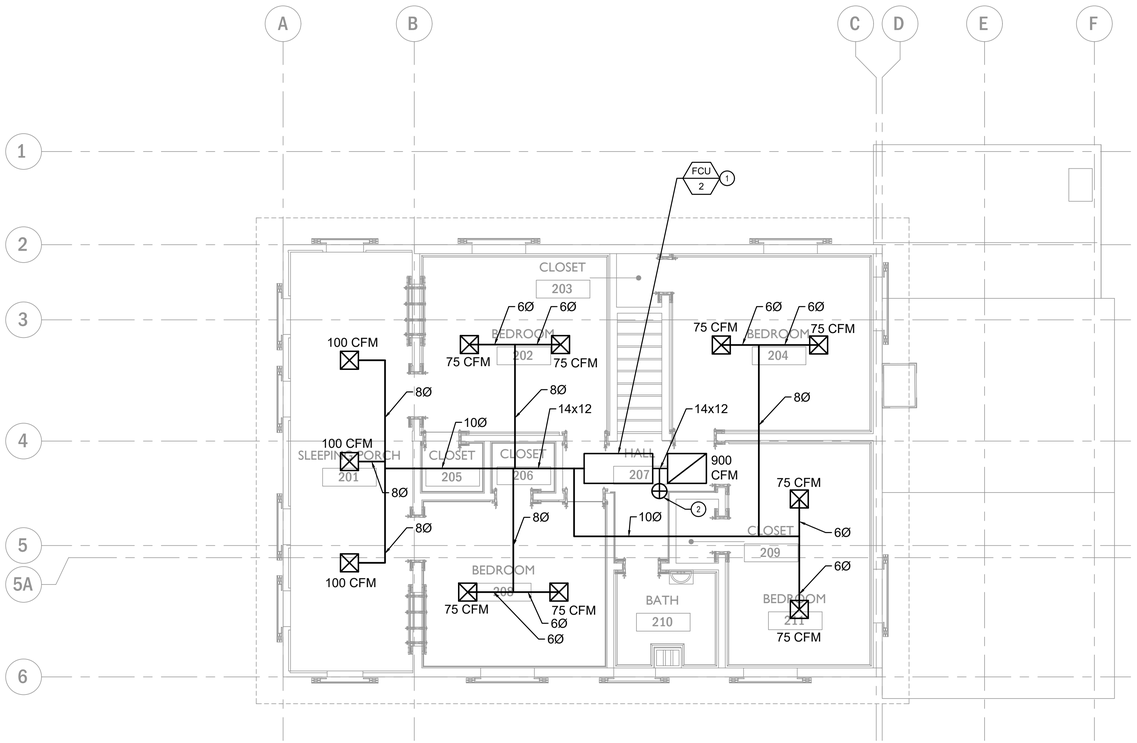

GARAGE

1/4"=1'-0" 0 2' 4' 8' 12'

MECHANICAL SECOND FLOOR PLAN

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

1 / M-1.2

KEY NOTES

1. INSTALL NEW DUCTED TYPE FAN COIL UNIT WITH ALL RELATED ACCESSORIES MOUNTED IN ATTIC SPACE.
2. RUN 10"Ø DUCT UP TO ROOF AND TERMINATE IN A GOOSENECK FOR 300 CFM OF OUTSIDE AIR.

GENERAL NOTES

NON-RESIDENTIAL PROJECTS

A. ALL DUCT EXPOSED TO CONDITION SPACE SHALL BE LINED INTERNALLY WITH 1 INCH OF ACOUSTICAL LINING.

B. ALL SUPPLY, RETURN AND OUTSIDE AIR DUCT TAKEOFF BRANCHES SHALL BE PROVIDED WITH A VOLUME DAMPER. REMOTE MANUAL CONTROL DAMPER SHALL BE USED WHERE NO ACCESSIBLE CEILING.

C. MECHANICAL SYSTEMS INSTALLATION MUST MAINTAIN INTEGRITY OF WALLS, PARTITIONS AND FLOORS DESIGNATED AS EITHER FIRE RATED OR "SMOKE TIGHT". SEAL AROUND ALL PENETRATIONS THROUGH RATED OR SMOKE TIGHT ASSEMBLIES. COORDINATE WITH GC PLANS AND GENERAL CONTRACTOR WHERE APPLICABLE.

D. ALL THE DUCT SIZES SHOWN IN PLAN ARE WITHOUT DUCT LINING.

E. EXHAUST OUTLET SHALL BE 3-FEET AWAY FROM ANY OPENINGS TO THE BUILDING, MIN 10-FT AWAY FROM OUTSIDE AIR INTAKE, AND 3-FEET AWAY FROM THE PROPERTY LINE.

F. ALL DUCTWORK BETWEEN FLOOR JOISTS SHALL BE PROVIDED WITH FIRE WRAP WITH FIRE RATING SIMILAR TO THE FLOOR CONSTRUCTION.

G. EXISTING CONDITIONS ARE PER AS-BUILT DRAWINGS AND SITE SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BIDDING AND INSTALLATION OF ANY WORK.

H. EXISTING DUCT AND PIPE DIMENSION AND ROUTING SHOWN ON THE PLAN IS BASED ON ASSUMPTION DUE TO LIMITED ACCESS TO THE CEILING SPACE AND MAY VARY FROM ACTUAL SITE CONDITION. CONTRACTOR TO VERIFY SIZES AND ROUTING ON SITE.

I. PROVIDE 1" UNDER CUT AT BATHROOM DOORS.

J. INSTALL BACK-DRAFT DAMPER IN OUTSIDE AIR INTAKE, EXHAUST AIR AND RELIEF AIR DUCTWORK.

K. ALL AIR-DISTRIBUTION SYSTEM DUCTS AND PLENUMS SHALL BE INSTALLED, SEALED, AND INSULATED TO MEET THE REQUIREMENTS OF 2022 CALIFORNIA MECHANICAL CODE SECTIONS 601.0, 602.0, 603.0, 604.0, 605.0 AND "HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE" AS PUBLISHED BY SMACNA.

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Project Title

HARADA HOUSE
PHASE 2

Sheet Title
MECHANICAL
SECOND
FLOOR PLAN

Design Stage

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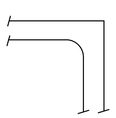
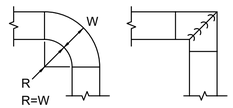
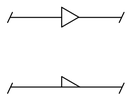
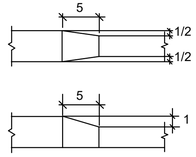
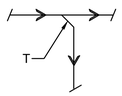
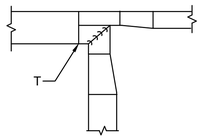
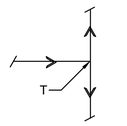
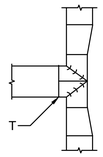
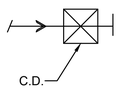
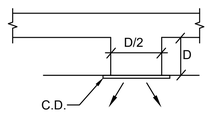
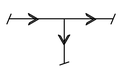
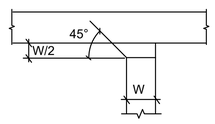
Scale
1/4" =1'-0"

Date

Sheet Number
M-1.2

RECTANGULAR LOW PRESSURE DUCTWORK

SINGLE LINE DIAGRAM	DOUBLE LINE CONFIGURATION	SINGLE LINE DIAGRAM	DOUBLE LINE CONFIGURATION
			
			
			

ROUND LOW PRESSURE DUCTWORK

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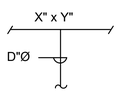
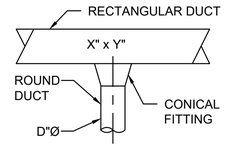
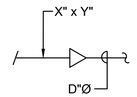
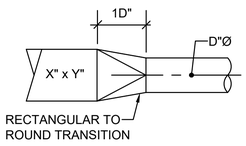
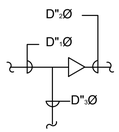
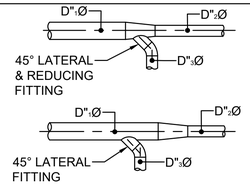
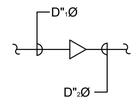
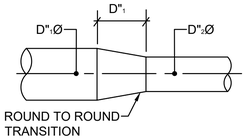
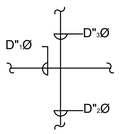
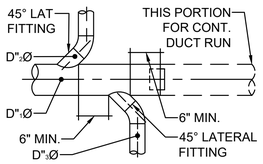
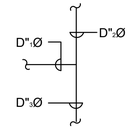
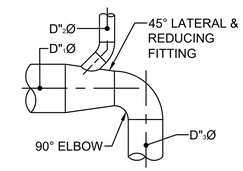
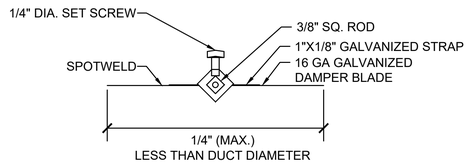
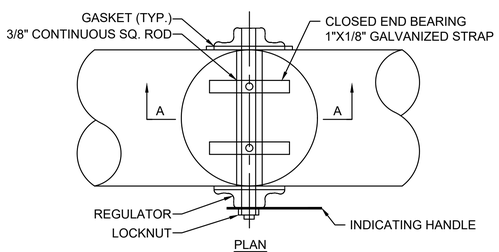
			
			
			

DUCTWORK DETAILS FOR RECTANGULAR AND ROUND ELBOW

N.T.S. 2



SECTION A-A



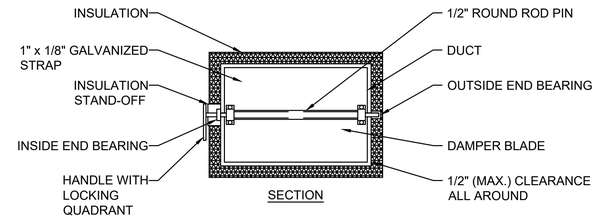
PLAN

NOTES:

1. LOCK DAMPER DURING AIR BALANCE AND MARK QUADRANT TO RECORD AIR BALANCED DAMPER POSITION.
2. PROVIDE "HAT" SECTION AT QUADRANT FOR ALL EXTERNALLY INSULATED DUCTWORK.
3. PROVIDE FLUORESCENT COLORED MARKERS AT ALL VOLUME DAMPERS LOCATIONS.

ROUND VOLUME DAMPER UP TO 14 INCH DIAMETER

N.T.S. 3



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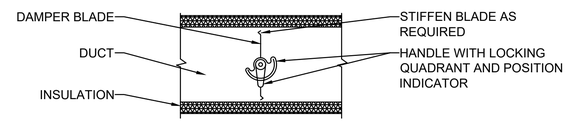

SIDE ELEVATION

NOTES:

1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
2. DETAIL SHOWS SINGLE BLADE DAMPER. MULTI-BLADE DAMPERS INSTALLATIONS SHALL BE SIMILAR.
3. LOCK DAMPER DURING AIR BALANCE AND MARK QUADRANT TO RECORD AIR BALANCED DAMPER POSITION.
4. PROVIDE "HAT" SECTION AT QUADRANT FOR ALL EXTERNALLY INSULATED DUCTWORK.
5. PROVIDE FLUORESCENT COLORED MARKERS ON CEILING AT ALL VOLUME DAMPERS LOCATIONS.

RECTANGULAR MANUAL VOLUME DAMPER

N.T.S. 1

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MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

Project Title
HARADA HOUSE PHASE 2

Sheet Title
MECHANICAL DETAILS

Design Stage

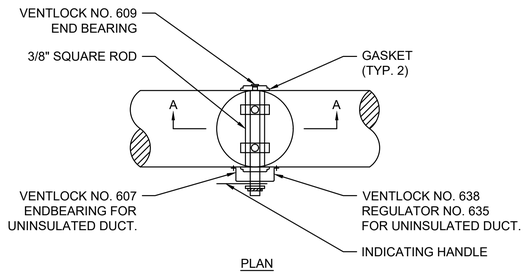
Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
N.T.S

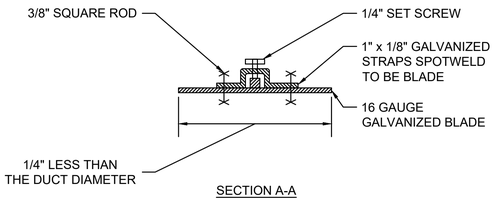
Date

Sheet Number
M-4.1

M-4.1 MECHANICAL DETAILS.DWG

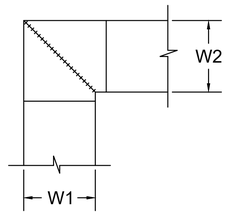


PLAN



SECTION A-A

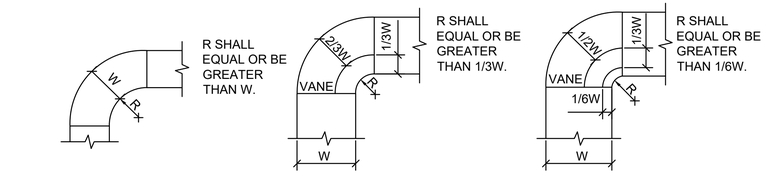
TYPICAL VOLUME DAMPER DIAGRAM N.T.S. 4



NOTES:

1. ALL VANE ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.
2. WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE THICKNESS VANE TYPE REGARDLESS OF W DIMENSION.
3. ALL SINGLE THICKNESS VANES SHALL HAVE A 2" [50mm] RADIUS, 1 1/2" [40 mm] MAXIMUM SPACE BETWEEN VANE AND A 3/4" [20 mm] TRAILING EDGE.
4. WHEN W EQUALS W2 AND W1 IS GREATER THAN 20" [500mm] VANES SHALL BE DOUBLE VANE TYPE.

DUCTWORK SQUARE VANE ELBOWS N.T.S. 2



STANDARD RADIUS OR LONG RADIUS ELBOW

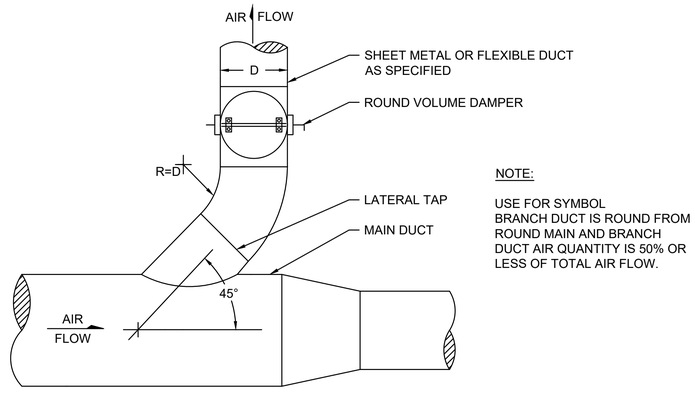
SHORT RADIUS ELBOW WITH ONE VANE

SHORT RADIUS ELBOW WITH TWO VANES

NOTE:

1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MAD ROUND.
2. ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

DUCTWORK RADIUS ELBOWS N.T.S. 3



NOTE:

USE FOR SYMBOL
BRANCH DUCT IS ROUND FROM
ROUND MAIN AND BRANCH
DUCT AIR QUANTITY IS 50% OR
LESS OF TOTAL AIR FLOW.

CIRCULAR DUCT LATERAL TAP WITH VOLUME DIAGRAM N.T.S. 1

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HARADA HOUSE
PHASE 2

Sheet Title
MECHANICAL
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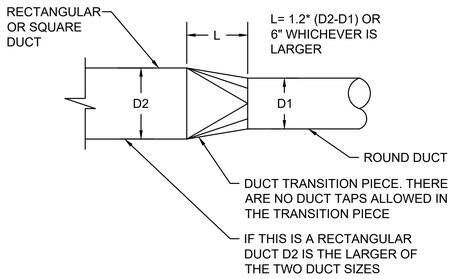
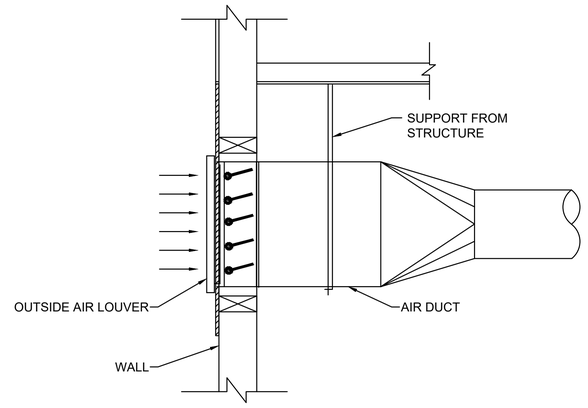
Sheet Number
M-4.2

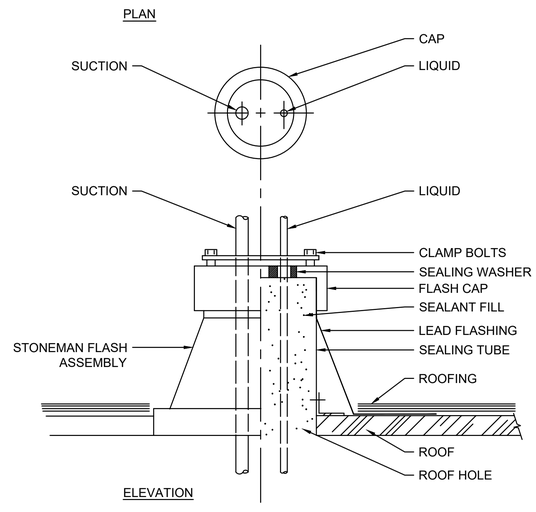
M-4.2 MECHANICAL DETAILS.DWG



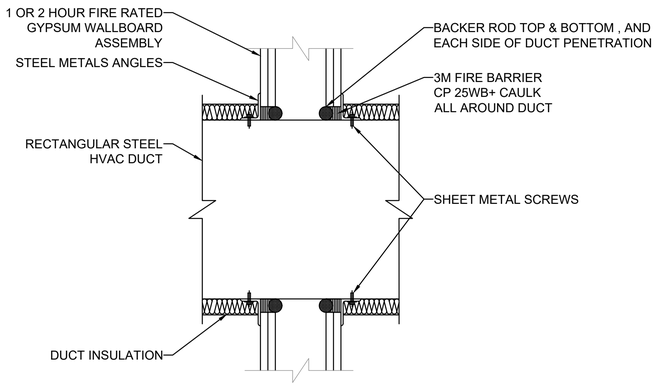
DUCT TRANSITION DIAGRAM N.T.S. 4



OUTSIDE AIR LOUVE N.T.S. 2



PIPE FLASHING DIAGRAM N.T.S. 3



NOTES:

1. UL SYSTEM NO. WL7008
2. PENETRATION THROUGH HORIZONTAL RATING SIMILAR AT STORAGE CEILING BELOW AUDITORIUM.

DUCT PENETRATION THROUGH RATED ROOF N.T.S. 1

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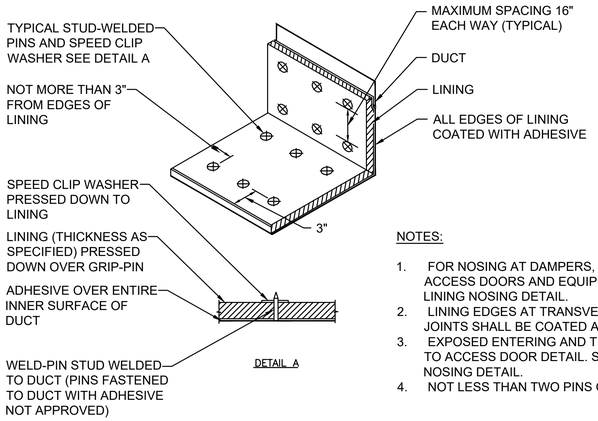
N.T.S

Date

Sheet Number
M-4.3

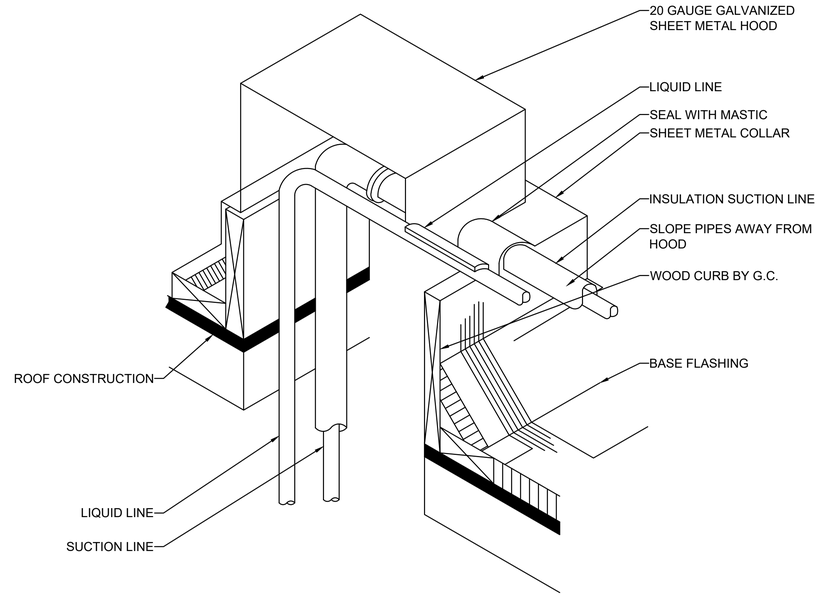
M-4.3 MECHANICAL DETAILS.DWG



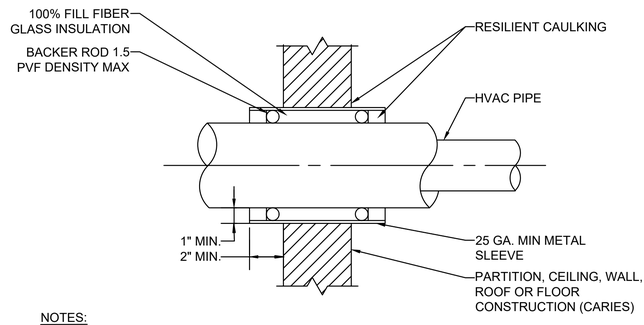
NOTES:

1. FOR NOSING AT DAMPERS, TURNING VANES, ACCESS DOORS AND EQUIPMENT, SEE ACOUSTIC LINING NOSING DETAIL.
2. LINING EDGES AT TRANSVERSE AND LONGITUDINAL JOINTS SHALL BE COATED AS SPECIFIED.
3. EXPOSED ENTERING AND TRAILING EDGES SIMILAR TO ACCESS DOOR DETAIL. SEE ACOUSTIC LINING NOSING DETAIL.
4. NOT LESS THAN TWO PINS ON EACH FACE OF DUCT.

ACOUSTIC LINING INSTALLATION DETAIL N.T.S. 4



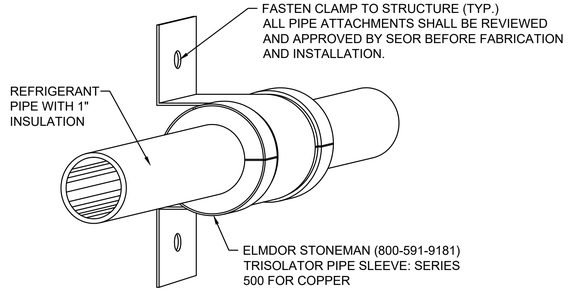
PIPING THROUGH ROOF DIAGRAM N.T.S. 2



NOTES:

1. PROVIDE PITCH POCKET CONSTRUCTION, ADDITIONAL FLASHING, OR WEATHER CAP AS REQUIRED FOR WATERPROOF CONSTRUCTION. DO NOT MECHANICALLY TIE PIPE TO STRUCTURE IN ANY WAY.
2. SPACE BETWEEN PIPE AND SLEEVE SHALL BE FREE OF ANY FOREIGN MATERIAL.
3. ALL HVAC PIPES SHALL NOT CONTACT STRUCTURE AT ANY TIME. WEDGES SHALL NOT BE USED TO MAINTAIN PIPE IN POSITION.
4. ALL HVAC PIPES MUST BE APPROXIMATELY CENTERED IN OPENING. PROVIDE ADDITIONAL CLEARANCE FOR POSITIONAL CHANGE OF PIPE DUE TO LOADING OF PIPE OR OPERATION OF SYSTEM.
5. ALL FIRE STOPPING AND FILL MATERIALS SHALL BE LISTED.

REFRIGERANT PIPE PENETRATION THROUGH WALL N.T.S. 3



REFRIGERANT PIPE WALL ATTACHMENT DIAGRAM N.T.S. 1

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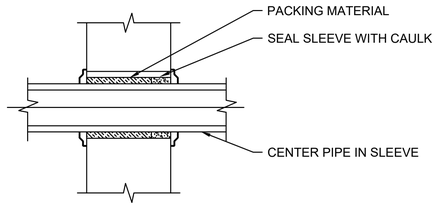
M-4.4 MECHANICAL DETAILS.DWG

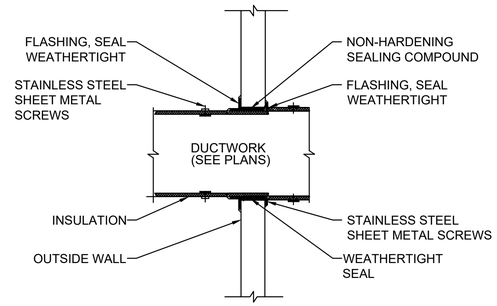


NOTE:

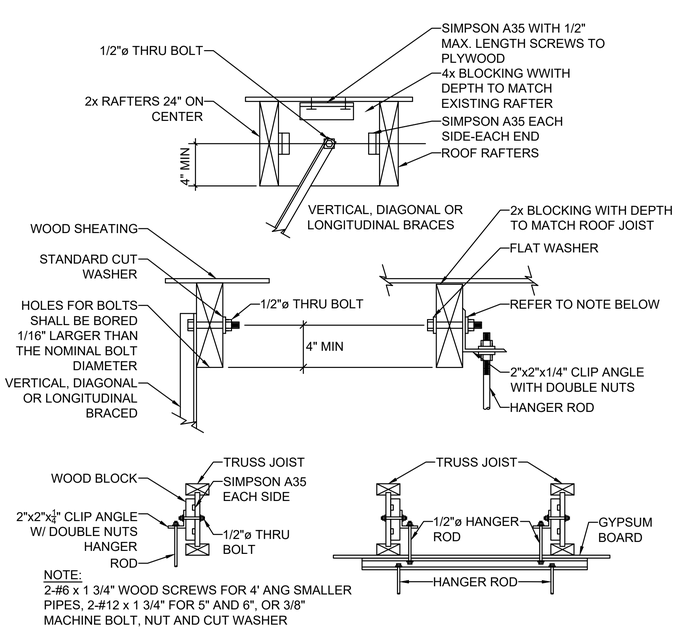
IN GYPSUM FIRE RATED WALLS PROVIDE "3M" U.L. TESTED SYSTEM #WL1001. INSTALL PER U.L FIRE RESISTANCE DIRECTORY VOLUME 2.

IN CONCRETE FIRE RATED WALLS PROVIDE "3M" U.L. TESTED SYSTEM #CAJ1044. INSTALL PER U.L. FIRE RESISTANCE DIRECTORY VOLUME 2.

PIPE PENETRATION THROUGH RATED WALL DETAIL N.T.S. 4

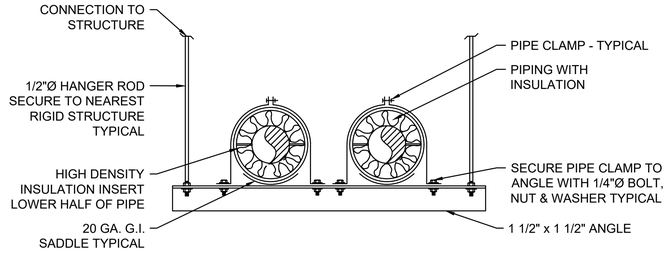


DUCT THROUGH WALL N.T.S. 2



NOTE:
2-#6 x 1 3/4" WOOD SCREWS FOR 4' ANG SMALLER PIPES, 2-#12 x 1 3/4" FOR 5" AND 6", OR 3/8" MACHINE BOLT, NUT AND CUT WASHER

SUPPORT CONNECTION TO STRUCTURE N.T.S. 3



PIPE SUPPORT DIAGRAM N.T.S. 1

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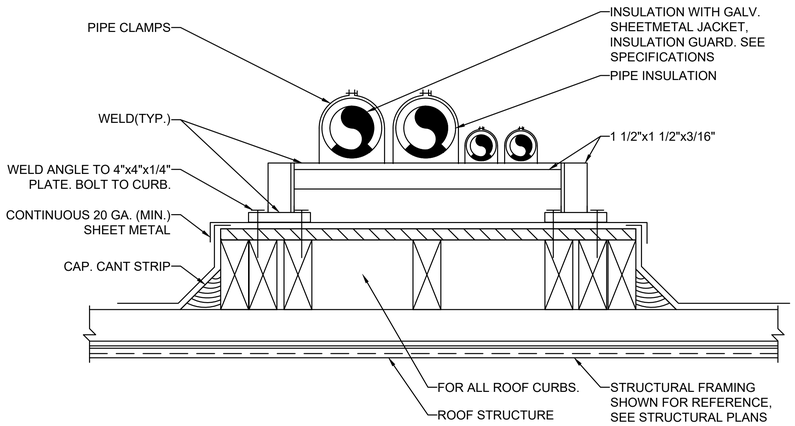
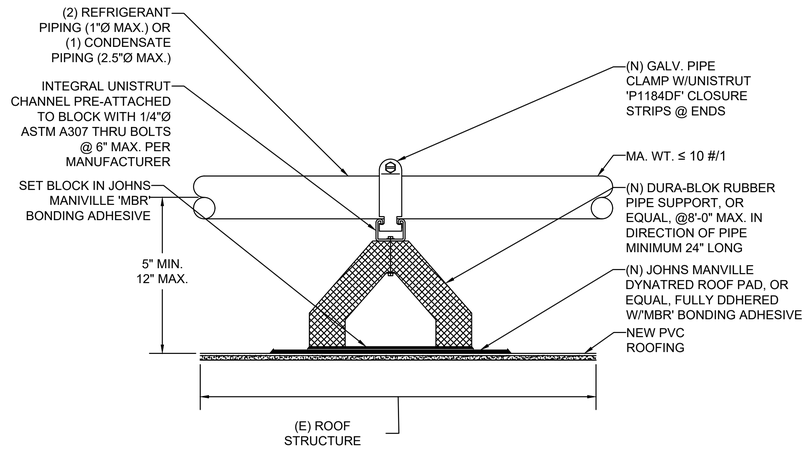


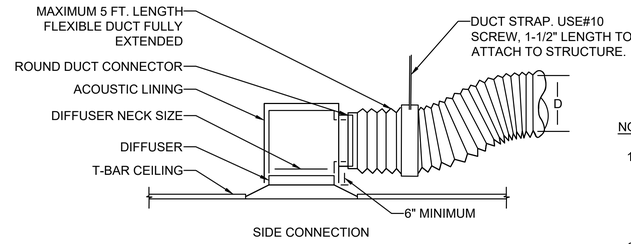
ROOF MOUNTED REFRIGERANT PIPE SUPPORT DIAGRAM N.T.S. 4



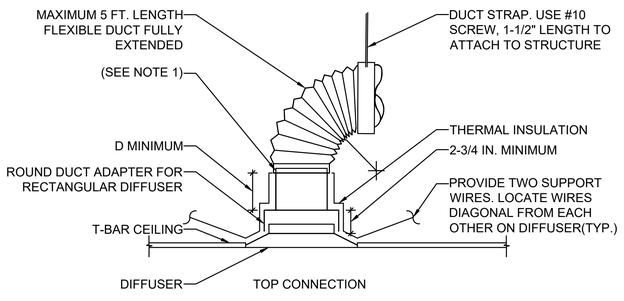
NOTE:

1. RUBBER SLEEPER SUPPORT NOT ALLOWED FOR GAS PIPING.
2. ALL EXPOSED STEEL COMPONENTS SHALL BE HOT DIP GALVANIZED.

ROOFTOP PIPE / CONDUIT RUBBER SLEEPER SUPPORT N.T.S. 2



SIDE CONNECTION

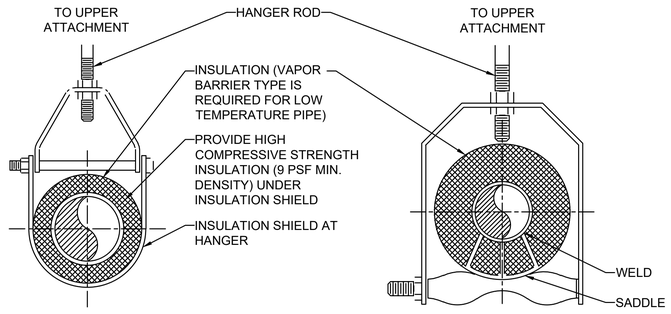


TOP CONNECTION

NOTES:

1. THE CONNECTION OF THE FLEXIBLE DUCT TO THE DEVICE SHALL BE WITH A NYLON STRAP SECURELY SEALED TO THE DEVICE COLLAR.
2. FLEXIBLE DUCT 7' 0" MAXIMUM LENGTH.
3. FLEXIBLE DUCT SHALL NOT HARD-LID CEILIN.
4. INSTALL WITH DUCT FROM SAGGING.
5. FOR INSTALLATION AT T-BAR CEILING ONLY. NO SHEET METAL SCREW ATTACHING DIFFUSER TO T-BAR GRID REQUIRED.

DIFFUSER FLEXIBLE CONNECTION DIAGRAM N.T.S. 3



ADJUSTABLE CLEVIS HANGER TYPE 1 -

ADJUSTABLE CLEVIS HANGER TYPE 43 -

MAXIMUM PIPE TUBING SUPPORT SPACING							
NOM. SIZE [IN]	THRU 3/4"	1	1 1/4	1 1/2	2	2 1/2	3
PIPE [FT]	7	7	7	9	10	11	12
TUBING [FT]	5	6	7	8	8	9	10

PIPE HANGERS DETAIL N.T.S. 1

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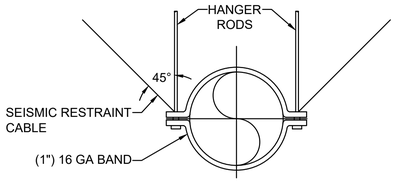
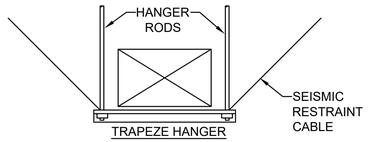
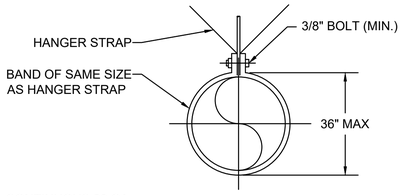
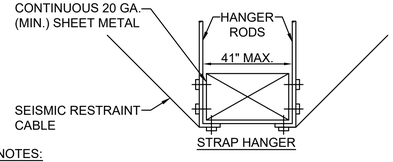
NOT USED

N.T.S. 2









FOR RECTANGULAR DUCT HANGERS MINIMUM SIZE SEE CALIFORNIA MECHANICAL CODE TABLE # 6-2-A.

FOR RECTANGULAR DUCT TRAPEZE ANGLES HANGERS MINIMUM SIZE SEE CALIFORNIA MECHANICAL CODE TABLE # 6-2-B.

NOTE:

NO POP RIVETS ALLOWED, USE SELF-TAPPING SHEET METAL SCREWS ONLY.

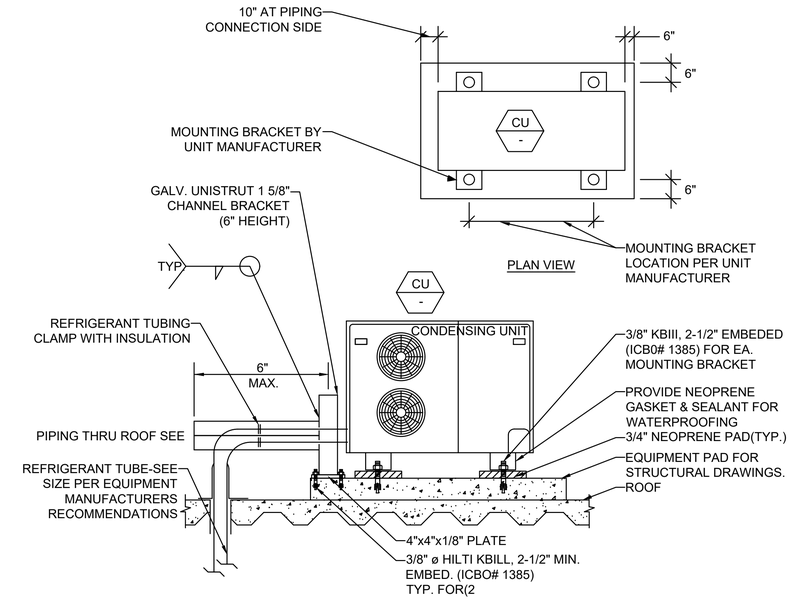
ROUND DUCT HANGERS

DUCT DIA	MAX SPACING	ROD	STRAP
10" DOWN	12'-0"	1/4"	1"x0.030 (22 GA)
11" TO 24"	12'-0"	1/4"	1"x0.030 (22 GA)
25" TO 36"	12'-0"	1/4"	1"x0.036 (20 GA)
37" TO 94"	12'-0"	TWO 3/8"	-

NOTES:

1. FOR HANGERS SIZE AND SPACING, SEE 2017 SMACNA HVAC DUCT CONSTRUCTION STANDARDS TABLE 5-1. FOR TRAPEZE ALLOWABLE LOAD SEE TABLE 5-3.
2. FOR UPPER ATTACHMENT TO BUILDING, SEE SMACNA HVAC DUCT CONSTRUCTION STANDARDS WITH SPECIFIC STRUCTURAL ENGINEER APPROVAL. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH DETAILS AND SUPPORT LOCATIONS.

DUCT SUPPORT DIAGRAMS N.T.S. 3



ROOF CONDENSING UNIT MOUNTING DETAIL N.T.S. 1

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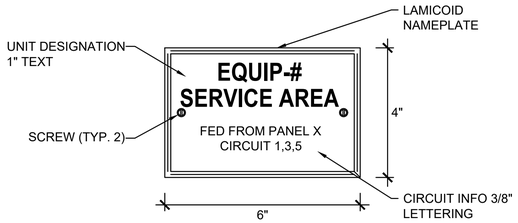


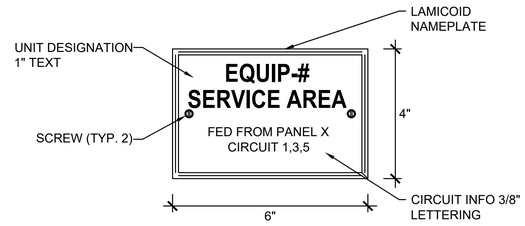
NOTES:

1. PROVIDE LAMICOID NAMEPLATES FOR ALL EQUIPMENT.
2. COORDINATE NAMES WITH FACILITY ENGINEER.

NOTE:

CONTRACTOR SHALL PROVIDE LAMICOID EQUIPMENT NAMEPLATE FOR ALL EQUIPMENT WITHIN THE AREA OF WORK. NAMEPLATE SHALL BE MINIMUM 3 1/2" LONG x 2" TALL. UNIT SHALL BE IMPRINTED WITH 1/2" TALL LETTERING, CENTERED HORIZONTALLY ON NAMEPLATE. DIRECTLY BELOW UNIT DESIGNATION INCLUDE UNIT ELECTRICAL FED FROM SOURCE IN 3/8" LETTERING. E.G. "FED FROM PANEL X, CIRCUIT 1,3,5". SUBMIT EQUIPMENT NAMEPLATE INFORMATION AND SAMPLE PRIOR TO ORDERING AND INSTALLATION. ALL TEXT SHALL BE WHITE.

EQUIPMENT NAME PLATE N.T.S. 4



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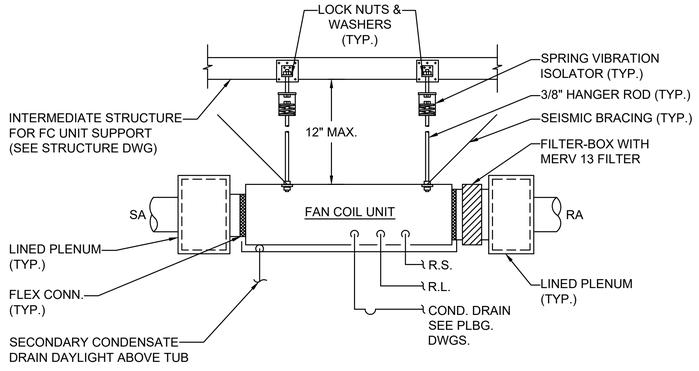
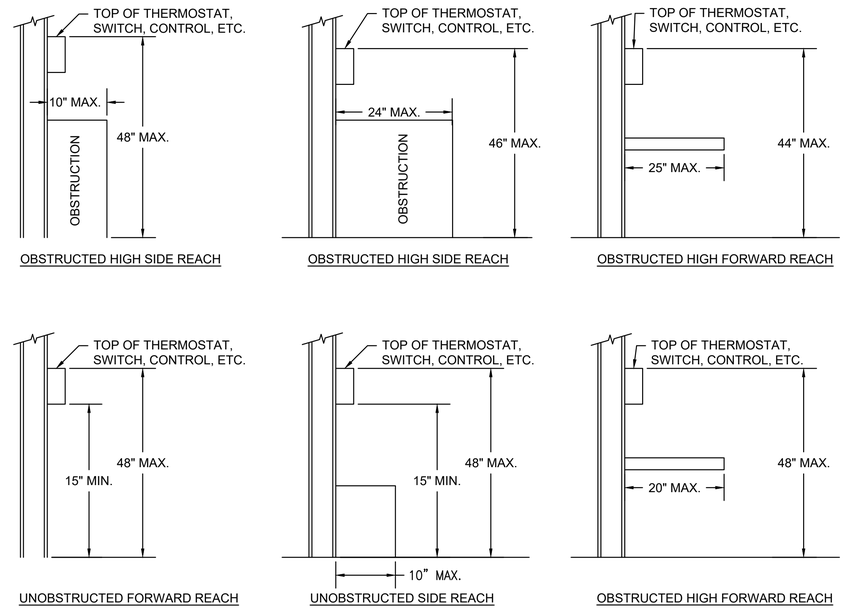
WALL MOUNTED FAN COIL UNIT N.T.S. 2



FANCOIL UNIT DIAGRAM N.T.S. 3



THERMOSTAT INSTALLATION DIAGRAM N.T.S. 1

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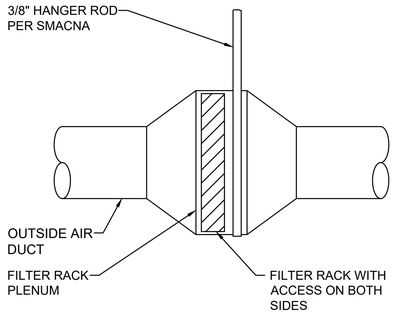
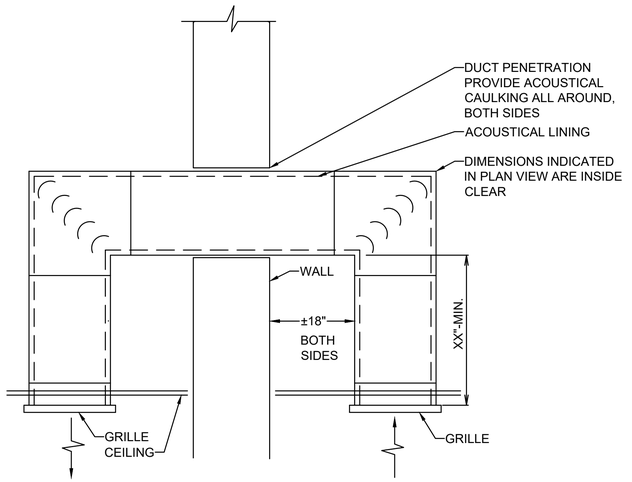


NOTES:

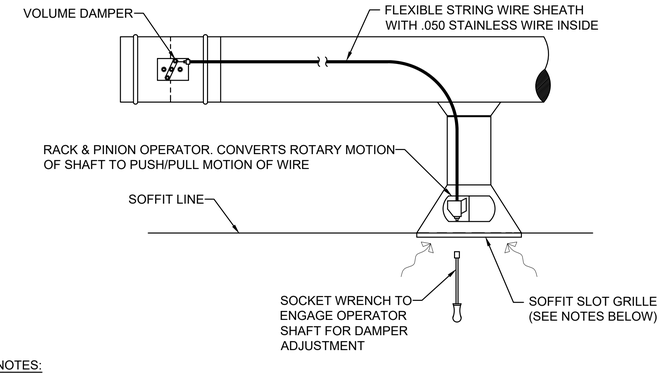
1. ALL OUTSIDE DUCTS SHALL BE INSULATED.
2. PROVIDE FLEXIBLE CONNECTION AT INLET AND OUTLET.

FILTER BOX MOUNTING — N.T.S. — 4



ELEVATION VIEW

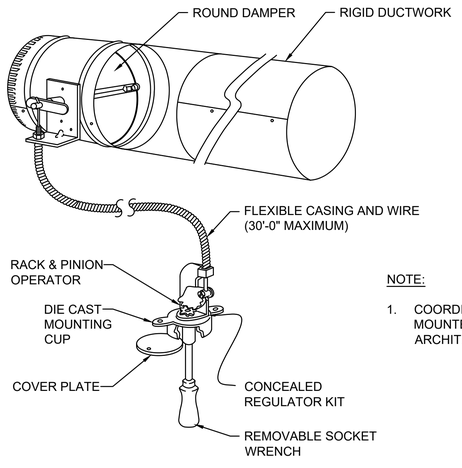
TRANSFER DUCT DETAIL — N.T.S. — 2



NOTES:

1. PROVIDE YOUNG REGULATOR FOR DIFFUSERS AND REGISTERS LOCATED IN SOFFIT AS INDICATED ON PLANS.
2. MAXIMUM CABLE LENGTH IS 10 FT.

TYPICAL REGULATOR WITH REMOTE DAMPER ACTUATOR — N.T.S. — 3



NOTE:

1. COORDINATE EXACT LOCATION OF CEILING MOUNTED CONCEALED REGULATOR WITH ARCHITECT PRIOR TO INSTALLATION.

YOUNG REGULATOR REMOTE CABLE SYSTEM — N.T.S. — 1

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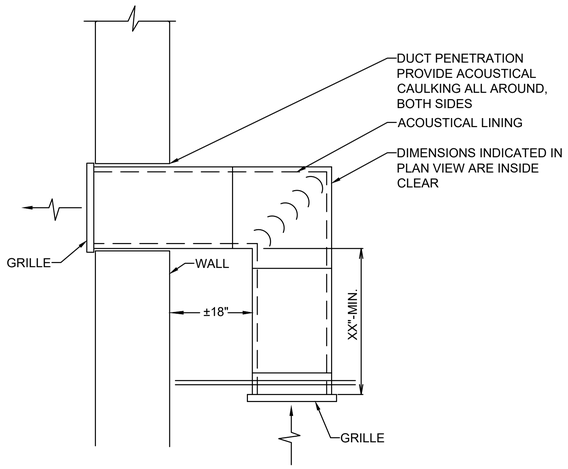
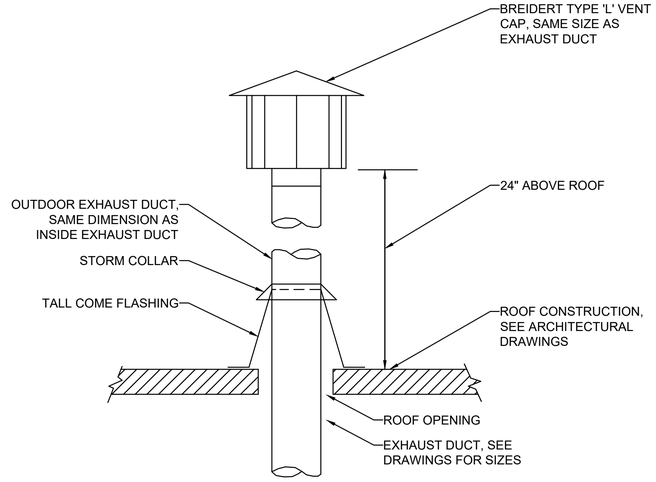


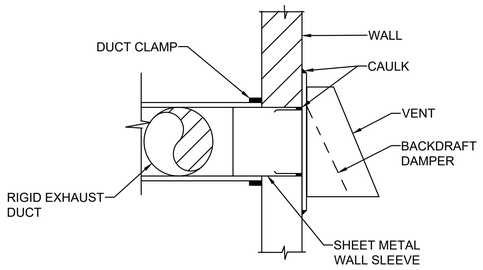
ELEVATION VIEW

TRANSFER DUCT DETAIL SHAPE — N.T.S. — 4

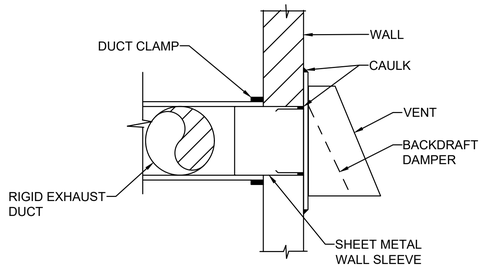


INSULATION TO FILL VOIDS AROUND
DUCTWORK AT ROOF CONSTRUCTION.

EXHAUST DUCT THRU ROOF DETAIL — N.T.S. — 2



TOILET EXHAUST VENTING REQUIREMENTS — N.T.S. — 3



KITCHEN EXHAUST VENTING REQUIREMENTS — N.T.S. — 1

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Project Title
HARADA HOUSE
PHASE 2

Sheet Title
MECHANICAL
DETAILS

Design Stage

Project Address
3342 & 3356 Lemon Street
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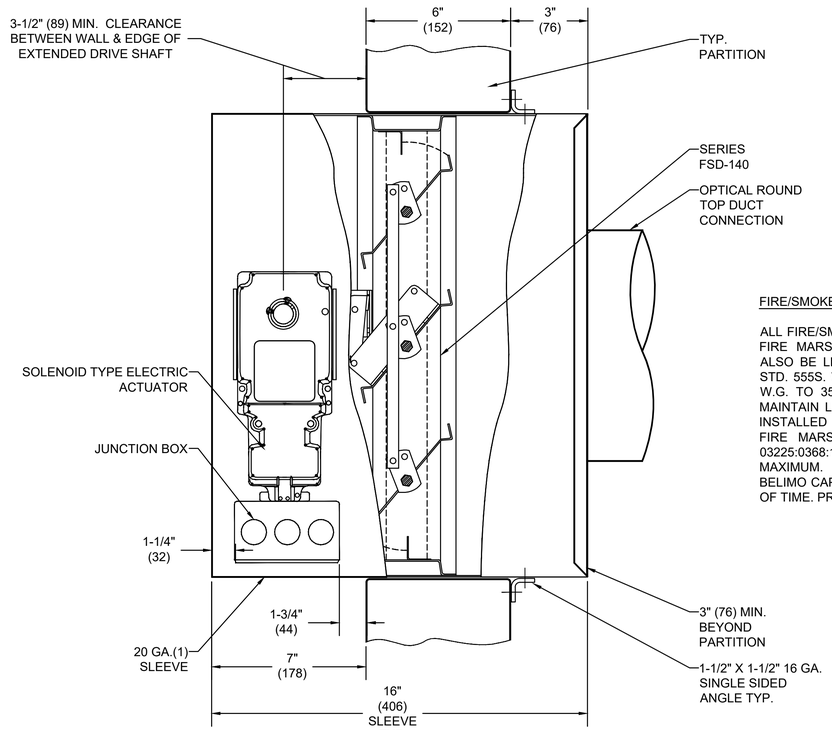
92501

Scale
N.T.S

Date

Sheet Number
M-4.10

M-4.10 MECHANICAL DETAILS.DWG



FIRE/SMOKE DAMPER SPECIFICATIONS:

ALL FIRE/SMOKE DAMPERS SHALL BE LABELED AND LISTED BY CALIFORNIA STATE FIRE MARSHAL AND/OR UNDERWRITERS LABORATORIES. ALL DAMPERS MUST ALSO BE LEAKAGE RATED AND LABELED UNDER UNDERWRITER LABORATORIES STD. 555S. WITH SILICON SEALS ALLOWING NO MORE THAN 10 CFM/SQ.FT. AT 1" W.G. TO 350° F FOR A FULL 30 MIN. MOTOR OPERATED. TORQUE REQ'D. TO MAINTAIN LEAKAGE RATE NOT TO EXCEED 0 LBS. TORQUE. DAMPERS SHALL BE INSTALLED PER MANUFACTURERS INSTALLATION INSTRUCTIONS AND/OR STATE FIRE MARSHAL LISTING NO. 03225. POTTORFF COMPANY, INC. (LISTING # 03225:0368:110 AND 03230:0368:111) PROVIDE NON STALL SOLENOID MOTOR , 64 VA. MAXIMUM. TESTED FOR 1 YEAR CONTINUOUS POWER APPLICATIONS SUCH AS BELIMO CAPABLE TO REOPEN DAMPER REGARDLESS OF POWER FAILURE LENGTH OF TIME. PROVIDE 5 YEAR DAMPER AND ACTUATOR WARRANTY.

A. CONCRETE OR MASONRY FIRE PARTITION SHOWN. SEE WOOD STUD AND/OR STEEL STUD FRAMING FOR FIRE DAMPERS IN DRYWALL AND/OR CAVITY SHAFTWALL PARTITIONS SUPPLEMENTAL INSTALLATION INSTRUCTIONS FOR FURTHER VERTICAL MOUNT INSTALLATION DETAILS. THE OPENING SHALL BE A MINIMUM OF 1/4" (6) TO A MAXIMUM OF 3/4" (19) LARGER THAN THE OVERALL DAMPER AND SLEEVE ASSEMBLY SIZE. DAMPER MUST BE INSTALLED WITH LEADING EDGE OF CLOSED BLADE WITHIN THE PARTITION.

B. FOR RIGID TYPE DUCT CONNECTIONS, THE SLEEVE SHALL BE A MINIMUM OF 16 GAUGE (1.5) FOR DAMPERS UP TO 36" WIDE BY 24" HIGH (914 X 610) AND 14 GAUGE (1.9) FOR LARGER UNITS. WHEN LIGHTER GAUGE SLEEVES ARE USED, ONE OR MORE OF COMMONLY USED BREAKAWAY STYLE CONNECTIONS ARE REQUIRED. REFER TO SLEEVE TERMINATION SUPPLEMENTAL INSTALLATION INSTRUCTIONS FOR FURTHER DETAILS. IN NO CASE WILL THE SLEEVE GAUGE BE LESS THAN THE DUCT GAUGE TO WHICH IT IS CONNECTED. DAMPER SLEEVE SHALL NOT EXTEND MORE THAN 16" (406) BEYOND THE RATED PARTITION ON THE ACTUATOR SIDE. THE OPPOSITE SIDE EXTENSION SHALL BE A MAXIMUM OF 6" (152) UNLESS AN ACCESS DOOR IS INSTALLED IN THE SLEEVE WHICH THEN PERMITS THE EXTENSION TO BE A MAXIMUM OF 16" (406).

C. MOUNTING ANGLES SHALL BE A MINIMUM OF 3/4" X 1-1/2" TALL X 20 GAUGE (19 X 38 X 1.0). FOR OPENING SIZES =80" X 48" (2032 X 1219) OR 40" X 96" (1016 X 2438) RETAINING ANGLES ARE ONLY REQUIRED ON ONE SIDE OF THE PARTITION AND MUST BE ATTACHED TO THE SLEEVE AND THE PARTITION. FOR LARGER OPENINGS (OR OPTIONAL ON SMALLER OPENINGS), OR HORIZONTAL MOUNTINGS 1-1/2" X 1-1/2" X 16 GAUGE (38 X 38 X 1.5). RETAINING ANGLES ARE REQUIRED ON BOTH SIDES OF THE PARTITION AND MUST BE ATTACHED TO THE SLEEVE. ATTACHMENT TO THE SLEEVE SHALL BE WITH NO. 10 (M5) SCREWS OR BOLTS, 3/16" (4.8) DIAMETER STEEL RIVETS, QUICK-LOCK JOINTS OR WELDS, AT 12" (305) O.C. MAXIMUM. ATTACHMENT TO PARTITION/OPENING SHALL BE WITH MIN. #10 FASTENERS WITH A MINIMUM LENGTH AS FOLLOWS: FOR METAL STUD AND THE ANGLES UNDER THE DRYWALL, THE FASTENERS MUST BE A MIN. 1/2" LONG. FOR METAL STUD AND THE ANGLES OVER THE DRYWALL THE FASTENER MUST BE A MIN. 1/2" LONGER THAN THE THICKNESS OF THE DRYWALL. I.E. IF THE PAR-TITION HAS ONE LAYER OF 5/8" DRYWALL ON THE ATTACHMENT SIDE, THE SCREWS MUST BE 1/2" + 5/8 "= 1-1/8" LONG. FOR WOOD STUD OPENINGS, THE MIN. LENGTH IS 1-1/2" LONGER THAN THE THICKNESS OF DRYWALL ON THE ATTACHMENT SIDE. FOR CONCRETE OR MASONRY OPENINGS, STEEL ANCHORS AT LEAST 1-1/2" LONG MUST BE USED. THE ANCHORS MUST BE FOR MIN. #10 FASTENERS- SCREWS OR BOLTS. IN LIEU OF MASONRY ANCHORS AND BOLTS/SCREWS, SELF-TAPPING MASONRY SCREWS, MIN. 3/8" DIA. BY 2-1/2" LONG CAN BE USED. THE FASTENERS IN THE PARTITION SHOULD BE LOCATED SUCH THAT THEY ARE 1/2" BELOW THE TOP OF THE 1-1/2" FLANGE OF THE RETAINING ANGLES. FASTENERS IN THE PARTITION SHOULD BE SPACED 12" O.C. MAX. A MINIMUM OF TWO CONNECTIONS PER SIDE, TOP AND BOTTOM. A MINIMUM 3/4" X 20 GAUGE (19 X 1) FLANGE TERMINATION MAY BE USED IN LIEU OF MOUNTING ANGLES. REFER TO SLEEVE TERMINATION SUPPLEMENTAL INSTALLATION INSTRUCTIONS AND FRAMING FOR FIRE DAMPERS FOR FURTHER DETAILS. ENSURE THAT ATTACHMENT DEVICE DOES NOT INTERFERE WITH THE OPERATION OF THE DAMPER AND THE FREE MOVEMENT OF THE DAMPER BLADES.

D. WHEN JOINING MULTIPLE SECTIONS OR FASTENING THE DAMPER TO THE SLEEVE, THE DAMPER SHALL BE FASTENED WITH 3/16" (4.8) DIAMETER STEEL RIVETS, QUICK-LOCK JOINTS, WELDS OR NO. 10 (M5) BOLTS OR SHEET METAL SCREWS AT 8" (203) O.C. MAXIMUM. A MINIMUM OF TWO CONNECTIONS PER SIDE, TOP AND BOTTOM.

E. A CONTINUOUS BEAD OF DOW-CORNING 999A, DOW-CORNING 732, FIBERFAX, OR GE RTV SILICONE RUBBER SEALANT SHALL BE APPLIED BETWEEN THE DAMPER AND THE SLEEVE AND BETWEEN SECTIONS OF A MULTIPLE DAMPER ASSEMBLY. SEALANT IS ONLY REQUIRED ON ONE SIDE OF THE DAMPER.

F. FIRE/LEAKAGE RATED DAMPERS AND QUALIFIED OPERATORS ARE TESTED TOGETHER BY UNDERWRITERS LABORATORIES AND ARE FACTORY INSTALLED TO QUALIFY FOR STANDARD DAMPER/OPERATOR WARRANTIES. DAMPER OPERATOR/ACTUATOR MUST BE TESTED PRIOR TO SYSTEM START-UP TO ENSURE PROPER OPERATION. BEFORE APPLYING POWER TO THE OPERATOR/ACTUATOR, THE POWER MUST BE VERIFIED.

COMBINATION SMOKE/FIRE DAMPER AT NEW SHAFT DIAGRAM

N.T.S. | 1

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Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

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Checked by:

Professional's Stamp

Project Title
HARADA HOUSE PHASE 2

Sheet Title
MECHANICAL DETAILS

Design Stage

Project Address
3342 & 3356 Lemon Street
Riverside, CA
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N.T.S

Date

Sheet Number
M-4.11

1.00 GENERAL

1.01 GENERAL REQUIREMENTS
A. DRAWINGS AND GENERAL PROVISIONS OF CONTACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS APPLY TO THIS SECTION.

1.02 PRINCIPAL WORK IN THIS SECTION
A. GENERAL REQUIREMENTS:

1. THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, DESIGN DOCUMENTS, AND THIS SPECIFICATION AS APPLICABLE ARE PART OF THIS CONTRACT.
2. RELATED DOCUMENTS: ARCHITECTURAL AND OTHER DISCIPLINE SPECIFICATIONS, EQUIPMENT SPECIFICATION PACKAGE, GENERAL, SPECIAL AND SUPPLEMENTARY CONDITIONS, SHALL FORM A PART OF THESE SPECIFICATIONS.
3. SCOPE OF WORK: PROVIDE ALL REQUIRED LABOR, MATERIALS, EQUIPMENT AND CONTRACTOR'S SERVICES NECESSARY FOR COMPLETE AND SAFE INSTALLATION OF WORK IN CONFORMITY WITH REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION; AS INDICATED ON DRAWINGS AND/OR HEREIN SPECIFIED OR DESCRIBED.
4. SITE CLEANLINESS: KEEP SITE FREE FROM THIS SECTION'S SURPLUS MATERIAL, TOOLS AND RUBBISH AT ALL TIMES DURING CONSTRUCTION PERIOD AND, UPON COMPLETION, LEAVE SITE IN CLEAN CONDITION.
5. SITE SECURITY: PROTECT THIS SECTION'S MATERIALS AND EQUIPMENT FROM ALL DAMAGE DUE TO FIRE, THEFT, VANDALISM, WEATHER, ETC.
6. DAMAGE TO OTHER WORK: REPAIR ANY DAMAGE CAUSED BY THIS SECTION TO WORK OF OTHER SECTIONS.
7. DAMAGE TO FIREPROOFING: REPAIR ANY DAMAGED FIREPROOFING CAUSED BY THIS SECTION TO INTEGRITY OF ORIGINAL CONSTRUCTION.
8. SITE SAFETY: CONTRACTOR AGREES THAT HE AND HIS SUBCONTRACTORS AND HIS AND THEIR AGENTS AND EMPLOYEES WILL PROVIDE AND MAINTAIN A SAFE PLACE TO WORK AND THAT HE AND THEY WILL COMPLY WITH ALL LAWS AND REGULATIONS OF ANY GOVERNMENTAL AUTHORITY HAVING JURISDICTION THEREOF, AND CONTRACTOR AGREES TO INDEMNIFY, DEFEND AND HOLD HARMLESS, ENGINEER, OWNER AND ARCHITECT FROM AND AGAINST ANY LIABILITY, LOSS, DAMAGE OR EXPENSE, INCLUDING ATTORNEY'S FEES, ARISING FROM A FAILURE OR ALLEGED FAILURE ON THE PART OF CONTRACTOR, THIS SUBCONTRACTORS AND HIS AND THEIR AGENTS, SERVANTS AND EMPLOYEES TO PROVIDE AND MAINTAIN A SAFE PLACE TO WORK OR TO COMPLY WITH ALL LAWS AND REGULATIONS OF ANY GOVERNMENTAL AUTHORITY HAVING JURISDICTION THEREOF.

VERIFICATION OF EXISTING:

9. A. BEFORE SUBMITTING BID, BECOME THOROUGHLY FAMILIAR WITH ACTUAL EXISTING CONDITIONS AND OF THE PRESENT INSTALLATIONS TO WHICH CONNECTIONS MUST BE MADE OR WHICH MUST BE CHANGED OR ALTERED. THE INTENT OF THE WORK IS SHOWN ON THE DRAWINGS AND DESCRIBED HEREIN, AND NO CONSIDERATION WILL BE GRANTED BY REASON OF LACK OF FAMILIARITY ON THE PART OF THE CONTRACTOR WITH ACTUAL PHYSICAL CONDITIONS, REQUIREMENTS, AND PRACTICES AT THE SITE.
10. REQUIREMENTS OF OTHER SECTIONS: CAREFULLY CHECK THE DOCUMENTS OF OTHER SECTIONS TO ASCERTAIN THE REQUIREMENTS OF ANY INTERFACING MATERIALS OR EQUIPMENT BEING FURNISHED AND/OR INSTALLED BY THAT SECTION, WHICH RELATE TO THIS SECTION, AND PROVIDE THE PROPER INSTALLATION AND/OR CONNECTION.
11. INFORMATION TRANSFER: TRANSMIT ALL INFORMATION REQUIRED FOR WORK BEING PERFORMED BY OTHER SECTIONS IN AMPLE TIME FOR THE PROPER INSTALLATION AND CONNECTION, AND FOR THE PROVISION OF ALL OPENINGS REQUIRED IN FLOORS AND WALLS.
12. HOLES AND STRUCTURE: FIELD DRILLING AND CUTTING OF HOLES IN BUILDING STRUCTURE REQUIRED FOR WORK UNDER THIS SECTION SHALL BE COORDINATED THROUGH THE GENERAL CONTRACTOR AND APPROVED BY OWNER AND BUILDING STRUCTURAL ENGINEER. ALL SUCH CO-ORDINATION, DRILLING, CUTTING AND REINFORCING COSTS SHALL BE BORNE BY THIS CONTRACTOR.
13. SLEEVES: FURNISH AND SET ALL SLEEVES FOR THE PASSAGE OF DISTRIBUTION SYSTEM THROUGH WALLS, ROOF AND FLOORS AND ELSEWHERE AS WILL BE REQUIRED FOR THE PROPER PROTECTION OF EACH COMPONENT PASSING THROUGH BUILDING SURFACES. COORDINATE THIS WORK WITH THE GENERAL CONTRACTOR IN ORDER TO PROPERLY EXPEDITE AND PERFORM THIS WORK.
14. PASSAGE OF EQUIPMENT: CHECK THE DIMENSIONAL REQUIREMENTS OF EQUIPMENT OF THIS SECTION TO ENSURE THAT SUCH EQUIPMENT CAN PASS THROUGH THE NECESSARY AREAS TO REACH ITS ULTIMATE INSTALLED LOCATION. INCLUDE IN BID COSTS FOR ALL WORK REQUIRED, INCLUDING ANY WORK REQUIRED TO MOVE THE EQUIPMENT THROUGH THE SITE TO THIS FINAL LOCATION, INCLUDING ANY DISMANTLING AND RE-ASSEMBLY.
15. SIGNAGE: PROVIDE SIGNAGE REQUIRED BY CODES AND AUTHORITIES HAVING JURISDICTION.
16. WARRANTY: SUBMIT A SINGLE GUARANTEE STATING THAT ALL PORTIONS OF THE WORK ARE IN ACCORDANCE WITH CONTRACT REQUIREMENTS. GUARANTEE ALL WORK AGAINST FAULTY AND IMPROPER MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY OWNER, EXCEPT THAT WHERE GUARANTEES OR WARRANTIES FOR LONGER TERMS ARE SPECIFIED BY CONTRACT, SUCH LONGER TERM SHALL APPLY.
17. RECTIFICATION: AT NO ADDITIONAL COST TO THE OWNER, WITHIN 24 HOURS AFTER NOTIFICATION, CORRECT ANY DEFICIENCIES, WHICH OCCUR DURING THE GUARANTEE PERIOD, ALL TO THE SATISFACTION OF THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY SUCH DEFICIENCIES AND REPAIR THEREOF AND REIMBURSE THE OWNER FOR ALL COSTS INCURRED.

B. GENERAL ITEMS:

1. ACCESS DOORS PANELS: PROVIDE CONCEALED EQUIPMENT INCLUDING CONTROLS, VALVES, ETC., REQUIRING ACCESS, WITH ADEQUATELY SIZED ACCESS DOORS/PANELS. IN REMOVABLE TYPE CEILING, PROVIDE ACCESS TILE IDENTIFICATION ONLY. SEE PARAGRAPH 2.09 HEREIN.
2. CUTTING AND PATCHING FOR MECHANICAL WORK.
3. INSULATION: FURNISH INSULATION FOR ALL EQUIPMENT AND DISTRIBUTION SYSTEM THAT PERMIT HEAT LOSS OR GAIN OR WILL FORM CONDENSATION. REPLACE ANY DAMAGED OR REMOVED INSULATION ON EXISTING SYSTEMS.
4. COORDINATE ALL NEW WORK WITH EXISTING INSTALLATIONS.

1.03 SUBMITTALS
A. PROVIDE SIX (6) COPIES OF SUBMITTAL MATERIAL WITH DESCRIPTIVE DATA FOR ALL PRODUCTS AND MATERIALS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING, PRIOR TO INSTALLATION. ALL SUBMITTALS SHALL BE HIGHLIGHTED TO INDICATE SPECIFIC PRODUCTS OR MATERIALS BEING USED.
B. SUBMIT PRODUCT DATA, DRAWINGS, TEST REPORTS FOR THE FOLLOWING ITEMS PER THIS DIVISION'S GENERAL PROVISIONS:

1. COORDINATED LAYOUT PLANS, SHOWING WORK OF ALL TRADES, INCLUDING BUT NOT LIMITED TO DUCTWORK; HVAC, PLUMBING, FIRE PROTECTION PIPING; ELECTRICAL CONDUITS AND BUS DUCTS; EQUIPMENT.
2. DUCTWORK ACCESSORIES.
3. DUCTWORK TYPICAL CONSTRUCTION.
4. DUCT SEALING.
5. FLEXIBLE DUCTING.
6. DAMPERS.
7. INSULATION AND ACOUSTICAL LINING.
8. PIPE AND PIPING ACCESSORIES INCLUDING VALVES AND FITTINGS.
9. DIFFUSERS, GRILLES AND REGISTERS.
10. CERTIFIED ACOUSTICAL TEST PERFORMANCE DATA, FOR DIFFUSERS, REGISTERS, GRILLES AND TERMINAL AIR UNITS.
11. AIR TEST AND BALANCE REPORTS.
12. DAMPER MOTORS.
13. THERMOSTATS AND ALL CONTROL DEVICES.
14. VIBRATION ISOLATION.
15. ONE SET OF AS-BUILT DRAWINGS AND CADD CD.

1.04 QUALITY ASSURANCE
A. QUALITY AND GAUGES OF MATERIALS:

1. QUALITY OF MATERIALS:

A. NEW, BEST OF THEIR RESPECTIVE KINDS, FREE FROM DEFECTS AND LISTED BY UNDERWRITERS' LABORATORIES, INC., OR BEARING THEIR LABEL. MATERIALS AND EQUIPMENT OF SIMILAR APPLICATION: SAME MANUFACTURE, EXCEPT AS NOTED. CONFORM TO REFERENCE STANDARDS.

1.05 PERMITS AND INSPECTIONS
A. THE CONTRACTOR SHALL SECURE ALL APPROVALS AND PAY ALL FEES FOR ALL WORK INSTALLED. CERTIFICATE SHALL BE DELIVERED TO OWNER BEFORE FINAL PAYMENT WILL BE MADE.
B. PROVIDE ALL REQUIRED LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY FOR A COMPLETE AND SAFE INSTALLATION OF HVAC IN FULL CONFORMITY WITH REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION; ALL AS INDICATED ON DRAWINGS AND/OR HEREIN SPECIFIED FOR THE SYSTEMS INCLUDED. WORK SHALL BE INSTALLED IN A NEAT, WORKMANLIKE MANNER. INCLUDE ALL COSTS FOR PERMITS, LICENSES, CERTIFICATES, FILING AND INSPECTION REQUIRED BY AUTHORITIES HAVING JURISDICTION.

1.06 DESCRIPTION
A. SPECIFICATIONS ARE OF SIMPLIFIED FORM AND INCLUDE INCOMPLETE SENTENCES. WORDS OR PHRASES SUCH AS "THE CONTRACTOR SHALL," "SHALL BE," "FURNISH," "PROVIDE," "A," "AN," "THE," AND "ALL" HAVE BEEN OMITTED FOR BREVITY.
B. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. FOLLOW DRAWINGS IN LAYING OUT WORK AND CHECK DRAWINGS OF OTHER TRADES TO VERIFY SPACE CONDITIONS. MAINTAIN HEADROOM AND SPACE CONDITIONS.
C. THE WORK DOES NOT SHOW ALL OFFSETS, DROPS AND RISES OF RUNS. THE CONTRACTOR SHALL ALLOW IN HIS PRICES FOR ROUTING OF DISTRIBUTION SYSTEM TO AVOID OBSTRUCTIONS. EXACT LOCATIONS SUBJECT TO APPROVAL OF ARCHITECT.
D. SCOPE OF WORK: LABOR, MATERIALS, EQUIPMENT, SERVICES AND FEES NECESSARY FOR COMPLETE SAFE INSTALLATION IN CONFORMITY WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION; AS INDICATED ON DRAWINGS AND HEREIN SPECIFIED.

1.07 JOB CONDITIONS
A. CONNECTIONS TO EXISTING WORK:

1. INSTALL NEW WORK AND CONNECT TO EXISTING WORK WITH MINIMUM INTERFERENCE TO EXISTING FACILITIES.
2. MAINTAIN CONTINUOUS OPERATION OF EXISTING FACILITIES AS REQUIRED WITH NECESSARY TEMPORARY CONNECTIONS BETWEEN NEW AND EXISTING WORK.
3. TEMPORARY SHUTDOWNS OF EXISTING SERVICES:

A. AT NO ADDITIONAL CHARGES.
B. AT TIMES NOT TO INTERFERE WITH NORMAL OPERATION OF EXISTING FACILITIES.
C. ONLY WITH WRITTEN CONSENT OF OWNER.

4. CONNECT NEW WORK TO EXISTING WORK IN NEAT AND ACCEPTABLE MANNER. RESTORE EXISTING DISTURBED WORK TO ORIGINAL CONDITION INCLUDING MAINTENANCE OF WIRING CONTINUITY AS REQUIRED.

B. REMOVAL AND RELOCATION OF EXISTING WORK:

1. DISCONNECT, REMOVE OR RELOCATE MATERIAL, EQUIPMENT, DUCTWORK, PIPING AND OTHER WORK NOTED AND REQUIRED BY REMOVAL OR CHANGES IN EXISTING CONSTRUCTION.
2. WHERE EXISTING PIPES, CONDUITS AND/OR DUCTS, WHICH ARE TO REMAIN, PREVENT INSTALLATION OF NEW WORK AS INDICATED, RELOCATE, OR ARRANGE FOR RELOCATION, OF EXISTING PIPES, CONDUITS AND/OR DUCTS.
3. PROVIDE NEW MATERIAL AND EQUIPMENT REQUIRED FOR RELOCATED EQUIPMENT.
4. PLUG OR CAP ACTIVE PIPING OR DUCTWORK BEHIND OR BELOW FINISH.
5. DO NOT LEAVE LONG DEAD-END BRANCHES. CAP OR PLUG AS CLOSE AS POSSIBLE TO ACTIVE LINE.
6. DISPOSE OF REMOVED MATERIAL AND EQUIPMENT AS DIRECTED.

1.08 PRODUCT DELIVERY, STORAGE AND HANDLING
A. MOVING OF EQUIPMENT: WHERE NECESSARY, SHIP IN CRATED SECTIONS OF SIZE TO PERMIT PASSING THROUGH AVAILABLE SPACES.
B. ACCESSIBILITY:

1. FOR OPERATION, MAINTENANCE AND REPAIR.
2. MINOR DEVIATIONS: PERMISSIBLE.
3. CHANGES OF MAGNITUDE OR INVOLVING EXTRA COST: NOT PERMISSIBLE WITHOUT REVIEW.
4. GROUP CONCEALED MECHANICAL EQUIPMENT REQUIRING ACCESS WITH EQUIPMENT FREELY ACCESSIBLE THROUGH ACCESS DOORS.

1.09 MAINTENANCE MANUALS, REPORTS AND AS-BUILT DRAWINGS
A. PROVIDE FOUR (4) COPIES OF OPERATING AND MAINTENANCE MANUAL AND COPIES OF GUARANTIES AND WARRANTIES FOR EACH SYSTEM FOR OWNER'S USE FOR EACH PIECE OF EQUIPMENT. EACH ITEM SHALL BE CROSS-REFERENCED AND NUMBERED WITH AS-BUILT DRAWING DESCRIPTIONS. Q&M INSTRUCTIONS SHALL BE
B. AS-BUILT DRAWINGS: DELIVER TO OWNER, ONE SET OF REPRODUCIBLES, AUTO-CAD CD, AND ONE BOUND SET OF BLUEPRINTS AND PANEL SCHEDULES SHOWING WORK AS ACTUALLY INSTALLED.

1.10 SEISMIC SUPPORT
A. CONTRACTOR SHALL RETAIN A PROFESSIONAL ENGINEER TO DESIGN ALL SEISMIC SUPPORTS REQUIRED FOR THE PROJECT.
B. CONTRACTOR SHALL SUPPORT AND BRACE ALL HVAC SYSTEMS IN ACCORDANCE WITH SEISMIC CODE REQUIREMENTS.

2.00 PRODUCTS
2.01 DUCTWORK
A. GENERAL: ALL SAFING, DUCTS, DAMPERS, ACCESS DOORS, JOINTS, HANGERS, STIFFENERS, FIRE DAMPERS AND FIRE RETARDING MATERIALS, IN ACCORDANCE WITH REQUIREMENTS OF SMACNA, "HVAC DUCT CONSTRUCTION STANDARDS," LATEST EDITION CHAPTER 6 OF CALIFORNIA MECHANICAL CODE, AND ALL OTHER AUTHORITIES HAVING JURISDICTION AND AS DESCRIBED HEREIN. ALL SHEET METAL WORK SHALL HAVE A PRESSURE CLASSIFICATION AS FOLLOWS, UNLESS OTHERWISE SPECIFIED:
1. SUPPLY DUCT BETWEEN FAN DISCHARGE AND INLET TO TERMINAL AIR UNIT - 4 INCHES W.G.
2. SUPPLY DUCTS DOWNSTREAM OF TERMINAL AIR UNITS AND FANS -2 INCHES W.G.
3. RETURN AND EXHAUST AIR DUCTS - 2 INCHES W.G.

B. DUCTWORK: UNLESS OTHERWISE SPECIFIED.
1. COLD ROLLED "COMMERCIAL" QUALITY HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM NO. M525-67.
A. AIR CONDITIONING SYSTEMS.
B. VENTILATION SYSTEMS.
2. DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS.
3. FITTINGS: SAME GAUGE AND CONSTRUCTION AS DUCTS.
4. DUCT SUPPORTS.
5. DUCTS WITH TRANSVERSE AND LONGITUDINAL BRACINGS IN ACCORDANCE WITH SMACNA.
C. UNEQUAL ELBOWS ARE NOT ACCEPTABLE, EXCEPT RADIUS BRANCH DUCTWORK WITH THROAT.
D. FLEXIBLE DUCTWORK:
1. THE FLEXIBLE DUCT FOR CONNECTION OF CEILING AIR DIFFUSERS TO SHEET METAL DUCT SHALL BE A FACTORY FABRICATED ASSEMBLY CONSISTING OF AN INNER SLEEVE, INSULATION AND AN OUTER MOISTURE BARRIER. THE INNER SLEEVE SHALL BE CONSTRUCTED OF AN ELASTOMERIC COMPOUND REINFORCED WITH WOVEN FIBERGLASS BANDED TO A VINYL COATED SPRING STEEL WIRE SUPPORTING HELIX. A MINIMUM 1 INCH THICK FIBERGLASS INSULATING BLANKET SHALL ENCASE THE INNER SLEEVE AND BE SHEATHED WITH AN OUTER MOISTURE BARRIER OF A REINFORCED METALIZED MYLAR/NEOPRENE LAMINATE, OR EQUAL.
2. ACOUSTICAL PERFORMANCE OF THE FLEXIBLE DUCT SHALL BE IN ACCORDANCE WITH AIR DIFFUSION COUNCIL FLEXIBLE AIR DUCT TEST FD72R1: PARAGRAPH 3.2.1, SOUND ATTENUATION. THE TEST DATA SHALL BE MADE BY AN ACCREDITED INDEPENDENT TESTING LABORATORY IN ACCORDANCE WITH THE ABOVE TESTING PROCEDURE.
3. CERTIFIED TEST DATA SHALL BE SUBMITTED FOR APPROVAL.
4. INSTALLATION OF THE FLEXIBLE DUCT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDED PROCEDURES.
5. FLEXIBLE DUCTWORK TO BE A MAXIMUM OF 84 IN. IN LENGTH.
6. CONNECTIONS, AIRTIGHT JOINTS, FASTENED WITH CLAMPS (SIMILAR TO IDEAL 5200 OR 5600 SERIES) AND SEALED WITH SEALING COMPOUND AND TAPE.
7. FLEXIBLE DUCT BENDS SHALL BE INSTALLED WITH CENTERLINE RADIUS NOT LESS THAT 1.5 TIME DIAMETER AND SHALL NOT BE CRUSHED TO FIT LIMITED CLEARANCE.

E. ACCESS DOORS:
1. FURNISH ACCESS DOOR OF SUFFICIENT SIZE AS REQUIRED, FOR ACCESS, INSPECTION, MAINTENANCE, AND REPLACEMENT TO ALL INSTRUMENTS, CONTROLS AND EQUIPMENT.
2. INSULATED OR UN-INSULATED, SAME AS DUCT.
3. PROVIDE MINIMUM 20 INCHES BY 14 INCHES, EXCEPT DUCTS LESS THAN 16 INCHES; ONE DIMENSION 20 INCHES AND OTHER DIMENSION 2 INCHES LESS THAN DUCT WIDTH.
UNLESS OTHERWISE NOTED, ALL ACCESS DOORS TO BE HINGED TYPE, WITH LATCH SIMILAR TO VENTLOCK NO. 100.

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Project Title
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F. DAMPERS:

1. FURNISH ALL DAMPERS NECESSARY FOR PROPER CONTROL AND BALANCING OF AIR DISTRIBUTION AS FOLLOWS:

A. ALL DUCTS WHICH SPLIT IN 2 OR MORE BRANCHES TO SERVE SUPPLY DIFFUSERS.

B. AT EACH SUPPLY AND RETURN BRANCH DUCT, AS FAR AWAY FROM EACH OUTLET AND INLET AS POSSIBLE.

C. ADJUSTABLE AND ACCESSIBLE.

D. ADDITIONALLY AS INDICATED.

E. JIFFY-TYPE AND FIELD FABRICATED DAMPERS ARE NOT ACCEPTABLE.

F. DAMPER SHALL BE SAME MATERIAL AS DUCTWORK, PER SMACNA CONSTRUCTION STANDARDS, EXCEPT PROVIDE BEARING AT ONE END OF DAMPER ROD AND QUADRANT, WITH LEVER AND LOCKSCREW AT OTHER END. FOR INSULATED DUCTS, QUADRANTS MOUNTED ON COLLAR TO CLEAR INSULATION. LEVERS MUST BE ACCESSIBLE.

2. FIRE DAMPERS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH NFPA STANDARD 90A AND UL STANDARD 555 AND SHALL BE SO LABELED WITH A PERMANENT IDENTIFICATION. FIRE RATING AS REQUIRED. FIRE DAMPER SHALL BE OUT-OF-AIR STREAM TYPE WITH A FACTORY SUPPLIED SLEEVE. FIRE DAMPER SHALL BE SIMILAR TO RUSKIN MODEL IBD 20.
CALIFORNIA STATE FIRE MARSHAL LISTING 3225-245:005.

3. TURNING VANES: GALVANIZED STEEL, DOUBLE WIDTH TURNING VANES.

2.02 AIR OUTLETS AND INLETS

A. ALL DIFFUSERS, GRILLES AND REGISTERS SHALL BE OF TYPE AND CAPACITY AS INDICATED ON DRAWINGS. STEEL AND/OR EXTRUDED ALUMINUM CONSTRUCTION WITH BAKED ENAMEL FINISH COLOR AS SELECTED BY ARCHITECT. DIFFUSERS TO HAVE NO VISIBLE SCREW HEADS OR CONNECTORS. RETURN GRILLES AND EXHAUST REGISTERS SIMILAR TO SUPPLY.

B. SUITABLE FOR OPERATION AT 5 PERCENT EXCESS AND 25 PERCENT LESS THAN NOTED CAPACITY. MANUFACTURER SHALL BE RESPONSIBLE FOR EXAMINING APPLICATION OF EACH OUTLET AND SHALL GUARANTEE THAT EACH WILL PROVIDE REQUIRED NC LEVELS AND COMFORT SPACE CONDITIONS WITHOUT DRAFTS THROUGHOUT OPERATING RANGE.

C. AIR OUTLETS AND FRAME TYPE SUITABLE FOR MOUNTING IN CEILING TYPES INDICATED ON ARCHITECTURAL PLANS.

D. FOR EXACT LOCATIONS OF ALL AIR OUTLETS, SEE ARCHITECTURAL PLANS.

E. PROVIDE BLANK OFF PLATES FOR INACTIVE PORTIONS.

F. SQUARE AND RECTANGULAR CEILING DIFFUSERS: WITH DIRECTIONAL PATTERN TYPE REMOVABLE CORE. PROVIDE AIR DISCHARGE IN ONE TO FOUR DIRECTIONS, AS NOTED.

G. PERFORATED DIFFUSERS: SQUARE AND RECTANGULAR TYPE. SUPPLY AIR DIFFUSERS SHALL BE PROVIDED WITH AIR PATTERN ADJUSTMENT WITH CONCEALED HINGES AND CATCHES FOR FACE PLATES.

H. LINEAR DIFFUSERS:

1. CONTINUOUS SLOT TYPE: EXTRUDED ALUMINUM, SLOTS WITH PATTERN AND DIRECTIONAL FLOW CONTROL BLADES.

I. REGISTERS AND GRILLES:

1. RETURN AND EXHAUST REGISTERS: WITH VOLUME DAMPER.

2.03 ROOM THERMOSTATS

A. PER BUILDING STANDARD

2.04 SUPPORTS AND ANCHORS

1. A. SUPPORT ALL EQUIPMENT FROM BUILDING STRUCTURE AND/OR FRAMING IN AN APPROVED MANNER. WHERE OVERHEAD CONSTRUCTION DOES NOT PERMIT FASTENING OR SUPPORTS FOR EQUIPMENT, FURNISH ADDITIONAL STEEL FRAMING.

B. ATTACHMENT TO STRUCTURE:

STEEL BEAM ANCHORS:
A. APPROVED BEAM OR CHANNEL CLAMPS.
B. DO NOT CUT OR WELD TO STRUCTURAL STEEL WITHOUT WRITTEN APPROVAL OF OWNER.

2. A. STEEL DECK ANCHORS: NO ATTACHMENT TO METAL DECK PERMITTED WITHOUT WRITTEN APPROVAL OF OWNER'S REPRESENTATIVE.

CONCRETE FILLED: AS SPECIFIED ABOVE.

3. SUPPORT SPREADERS:

A. INSTALL SPREADERS SPANNING BETWEEN STRUCTURAL MEMBERS WHEN HANGERS FALL BETWEEN THEM, AND HANGER LOAD IS TOO GREAT FOR SLAB OR DECK ATTACHMENT.

B. SPREADERS MAY BE ONE OF METHODS LISTED BELOW, OR COMBINATION OF BOTH AS REQUIRED:

1) FABRICATED FROM STRUCTURAL CHANNEL:
A) END FITTINGS BOLTED OR WELDED.
B) SECURE TO STRUCTURAL MEMBERS:
(1) AS REQUIRED BY CONSTRUCTION.
(2) AS APPROVED BY STRUCTURAL ENGINEER.
2) FORMED CHANNELS WITH FITTINGS, SIMILAR TO SUPERSTRUT:
A) SUBMIT MANUFACTURER'S CALCULATIONS FOR INSTALLATION.

C. DUCT HANGERS AND SUPPORTS:

1. GENERAL:
A. SUPPORT HORIZONTAL DUCTS WITH HANGERS OF SIZE AND SPACING AS INDICATED IN PERTINENT SMACNA DUCT CONSTRUCTION STANDARDS.

2. HORIZONTAL DUCT SUPPORTS:
A. INSTALL HANGERS AT EACH CHANGE IN DIRECTION OF DUCT.
B. STRAP HANGERS:
1) EXTEND STRAP DOWN BOTH SIDES OF DUCTS.
2) TURN UNDER BOTTOM ONE INCH MINIMUM.
3) METAL SCREW HANGERS TO:
A) BOTTOM OF DUCT.
B) UPPER AND LOWER SIDES OF DUCTS.
C) NOT MORE THAN 12 INCHES ON CENTER.
C. ANGLE HANGERS:
1) PROVIDE ANGLE HANGERS FORMED BY EXTENDED VERTICAL BRACING ANGLES.

2.05 ACCESS DOORS

A. PROVIDE EQUIPMENT AND CONCEALED VALVE ACCESS, EXCEPT IN REMOVABLE TILE CEILINGS AND APPROVED BY LOCAL CODE, WITH ADEQUATE SIZE (MINIMUM 18 INCHES BY 18 INCHES) ACCESS DOORS FOR INSPECTION AND MAINTENANCE.

2.06INSULATION AND LINING

A. MATERIALS:
1. INSULATION, JACKETS, FACINGS, ADHESIVES, COATINGS, AND ACCESSORIES FIRE HAZARD RATING BY UNDERWRITERS LABORATORIES, INC. STEINER TUNNEL TEST METHOD FOR FIRE HAZARD CLASSIFICATION OF BUILDING MATERIALS, STANDARD UL 723, ASTM E-84, NFPA-225.
2 FLAMESPREAD: MAXIMUM 25.
3 FUEL CONTRIBUTED AND SMOKE DEVELOPED: MAXIMUM 50.
4 FLAMEPROOFING TREATMENTS SUBJECT TO DETERIORATION DUE TO MOISTURE OR HUMIDITY NOT ACCEPTABLE.
5 INSULATION SHALL BE MANVILLE, OR EQUAL.
6 LABEL AS REQUIRED BY CODE.
7 NOISE CONTROL:
A. UNLESS OTHERWISE NOTED, ALL ROOM NC LEVELS SHALL BE 35 OR LESS.
B. DUCTS LINED AS REQUIRED.

B. ALL INSULATION APPLIED ACCORDING TO MANUFACTURER'S PUBLISHED RECOMMENDATIONS.

C. INSULATE ALL EXISTING AND NEW DUCTWORK AND EQUIPMENT, EXCEPT AS FOLLOWS:
1. RETURN AIR DUCTS IN CONDITIONED SPACES AND EXHAUST AIR DUCTS, EXCEPT WHERE INDICATED.
2. WHERE SOUND LINING IS OF MINIMUM THICKNESS SPECIFIED FOR INSULATION.

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PLUMBING GENERAL NOTES

1. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH 2022 CPC/CMC/CBC ALL LOCAL CODES AND AUTHORITIES HAVING JURISDICTION.
2. ARCHITECTURAL AND STRUCTURAL PLANS ARE CONSIDERED A PART OF THE DESIGN DRAWINGS AND ARE TO BE USED TO DEFINE DETAIL CONFIGURATIONS INCLUDING, BUT NOT LIMITED TO RELATIVE LOCATION OF MEMBERS, ELEVATION, LOCATION OF ALL OPENINGS, ETC.
3. BEFORE STARTING ANY WORK, VERIFY THE ADEQUACY, LOCATION, SIZE, AND AVAILABILITY OF ALL UTILITIES CONCERNED, INCLUDING SEWER INVERT ELEVATIONS, AND WATER PRESSURE.
4. ALL VENTS THRU ROOF AND ROOF DECKS SHALL BE MINIMUM OF THREE FEET VERTICALLY OR TEN FEET HORIZONTALLY FROM ANY FRESH AIR INTAKES.
5. CLEANOUTS SHALL BE REQUIRED AS INDICATED ON THE PLANS AND INSTALLED PER SECTION 707.0 AND 719.0 OF THE PLUMBING CODE.
6. HANDICAPPED USE PLUMBING FIXTURES SHALL BE MOUNTED AT REQUIRED HEIGHTS AND WITH ALL RELATED ACCESSORIES AS REQUIRED BY THE ADMINISTRATIVE AUTHORITIES AND AS INDICATED ON ARCHITECTURAL PLANS .
7. EXPOSED SUPPLY PIPES, TRAP AND TRAP ARM AT HANDICAPPED LAVATORIES SHALL BE INSULATED.
8. ALL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH "GUIDELINES FOR RESTRAINTS OF MECHANICAL SYSTEMS, PLUMBING PIPING SYSTEMS" PUBLISHED BY SMACNA.
9. ALL DOMESTIC WATER FIXTURES, PIPING VALVES, ETC. FOR HUMAN CONSUMPTION SHALL COMPLY WITH CALIFORNIA HEALTH AND SAFETY CODE 116875
10. NEW OR REPAIRED POTABLE WATER SYSTEM SHALL BE DISINFECTED PRIOR TO USE ACCORDING TO THE METHOD SET IN SECTION 609.9 OF THE PLUMBING CODE.
11. INSULATE ALL HOT WATER, HOT WATER RETURN AND CONDENSATE DRAIN PIPING AS PER CA TITLE 24 TABLE 120.3-A.
12. WATER CLOSET BOWLS FOR PUBLIC USE SHALL BE OF THE ELONGATED TYPE.
13. PIPES PASSING THRU FIRE RATED WALLS OR FLOORS SHALL BE SEALED ALL AROUND WITH FIRE RATED SEALANT.
14. PROVIDE FLASHING AND/OR COUNTER FLASHING OF ALL EXTERIOR PENETRATIONS.
15. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURERS RECOMMENDATIONS. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
16. ALL APPLIANCE AND PLUMBING VENTS AND THE DISCHARGE OUTLET OF EXHAUST FANS SHALL BE AT LEAST 10' IN A HORIZONTAL DIRECTION, OR 3' ABOVE THE OUTSIDE AIR INTAKES FOR HVAC UNITS.
17. ALL APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE SECURELY FASTEN IN PLACE PER BUILDING CODE REQUIREMENTS OR APPLICABLE MANUFACTURER INSTALLATION REQUIREMENTS.
18. ALL EXPOSED GAS PIPING SHALL BE PROTECTED AGAINST CORROSION BY COATING OR WRAPPING WITH AN INERT MATERIAL APPROVED FOR SUCH APPLICATIONS.
19. MANUFACTURED ROOF DRAINS AND OVERFLOW (FIXTURES) SHALL BE IAPMO LISTED.
20. ROOF DRAIN AND OVERFLOW PIPING WITHIN THE BUILDING SHALL UTILIZE APPROVED DRAINAGE FITTINGS.
21. OVERFLOW DRAINS SHALL DISCHARGE ABOVE GRADE IN A LOCATION OBSERVABLE BY THE BUILDING OCCUPANTS, OR MAINTENANCE PERSONNEL, INDEPENDENT FROM THE PRIMARY ROOF DRAIN. EXCEPTION: A COMBINED SYSTEM IN COMPLIANCE WITH SECTION 1101.12.2.2.2 OF THE CALIFORNIA PLUMBING CODE.
22. ROOF DRAINAGE OR GUTTERS DOWNSPOUT SHALL NOT BE DISCHARGED TO THE SANITARY SEWER SYSTEM. ALL EXISTING GUTTERS AND DOWNSPOUTS TO REMAIN ARE TO BE CLEAN, FURBISHED, PAINTED AND PROPERLY ANCHOR AND SECURE, SEE ARCHITECTURAL PLANS AND CIVIL SITE PLAN FOR LID REQUIREMENTS.
23. OVERFLOW DRAINS HAVING THE SAME SIZE AS THE ROOF DRAINS SHALL BE INSTALLED WITH INLET FLOW LINE LOCATED 2" ABOVE THE LOW POINT OF THE ROOF.
24. CLEANOUTS FOR HORIZONTAL BUILDING STORM DRAINS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 719 OF THE CALIFORNIA PLUMBING CODE.

PLUMBING GENERAL NOTES

25. ALL FUEL GAS PIPING SHALL BE INSTALLED PER CHAPTER 12 OF THE CALIFORNIA PLUMBING CODE FOR "FIRESTOP PROTECTION".
26. STORM DRAIN PIPING IS SIZED FOR 2" MAXIMUM RAINFALL.
27. PROVIDE METALLIC WATER LINE CONNECTORS FROM SHUT-OFF TO PLUMBING FIXTURES. RUBBER AND PLASTICS ARE NOT PERMITTED.
28. ALL FIXTURES, EQUIPMENT, PIPING, AND MATERIALS SHALL BE LISTED.
29. ALL FAUCETS IN PUBLIC RESTROOMS SHALL BE SELF-CLOSING OR SELF-CLOSING METERING FAUCETS.
30. PUBLIC LAVATORIES SHALL HAVE CONTROLS TO LIMIT THE WATER TEMPERATURE TO 110 °F.
31. WATER PIPE AND FITTINGS WITH A LEAD CONTENT WHICH EXCEEDS 0.25% SHALL BE PROHIBITED IN SYSTEMS CONVEYING POTABLE WATER.
32. CGBC 2022 - SECTION 4.303 INDOOR WATER USE

4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS
PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS) SHALL COMPLY WITH THE FOLLOWING:

4.303.1.1 WATER CLOSETS
THE EFFECTIVE FLUSH VOLUME OF ALL WATER CLOSETS SHALL NOT EXCEED 1.28 GALLONS PER FLUSH. TANK-TYPE WATER CLOSETS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR TANK-TYPE TOILETS.
NOTE: THE EFFECTIVE FLUSH VOLUME OF DUAL FLUSH TOILETS IS DEFINED AS THE COMPOSITE, AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSHES AND ONE FULL FLUSH.

4.303.1.2 URINALS
THE EFFECTIVE FLUSH VOLUME OF WALL-MOUNTED URINALS SHALL NOT EXCEED 0.125 GALLONS PER FLUSH. THE EFFECTIVE FLUSH VOLUME OF ALL OTHER URINALS SHALL NOT EXCEED 0.5 GALLONS PER FLUSH.

4.303.1.4 FAUCETS

4.303.1.4.2 LAVATORY FAUCETS IN COMMON AND PUBLIC USE AREAS
THE MAXIMUM FLOW RATE OF LAVATORY FAUCETS INSTALLED IN COMMON AND PUBLIC USE AREAS (OUTSIDE OF DWELLINGS OR SLEEPING UNITS) IN RESIDENTIAL BUILDINGS SHALL NOT EXCEED 0.5 GALLONS PER MINUTE AT 60 PSI.

4.303.1.4.4 KITCHEN FAUCETS
THE MAXIMUM FLOW RATE OF KITCHEN FAUCETS SHALL NOT EXCEED 1.8 GALLONS PER MINUTE AT 60 PSI. KITCHEN FAUCETS MAY TEMPORARILY INCREASE THE FLOW ABOVE THE MAXIMUM RATE, BUT NOT TO EXCEED 2.2 GALLONS PER MINUTE AT 60 PSI, AND MUST DEFAULT TO A MAXIMUM FLOW RATE OF 1.8 GALLONS PER MINUTE AT 60 PSI. NOTE: WHERE COMPLYING FAUCETS ARE UNAVAILABLE, AERATORS OR OTHER MEANS MAY BE USED TO ACHIEVE REDUCTION.

PLUMBING LEGEND

SYMBOL	ABBR.	DESCRIPTION
	W	WASTE PIPING ABOVE FINISHED GRADE
	W	WASTE PIPING BELOW FINISHED GRADE
GW	GW	GREASE WASTE BELOW FINISHED GRADE
SD	SD	STORMDRAIN PIPING ABOVE FINISHED GRADE
SD	SD	STORMDRAIN PIPING BELOW FINISHED GRADE
OD	OD	OVERFLOW DRAIN PIPING ABOVE FINISHED GRADE
	V	VENT PIPING ABOVE FINISHED GRADE
	V	VENT PIPING BELOW FINISHED GRADE
	CW	COLD WATER PIPING ABOVE FINISHED GRADE
	CW	COLD WATER PIPING BELOW FINISHED GRADE
	HW	HOT WATER PIPING ABOVE FINISHED GRADE
CD	CD	CONDENSATE PIPING ABOVE FINISHED GRADE
PCD	PCD	PUMP CONDENSATE PIPING ABOVE FINISHED GRADE
CD	CD	CONDENSATE PIPING BELOW FINISHED GRADE
G	GAS	GAS PIPING BELOW/ABOVE FINISHED GRADE
LP	PROPANE	LOW PRESSURE PROPANE
		EXISTING PIPING TO BE REMOVED
	-	DROP IN PIPE
	-	RISE IN PIPE
	-	DIRECTION OF FLOW
	HB	HOSE BIBB
	WCO	WALL CLEANOUT
	-	FLOOR CLEANOUT TO GRADE
	U	UNION
	GV	GATE SHUT-OFF VALVE
	FD	FLOOR DRAIN
	BV	BALL VALVE
	CV	CHECK VALVE
	-	GAS SHUT-OFF COCK
	POC	POINT OF CONNECTION
	POD	POINT OF DEMOLITION
	CO	CLEAN-OUT
	FU	FIXTURE UNIT
	GPM	GALLONS PER MINUTE
	I.E.	INVERT ELEVATION
	NTS	NOT TO SCALE
	SOV	SHUT-OFF VALVE
	TYP	TYPICAL

PLUMBING SHEET INDEX

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P-2.2	PLUMBING SECOND FLOOR PLAN

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PLUMBING GENERAL NOTES

49. ALL BACTERIA AND PRESSURE TESTS SHALL BE APPROVED BY THE ALW WATER INSPECTOR PRIOR TO PLACEMENT OF PERMANENT RESURFACING, DISINFECTION SHALL BE CONDUCTED IN ACCORDANCE WITH WATER CHLORINATION PRINCIPLES AND PRACTICES A.W.W.A. NO C651 & ALW STD W-5. NO PRESSURE TEST AGAINST EXISTING VALVES IS ALLOWED. FLUSHED CHLORINATED WATER TO BE DE-CHLORINATED PER NPDES REQUIREMENTS.

50. CONTRACTOR TO FURNISH AND INSTALL ALL WATER METERS THE CONTRACTOR SHALL COMPLETELY REMOVE ABANDONED WATER SERVICES AND SEVER FROM THE MAIN LINE ALL UNUSED WATER SERVICES WITHIN THE PROJECT VICINITY PER ALW REQUIREMENTS.

51. THE FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT BE INSTALLED ON THE RISER OF THE BACKFLOW PREVENTER. ALW IS REQUIRED TO INSPECT THE BACKFLOW PREVENTER.

52. ALL BACKFLOW DEVICES SHALL BE APPROVED BY THE USC FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH, INSTALLED PER ALW STD W-15, AND TESTED BY AN LA COUNTY CERTIFIED BACKFLOW TESTER. THE REPORTS SHALL BE FILED WITH ALW IMMEDIATELY AFTER THE DEVICES ARE IN A CAGE IS REQUIRED TO BE INSTALLED AROUND ALL BACKFLOW DEVICES. ALL BACKFLOW DEVICES WILL NEED TO BE FIELD VERIFIED WITH ALW INSPECTOR PRIOR TO PLACEMENT AND (5) WORKING DAYS PRIOR TO START OF WORK.

53. NO WELDING ON EXISTING STEEL MAINS OR PIPE SHALL BE ALLOWED. ALL CONNECTIONS TO EXISTING STEEL MAINS OR PIPE SHALL BE DONE USING A TRANSITION COUPLING, UNLESS OTHERWISE APPROVED BY ALW.

54. EXISTING BUILDING SEWERS AND BUILDING DRAINS MAY BE USED IF SUCH SEWERS HAVE BEEN PROPERLY MAINTAINED AND FOUND UPON EXAMINATION AND TEST PERFORMED BY THE OWNER OR OWNER'S DESIGNATED AGENT THAT THEY ARE IN WORKING CONDITION AND FREE FROM ANY DEFECT.

55. WATER SUPPLY AND DRAIN PIPES UNDER ACCESSIBLE LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE BE CONFIGURED TO PROTECT AGAINST CONTACT. PROTECTORS, INSULATORS, OR BOTH SHALL COMPLY WITH ASME A112.18.9. 403.3

56. POTABLE WATER SUPPLY TRAP SEAL PRIMER VALVES SHALL COMPLY WITH ASSE 1018. DRAINAGE AND ELECTRONIC DESIGN TYPE TRAP SEAL PRIMER DEVICES SHALL COMPLY WITH ASSE 1044. 1007.2

57. PUBLIC LAVATORIES SHALL HAVE A WATER TEMPERING DEVICE THAT COMPLIES WITH ASSE 1070, ASME 112.1070 OR CSA B125.3. WATER HEATER THERMOSTAT SHALL NOT BE CONSIDERED A CONTROL TO MEET THIS PROVISION. 407.3

58. WATER SYSTEM PROVIDED WITH A PRESSURE REGULATING DEVICE WITHOUT A BYPASS SHALL BE PROVIDED WITH AN APPROVED, LISTED EXPANSION TANK. SHOW DETAIL ON THE PLAN. 608.2

59. ANY WATER SYSTEM PROVIDED WITH A CHECK VALVE OR A BACKFLOW PREVENTION DEVICE OR ANY OTHER NORMALLY CLOSED DEVICE THAT PREVENTS DISSIPATION OF BUILDING PRESSURE BACK INTO THE WATER MAIN, INDEPENDENT OF TYPE OF WATER HEATER USED, SHALL BE PROVIDED WITH AN APPROVED, LISTED EXPANSION TANK. SHOW DETAIL ON THE PLANS. 608.3.

60. THE TEMPERATURE AND PRESSURE RELIEF VALVE LOCATED ON THE STORAGE WATER HEATER/ BOILER SHALL BE INSTALLED PER THE LISTING AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. 505.2

61. ALL PLUMBING FIXTURES SHALL MEET OR BE LESS THAN THE FOLLOWING FLOW RATES PER CHAPTER 4 OF 2023 COUNTY OF LOS ANGELES PLUMBING CODE:

62. WHEN A DOMESTIC WATER HEATING SYSTEM IS INSTALLED, PROVIDE COMPLIANCE FORM 2022-NRCC-PLB-E FILLED OUT AND AFFIXED TO THE PLANS.

PLUMBING GENERAL NOTES

30. PIPE SHALL BE DUCTILE IRON CLASS 350. MINIMUM COVER TO FINISHED SURFACE SHALL BE THREE (3) FEET ON LOCAL RESIDENTIAL STREETS AND FOUR (4) FEET ON MAIN COLLECTOR AND ARTERIAL STREETS. WATER MAINS SHALL BE IMPORT SAND BEDDED AND SHADED TO 12" ABOVE TOP OF PIPE. WHEREVER A WATER LINE ENCOUNTERS AN OBSTRUCTION AND CROSSING OVER WILL RESULT IN LESS THAN 30" OF COVER OVER THE WATER LINE, IT SHALL CROSS UNDER OBSTRUCTION WITH A MINIMUM OF 12 INCHES CLEARANCE.

31. ALW REQUIRES A MINIMUM 1 FOOT VERTICAL SEPARATION FOR ALL UTILITIES CROSSING ALW WATER FACILITIES PER ALW STD W-16 & W-19. ALW WATER INSPECTOR SHALL VERIFY THE SEPARATION PRIOR TO BACKFILLING. ANY DEVIATION LESS THAN 1 FOOT REQUIRES A REQUEST TO BE MADE, THE REQUEST MUST BE IN WRITING AND MUST BE APPROVED BY ALW.

32. FOR WATER AND SEWER SEPARATION SEE LOS ANGELES COUNTY ENGINEER'S SANITARY DIVISION CHART S-C1 AS WELL AS ALW STD W-16 AND W-19. WHEREVER THE WATER LINE CROSSES OVER THE SEWER LINE AND THE SEPARATION AT CROSSING POINT IS ONE FOOT OR LESS. THE CONTRACTOR SHALL INSTALL THE WATER MAIN SO THAT THE PIPE SECTION IS CENTERED OVER THE SEWER LINE AND THERE SHALL NOT BE A JOINT WITHIN 6 FEET; 10 FEET WHEREVER THE WATERLINE CROSSES UNDER THE SEWER LINE.

33. CONTRACTOR SHALL REMOVE AND REPLACE ALL SERVICES IN CONFLICT WITH WATER MAIN REPLACEMENT OR INSTALLATION OF NEW WATER MAINS WITH NEW SERVICES OF THE SAME SIZE.

34. AS FIELD CONDITIONS WARRANT A COMBINATION AIR-VAC RELIEF VALVE ASSEMBLY SHALL BE INSTALLED AT FIRST HIGHEST POINT OF THE WATER LINE, OR AS DIRECTED BY ALW. SIMILARLY, A BLOW-OFF ASSEMBLY SHALL BE INSTALLED AT THE LOW POINTS OF THE WATER LINE, OR AS DIRECTED BY ALW.

35. ALL LINE REALIGNMENT DUE TO OTHER EXISTING UTILITIES SHALL BE APPROVED BY THE ALW INSPECTOR. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY ALW.

36. ALL FIRE SERVICE TO BE CONNECTED TO MAIN WITH A GATE VALVE OF THE SAME SERVICE SIZE. NO SERVICE BRANCH OFF BETWEEN FIRE HYDRANT VALVE AND FIRE HYDRANT.

37. THE EXACT LOCATION OF FIRE HYDRANTS, AIR RELEASE VALVES, AND BLOW-OFFS SHALL BE SET IN THE FIELD BY THE ALW INSPECTOR.

38. FIRE HYDRANT VALVES SHALL BE AT LEAST TEN (10) FEET AWAY FROM THE FIRE HYDRANT. INSTALLATION OF A NEW FIRE HYDRANT SHALL INCLUDE A TEE OR ELBOW, A SIX-INCH GATE VALVE, REQUIRED PIPING, ALL FITTINGS, AND THE FIRE HYDRANT, WITH A BLUE MARKER NEXT TO THE CENTERLINE STRIPE ON THE SAME SIDE OF THE FIRE HYDRANT, AND PAINTING TEN (10) FEET OF RED CURB AS PER PUBLIC STANDARDS AND ALW STD W-11.

39. DURING CONSTRUCTION, ALL ABANDONED FIRE HYDRANTS SHALL BE REMOVED, SALVAGED, AND RESTOCKED TO ALW CONSTRUCTION YARD. THE LATERAL SHALL BE CUT AND BLIND FLANGED AT THE MAIN.

40. THE CONTRACTOR SHALL COMPLETELY ABANDON, SEVER, AND REMOVE FROM THE MAIN LINE ALL UNUSED CONNECTIONS AND CROSSINGS INCLUDING ALL ABANDONED WATER FACILITIES WITHIN THE PROJECT VICINITY PER ALW REQUIREMENTS, SPECIFICATIONS AND STANDARDS. OPERATIONS.

41. THE EXACT LOCATIONS OF THE WATERLINE ABANDONING SHALL BE DETERMINED BY THE ALW INSPECTOR. ALL VALVES ON ABANDONED LINE TO BE CLOSED AND CANS TO BE FILLED WITH CONCRETE, WORK SHALL BE DONE IN THE PRESENCE OF ALW INSPECTOR. ALL OPENINGS RESULTING FROM THE CUTTING OR PARTIAL REMOVAL OF EXISTING PIPES OR SIMILAR STRUCTURES SHALL BE SEALED WITH 8 INCHES OF BRICK AND MORTAR OR 12 INCHES OF CONCRETE AT 100 FEET INTERVALS.

42. THE OWNER IS REQUIRED TO REMOVE ANY UNUSED WATER SERVICE/WATER FACILITY WITHIN THE PROJECT VICINITY AND SHALL ABANDON AND SEVER COMPLETELY FROM THE WATER MAIN PER ALW REQUIREMENTS.

43. ALL FITTINGS SHALL BE M.J. WITH RESTRAINING GLAND (MEGALUG OR APPROVED EQUAL) & THRUST BLOCK, EXCEPT AT FLANGE FITTING CONNECTIONS. ALL TAPPING SLEEVES SHALL BE FULL CIRCLE STAINLESS STEEL. ALL DRAWINGS OF EXISTING MAIN AT TIE-INS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL FURNISH ALL FITTINGS NECESSARY FOR DEVIATION OF PIPE ALIGNMENT NOT SHOWN ON THE PLANS.

44. EACH LOT SHALL HAVE A SEPARATE METERED WATER SYSTEM. ALL EXISTING WATER SERVICES SHALL BE EXAMINED BY THE WATER SUPERVISOR OR HIS REPRESENTATIVE AT THE TIME SUCH SERVICES HAVE BEEN EXPOSED AND PRIOR TO ANY REMOVALS. ALL WATER METERS SHALL BE SET 12-INCHES BEHIND THE BACK OF THE CONTRACTOR SHALL REPLACE ALL WATER BOXES AND VAULTS DAMAGED DURING CONSTRUCTION AS PER APPLICABLE STANDARD DRAWINGS.

45. SERVICES FROM 4-INCH AND ABOVE SHALL BE REPLACED UP TO EXISTING METERS, UNLESS OTHERWISE NOTED ON THE PLANS.

46. THE PHRASE "RE-CONNECT EXISTING SERVICE" SHALL BE UNDERSTOOD THAT THE EXISTING METER, METER BOX, AND SERVICE LINE SHALL BE COMPLETELY REMOVED AND A NEW SERVICE OF REQUIRED SIZE SHALL BE INSTALLED FROM THE MAIN TO THE NEW METER LOCATION AS PER APPLICABLE STANDARD DRAWINGS (INCLUDING METER BOXES AND THE BALL VALVE).

47. SHUT DOWN OF EXISTING TRANSMISSION MAINS SHALL BE LIMITED TO TWO (2) HOURS MAXIMUM, UNLESS DIRECTED OTHERWISE BY THE WATER SUPERVISOR. VALVES SHALL BE OPERATED BY ALW DIVISION PERSONNEL ONLY.

48. CONNECTIONS TO EXISTING WATER LINES SHALL BE WITH A MINIMUM 12-INCH LONG TRANSITION COUPLING (ROMAC 501 OR APPROVED EQUAL). ALL CONNECTION WORK SHALL BE DONE IN THE PRESENCE OF THE ALW INSPECTOR.

PLUMBING GENERAL NOTES

15. ALL PERMIT WORK SHALL CONFORM TO PERMIT REQUIREMENTS AT ALL TIMES. THE PLANS, SPECIFICATIONS, AND ALL NECESSARY PERMITS REQUIRED BY THE CITY OF AZUSA, ALW, AND BY THE COUNTY OF LOS ANGELES, PUBLIC WORKS DEPARTMENT SHALL BE ON THE JOB SITE AT ALL TIMES.

16. ALL CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GUIDELINES AND THE CLEAN WATER ACT.

17. DISCHARGES OF MATERIAL OTHER THAN STORM WATER ARE ALLOWED ONLY WHEN NECESSARY FOR PERFORMANCE AND COMPLETION OF CONSTRUCTION PRACTICES AND WHERE THEY DO NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD; CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION OR NUISANCE; OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER FEDERAL REGULATIONS 40 CFR, PARTS 117 AND 302.

18. POTENTIAL POLLUTANTS INCLUDE, BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PANTS, STAINS, SEALANTS, GLUES, LIMES, PESTICIDES, HERBICIDES, WOOD PRESERVATIVE AND SOLVENTS; ASBESTOS FIBERS, PLANT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS AND HYDRAULIC, RADIATOR OR BATTER FLUIDS; FERTILIZERS, VEHICLE/EQUIPMENT WASH WATER AND CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES, WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING, AND SUPER CHLORINATED POTABLE WATER LINE FLUSHINGS. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE, PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUN-OFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.

19. THE CONTRACTOR WILL KEEP THE STREETS SWEPT CLEAN, FREE OF TRASH AND DEBRIS, SAFE FOR VEHICULAR AND PEDESTRIAN TRAFFIC WHILE WORK IS IN PROGRESS AND AT THE END OF EACH DAY.

20. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATING WITH OTHER SUBCONTRACTORS AS A REQUIRED TO ACCOMPLISH CONSTRUCTION OPERATIONS.

21. ALL WORK WHICH IS NOT IN THE PUBLIC RIGHT OF WAY SHALL BE DONE AT THE LEAST INCONVENIENCE TO THE PROPERTY OWNER, CONTRACTOR SHALL MINIMIZE DAMAGE TO EXISTING LANDSCAPING, ALL PRIVATE OR PUBLIC WALLS, FENCES, OR SOILS REMOVED FOR THE CONSTRUCTION OF THIS PIPE LINE SHALL BE REPLACED TO MATCH EXISTING, CONTRACTOR SHALL FILL ALL TURF AND LANDSCAPED AREAS TO ORIGINAL GRADE.

22. ALL BACKFILL, COMPACTION, PAVING, CONCRETE RECONSTRUCTION, INCIDENTAL SEWER LINE RECONSTRUCTION, AND TRAFFIC CONTROL SHALL BE INSPECTED BY THE APPROPRIATED CITY OF AZUSA, ALW, OR COUNTY OF LOS ANGELES PUBLIC WORKS INSPECTORS. ALL FOLLOWING WORKS SHALL BE INSPECTED BY THE ALW WATER INSPECTOR:
(A) TRENCHING, BEDDING, AND SHADING
(B) PLACING OF PIPE, VALVES, FITTINGS, AND THRUST BLOCKS
(C) OTHER UNDERGROUND UTILITIES IN PLACE, VERTICAL AND HORIZONTAL CROSSING SEPARATION
(D) LEAKAGE TESTING, FLUSHING, DISINFECTION, AND BACTERIOLOGICAL TESTING
(E) VALVE BOXES RAISED TO GRADE AND LINES FLUSHED
(F) BACKFLOW PREVENTION DEVICE, METER, BLOW-OFF, AND AIR-VAC ASSEMBLIES
(F) FINAL INSPECTION

23. SCARIFY A.C. PAVING BEFORE TRENCHING. IF CUT LINE IS LESS THAN THREE FEET FROM AN EXISTING CUT LINE EXPANSION JOINT, OR EDGE, THE EXISTING PAVEMENT SHALL BE REMOVED TO CUT LINE, EXPANSION JOINT, OR EDGE OR AS DIRECTED BY THE INSPECTOR. SAW CUT P.C.C. SIDE WALK 1" DEEP PRIOR TO REMOVAL OF 3'x3' SECTION FOR TIE IN.

24. TRENCH BACKFILL AND STREET RESURFACING SHALL BE DONE IN ACCORDANCE WITH THE STANDARD PLANS OF THE CITY OF AZUSA OR COUNTY OF LOS ANGELES PUBLIC WORKS DEPARTMENTS RESPECTIVELY. THE CONTRACTOR SHALL REPLACE ALL STREET SIGNING, STRIPING, AND MARKERS IN KIND.

25. CONTRACTOR SHALL NOT BACKFILL TRENCH UNTIL THE INSPECTOR HAS OBTAINED AS-BUILT STATIONING ON ALL STRUCTURES. ALL BACKFILL FOR THE ENTIRE PROJECT SHALL BE 3/4" CRUSHED AGGREGATE BASE UNLESS OTHERWISE SPECIFIED OR APPROVED BY THE CITY OF AZUSA. BACKFILL IN PARKWAY AREAS SHALL BE A SAND SLURRY MIX, CONSISTING OF ONE (1) SACK OF CEMENT PER CUBIC YARD OF SAND, UP TO 12 (TWELVE) INCHES BELOW FINISHED SURFACE.

26. ANY CONCRETE CURB, GUTTER OR SIDEWALK REQUIRING REMOVAL FOR WATER MAIN INSTALLATION OR SERVICE CONNECTION SHALL BE REPLACED IN KIND AND SHALL BE APPROVED BY THE COUNTY OF LOS ANGELES INSPECTOR OR CITY OF AZUSA INSPECTOR. WHEN A CURB RETURN IS REMOVED FOR CONSTRUCTION, CONTRACTOR SHALL PROVIDE A CURB RAMP FOR A NEW CURB RETURN PER CITY OR COUNTY STANDARD PLAN.

27. COMPACTION TEST SHALL BE REQUIRED FOR ALL TRENCH BACKFILL IN ACCORDANCE WITH THE CITY OF AZUSA STANDARDS. CONTACT THE CITY ENGINEER TO SET TIMES AND LOCATIONS OF TESTS. CONTRACTOR TO PAY FOR ALL TESTS.

28. THE CONTRACTOR SHALL CONTACT THE CITY OF AZUSA AND L.A. COUNTY ENGINEERING OFFICE FOR INFORMATION REGARDING TRAFFIC LOOPS. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR COST INCURRED DUE TO REPLACEMENT OF ANY DAMAGED TRAFFIC LOOP.

29. REFER TO CITY OF AZUSA AND L.A. COUNTY PLAN FOR REPAIR OF OPEN TRENCH.

PLUMBING GENERAL NOTES

1. THIS WATER SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS, CURRENT AZUSA LIGHT & WATER (ALW) STANDARDS & SPECIFICATIONS, CITY OF AZUSA, COUNTY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS STANDARDS PLANS, SECTION 306 OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" LATEST EDITION, AND SUBSEQUENT EDITIONS, ALL WORK SHALL BE SUBJECT TO THE ALW WATER INSPECTOR'S ACCEPTANCE AS A CONDITION OF COMPLETION OF WORK BY THE CONTRACTOR. IN ADDITION, ALL TRENCH BACKFILL, A.C. PAVING, AND CONCRETE REPLACEMENT SHALL BE SUBJECT TO THE CITY ENGINEER'S ACCEPTANCE AS A CONDITION OF COMPLETION OF WORK BY THE CONTRACTOR.

2. THE CONTRACTOR SHALL HAVE THE PROJECT LIMITS MARKED BY U.S.A. (DIGALERT) AT LEAST TWO WORKING DAYS PRIOR TO STARTING CONSTRUCTION AND SHALL BE BE RESPONSIBLE FOR MAKING HIM/HER SELF FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPES, AND STRUCTURES. THE CONTRACTOR SHALL VERIFY SITE CONDITIONS AND MAKE NECESSARY POT HOLES, NOTIFY THE VARIOUS UTILITIES TO MAKE NECESSARY ARRANGEMENTS FOR ANY RELOCATION OF THESE UTILITIES WITH THE OWNER OF THE UTILITY. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE RELOCATION OF VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT, NO EXTRA COMPENSATION WILL BE ALLOWED, CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR COST INCURRED DUE TO DAMAGE AND REPLACEMENT OF SAID UTILITIES. ALL U.S.A. MARKS SHALL BE CLEANED AND REMOVED WHEN THE PROJECT IS COMPLETED.

3. THE EXISTENCE AND LOCATION OF ALL UTILITIES, IMPROVEMENTS, AND STRUCTURES SHOWN ON THE PLANS ARE APPROXIMATE AND TAKEN FROM AVAILABLE RECORDS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THEIR LOCATION AND PROTECT THEM IN PLACE REGARDLESS IF THEY ARE SHOWN ON THE PLANS OR NOT.

4. CONTRACTOR SHALL POT HOLE AND EXPOSE ALL UTILITIES THAT MAY CONFLICT WITH THE SCOPE OF WORK OF THE PROJECT. THIS SHALL BE DONE FAR ENOUGH IN ADVANCE SO THAT SUFFICIENT TIME IS AVAILABLE FOR THE CONTRACTOR TO MAKE THE NECESSARY ADJUSTMENTS TO CLEAR THESE UTILITIES. THESE ADJUSTMENTS SHALL BE MADE AT THE SOLE EXPENSE OF THE CONTRACTOR.

5. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION TRAFFIC CONTROL AND CONSTRUCTION PHASING PLAN TO THE CITY OF AZUSA AND/OR COUNTY OF LOS ANGELES PUBLIC WORKS DEPARTMENT FOR APPROVAL. THE CONTRACTOR SHALL POST CUSTOM SIGNS AT RELATED INTERSECTIONS SO AS TO INFORM THE PUBLIC OF THE TIME LINE OF THE UPCOMING PROJECT AND ADVISE COMMUTERS TO CONSIDER ALTERNATE ROUTES. SUCH SIGNS SHALL BE IN PLACE A MINIMUM OF (10) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

6. PRIOR TO CONSTRUCTION OF THE WATER MAIN, THE CONTRACTOR, AT HIS OWN EXPENSE SHALL OBTAIN ALL NECESSARY PERMITS TO EXPOSE THE EXISTING WATER LINE WHERE CONNECTIONS AND CROSSINGS WILL OCCUR AND VERIFY THEIR ELEVATION AND LOCATION. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS AND/OR DISCREPANCIES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. THE ALW DEPARTMENT WATER SYSTEM ENGINEER & WATER ENGINEER SHALL BE CONSULTED TO MAKE ANY/ALL REQUIRED INTERPRETATIONS OF THE PLANS. HOWEVER, THIS IN NO WAY RELIEVES THE CONTRACTOR OF HIS RESPONSIBILITY FOR CONSTRUCTING THE PROJECT TO ACCOMPLISH THE INTENT OF THE PLANS. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO A FAILURE TO GIVE SUCH NOTIFICATION.

7. ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTOR AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATION" OF THE U.S. DEPARTMENT OF LABOR AND WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS "CONSTRUCTION SAFETY ORDERS."

8. THE INSTALLING CONTRACTOR SHALL BE A CALIFORNIA LICENSED "A" OR "C-34" CONTRACTOR FOR ALL WORK ON ALW PUBLIC WATER FACILITIES.

9. CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, THE ENGINEER, L.A. COUNTY, THE CITY OF AZUSA, AND ALW AND HIS/HER REPRESENTATIVE, HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.

10. CONTRACTOR SHALL SUBMIT THEIR SURVEY RECORDS TO THE CITY ENGINEER AND SHALL PROVIDE ALL THE NECESSARY SURVEY AND 'AS-BUILT' PLANS TO THE ALW INSPECTOR PRIOR TO FINAL INSPECTION.

11. CONTRACTOR SHALL OBTAIN CONSTRUCTION/ENCROACHMENT PERMITS FROM THE CITY OF AZUSA, ALW, AND THE COUNTY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS PRIOR TO ANY WORK.

12. ALL INSPECTION REQUESTS MUST BE MADE 48 HOURS PRIOR TO THE DESIRED DATE OF INSPECTION.

13. THE CONTRACTOR SHALL NOTIFY THE CITY OF AZUSA, ALW, AND THE COUNTY OF LOS ANGELES, DEPARTMENT OF PUBLIC WORKS FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION AND AT LEAST (2) WORKING DAYS NOTICE WHEN INSPECTIONS OR ENGINEERING JUDGEMENT BECOMES NECESSARY AS SET FORTH IN THE STANDARDS.

14. TEMPORARY CONSTRUCTION METERS SHALL BE OBTAINED FROM ALW WITH A DEPOSIT PER THE CURRENT ALW FEE SCHEDULE.

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CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

Project Title
HARADA HOUSE
PHASE 2

Sheet Title
PLUMBING
GENERAL NOTES

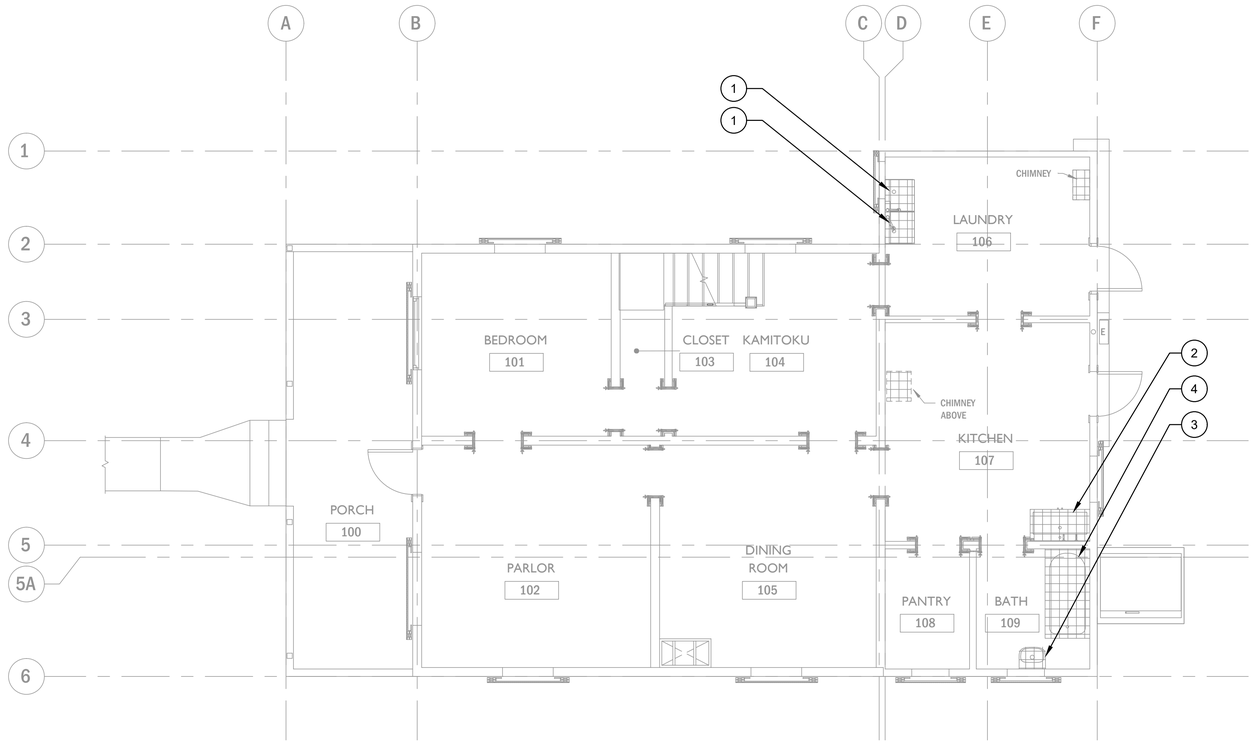
Design Stage

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
N.T.S

Date

Sheet Number
P-0.2



1/4"=1'-0" 0 2' 4' 8' 12'

PLUMBING COLD AND HOT WATER FIRST FLOOR PLAN

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

1 / P-2.1

GENERAL NOTES

A. ALL PIPING SHOWN ON THIS PLAN SHALL BE CONCEALED WITHIN WALLS, FLOORS, OR CEILINGS UNLESS OTHERWISE NOTED.

B. REFER TO RISER DIAGRAMS FOR ALL PIPE SIZES.

C. PIPING ABOVE THE DRIVEWAY ON THIS PLAN SHALL MAINTAIN A MINIMUM CLEARANCE OF 8'-2" FROM THE FINISHED FLOOR, PER ADA VAN CLEARANCE REQUIREMENTS.

D. SOME UNITS MAY HAVE MIRRORED LAYOUTS COMPARED TO THE LAYOUTS SHOWN ON THIS SHEET.

E. ALL PIPE PENETRATIONS AT THE ROOF SHALL BE PROPERLY SEALED BY THE INSTALLING ROOFING CONTRACTOR.

CONSTRUCTION NOTES

1. INSTALL REFURBISHED LAUNDRY SINK.
2. INSTALL REFURBISHED KITCHEN SINK.
3. INSTALL REFURBISHED LAVATORY.
4. INSTALL REFURBISHED BATHTUB.

KEY PLAN

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Project Title
HARADA HOUSE
PHASE 2

Sheet Title
PLUMBING COLD AND HOT WATER FIRST FLOOR PLAN

Design Stage

Project Address
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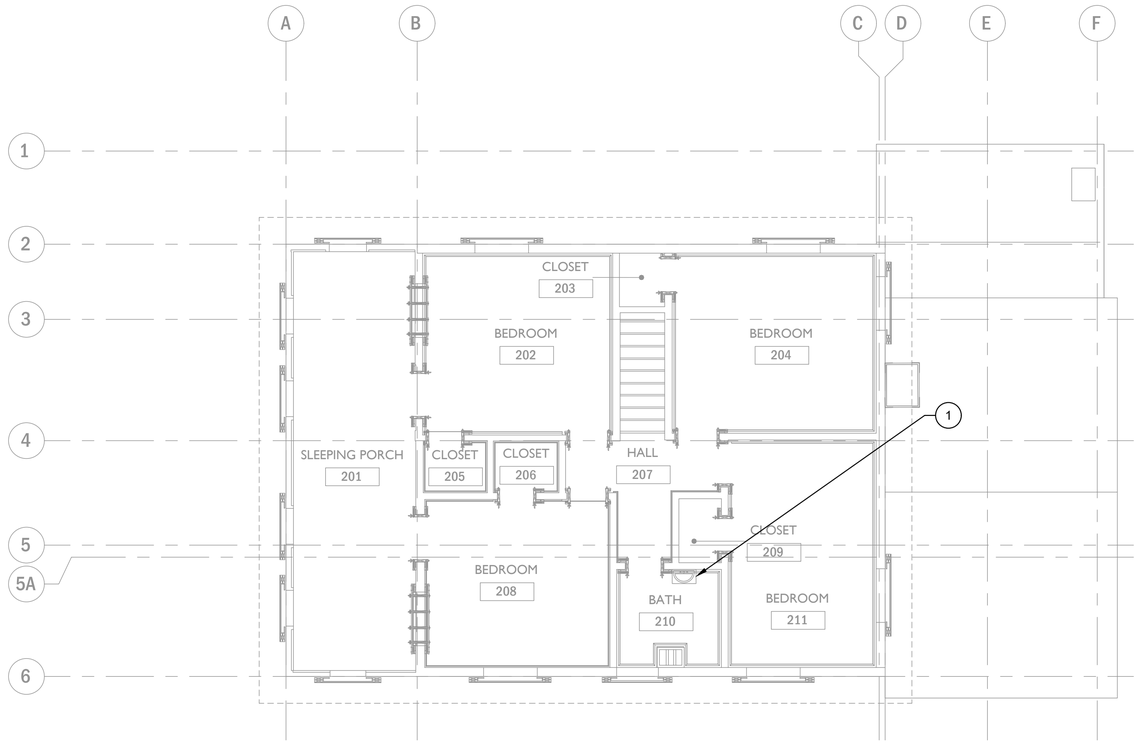
Riverside, CA
92501

Scale
1/4" =1'-0"

Date

Sheet Number
P-2.1



1/4"=1'-0" 0 2' 4' 8' 12'

PLUMBING COLD AND HOT WATER SECOND FLOOR PLAN

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

1 / P-2.2

GENERAL NOTES

A. ALL PIPING SHOWN ON THIS PLAN SHALL BE CONCEALED WITHIN WALLS, FLOORS, OR CEILINGS UNLESS OTHERWISE NOTED.

B. REFER TO RISER DIAGRAMS FOR ALL PIPE SIZES.

C. PIPING ABOVE THE DRIVEWAY ON THIS PLAN SHALL MAINTAIN A MINIMUM CLEARANCE OF 8'-2" FROM THE FINISHED FLOOR, PER ADA VAN CLEARANCE REQUIREMENTS.

D. SOME UNITS MAY HAVE MIRRORED LAYOUTS COMPARED TO THE LAYOUTS SHOWN ON THIS SHEET.

E. ALL PIPE PENETRATIONS AT THE ROOF SHALL BE PROPERLY SEALED BY THE INSTALLING ROOFING CONTRACTOR.

CONSTRUCTION NOTES

1 INSTALL REFURBISHED LAVATORY.

KEY PLAN

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Sheet Title
PLUMBING COLD AND HOT WATER SECOND FLOOR PLAN

Design Stage

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P-2.2

P-2.2A PLUMBING SECOND FLOOR PLAN.DWG

ELECTRICAL SYMBOLS LIST (AS IT OCCURS)

POWER SYMBOLS LIST

- DUPLEX RECEPTACLE OUTLET, 125V, 20 AMP, WALL MOUNTED.
- USB — POP UP POWER GROMMET w/ 1 POWER/ 1 DUAL USB CHARGER FOR DESKS MOCKETT PCS82A/U1 OR EQUAL
- QUAD RECEPTACLE OUTLET, 125V, 20 AMP, WALL MOUNTED.
- QUAD RECEPTACLE OUTLET, 125V, 20 AMP, FLOOR MOUNTED
- C — QUAD RECEPTACLE OUTLET, 125V, 20 AMP, CEILING MOUNTED
- SPLIT WIRED DUPLEX RECEPTACLE OUTLET, 125V, 20 AMP, WALL MOUNTED. BOTTOM RECEPTACLE IS TO BE SWITCHED CONTROLLED. USE GRAY COLORED RECEPTACLE TO INDICATE SWITCHED RECEPTACLE.
- DEDICATED RECEPTACLE WITH SPECIFIC NEMA CONFIGURATION. WALL MOUNTED.
- W.P. — GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE, 125V, 20A. INDICATES WEATHERPROOF COVER.
- USB — DUPLEX RECEPTACLE OUTLET w/DUAL USB CHARGER, 125V, 20 AMP, WALL MOUNTED.
- JUNCTION BOX CEILING MOUNTED.
- JUNCTION BOX WALL MOUNTED.
- PB — PULLBOX
- DISCONNECT SWITCH. H.P. RATED, PER EQUIPMENT FLA, 2P U.O.N. "F" INDICATES FUSED, PROVIDE FUSE SIZE PER MANUFACTURER RECOMMENDATIONS. PROVIDE NEMA-3R IN EXTERIOR LOCATIONS.
- COMBINATION FUSED MOTOR DISCONNECT SWITCH AND MAGNETIC MOTOR STARTER SIZED ACCORDING TO MOTOR MANUFACTURER RECOMMENDATIONS. HOA, (2) FORM C CONTROL CONTACTS, STARTER SIZE 1 U.O.N., SOLID STATE ADJUSTABLE OVER-LOAD PROTECTION, MOUNTED ON INDEPENDENT SUPPORT.

SWITCHING/LIGHTING CONTROL SYMBOLS LIST

- S — MANUAL ON-OFF TOGGLE SWITCH IN FLUSH OR SURFACE WALL OUTLET BOX +42" AFF TO TOP OF BOX OF SWITCH.
- S_3 — 3 WAY SWITCH, WALL MOUNTED, +48" AFF.
- S_{3OS} — 3 WAY SWITCH WITH OCC SENSOR, WALL MOUNTED, +48" AFF.
- S_{3DOS} — 3 WAY OCCUPANCY DIMMER SWITCH WALL MOUNTED, +48" AFF.
- S_D — DIMMING SWITCH, WALL MOUNTED, +48" AFF.(MEASURED TO THE BOTTOM OF THE BOX).
- OCCUPANCY SENSOR w/MANUAL OVERRIDE FOR LIGHTING CONTROL, SURFACE WALL MOUNTED, AS SPECIFIED. PROVIDE DUAL SWITCHING CAPABILITY PER TITLE 24 WHERE REQUIRED.
- OS — CEILING MOUNTED OCCUPANCY SENSOR
- LCP — LIGHTING CONTROL PANEL WITH 120V RELAYS AS INDICATED ON PLAN.
- DS — CEILING MOUNTED DAYLIGHT SENSOR

DATA, AUDIO VIDEO SYMBOLS LIST

- DATA(LAN) WALL OUTLET +18" AFF U.O.N., 1-CAT5E CABLE BACK TO MEDIA PANEL
- TELEPHONE WALL OUTLET +18" AFF U.O.N., 1-CAT5E CABLE BACK TO MEDIA PANEL
- TELEPHONE/DATA(LAN) WALL OUTLET COMBO +18" AFF U.O.N., 2-CAT5E CABLES BACK TO MEDIA PANEL
- TV — RG-6(TELEVISION COAXIAL CABLE) WALL OUTLET +18" AFF U.O.N. , RG-6 CABLE BACK TO MEDIA PANEL
- TV — DATA+TV WALL OUTLET COMBO +18" AFF U.O.N., 1-CAT5E+RG-6 CABLE BACK TO MEDIA PANEL
- TV — PHONE+TV WALL OUTLET COMBO +18" AFF U.O.N., 1-CAT5E+RG-6 CABLE BACK TO MEDIA PANEL
- TV — PHONE/DATA+TV WALL OUTLET COMBO+18" AFF U.O.N, 2-CAT5E+1RG-6 CABLE BACK TO MEDIA PANEL

GENERAL NOTES

1. CONSULT WITH THE OWNER AUTHORIZED REPRESENTATIVE (OAR) PRIOR TO STARTING WORK.
2. THE CONTRACTOR SHALL USE SUFFICIENT BARRICADES AND TEMPORARY PROTECTION DEVICES TO PREVENT PEDESTRIANS OR NON-AUTHORIZED PERSONNEL ACCESS TO ANY OPEN TRENCHES OR CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL ERECT A SAFETY BARRICADE AT ALL OPEN TRENCHES, DITCHES, PITS, SUMPS, ETC FOR THE PROTECTION AND SAFETY OF THE PUBLIC. ALL TRENCHES OUTSIDE OF THE BARRICADE LIMITS SHALL BE BACKFILLED AND PAVED NOT LATER THAN 72 HOURS AFTER BEING OPENED. DURING THE TIME THE TRENCHES ARE OPEN IN TRAFFIC AREAS, THE CONTRACTOR SHALL PROVIDE TRAFFIC PLATES. SAFETY BARRICADES SHALL BE PANELIZED CHAIN LINK FENCE. EACH FENCE PANEL SHALL BE 6FT TALL X 10FT WIDE WITH STAND AND TIED TOGETHER END TO END WITH A MINIMUM 8-GAUGE WIRE. NO TRENCHES SHALL BE LOCATED OUTSIDE BARRICADES.
3. THE REPRESENTATION OF PHYSICAL PLACEMENT OF EXISTING UNDERGROUND CONDUITS HAS BEEN DEVELOPED FROM THE BEST INFORMATION AVAILABLE TO THE OWNER AT THE TIME THE DRAWINGS WERE PREPARED. THE OWNER PROVIDES THIS ONLY AS A GENERAL GUIDELINE FOR THE CONVENIENCE OF BIDDERS/CONTRACTORS AND DOES NOT PROVIDE A GUARANTEE OR WARRANTY IN ANY WAY EXPRESS OR IMPLIED, AS TO THE ACCURACY OF THESE REPRESENTATIONS. NOTHING IN THIS DISCLAIMER AFFECTS IN ANY WAY THE DUTY OF THE CONTRACTOR TO FURNISH ACCURATE "AS BUILT" DRAWINGS AFTER THE COMPLETION OF THE CONTRACT.
4. ALL FEEDERS AND BRANCH CIRCUITS SHALL CARRY A GROUND WIRE, SIZED AS PER N.E.C. ARTICLE 250.
5. REFER TO THE PLANS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT AND MATERIAL APPROVED FOR USE UNDER THIS CONTRACT.
6. PRIOR TO PULLING ANY CONDUCTORS, CLEAN AND MANDREL ALL CONDUITS.
7. CONTRACTOR SHALL INSTALL EQUIPMENT PER ADA (AMERICAN DISABILITIES ACT) REQUIREMENTS.
8. EXTERIOR EQUIPMENT, JUNCTION BOXES, ENCLOSURES AND CONNECTIONS SHALL BE WEATHERPROOF TYPE SUITABLE FOR EXTERIOR INSTALLATION.(MALLEABLE IRON FITTINGS).
9. IN THE EVENT THAT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE CONSTRUCTION DOCUMENTS, THE FEATURES SHALL BE OF THE SAME CHARACTER AS SIMILAR CONDITIONS THAT ARE SHOWN.
10. ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDUITS SHALL BE ON SITE BY GENERAL CONTRACTOR, AND EACH SUB-CONTRACTOR BEFORE THE WORK BEGINS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE OAR'S ATTENTION BEFORE CONSTRUCTION BEGINS.
11. THE ENGINEER HAS PREPARED THESE DOCUMENTS ONLY FOR IMPROVEMENTS SPECIFIED, DETAILED OR SHOWN AS NEW WORK, AND ASSUMES NO RESPONSIBILITY FOR OTHER CONSTRUCTION, MATERIAL OR EQUIPMENT NOTED AS "PROVIDED BY OTHERS".
12. DEMOLITION AND/OR REMOVAL OF ELECTRICAL EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. ALL REMOVED EQUIPMENT NOT TO BE REUSED SHALL BE RETURNED TO OWNER OR AS DIRECTED BY THE OWNER INSPECTOR.
13. ALL JUNCTION BOX COVER PLATES FOR BRANCH CIRCUIT SYSTEM SHALL BE CLEARLY MARKED WITH PERMANENT INK FELT PEN IDENTIFYING THE BRANCH CIRCUIT (BOTH PANEL NUMBER AND CIRCUIT NUMBER) CONTAINED IN THE BOX.
14. THE CONTRACTOR SHALL MAINTAIN THE UNIFORMITY AND CONTINUITY OF THE GROUNDING SYSTEM IN ALL CONDUITS/RACEWAYS.
15. TEST THE ENTIRE SYSTEM TO DEMONSTRATE TO THE OAR THAT THE ELECTRICAL COMPONENTS AND SPECIAL SYSTEMS ARE COMPLETE AND FUNCTION PROPERLY. MAKE NECESSARY CORRECTIONS AND LEAVE SYSTEMS READY FOR OPERATION.
16. DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND THE SIZE AND LOCATION OF EQUIPMENT IS INDICATED TO SCALE WHENEVER POSSIBLE. COORDINATE LOCATION AND LAYOUT WITH OTHER WORK. CONTRACTOR SHALL PROVIDE TO THE ENGINEER A 1/4"=1'-0" OF SCALED DRAWING OF ELECTRICAL EQUIPMENT ROOMS SHOWING LOCATION AND CLEARANCES OF SUBMITTED EQUIPMENT FOR REVIEW AND APPROVAL PRIOR TO ORDERING OF ELECTRICAL EQUIPMENT.
17. PROVIDE HANGERS, SUPPORTS, SEISMIC RESTRAINTS AND/ OR BRACING FOR ALL EQUIPMENT, CONDUIT, AND LIGHTING FIXTURES TO SUSTAIN VERTICAL LOADS AND RESIST HORIZONTAL FORCES IN ANY DIRECTION TO COMPLY WITH 2022 EDITION OF TITLE 24, PART 2,CALIFORNIA BUILDING CODE, CHAPTER 16.
18. PER CEC 300.21, "OPENINGS AROUND ELECTRICAL PENETRATIONS THROUGH FIRE-RESISTANT-RATED WALLS, PARTITIONS, FLOORS, CEILINGS SHALL BE FIRE STOPPED USING APPROVED METHODS TO MAINTAIN THE FIRE RESISTANCE RATING."
19. ALL CONDUCTORS FOR FEEDERS AND BRANCH CIRCUITS SHALL BE COPPER, TYPE THWN/THHN, RATED FOR 75°C. SIZES #12 AWG MAY BE SOLID OR STRANDED, #10 AND LARGER SHALL BE STRANDED. PROVIDE 75°C RATED AND APPROVED TERMINATION FOR ALL CONDUCTORS.
20. ALL ELECTRICAL WORK SHALL BE PER THE APPLICABLE 2022 CEC CODE. CONTRACTOR SHALL INCLUDE IN HIS BID ALL REQUIRED LABOR, MATERIAL, EXPERTISE AND QUALIFIED PERSONNEL TO COMPLETELY INSTALL IN A CODE COMPLIANT MANNER, ALL WORK SHOWN ON THE PLANS.
21. WHEN THERE ARE DISCREPANCIES BETWEEN CONTRACT DOCUMENTS (DRAWINGS), OBTAIN CLARIFICATION FROM THE ENGINEER PRIOR TO BID. FOR BIDDING PURPOSES, THE MORE STRINGENT OR MORE EXPENSIVE REQUIREMENT(S) SHALL APPLY.
22. DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN A DAILY RECORD OF ALL DEVIATIONS FROM THE BID DRAWINGS. ALL DIMENSIONS AND OTHER INFORMATION NECESSARY TO COMPLETELY EXPLAIN AND LOCATE ALL ELEMENTS OF THESE DEVIATIONS SHALL BE RECORDED. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL SUBMIT TO THE OWNER, ONE COMPLETE SET OF REPRODUCIBLE DRAWINGS CORRECTED TO REFLECT "AS-BUILT" CONDITIONS OF THE WORK.
23. ANY SUBMITTALS FOR EQUIPMENT DIFFERENT FROM THE SPECIFIED ITEMS SHOWN ON THE PLANS SHALL BE ACCOMPANIED BY CUT SHEETS FOR THE ORIGINAL SPECIFIED ITEM(S). SUBMITTALS WITHOUT THE SPECIFIED CUT SHEETS WILL BE REJECTED AS INCOMPLETE.
24. "PROVIDE" SHALL BE DEFINED AS: FURNISH AND INSTALL.
25. ALL MATERIALS, EQUIPMENT, CONDUIT AND WIRING SHALL BE NEW AND PROVIDED BY THE CONTRACTOR. REFER TO THE PLANS FOR ADDITIONAL REQUIREMENTS FOR EQUIPMENT AND MATERIAL APPROVED FOR USE UNDER THIS CONTRACT.
26. PROVIDE ELECTRICAL PANELS WITH TYPEWRITTEN "AS-BUILT" PANEL SCHEDULE. PANEL SCHEDULE SHALL INCLUDE LOCATION, QUANTITY AND TYPE OF DEVICES SERVED. PANEL SCHEDULE SHALL BE REVISED AS REQUIRED TO REFLECT REMOVED OR DEMOLISHED CIRCUITS.
27. THE SEISMIC ANCHORAGE OF ELECTRICAL EQUIPMENT SHALL CONFORM TO C.C.R. 2022 CHAPTER 16 AND ASCE 7-22 CHAPTER 13 SECTION 13.6.3.
28. CONTRACTOR SHALL SUBMIT CALCULATIONS AND DETAILS FOR APPROVAL WHEN USING AN INSTALLATION METHOD NOT COVERED UNDER ANY OF THE STRUCTURAL DRAWINGS STANDARD DETAILS.
29. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LATEST APPLICABLE CODES AND REGULATIONS PER CALIFORNIA AND OTHER AUTHORITIES HAVING JURISDICTION.
30. ALL MATERIALS, EQUIPMENT, CONDUIT AND WIRING SHALL BE NEW AND PROVIDED BY THE CONTRACTOR. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR EQUIPMENT AND MATERIAL APPROVED FOR USE UNDER THIS CONTRACT.
31. WIRING FOR ALL LOW VOLTAGE SYSTEMS SHALL BE ENCLOSED IN CONDUIT AND/OR RACEWAY.
32. ALL RACEWAYS INSIDE OF BUILDING SHALL BE CONCEALED. INCLUDE ALL REQUIRED DEMOLITION, CUTTING, PATCHING AND FINISH TO MATCH EXISTING INSTALLATION AS REQUIRED TO INSTALL NEW CONDUIT AND RACEWAYS IN EXISTING BUILDING.
33. ALL CONDUIT PENETRATIONS THROUGH FIRE-RATED FLOOR SLABS, SHAFTS AND WALLS SHALL BE SEALED AGAINST THE SPREAD OF FIRE OR SMOKE WITH APPROVED CABLE & CONDUIT FIRE STOPS OR FIRE RESISTANT SEALANT TO GIVE THE EQUIVALENT FIRE RATING OF THE STRUCTURE BEFORE THE PENETRATION. ALL OTHER NON-RATED PENETRATIONS OF STRUCTURES SHALL BE SEALED.
34. EXPOSED AND CONDUITS ABOVE T-BAR CEILINGS SHALL BE INSTALLED PARALLEL TO OR AT RIGHT ANGLES TO EXISTING BEAMS OR WALLS. EXPOSED CONDUITS UP TO 7'-0" ABOVE FINISH FLOOR SHALL BE RIGID GALVANIZED STEEL AND ABOVE 7'-0" MAY BE NEW.
35. PROVIDE ELECTRICAL PANELS WITH ENGRAVED NAMEPLATE ON OUTSIDE OF PANEL ABOVE DOOR OPENING.
36. SUPPORT CONDUIT 2-1/2 INCH TRADE SIZE OR SMALLER WITH U.L. LISTED CLAMPS AND HANGERS IN ACCORDANCE WITH SMACNA STANDARDS.
37. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL ADDITIONAL DESIGN AND CONSTRUCTION COSTS INCURRED BY THE USE OF ANY PRODUCT OTHER THAN THE BASIS OF DESIGN.
38. PROVIDE AN INDIVIDUAL NEUTRAL CONDUCTOR FOR MULTIWIRE BRANCH CIRCUITS.
39. THESE PLANS ARE DIAGRAMMATIC, CONDUIT EXACT ROUTING, BOXES, FASTENERS, ETC. ARE CONSIDERED AS PART OF THE MEANS AND METHODS THAT THE CONTRACTOR IS USING TO PROVIDE AN OPERABLE AND APPROVED INSTALLATION.
40. 110.2 APPROVAL: ALL ELECTRICAL EQUIPMENT SHALL BE LABELED, LISTED OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCREDITED BY THE UNITED STATES OCCUPATIONAL SAFETY HEALTH ADMINISTRATION.
41. 130.5(c) VOLTAGE DROP: THE MAXIMUM COMBINED VOLTAGE DROP ON BOTH INSTALLED FEEDER CONDUCTORS AND BRANCH CIRCUIT CONDUCTORS TO THE FARTHEST CONNECTED LOAD OR OUTLET SHALL NOT EXCEED 5 PERCENT.

MISC. SYMBOLS LIST

- CONDUIT SYSTEM RISER UP.
- CONDUIT SYSTEM RISER DOWN.

ELECTRICAL EQUIPMENT SYMBOLS LIST

- FLUSH MOUNTED/ WALL RECESSED PANELBOARD.
- SURFACE MOUNTED PANELBOARD.
- LIGHTING CONTROL PANEL FLUSH MOUNTED.
- FLOOR STANDING SWITCHBOARD.
- T — PAD MOUNTED TRANSFORMER.

STANDARD ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
A OR AMP	AMPERES
A/C	ASPHALT CONCRETE
AIC	AMPERE INTERRUPTING CAPACITY
BKR.	BREAKER
BC	BARE COPPER
C	CONDUIT
CKT.	CIRCUIT
C.O.	CONDUIT ONLY
(E)	EXISTING
(ER)	RELOCATED EXISITING EQUIPMENT IN NEW LOCATION
EQPT.	EQUIPMENT
F.O.	FIBER OPTIC
GFI, G.F.I.	GROUND FAULT INTERRUPTER
J.BOX	JUNCTION BOX
IDF	INTERMEDIATE DISTRIBUTION FRAME (COMPUTER/NETWORKING SYSTEM)
LDF	LOCAL DISTRIBUTION FRAME (COMPUTER/NETWORKING SYSTEM)
MDF	MAIN DISTRIBUTION FRAME (COMPUTER/NETWORKING SYSTEM)
M.H.	MOUNTING HEIGHT
MISC.	MISCELLANEOUS
(N)	NEW
N.I.C.	NOT IN CONTRACT
PA	PUBLIC ADDRESS
PH OR Ø	PHASE
(R)	REMOVE
(RR)	REMOVE & RELOCATE EXISTING EQUIPMENT
REV.	REVISED
RSP	REMOTE SECURITY PANEL
SLC	SIGNALING LINE CIRCUIT
SW	SWITCH
XFMR	TRANSFORMER
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
TYP.	TYPICAL
UFER	UFER GROUND
UG	UNDERGROUND
U.O.N.	UNLESS OTHERWISE NOTED
WM	WIREMOLD
WP	WEATHERPROOF
W.P.	WEATHERPROOF
V.L.	VERIFY LOCATION.

APPLICABLE CODES

PART 1 - 2022 CALIFORNIA ADMINISTRATIVE CODE, TITLE 24 CCR
PART 2 - 2022 CALIFORNIA BUILDING CODE, TITLE 24 CCR (2021 IBC)
PART 3 - 2022 CALIFORNIA ELECTRICAL CODE, TITLE 24 CCR (2020 NEC OF THE NFPA)
PART 4 - 2022 CALIFORNIA MECHANICAL CODE, TITLE 24 CCR (2021 IMC OF THE IAPMO)
PART 5 - 2022 CALIFORNIA PLUMBING CODE, TITLE 24 CCR (2021 IPC OF THE IAPMO)
PART 6 - 2022 CALIFORNIA ENERGY CODE, TITLE 24 CCR
PART 9 - 2022 CALIFORNIA FIRE CODE, TITLE 24 CCR (2021 IFC OF THE ICC)
PART 10 - 2022 CALIFORNIA EXISTING BUILDING CODE (2021 EXISTING IBC)
PART 12 - 2022 CALIFORNIA REFERENCED STANDARDS, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHALL REGULATIONS

WIRING LEGEND (AS IT OCCURS)

- 3/4"C. 2 #12 + #12 GND.
- // — 3/4"C. 3#12, + #12 GND.
- /// — 3/4"C. 4#12, + #12 GND.
- //// — 1"C. 5 #12 + #12 GND.
- ///// — 1"C. 6 #12 + #12 GND.
- ////// — 1-1/4"C. 7 #12 + #12 GND.
- /////// — 1-1/4"C. 8 #12 + #12 GND.
- CONDUIT: EXPOSED IN UNFINISHED AREA.
- CONDUIT:CONCEALED ABOVE CEILING OR IN WALL IN FINISHED AREAS.
- CONDUIT: IN OR BELOW FLOOR OR BELOW GRADE. SIZE & NUMBER OF CONDUCTORS AS NOTED.
- A-1,3,5 — HOMERUN TO PANEL "A", CIRCUITS 1,3,5. EQUIPMENT GROUNDING CONDUCTOR IS NOT REPRESENTED IN THE CROSS MARKS BUT IS TO BE INCLUDED IN ALL RACEWAYS.

ELECTRICAL SHEET INDEX

E-0.1	ELECTRICAL FRONT SHEET
E-1.1	ELECTRICAL DEMOLITION SITE POWER PLAN
E-1.2	ELECTRICAL DEMOLITION FIRST FLOOR POWER PLAN
E-1.3	ELECTRICAL DEMOLITION SECOND FLOOR POWER PLAN
E-2.1	ELECTRICAL SITE POWER PLAN
E-2.2	ELECTRICAL FIRST FLOOR POWER PLAN
E-2.3	ELECTRICAL SECOND FLOOR POWER PLAN

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ELECTRICAL FRONT SHEET

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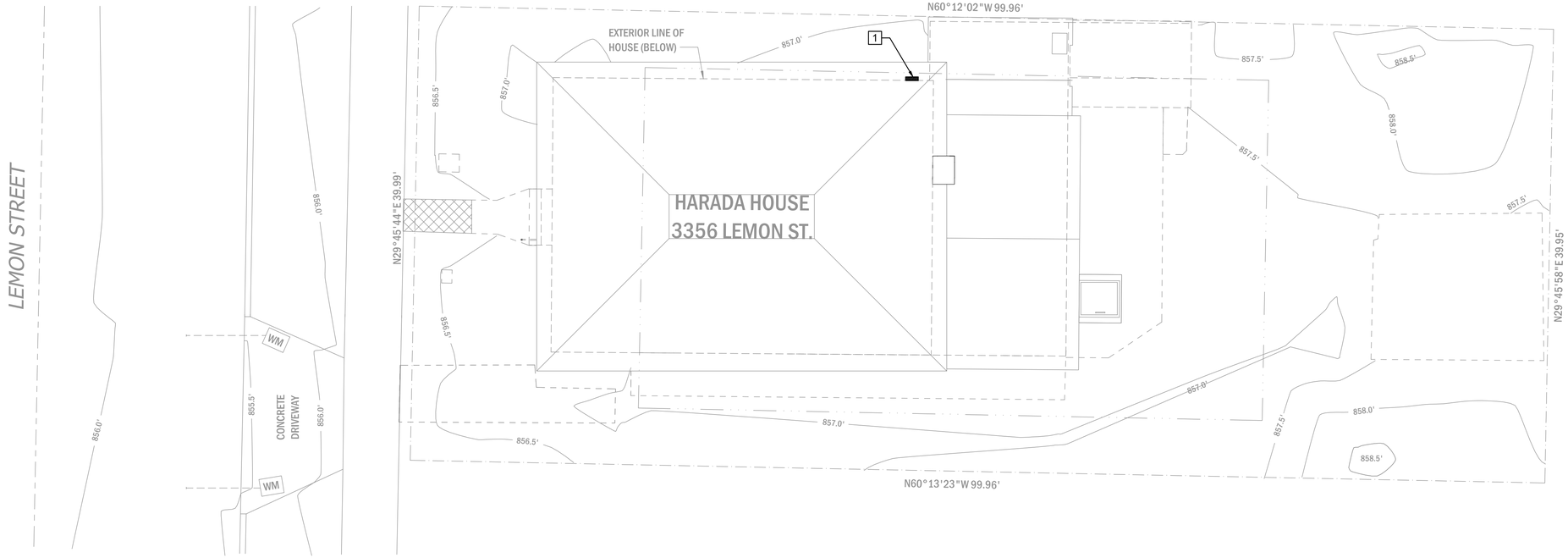
E-0.1

E-0.1 ELECTRICAL FRONT SHEET.DWG



3/16"=1'-0" 0' 2' 8' 16'

ELECTRICAL DEMOLITION SITE POWER PLAN

SCALE: 3/16" = 1'-0"

1 / E-1.1

GENERAL NOTES

A. THE CONTRACTOR SHALL VISIT THE PROJECT SITE TO VERIFY ALL EXISTING CONDITIONS IN RELATION TO THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS. ANY DISCREPANCIES NOTED BETWEEN THE EXISTING CONDITIONS AND THE APPROVED CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO SUBMITTING OF BIDS.

B. SCHEDULING AND PHASING FOR DEMOLITION WORKS SHALL BE UNDERTAKEN WITH MINIMAL DISRUPTIONS ON THE OPERATIONS ON THE ELECTRICAL SYSTEMS OF THE AREAS/BUILDINGS/ROOMS NOT INCLUDED IN THE PROJECT SCOPE OF WORK.

C. EQUIPMENT SHOWN IN THE DRAWINGS TO BE REMOVED SHALL BE TAKEN OUT FROM THE SITE DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS AND ENVIRONMENTAL REGULATIONS. EQUIPMENT REQUIRED TO BE TURNED OVER TO THE OWNER SHALL BE PLACED IN A LOCATION ACCEPTABLE TO THE OWNER.

D. CONTRACTOR TO FIELD VERIFY EXISTING CONDITION PRIOR TO START OF ANY DEMOLITION WORK AND REPORT ANY DISCREPANCIES NOTED TO THE ENGINEER-ON-RECORD (EOR).

E. CONTRACTOR TO DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES AS SHOWN ON PLANS. DISCONNECT AND REMOVE THE EXISTING EQUIPMENT INCLUDING THE ASSOCIATED CONDUIT AND WIRING BACK TO SOURCE.

F. MAINTAIN CONTINUITY OF EXISTING EQUIPMENT, DEVICES, CONDUIT AND WIRING TO REMAIN. PROVIDE NEW CONDUIT AND WIRING TO EXTEND EXISTING CIRCUITS AS MAY BE REQUIRED.

G. DISCONNECT, REMOVE AND RELOCATE ANY BRANCH CIRCUIT CONDUITS THAT ARE IN CONFLICT WITH NEW CONSTRUCTION WORK. THE CONTINUITY OF ANY PART OF THE CIRCUITS TO REMAIN SHALL BE MAINTAINED AND KEEP IN OPERABLE CONDITION.

H. PROTECT EXISTING ELECTRICAL EQUIPMENT AND INSTALLATION SHOWN TO TO REMAIN. IF DAMAGED WHILE UNDERTAKING THE WORK, REMOVE THE DAMAGED SYSTEM OR EQUIPMENT AND REPLACE REPLACE WITH THE SAME OR EQUIVALENT PRODUCT OF EQUAL CAPACITY AND TECHNICAL SPECIFICATIONS.

I. WHEN NEW WORK INTERFERES WITH EXISTING EQUIPMENT OR SYSTEM WORK OR OTHER TRADES, DISCONNECT, REMOVE AND RELOCATE SAID EQUIPMENT OR SYSTEM WITHOUT INCURRING ADDITIONAL COST ON THE PART OF THE OWNER.

J. IN THE PROCESS OF REMOVING WIRING DEVICES, LIGHTING FIXTURES AND OTHER ELECTRICAL EQUIPMENT AND MATERIAL, CONTRACTOR SHALL EXERCISE EXTREME CAUTION TO AVOID DAMAGE TO THE ARCHITECTURAL SURFACES AND MATERIALS WHICH ARE TO REMAIN INCLUDING WALLS, FLOORS, CEILINGS, WINDOWS, DOORS, MOLDINGS, STRUCTURAL MEMBERS, ETC. THE COST TO REPAIR OR ANY MATERIAL DEEMED DAMAGED BY THE CONTRACTOR DURING PERFORMANCE OF HIS CONTRACT SHALL BE PAID BY THE CONTRACTOR TO THE OWNER.

K. SHOULD THE ELECTRICAL SERVICE BE DISRUPTED DUE TO CONSTRUCTION WHILE THE BUILDING IS OCCUPIED, THE CONTRACTOR SHALL PROVIDE TEMPORARY ELECTRICAL POWER AT NO ADDITIONAL COST TO THE OWNER.

DEMOLITION KEYNOTES

1 EXISTING ELECTRIC METER SERVICE BOX AND WEATHER HEAD DROP TO REMAIN.

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Project Title
HARADA HOUSE PHASE 2

Sheet Title
ELECTRICAL DEMOLITION SITE POWER PLAN

Design Stage

Project Address
3342 & 3356 Lemon Street
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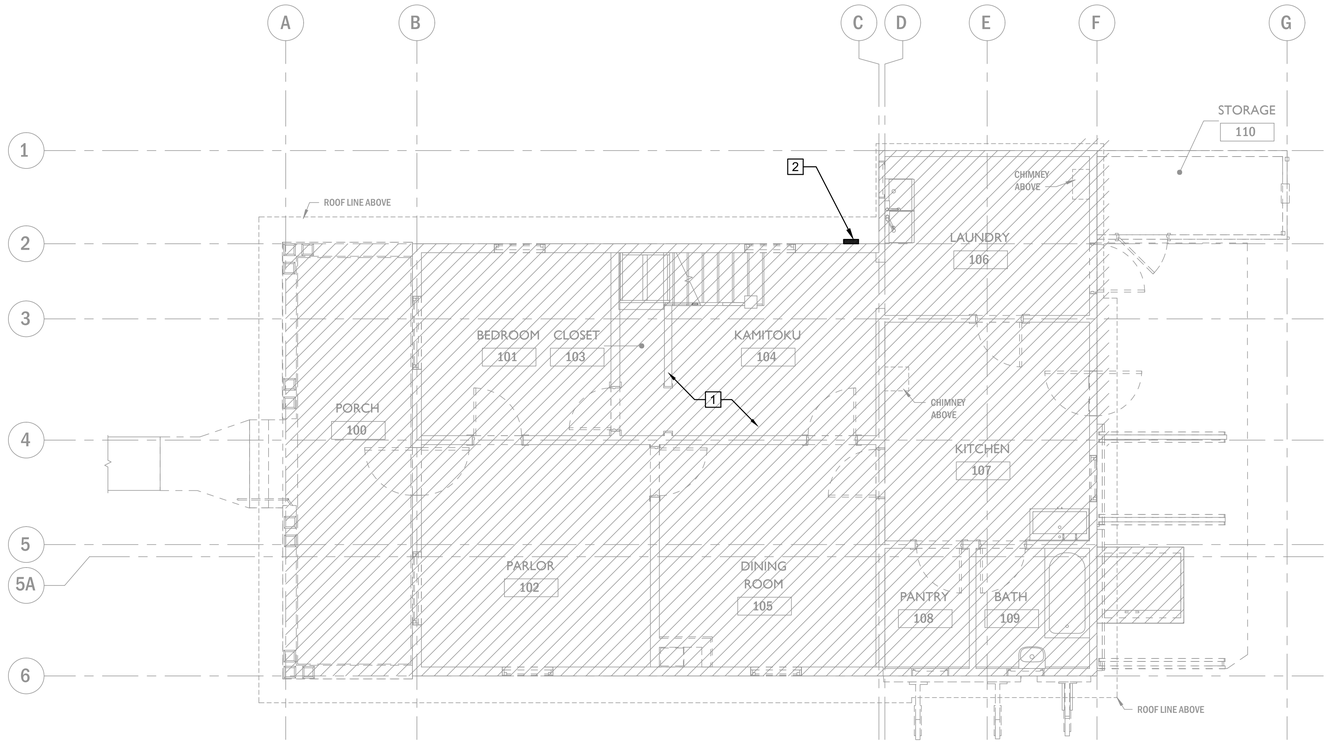
92501

Scale
3/16" =1'-0"

Date

Sheet Number
E-1.1



1/4"=1'-0" 0 2' 4' 8' 12'

ELECTRICAL DEMOLITION FIRST FLOOR POWER PLAN

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

1 / E-1.2

GENERAL NOTES

A. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO DEMOLITION OF ANY WORK.

B. AS A RESULT OF ANY DEMOLITION, ALLOW NO 'ORPHANED' OR ISOLATED DEVICES OUTSIDE OF WORK SCOPE AREA TO REMAIN DISCONNECTED. PROVIDE ANY NECESSARY NEW TERMINATIONS, CONDUCTORS, CONNECTIONS, CONDUIT, ETC.

C. ANY CONDUITS NOT SUITABLE FOR REUSE SHALL NOT BE ABANDONED IN PLACE. REMOVE BACK TO FEEDING PANEL OR NEAREST PRECEDING JUNCTION BOX.

D. PRIOR TO COMMENCING ANY WORK THE CONTRACTOR SHALL CONSULT WITH OWNER REPRESENTATIVE ELECTRICIAN AND CONDUCT THE NECESSARY PROTOCOLS FOR THE LOCK OUT/TAG OUT PROCEDURE.

E. REFER TO ARCHITECTURAL SHEETS FOR COMPLETE DEMOLITION DIRECTIONS.

DEMOLITION KEYNOTES

1 EXISTING ELECTRICAL FIXTURES, RECEPTACLES, SWITCHES, AND EQUIPMENT ARE REMOVED AND REFURBISHED.

2 EXISTING ELECTRIC METER SERVICE BOX AND WEATHER HEAD DROP TO REMAIN.

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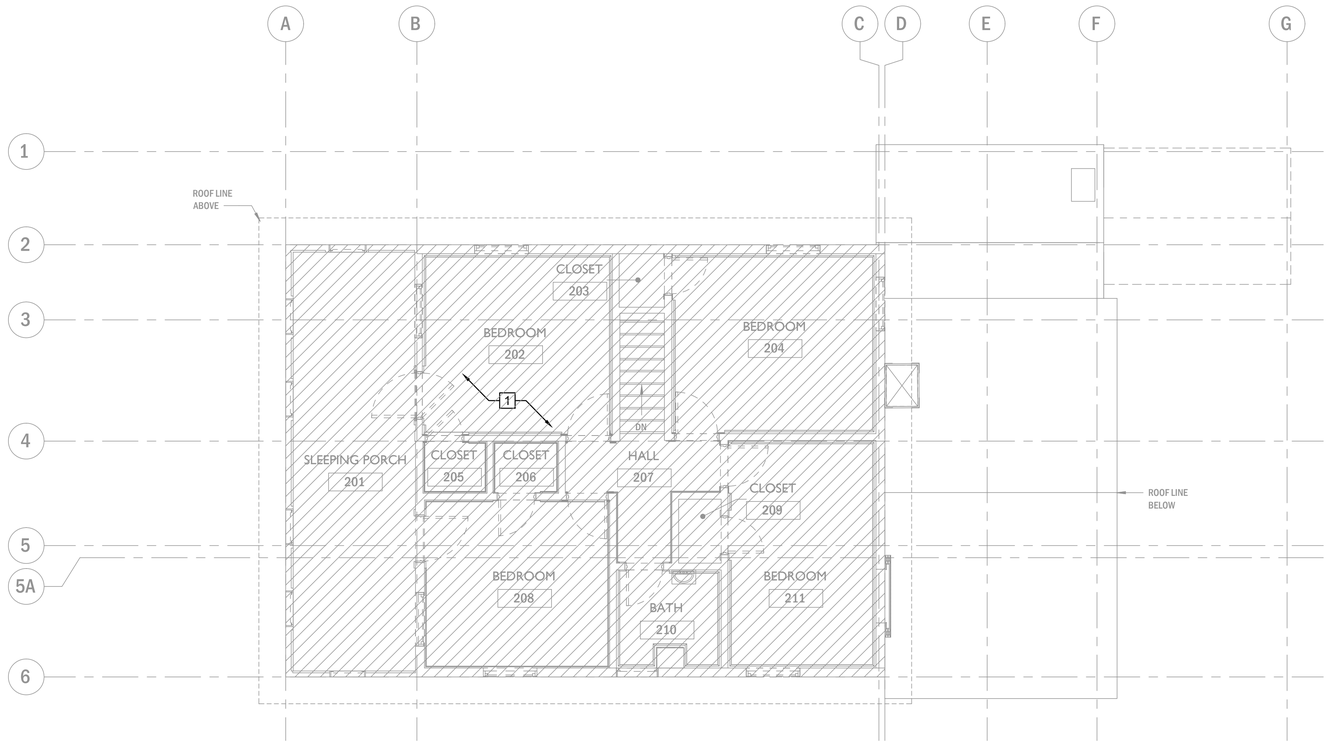

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ELECTRICAL DEMOLITION SECOND FLOOR POWER PLAN

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

1 / E-1.3

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ELECTRICAL DEMOLITION SECOND FLOOR POWER PLAN

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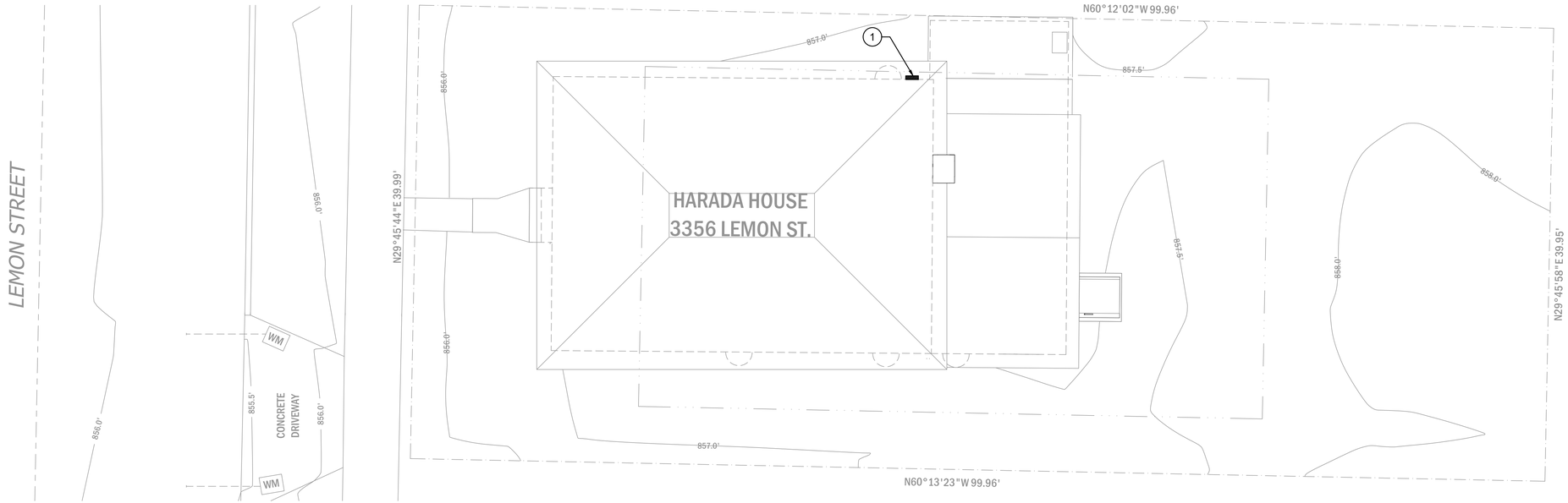
Sheet Number
E-1.3



3/16"=1'-0" 0' 2' 8' 16'

ELECTRICAL SITE POWER PLAN

SCALE: 3/16" = 1'-0"

1 / E-2.1

O. EXISTING CONDITIONS SHOWN ARE BASED ON AS-BUILT DRAWINGS & SITE-SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS SHOWN PRIOR TO INSTALLATION OF ANY WORK.

KEYNOTES

(1) EXISTING ELECTRIC METER SERVICE BOX AND WEATHER HEAD DROP TO REMAIN.

GENERAL NOTES

A. UNDERGROUND PULL BOX SHALL BE SIZED IN ACCORDANCE WITH CEC/NEC 314.28. USE PRECAST CONCRETE, AASHTO H-20 TYPE PULL BOX FOR DELIBERATE VEHICULAR TRAFFIC APPLICATIONS (E.G. WITHIN STREETS, HIGHWAYS AND PAVED SHOULDERS ALONG HIGHWAYS). USE PRECAST CONCRETE, LIGHT DUTY TYPE PULL BOX FOR PEDESTRIANS TRAFFIC ONLY (E.G. GRASSY AREAS IN RESIDENTIAL PROPERTIES THAT ARE LOCATED AWAY FROM VEHICULAR TRAFFIC. CONTRACTOR IS REQUIRED TO SIZE THE PULL BOXES, HANDHOLES AND ALL ELECTRICAL ENCLOSURES PER CEC 314. SIZES SHOWN ON THE PLANS ARE FOR REFERENCE ONLY, CONTRACTOR TO PROVIDE THE BIGGER OR EQUIVALENT SIZE PULL BOX. THE DEPTH OF THE PULL BOX SHALL HAVE ENOUGH SPACE TO ACCOMMODATE THE LARGEST SIZE CONDUITS AND RELATED LOCKNUTS, BUSHING AND ALL OTHER ACCESSORIES.

B. SCHEDULE 40 RIGID PVC CONDUIT SHALL BE USED FOR CONCRETE ENCASED DUCTBANK UNDER ROADWAYS, PARKING LOTS, OR OTHER AREAS SUBJECT TO VEHICULAR TRAFFIC AND ALL MEDIUM VOLTAGE WORK.

C. MAXIMUM NUMBER OF BENDS IN ONE CONDUIT RUN BETWEEN MANHOLES SHALL BE NO MORE THAN 270 DEGREES.

D. THE ENCLOSURES OF ALL SWITCHGEAR, TRANSFORMERS, UNIT SUBSTATIONS, MOTOR CONTROLS AND PANELBOARDS SHALL BE GROUNDED BY A SEPARATE GROUNDING CONDUCTOR TO THE GROUND SYSTEM.

E. THE RESISTANCE OF THE COMPLETED GROUND SYSTEM FOR STANDARD INSTALLATIONS SHALL NOT EXCEED 5 OHMS. IF ANY SPECIAL EQUIPMENT BEING INSTALLED REQUIRES A LOWER GROUND SYSTEM RESISTANCE, THAT EQUIPMENT MANUFACTURER'S MAXIMUM GROUND RESISTANCE SHALL APPLY.

F. FOR SOLIDLY GROUNDED ALTERNATE SOURCE OF EMERGENCY POWER SYSTEMS (GENERATOR) HAVING LINE TO LINE-TO GROUND VOLTAGE LARGER THAN 150V (FOR EXAMPLE 480V/277Y) AND RATED 1000A OR MORE, NO GROUND FAULT PROTECTION WITH AUTOMATIC DISCONNECTING MEANS IS REQUIRED; ONLY GROUND-FAULT INDICATION (ALARMS) SHALL BE PROVIDED IN ACCORDANCE WITH CEC/CEC, ARTICLE 700.31 AND 700.69D).

G. PROVIDE STATIONARY DIESEL-FUELED POWER SUPPLY (EPS) WITH ATS, LOAD TESTING MEANS, AND ASSOCIATED ACCESSORIES IN COMPLIANCE WITH NFPA 110, LEVEL 1, EMERGENCY POWER SUPPLY SYSTEM (EPS) REQUIREMENTS.

H. PROVIDE AN NFPA 110 COMPLIANT CONTROL PANEL MOUNTED ON THE EMERGENCY POWER SYSTEMS (EPS). NO MORE THAN 78 INCHES ABOVE THE FINISHED FLOOR TO THE TOP OF THE PANEL, INCLUDING THE CONCRETE HOUSEKEEPING PAD AND VIBRATION ISOLATORS.

I. CONDUIT ROUTING IS DIAGRAMMATICALLY SHOWN ONLY. CONDUIT SHALL BE INSTALLED AS REQUIRED TO AVOID INTERFERENCE WITH EXISTING UTILITIES AND STRUCTURES. COORDINATE EXACT LOCATIONS OF ANY SITE WORK WITH CIVIL DRAWINGS.

J. ALL JUNCTION BOXES, PULL BOXES, ETC. ARE NOT SHOWN ON THIS DRAWING, BUT SHALL BE PROVIDED WHERE NECESSARY IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE NEC/CEC.

K. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION RELATED TO CIVIL WORKS.

L. PROVIDE POST BARRIERS TO ELECTRICAL EQUIPMENT TO PROVIDE PHYSICAL PROTECTION.

M. EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO AVOID EXISTING DUCTS, PIPING OF CONDUITS, ETC., AND TO PREVENT HAZARD TO PERSONNEL AND/OR DAMAGE TO EXISTING UNDERGROUND UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN AND INSTALLED BY ANY OTHER CONTRACTS. THE ENGINEER IS NOT RESPONSIBLE FOR THE LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN OR DETAILED AND INSTALLED BY ANY OTHER CONTRACTS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SHOULD SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED.

N. LABEL ALL WIRING CIRCUIT NUMBERS INSIDE ENCLOSURES OR HANDHOLES. PROVIDE CIRCUIT I.D. TAGS INSIDE HANDHOLES RATED FOR WET LOCATIONS.

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Owner
CITY OF RIVERSIDE
MUSEUM OF RIVERSIDE

Revisions

Drawn by:

Checked by:

Professional's Stamp

Project Title
HARADA HOUSE PHASE 2

Sheet Title
ELECTRICAL SITE POWER PLAN

Design Stage

Project Address
3342 & 3356 Lemon Street
Riverside, CA
92501

Scale
3/16" =1'-0"

Date

Sheet Number
E-2.1

KEYNOTES

1. INSTALL REFURBISHED EXISTING ELECTRICAL FIXTURES, RECEPTACLES, SWITCHES, AND EQUIPMENT THAT WERE REMOVED DURING DEMOLITION.
2. EXISTING ELECTRIC METER SERVICE BOX AND WEATHER HEAD DROP TO REMAIN.
3. NEW OUTDOOR WEATHERPROOF DISCONNECT SWITCH 60AS, 40AF, 208, 1ϕ FOR HP UNITS.
4. NEW 20A, 208V, 1ϕ MOTOR RATED SWITCH FOR FCU-1

GENERAL NOTES

A. UNDERGROUND PULL BOX SHALL BE SIZED IN ACCORDANCE WITH CEC/NEC 314.28. USE PRECAST CONCRETE, AASHTO H-20 TYPE PULL BOX FOR DELIBERATE VEHICULAR TRAFFIC APPLICATIONS (E.G., WITHIN STREETS, HIGHWAYS AND PAVED SHOULDERS ALONG HIGHWAYS).

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D. MAXIMUM NUMBER OF BENDS IN ONE CONDUIT RUN BETWEEN MANHOLES SHALL BE NO MORE THAN 270 DEGREES.

E. THE ENCLOSURES OF ALL SWITCHGEAR, TRANSFORMERS, UNIT SUBSTATIONS, MOTOR CONTROL S AND PANELBOARDS SHALL BE GROUNDED BY A SEPARATE GROUNDING CONDUCTOR TO THE GROUND SYSTEM.

F. THE RESISTANCE OF THE COMPLETED GROUND SYSTEM FOR STANDARD INSTALLATIONS SHALL NOT EXCEED 5 OHMS. IF ANY SPECIAL EQUIPMENT BEING INSTALLED REQUIRES A LOWER GROUND SYSTEM RESISTANCE, THAT EQUIPMENT MANUFACTURER'S MAXIMUM GROUND RESISTANCE SHALL APPLY.

G. FOR SOLIDLY GROUNDED ALTERNATE SOURCE OF EMERGENCY POWER SYSTEMS (GENERATOR) HAVING LINE TO LINE-TO GROUND VOLTAGE LARGER THAN 150V (FOR EXAMPLE 480V/277Y) AND RATED 1000A OR MORE, NO GROUND FAULT PROTECTION WITH AUTOMATIC DISCONNECTING MEANS IS REQUIRED; ONLY GROUND-FAULT INDICATION (ALARMS) SHALL BE PROVIDED IN ACCORDANCE WITH NEC/CEC, ARTICLE 700.31 AND 700.69D).

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I. PROVIDE AN NFPA 110 COMPLIANT CONTROL PANEL MOUNTED ON THE EMERGENCY POWER SYSTEMS (EPS). NO MORE THAN 78 INCHES ABOVE THE FINISHED FLOOR TO THE TOP OF THE PANEL, INCLUDING THE CONCRETE HOUSEKEEPING PAD AND VIBRATION ISOLATORS.

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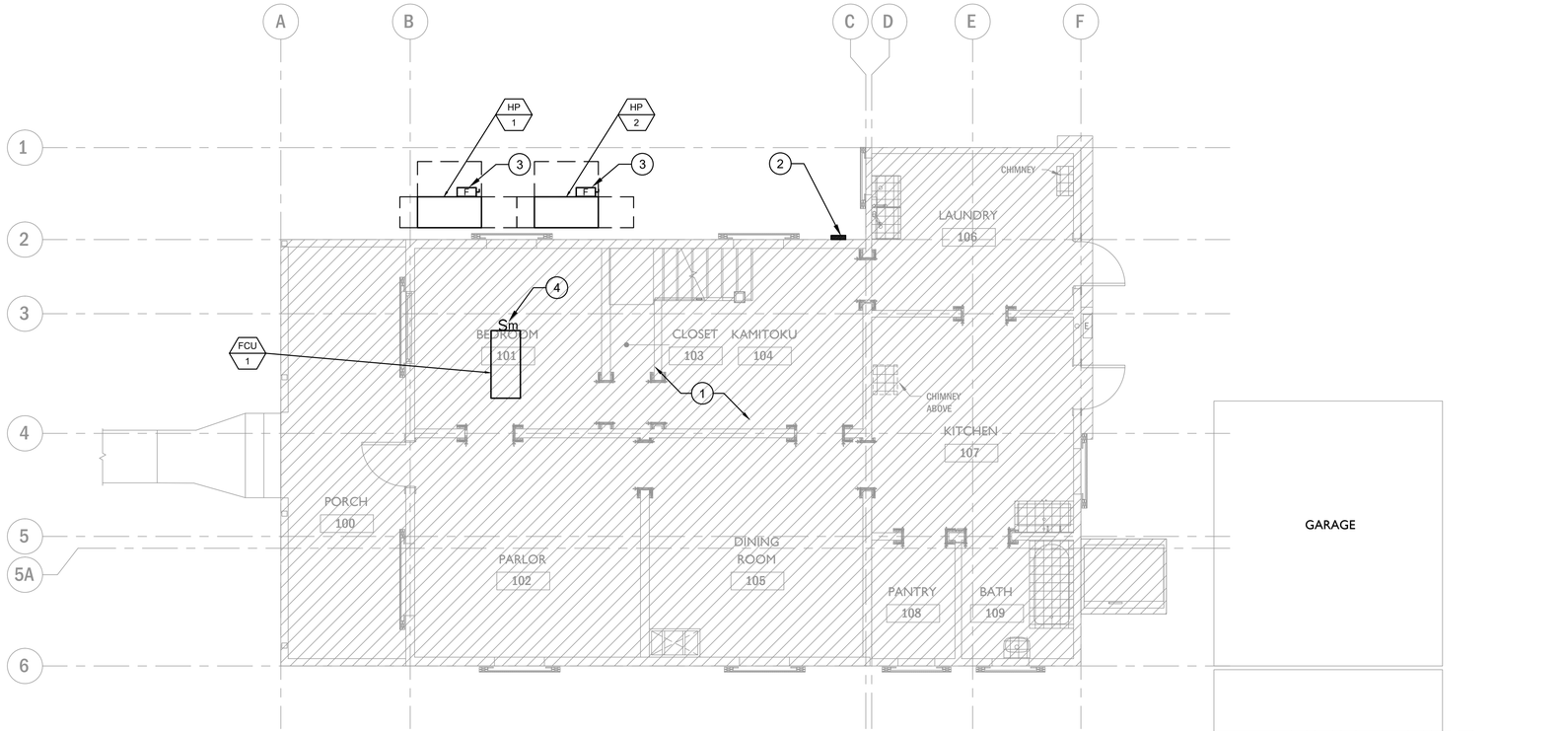

1/4"=1'-0" 0 2' 4' 8' 12'

ELECTRICAL FIRST FLOOR POWER PLAN

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

1 / E-2.2

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HARADA HOUSE PHASE 2

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1/4" =1'-0"

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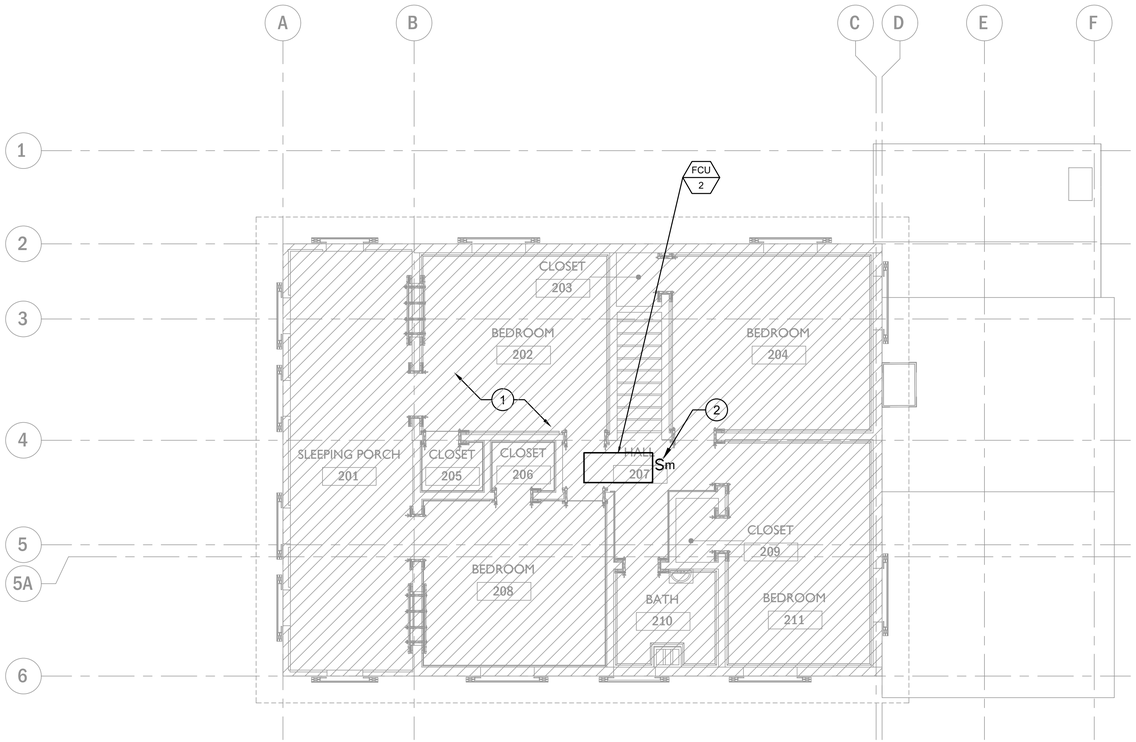
E-2.2



1/4"=1'-0" 0 2' 4' 8' 12'

ELECTRICAL SECOND FLOOR POWER PLAN

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

1 / E-2.3

KEYNOTES

1. INSTALL REFURBISHED EXISTING ELECTRICAL FIXTURES, RECEPTACLES, SWITCHES, AND EQUIPMENT THAT WERE REMOVED DURING DEMOLITION.
2. NEW 20A, 208V, 1ϕ MOTOR RATED SWITCH FOR FCU-2

GENERAL NOTES

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