3101 35TH AVENUE

OAKLAND CA 94619

APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK SECTION
For Substantial Compliance With
Codes and Ordinances
REVISIONS NEED APPROVAL
By:
__ BUILDING CODE
SUBJECT TO UBC SECT 106.4.3
IBC SECT 105.4 & IRC SECT R105.8
__ SURVEY (REVIEW ONLY)
__ PLOT PLAN REVIEW
__ PARKING/DWY LAYOUT
__ GRADING AND
EROSION CONTROL
__ SOILS REPORT ON FILE
MECH. PLUMB.
CHECKED

APPROVED
City of Oakland Planning & Zoning
Signature: Date: 2/13/14

ARCHITECTURE

PHILIP BANTA
& ASSOCIATES
6050 HOLLIS STREET
EMERYVILLE, CALIFORNIA 94608
TEL | 510.654.3255
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REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (△)	1ST PLAN CHECK REVIEW	01/14/14
1 (○)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

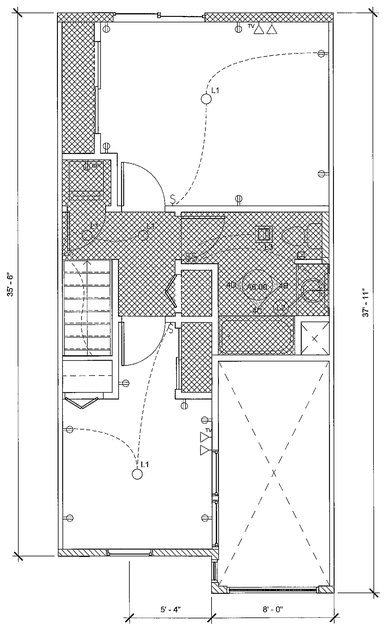
SHEET DESCRIPTION:

COVER SHEET

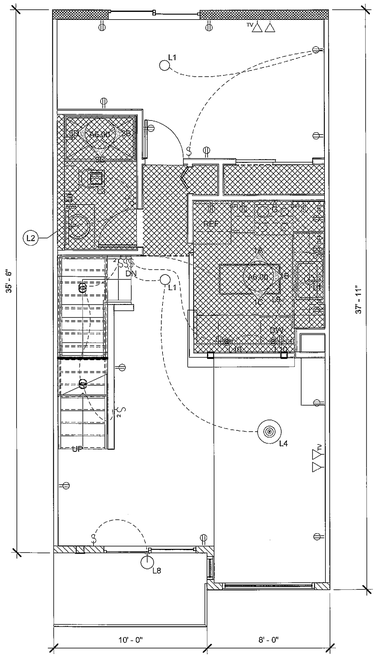
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	

GEN-00

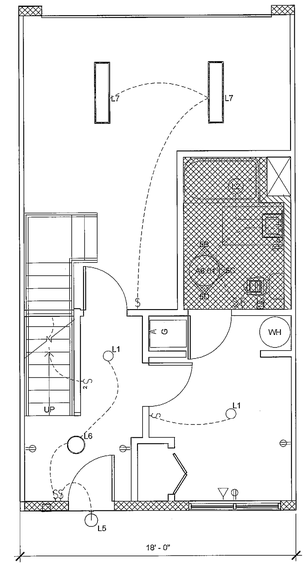
12/7/2013 4:02:15 PM



3 ElecPlan UNIT A3 3RD FLOOR
1/4" = 1'-0"



2 ElecPlan UNIT A3 2ND FLOOR
1/4" = 1'-0"



1 ElecPlan UNIT A3 1ST FLOOR
1/4" = 1'-0"

- L1 - RECESSED
- L1A - EXTERIOR RECESSED
- L2 - VANITY WALL FIXTURE
- L3 - CEILING FAN W/ LIGHT
- L4 - DINING ROOM PENDANT
- L5 - EXTERIOR LIGHTING - ENTRY
- L6 - FLUSH MOUNTED LIGHT
- L7 - STRIP FLUORESCENT
- L8 - EXTERIOR LIGHTING - DECK
- L9 - FLOURESCENT CEILING LIGHT - MINKA ENERGY STAR (17 1/4" x 4 1/2" x 51 1/2")
- L10 - KITCHEN ISLAND PENDANT
- L11 - CEILING MOUNT

- DROPPED CEILING, 8'-0" TYP., U.N.O.
- G — GAS
- TV — TV OUTLET
- TELEPHONE
- DUPLEX OUTLET
- GFI — GFI DUPLEX OUTLET
- S2 — LIGHT SWITCH DOUBLE
- S — LIGHT SWITCH SINGLE

ELECTRICAL NOTES:

(A)- WALLS 2 FEET WIDE AND GREATER SHALL HAVE AN ELECTRICAL OUTLET. OUTLETS SHALL BE LOCATED WITH A MAXIMUM SPACING OF 12 FEET AND WITHIN 6 FEET OR ENDS OF WALLS AND OPENINGS.

(B)- LOCATE RECEPTACLE OUTLETS IN KITCHEN AT EVERY COUNTER SPACE WIDER THAN 12 INCHES SO THAT NO POINT IS MORE THAN 24 INCHES FROM AN OUTLET.

(C)- ALL EXTERIOR LIGHTING MUST BE HIGH EFFICACY PER CEC SECTION 150. AS AN EXCEPTION THE EXTERIOR LIGHTS MAY BE INCANDESCENT LIGHTING CONTROLLED BY A MOTION SENSOR, EXCEPTION 1, SECTION 150(K) 6.

(D)- ROOMS WITH PERMANENT LIGHTING MUST HAVE HIGH EFFICACY OR NON-HIGH EFFICACY LIGHTING SHALL BE CONTROLLED BY A MANUAL ON MOTION SENSOR OR DIMMER SWITCH CONTROL PER CEC SECTION 150(K)4. EXCEPTIONS (1), (2) & (3)

(E)-ALL OTHER INTERIOR ROOMS- ALTERNATE OPTION: MANUAL-ON OCCUPANT SENSOR, OR DIMMER

(F)- BATHROOM, LAUNDRY,UTILITY- ALTERNATE OPTION: MANUAL-ON OCCUPANT SENSOR, AT LEAST ONE RECEPTACLE OUTLET, IN ADDITION TO ANY PROVIDED FOR LAUNDRY EQUIPMENT, SHALL BE INSTALLED PER 2004 C.E.C. ARTICLE 210-52 f.

(G)- KITCHEN-ALTERNATE OPTION: UP TO 50% OF RELAMPING RATED WATTAGE CAN BE OTHER THAN HIGH EFFICACY

(H)- ALL CLOSETS EXCEEDING 70 SQUARE FEET, MUST HAVE HIGH EFFICACY LIGHTING.

(I)- ALL LUMINARIES INSTALLED IN WET OR DAMP LOCATIONS MUST BE SUITABLE FOR WET LOCATIONS.

(J)- SWITCH ALL HIGH EFFICACY LIGHTING SEPARATE FROM LOW EFFICACY LIGHTING.

(K)- ELECTRONIC BALLASTS FOR ALL FLUORESCENT LAMPS RATED 13 WATTS OR GREATER.

(L)- PROVIDE DEDICATED CIRCUITS AT ALL REQD LPG SENSORS

(M)-RECESSED LUMINARIES IN ALL INSULATED CEILINGS APPROVED FOR ZERO-CLEARANCE INSULATION COVER (IC) AND CERTIFIED AIRTIGHT.

(N)- ALL BRANCH CIRCUITS THAT SUPPLY RECEPTACLE OUTLETS IN BEDROOMS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER(S) LISTED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT, INCLUDING LIGHTING OUTLETS AND SMOKE DETECTORS.

(O) USE 110V SMOKE DETECTORS W/ BATTERY BACKUP (WHICH ARE AUDIBLE IN ALL SLEEPING AREAS) AT ALL BEDROOMS, CENTRALLY LOCATED IN CORRIDOR AND HALLWAYS LEADING TO BEDROOMS, ABOVE TOPS OF STAIRS, AND AT LEAST ONE AT EVERY LEVEL, INCLUDING BASEMENTS.

(P)- PROVIDE TWO OR MORE 20-AMPERE SMALL APPLIANCE BRANCH CIRCUITS EVENLY PROPORTIONED IN THE KITCHEN, PANTRY, BREAKFAST ROOM, DINING ROOM, OR SIMILAR AREAS, SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS.

(Q) RECEPTACLE OUTLETS IN BATHROOMS, GARAGES, OUTDOORS AND CRAWL SPACES SHALL HAVE GFCI PROTECTION FOR PERSONNEL, IN ACCORDANCE WITH CEC 210.8 A

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No.	Description	Date
△1	1ST PLAN CHECK REVIEW	01/14/14
(1)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT PHILIP BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

SHEET DESCRIPTION:

UNIT A3 RCP/ELECTRICAL PLANS

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

A3.01

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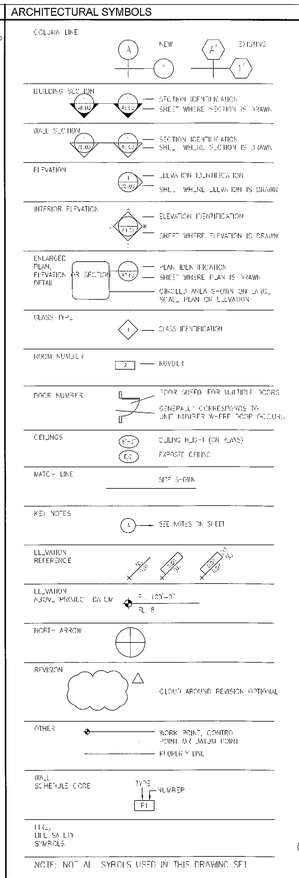
ABBREVIATIONS

#	POUND OR NUMBER	O.C.	ON CENTER
&	AND	O.D.	OUTSIDE DIAMETER
		O.F.C.I.	OWNER FURNISHED/CONTRACTOR INSTALLED
A.	AIR	O.F.O.I.	OWNER FURNISHED/OWNER INSTALLED
A.B.	ANCHOR BOLT	OFD.	OVERFLOW DRAIN
AD	AREA DRAIN	OFF.	OFFICE
A/C	AIR CONDITIONING	OPP.	OPPOSITE
A.C.T.	ACOUSTICAL CEILING TILE	OPP. HND.	OPPOSITE HAND
A.F.C.	ABOVE FINISHED COUNTER	OPNG.	OPENING
A.F.C.E.	ABOVE FINISHED FLOOR		
A.F.G.	ABOVE FINISHED GRADE	P.C.D.	PAPER CUP DISPENSER
A.F.S.	ABOVE FINISHED SLAB	P.L.	PROPERTY LINE
ACOUS.	ACOUSTIC	PLAM.	PLASTIC LAMINATE
ACOUS. INSUL.	ACOUSTICAL INSULATION	P.T.D.	PAPER TOWELL DISPENSER
ACOUS. PNL.	ACOUSTICAL PANEL	P.T.D.R.	PAPER TOWELL DISPENSER AND RECEPTACLE
ACS. DR.	ACCESS DOOR	P.T.R.	PAPER TOWELL RECEPTACLE
ACS. FLR.	ACCESS FLOOR	P.V.C.	POLYVINYL CHLORIDE
ACS. PNL.	ACCESS PANEL	PAV.	PAVING
ADJ.	ADJUSTABLE	PERP.	PERPENDICULAR
ALT.	ALTERNATE	PL.	PLATE
ALUM.	ALUMINUM	PLAS.	PLASTIC LAMINATE
ANR	ANCHOR	PLMG.	PLUMBING
ARCH.	ARCHITECTURAL	PLMO.	PLYWOOD
ASPH.	ASPHALT	PNL.	PANEL
ATCH.	ATTACHMENT	POL.	POLISHED
AUTO.	AUTOMATIC	PR.	PAIR
		PRCST. -	PRECAST
B.O.	BOTTOM OF		
B.O.S.	BOTTOM OF STEEL	Q.T.	QUARRY TILE
B.P.	BUILDING PAPER	QTY.	QUANTITY
B.R.	BUILT-UP ROOFING		
B.U.R.		R.	RISER OR RADIUS
BD.	BOARD	R.B.	RESILIENT BASE
BITUM.	BITUMINOUS	R.C.P.	REFLECTED CEILING PLAN
BKG.	BACKING	R.D.	ROOF DRAIN
BLDG.	BUILDING	R.H.	RISER HOOK
BLK.	BLOCK	R.O.	ROUGH OPENING
BLKG.	BLOCKING	R.W.L.	RAIN WATER LEADER
BLST.	BALLAST	RECT.	RECTANGULAR
BM.	BEAM	REF.	REFERENCE OR REFRIDGERATOR
BRCG.	BRACING	REINF.	REINFORCING OR REINFORCED
BRZ.	BRONZE	REQD.	REQUIRED
		RESIL.	RESILIENT
C.	CHANNEL	RM.	ROOM
C.B.	CATCH BASIN	RND.	ROUND
C.B.BD.	CEMENTITIOUS BACKER BOARD	RUB.	RUBBER
C.B.C.	CALIFORNIA BUILDING CODE		
C.C.T.	CURCLE CURTAIN TRACK	S.	SOUTH
C.C.W.	CLOSED CIRCUIT TELEVISION	S.C.D.	SEE CIVIL DRAWINGS
C.M.U.	CONTRACTOR FURNISH/OWNER INSTALLED	S.C.R.	SHOWER CURTAIN ROD
C.F.O.I.	CORNER GUARD	S.D.	SOAP DISPENSER
C.G.	COAT HOOK	S.E.D.	SEE ELECTRICAL DRAWINGS
C.H.	CAST IRON	S.F.	SQUARE FEET
C.I.	CONTROL JOINT	S.H.	SHEET RUBBER
C.J.	CENTER LINE	S.M.D.	SEE MECHANICAL DRAWINGS
C.L.	CONCRETE MASONRY UNIT	S.M.S.	SHEET METAL SCREW
C.M.U.	CASED OPENING	S.N.D.	SAN. NAPKIN DISPENSER
C.O.	CARBON DIOXIDE	S.S.D.	SEE STRUCTURAL DRAWING
CO2	CHAIR RAIL	S.S.	SERVICE SINK
C.R.	CLINICAL SINK	S.S.T.	STAINLESS STEEL
C.S.	CERAMIC TILE	SHT.	SHEET VINYL
CAB.	CABINET	SCHED.	SCHEDULE
CAB.	CENTER TO CENTER	SECT.	SECTION
C.T.	CEMENT	SECUR.	SECURITY
CEM.	CEMENT PLASTER	SHR.	SHOWER
CEM. PLAS.	CEMENT PLASTER CEILING	SHT.	SHEET
CEM. PLAS. CLG.	CHALKBOARD	SHTHG.	SHEATHING
CHBD.	CIRCULAR	SIM.	SIMILAR
CIRC.	CLEANOUT	SLD.	SEE LANDSCAPE DRAWINGS
CLNO.	CEILING	SPEC.	SPECIFICATION
CLG.	CLOSET	SPKR.	SPEAKER
CLG. HT.	CEILING HEIGHT	SPNLR.	SPRINKLER
CLO.	CLOSET	SQ.	SQUARE
CLR.	CLEAR	STA.	STATION
CNTR.	COUNTER	STD.	STANDARD
COL.	COLUMN	STL.	STEEL
CONC.	CONCRETE	STOR.	STORAGE
CONC. FLR.	CONCRETE FLOOR	STN.	STONE
CONC. OPNG.	CONCRETE OPENING	STRD.	STRUCTURAL
COND.	CONDITION	SUSP.	SUSPENDED
CONF.	CONFERENCE	SYM.	SYMMETRICAL
CONN.	CONNECTION		
CONT.	CONTINUOUS	T.	TREAD
CORR.	CORRIDOR	T.&G.	TONGUE AND GROOVE
CPT.	CARPET	T.B.	TOWEL BARITE BACK
CPT. T.	CARPET TILE	T.G.	TOP OF CURB
CTR.	CENTER R.	T.O.	TOP OF
		T.O.B.	TOP OF BEAM
D.	DEEP	T.O.C	TOP OF CONCRETE
D.F.	DRINKING FOUNTAIN	T.O.P	TOP OF PARAPET
D.T.	DRAPERY TRACK	T.P.	TOP OF PAVEMENT
D.W.	DISH WASHER	T.P.D.	TOILET PAPER DISPENSER
DBL.	DOUBLE	TEL.	TELEVISION
DEMO.	DEMOLITION	T.O.W.	TOP OF WALL
DEPT.	DEPARTMENT	T.S.	TUBE STEEL
DET.	DETAIL	TEL.	TELEPHONE
DETN.	DETENTION	TER.	TERRAZZO
DIA.	DIAMETER	THK.	THICK
D.MG.	DIAGONAL	THRES.	THRESHOLD
DIM.	DIMENSION	TKBD.	TACK BOARD
DISP.	DISPENSER	TYP.	TYPICAL
DMPF.	DAMPPROOFING		
DN.	DOWN	U.N.O.	UNLESS NOTED OTHERWISE
DS.	DOWNSPOUT	U.O.N.	UNLESS OTHERWISE NOTED
DWG.	DRAWING	UR.	URINAL
DWR.	DRAWER		
		V.B.	VAPOR BARRIER
(E)	EXISTING	V.C.T.	VINYL COMPOSITION TILE
E.	EAST	V.G.	VERTICAL GRAIN
E.H.D.	ELETRICAL HAND DRYER	V.F.	VERTICAL FIELD
E.I.F.S.	EXTERIOR INSULATION AND FINISH SYSTEM	V.P.L.	VERTICAL PLASTER
E.J.	EXPANSION JOINT	VAC.	VACUUM
E.P.	ELECTRICAL PANELBOARD	VENT.	VENTILATION
E.S.	ELASTOMERIC	VERT.	VERTICAL
E.W.C.	EXPOSED STRUCTURE	VEST.	VESTIBULE
EA.	EACH		
EL.	ELEVATION	W.	WEST
ELAST.	ELASTOMERIC	WI.	WITH
ELEC.	ELECTRICAL	W.B.	WALL BUMPER
ELEV.	ELEVATOR	W.C.	WATER CLOSET
EMER.	EMERGENCY	W.G.	WALL GUARD
E.M.T.	ELECTRICAL METAL TUBING	W.H.	WHERE OCCURS
ENCL.	ENCLOSURE	W.M.	WELDED WIRE MESH
ENGR.	ENGINEER	WD.	WOOD
ENTR.	ENTRANCE	WP.	WATERPROOF/ WATERPROOFING
EQ.	EQUAL	WSCT.	WAINSCOT
EQUIP.	EQUIPMENT	WT.	WEIGHT
EXP.	EXPANSION		
EXP. BT.	EXPANSION BOLT	X	TIMES OR BY (2x4)
EXT.	EXTERIOR		
		YD.	YARD
F.A.	FIRE ALARM		
F.A.A.P.	FIRE ALARM ANNUNCIATOR PANEL		
F.D.	FLOOR DRAIN		
F.D.C.	FIRE DEPARTMENT CONNECTION		
F.E.	FIRE EXTINGUISHER		
F.E.C.	FIRE EXTINGUISHER CABINET		
F.H.C.	FIRE HOSE CABINET		
F.O.	FACE OF		
F.O.C.	FACE OF CONCRETE		
F.O.F.	FACE OF FINISH		
F.O.S.	FACE OF STUD		
F.T.	FIRE TREATED		
FIN.	FINISH		
FL.	FLOOR		
FLASH.	FLASHING		
FLEX.	FLEXIBLE		
FLUOR.	FLUORESCENT		
FP.	FIREPROOFING		
FT.	FOOTFEET		
FTG.	FOOTING		
FURR.	FURRING		
FUT.	FUTURE		
G.B.	GRAB BAR		
G.F.R.C.	GLASS FIBER REINFORCED CONCRETE		
G.F.R.G.	GLASS FIBER REINFORCED GYPSUM		
G.F.R.P.	GLASS FIBER REINFORCED PLASTER		
G.MU.	GLASS MASONRY UNIT		
GA.	GAUGE		
GALV.	GALVANIZED		
G.L.	GLASS		
GLU. LAM.	GLUED LAMINATED WOOD		
GND.	GROUND		
GR.	GRADE		
GROM	GROMMET		
GYP.	GYPSUM		
GYP. BD.	GYPSUM BOARD		
H.	HIGH		
H.B.	HOSE BIBB		
H.M.	HOLLOW METAL		
H.P.	HIGH POINT		
H.V.A.C.	HEATING VENTILATION AND AIR CONDITIONING		
H.W.	HOT WATER		
HC.	HANDICAPPED		
HDW.	HARDWARE		
HDWD.	HARDWOOD		
HNDRL	HAN DRAIL		
HORIZ.	HORIZONTAL		
HR.	HOUR		
HT.	HEIGHT		
I.D.	INSIDE DIAMETER		
I.V.T.	INTRAVENEOUS TRACK		
IN.	INCH		
INSUL.	INSULATION		
INT.	INTERIOR		
INV.	INVERT		
J.C.	JANITOR CLOSET		
JT.	JOINT		
K.B.	KNEE BRACE		
K.P.	KICK PLATE		
KIT.	KITCHEN		
L.	LONG		
L.L.	LEAD LINED		
LAM.	LAMINATED		
LAM. GL.	LAMINATED GLASS		
LAUN.	LAUNDRY		
LAV.	LAVATORY		
LIN.	LINEN		
LKR.	LOCKER		
LN.	LINOLEUM		
L.PT.	LOW POINT		
LT.	LIGHT		
LVR.	LOUVER		
M.D.O.	MEDIUM DENSITY OVERLAY		
M.O.	MASONRY OPENING		
MACH.	MACHINE		
MATL.	MATERIAL		
MAX.	MAXIMUM		
MECH.	MECHANICAL		
MEMB.	MEMBRANE		
MET.	METAL		
MFR.	MANUFACTURER		
MH.	MANHOLE		
MIN.	MINIMUM		
MIR.	MIRROR		
MISC.	MISCELLANEOUS		
MKR. BD.	MARKER BOARD		
MTD.	MOUNTED		
MULL.	MULLION		
(N)	NEW		
N.	NORTH		
N.C.	NURSE CALL		
N.I.C.	NOT IN CONTRACT		
N.T.S.	NOT TO SCALE		
NO.	NUMBER		
NOM.	NOMINAL		

ARCHITECTURAL SYMBOLS



NOTE: NOT ALL SYMBOLS USED IN THIS DRAWING SET

GENERAL CONDITIONS

1. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION MEETING ON SITE TO ARRANGE JOB SCHEDULING WITH THE OWNER'S REPRESENTATIVE, ARCHITECT AND CLIENT.
2. THE CONTRACTOR SHALL SCHEDULE WORK AND COORDINATE WITH THOSE DOING OTHER WORK TO AVOID DELAYS, INTERFERENCE AND UNNECESSARY WORK.
3. THE CONTRACTOR SHALL MAKE NECESSARY CHANGES, INCLUDING REMOVAL AND REINSTALLATION OF MATERIALS AT HIS SOLE EXPENSE, IF HE FAILS TO CHECK WITH THOSE DOING OTHER WORK AND HIS INSTALLED WORK IS LATER FOUND TO INTERFERE WITH SUCH WORK.
4. WHERE WORK OF ONE TRADE JOINS, OR IS ON OTHER WORK, THERE SHALL BE NO DISCREPANCY WHEN SAME IS COMPLETED. IN ENGAGING ONE KIND OF WORK WITH ANOTHER, MARRING OR DAMAGING SAME WILL NOT BE PERMITTED. SHOULD IMPROPER WORK OF ANY TRADE BE COVERED BY ANOTHER WHICH RESULTS IN DAMAGE OR DEFECTS, THE WHOLE WORK AFFECTED SHALL BE MADE GOOD BY THE CONTRACTOR WITHOUT EXPENSE OR DELAY TO THE PROJECT OR PROJECT SCHEDULE.
5. THE EXISTING CONDITIONS IN THE CONSTRUCTION DOCUMENTS ARE BASED ON DRAWINGS PROVIDED BY THE OWNER ANY DISCREPENCIES BETWEEN THESE DOCUMENTS AND THE ACTUAL FIELD CONDITIONS SHALL BE BROUHGT TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH ANY WORK.
6. THE CONTRACTOR SHALL PATCH AND REPAIR ALL FIRE PROOFING DAMAGE INCURRED DURING CONSTRUCTION. THE CONTRACTOR SHALL FIREPROOF ALL PENETRATIONS THROUGH RATED ASSEMBLIES GENERATED BY THE WORK DESCRIBED IN THESE DOCUMENTS.
8. THE CONSTACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS AT THE BUIDLING BEFORE ORDERING MATERIAL OR DOING ANY WORK. IF ANY INCONSISTENCIES OCCUR, THE CONTRACTOR SHALL REPORT TO THE ARCHITECT, ANY INCONSISTENCIES OR ERRORS IN WORK OF OTHERS, AFFECTING THE COMPLETION OF HIS WORK. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH THE WORK IN QUESTION, OR RELATED WORK. FAILURE AND CORRECTED AT NO COST TO THE PROJECT OR DELAY IN THE PROJECT SCHEDULE.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS FOR ACCURACY AND CONFIRMING THAT THE PARTITION LAYOUT IS ACCURATE. IF THERE ARE ANY QUESTIONS REGARDING THESE OR OTHER COORDINATION QUESTIONS, THE CONTRACTOR SHALL SUBMIT THEM TO THE ARCHITECT AND OBTAIN CLARIFICATION. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH THE WORK IN QUESTIONS, OR RELATED WORK. FAILURE TO OBTAIN CLIFICATION MAY RESULT IN THE WORK BEING REJECTED AND CORRECTED AT NO COST TO THE PROJECT OR DELAY IN THE PROJECT SCHEDULE.
10. CONTRACTOR SHALL MARK LOCATIONS OF PARTITIONS AND DOORS FOR REVIEW BY ARCHITECT PRIOR TO INSTALLATION. REVIEW WILL BE FOR DESIGN INTENT. CONTRACTOR SHALL COORDINATE AND VERIFY ALL CONDITIONS TO ENSURE PROPER FIT.
11. DO NO SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN ALL PARTITION LOCATIONS. ALL DOOR AND OPENING LOCATIONS SHALL BE SHOWN ON FLOOR PLAN. IN CASE OF CONFLICT, NOTIFY THE ARCHITECT. FLOOR PLAN BY ARCHITECT SUPERSEDES OTHER PLANS. ALL DIMENSIONS MARKED 'CLEAR' SHALL BE MAINTAINED AND SHALL ALLOW FOR THICKNESS OF ALL FINISHES.
12. INCLUDED ON ALL SHEETS ELECTRONICAL SIGNATURE AND SEAL. (1)

RELEVANT CALIFORNIA CODES

BUILDING:	ALL NEW CONSTRUCTION SHALL COMPLY WITH 2010 CBC
FIRE:	CALIFORNIA FIRE CODE 2010 CFC
MECHANICAL:	CALIFORNIA MECHANICAL CODE 2010 CMC
PLUMBING:	CALIFORNIA PLUMBING CODE 2010 CPC
ELECTRICAL:	CALIFORNIA PLUMBING CODE 2010 CEC
	CALIFORNIA ENERGY EFFICIENCY STANDARDS CODE 2008 CEES
	CALIFORNIA GREEN BUILDING STANDARDS CODE 2010 CALGREEN

VICINITY MAP

PROJECT

3101 35TH AVENUE OAKLAND, CA 94619

PROJECT DATA

3101 35th Street Area Calculations

Description	level	R-2 Area	U-1 Area	B Area
Unit type A	Ground	191 sf	362 sf	
	Second	615 sf		
	Third	476 sf		
	Subtotal	1,282 sf	362 sf	
	Total sf/unit	1,644 sf		
*5 units total	Total sf unit A	9,864 sf	2,172 sf	
Unit type B	Unit B Entry/ Commercial	75 sf		1,078 sf
	First	1,210 sf		
	Second	603 sf		
	Subtotal	1,888 sf	0 sf	1,078 sf
	Total/unit	1,888 sf		1,078 sf
*1 unit total	Total sf unit B	1,888 sf		
Total sf R-2		11,752 sf		
Total sf U-1			2,172 sf	
Total sf B				1,078 sf
Total project sf				15,002 sf

* Area must not exceed 500sf,. Floor Area is the area included within the surrounding exterior walls, exclusive of vent shafts & courts.

DIRECTORY

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SAN FRANCISCO, CA 94110
TEL: 415.642.7722 X 106
EMAIL: aurrutia@santosurrutia.com

MEP CONSULTANT:
RENE TANAG
ACIES

CIVIL ENGINEER
MATT WHELLER
TEL: 916.660.6834
500 WALL ST.
AUBURN, CA 95603
EMAIL: mattw@mwheelereng.com

LANDSCAPE (1)
NANN WHITE
REDBUD DESIGN
3739 16TH STREET
SAN FRANCISCO, CA

PROJECT DESCRIPTION

SCOPE OF WORK INCLUDES:
CONSTRUCTION OF A 7-UNIT MIXED USE PROJECT AND CORNER COMMERCIAL.

PLANNING APPROVALS:
CASE FILE NO. CDV06-014, 3101 35TH AVENUE

GENERAL PLAN LAND USE CLASSIFICATION:
MIXED HOUSING TYPE RESIDENTIAL

ZONING DESIGNATION:
C-20 SHOPPING CENTER COMMERCIAL ZONE

ENVIRONMENTAL DETERMINATION:
EXEMPT, SECTION 15332 OF THE STATE CEQA GUIDELINES; IN-FILL DEVELOPMENT PROJECT AND 15183

HISTORIC STATUS:
NOT A POTENTIALLY DESIGNATED HISTORIC PORPERTY (PDHP); SURVEY RATING: F3

SERVICE DELIVERY DISTRICT:
IV

CITY COUNCIL DISTRICT:
4

SHEET LIST

ARCHITECTURE
PHILIP BANTA & ASSOCIATES
6050 HOLLIS STREET
EMERYVILLE, CALIFORNIA 94608
TEL: 510.654.3255
FAX: 510.654.3259
www.bantadesign.com

REVISIONS: (1) ISSUES: ( )

No.	Description	Date
(1)	1ST PLAN CHECK REVIEW	01/14/14
(1)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT PHILIP BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

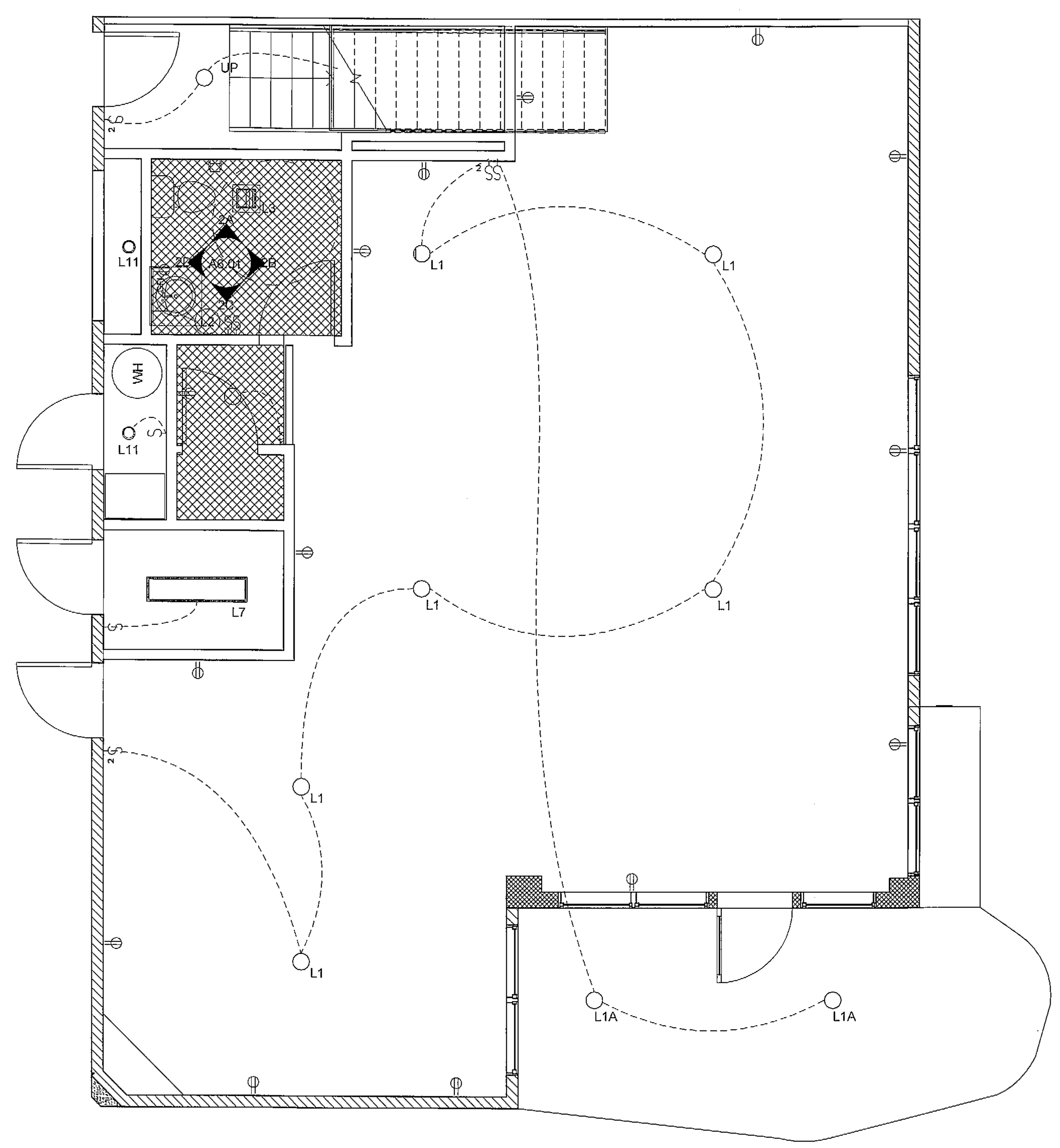
SHEET DESCRIPTION:

GENERAL INFORMATION

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1 : 5

GEN-01

1/30/2014 3:02:01 PM



(1) ElecPlan UNIT B 1ST FLOOR
1/4" = 1'-0"

- L1 - RECESSED
- L1A - EXTERIOR RECESSED
- L2 - VANITY WALL FIXTURE
- L3 - CEILING FAN W/ LIGHT
- L4 - DINING ROOM PENDANT
- L5 - EXTERIOR LIGHTING - ENTRY
- L6 - FLUSH MOUNTED LIGHT
- L7 - STRIP FLUORESCENT
- L8 - EXTERIOR LIGHTING - DECK
- L9 - FLOURESCENT CEILING LIGHT - MINKA ENERGY STAR (17 1/4" x 4 1/2" x 51 1/2")
- L10 - KITCHEN ISLAND PENDANT
- L11 - CEILING MOUNT

- DROPPED CEILING, 8'-0" TYP., U.N.O.
- GAS
- TV OUTLET
- TELEPHONE
- DUPLEX OUTLET
- GFI DUPLEX OUTLET
- LIGHT SWITCH DOUBLE
- LIGHT SWITCH SINGLE

ELECTRICAL NOTES:

(A)- WALLS 2 FEET WIDE AND GREATER SHALL HAVE AN ELECTRICAL OUTLET. OUTLETS SHALL BE LOCATED WITH A MAXIMUM SPACING OF 12 FEET AND WITHIN 6 FEET OR ENDS OF WALLS AND OPENINGS.

(B)- LOCATE RECEPTACLE OUTLETS IN KITCHEN AT EVERY COUNTER SPACE WIDER THAN 12 INCHES SO THAT NO POINT IS MORE THAN 24 INCHES FROM AN OUTLET.

(C)- ALL EXTERIOR LIGHTING MUST BE HIGH EFFICACY PER CEC SECTION 150. AS AN EXCEPTION THE EXTERIOR LIGHTS MAY BE INCANDESCENT LIGHTING CONTROLLED BY A MOTION SENSOR, EXCEPTION 1, SECTION 150(K) 6.

(D)- ROOMS WITH PERMANENT LIGHTING MUST HAVE HIGH EFFICACY OR NON-HIGH EFFICACY LIGHTING SHALL BE CONTROLLED BY A MANUAL ON MOTION SENSOR OR DIMMER SWITCH CONTROL PER CEC SECTION 150(K)4. EXCEPTIONS (1), (2) & (3)

(E)-ALL OTHER INTERIOR ROOMS- ALTERNATE OPTION: MANUAL-ON OCCUPANT SENSOR, OR DIMMER

(F)- BATHROOM, LAUNDRY,UTILITY- ALTERNATE OPTION: MANUAL-ON OCCUPANT SENSOR. AT LEAST ONE RECEPTACLE OUTLET, IN ADDITION TO ANY PROVIDED FOR LAUNDRY EQUIPMENT, SHALL BE INSTALLED PER 2004 C.E.C. ARTICLE 210-52 f.

(G)- KITCHEN-ALTERNATE OPTION: UP TO 50% OF RELAMPING RATED WATTAGE CAN BE OTHER THAN HIGH EFFICACY

(H)- ALL CLOSETS EXCEEDING 70 SQUARE FEET, MUST HAVE HIGH EFFICACY LIGHTING.

(I)- ALL LUMINARIES INSTALLED IN WET OR DAMP LOCATIONS MUST BE SUITABLE FOR WET LOCATIONS.

(J)- SWITCH ALL HIGH EFFICACY LIGHTING SEPARATE FROM LOW EFFICACY LIGHTING.

(K)- ELECTRONIC BALLASTS FOR ALL FLUORESCENT LAMPS RATED 13 WATTS OR GREATER.

(L)- PROVIDE DEDICATED CIRCUITS AT ALL REQD LPG SENSORS

(M)-RECESSED LUMINARIES IN ALL INSULATED CEILINGS APPROVED FOR ZERO-CLEARANCE INSULATION COVER (IC) AND CERTIFIED AIRTIGHT.

(N)- ALL BRANCH CIRCUITS THAT SUPPLY RECEPTACLE OUTLETS IN BEDROOMS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER(S) LISTED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT, INCLUDING LIGHTING OUTLETS AND SMOKE DETECTORS.

(O) USE 110V SMOKE DETECTORS W/ BATTERY BACKUP (WHICH ARE AUDIBLE IN ALL SLEEPING AREAS) AT ALL BEDROOMS, CENTRALLY LOCATED IN CORRIDOR AND HALLWAYS LEADING TO BEDROOMS, ABOVE TOPS OF STAIRS, AND AT LEAST ONE AT EVERY LEVEL, INCLUDING BASEMENTS.

(P)- PROVIDE TWO OR MORE 20-AMPERE SMALL APPLIANCE BRANCH CIRCUITS EVENLY PROPORTIONED IN THE KITCHEN, PANTRY, BREAKFAST ROOM, DINING ROOM, OR SIMILAR AREAS, SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS.

(Q) RECEPTACLE OUTLETS IN BATHROOMS, GARAGES, OUTDOORS AND CRAWL SPACES SHALL HAVE GFCI PROTECTION FOR PERSONNEL, IN ACCORDANCE WITH CEC 210.8 A

APPLICANT COPY

ARCHITECTURE
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REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (revision)	1ST PLAN CHECK REVIEW	01/14/14
1 (issue)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

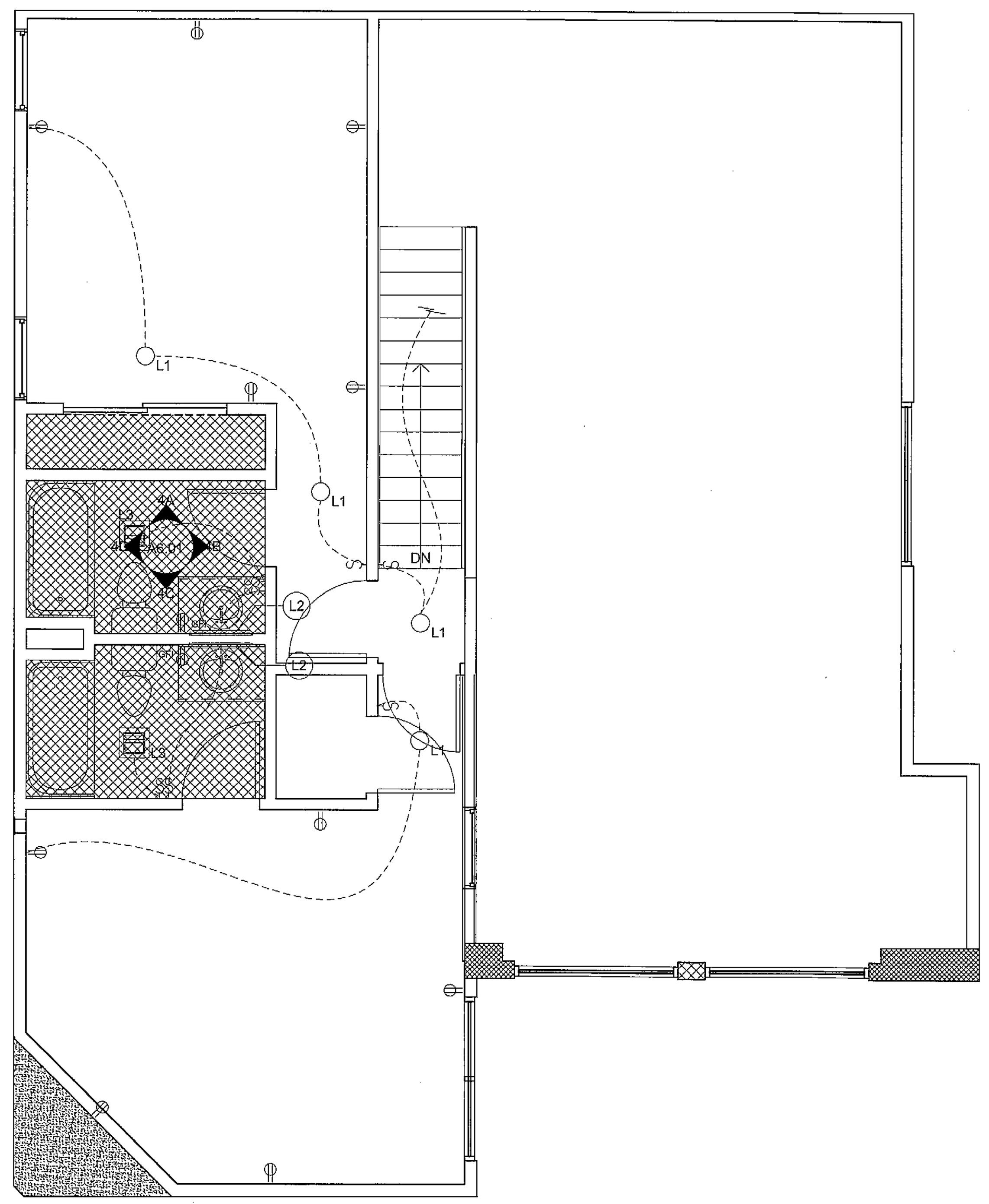
SHEET DESCRIPTION:

UNIT B RCP/ELECTRICAL PLANS (COMMERCIAL)

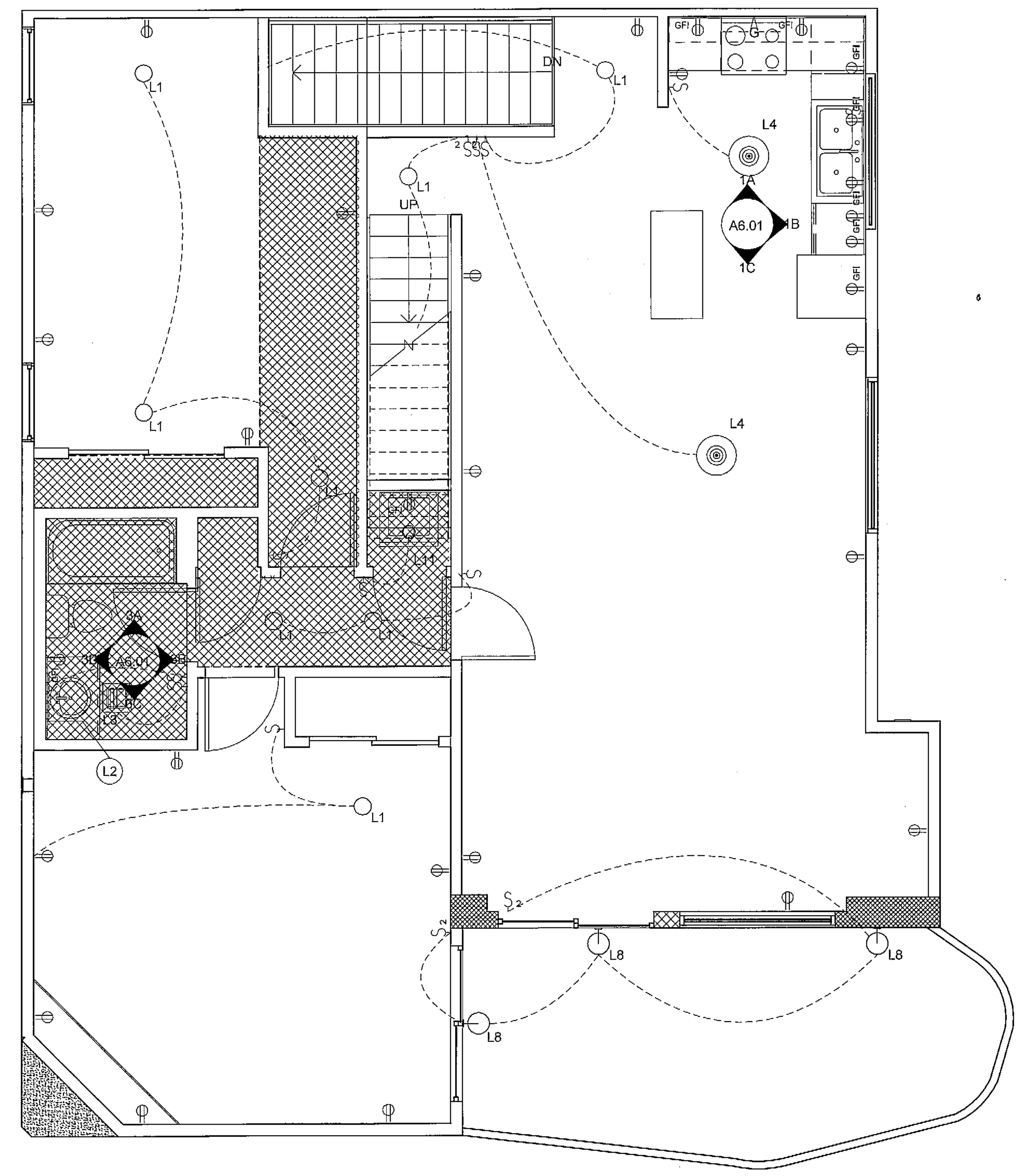
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

A3.10

12/7/2013 4:01:06 PM



(2) ElecPlan UNIT B 3RD FLOOR
1/4" = 1'-0"



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REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (revision)	1ST PLAN CHECK REVIEW	01/14/14
1 (issue)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

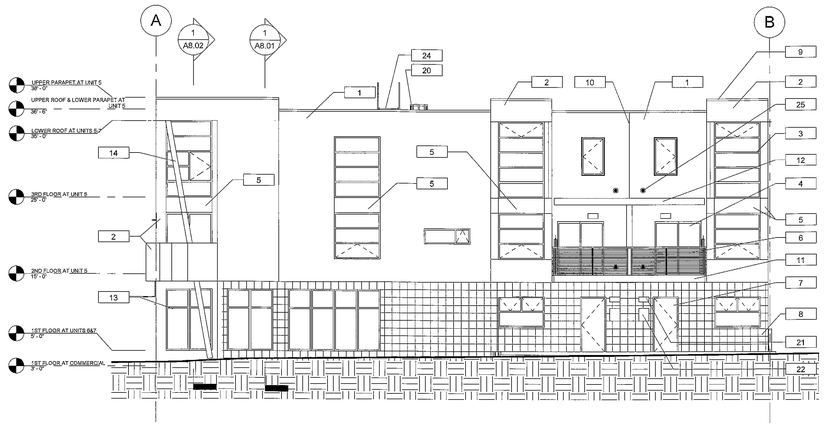
SHEET DESCRIPTION:

UNIT B RCP/ELECTRICAL PLANS (RESIDENTIAL)

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

A3.11

12/7/2013 4:01:07 PM



② EAST ELEVATION (VIEW FROM 35TH ST.)
1/8" = 1'-0"

① NORTH ELEVATION (VIEW FROM PARKING @ REAR OF BLDG.)
1/8" = 1'-0"

1	7/8" CEMENT PLASTER
2	7/8" CEMENT PLASTER STEEL TROWEL FINISH
3	ALUMINUM WINDOWS
4	SLIDING METAL DOOR
5	ALUMINUM PANEL COLOR TO MATCH ADJACENT WINDOW
6	PAINTED METAL RAILING
7	HM FRAME W/ SOLID CORE DOOR PAINTED
8	12" X 12" GRANITE TILE - GRANITE TILE FLAMED - VERDE UBATUBA
9	GSM FLASHING NOTE: (ALL STUCCO SHALL BE CONCEALED WITHIN FLASHING)
10	3/8" "V" CONTROL JOINT
11	PAINTED METAL DECK
12	PAINTED METAL TRELLIS
13	ALLUMINUM STOREFRONT WINDOWS
14	PAINTED METAL POLE
15	PAINTED METAL GARAGE DOORS
16	PAINTED METAL GATE
17	PAINTED METAL CONDUCTOR-HEAD & DRAIN PIPE
18	METAL FRAMED ROOF W/ TRANSPARENT COVERING
19	MAIL BOXES
20	ROOF ACCESS LADDER WITH CAGE TYP.
21	EXTERIOR LIGHT FIXTURE UNIT
22	UNIT ADDRESS SIGN
23	PROPERTY ADDRESS SIGN
24	PAINTED CATWALK
25	ACOUSTICAL VENT- PROVIDE THERMA-STOR FRESH 100 OR APPROVED EQUAL

NOTES:

1. ALL WINDOWS THAT ARE NOT BAY WINDOW TYPE SHALL BE 2" RECESSED FROM FRONT OF FINISHED FACADE.

APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK SECTION
APPROVAL CONFORMS WITH
CODES AND ORDINANCES
ACTIONS NEED APPROVAL
BUILDING CODE
TO UBC SECT 105.4.3
SECT 105.4 & IFC SECT R105.6
SURVEY (REVIEW ONLY)
PLOT PLAN REVIEW
PARKING/DWY LAYOUT
GRADING AND
EROSION CONTROL
REPORT ON FILE
MECH, PLUMB,
CHECKED

SEE GROUND FLOOR PLAN

APPLICANT COPY

ARCHITECTURE
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REVISIONS: △ ISSUES: ○

No.	Description	Date
△	1ST PLAN CHECK REVIEW	01/14/14
①	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT PHILIP BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

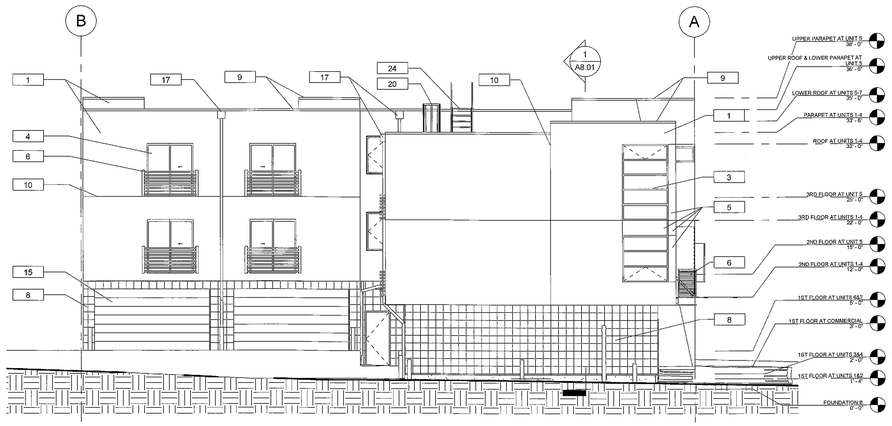
SHEET DESCRIPTION:

EXTERIOR ELEVATIONS

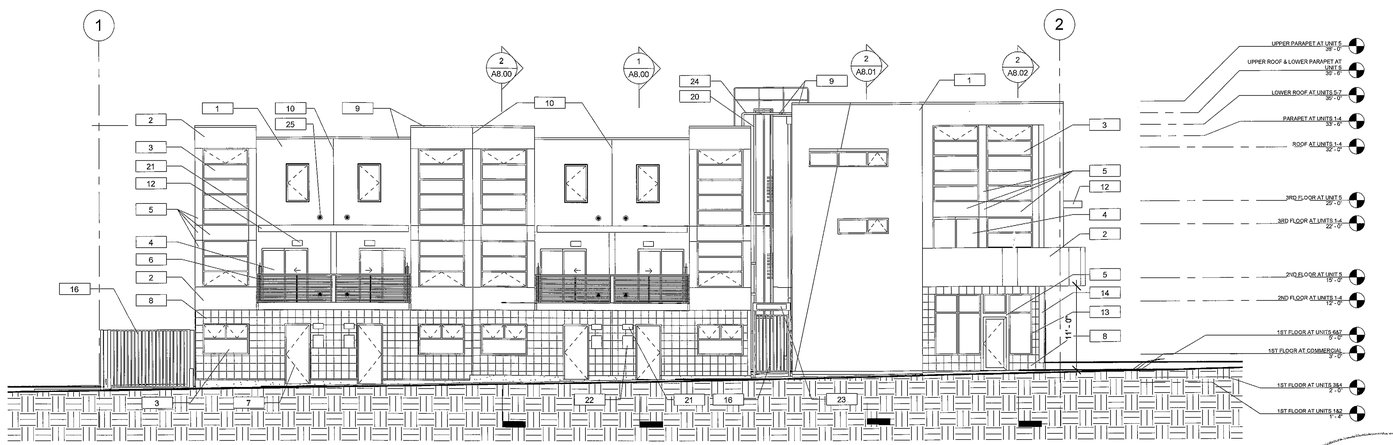
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/8" = 1'-0"

A4.00

1/9/2014 5:35:49 PM



1 WEST ELEVATION
1/8" = 1'-0"



2 SOUTH ELEVATION
1/8" = 1'-0"

1	7/8" CEMENT PLASTER
2	7/8" CEMENT PLASTER STEEL TROWEL FINISH
3	ALUMINUM WINDOWS
4	SLIDING METAL DOOR
5	ALUMINUM PANEL COLOR TO MATCH ADJACENT WINDOW
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22	UNIT ADDRESS SIGN
23	PROPERTY ADDRESS SIGN
24	PAINTED CATWALK
25	ACOUSTICAL VENT- PROVIDE THERMA-STOR FRESH 100 OR APPROVED EQUAL

NOTES:

1. ALL WINDOWS THAT ARE NOT BAY WINDOW TYPE SHALL BE 2" RECESSED FROM FRONT OF FINISHED FACADE.

APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK SECTION
For Substantial Compliance With Codes and Ordinances
REVISIONS NEED APPROVAL
By: _____
BUILDING CODE
SUBJECT TO UBC SECT 104.4.3
IBC SECT 105.4 & IRC SECT 2105.1
SURVEY (REVIEW ONLY)
PLOT PLAN REVIEW
PARKING/DWY LAYOUT
GRADING AND
EROSION CONTROL
SOILS REPORT ON FILE
ELECT. MECH. PLUMB
NOT CHECKED
Date _____

SEE GROUND FLOOR PLAN

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REVISIONS: △ ISSUES: ○

No.	Description	Date
△1	1ST PLAN CHECK REVIEW	01/14/14
(1)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT PHILIP BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

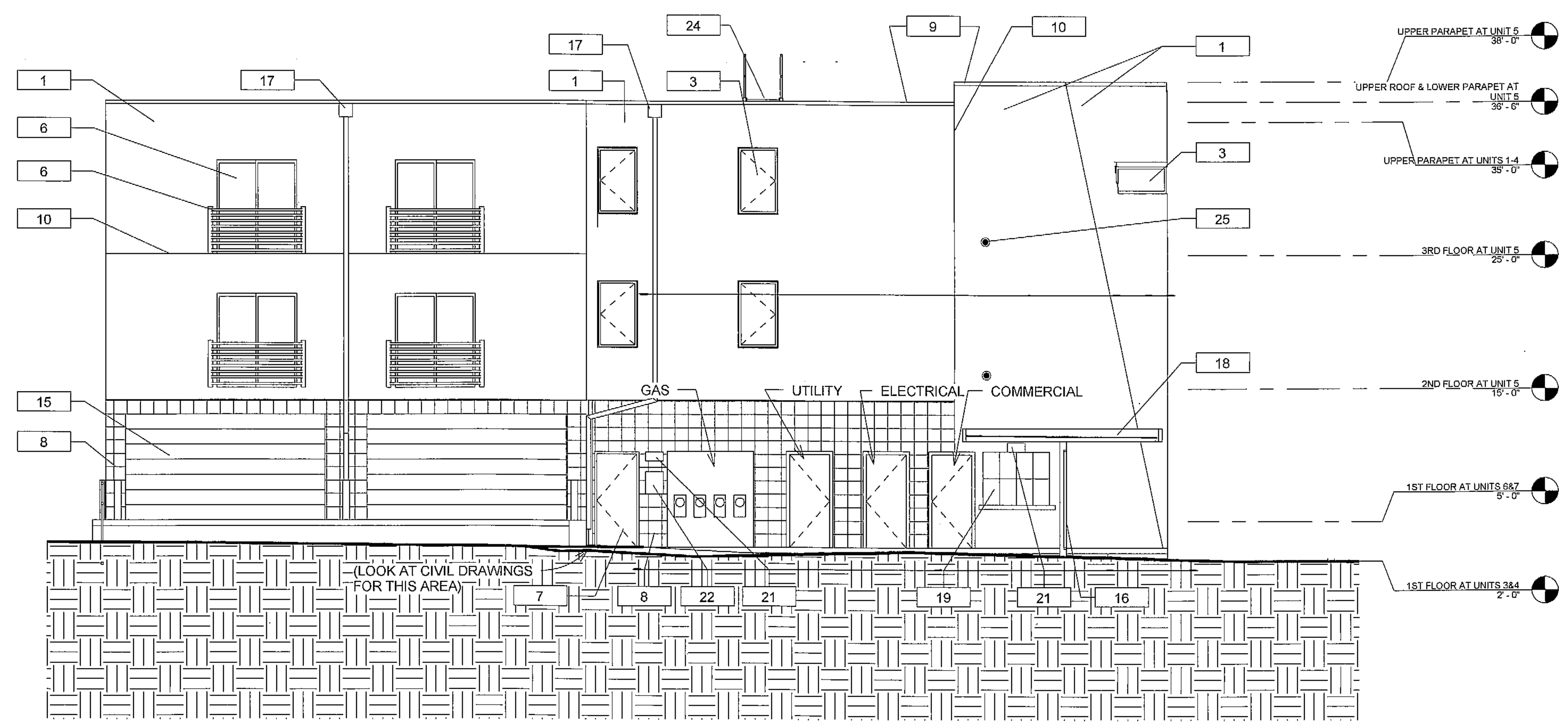
SHEET DESCRIPTION:

EXTERIOR ELEVATIONS

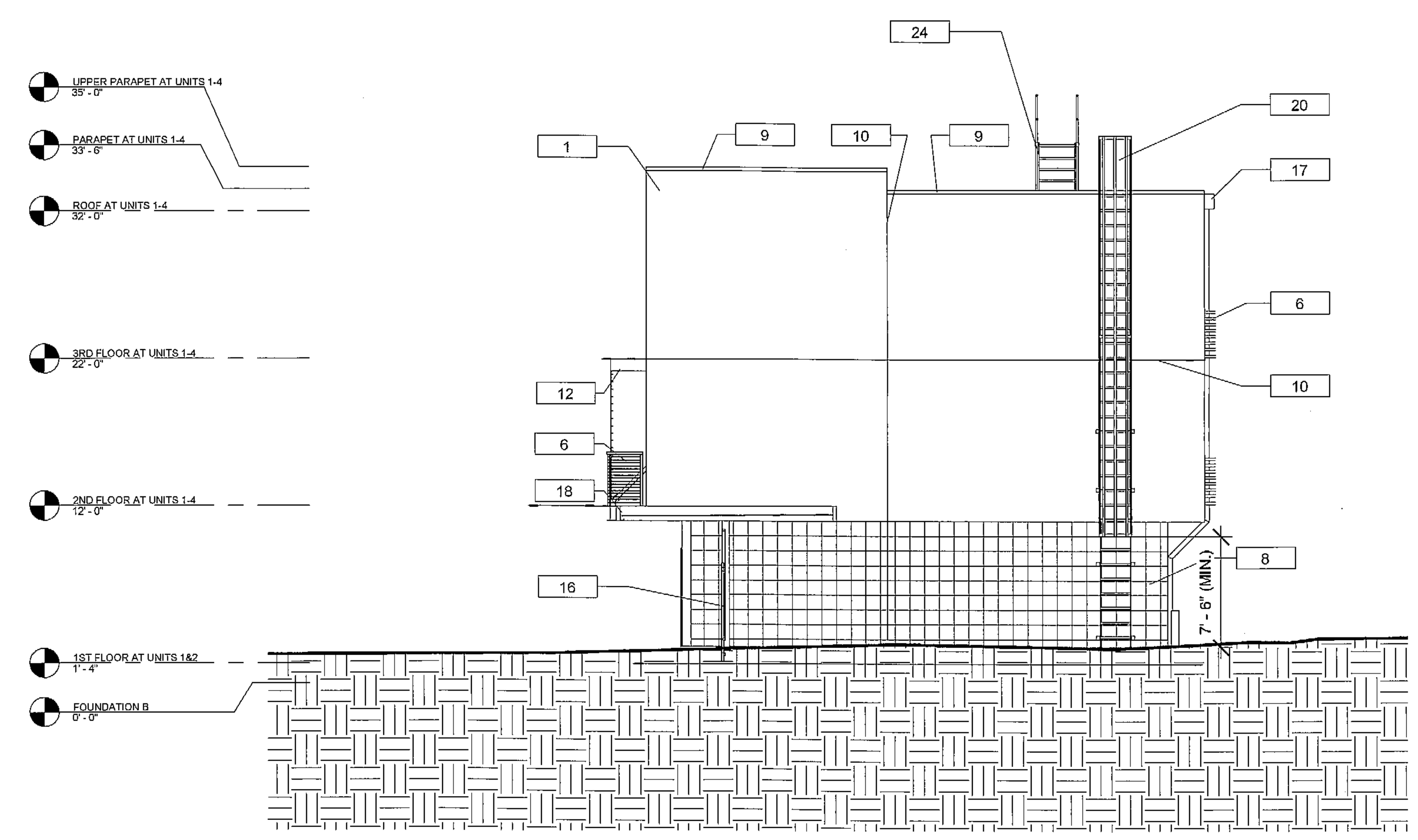
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/8" = 1'-0"

A4.01

1/8/2014 5:35:06 PM



② WEST ELEVATION - EXTERIOR HALL
1/8" = 1'-0"



① EAST ELEVATION - EXTERIOR HALL
1/8" = 1'-0"

1	7/8" CEMENT PLASTER
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NOTES:

1. ALL WINDOWS THAT ARE NOT BAY WINDOW TYPE SHALL BE 2" RECESSED FROM FRONT OF FINISHED FACADE. (1)

See Grading Floor Plan

ARCHITECTURE
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1 (△)	1ST PLAN CHECK REVIEW	01/14/14
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PROJECT:

35th @ School

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LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

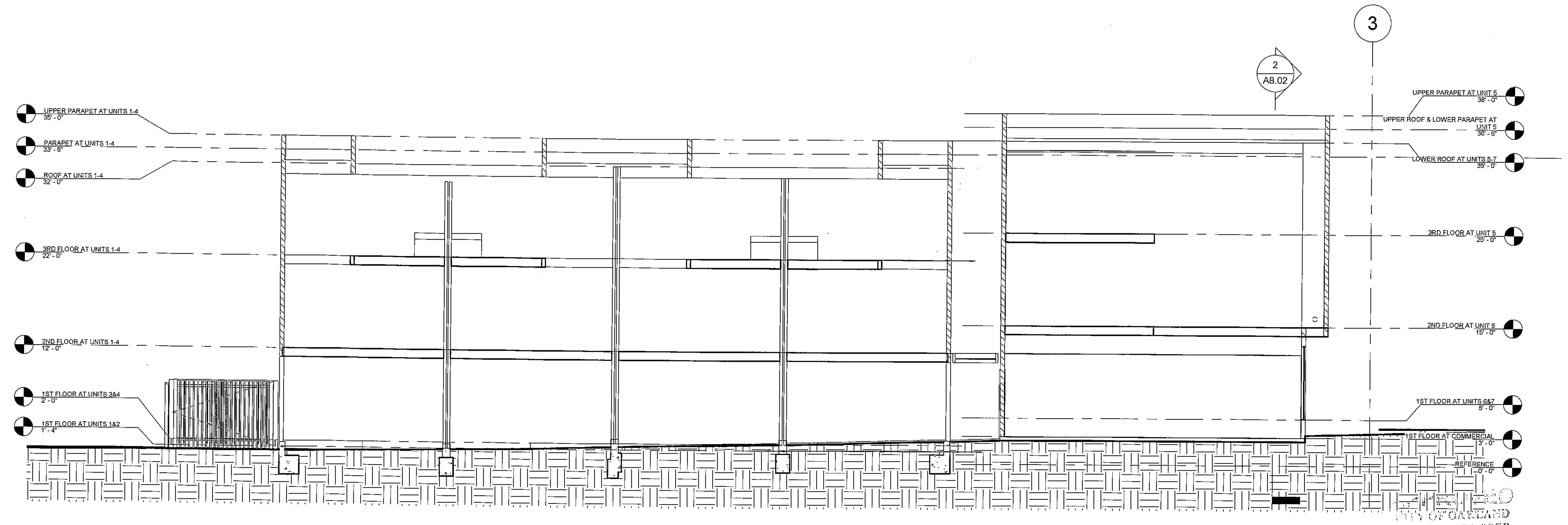
SHEET DESCRIPTION:

EXTERIOR ELEVATIONS

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/8" = 1'-0"

A4.02

1/9/2014 5:36:18 PM



3 BUILDING SECTION 3
1/8" = 1'-0"

CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK SECTION
Substantial Compliance With
Codes and Ordinances
REVISIONS NEED APPROVAL
BUILDING CODE
TO UBC SECT 106.4.3
SECT 105.4 & IRC SECT R105.8
SURVEY (REVIEW ONLY)
PLOT PLAN REVIEW
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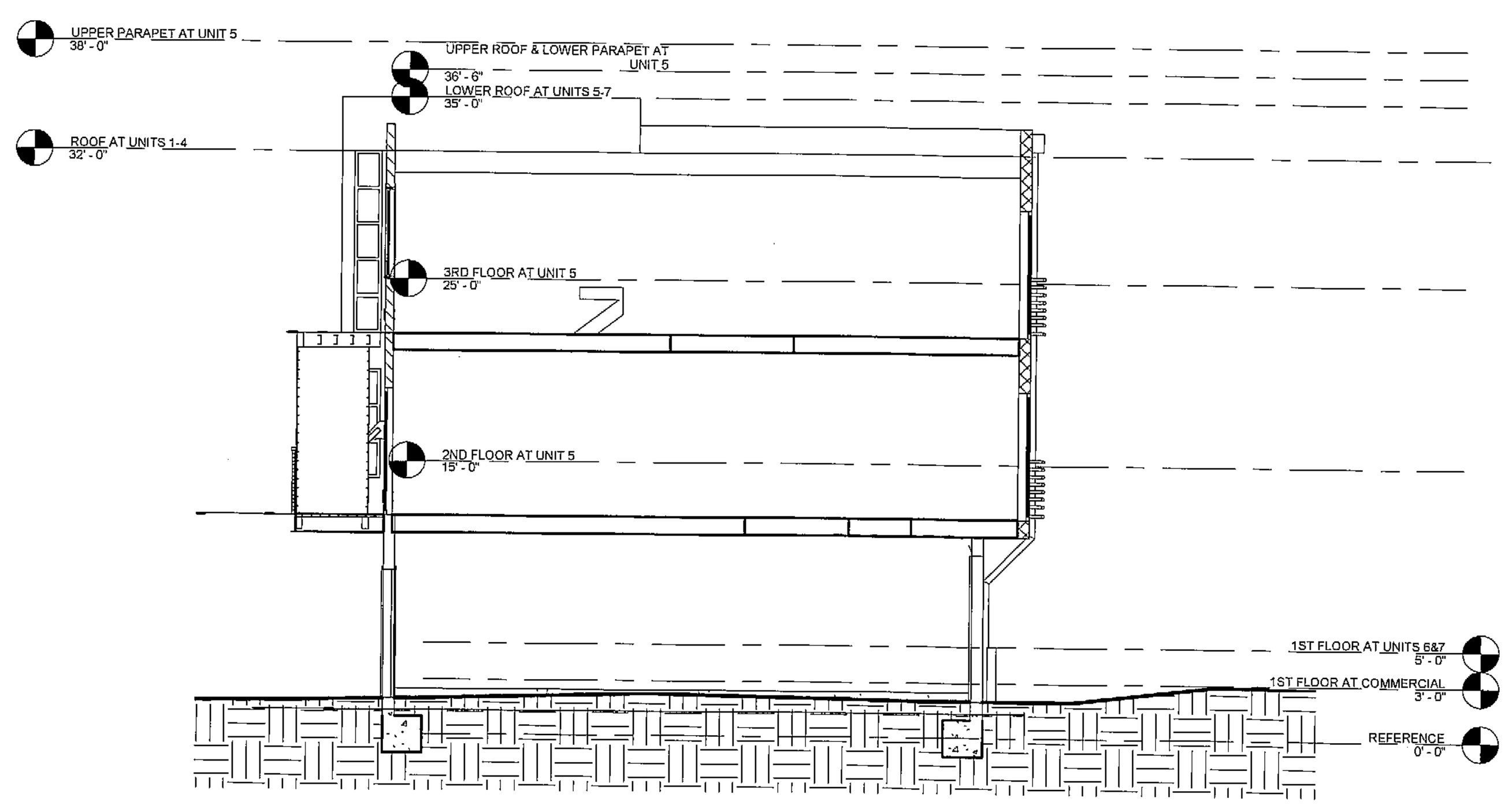
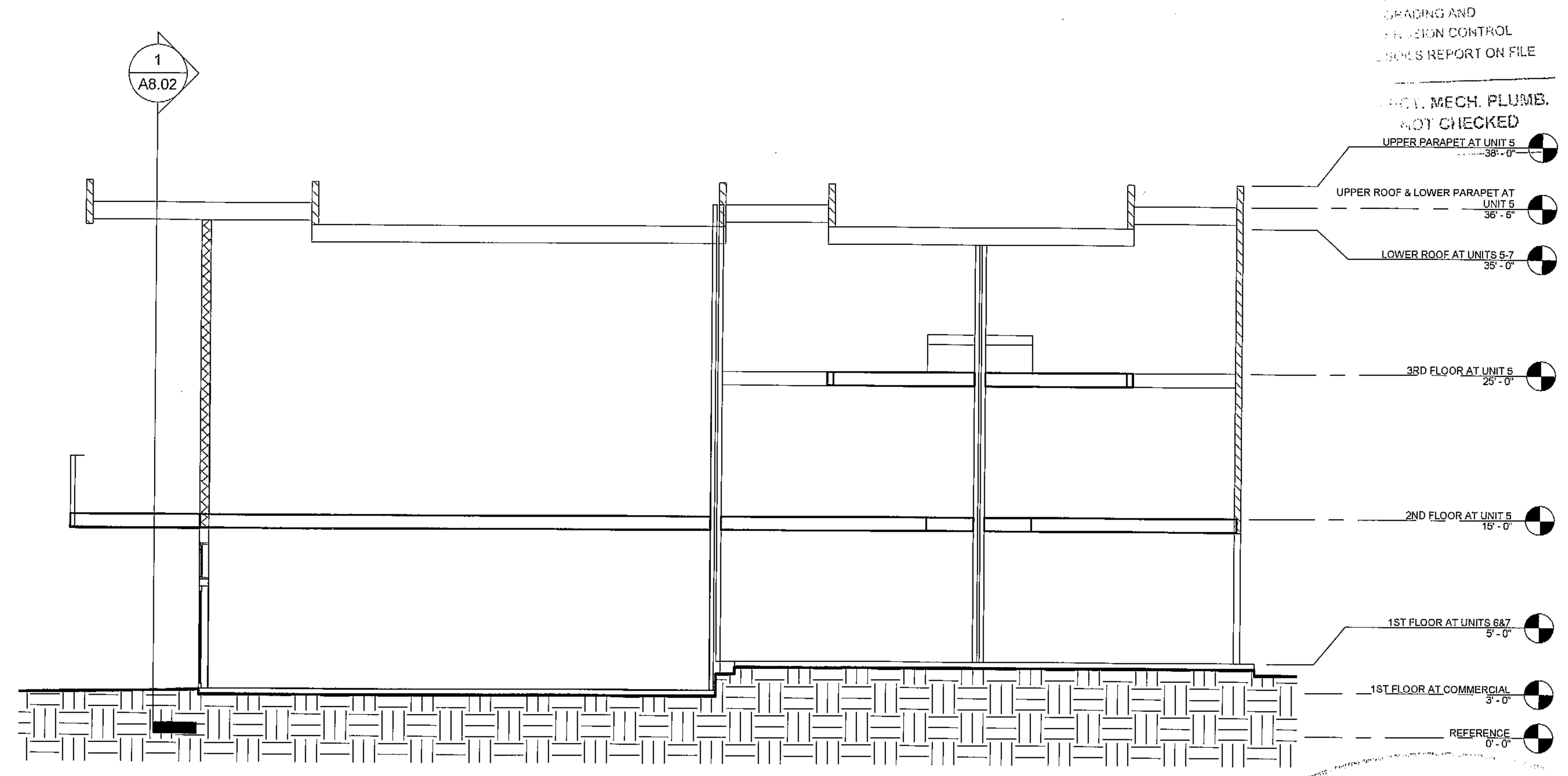
SOILS REPORT ON FILE
ELECT. MECH. PLUMB.
NOT CHECKED



2 BUILDING SECTION 2
1/8" = 1'-0"



1 BUILDING SECTION 1
1/8" = 1'-0"

SEE GROUND FLOOR PLAN

ARCHITECTURE

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PHILIP BANTA
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STATE OF CALIFORNIA

SHEET DESCRIPTION:

BUILDING SECTIONS

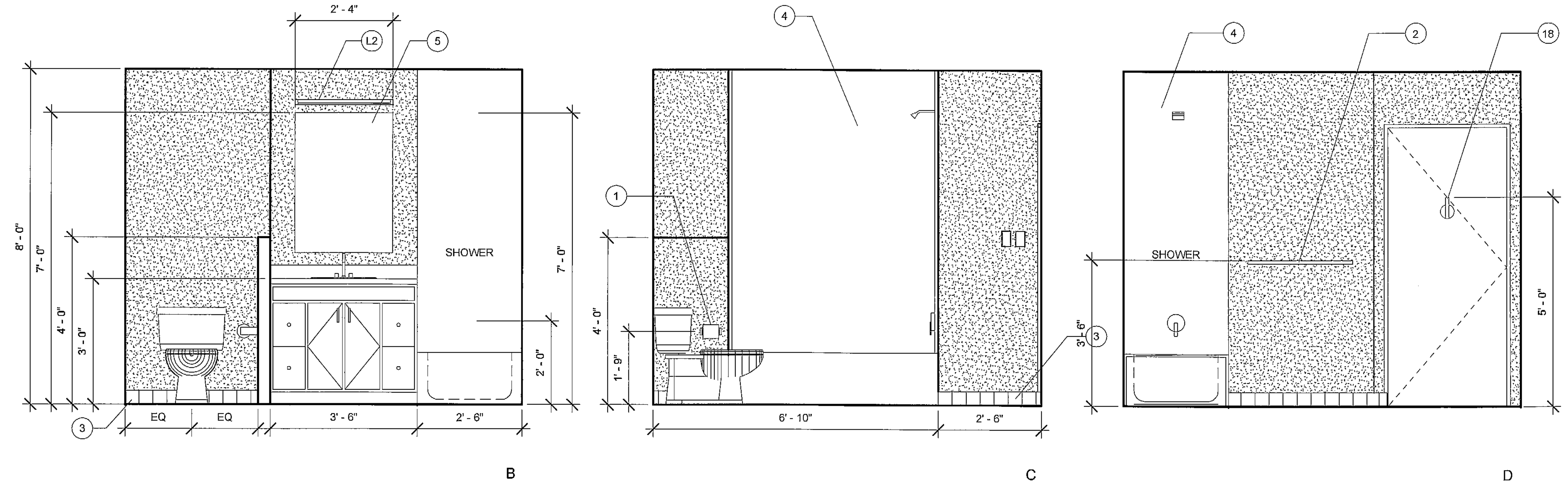
APPLICANT COPY

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/8" = 1'-0"

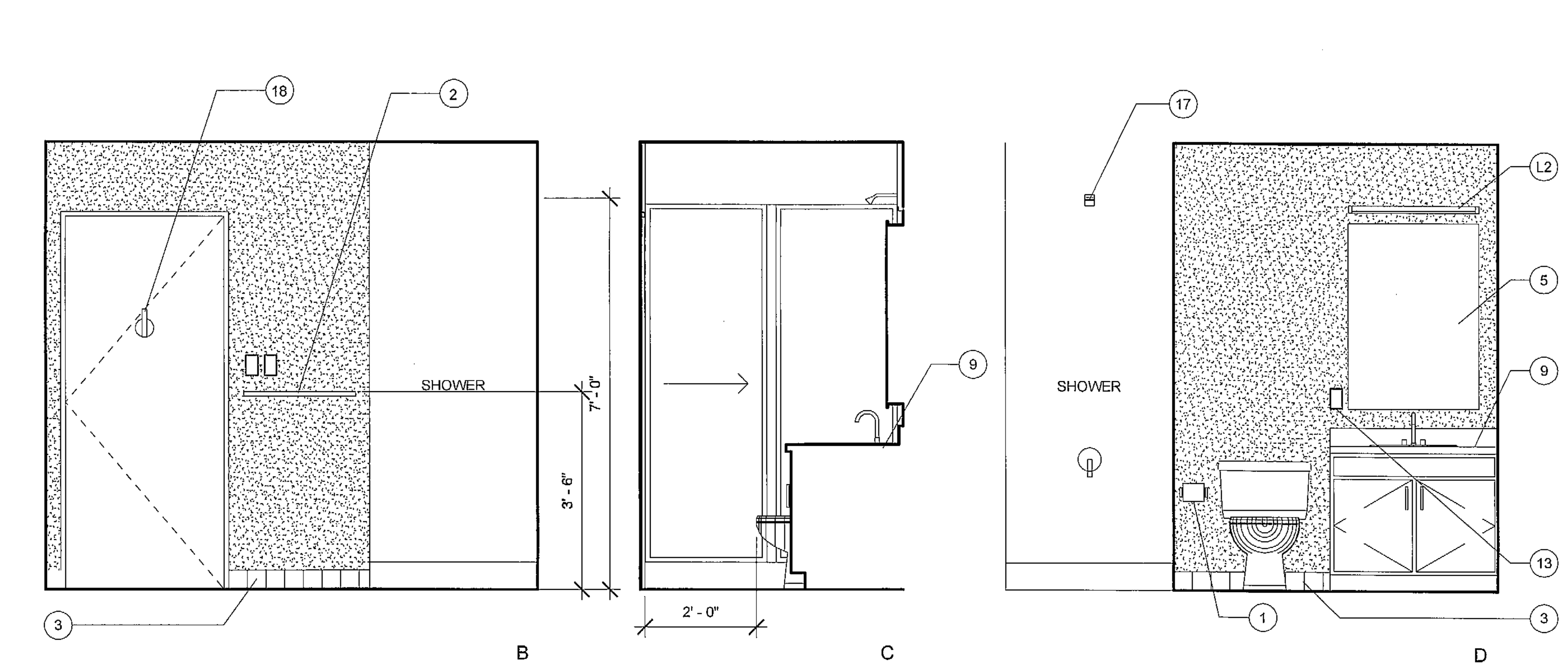
A5.00

12/8/2013 6:26:18 PM

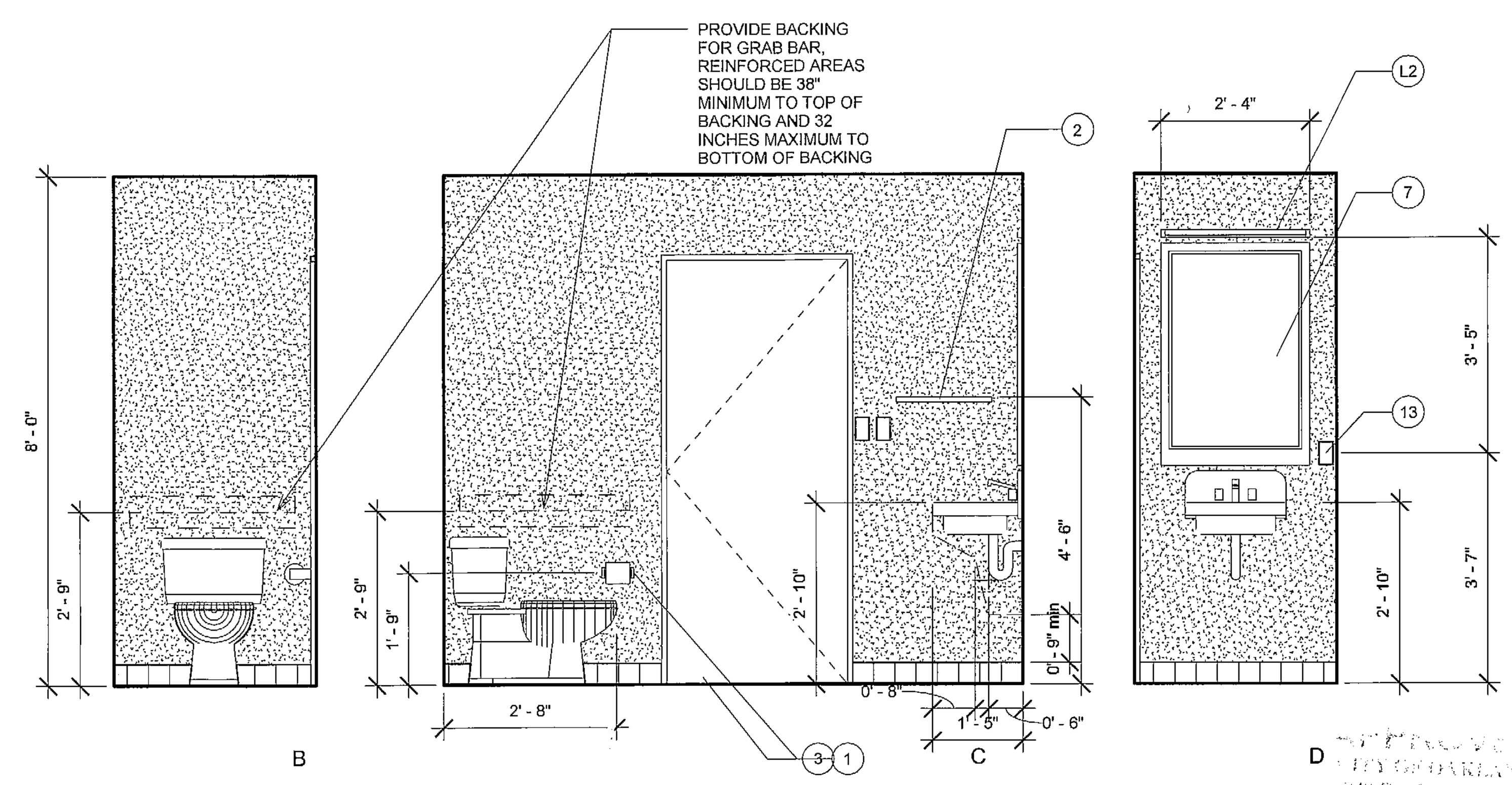
1	RECESSED TOILET DISPENSER
2	TOWEL RACK
3	6 " CERAMIC TILE BASE
4	FIBERGLASS TUB & SURROUND
5	MIRROR W/ MEDICINE CABINET BEHIND (SEMI-ENCLOSED)
6	
7	MIRROR
8	LIGHT FIXTURE
9	4" HIGH BACKSPLASH MATCH COUNTER TOP MATERIAL
10	BASE CABINET W/ LAZY SUSAN
11	KITCHEN HOOD
12	
13	OUTLET
14	SWITCH
15	PAINTED 1X6 BASE, TYP.
16	COUNTERTOP & BAR TOP
17	FIBERGLASS SHOWER W/ 1/4" TEMP GLAZING WDW & SHOWER
18	ROBE HOOK
19	ADA COMPLIANT GRAB BAR
20	ONE PIECE ADA COMPLIANT LAVATORY
21	CERAMIC TILE FLOORING MATERIAL TO ROLL UP VERTICALLY 6" @ WALL BASE PER SECTION 807.1 OF 1997 U.B.C.
22	6" TRIM W/ FLOURESCENT UPLIGHT BEYOND



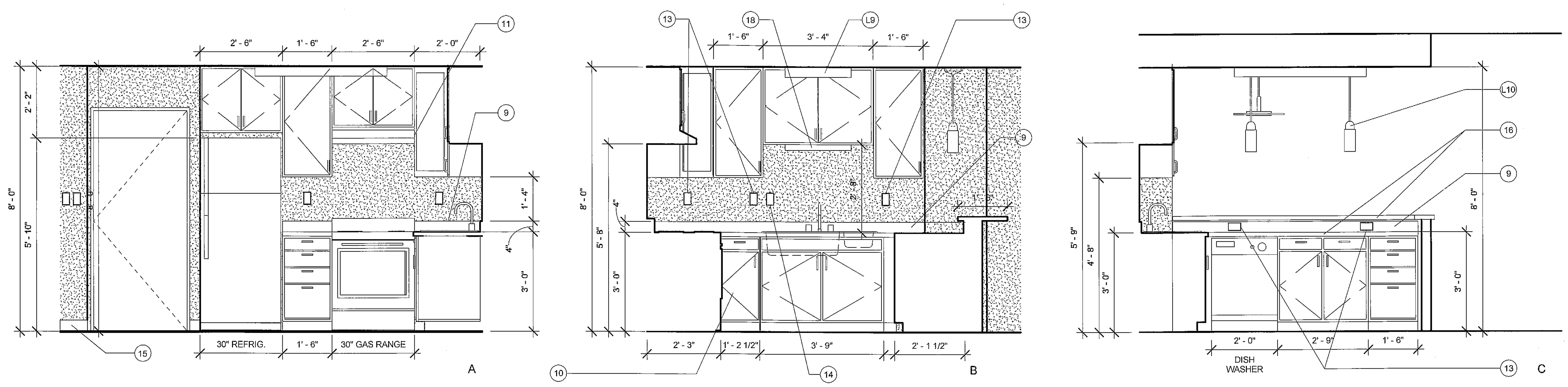
4 UNIT A - 3RD FLOOR - BATHROOM
1/2" = 1'-0"



3 UNIT A - 2ND FLOOR - BATHROOM
1/2" = 1'-0"



2 UNIT A - GND FLOOR - POWDER
1/2" = 1'-0"



1 UNIT A - 2ND FLOOR - KITCHEN
1/2" = 1'-0"

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www. | bantadesign.com

REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (revision)	1ST PLAN CHECK REVIEW	01/14/14
1 (issue)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT PHILIP BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

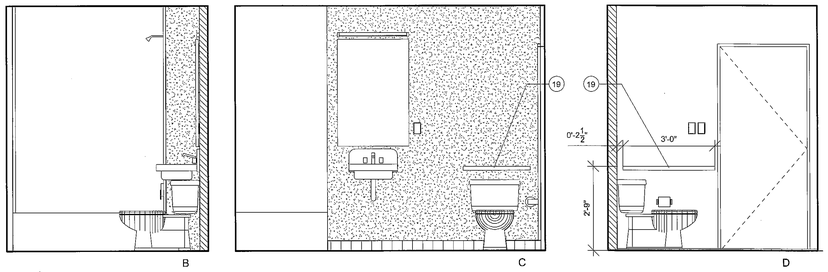
SHEET DESCRIPTION:

TYPE A INTERIOR ELEVATIONS

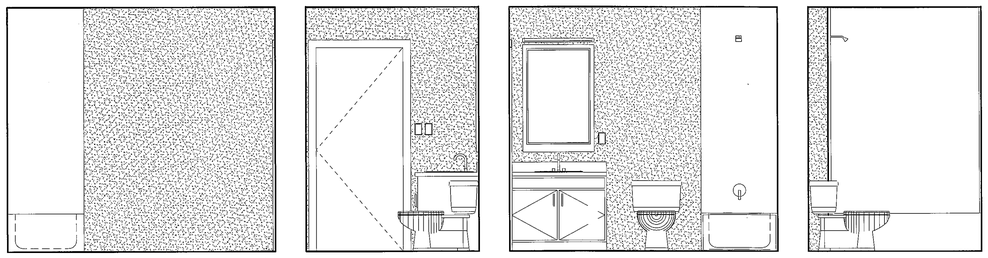
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

A6.00

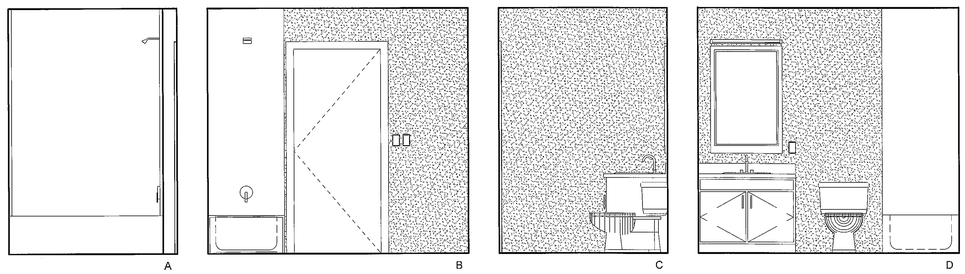
12/7/2013 4:01:22 PM



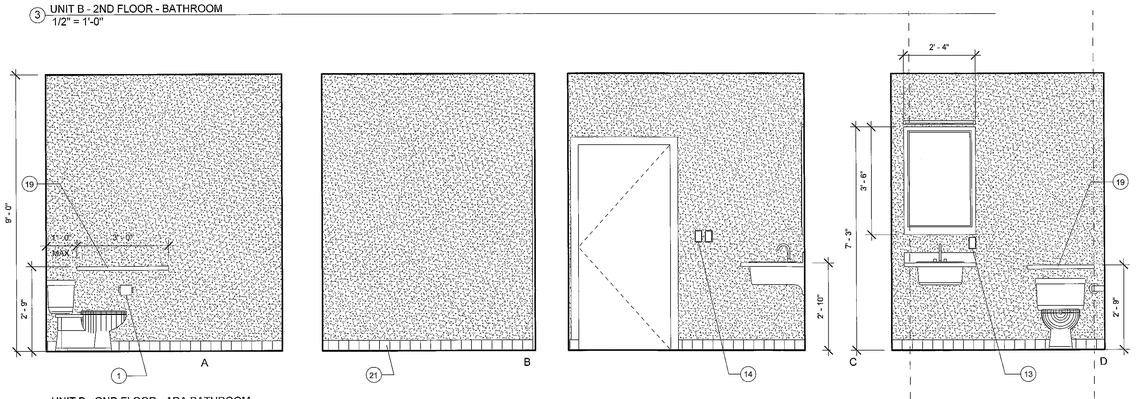
5 UNIT A3 - 1ST FLOOR - HANDICAP BATHROOM
1/2" = 1'-0"



4 UNIT B - 3RD FLOOR - BATHROOMS (B304 & B308 SIM.)
1/2" = 1'-0"



3 UNIT B - 2ND FLOOR - BATHROOM
1/2" = 1'-0"



2 UNIT B - GND FLOOR - ADA BATHROOM
1/2" = 1'-0"

1	RECESSED TOILET DISPENSER
2	TOWEL RACK
3	6 " CERAMIC TILE BASE
4	FIBERGLASS TUB & SURROUND
5	MIRROR W/ MEDICINE CABINET BEHIND (SEMI-ENCLOSED)
6	
7	MIRROR
8	LIGHT FIXTURE
9	4" HIGH BACKSPLASH MATCH COUNTER TOP MATERIAL
10	BASE CABINET W/ LAZY SUSAN
11	KITCHEN HOOD
12	
13	OUTLET
14	SWITCH
15	PAINTED 1X6 BASE, TYP.
16	COUNTERTOP & BAR TOP
17	FIBERGLASS SHOWER W/ 1/4" TEMP GLAZING WDW & SHOWER
18	ROBE HOOK
19	ADA COMPLIANT GRAB BAR
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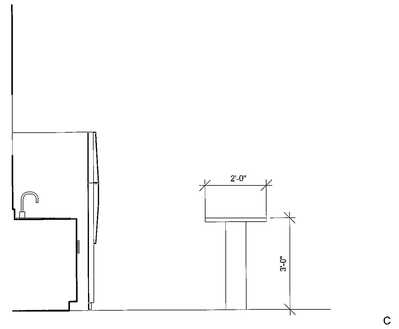
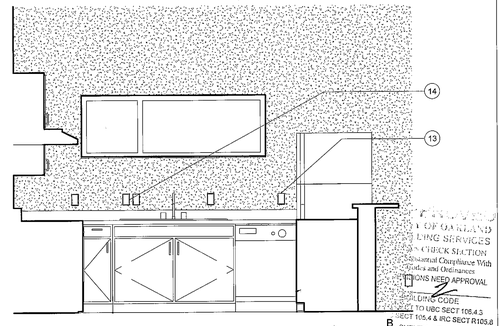
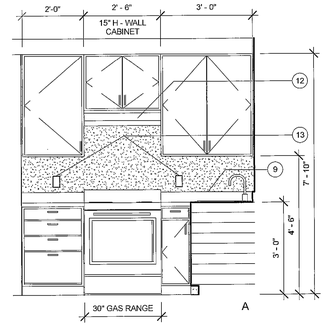
21	CERAMIC TILE FLOORING MATERIAL TO ROLL UP VERTICALLY 6" @ WALL BASE PER SECTION 807.1 OF 1997 U.B.C.
22	6" TRIM W/ FLOURESCENT UPLIGHT BEYOND







1 UNIT B - 2ND FLOOR - KITCHEN
1/2" = 1'-0"

CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK STATION
Substantial Compliance With
Codes and Ordinances
CORRECTIONS NEED APPROVAL
BUILDING CODE
SECT 105.3.1 IBC SECT 105.4.3
SECT 105.4 & IRC SECT R105.8
SURVEY (REVIEW ONLY)
PILOT PLAN REVIEW
OVERHEAD/WAY LAYOUT
GRADING AND
EROSION CONTROL
SOILS REPORT ON FILE
KITCHEN PLUMB.
BLOCKED

1 CBC SEC 1210.1
NONABSORBENT
FINISH & BACKING
REQUIRED FOR
ALL OCCUPANCY
RESTROOM WALLS &
FLOOR

ARCHITECTURE

PHILIP BANTA & ASSOCIATES

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EMERYVILLE, CALIFORNIA 94608

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www.philbantadesign.com

REVISIONS: △ ISSUES: ○

No.	Description	Date
△	1ST PLAN CHECK REVIEW	01/14/14
(1)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT PHILIP BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

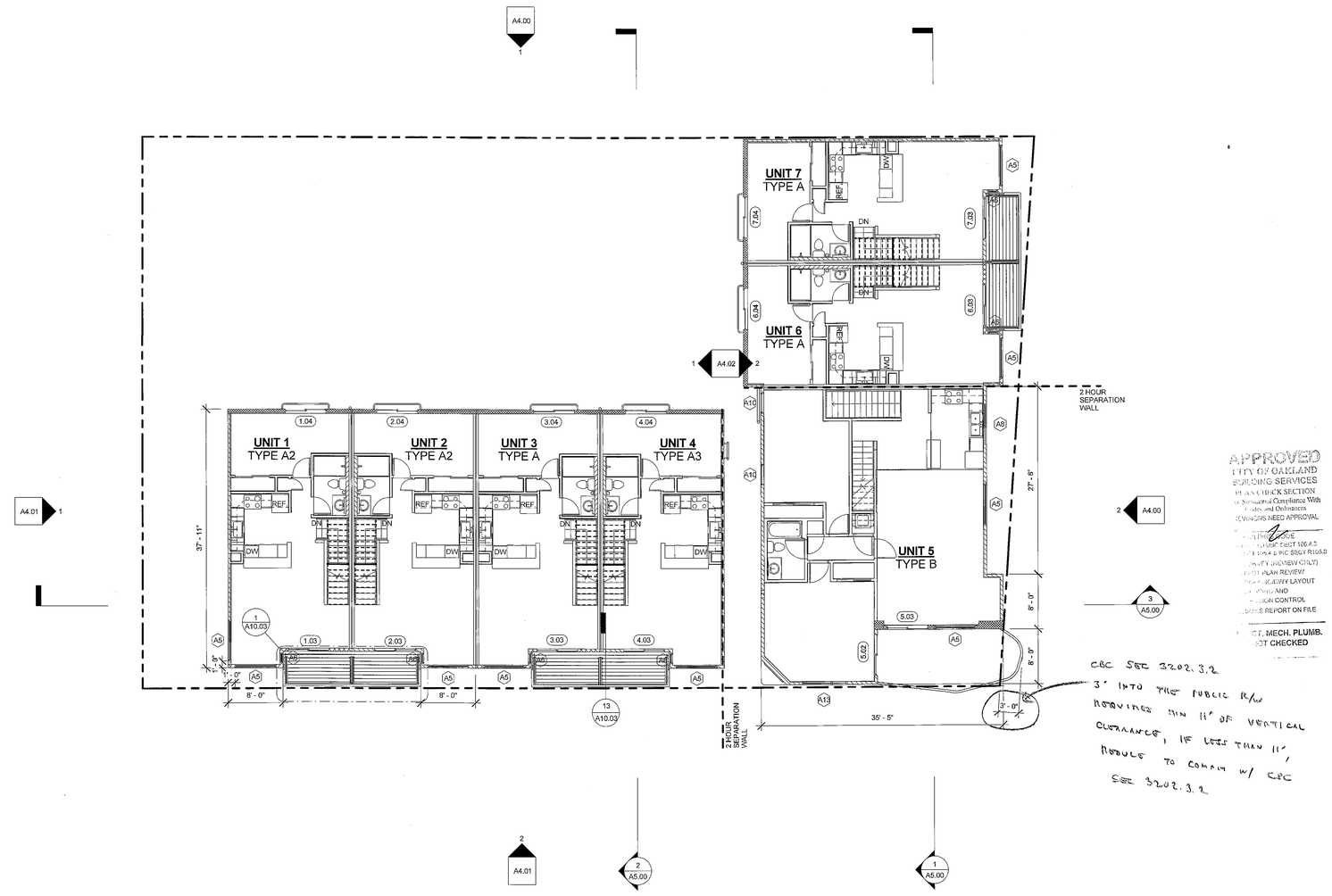
SHEET DESCRIPTION:

TYPE B INTERIOR ELEVATIONS

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

A6.01

12/8/2013 9:08:33 PM



1 2ND FLOOR AT UNITS 1-4
1/8" = 1'-0"

CBC SEC 3202.3.2
3' INTO THE PUBLIC R/W
REQUIRES MIN 11' OF VERTICAL
CLEARANCE, IF LESS THAN 11',
REDUCE TO COMPLY W/ CBC
SEC 3202.3.2

APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK SECTION
In Substantial Compliance With
Codes and Ordinances
REVISIONS NEED APPROVAL
BY
CONDITIONS
SEE CBC SECT 106.4.3
CEC 104.4 & IRC SECT R105.3
(VERIFY (REVIEW ONLY)
FIELD PLAN REVIEW
ROADWAY LAYOUT
GRADING AND
EROSION CONTROL
SOILS REPORT ON FILE
ST. MECH. PLUMB.
NOT CHECKED

BUILDING PLAN LEGEND	
PLANTING AREA	2x4 STUD WALL - SEE SHEET A9.0
0'-0" FINISH FLOOR ELEVATION 0'-0" SET AT 160'-0" PER SURVEY	2x6 STUD WALL - SEE SHEET A9.0
	2x8 STUD WALL - SEE SHEET A9.0
	CONCRETE

BUILDING PLAN NOTES

1. REFER TO SHEET A9.00 FOR ASSEMBLY NOTES.
2. REFER TO SHEETS A7.00 FOR DOOR SCHEDULES AND NOTES
3. REFER TO SHEETS A7.01 FOR WINDOW SCHEDULE AND NOTES
4. REFER TO SHEETS OF A10.00 SERIES FOR WATERPROOFING DETAILS
5. REFER TO SHEET A0.05 FOR ACCESSIBILITY DETAILS AND REQUIREMENTS
6. REFER TO SHEET A9.00 FOR WALL TYPE ASSEMBLIES.
7. REFER TO A2 SERIES FOR UNIT DIMENSIONS, DOOR AND WINDOW TAGS AND PARTITION INFORMATION
8. ALL DIMENSIONS TO FACE OF STUD, U.N.O.
9.
10.

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REVISIONS: △ ISSUES: ○

No.	Description	Date
△	1ST PLAN CHECK REVIEW	01/14/14
(1)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT PHILIP BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

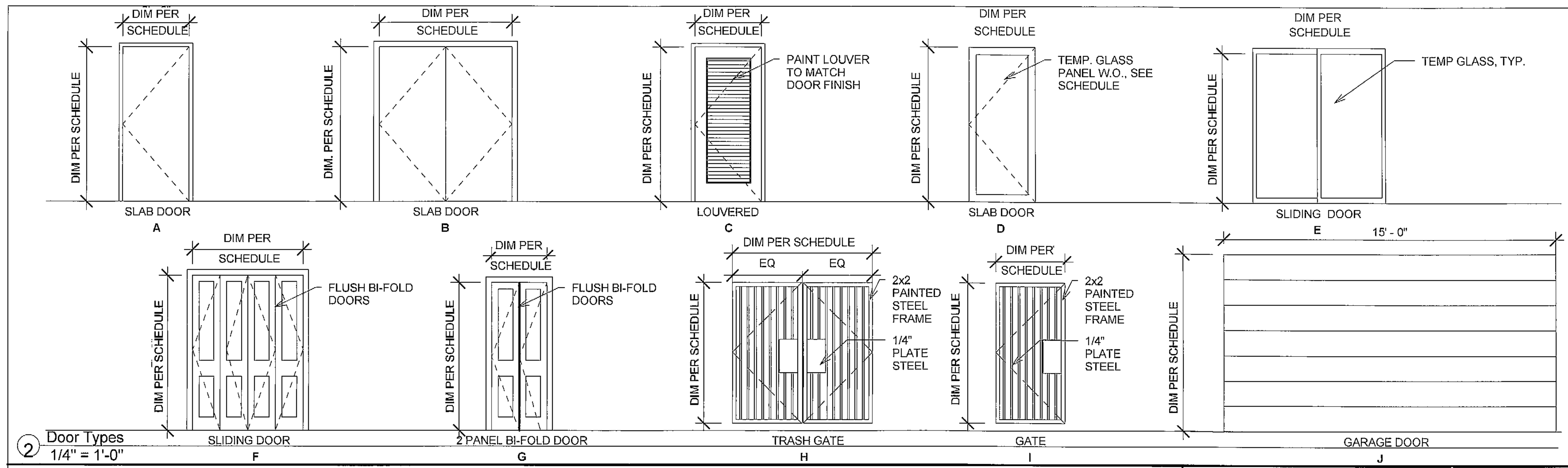
SHEET DESCRIPTION:

SECOND FLOOR PLAN

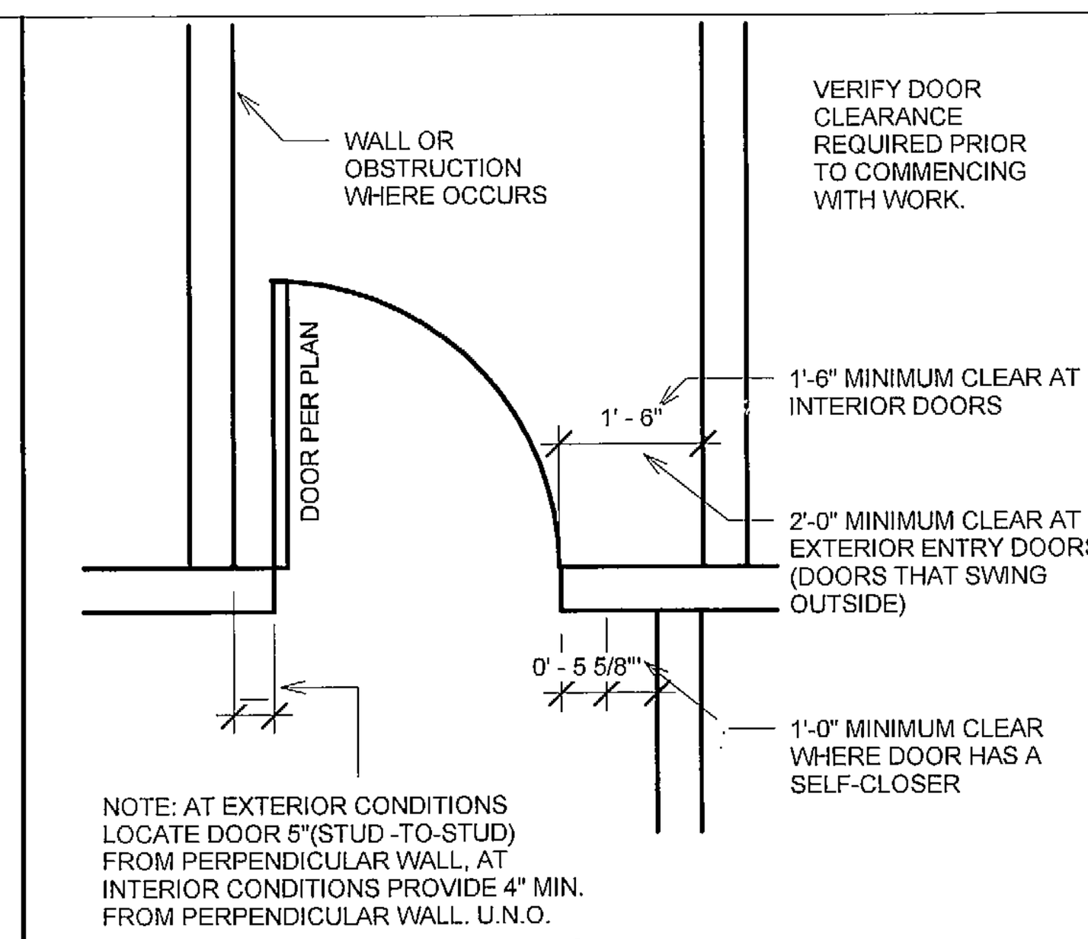
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/8" = 1'-0"

A1.02

12/8/2013 8:28:12 PM



2 Door Types
1/4" = 1'-0"



1 DOOR SWING REQUIREMENTS
1/2" = 1'-0"

DOOR SCHEDULE

Mark	Type	Description	Width	Height	Finish	Frame	Jamb	Head	Comments
1.01	A	ENTRY 7'-6"	3' - 0"	7' - 8"	PTD	HM	2/A7.02	1/A7.02	HW1; 1,5,12,15
1.02	J	GARAGE 8'-8"	15' - 0"	8' - 8"	PTD	HM			
1.03	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
1.04	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL			HW2
1.05	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL			HW2
2.01	A	ENTRY 7'-6"	3' - 0"	7' - 8"	PTD	HM	2/A7.02	1/A7.02	HW1; 1,5,12,15
2.02	J	GARAGE 8'-8"	15' - 0"	8' - 8"	PTD	HM			
2.03	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
2.04	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL			HW2
2.05	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
3.01	A	ENTRY 7'-0"	3' - 0"	7' - 0"	CLR		2/A7.02	5/A7.02	HW1; 1,5,12,15
3.02	J	GARAGE 8'-0"	15' - 0"	8' - 0"	PTD	HM			
3.03	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
3.04	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
3.05	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
3.19	F	CLOSET 5'-0"	5' - 0"	7' - 0"					
3.19	F	CLOSET 5'-0"	5' - 0"	7' - 0"					
3.26	A	UTILITY 7'-0"	3' - 0"	7' - 0"	PTD	HM		1/A7.02	3/4 HOUR FIRE RATED
4.01	A	ENTRY 7'-0"	3' - 0"	7' - 0"	PTD		2/A7.02	1/A7.02	HW1; 1,5,12,15
4.02	J	GARAGE 8'-0"	15' - 0"	8' - 0"	PTD				
4.03	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
4.04	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
4.05	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
5.01	A	ENTRY 7'-0"	3' - 0"	7' - 0"	PTD	HM	2/A7.02	1/A7.02	HW1; 1,5,12,15. 3/4 HOUR FIRE RATED DOOR
5.02	E	BALCONY 8'-0"	6' - 0"	8' - 0"	CLR	AL		5/A7.02	HW2
5.03	E	BALCONY 8'-0"	6' - 0"	8' - 0"	CLR	AL		5/A7.02	HW2
6.01	A	ENTRY 7'-0"	3' - 0"	7' - 0"	PTD	HM	2/A7.02	1/A7.02	HW1; 1,5,12,15
6.02	J	GARAGE 8'-0"	15' - 0"	8' - 0"	PTD	HM			
6.03	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
6.04	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
6.05	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
7.01	A	ENTRY 7'-0"	3' - 0"	7' - 0"	PTD	HM	2/A7.02	1/A7.02	HW1; 1,5,12,15
7.02	J	GARAGE 8'-0"	15' - 0"	8' - 0"	PTD	HM			
7.03	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
7.04	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
7.05	E	BALCONY 7'-0"	6' - 0"	7' - 0"	CLR	AL		5/A7.02	HW2
A1.1	A	GARAGE (RATED) 34"	2' - 10"	6' - 8"	PTD	WD		3/A7.02	HW3
A1.1	A	GARAGE (RATED) 34"	2' - 10"	6' - 8"	PTD	WD		3/A7.02	HW3
A1.1	A	GARAGE (RATED) 34"	2' - 10"	6' - 8"	PTD	WD		3/A7.02	HW3
A1.2	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"	PTD	WD		3/A7.02	HW3
A1.2	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"	PTD	WD		3/A7.02	HW3
A1.2	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"	PTD	WD		3/A7.02	HW3
A1.3	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"					HW3
A1.3	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"					HW3
A1.3	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"					HW3
A1.4	A	INTERIOR DOOR 20"	1' - 8"	6' - 8"					
A1.4	A	INTERIOR DOOR 20"	1' - 8"	6' - 8"					
A1.5	G	CLOSET 2'-6"	2' - 6"	4' - 0"					
A1.5	G	CLOSET 2'-6"	2' - 6"	4' - 0"					
A2.1	A	INTERIOR DOOR 30"	2' - 6"	6' - 8"	PTD	WD		3/A7.02	HW3
A2.1	A	INTERIOR DOOR 30"	2' - 6"	6' - 8"	PTD	WD		3/A7.02	HW3
A2.2	A	INTERIOR DOOR 30"	2' - 6"	6' - 8"					HW3
A2.2	A	INTERIOR DOOR 30"	2' - 6"	6' - 8"					HW3
A3.1	A	INTERIOR DOOR 30"	2' - 6"	6' - 8"	PTD	WD		3/A7.02	HW4
A3.1	A	INTERIOR DOOR 30"	2' - 6"	6' - 8"	PTD	WD		3/A7.02	HW4
A3.2	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"					HW3
A3.2	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"					HW3
A3.3	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"	PTD	WD		4/A7.02	HW3
A3.3	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"	PTD	WD		4/A7.02	HW3
A3.4	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"					HW3
A3.4	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"					HW3
A3.5	F	CLOSET 6'-0"	6' - 0"	7' - 0"	PTD				
A3.5	F	CLOSET 6'-0"	6' - 0"	7' - 0"	PTD				
A3.6	F	CLOSET 4'-0"	4' - 0"	7' - 0"	PTD				
A3.6	F	CLOSET 4'-0"	4' - 0"	7' - 0"	PTD				
A3.7	G	CLOSET 2'-6"	2' - 6"	4' - 0"	PTD	WD		4/A7.02	
A3.7	G	CLOSET 2'-6"	2' - 6"	4' - 0"	PTD	WD		4/A7.02	
A3.7	G	CLOSET 2'-6"	2' - 6"	4' - 0"	PTD	WD		4/A7.02	
B2.1	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"	PTD			3/A7.02	HW4
B2.2	C	LOUVERD INTERIOR 34" x 80"	2' - 10"	6' - 8"	PTD			3/A7.02	HW4
B2.3	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"	PTD			3/A7.02	HW3
B2.4	A	INTERIOR DOOR 30"	2' - 6"	6' - 8"	PTD			3/A7.02	HW4
B2.5	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"	PTD			3/A7.02	HW3
B2.6	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"	PTD				HW3
B2.7	F	CLOSET 5'-0"	5' - 0"	7' - 0"	PTD				
B2.8	F	CLOSET 6'-0"	6' - 0"	7' - 0"	PTD				
B3.1	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"					HW3
B3.2	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"					HW3
B3.3	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"	PTD	WD		3/A7.02	HW3
B3.4	F	CLOSET 6'-0"	6' - 0"	7' - 0"					
B3.5	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"					
B3.6	A	INTERIOR DOOR 34"	2' - 10"	6' - 8"					HW3
C1.1	A	INTERIOR DOOR 36"	3' - 0"	6' - 8"	PTD	WD		3/A7.02	HW4
C1.2	A	INTERIOR DOOR 36"	3' - 0"	6' - 8"	PTD	WD		3/A7.02	HW3; 14
C.01	D	GLASS 7'-0"	3' - 0"	7' - 0"		AL	7/A2.01	6/A7.01	HW5
C.02	A	UTILITY 7'-0"	3' - 0"	7' - 0"	PTD	HM		1/A7.02	HW6; 9. 3/4 HOUR DOOR
C.03	A	UTILITY 7'-0"	3' - 0"	7' - 0"	PTD	HM		1/A7.02	HW6, 3/4 HOUR RATED DOOR
S1.1	H	TRASH GATE	6' - 8"	7' - 6"	PTD	STL			HW7; 4
S1.2	I	DRIVEWAY GATE	11' - 0"	8' - 0"	PTD	STL			HW7; 4
S1.3	I	ENTRANCE GATE	4' - 4 1/2"	8' - 0"	PTD	STL			HW7; 4,7

COMMENT NOTES

1. SELF-CLOSING
2. CARD READER
3. MAGNETIC HOLD-OPEN. WIRE TO LIFE SAFETY SYSTEM
4. SEE GATE DETAILS FOR DESIGN
5. SMOKE SEALS AT HEAD AND JAMB
6. SECURITY CONTACT
7. KNOX BOX FOR FIRE DEPT. KEY ACCESS
8. ACCESS TO ROOF.
9. LOUVER, SEE MECHANICAL FOR FREE AREA
10. STAIRWAY IDENTIFICATION SIGNAGE PER X/XXX
11. PRIVACY LOCK
12. PEEP HOLE VIEWER
13. CASED OPENING
14. ACCESSIBLE RESTROOM SIGNAGE PER X/XXX
15. UNIT IDENTIFICATION SIGNAGE PER X/XXX
16. PANIC HARDWARE
17. FINISH TO MATCH THE WINDOW SYSTEM
18. STAIN OR PAINT COLOR AND SEALER PER INTERIOR DESIGN

DOOR SCHEDULE ABBREVIATIONS

AL	ALLUMINUM	LVR	LOUVER
AC	ANODIZED CLEAR	MF	MILL FINISH
ADBZ	ANODIZED DARK BRONZE	MHO	MAGNETIC HOLD OPEN
BZ	BRONZE	PHS	PIANT HIGH GLOSS ENAMEL
CC	CONCEALED CLOSER	PSG	PAINT SEMI GLOSS ENAMEL
CL	CHAIN LINK	PC	PVDF COAT
CLR	CLEAR	PT	PAINT
EST	EMBOSED STEEL	PR	PAIR
FB	FIBERGLASS	SCS	SOLID COR WOOD, STAIN GRADE VENEER
FC	FLOOR CLOSER		
FLFD	FUSIBLE LINK FIRE DAMPER	SCM	SOLID CORE WOOD, MEDIUM DENSITY OVERLAY VENEER
FP	FACTORY PRIMED, FIELD PAINTED		
FR	FRENCH DOOR		
FRA	FIRE-RATED ASSEMBLY	SF	STOREFRONT
GA	GALVINIZED	SMC	SURFACE MOUNTED CLOSER
GL	GLASS OR GLAZING	STL	STEEL
HC	HOLLOW CORE WOOD	(T)	TEMPERED
HCP	HOLLOW CORE WOOD, PAINT GRADE	WD	WOOD
HM	HOLLOW METAL	WV	WOOD VENEER

Room Finish Schedule

Room Number	Room Name	Level	Area	Floor	Base	Wall	Ceiling	Comments
A100	ENTRY	UnitPlan-UnitA-1st Floor	87 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A100	ENTRY	UnitPlan-UnitA-1st Floor	87 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A100	ENTRY	UnitPlan-UnitA-1st Floor	87 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A101	GARAGE	UnitPlan-UnitA-1st Floor	335 SF	Sealed Conc.	None	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A101	GARAGE	UnitPlan-UnitA-1st Floor	258 SF	Sealed Conc.	None	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A101	GARAGE	UnitPlan-UnitA-1st Floor	335 SF	Sealed Conc.	None	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A102	BEDROOM	UnitPlan-UnitA-1st Floor	105 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A102	OFFICE	UnitPlan-UnitA-1st Floor	85 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A102	OFFICE	UnitPlan-UnitA-1st Floor	85 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A103	BATHROOM	UnitPlan-UnitA-1st Floor	61 SF	Cer. Tile	6" Tile	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A103	POWDER	UnitPlan-UnitA-1st Floor	27 SF	Cer. Tile	6" Tile	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A103	POWDER	UnitPlan-UnitA-1st Floor	27 SF	Cer. Tile	6" Tile	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A105	BEDROOM 1	UnitPlan-UnitA-2nd Floor	140 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A105	BEDROOM 1	UnitPlan-UnitA-2nd Floor	140 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A200	LIVING / DINING	UnitPlan-UnitA-2nd Floor	303 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A200	LIVING / DINING	UnitPlan-UnitA-2nd Floor	303 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A201	BATH	UnitPlan-UnitA-2nd Floor	41 SF	Cer. Tile	6" Tile	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A201	BATH	UnitPlan-UnitA-2nd Floor	41 SF	Cer. Tile	6" Tile	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A203	KITCHEN	UnitPlan-UnitA-2nd Floor	81 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A203	KITCHEN	UnitPlan-UnitA-2nd Floor	81 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A204	CLOSET	Not Placed	Not Placed	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A204	CLOSET	Not Placed	Not Placed	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A204	CLOSET	Not Placed	Not Placed	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A204	CLOSET	UnitPlan-UnitA-2nd Floor	13 SF					
A204	CLOSET	UnitPlan-UnitA-2nd Floor	13 SF					
A300	HALL	UnitPlan-UnitA-3rd Floor	57 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A300	HALL	UnitPlan-UnitA-3rd Floor	57 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A301	BEDROOM 2	UnitPlan-UnitA-3rd Floor	175 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A301	BEDROOM 2	UnitPlan-UnitA-3rd Floor	175 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A302	BATH	UnitPlan-UnitA-3rd Floor	68 SF	Cer. Tile	6" Tile	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A302	BATH	UnitPlan-UnitA-3rd Floor	68 SF	Cer. Tile	6" Tile	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A303	BEDROOM 3	UnitPlan-UnitA-3rd Floor	114 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A303	BEDROOM 3	UnitPlan-UnitA-3rd Floor	114 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A304	CLOSET	UnitPlan-UnitA-3rd Floor	18 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
A304	CLOSET	UnitPlan-UnitA-3rd Floor	18 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B100	ENTRY	UnitPlan-UnitB-1st Floor	75 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B101	EXTERIOR CLOSET	UnitPlan-UnitB-1st Floor	17 SF	Sealed Conc.	None	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B201	HALL	UnitPlan-UnitB-2nd Floor	166 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B202	KITCHEN	UnitPlan-UnitB-2nd Floor	91 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B203	LIVING / DINING	UnitPlan-UnitB-2nd Floor	372 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B204	BEDROOM 1	UnitPlan-UnitB-2nd Floor	239 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B205	CLOSET	UnitPlan-UnitB-2nd Floor	14 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B206	LINEN	UnitPlan-UnitB-2nd Floor	4 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B207	BEDROOM 2	UnitPlan-UnitB-2nd Floor	204 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B208	CLOSET	UnitPlan-UnitB-2nd Floor	16 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B209	BATH	UnitPlan-UnitB-2nd Floor	45 SF	Cer. Tile	Cer. Tile	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B211	W/D	UnitPlan-UnitB-2nd Floor	10 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B212	HALLWAY	UnitPlan-UnitB-2nd Floor	34 SF	Lam. WD	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B301	BEDROOM / OFFICE	UnitPlan-UnitB-3rd Floor	226 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B302	BATH	UnitPlan-UnitB-3rd Floor	48 SF	Cer. Tile	Cer. Tile	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B303	M. BEDROOM	UnitPlan-UnitB-3rd Floor	207 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B304	BATH	UnitPlan-UnitB-3rd Floor	48 SF	Cer. Tile	Cer. Tile	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B305	CLOSET	UnitPlan-UnitB-3rd Floor	18 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
B306	CLOSET	UnitPlan-UnitB-3rd Floor	15 SF	Carpet	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
C100	COMMERCIAL	UnitPlan-UnitB-1st Floor	1002 SF	Sealed Conc.	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
C101	CLOSET	UnitPlan-UnitB-1st Floor	11 SF	Sealed Conc.	PTD WD	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
C102	ADA BATH	UnitPlan-UnitB-1st Floor	53 SF	Cer. Tile	Cer. Tile	PTD, Gyp. Bd., Cer. Tile @ Base	PTD, Gyp. Bd.	6" CERAMIC TILE BASE
C103	UTILITY CLOSET	UnitPlan-UnitB-1st Floor	34 SF	Sealed Conc.	None	PTD, Gyp. Bd.	PTD, Gyp. Bd.	
C104	UTILITY CLOSET	UnitPlan-UnitB-1st Floor	10 SF	Sealed Conc.	None	PTD, Gyp. Bd.	PTD, Gyp. Bd.	

GENERAL DOOR NOTES

1. DOORS SHALL COMPLY WITH CBC 2010
2. ALL GLAZING SHALL COMPLY WITH C.P.S.C. 16 C.F.R. AND UBC. PROVIDE TEMPERED GLASS AS REQUIRED BY CBC 2010 AND OTHER APPLICABLE CODES
3. GLASS DOORS, ADJACENT PANELS AND ALL GLAZED OPENINGS SHALL BE APPROVED FOR IMPACT PER CBC 2010. PROVIDE IDENTIFICATION OF GLAZING PER CBC 2010.
4. DOOR SIZES SHOWN ON DOOR SH=SCHEDULE ARE OPENING SIZES. ALLOWANCE FOR THRESHOLDS, ETC., SHALL BE TAKEN OFF THE DOOR. DOORS AND FRAMES SHALL BE REINFORCED WHERE REQUIRED FOR CLOSERS, STOPS, AND HARDWARE. EVERY REQUIRED EXIT MUST BE LARGE ENOUGH TO PERMIT A DOOR AT LEAST 3'-0" WIDE BY 6'8" HIGH. EXIT DOORS SHALL BE OPEN AT LEAST 90 DEGREES AND PROVIDE A CLEAR WIDTH OF AT LEAST 32". A 34" WIDE DOOR IS ACCEPTABLE WITHIN A UNIT PROVIDED A 32" CLEAR OPENING EXISTS.
5. THE SIZE OF A PAIR OF DOORS NOTED ON SCHEDULE IS THE TOTAL DOOR OPENING FOR BOTH LEAVES. EACH LEAF IS TO BE OF EQUAL SIZE UNLESS NOTED OTHERWISE. THE INACTIVE LEAF WHERE INDICATED SHALL BE SECURED BY AUTOMATIC FLUSH BOLTS OR BOLTS FRO PANIC HARDWARE.
6. DOORS IN RATED WALLS SHALL CONSIST OF SELF-CLOSING, SELF LATCHING ASSEMBLIES WITH SMOKE AND DRAFT SEALS AT HEAD AND JAMBS. DOOR ASSEMBLY RATINGS SHALL BE AS INDICATED ON DOOR SCHEDULE. HOLD OPEN DEVISES (WHERE REQUIRED) ON RATED ASSEMBLIES SHALL BE MAGNETICALLY OPERATED AND CONTROLLED BY SMOKE DETECTORS
7. AIR LEAKAGE AT EXTERIOR DOORS SHALL BE LIMITED BY THE FOLLOWING:
   A. ALL DOORS SHALL BE PROVIDED WITH A SEAL, ASTRAGAL, OR BAFFLE AT THE HEAD AND SILL.
   B. DOORS MOUNTED ON EITHER THE INSIDE OR OUTSIDE OF AN EXTERIOR WALL SHALL HAVE A MINIMUM 1/2" LAP AT EACH JAMB.
   C. DOORS REQUIRING VERTICAL TRACK OR GUIDES SHALL USE A CONTINUOUS MOUNTING ANGLE, SEALED, CAULKED, GASKETED, OR WEATHER-STRIPPED TO LIMIT AIR LEAKAGE.
   D. MEETING RAILS OR SECTION DOORS AND MEETING STILES OR RAILS OR BI-PARTING DOORS SHALL BE PROVIDED WITH A SEAL, ASTRAGAL, OR BAFFLE.
8. DOORS WITH LOUVERS: LOUVER SHALL BE 12" HIGH, UNLESS NOTED OTHERWISE, LOUVERS IN FIRE-RATED ASSEMBLIES TO BE FUSIBLE LINK FIRE DAMPERS. LOUVERS IN EXTERIOR DOORS TO BE VANDAL RESISTANT. SEE DOOR TYPE ELEVATIONS.
9. DOOR THICKNESS TO BE 1 3/4" FOR EXTERIOR DOORS AND 1 3/8" FOR INTERIOR DOORS, UNLESS NOTED OTHERWISE.
10. EXIT DOORS MUST OPEN FOR THE INSIDE WITHOUT A KEY, OR ANY SPECIAL KNOWLEDGE OR EFFORT. EXIT DOORS FROM BUILDINGS OR ROOMS SERVICE 10 OR FEWER OCCUPANTS MAY HAVE A NIGHT LATCH, DEADBOLT OR SECURITY CHAIN, AS LONG AS THE DOORS CAN SILL BE OPENED FROM THE INSIDE WITH A KEY, SPECIAL KNOWLEDGE OR EFFORT. IN ADDITION, THESE DEVICES ARE NOT MOUNTED MORE THAN 48" ABOVE THE FLOOR. MANUALLY OPERATED EDGE BOLTS, SURFACE MOUNTED FLUSH BOLTS AND SURFACE BOLTS ARE PROHIBITED. WHEN EXIT DOORS ARE USED IN PAIRS AND AUTOMATIC FLUSH BOLTS ARE USED, THE DOOR LEAF WITH THE FLUSH BOLT MUST HAVE NO DOORKNOB OR SURFACE MOUNTED HARDWARE. THE UNLATCHING OF ANY LEAF MUST NOT REQUIRE MORE THAN ONE OPERATION. SPECIAL LOCKING DEVICES SHALL BE APPROVED BY THE LOCAL AUTHORITY.
11. DOOR HARDWARE SHALL COMPLY WITH THE FOLLOWING:
   A. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND ARE IN THE PATH OF TRAVEL, SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE.
   B. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8 1/2 LBS. FOR EXTERIOR DOORS AND 5 LBS. FOR INTERIOR DOORS. SUCH PULL OR PUSH EFFORT SHALL BE APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. WHEN FIRE DOORS ARE REQUIRED, THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED NOT TO EXCEED 15 LBS.
   C. HAND ACTIVATED DOOR HARDWARE SHALL BE CENTERED BETWEEN BETWEEN 30" AND 44" ABOVE THE FLOOR.
   D. PROVIDE DEADBOLTS WITH HARDENED INSERTS. DEADLOCKING LATCH KEY OPERATED LOCKS SHALL BE OPENABLE FROM THE INSIDE WITHOUT A KEY, SPECIAL KNOWLEDGE OR EFFORT.
   E. ALL DOORS IN ALUMINUM FRAMES SHALL BE PROVIDED WITH AN ARMORED STRIKE.
   F. THRESHOLDS AT EXTERIOR DOORS OTHER THAN PRIMARY ENTRANCES SHALL BE NO HIGHER THAN 3/4" SUCH THRESHOLD SHALL BE BEVELED NO GREATER THAN 1:2.
12. THE BOTTOM 10 INCHES OF ALL DOORS WITH ADA REQUIREMENTS EXCEPT SLIDING AND POCKET DOORS SHALL HAVE A SMOOTH INTERRUPTED TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.
13. ALL EXTERIOR DOORS SHALL BE WEATHER-STRIPPED ON ALL SIDES PER TITLE 24, SECTION T20-1451-1542
14. COORDINATE FABRICATION OF ALL DOORS AND FRAMES WITH THE PROJECTS SECURITY REQUIREMENTS.
15. INSTALLATION AND CONSTRUCTION OF FRAMES, JAMBS, STRIKES AND HINGES FOR EXTERIOR SWINGING DOORS SHALL BE AS FOLLOWS:
   A. DOOR JAMBS SHALL BE INSTALLED WITH SOLID BACKING IN SUCH A MANNER THAT NO VOIDS EXIST BETWEEN THE STRIKE SIDE OF THE JAMB AND THE FRAME OPENING.
   B. DOOR STOPS ON WOODEN JAMBS FOR IN-SWINGING DOORS SHALL BE OF ONE-PIECE CONSTRUCTION WITH THE JAMB. JAMBS FOR ALL DOORS SHALL BE CONSTRUCTED OR PROTECTED SO AS TO PREVENT VIOLATION OF THE STRIKE.
   C. THE STRIKE PLATE FOR DEAD BOLTS ON ALL WOOD FRAMED DOORS SHALL BE CONSTRUCTED OF MIN. SIXTEEN USGA. STEEL, BRONZE, OR BRASS, AND SECURED TO THE JAMB BY A MINIMUM OF TWO SCREWS, WHICH MUST PENETRATE AT LEAST TWO INCHES INTO SOLID BACKING BEYOND THE SURFACE TO WHICH THE STRIKE IS ATTACHED.
   D. HINGES FOR OUT-SWINGING DOORS SHALL DE EQUIPPED WITH NON- REMOVABLE HINGE PINS OR A MECHANICAL INTERLOCK TO PRECLUDE REMOVAL OF THE DOOR FROM THE EXTERIOR BY REMOVING THE HINGE PINS.
   E. USE DOOR JAMB AND HEAD GASKETING AND DOOR BOTTOM GASKETING AT ENTRY DOORS TO SEAL THE SOLID CORE DOORS AGAINST WEATHER AND SOUND.
16. ALL EXTERIOR SWINGING DOORS OF ANY RESIDENTIAL BUILDING SHALL BE EQUIPPED AS FOLLOWS:
   A. ALL WOOD DOORS SHALL BE OF SOLID CORE CONSTRUCTION WITH A MINIMUM THICKNESS OF ONE AND THREE-FOURTHS INCHES, OR WITH PANELS NOT LESS THAN NINE-SIXTEENTHS INCH THICK.
   B. A SINGLE OR DOUBLE DOOR SHALL BE EQUIPPED WITH A DOUBLE OR SINGLE CYLINDER DEAD BOLT LOCK. THE BOLT SHALL HAVE A MINIMUM PROJECTION OF ONE INCH AND BE CONSTRUCTED SO AS TO REPEL CUTTING TOOL ATTACK. THE DEAD BOLT SHALL HAVE AN EMBEDMENT OF AT LEAST THREE-FOURTHS INCH INTO THE STRIKE RECEILING THE PROJECTED BOLT. THE CYLINDER SHALL HAVE CYLINDER GUARD, A MINIMUM OF FIVE-PIN TUMBLERS, AND SHALL BE CONNECTED TO THE INNER PORTION OF THE LOCK BY CONNECTING SCREWS OF AT LEAST ONE-FOURTH INCH DIAMETER. ALL INSTALLATION SHALL BE DONE SO THAT THE PERFORMANCE OF THE LOCKING DEVICE WILL MEET THE INTENDED ANTI-BURGULARY REQUIREMENTS. DOUBLE CYLINDER-TYPE DEAD BOLT LOCKS SHALL BE CONSTRUCTED SO AS TO PREVENT THE KEY FROM BEING REMOVED FROM THE INTERIOR CYLINDER WHEN THE BOLT IS PROJECTED. A DUAL LOCKING MECHANISM CONSTRUCTED SO BOTH THE DEAD BOLT AND LATCH CAN BE RETRACTED BY A SINGLE ACTION OF THE INSIDE DOOR KNOB, OR LEVER, MAY BE UTILIZED PROVIDED IT MEETS ALL OTHER SPECIFICATIONS FOR LOCKING DEVICES.
   C.DOOR JAMBS SHOULD BE INSULATED AGAINST WEATHER AND SOUND WITH NON-POROUS SEALS
17. FOR ALL DOOR HARDWARE, PLEASE SEE SPECS.

FINISH MATERIALS SHALL COMPLY WITH CAL GREEN BUILDING STANDARDS CODE SECTIONS 5.504.4.1 THROUGH 5.504.4.4

ADHESIVES, SEALANTS, CAULKS. ADHESIVES AND SEALANTS USED ON THE PROJECT SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS.
5.504.4.1 ADHESIVES, SEALANTS, CAULKS. ADHESIVES AND SEALANTS USED ON THE PROJECT SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS.
1. ADHESIVES, ADHESIVE BONDING PRIMERS, ADHESIVE PRIMERS, SEALANTS, SEALANT PRIMERS AND CAULKS SHALL COMPLY WITH LOCAL OR REGIONAL AIR POLLUTION CONTROL OR AIR QUALITY MANAGEMENT DISTRICT RULES WHERE APPLICABLE OR SCAQMD RULE 1168 VOC LIMITS, AS SHOWN IN CAL GREEN CODE TABLES 5.504.4.1 AND 5.504.4.2.
2. AEROSOL ADHESIVES AND SMALLER UNIT SIZES OF ADHESIVES AND SEALANT OR CAULKING COMPOUNDS (IN UNITS OF PRODUCT, LESS PACKAGING, WHICH DO NOT WEIGH MORE THAN ONE POUND AND DO NOT CONSIST OF MORE THAN 16 FLUID OUNCES) SHALL COMPLY WITH STATEWIDE VOC STANDARDS AND OTHER REQUIREMENTS, INCLUDING PROHIBITIONS ON USE OF CERTAIN TOXIC COMPOUNDS, OF CALIFORNIA CODE OF REGULATIONS, TITLE 17, COMMENCING WITH SECTION 94507.
5.504.4.3 PAINTS AND COATINGS. ARCHITECTURAL PAINTS AND COATINGS SHALL COMPLY WITH TABLE 5.504.4.3 UNLESS MORE STRINGENT LOCAL LIMITS APPLY.
5.504.4.3.1 AEROSOL PAINTS AND COATINGS. AEROSOL PAINTS AND COATINGS SHALL MEET THE PRODUCT-WEIGHTED MIR LIMITS FOR ROC IN SECTION 94522(A)(3) AND OTHER REQUIREMENTS, INCLUDING PROHIBITIONS ON USE OF CERTAIN TOXIC COMPOUNDS AND OZONE DEPLETING SUBSTANCES (CCR, TITLE 17, SECTION 94520 ET SEQ).
5.504.4.3.2 VERIFICATION. VERIFICATION OF COMPLIANCE WITH THIS SECTION SHALL BE PROVIDED AT THE REQUEST OF THE ENFORCING AGENCY.
5.504.4.4 CARPET SYSTEMS. ALL CARPET INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE TESTING AND PRODUCT REQUIREMENTS OF ONE OF THE STANDARDS LISTED IN CAL GREEN SECTION 5.504.4.4.
5.504.4.4.1 CARPET CUSHION. ALL CARPET CUSHION INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE REQUIREMENTS OF THE CARPET AND RUG INSTITUTE GREEN LABEL PROGRAM.
5.504.4.4.2 CARPET ADHESIVE. ALL CARPET ADHESIVE SHALL MEET THE REQUIREMENTS OF TABLE 804.4.1.
5.504.4.5 COMPOSITE WOOD PRODUCTS. HARDWOOD PLYWOOD, PARTICLEBOARD AND MEDIUM DENSITY FIBERBOARD COMPOSITE WOOD PRODUCTS USED ON THE INTERIOR OR EXTERIOR OF THE BUILDING SHALL MEET THE REQUIREMENTS FOR FORMALDEHYDE AS SPECIFIED IN TABLE 5.504.4.

A5.504.4.5.1 EARLY COMPLIANCE WITH FORMALDEHYDE LIMITS.WHERE COMPLYING COMPOSITE WOOD PRODUCT IS READILY AVAILABLE FOR NONRESIDENTIAL OCCUPANCIES, MEET PHASE 2 REQUIREMENTS BEFORE THE COMPLIANCE DATES INDICATED IN TABLE 5.504.4.5 (TIER I) OR USE COMPOSITE WOOD PRODUCTS MADE WITH EITHERCARB-APPROVED NO-ADDED FORMALDEHYDE (NAF) RESINS OR CARB-APPROVED ULTRA-LOW EMITTING FORMALDEHYDE (ULEF) RESINS (TIER II). 5.504.4.5.2 DOCUMENTATION. VERIFICATION OF COMPLIANCE WITH THIS SECTION SHALL BE PROVIDED AS REQUESTED BY THE ENFORCING AGENCY. DOCUMENTATION SHALL INCLUDE AT LEAST ONE OF THE FOLLOWING.

1. PRODUCT CERTIFICATIONS AND SPECIFICATIONS
2. CHAIN OF CUSTODY CERTIFICATIONS
3. OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY
5.504.4.6 RESILIENT FLOORING SYSTEMS. COMPLY WITH THE VOC-EMISSION LIMITS DEFINED IN THE 2009 CHPS CRITERIA AND LISTED ON ITS LOW-EMITTING MATERIALS LIST (OR PRODUCT REGISTRY) OR CERTIFIED UNDER THE FLOORSCORE PROGRAM OF THE RESILIENT FLOOR COVERING INSTITUTE. A5.504.4.6.1 VERIFICATION OF COMPLIANCE. DOCUMENTATION SHALL BE PROVIDED VERIFYING THAT RESILIENT FLOORING MATERIALS MEET THE POLLUTANT EMISSION LIMITS. A5.504.4.7 RESILIENT FLOORING SYSTEMS, TIER 1. FOR 80 PERCENT OF FLOOR AREA RECEIVING RESILIENT FLOORING, INSTALL RESILIENT FLOORING COMPLYING WITH THE VOC-EMISSION LIMITS DEFINED IN THE 2009 CHPS CRITERIA AND LISTED ON ITS LOW-EMITTING MATERIALS LIST (OR PRODUCT REGISTRY) OR CERTIFIED UNDER THE FLOORSCORE PROGRAM OF THE RESILIENT FLOOR COVERING INSTITUTE. A5.504.4.7.1 RESILIENT FLOORING SYSTEMS, TIER 2. FOR 100 PERCENT OF FLOOR AREA TO SCHEDULED TO RECEIVE RESILIENT FLOORING, INSTALL RESILIENT FLOORING COMPLYING WITH THE VOC-EMISSION LIMITS DEFINED IN THE 2009 CHPS CRITERIA AND LISTED ON ITS LOW-EMITTING MATERIALS LIST (OR PRODUCT REGISTRY) OR CERTIFIED UNDER THE FLOORSCORE PROGRAM OF THE RESILIENT FLOOR COVERING INSTITUTE. A5.504.4.7.2 VERIFICATION OF COMPLIANCE. DOCUMENTATION SHALL BE PROVIDED VERIFYING THAT RESILIENT FLOORING MATERIALS MEET THE POLLUTANT EMISSION LIMITS. A5.504.4.8 THERMAL INSULATION, TIER 1. COMPLY WITH CHAPTER 12-13 IN TITLE 24, PART 12 AND WITH THE VOC-EMISSION LIMITS DEFINED IN 2009 CHPS CRITERIA AND LISTED ON ITS LOW-EMITTING MATERIALS LIST.A5.504.4.8.1 THERMAL INSULATION, TIER 2. INSTALL NO-ADDED FORMALDEHYDE THERMAL INSULATION IN ADDITION TO MEETING SECTION A5.504.4.8. A5.504.4.8.2 VERIFICATION OF COMPLIANCE. DOCUMENTATION SHALL BE PROVIDED VERIFYING THAT THERMAL INSULATION MATERIALS MEET THE POLLUTANT EMISSION LIMITS. A5.504.4.9 ACOUSTICAL CEILINGS AND WALL PANELS. COMPLY WITH CHAPTER 8 IN TITLE 24, PART 2 AND WITH THE VOC-EMISSION LIMITS DEFINED IN THE 2009CHPS CRITERIA AND LISTED ON ITS LOW-EMITTING MATERIALS LIST (OR PRODUCT REGISTRY). A5.504.4.9.1 VERIFICATION OF COMPLIANCE.DOCUMENTATION SHALL BE PROVIDED VERIFYING THAT ACOUSTICAL FINISH MATERIALS MEET THE POLLUTANT EMISSION LIMITS.

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REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (△)	1ST PLAN CHECK REVIEW	01/14/14
1 (○)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT PHILIP BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

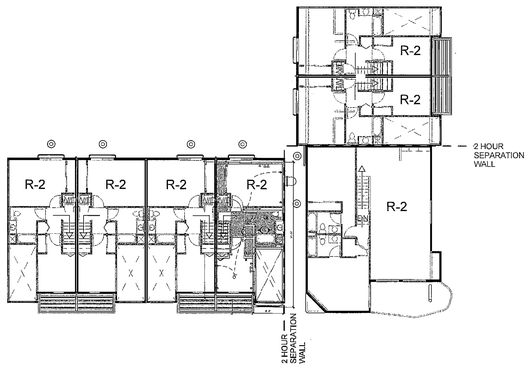
SHEET DESCRIPTION:

DOOR AND FINISH SCHEDULES

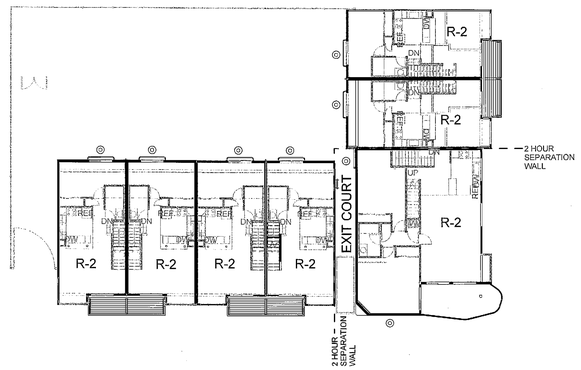
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

A7.00

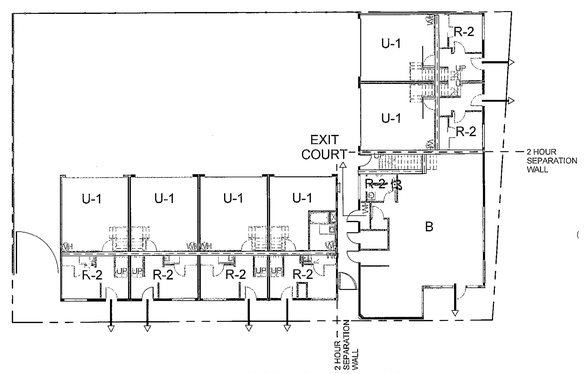
12/16/2013 11:15:01 AM



3 OCCUPANY TYPE/EXIT PATH THIRD FLOOR
1/16" = 1'-0"



2 OCCUPANCY TYPE/EXIT PATH SECOND FLOOR
1/16" = 1'-0"



1 OCCUPANCY TYPE/EXIT PATH GROUND FLOOR
1/16" = 1'-0"

LEGEND

- EGRESS WINDOWS
- HOUSE RATED OCCUPANCY SPERATION
- MEANS OF EGRESS
- ONE HOUR OCCUPANCY/SEPERATION

NOTE:
ALL WALLS TO BE 1 HOUR RATED CONSTRUCTION PER BUILDING CODE

RELEVANT CALIFORNIA CODES

BUILDING:	ALL NEW CONSTRUCTION SHALL COMPLY WITH 2010 CBC
FIRE:	CALIFORNIA FIRE CODE 2010 CFC
MECHANICAL:	CALIFORNIA MECHANICAL CODE 2010 CMC
PLUMBING:	CALIFORNIA PLUMBING CODE 2010 CPC
ELECTRICAL:	CALIFORNIA PLUMBING CODE 2010 CEC
	CALIFORNIA ENERGY EFFICIENCY STANDARDS CODE 2008 CEES
	CALIFORNIA GREEN BUILDING STANDARDS CODE 2010 CALGREEN

CBC SEC 412.3
1 UNISEX RESTROOM FOR BUSINESS & MERCANTILE, BUT SEPARATE HANDICAP RESTROOMS (MALE & FEMALE) NEED NOT BE PROVIDED FOR EATING & DRINKING USE

CBC TABLE 705.8

3101 35th Street Code Analysis

		Allowed	Proposed	Code reference
Zoning	Zone	C-20 Shopping Center Commercial Zone		
	General Plan	Mixed Housing Type Residential		
	Height	45'	35'	17.38.120
	Lot Area		10,240 sf	
	Max Density	1unit/1,500sf + extra unit if the remainder of 1,000sf or more is obtained after the division of the total lot area. 10,240sf/1,500sf/unit = 6.83 units = 1,240sf remaining = 7 units.	Proposed number of units is 7	17.24.110 (R-50)
	Parking	one space for each dwelling unit. 7 spaces required.	15 spaces provided.	17.116.080
Building	Code	CBC 2010		
	Construction type	Type V- One hour 5A		
	Occupancy Groups	R-2.residential. "congregate residences each accomodating less than 10 persons" Unit A 1,757sf/200 OLF = 9 occupants Unit B 2,006 sf/200 OLF = 10 occupants		310.1
		U-1:Private Parking		312.1
		B:Office, Professional , and Service type transactions, and eating and drinking establishments with an occupant load less than 50		304.1
	Sprinklered		Yes	
	Number of Stories	3	3	Table 5-B
	Area	10,500 sf	R-2: 9,546sf	Table 5-B
		Multi-story: 10,500 x 2 = **21,000sf**	U-1: 2,238 sf	504.2
			B: 1,242 sf	
			Total: **13,790 sf**	
	Height	50'	35'	
	Occupancy Separation	1-hour assemblies required at walls separating R-3/U-1/B		Table 3-B
	Exterior Wall protection	Bearing Walls: one-hour		Table 5-A
		Nonbearing:same as bearing		
		Openings: ~~Not permitted less than 5 feet~~		
	Fire Resistive Requirements	Structural Frame: one hour		Table 6-A
		Partitions Permanent: one hour		
		Shaft enclosures: one hour		
		Floors and Floor/ceiling: one hour		
		Roof and Roof/ceiling: one hour		
	Exiting	Only one exit required for R-2 occupancies if number of occupants is less than 10	R-2: one exit per unit	Table 10-A
		Only one exit required for B occupancies if number of occupants is less than 50. 1,242 sf / 15 OLF = 84 occupants	B:two exits provided	
	Access to exits	Where the Third Floor within an individual dwelling unit does not exceed 500 square feet, access to only one exit need be provided from that floor. The area used does not included accessory areas as defined by sec 1003.2..2.1. See area calculations	one exit per floor	10004.2.3.2

PROJECT DATA

3101 35th Street Area Calculations

Description	level	R-2 Area	U-1 Area	B Area
Unit type A	Ground	191 sf	362 sf	
	Second	615 sf		
	Third	476 sf		
	Subtotal	1,282 sf	362 sf	
	Total sf/unit	1,644 sf		
*6 units total	Total sf unit A	9,864 sf	2,172 sf	
Unit type B	Unit B Entry/ Commercial	75 sf		1,078 sf
	First	1,210 sf		
	Second	603 sf		
	Subtotal	1,888 sf	0 sf	1,078 sf
	Total/unit	1,888 sf		1,078 sf
*1 unit total	Total sf unit B	1,888 sf		
Total sf R-2		11,752 sf		
Total sf U-1			2,172 sf	
Total sf B				1,078 sf
Total project sf				15,002 sf

* Area must not exceed 500sf, Floor Area is the area included within the surrounding exterior walls, exclusive of vent shafts & courts.

< 3,000 SF

OPEN SPACE CALCULATIONS

UNIT #	OPEN SPACE REQUIRED (sf)	BALCONY AREA (sf)	GROUND LEVEL PRIVATE SPACE AREA (sf)	COMMON OPEN SPACE AREA (sf)	TOTAL PRIVATE OPEN SPACE AREA (sf)	COUNTS AS (X2)
1	200	Y	52	53	105	210
2	200	Y	52	53	105	210
3	200	Y	52	53	105	210
4	200	Y	52	53	105	210
5	200	Y	120	0	120	240
6	200	Y	52	53	105	210
7	200	Y	52	53	105	210

TOTAL OPEN SPACE REQUIRED	MINIMUM COMMON OPEN SPACE REQUIRED PER 17.24.160 –	TOTAL PRIVATE OPEN SPACE PROVIDED (sf)	TOTAL COMMON OPEN SPACE PROVIDED (sf)
1400	75sf * 7units = 525sf	1500	579

TOTAL OPEN SPACE PROVIDED (sf)
2079

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REVISIONS: △ ISSUES: ○

No.	Description	Date

APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK NOTATION
For Structural Compliance With
Codes and Ordinances
APPROVAL NEED APPROVAL
BUILDING CODE
PLANNING SECT 105.4.3
ZONING SECT 1105.8
ZONING REVIEW ONLY
HISTORIC REVIEW
PLANNING STAY LAYOUT
ENGINEERING
FIRE SPRINKLER
SOILS REPORT IN FILE
STRUCT. MECH. PLUMB.
NOT CHECKED

(1)	1ST PLAN CHECK REVIEW	01/14/14
(1)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

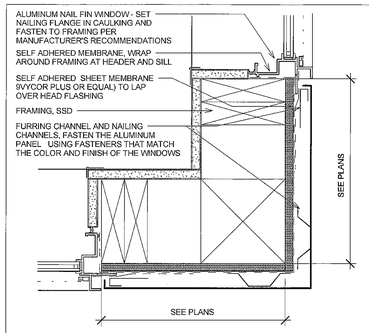
SHEET DESCRIPTION:

CODE ANALYSIS

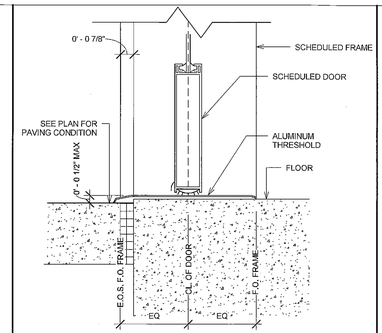
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/16" = 1'-0"

GEN-02

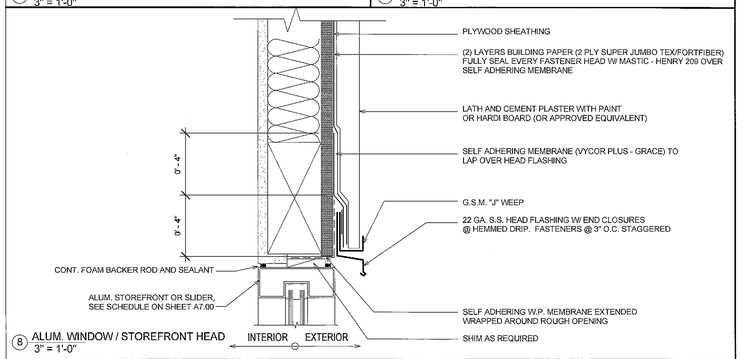
12/6/2013 11:23:18 AM



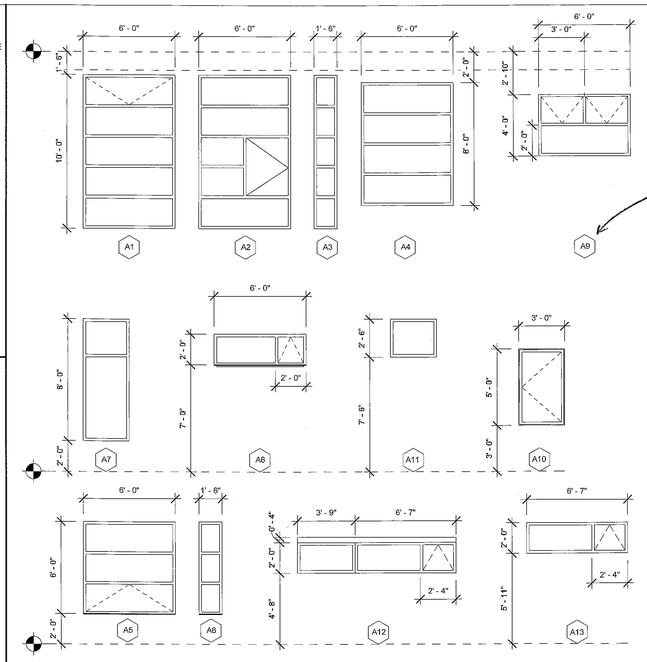
10 PLAN DETAIL AT BAY WINDOW
3" = 1'-0"



9 STOREFRONT DOOR THRESHOLD
3" = 1'-0"



8 ALUM. WINDOW / STOREFRONT HEAD
3" = 1'-0"



window types
1/4" = 1'-0"

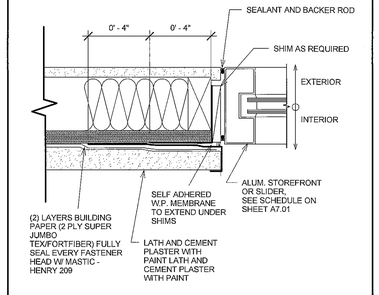
*NOTES:
A) FOR WINDOWS ALONG SCHOOL STREET PROVIDE WINDOWS THAT HAVE MIN. ACOUSTICAL RATING OF STC 27 TO 31 & OITC27.
B) AT UNIT 1 DRIVEWAY PROVIDE AT LEAST DUAL PANE WINDOWS.
C) ALONG SCHOOL & 35TH AVE. FOR UNITS 4,5,6,7, PROVIDE WINDOWS THAT HAVE MIN. ACOUSTICAL RATING OF STC 35 TO 37 & OITC 29
D) AT COURTYARD WINDOWS NO ACOUSTICAL REQUIREMENTS
E) USE PERMANENTLY NON-HARDENING SEALANT AROUND PERIMETER OF WINDOW FRAMES.
F) SELECT WINDOW ASSEMBLIES WITH EFFECTIVE NONPOROUS GASKETS OR WEATHERSTRIPPING TO MINIMIZE AIR INFILTRATION AND SOUND LEAKAGE.
G) WINDOW TYPE SHALL BE 2" RECESSED FROM FRONT OF FINISHED FACADE.

Type Mark	Rough Opening Width	Rough Opening Height	Description	Glazing Type
A1	6' - 0"	10' - 0"	FIXED W/ AWNING	
A2	6' - 0"	10' - 0"		
A3	1' - 6"	10' - 0"		
A4	6' - 0"	8' - 0"		
A5	6' - 0"	6' - 0"		
A6	1' - 6"	6' - 0"		
A7	3' - 0"	8' - 0"		
A8	6' - 0"	2' - 0"	NOTE G	
A9	6' - 0"	4' - 0"	NOTE G	
A10	3' - 0"	5' - 0"	NOTE G	
A11	3' - 0"	2' - 6"		
A12	10'-4"	2'-0"	NOTE G	
A13	6'-7"	2'-0"	NOTE G	

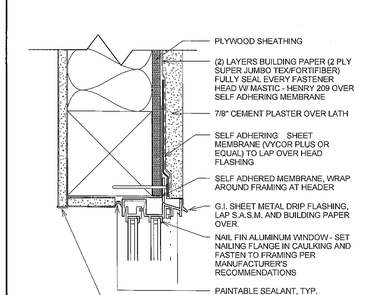
*SEE DIMENSION ON TYPES

WINDOW NOTES

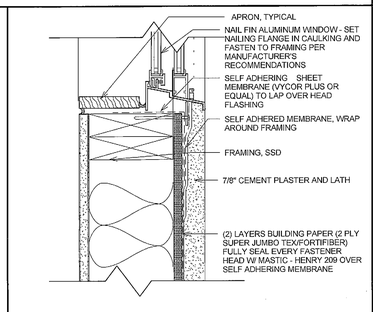
1. WINDOWS SHALL COMPLY WITH CBC SECTION 310.4 FOR ESCAPE AND RESCUE, AND CHAPTER 7 FOR FIRE-RESISTIVE DESIGN.
2. ALL GLAZING SHALL COMPLY WITH C.P.S.C. 16 C.F.R. AND CHAPTER 24 CBC.
3. GLASS DOORS, ADJACENT PANELS AND ALL GLAZED OPENINGS SHALL BE APPROVED FOR IMPACT HAZARD PER CBC SECTION 2406. PROVIDE IDENTIFICATION OF GLAZING PER SECTION 2406.2 3
4. REFER TO PLAN FOR WINDOW TYPE DESIGNATION. REFER TO EXTERIOR ELEVATIONS AND SECTIONS FOR WINDOW PLACEMENT. REFER TO WINDOW TYPE ELEVATIONS ON THIS SHEET FOR OPERABLE WINDOW DESIGNATIONS. ALL WINDOW SIZES ARE NOMINAL, VERIFY EXACT WINDOW SIZES WITH MANUFACTURERS.
5. SLEEPING ROOMS SHALL HAVE AN EMERGENCY EXIT WINDOW WITH A NET CLEAR OPENING OF NOT LESS THAN 5.7 SQUARE FEET. MINIMUM CLEAR OPENING SHALL BE 24" IN HEIGHT AND 20" IN WIDTH. THE EXIT WINDOW OPENING SHALL BE NO HIGHER THAN 44" ABOVE FINISHED FLOOR PER SECTION ~~2014 CBC~~ 1029 CBC
6. GUEST ROOM AND HABITABLE ROOM WINDOWS SHALL COMPLY WITH CBC SECTION 1203 FOR LIGHT AND VENTILATION REQUIREMENTS.
   A. FOR LIGHT, NO LESS THAN 1/10 OF THE FLOOR AREA WITH A MIN. OF 10 SF.
   B. FOR VENTILATION, NO LESS THAN 1/20 OF THE FLOOR AREA WITH A MIN. OF 5 SF.
7. ALL RESIDENTIAL DWELLING UNIT WINDOWS SHALL BE ALUMINUM FIXED/OPERABLE UNITS. ALL OPERABLE WINDOW SASHES SHALL BE PIVOTING FOR THE PURPOSE OF PROVIDING WINDOW CLEANING FROM THE INTERIOR OF THE BUILDING.
8. WINDOW UNITS DESIGNATED AS 'STOREFRONT' SHALL BE ALUMINUM FIXED UNITS. STOREFRONT ALUMINUM SECTION SHALL BE 2"x4 1/4". GLAZING SHALL BE 1/4" CLEAR VISION (TEMPERED AS REQUIRED).
9. REFER TO ACOUSTICAL REPORT FOR ADDITIONAL ACOUSTICAL REQUIREMENTS FOR WINDOWS.
10. REFER TO SPECIFICATIONS FOR FURTHER DETAILED WINDOW INFORMATION.
11. WINDOWS INDICATED AS 45 OR 90 MIN. (FIRE-RATED) SHALL BEAR THE MANUFACTURER'S ETCHED 'LABEL' ON EACH PANEL, NO FIELD APPLICATIONS ALLOWED.
12. SAFETY GLAZING PER CBC 2001 SECTION 2406.4 ITEMS 6, 7 & 10: TEMPERED GLASS TO BE USED AT CONDITIONS WHERE GLAZING IS WITHIN 60" OF STAIRWAY LANDINGS ALSO AT CONDITIONS WHERE THE EDGE IS WITHIN 24" OF EITHER THE VERTICAL EDGE OF THE DOOR OR WHERE THE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR OR STAIR WALKING SURFACE.
13. AT DUAL PANE WINDOWS, PANES TO HAVE DIFFERENT THICKNESS OF GLASS. AT DUAL PANE WINDOWS WITH A SOUND INSULATION RATING OF STC 35 OR OVER, ONE PANE TO BE LAMINATED.



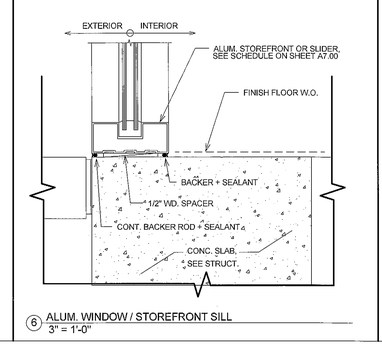
7 ALUM. WINDOW / STOREFRONT JAMB
3" = 1'-0"



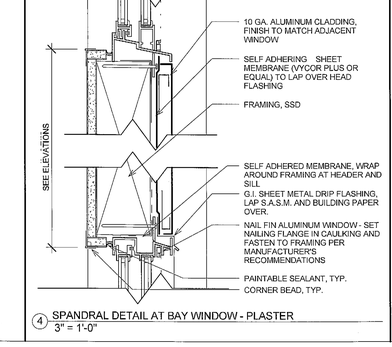
5 HEAD DETAIL AT WINDOW - PLASTER
3" = 1'-0"



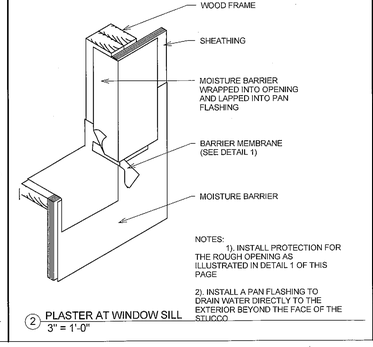
3 SILL DETAIL AT WINDOW
3" = 1'-0"



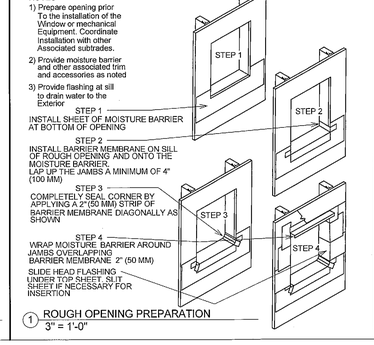
6 ALUM. WINDOW / STOREFRONT SILL
3" = 1'-0"



4 SPANDRAL DETAIL AT BAY WINDOW - PLASTER
3" = 1'-0"



2 PLASTER AT WINDOW SILL
3" = 1'-0"



1 ROUGH OPENING PREPARATION
3" = 1'-0"

ARCHITECTURE
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EMERYVILLE, CALIFORNIA 94608
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REVISIONS: △ ISSUES: ○

No.	Description	Date
	PLANNING SUBMITTAL	
	CITY COMMENTS	
	BUILDING SERVICES	
	PLAN CHECK SET	
	PLAN CHECK COMMENTS	
	REVISIONS AND APPROVAL	
	BUILDING PERMIT	
	SUBJECT TO DEMOLITION	
	SECTION 4 + INC STRUCTURE	
	SURVEY INFO	
	PLOT PLAN REVISED	
	PLANNING VIEW / LAYOUT	
	SITE WORK AND	
	UNDERGROUND	
	SOILS REPORT ON FILE	
	ELECT. MECH. PLUMB.	
	NOT CHECKED	
	Date	
△	1ST PLAN CHECK REVIEW	01/14/14
(1)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT PHILIP BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

SHEET DESCRIPTION:

WINDOW SCHEDULES

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

A7.01

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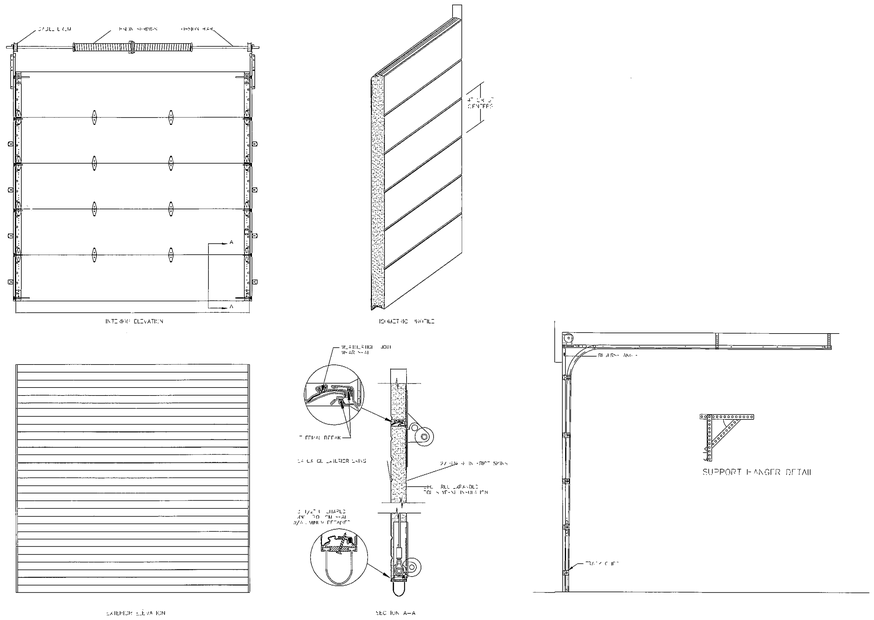
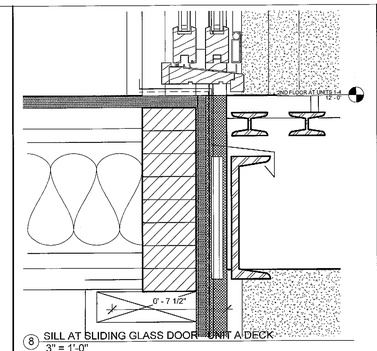
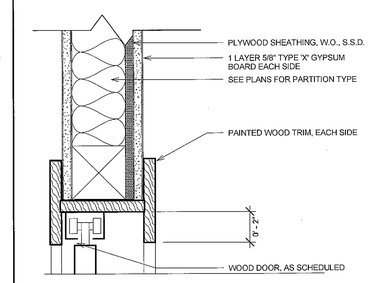


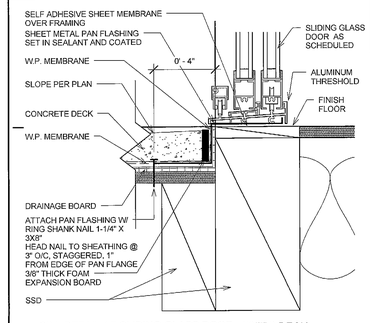
13 GARAGE DOOR DETAILS
3/8" = 1'-0"



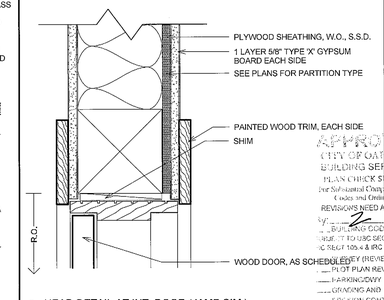
8 SILL AT SLIDING GLASS DOOR - UNIT A DECK
3" = 1'-0"



4 HEAD DETAIL AT BI-FOLD DOOR/ SLIDING DOOR
3" = 1'-0"



7 SILL DETAIL AT SLIDING GLASS DOOR - UNIT 5 DECK
3" = 1'-0"



3 HEAD DETAIL AT INT. DOOR (JAMB SIM.)
3" = 1'-0"

ARCHITECTURE
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EMERYVILLE, CALIFORNIA 94608
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REVISIONS: △ ISSUES: ○

No.	Description	Date
1	1ST PLAN CHECK REVIEW	01/14/14
2	BUILDING PERMIT	12/12/13

CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK STATION
Per Submittal Comments Dated
Codes and Ordinances
REVISIONS NEED APPROVAL
BY
BUILDING CODE
SUBJECT TO USC 6601
SECT 105.4 & 601
KEY REVIEW ONLY
PLOT PLAN REVIEW
PARKING/DWY LAYOUT
GRADING AND
EROSION CONTROL
SOILS REPORT DUE
ELECT, MECH, PLUMB.

NOTE:
SEE DETAIL 1 ON THIS SHEET FOR TYPICAL NOTES

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

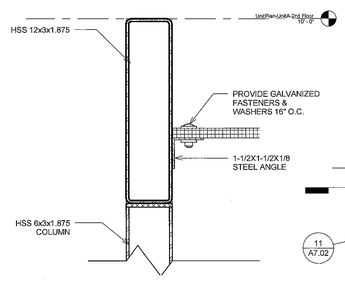
SHEET DESCRIPTION:

DOOR DETAILS

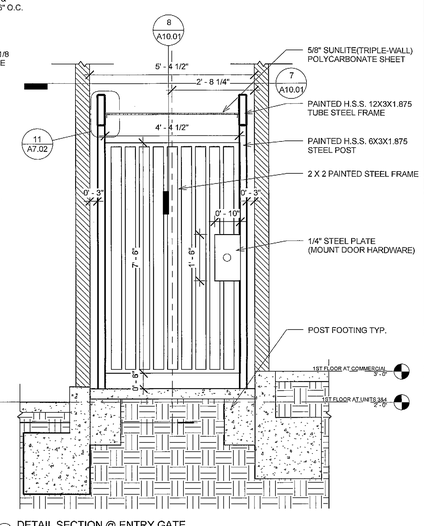
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

A7.02

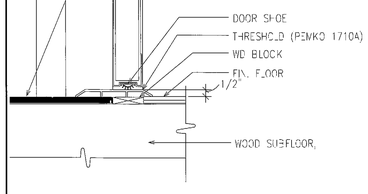
12/8/2013 7:06:10 PM



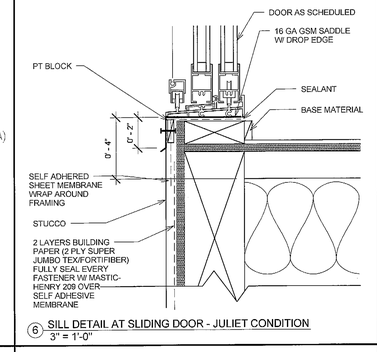
11 CONNECTION @ COVERED ENTRY GATE
3" = 1'-0"



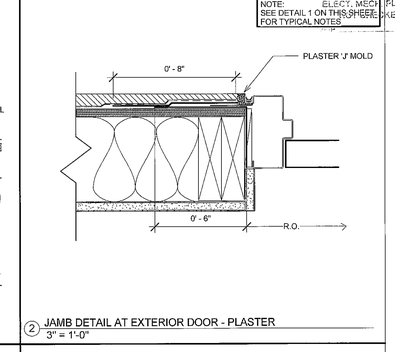
10 DETAIL SECTION @ ENTRY GATE
1/2" = 1'-0"



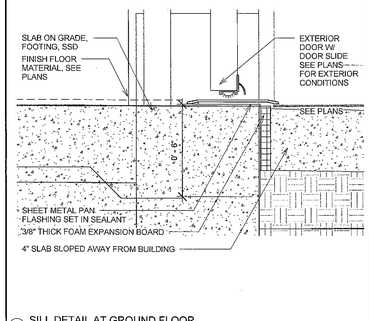
TMP1 INTERIOR THRESHOLD TYP.
3" = 1'-0"



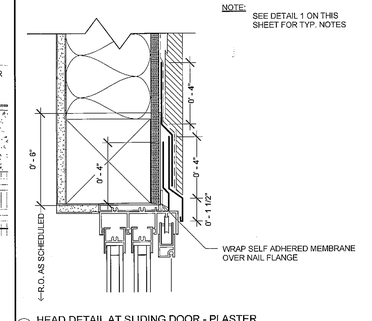
6 SILL DETAIL AT SLIDING DOOR - JULIET CONDITION
3" = 1'-0"



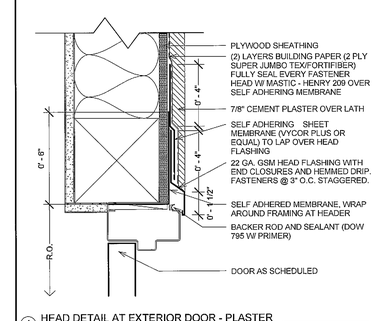
2 JAMB DETAIL AT EXTERIOR DOOR - PLASTER
3" = 1'-0"



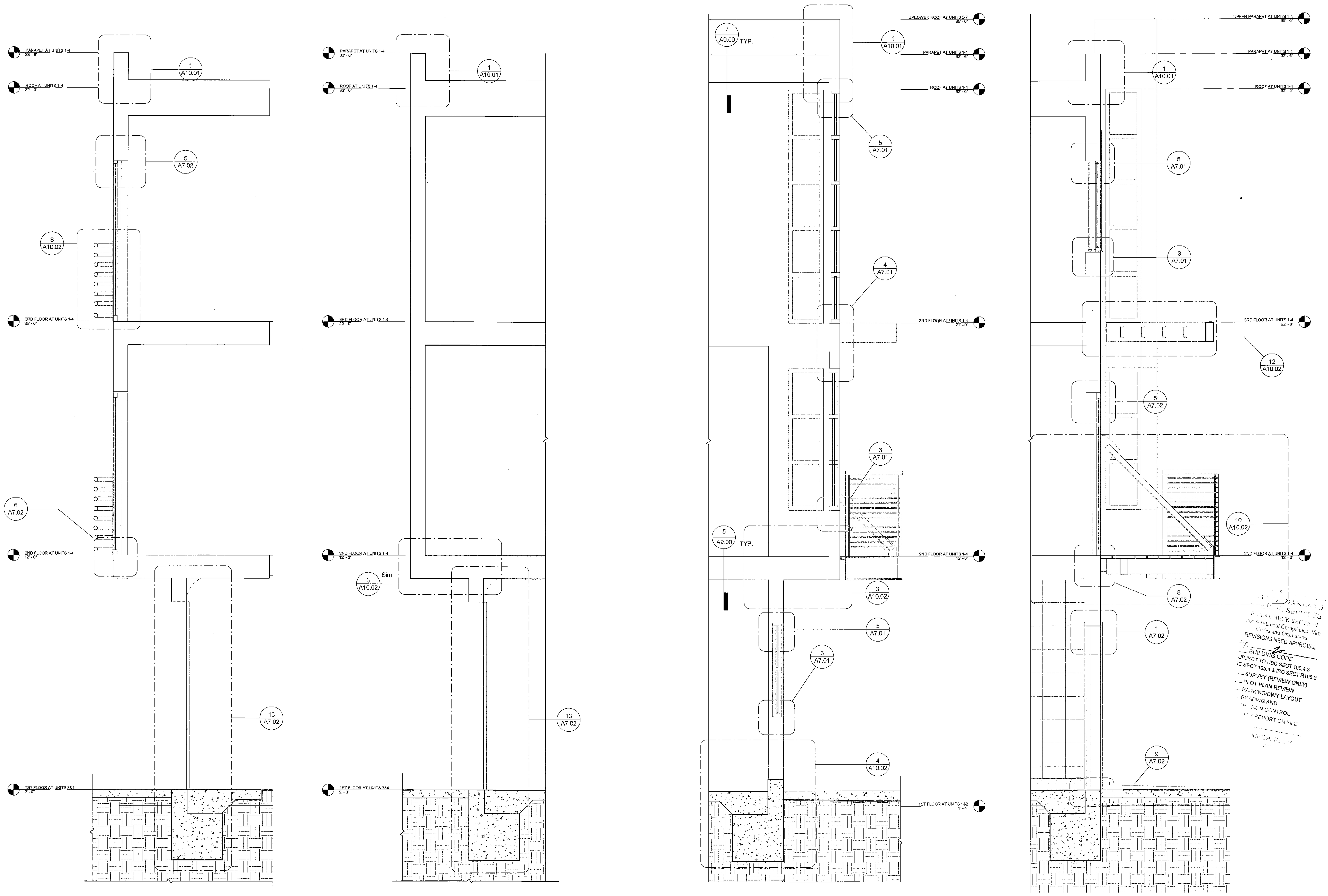
9 SILL DETAIL AT GROUND FLOOR
3" = 1'-0"



5 HEAD DETAIL AT SLIDING DOOR - PLASTER
3" = 1'-0"



1 HEAD DETAIL AT EXTERIOR DOOR - PLASTER
3" = 1'-0"



4 UNIT A WALL SECTION 4
1/2" = 1'-0"

3 UNIT A WALL SECTION 3
1/2" = 1'-0"

2 UNIT A WALL SECTION 2
1/2" = 1'-0"

1 UNIT A WALL SECTION 1
1/2" = 1'-0"

PLAN CHECK SECTION
For Substantial Compliance With Codes and Ordinances
REVISIONS NEED APPROVAL
By:
— BUILDING CODE
SUBJECT TO UBC SECT 106.4.3
IRC SECT 105.4 & IRC SECT R105.8
— SURVEY (REVIEW ONLY)
— PLOT PLAN REVIEW
— PARKING/DWY LAYOUT
— GRADING AND
EROSION CONTROL
REPORT ON FILE

ARCHITECTURE
PHILIP BANTA
& ASSOCIATES
6050 HOLLIS STREET
EMERYVILLE, CALIFORNIA 94608
TEL | 510 654 3255
FAX | 510 654 3259
www.pbantadesign.com

REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (△)	1ST PLAN CHECK REVIEW	01/14/14
1 (○)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

SHEET DESCRIPTION:

WALL SECTIONS

APPLICANT COPY

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/2" = 1'-0"

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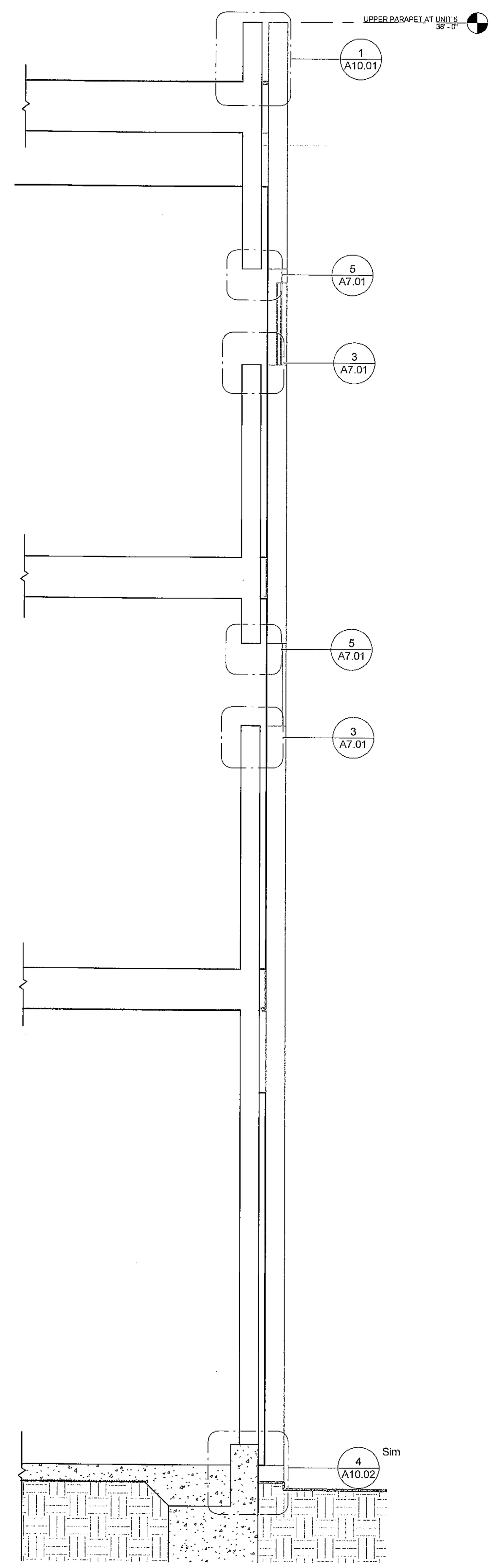
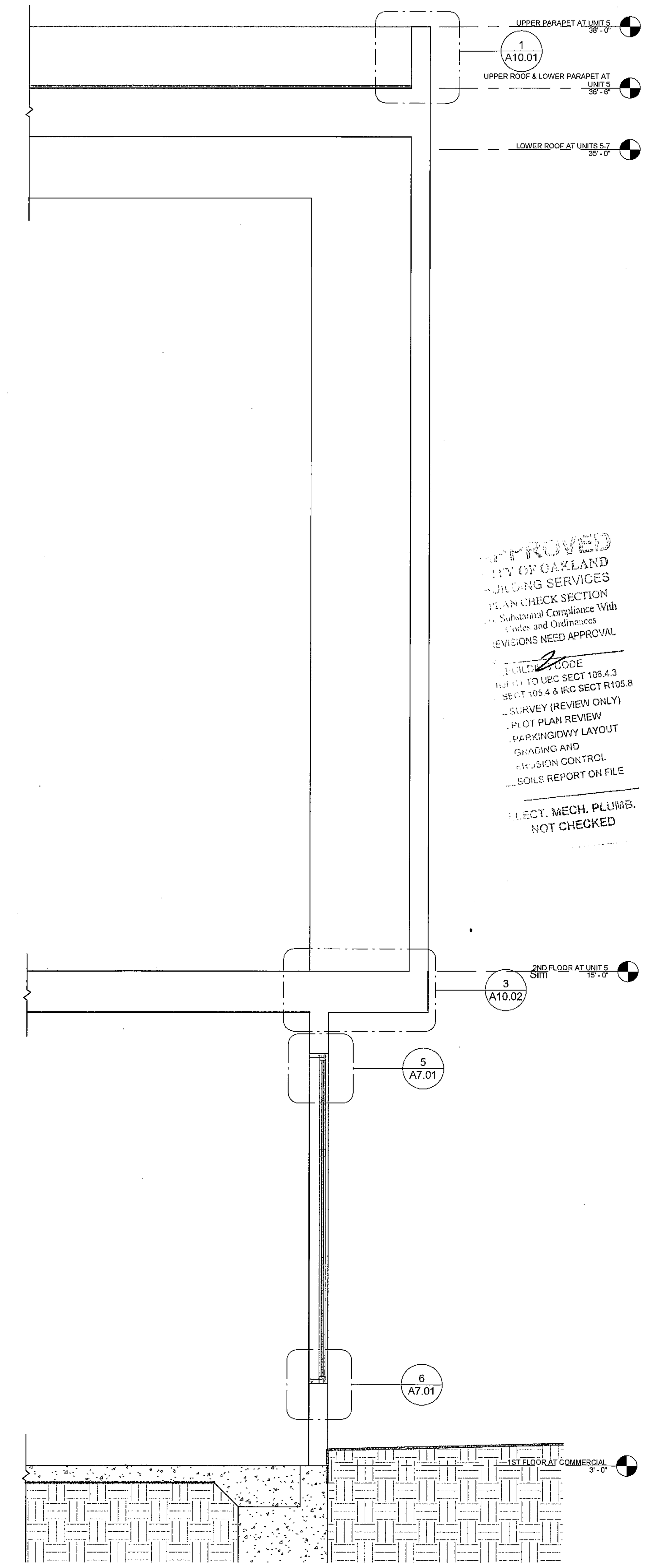
12/7/2013 4:01:39 PM



② UNIT B WALL SECTION 2
1/2" = 1'-0"



① UNIT B WALL SECTION 1
1/2" = 1'-0"

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REVISIONS: △ ISSUES: ○

No.	Description	Date
△1	1ST PLAN CHECK REVIEW	01/14/14
○1	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

SHEET DESCRIPTION:

WALL SECTIONS

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/2" = 1'-0"

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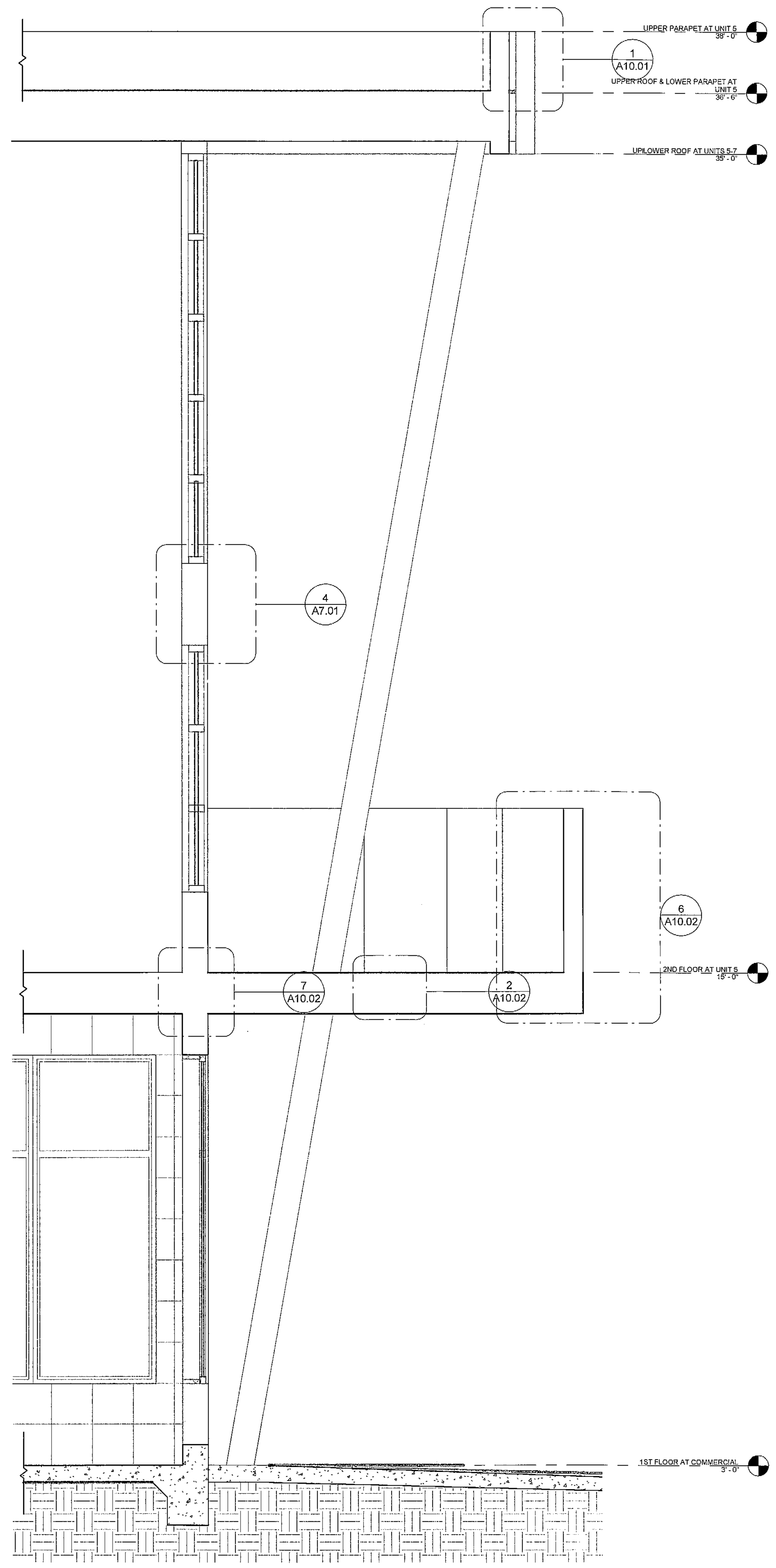

2 UNIT B WALL SECTION 4
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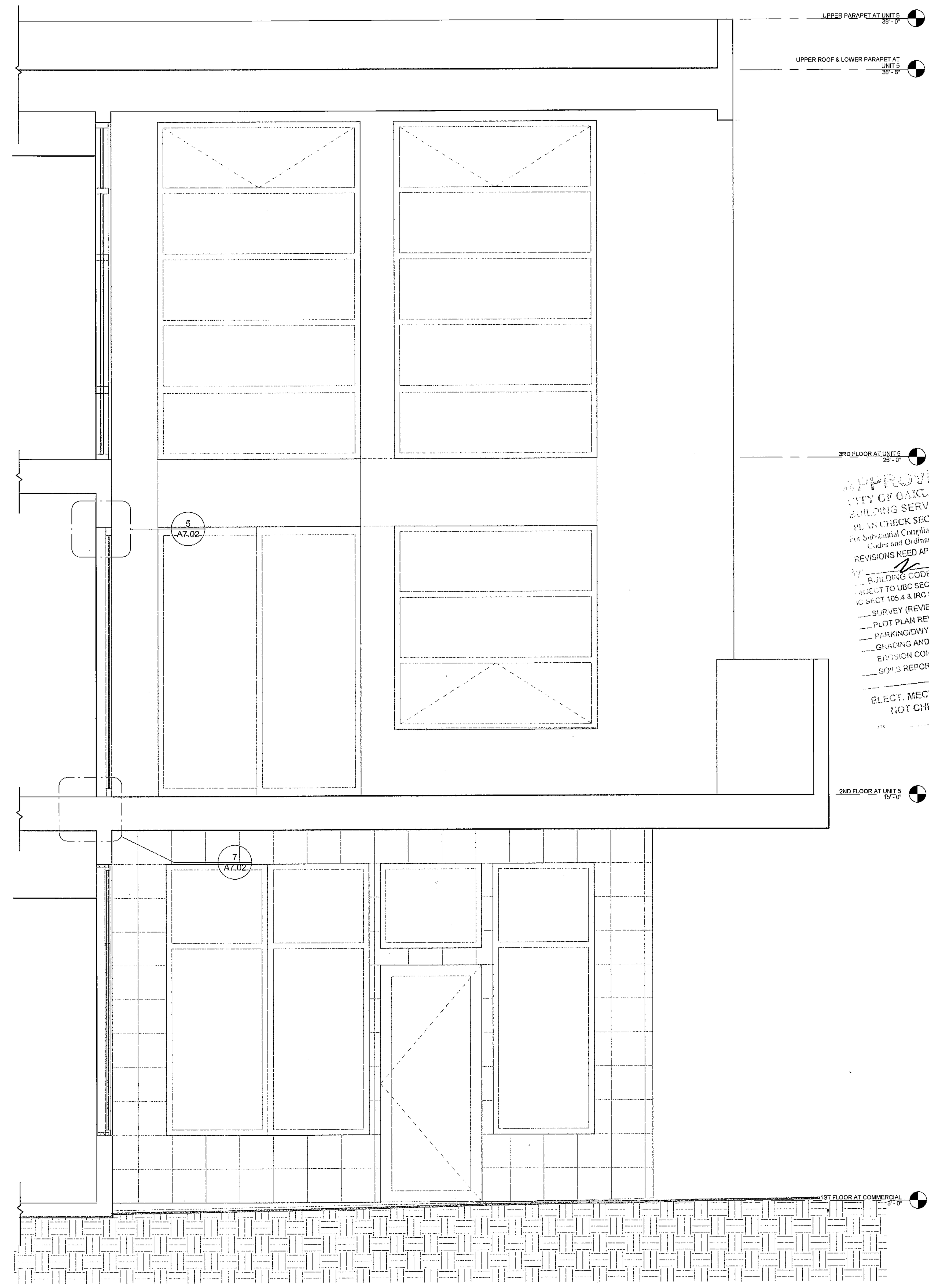

1 UNIT B WALL SECTION 3
1/2" = 1'-0"

APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK SECTION
For Substantial Compliance With
Codes and Ordinances
REVISIONS NEED APPROVAL
By: ___
___ BUILDING CODE
SUBJECT TO UBC SECT 106.4.3
IRC SECT 105.4 & IRC SECT R105.8
___ SURVEY (REVIEW ONLY)
___ PLOT PLAN REVIEW
___ PARKING/DWY LAYOUT
___ GRADING AND
EROSION CONTROL
___ SOILS REPORT ON FILE
ELECT. MECH. PLUMB.
NOT CHECKED

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REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (revision)	1ST PLAN CHECK REVIEW	01/14/14
1 (issue)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

SHEET DESCRIPTION:

WALL SECTIONS

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/2" = 1'-0"

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ACOUSTICAL CONTROL REQUIREMENTS

1.0 GENERAL REQUIREMENTS (CALIFORNIA CODE OF REGULATIONS, TITLE 24)

1. ALL SOUND-RATED ASSEMBLIES, INCLUDING PARTY WALLS, CORRIDOR WALLS, PLUMBING WALLS, AND DROPPED CEILINGS BETWEEN RESIDENCES, SHOULD INCLUDE BATT INSULATION AND ACOUSTICAL CAULKING AROUND THE PERIMETER.

2.0 PARTY WALL, DIVISION WALL AND FLOOR/CEILING FRAMING

1. STUDS SUPPORTING OPPOSING FACES IN DOUBLE STUD OR STAGGERED STUD ASSEMBLIES SHALL NOT BE CONNECTED ACROSS THE PLATE(S) OR AIR GAP. NO RIGID MATERIAL OF ANY KIND MAY CONNECT OPPOSING STUDS.
2. STUDS SHALL NOT OVERRIDE PLATES OF PARTY OR DIVISION WALLS. KNOW HOLES, WARPED LUMBER, SPLINTERED WOOD, SPLICES, CHIPS, AND SAW CUTS SHALL NOT BE PERMITTED AT VERTICAL OR HORIZONTAL PARTY WALL CONNECTIONS.
3. FRAMING AT BUILT-UP CORNERS AND JOISTS TO WALL CONNECTIONS ALONG PARTY WALLS SHALL FIT TIGHTLY WITHOUT AIR GAPS , SPECIAL CARE SHALL BE TAKEN SO THAT DRY WALL NAILER BLOCKING MEETS THIS CONDITION BETWEEN JOISTS.
4. DOUBLE BLOCKING BETWEEN CEILING JOISTS SHALL BE POSITIONED TO ELIMINATE FLANKING OF SOUND OVER PARTY OR DIVISION WALLS AT THE JOISTS.
5. CONCRETE POUR MATERIAL SHALL NOT FLOW ONTO PARTY WALL SOLE PLATES. CONCRETE SHALL NOT BE POURED ONTO OR INTO PARTY WALL SEPARATION CAVITIES BETWEEN PLATES.
6. ALL WALL INSULATION SHALL BE SNUGLY FITTED AND/OR STAPLED BETWEEN STUDS.
7. GYPSUM WALLBOARD SHOULD CONTINUE TO THE ROOF LINE ON ONE SIDE OF THE WALL TO AVOID FLANKING OF SOUND THROUGH THE ATTIC SPACE.
8. MAINTAIN A 1/4" GAP AT ALL PARTY WALL OR DIVISION WALL PERIMETERS AND FILL THE GAP WITH ACOUSTICAL CAULK.
9. CAULKING FOR ALL PARTY OR DIVISION WALLS SHALL BE USED IN STRICT CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS
10. WHERE TWO LAYERS OF GYPSUM WALLBOARD OR SHEATHING ARE REQUIRED ON ONE SIDE OF A COMMON WALL, THE JOINTS BETWEEN THE SECOND LAYER OF WALLBOARD MUST BE STAGGERED WITH RESPECT TO THE JOINTS OF THE FIRST LAYER, I.E., THE JOINTS MUST NOT OVERLAP.

3.0 FLOOR/CEILING ASSEMBLIES

1. ALL INSULATION SHALL BE SNUGLY FITTED AND/OR STAPLED BETWEEN THE JOISTS.
2. MAINTAIN A 1/4" GAP AT ALL CEILING PERIMETERS AND FILL WITH ACOUSTICAL CAULK.
3. CAULKING FOR ALL FLOORS/CEILING ASSEMBLIES SHALL BE USED IN STRICT CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS.
4. WALLS SHOULD BE INSTALLED BEFORE THE RESILIENT CHANNELS TO ENSURE THAT THE CHANNELS REMAIN TO THE OUTSIDE OF THE WALL TO ALLOW THE CEILING TO "FLOAT" OR MOVE VERTICALLY WITHOUT HINDRANCE.
5. ALL SUB-FLOOR PENETRATIONS SHALL BE SEALED WITH PLYWOOD, OSB, GYPSUM BOARD OR SIMILAR SOLID MATERIAL AND ACOUSTICAL CAULKING SHALL BE PERFORMED AROUND THE PENETRANT.

4.0 CAULKING

1. WHEN INSTALLING THE GYPSUM WALLBOARD PROVIDE A 3/16" TO 1/4" WIDE GAP AROUND THE ENTIRE PERIMETER OF ALL COMMON WALLS AND COMMON CEILINGS. THE GAP MUST THEN BE FILLED WITH A CONTINUOUS BEAD OF NON-HARDENING CAULKING COMPOUND OR ACOUSTICAL SEALANT.
2. IF MULTIPLE LAYERS OF GYPSUM BOARD ARE APPLIED TO A WALL OR CEILING SURFACE THE CAULKING MUST BE PERFORMED FOR EACH LAYER.
3. AT ALL SURFACE PENETRATIONS IN COMMON WALLS OR COMMON CEILINGS FOR SUCH ITEMS AS ELECTRICAL BOXES, LIGHT FIXTURES, PLUMBING LINES, ETC., LEAVE A 3/16" TO 1/4" IN THE GYPSUM BOARD AROUND THE FIXTURE, AND THEN FILL THE GAP WITH A NON-HARDENING CAULKING COMPOUND OR ACOUSTICAL SEALANT. IN ADDITION THE BACKS OF ALL ELECTRICAL BOXES, TELEPHONE BOXES, MEDICINE CABINETS, AND OTHER THIN WALLED ITEMS INSET INTO A COMMON WALL MUST BE COVERED WITH AN AIR-TIGHT SHEETROCK HOUSING OR WITH HEAVY MASTIC MATERIAL, SUCH AS LOWRY PADS.
4. PROVIDE AIRTIGHT CONSTRUCTION AT ALL EXTERIOR WALLS WITH ACOUSTICAL OR OTHER NON-HARDENING SEALANT AT FLOOR PLATES.
5. CAULK ENTRY DOOR THRESHOLDS AS THEY ARE PLACED.

5.0 RESILIENT CHANNELS

1. ATTACHMENT SCREWS SHALL NOT BE LOCATED COINCIDENT WITH UNDERLYING FRAMING.
2. RESILIENT CHANNELS SHALL BE ATTACHED TO WOOD OR HEAVY GAUGE METAL FRAMING ONLY USING SCREWS. DO NOT ATTACH RESILIENT CHANNELS TO LIGHT GAUGE METAL FRAMING. NAILING RESILIENT CHANNELS IS NOT PERMITTED.
3. WHEN INSTALLING THE RESILIENT CHANNEL TO THE STUDS OR JOISTS, USE THE PRE-DRILLED MOUNTING HOLES IN THE CHANNELS FOR ATTACHMENT TO FRAMING.
4. THE ENDS OF THE RESILIENT CHANNELS MUST NOT BUTT UP AGAINST ADJOINING WALL SURFACES, I.E., CUT THE CHANNEL TO ALLOW A 1/2 TO 1 IN. SPACE BETWEEN THE END OF THE CHANNEL AND WALL EDGES OR CORNERS. DO NOT OVERLAP RESILIENT CHANNELS. AT SOME LOCATIONS, THE RESILIENT CHANNELED MAY NEED TO BE SPLICED TO ENCOMPASS THE ENTIRE WIDTH OF A LONG WALL OF CEILING. WHERE THIS OCCURS, SPLICE THE RESILIENT CHANNELS AT A JOIST OR STUD AND OVERLAP BUTT ENDS NO MORE THAN 1-1/2 INCHES.
5. RESILIENT CHANNELS SHALL BE INSTALLED AT 24"O.C. WHEN SUPPORTING ONE LAYER OF GYPSUM BOARD AND AT 16" O.C. WHEN SUPPORTING TWO LAYERS OF GYPSUM BOARD.
6. RESILIENT CHANNELS ATTACHED TO WALL FRAMING SHALL BE ATTACHED WITH THE GYPSUM BOARD MOUNTING FLANGE GAP FACING UP.
7. HEAVY ITEMS, SUCH AS CABINETS, MIRRORS, ARTWORK, SOLID DUCTING, ETC., SHALL NOT BE SUPPORTED FROM OR THROUGH A RESILIENT WALL OR CEILING. LIGHTWEIGHT WIRE FLEX DUCT MAY BE SUPPORTED BY A RESILIENT CEILING USING MOLLY BOLTS IN THE GYPSUM BOARD ONLY. NOTHING MAY PENETRATE A RESILIENT WALL OR CEILING FROM THE SURFACE SIDE AND CONNECT DIRECTLY TO THE UNDERLYING FRAMING. ITEMS THAT ARE AN INTEGRAL PART OF THE STRUCTURE, SUCH AS ELECTRICAL BOXES, FIRE SPRINKLERS, ETC., ARE EXCEPTED FROM THE REQUIREMENT.

6.0 PLUMBING

1. ALL PLUMBING LINES MUST BE ISOLATED FROM SURROUNDING SUPPORTS WITH PLUMBING ISOLATORS. ISOLATORS WITH A FLEXIBLE NEOPRENE OR SOFT PADDING INSERT, SUCH AS ACOUSTIO-PLUMB ISOLATORS, ARE PREFERABLE TO THOSE HAVING A ONE-PIECE PLASTIC CONSTRUCTION. THE PLUMBING LINES, INCLUDING DRAIN LINES, MUST NOT REST AGAINST ANY PART OF THE SURROUNDING STRUCTURE, SUCH AS JOISTS, STUDS, OR WALLBOARD, IN ORDER FOR THE PLUMBING ISOLATION TO BE EFFECTIVE.
2. AVOID INSTALLING PLUMBING LINES THROUGH MAIN LIVING SPACE WALLS WHEREVER POSSIBLE.
3. PIPING AND/OR DUCTING WITHIN FLOOR/CEILING ASSEMBLIES SHALL BE SUPPORTED FROM THE JOISTS AND COMPLETELY ISOLATED FROM THE CEILING.
4. THE STUD BAY OR JOIST CAVITY SURROUNDING THE SUPPLY AND WASTE PIPING SHALL BE FITTED WITH OPEN-FACED FIBERGLASS OR EQUIVALENT SOUND ABSORPTIVE MATERIAL.
5. COMMON SUPPLY OR DRAIN LINES SHALL NOT CROSS THE GAP BETWEEN PARTY WALLS OR CONNECT TWO OPPOSING SIDES OF A PARTY WALL.
6. CAULKING SHALL BE PERFORMED AT ALL PIPE PENETRATIONS IN COMMON WALLS AND CEILINGS, AS DESCRIBED ABOVE.
7. USE CAST IRON DRAIN LINE THROUGHOUT THE ENTIRE CONSTRUCTION. SHOULD PLASTIC OR COPPER DRAIN LINES BE USED, THE PIPE MUST BE COMPLETELY WRAPPED WITH A HEAVY MASTIC MATERIAL SUCH AS LOWRY PIPE WRAP TAPE OR EQUIVALENT.
8. ALL PENETRATIONS IN THE SUB-FLOOR FOR PLUMBING MUST BE SEALED WITH SHEETROCK, PLYWOOD, ETC., AND CAULKED WITH ACOUSTICAL SEALANT.
9. LIMIT WATER FLOW RATES TO 4 FT. PER SEC. IN 1/2" AND 3/4" PIPES AND UP TO 6 FT. PER SEC. IN LARGER PIPES. MAINTAIN THE WATER PRESSURE AT FIXTURES TO 50 PSI OR LOWER.
10. FOR REFRIGERATOR "ICE BOX" INSTALLATIONS FOLLOW GUIDELINES FOR ELECTRICAL BOXES OUTLINED IN 8.0.

7.0 MECHANICAL/DUCTING

1. BATHROOM EXHAUST FAN HOUSINGS WHICH ARE MOUNTED WITHIN A SEPARATION ASSEMBLY SHALL BE BOXED IN WITH GYPSUM BOARD, CAULKED AIR-TIGHT AND SURROUNDED WITH FIBERGLASS OR EQUIVALENT SOUND ABSORPTIVE MATERIAL.
2. SOLID WALL HVAC EQUIPMENT AND/OR DUCTS, EXCEPT LIGHTWEIGHT WIRE FLEX DUCTS, SHALL NOT BE SUPPORTED FROM OR THROUGH A RESILIENT CEILING. SEE 5.0 - 10 ABOVE. MECHANICAL UNITS IN DROPPED CEILING CAVITIES SHALL NOT BE SUPPORTED BY THE UPPER FLOOR FRAMING UNLESS RESILIENT OR VIBRATION ISOLATING HANGERS ARE USED.
3. MECHANICAL VENTILATION DEVICES, REQUIRED WHEN WINDOWS ARE CLOSED FOR NOISE CONTROL, SHALL NOT COMPROMISE THE ACOUSTICAL INTEGRITY OF THE BUILDING SHELL.

8.0 ELECTRICAL

1. TELEVISION AND TELEVISION OUTLETS SHALL NOT BE PLACED IN PARTY OR DIVISION WALLS UNLESS SEALED WITH LOWRY PADS OR BOXED WITHIN THE STUDS CAVITY.
2. IN THE EVENT IT IS NOT PRACTICAL OR POSSIBLE TO PLACE CONVENIENCE OUTLETS IN DIFFERENT STUD BAYS AS SPECIFIED IN ITEM 2A ABOVE, THEY SHALL BE SEPARATED FROM EACH OTHER AS MUCH AS POSSIBLE AND IN NO CASE SHALL THERE BE PHYSICAL CONTACT BETWEEN THE TWO ELECTRICAL BOXES. ITEMS 8.3B, 8.3C & 8.30 BELOW STILL APPLY.

8.0 ELECTRICAL (CONTINUED)

3. CONVENIENCE OUTLETS IN OPPOSITE FACES OF PARTY, PLUMBING OR DIVISION WALLS SHALL BE INSULATED AS FOLLOWS:
   - A. ELECTRICAL BOXES (SWITCHES, OUTLETS, WALL FIXTURES, ETC.) IN OPPOSITE FACES OF PARTY OR DIVISION WALLS SHALL BE SEPARATED HORIZONTALLY BY NOT LESS THAN 24 INCHES (I.E. IN DIFFERENT STUD BAYS).
   - B. MASTIC SEALER (LOWRY PADS OR EQUIVALENT) SHALL BE WRAPPED AROUND BACK SIDES, TOP AND BOTTOM OF ALL ELECTRICAL BOXES IN PARTY WALLS. PAD MUST MAKE CONTINUOUS CONTACT WITH BACK OF BOX.
   - C. ELECTRICAL BOXES SHALL BE BACKED BY R-11 FIBERGLASS FAS NEEDED TO COMPLETELY FILL THE STUD BAY.
   - D. KNOCKOUT PLATES ON ELECTRICAL BOXES IN PARTY OR DIVISION WALLS SHALL NOT BE BENT OR REMOVED WHERE CONDUITS ARE NOT CONNECTED TO THE BOX.
   - E. WHEN BACK TO BACK OUTLETS CAN NOT BE AVOIDED PLACE A LAVER OF 5/8" GYPSUM BOARD BETWEEN THE OUTLET BOXES. CONNECT GYPSUM BOARD TO ONE BOX ONLY.

9.0 KITCHENS, BATHROOMS AND LAUNDRY ROOMS

1. THE PARTY WALL BEHIND A TUB AND /OR SHOWER ASSEMBLY SHALL BE CONSTRUCTED CONSISTENT WITH THE PARTY WALL SPECIFICATIONS. WALLBOARD SHALL BE INSTALLED BEHIND ALL TUBS AND/OR SHOWERS WHICH ARE ADJACENT TO PARTY WALLS
2. VOIDS BETWEEN THE WALL, FLOOR, AND FIBERGLASS OR ACRYLIC TUB/SHOWER UNITS SHALL BE COMPLETELY FILLED WITH FIBERGLASS INSULATION OR EQUIVALENT SOUND ABSORPTIVE MATERIAL.
3. CABINET DOORS SHALL BE INSTALLED WITH SOFT DOOR BUMPERS.
4. CABINETS SHALL NOT BE INSTALLED ON RESILIENT CHANNEL WALLS.
5. THE GARBAGE DISPOSAL SHALL BE 'QUIET' WITH AN ISOLATED MOTOR AND FLEXIBLE CONNECTIONS

10.0 GARAGE NOISE CONTROL

1. ANY GRATES IN THE TRAVEL PATH NEAR THE GARAGE ENTRANCE SHOULD HAVE GASKETING ALONG THE PERIMETER AND BE SECURELY ATTACHED TO REDUCE RATTLING WHEN VEHICLES DRIVE OVER THEM.

-REFER TO ATTACHED INTERDWELLING ACOUSTICAL RECOMMENDATION LETTER DATED MARCH 27 2008 AND TITLE 24 ACOUSTICAL EVALUATION DATED MARCH 19 2008 FOR MORE ACOUSTICAL INFO.

FIRE BLOCKING AND DRAFT STOPPING NOTES

FIRE BLOCKS

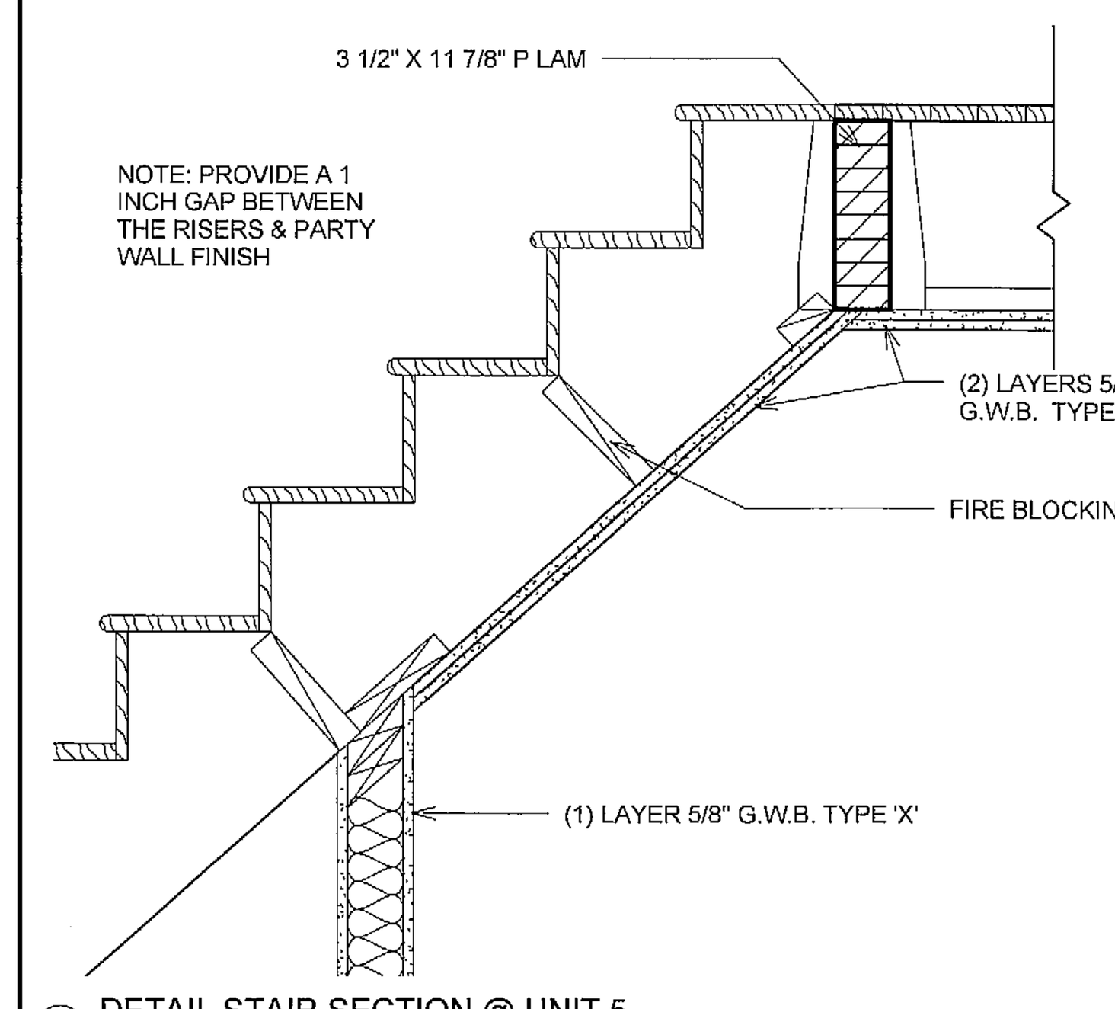
REQUIRED LOCATIONS
1. CONCEALED SPACES OF WALLS AND PARTITIONS INCLUDING FURRED SPACES, AT 10'-0" INTERVALS BOTH HORIZONTAL AND VERTICAL.
2. AT INTERSECTIONS BETWEEN VERTICAL AND HORIZONTAL.
3. AT CONCEALED SPACES BETWEEN STAIR STRINGERS AT TOP AND BOTTOM OF STAIR RUN.
4. IN OPENINGS AROUND PIPES, DUCTS, CHIMNEYS, FIREPLACES AT CEILINGS AND FLOORS.

CONSTRUCTION:
1. 2" NOMINAL LUMBER, OR 2 LAYERS OF 1" LUMBER WITH BROKEN LAPS OR 1 LAYER OF 3/4" STRUCTURAL PANEL WITH JOINTS BACKED BY 3/4" STRUCTURAL PANEL.
2. GYPSUM BOARD, CEMENT FIBER BOARD.
3. BLANKETS OF MINERAL FIBER (IF TESTED FOR USE). (NO LOOSE FILL INSULATION).

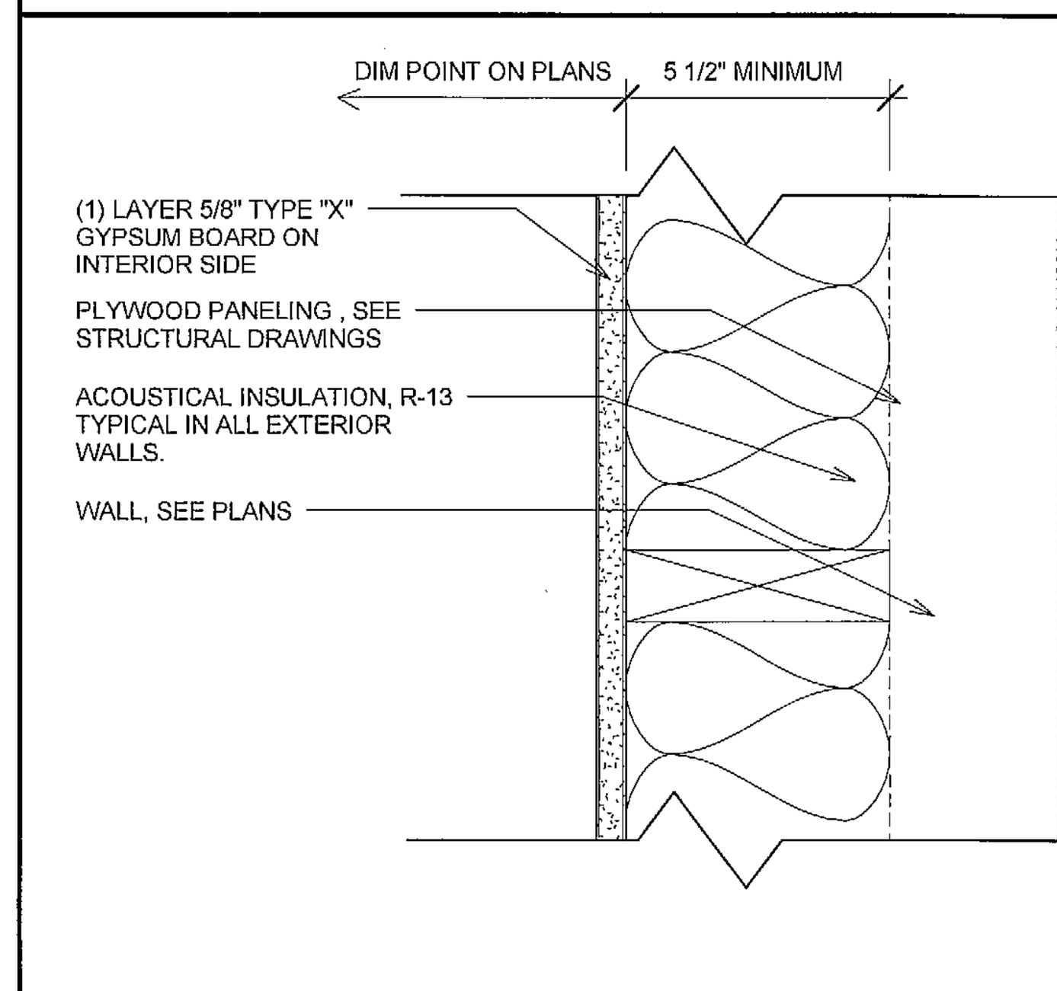
DRAFT STOPS

REQUIRED LOCATIONS:
1. IN FLOOR/CEILING ASSEMBLIES TO BREAK THE AREA IN TO 3000 SF. AREAS SO THAT NO DIMENSION EXCEEDS 100'-0"/
2. DRAFT STOPS ARE ALSO REQUIRED AT ATTICS, MANSARDS, OVERHANGS, AND OTHER CONCEALED SPACES. THE DRAFT STOPS SHALL BE IN LINE WITH THE WALLS SEPARATING THE UNITS AND FROM OTHER USES. THEY SHALL BE INSTALLED TO BREAK DOWN AREAS INTO 9000 SF. AREAS WITH Q00 FOOT MAXIMUM DIMENSIONS.

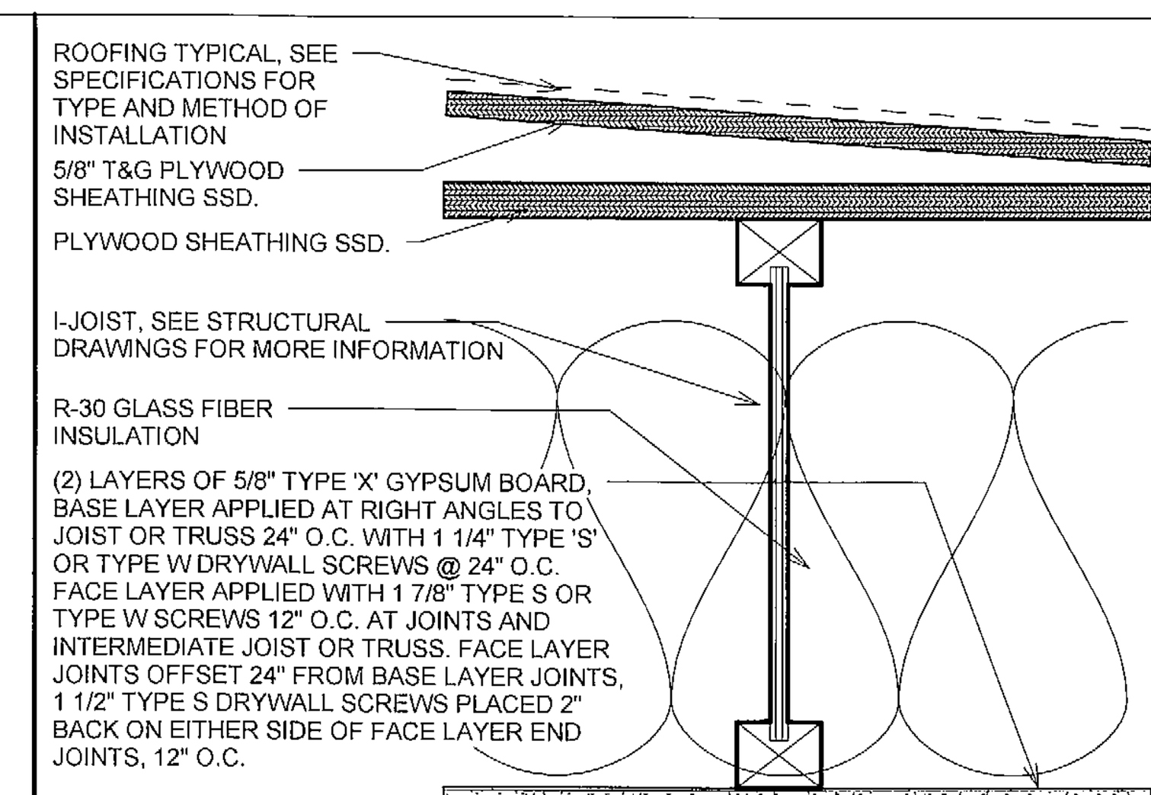
CONSTRUCTION:
1. DRAFT STOPPING MATERIALS SHALL NOT BE LESS THAN 5/8" GYPSUM BOARD, 3/8" STRUCTURAL PANELS OR PARTICLE BOARD
2. ANY OPENING THROUGH THE DRAFT STOPS SHALL BE PROTECTED BY SELF-CLOSING DOORS WITH AUTOMATIC LATCHES. VENTILATION FOR THE SPACES SHALL BE MAINTAINED.



9 DETAIL STAIR SECTION @ UNIT 5
1" = 1'-0"



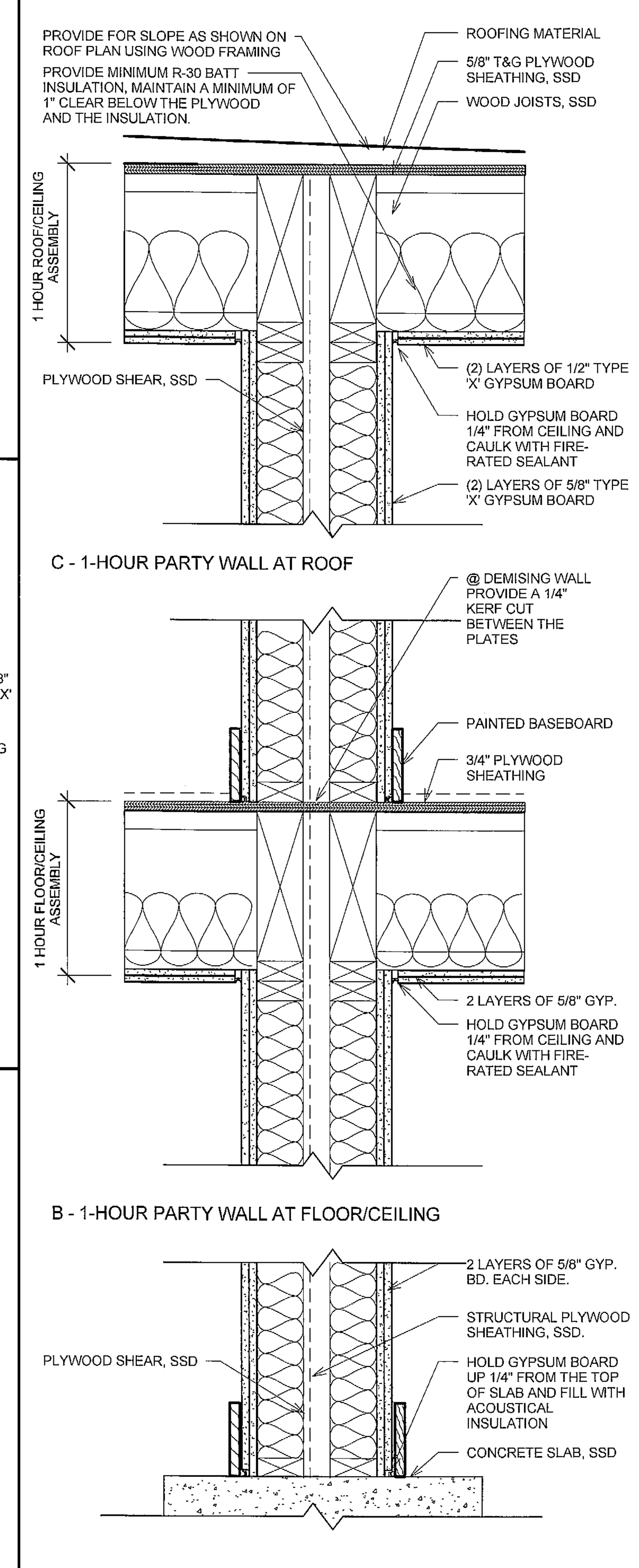
8 WALL TYPE E - TYPICAL FURRED PLUMBING WALL
3" = 1'-0"



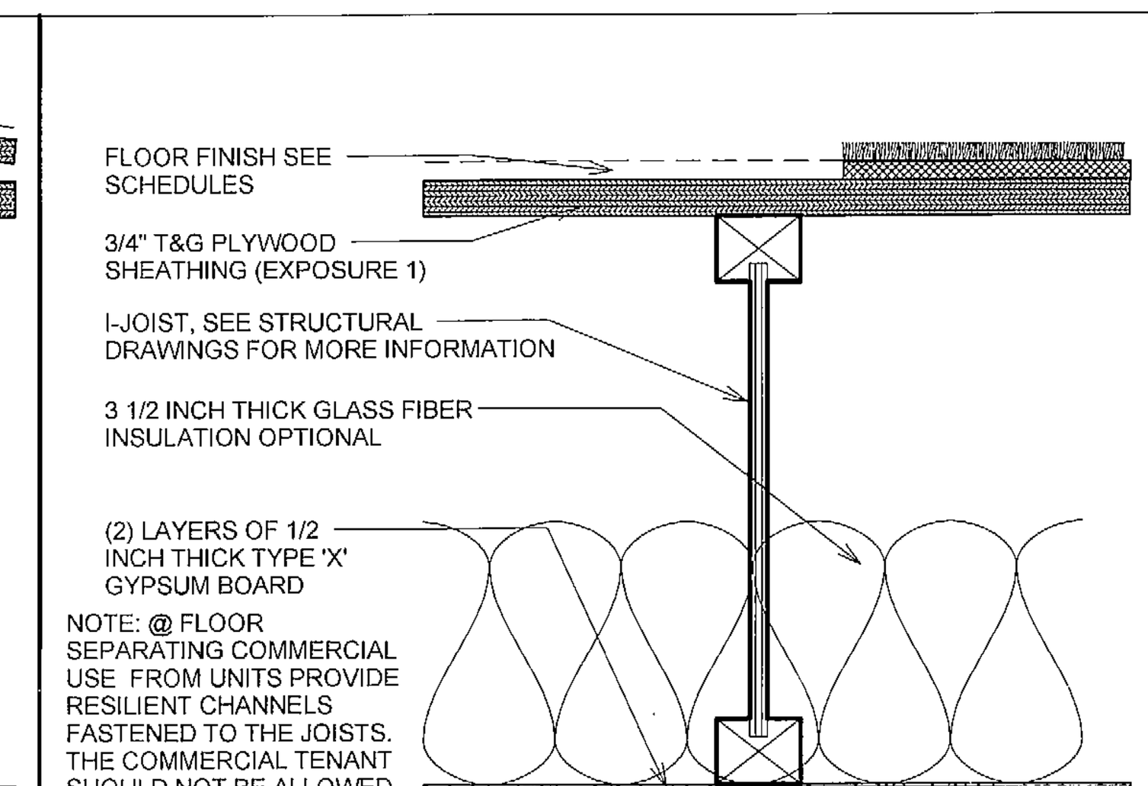
FLOOR DESIGN CRITERIA AND TEST DATA
REFER TO THE FOLLOWING AND COMPLY WITH REQ.
TEST ASSEMBLY — ICC ES REPORT ESR 1153 ASSEMBLY B
FIRE RATING — ONE HOUR

NOTES
1. SEE SHEET A9.0 FOR FIRE BLOCKING,DRAFT STOP AND ACOUSTICAL REQUIREMENTS
2. PROVIDE RC CHANNELS AT ROOMS BELOW ROOF TOP MECHANICAL EQUIPMENT

7 TYPICAL ROOF/CEILING ASSEMBLY
3" = 1'-0"

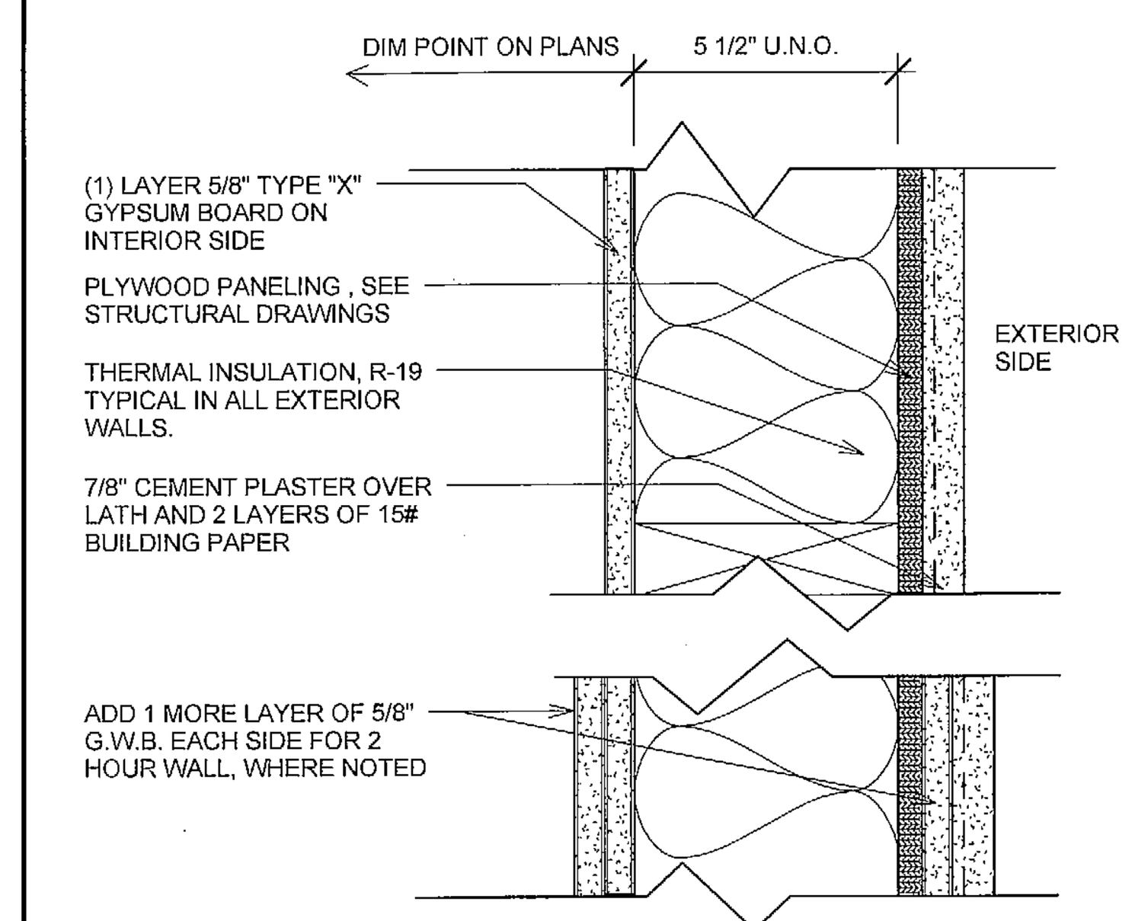


6 TYP ONE-HOUR PARTY WALL
1 1/2" = 1'-0"

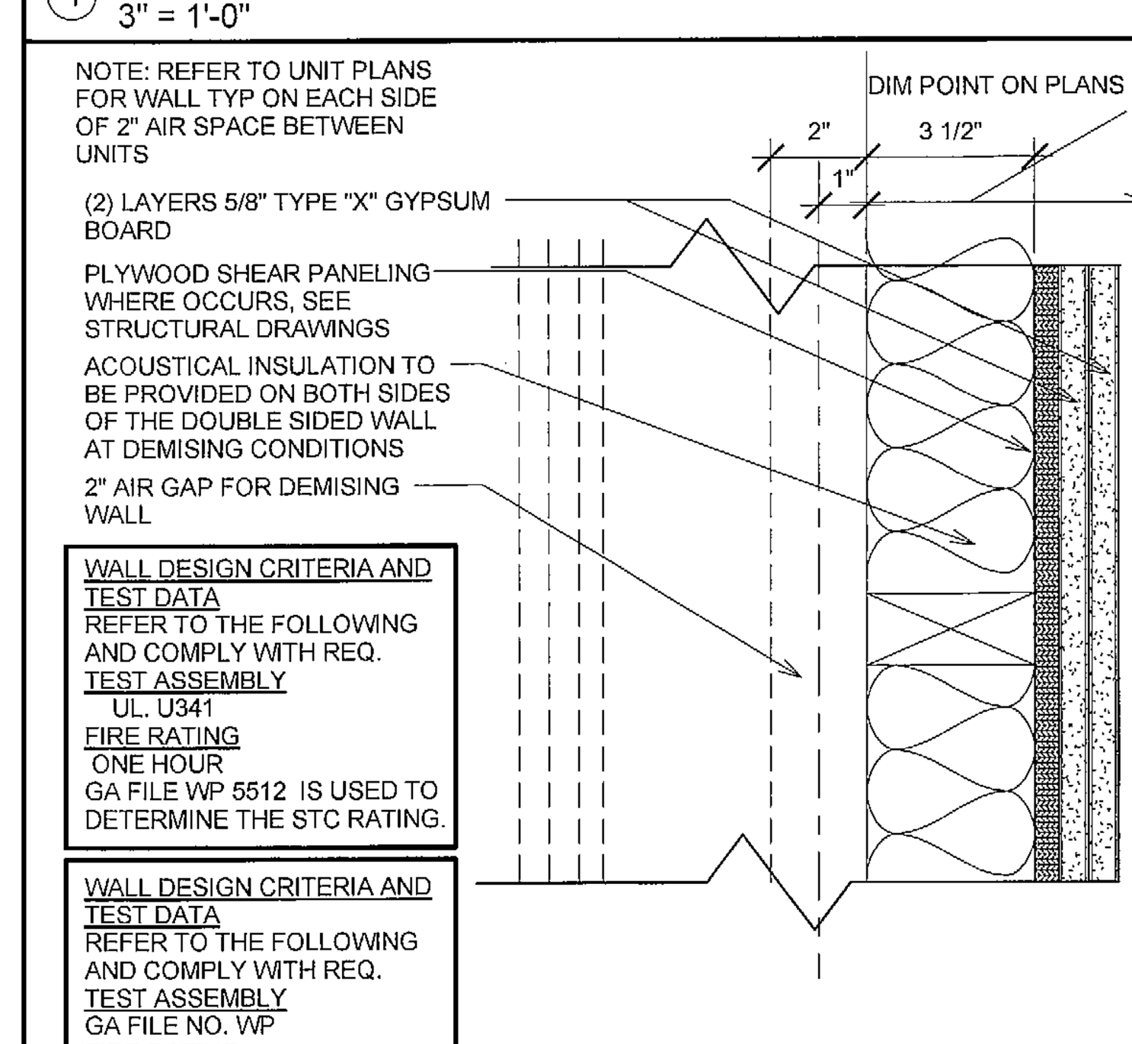


FLOOR DESIGN CRITERIA AND TEST DATA
REFER TO THE FOLLOWING AND COMPLY WITH REQ.
TEST ASSEMBLY — ICC ES REPORT ESR 1153 ASSEMBLY B
FIRE RATING — ONE HOUR

5 TYPICAL FLOOR/CEILING ASSEMBLY
3" = 1'-0"



4 WALL TYPE D - TYPICAL EXTERIOR WALL
3" = 1'-0"

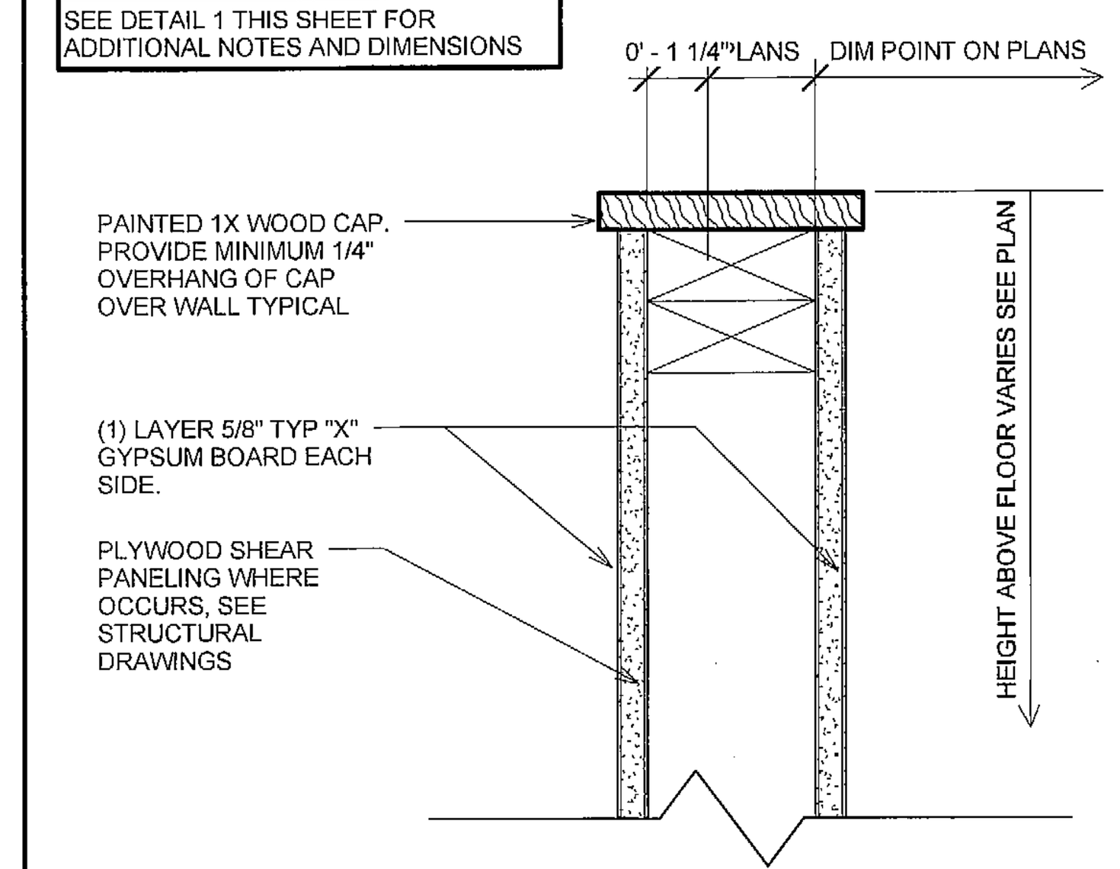


WALL DESIGN CRITERIA AND TEST DATA
REFER TO THE FOLLOWING AND COMPLY WITH REQ.
TEST ASSEMBLY
UL. U341
FIRE RATING
ONE HOUR
GA FILE WP 5512 IS USED TO DETERMINE THE STC RATING.

WALL DESIGN CRITERIA AND TEST DATA
REFER TO THE FOLLOWING AND COMPLY WITH REQ.
TEST ASSEMBLY
GA FILE NO. WP
FIRE RATING
TWO HOUR
GA FILE WP 3820 IS USED TO DETERMINE THE STC RATING.

3 WALL TYPE C - TYPICAL DEMISING WALL
3" = 1'-0"

SEE DETAIL 1 THIS SHEET FOR ADDITIONAL NOTES AND DIMENSIONS



2 WALL TYPE B - INTERIOR LOW WALL
3" = 1'-0"

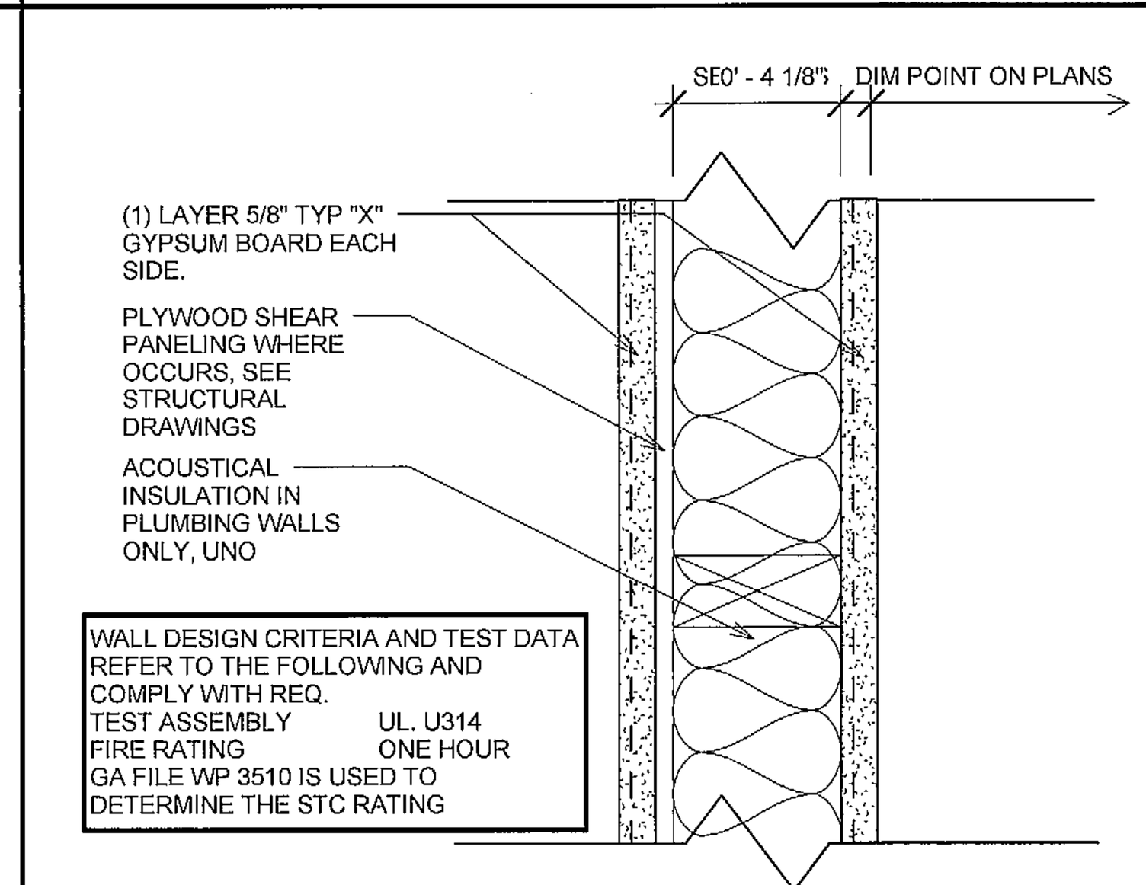
GENERAL WALL NOTES

1. SUPPLY AND INSTALL ADDITIONAL WALL AND/OR BRIDGING AS MAY BE REQUIRED FOR HEIGHT OF WALL BRACING SYSTEM DESIGN SHALL BE SUBMITTED TO THE ARCHITECT TO CONFIRM ACOUSTICAL PERFORMANCE IS NOT COMPROMISED.
2. WALL BACKING FOR ITEMS ATTACHED THROUGH GYPSUM BOARD SURFACES SEE DETAIL X/XXX. CONTRACTOR SHALL SUPPLY AND INSTALL ALL STIFFENER, BRACING, BACK-UP PLATES, AND SUPPORT BRACKETS TO FACILITATE THE INSTALLATION ALL CASEWORK, STAIR RAILINGS, TOILET ACCESSORIES, PARTITIONS, AND WALL MOUNTED OR SUSPENDED MECHANICAL, ELECTRICAL, AND MISC. EQUIPMENT.
3. GYPSUM BOARD INSTALLED TO CREATE 1-HOUR RATED WALLS SHALL TERMINATE AT STRUCTURE AND WHERE INTERSECTING 1-HOUR CEILINGS, TYPICAL 1-HOUR CONSTRUCTION THROUGHOUT WOOD FRAMED CONSTRUCTION.
4. GYPSUM BOARD INSTALLED TO CREATE 1-HOUR RATED SHAFTS, INCLUDING EXTERIOR BEARING WALLS, SHALL BE INSTALLED BETWEEN JOIST AND OTHER BUILDING COMPONENTS TO CREATE A CONTINUES 1-HOUR ASSEMBLY FROM PODIUM TO ROOF TOP, SEE DETAIL 6/A9.00.
5. WHERE A FIRE RATED ASSEMBLY IS INDICATED IN THESE DOCUMENTS, ALL ELEMENTS OF THE SPECIFIC APPROVED ASSEMBLY SHALL BE INSTALLED IN ACCORDANCE WITH THE SAME.
6. WALL FRAMING DIMENSIONS INDICATED ON DOCUMENTS ARE FROM FACE OF STUD (F.O.S.) UNLESS NOTED OTHERWISE.
7. ALL FRAMING MEMBERS SHALL BE INSTALLED TO PERMIT INSTALLATION OF PIPES, CONDUITS, AND DUCT WORK, WITH A MINIMUM OF CUTTING AND NOTCHING. WHERE CUTTING OCCURS FRAMING MEMBERS SHALL BE AUGMENTED WITH STEEL REINFORCEMENT SO THE STRUCTURAL INTEGRITY OF THE MEMBER IS RESTORED.
8. PROVIDE AND INSTALL ACOUSTICAL INSULATION IN ALL DEMISING, SHAFT,CORRIDOR AND PLUMBING WALLS. INSULATION REQUIREMENTS:
   - 2X4 WALLS PROVIDE R-13: BATT INSULATION.
   - 2X6 OR LARGER WALLS R-19: BATT INSULATION
   - FLOOR ASSEMBLY AT GARAGE LEVEL: R-30 BATT INSULATION
   - ROOF/CEILING ASSEMBLY: R-30 INSULATION
9. WHERE OFFSET STUDS, STRUCTURAL SHEATHING OR ADDITIONAL GYPSUM BOARD FOR FIRE RATING CREATES OFFSETS ON PLANS, WALL FINISH AFFECTED SHALL BE FLUSH FROM CORNER OF ROOM TO CORNER OF ROOM. FLUSH CONDITION SHALL BE ACHIEVED BY FURRING THE WALL, UNLESS OTHERWISE NOTED.
10. SUPPLY AND INSTALL METAL CORNER BEAD AT ALL EXPOSED GYPSUM WALL BOARD CORNERS, AND CASING BEADS WHERE GYPSUM WALL BOARD AND PLASTER FINISHES ABUT WHERE DISSIMILAR FINISHES MEET PROVIDE A MINIMUM OF 3/16" SEPARATION WITH A "J" MOLD AND FILL WITH CAULKING COMPOUND. ALL WALLS , CEILINGS AND SOFFITS WHERE CORNERS ARE VISIBLE WITHIN A LIVING UNIT (EXCLUDING CLOSETS, LAUNDRY ROOMS) SHALL RECEIVE CORNER BEADS ON OUTSIDE CORNERS. INSIDE CORNERS SHALL BE TAPED SMOOTH AND SQUARE.
11. ALL GYPSUM BOARD SHALL BE 5/8" THICK TYPE 'X' UNLESS NOTED OTHERWISE. ATTACHMENT OF THE GYPSUM BOARD SHALL BE NAILED OR SCREWED TO THE FRAMING MEMBERS INCLUDING THE TOP AND BOTTOM PLATES AS REQUIRED PER CODE AND APPROVED ASSEMBLY SYSTEM.
12. GYPSUM BOARD ON ACOUSTICALLY RATED WALL ASSEMBLIES SHALL SET IN A CONTINUOUS BEAD OF ACOUSTICAL CAULK. GYPSUM BOARD SHOULD BE HELD BACK TO LEAVE A 1/4-INCH GAP PRIOR TO CAULKING. SEE PLANS AND DETAILS FOR LOCATIONS OF ACOUSTICAL WALLS.
13. PROVIDE A 1/4" GAP AROUND THE FULL PERIMETER OF EACH WALL AT FACE LAYER OF GYPSUM BOARD. SUPPLY AND INSTALL ACOUSTICAL SEALANT IN GAP FOR EACH LAYER OF MATERIAL. WHERE RESILIENT CHANNELS ARE USED, ALL GYPSUM BOARD LAYERS SHOULD BE HELD BACK 1/4 INCH FROM INTERSECTION SURFACES AND THE GAP CAULKED AIRTIGHT WITH ACOUSTICAL SEALANT. WHERE THE GYPSUM BOARD IS DIRECTLY ATTACHED TO THE FRAMING, ONLY THE FACE LAYER NEEDS TO BE HELD BACK AND CAULKED AIRTIGHT.
14. SUPPLY AND INSTALL PLYWOOD SHEAR PANELS PER STRUCTURAL DRAWINGS ON STUDS PRIOR TO INSTALLATION OF GYPSUM BOARD AND FINISHES.
15. ALL FRAMING MEMBERS SHALL BE SO ARRANGED AND SPACED AS TO PERMIT INSTALLATION OF PIPES, CONDUITS, CONTROLS AND DUCTWORK WITH A MINIMUM OF CUTTING. SHAFT WALLS SHALL BE PROVIDED WITH NECESSARY FRAMES, BRACING AND SEALANT AROUND THE OPENING.
16. FIRE AND DRAFT STOPS SHALL BE PROVIDED THROUGHOUT AS REQUIRED PER U.B.C. SECTION 708 REFER TO FIRE STOPPING AND DRAFT STOPPING NOTES ON THIS PAGE.
17. PLASTIC PIPE PENETRATION IN ACOUSTICAL PARTY FLOOR-CEILING OR WALL ASSEMBLIES ARE PROHIBITED (UNLESS ALLOWED BY LISTED ASSEMBLY). PLASTIC PIPES AND PLASTIC BOXES (EXCEPT UL FIRE RATED BOXES) SHALL NOT PENETRATE FIRE RATED WALLS, FLOORS, CEILINGS. NEC 300-21, UBC 709 & 710.
18. FURNISH AND INSTALL ACCESS DOORS, FIRE DAMPERS, ETC., IN CEILING AND WALL CONSTRUCTION LOCATED AS REQUIRED BY INSTALLATION OF MECHANICAL, PLUMBING, AND ELECTRICAL WORK AND AS APPROVED BY THE ARCHITECT. PROVIDE REQUIRED FIRE RATED ASSEMBLIES IN THE FIRE RATED WALLS AND CEILINGS.
19. CONTACT BETWEEN DISSIMILAR METALS SHALL BE PROTECTED..
20. PROVIDE INSULATION PER ITEM 8 ABOVE AND PER FED. SPEC. HH-I-521E, TYPE III - - FIRE RESISTANCE RATED WHERE EXPOSED IN THE EXTERIOR WALL OR AT THE CEILING PLENUM.
21. ROOFING SYSTEM SHALL BEAR U.L. LISTING AS A CLASS 'A' SYSTEM. ALL MANUFACTURED MATERIALS USED SHALL BEAR THE APPROPRIATE U.L. LABEL.
22. CONTRACTORS SHALL PROVIDE AND INSTALL ALL CONCRETE HOUSEKEEPING PADS FOR MECHANICAL AND ELECTRICAL EQUIPMENT, AS REQUIRED.
23. ALL CONSTRUCTION SHALL COMPLY WITH ACOUSTICAL REQUIREMENTS NOTED ON THIS SHEET AND ELSEWHERE IN THE DRAWINGS AND SPECIFICATIONS UNIT TO UNIT WALL AND FLOOR/CEILING ASSEMBLIES SHALL MEET A MINIMUM STC AND IIC SOUND RATING OF 50. REFERENCE INDIVIDUAL WALL AND FLOOR/CEILING ASSEMBLIES NOTED IN THESE DRAWINGS.
24. ALL ROOF PENETRATIONS TO BE ROUND.

INSULATION NOTES

1. INSULATION INSTALLED IN A FLOOR/CEILING OR ROOF /CEILING ASSEMBLY SHALL BE SUPPORTED BY WIRE STAYS (OR EQUAL) SO THAT THE INSULATION DOES NOT MAKE CONTACT WITH THE FACE MEMBRANE OF THE ASSEMBLY (GYPSUM WALLBOARD).
2. MATERIAL NOTED AS S.A.B. REFERS TO SOUND ATTENUATION BATT.
3. INSULATION SCHEDULED FOR COMMON WALL UNIT TO UNIT SHALL BE INSTALLED IN EACH SIDE OF THE WALL ASSEMBLY.

APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK SECTION
... APPROVAL
BUILDING CODE
... TO UBC SECT 106.4.3
... SECT 105.4 & IRC SECT R105.6
___ SURVEY (REVIEW ONLY)
___ PLOT PLAN REVIEW
___ PARKING/DWY LAYOUT
___ GRADING AND EROSION CONTROL
___ SOILS REPORT ON FILE
...T. MECH. PLUMB.
...T CHECKED



WALL DESIGN CRITERIA AND TEST DATA
REFER TO THE FOLLOWING AND COMPLY WITH REQ.
TEST ASSEMBLY — UL. U314
FIRE RATING — ONE HOUR
GA FILE WP 3510 IS USED TO DETERMINE THE STC RATING

1 WALL TYPE A - INTERIOR UNIT WALL
3" = 1'-0"

ARCHITECTURE
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REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (△)	1ST PLAN CHECK REVIEW	01/14/14
1 (○)	BUILDING PERMIT	12/12/13

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

PROJECT:

35th @ School

Oakland, CA 94619

SHEET DESCRIPTION:

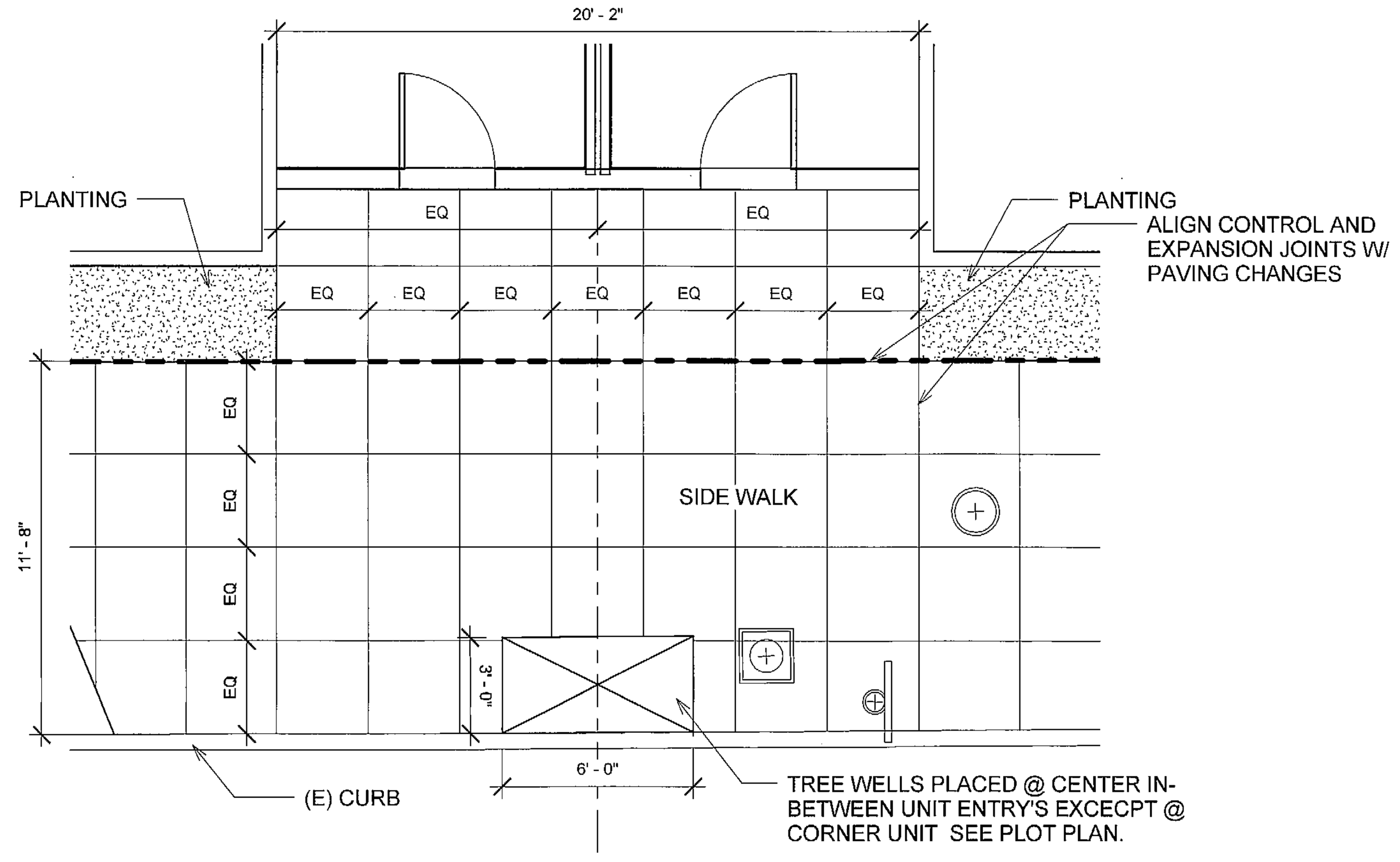
PARTITION TYPES

APPLICANT COPY

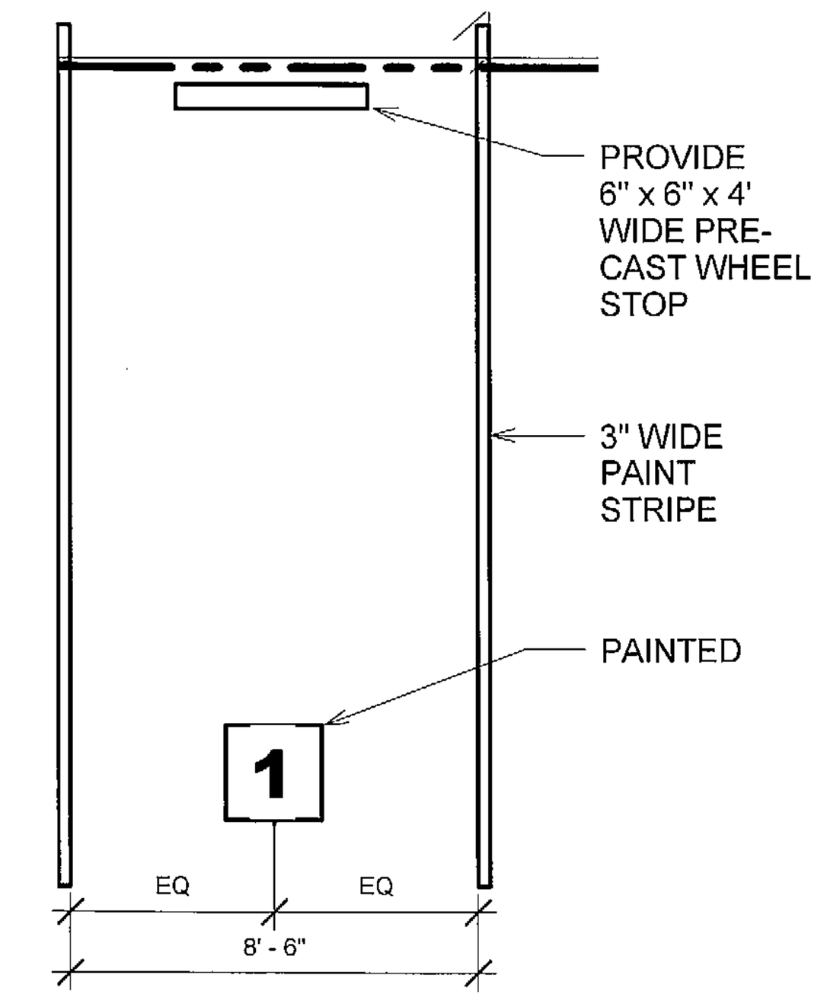
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

A9.00

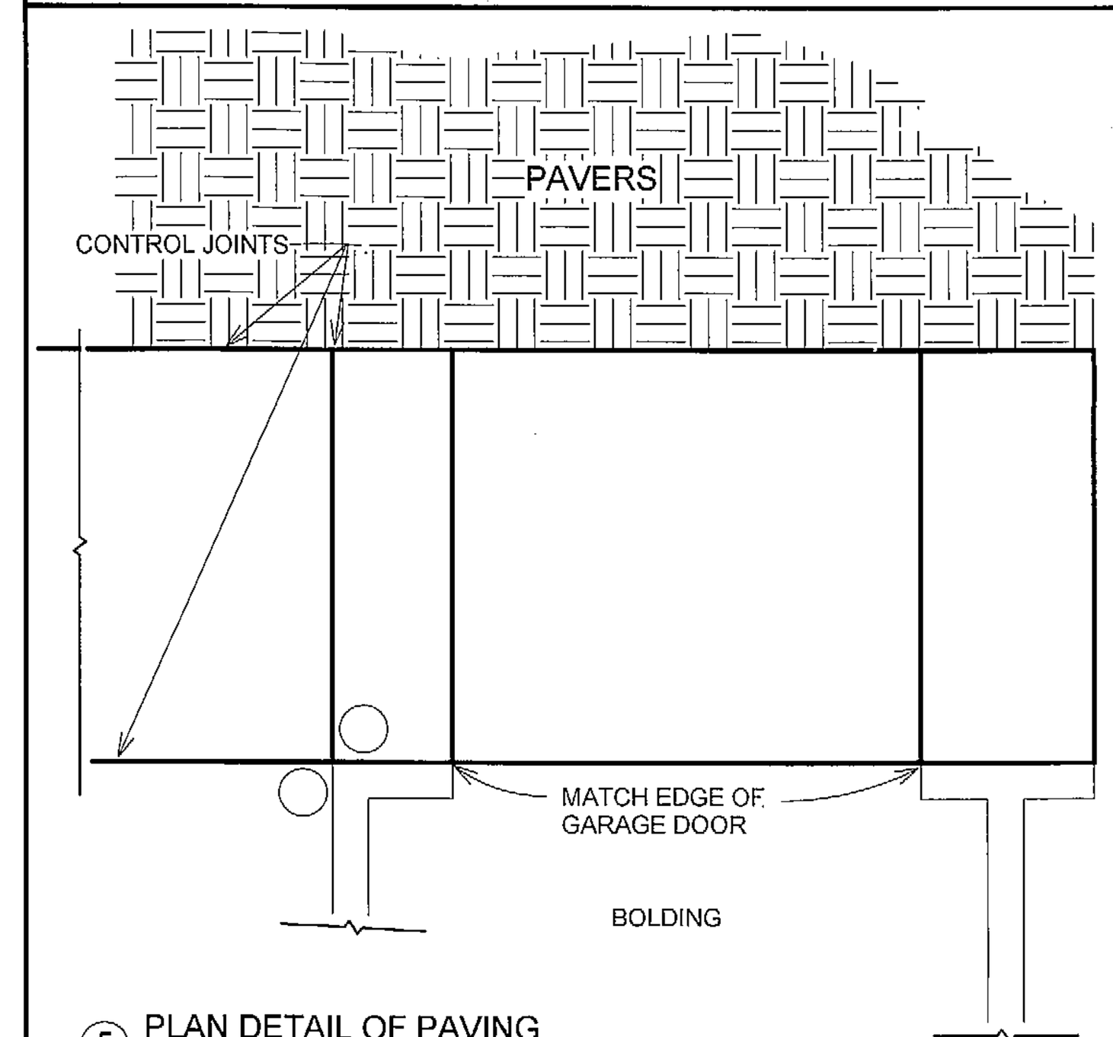
12/7/2013 4:01:43 PM



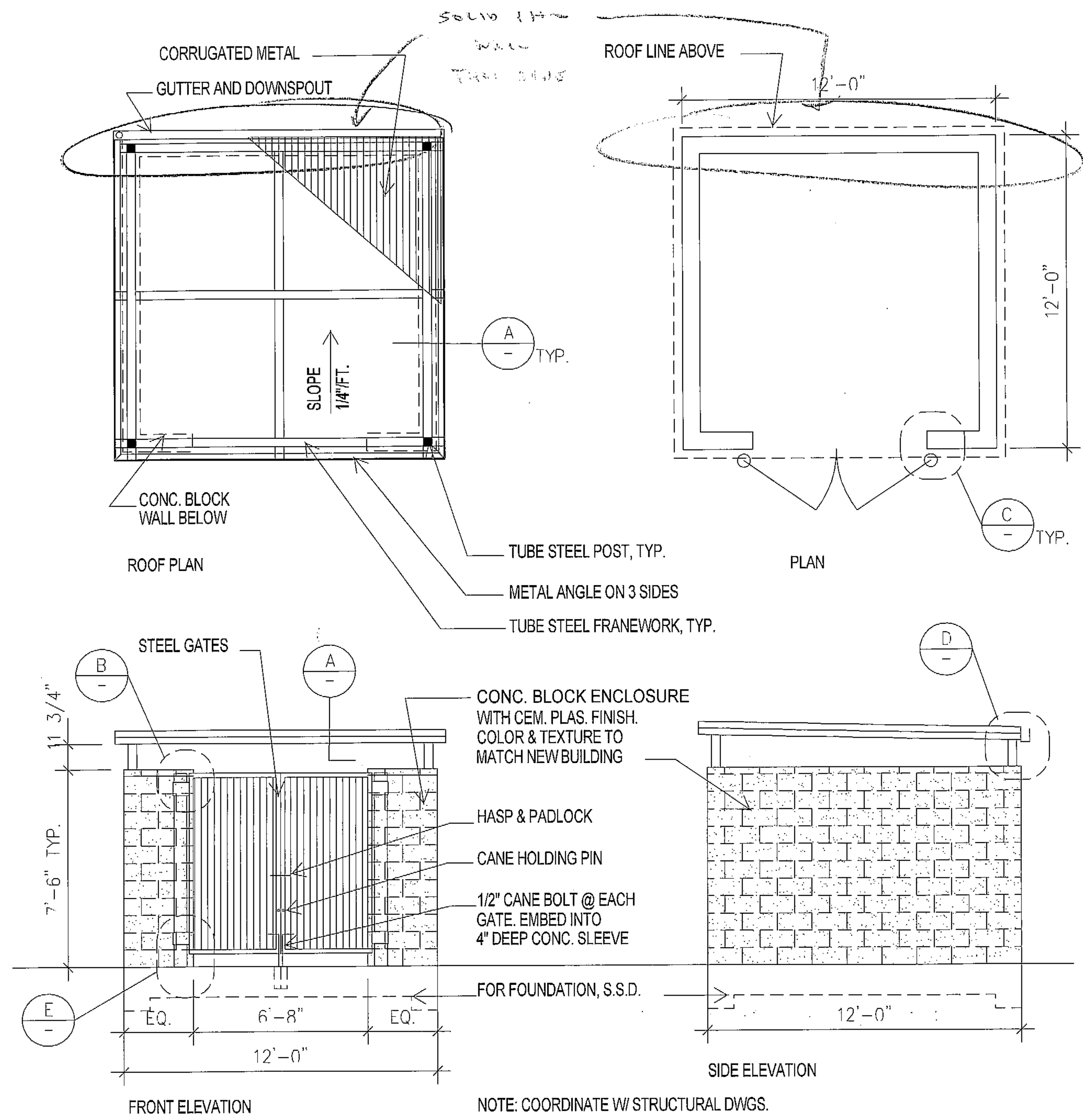
(10) SIDE WALK CALLOUT
1/4" = 1'-0"



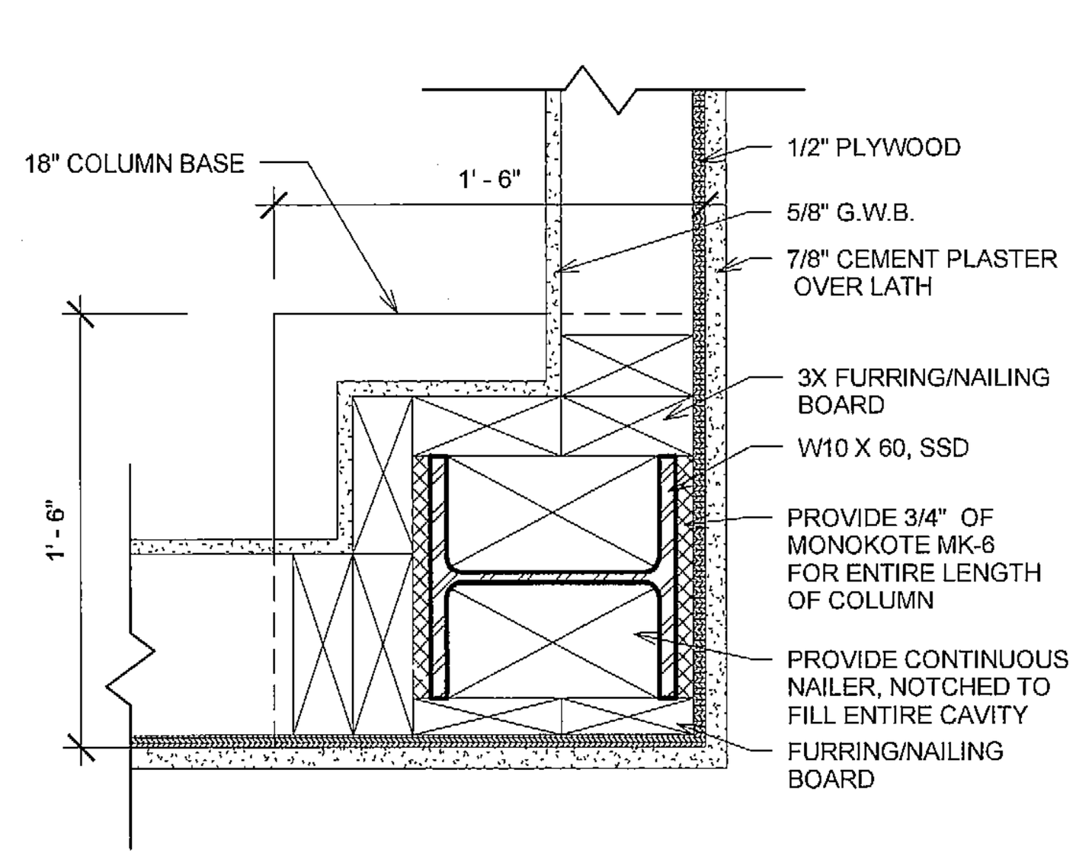
(6) PARKING SPACE
1/4" = 1'-0"



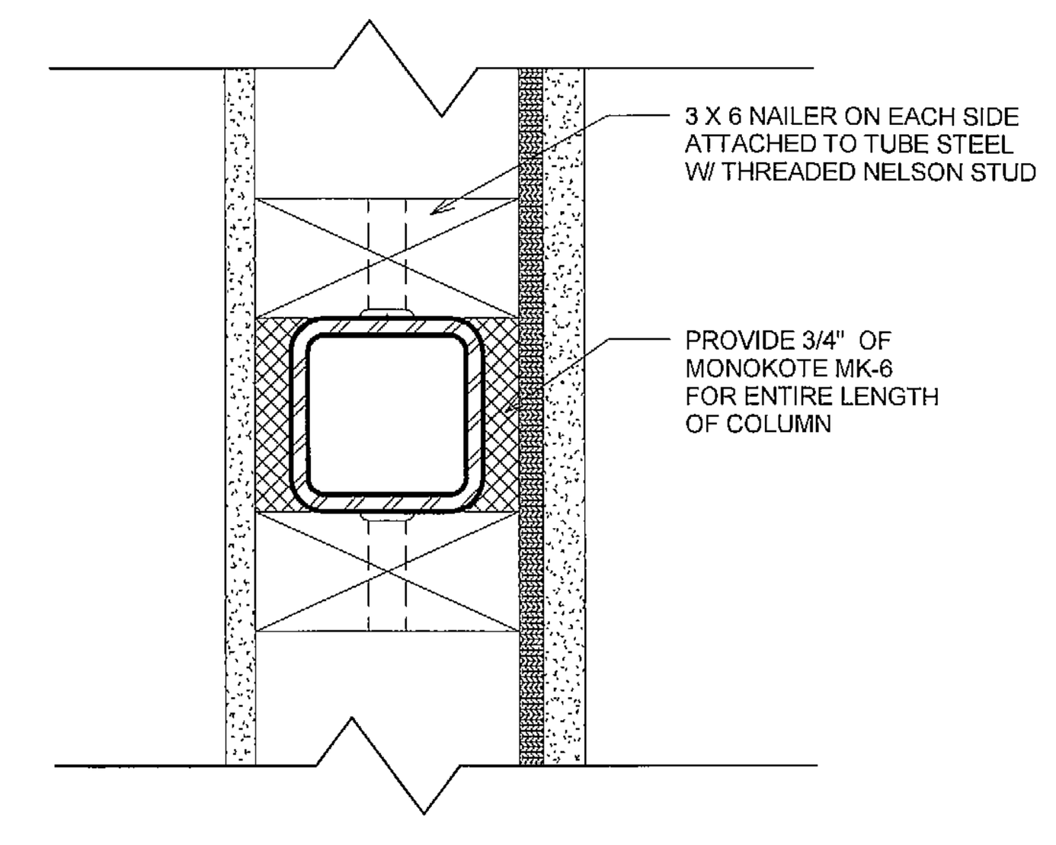
(5) PLAN DETAIL OF PAVING
3/8" = 1'-0"



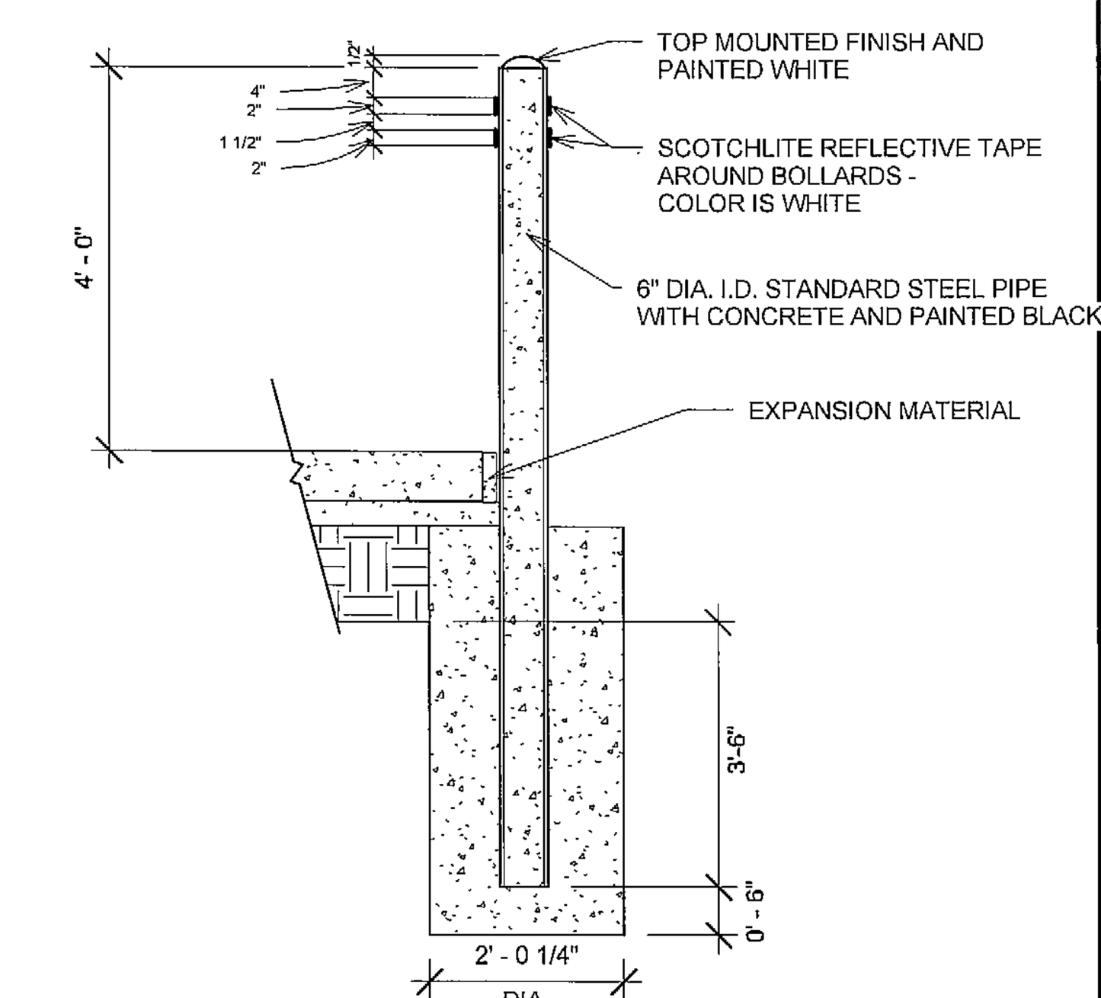
(2) DUMPSTER ENCLOSURE
1/4" = 1'-0"



(9) COLUMN FIRE PROOFING DETAIL 2 TYP.
1 1/2" = 1'-0"

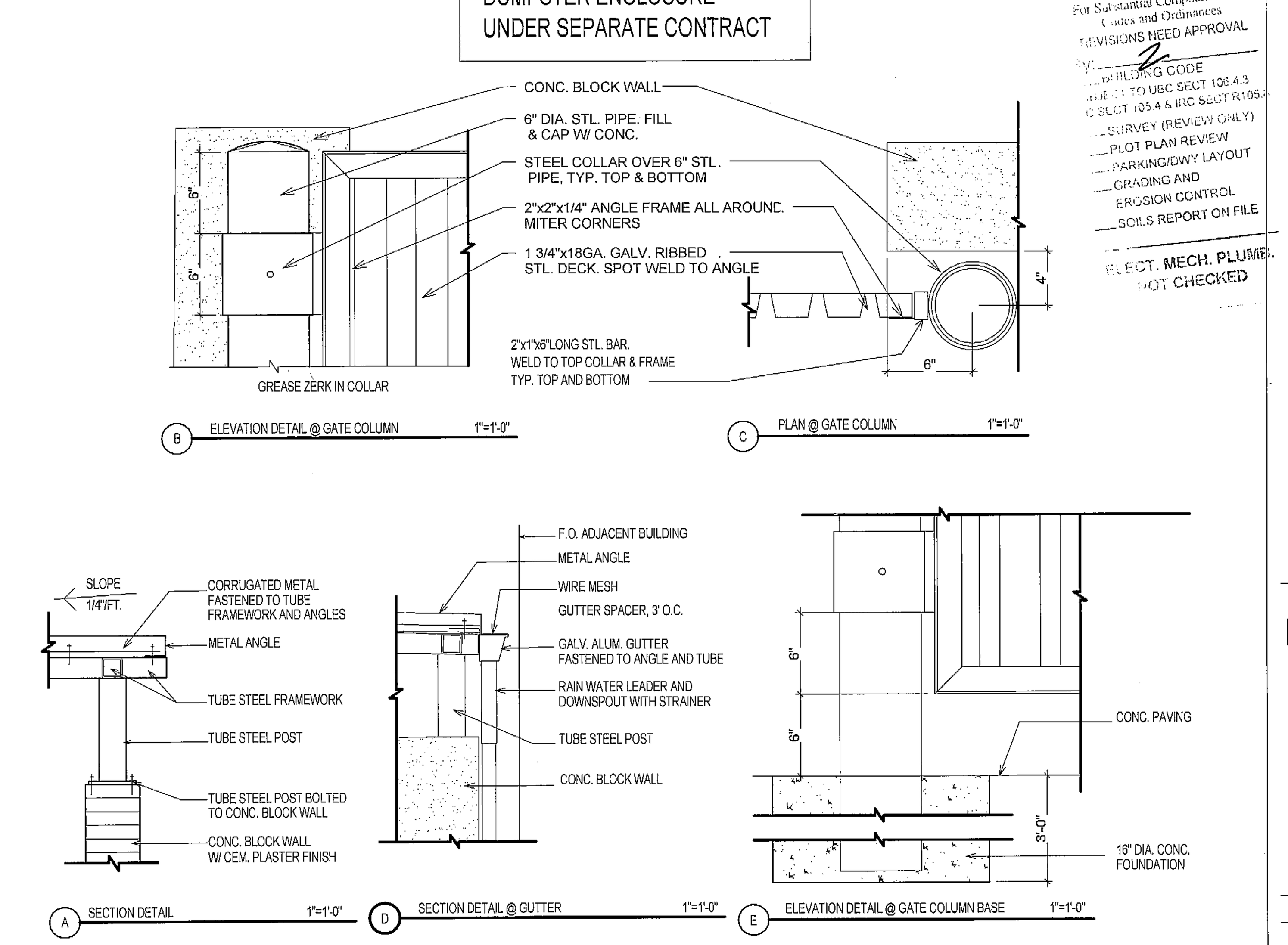


(8) FIRE PROTECTION FOR STEEL COL. TYP.
3" = 1'-0"

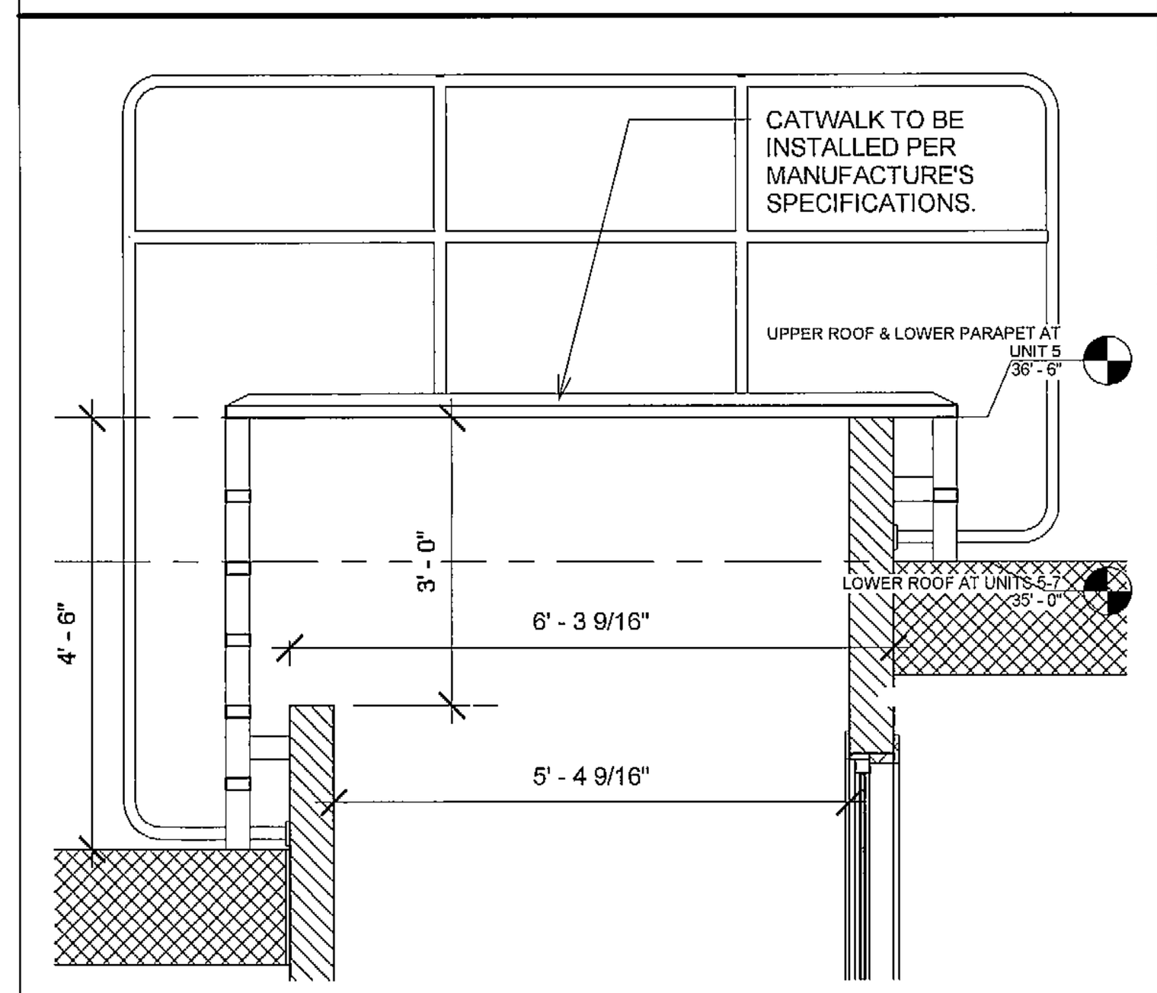


(4) BOLLARD DETAIL
1/2" = 1'-0"

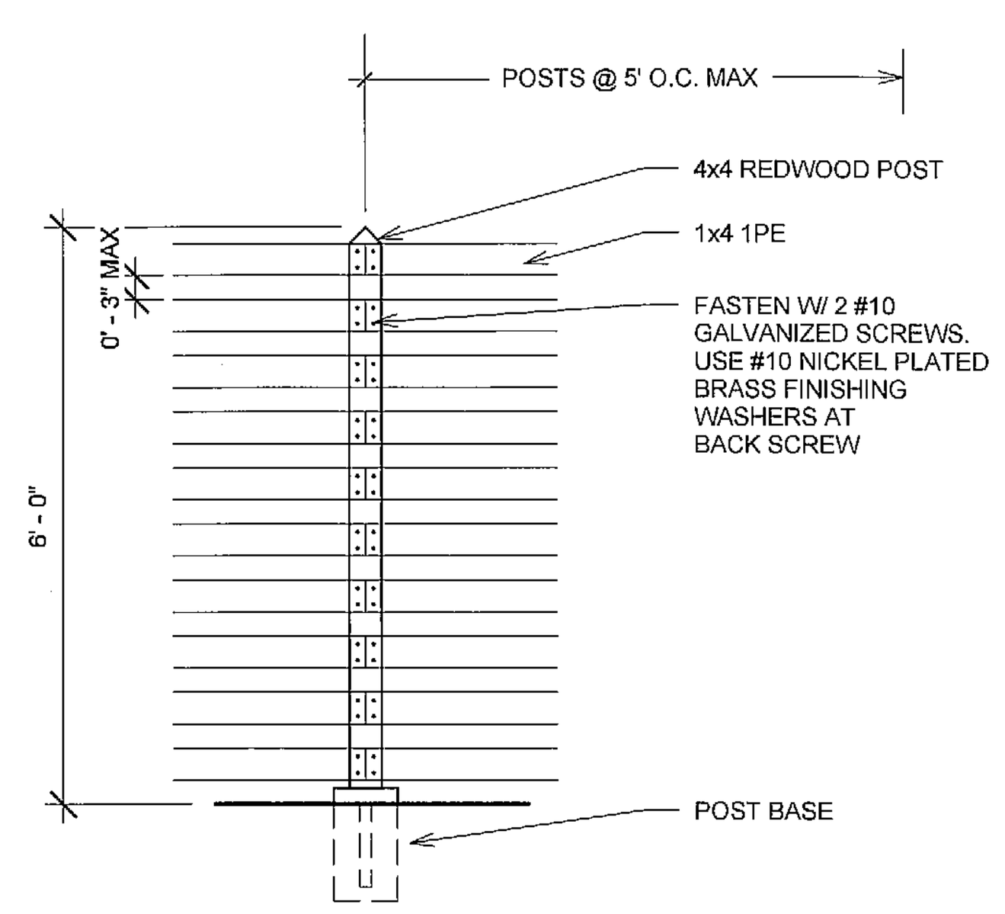
DUMPSTER ENCLOSURE
UNDER SEPARATE CONTRACT



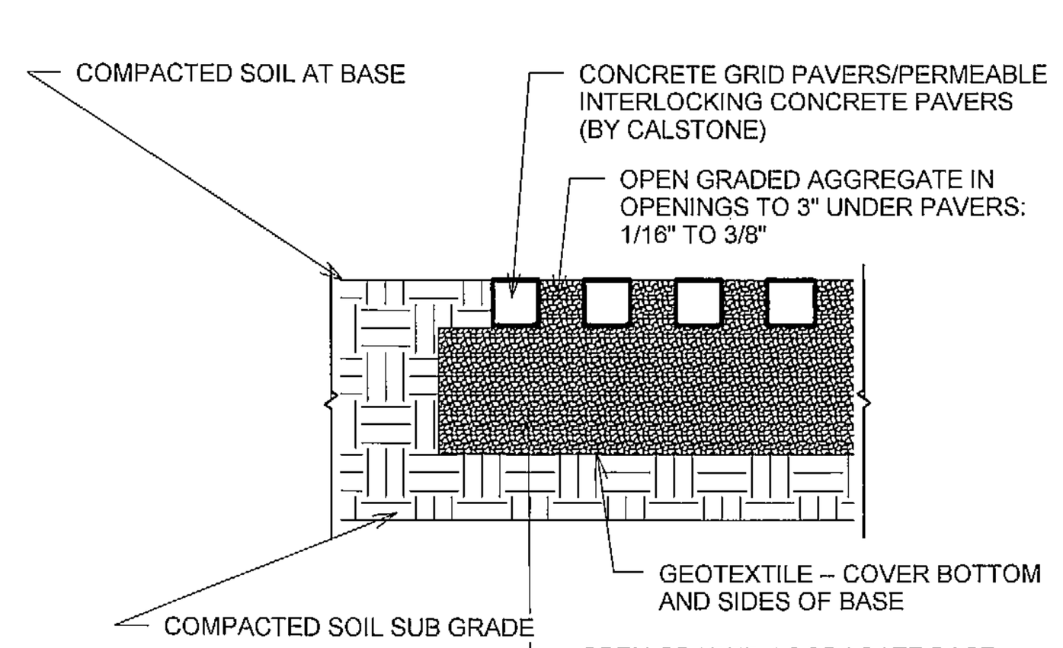
(1) DUMPSTER DETAILS
1 1/2" = 1'-0"



(11) Detail 5
1/2" = 1'-0"



(7) WOOD FENCE DETAIL
1/2" = 1'-0"



NOTES:
1. DEPTH OF OPEN GRADED BASE WILL IMPACT RUNOFF STORAGE CAPACITY
2. BEARING CAPACITY & PERMEABILITY OF SOIL SUB GRADE SHOULD BE EVALUATED FOR SUITABILITY -- DRAINAGE MAY BE REQUIRED
3. EDGE RESTRAINTS ARE REQUIRED FOR PERMEABLE INTERLOCKING CONCRETE PAVEMENTS

(3) CONCRETE GRID PAVERS - SECTION
3/8" = 1'-0"

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REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (△)	1ST PLAN CHECK REVIEW	01/14/14
1 (○)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School
Oakland, CA 94619

SHEET DESCRIPTION:

EXTERIOR DETAILS

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

A10.00

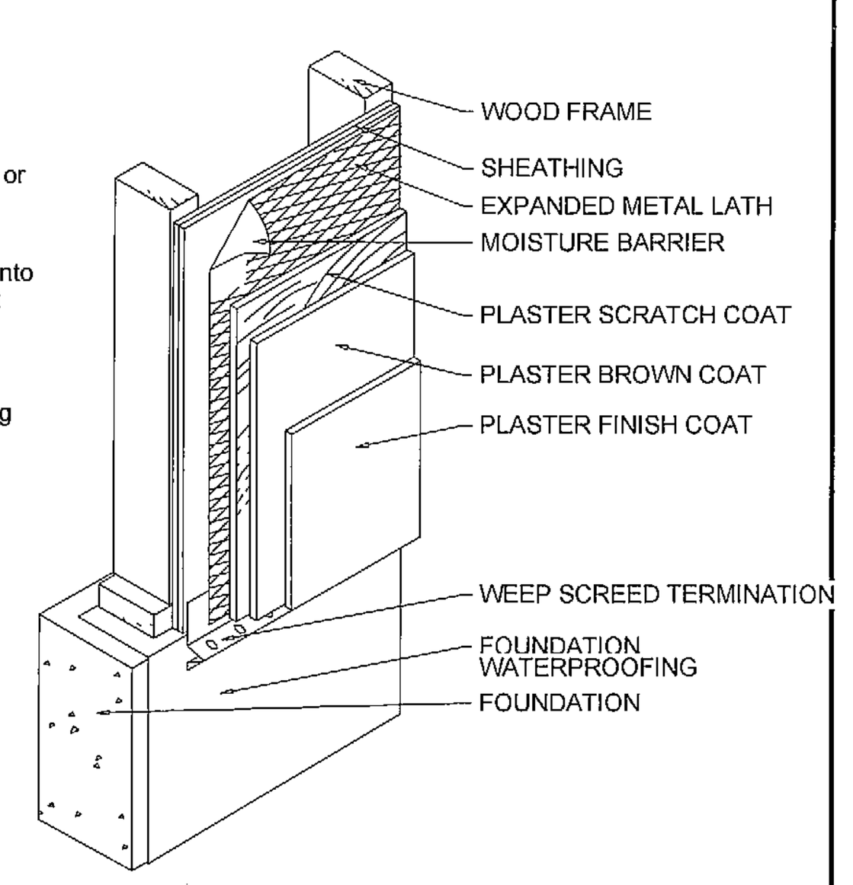
12/8/2013 6:26:36 PM

NOTES:

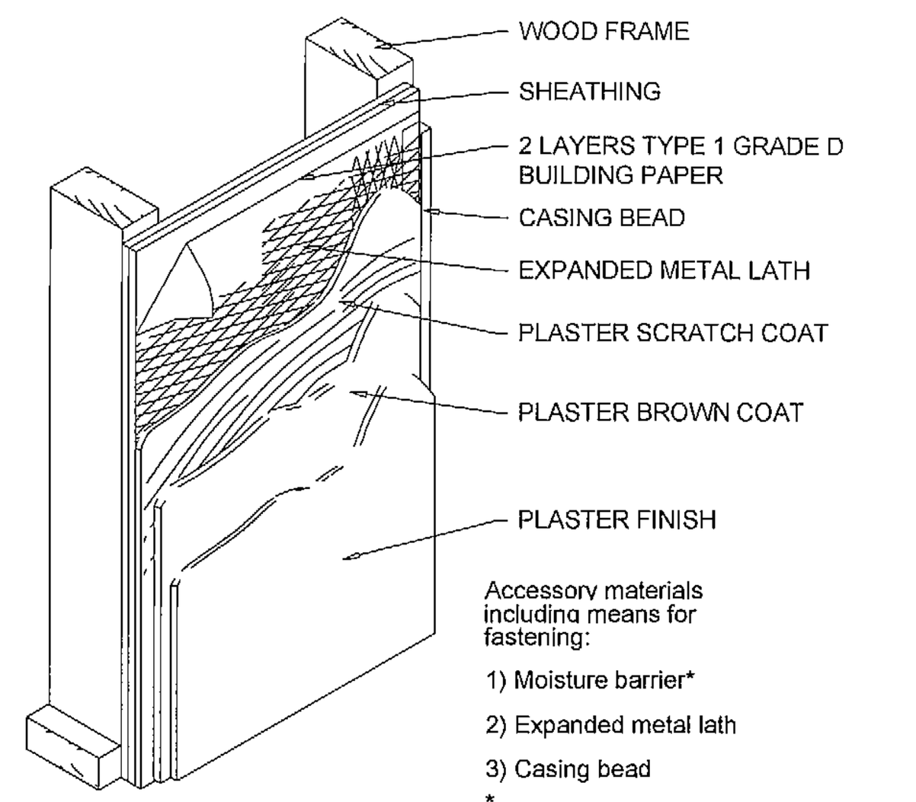
1) Install stucco weep screed to terminate minimum 1" below bottom of wood plate and a minimum of 8" above finished grade or as required by code.

2) Lap moisture barrier into weep screed to direct water to the exterior.

3) Provide water proofing at the foundation to protect the support structure from rising damp.



(13) PLASTER @ GRADE TERMINATION
3" = 1'-0"



Accessory materials including means for fastening:

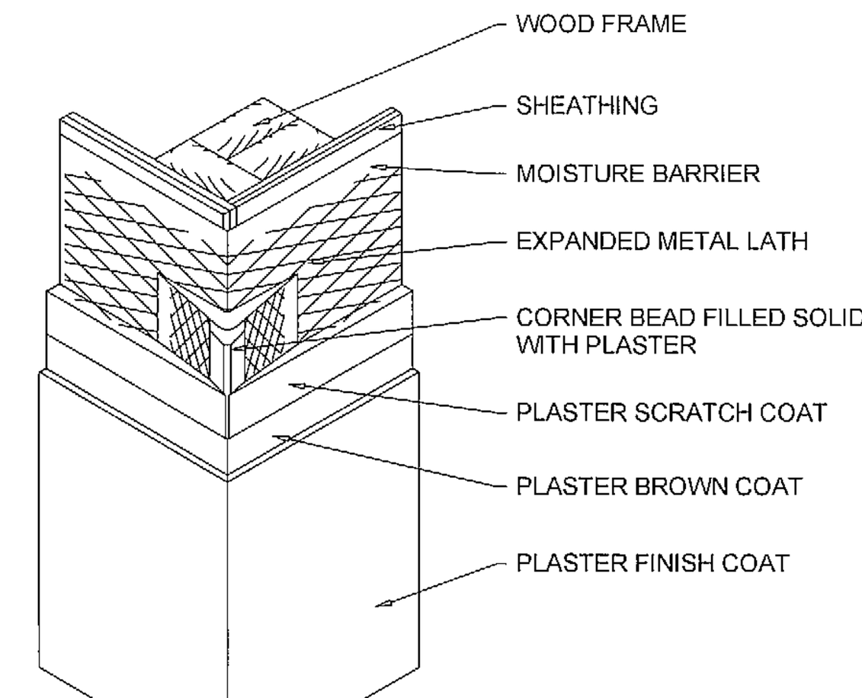
1) Moisture barrier*

2) Expanded metal lath

3) Casing bead

* Other accessories as may be required (e.g. weep screeds, etc.)

(11) PLASTER ON WOOD FRAME
3" = 1'-0"



NOTES:

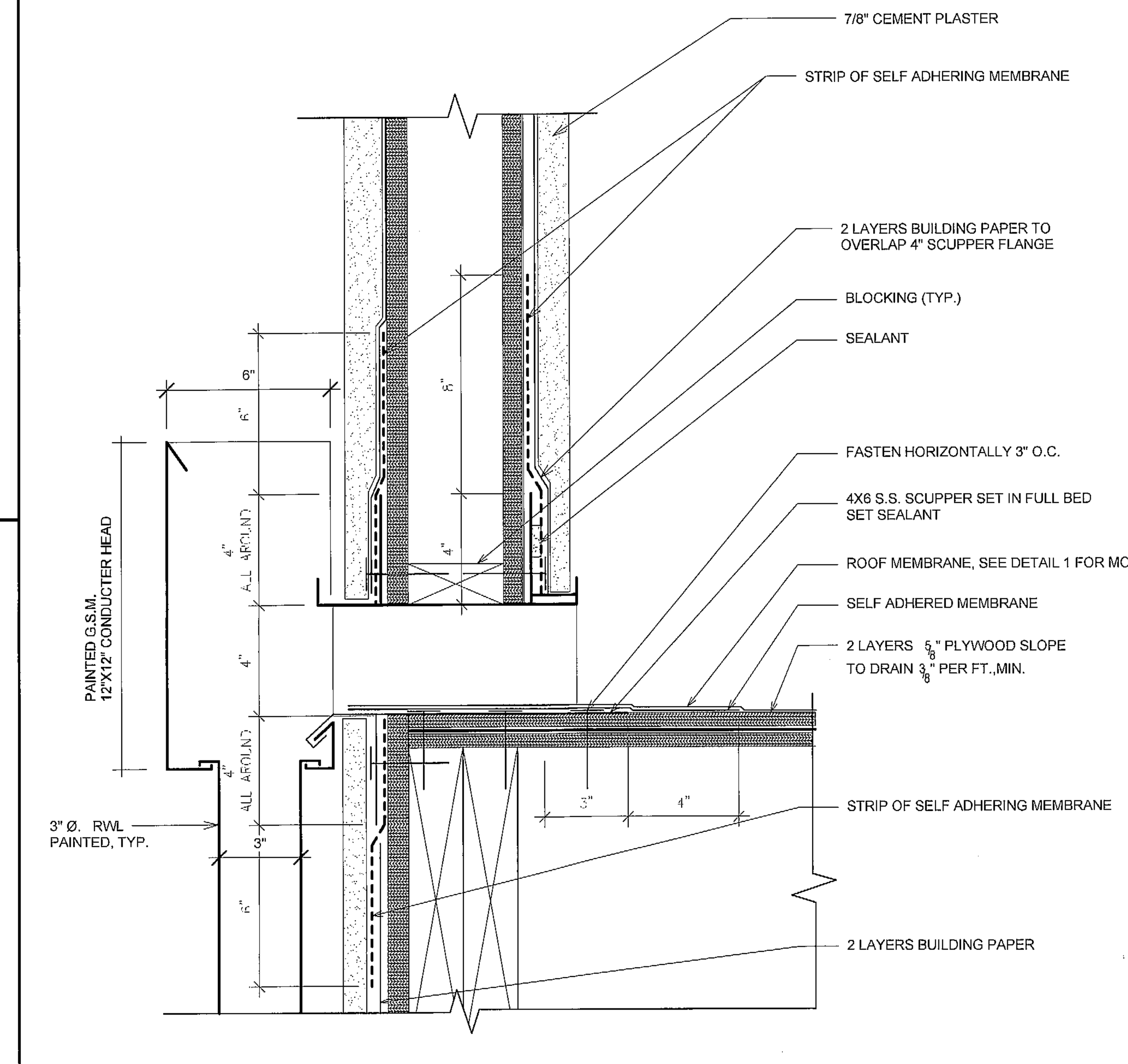
1) Install moisture barrier continuous around corner without break for minimum 12" (300mm).

2) Install expanded metal lath continuous around corner without break for minimum 24" (610mm).

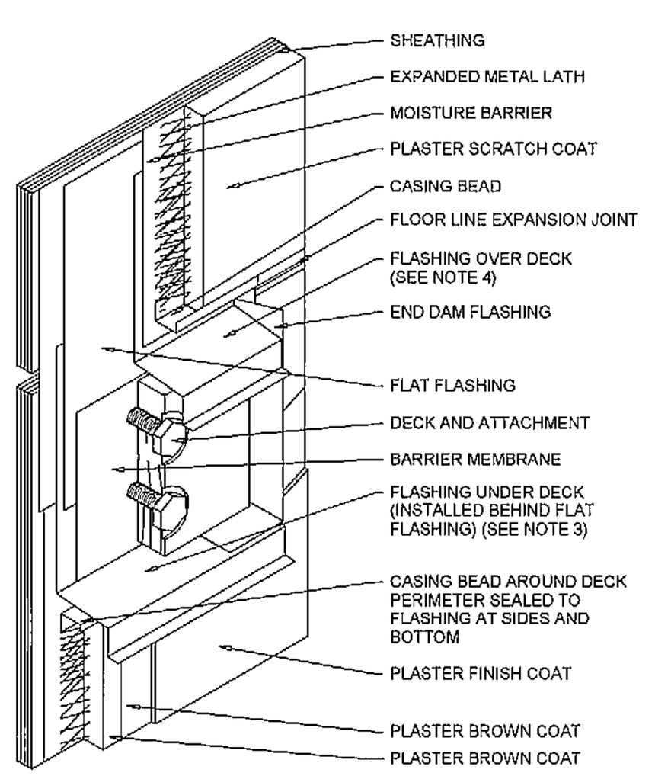
3) Attach corner bead over lath.

4) Metal accessories are susceptible to corrosion in costal environments. Metal corner beads with solid metal noses are susceptible to corrosion in exposed exterior applications.

(6) PLASTER JOINT @ OUTSIDE CORNER
3" = 1'-0"



(2) SCUPPER
3" = 1'-0"



Notes:

1) The deck attachment method is independent of the cladding. Care must be taken to prevent water penetration into the wall assembly via the attachment mechanism.

2) Provide flat metal flashing on the surface of the wall where the deck is to be attached so that the finished plaster will overlap it a minimum 4" (100mm)

3) Slide a folded flashing up under the first flat flashing and position it below the planned position of the deck.

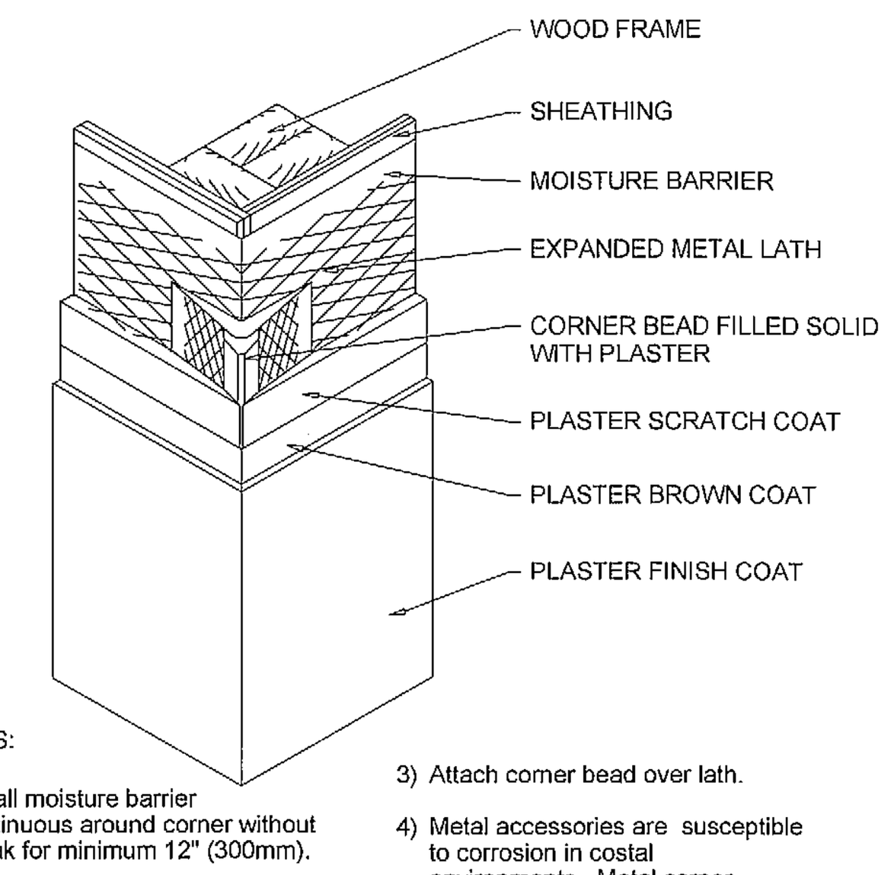
4) Provide a folded flashing over the planned deck position to direct water away from the deck connections.

5) Provide flashing end dams on each side of the second folded flashing. Set the end dams in sealant.

6) Provide barrier membrane over the flashing so it will be positioned behind the deck ledger.

7) Terminate the scratch coat a minimum of 2" (50mm) above the deck and 3/8" (10mm) from the perimeter of the flashing.

(12) PLASTER JOINT @ DECK ATTACHMENT
3" = 1'-0"



NOTES:

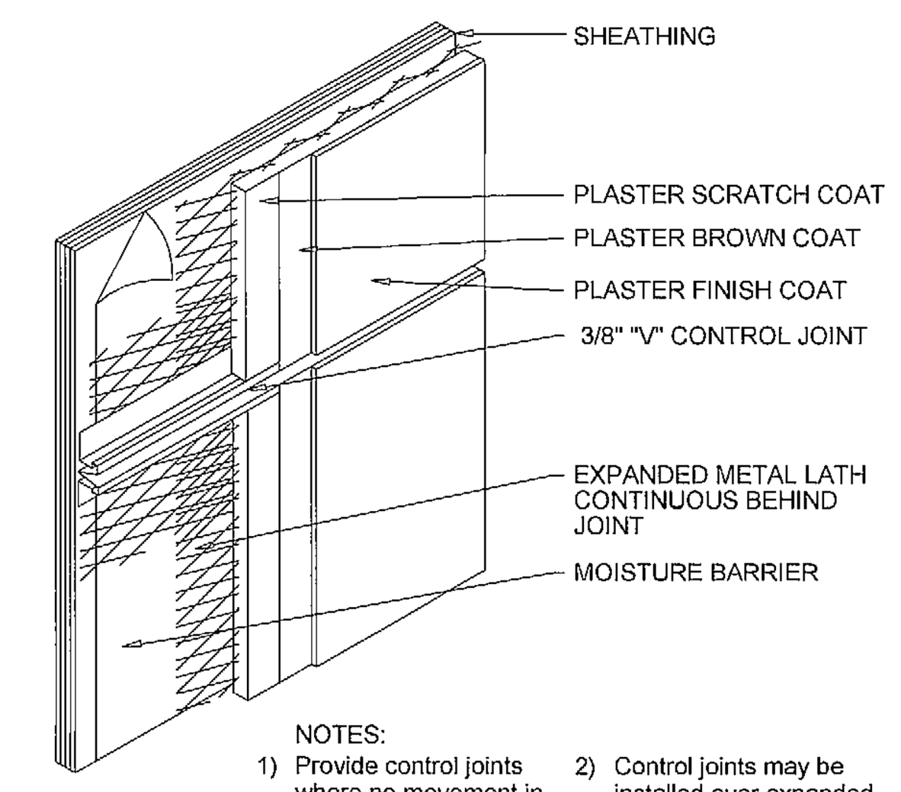
1) Install moisture barrier continuous around corner without break for minimum 12" (300mm).

2) Install expanded metal lath continuous around corner without break for minimum 24" (610mm).

3) Attach corner bead over lath.

4) Metal accessories are susceptible to corrosion in costal environments. Metal corner beads with solid metal noses are susceptible to corrosion in exposed exterior applications.

(10) PLASTER JOINT @ INSIDE CORNER
3" = 1'-0"

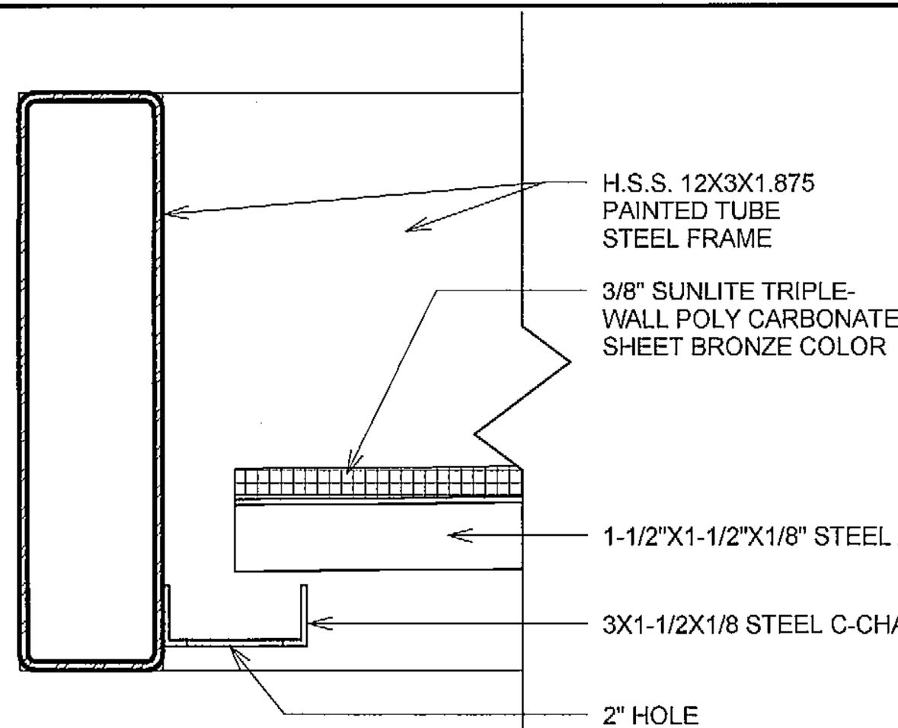


NOTES:

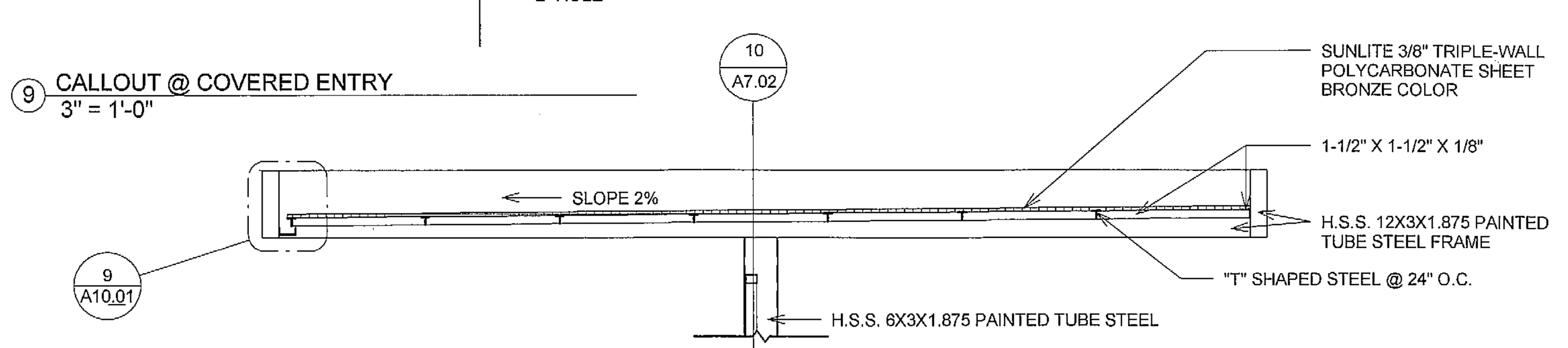
1) Provide control joints where no movement in the stucco is anticipated or where an aesthetic feature line is desired. Provide expansion joint where movement is expected.

2) Control joints may be installed over expanded metal lath.

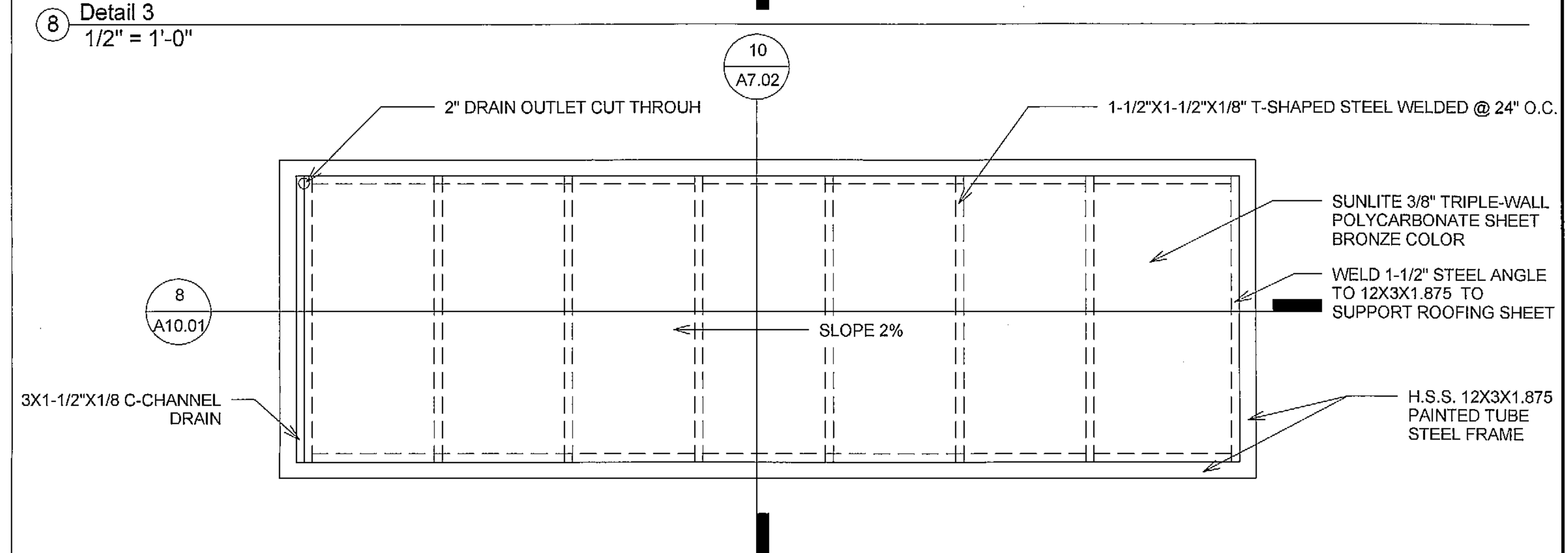
(5) CONTROL JOINT
3" = 1'-0"



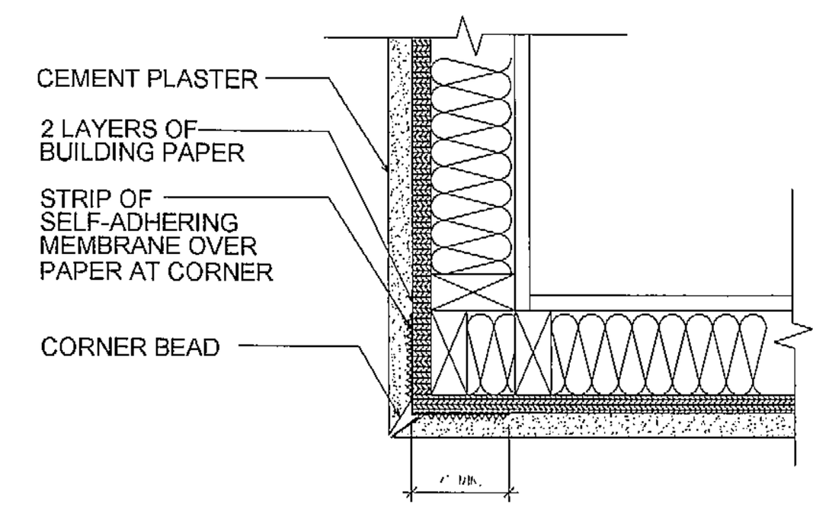
(9) CALLOUT @ COVERED ENTRY
3" = 1'-0"



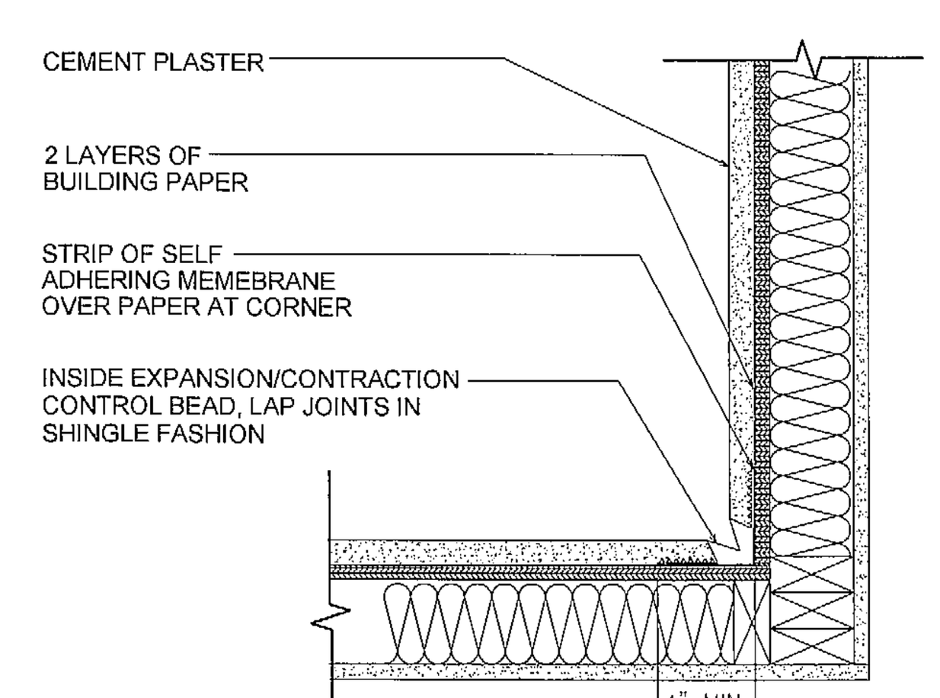
(8) Detail 3
1/2" = 1'-0"



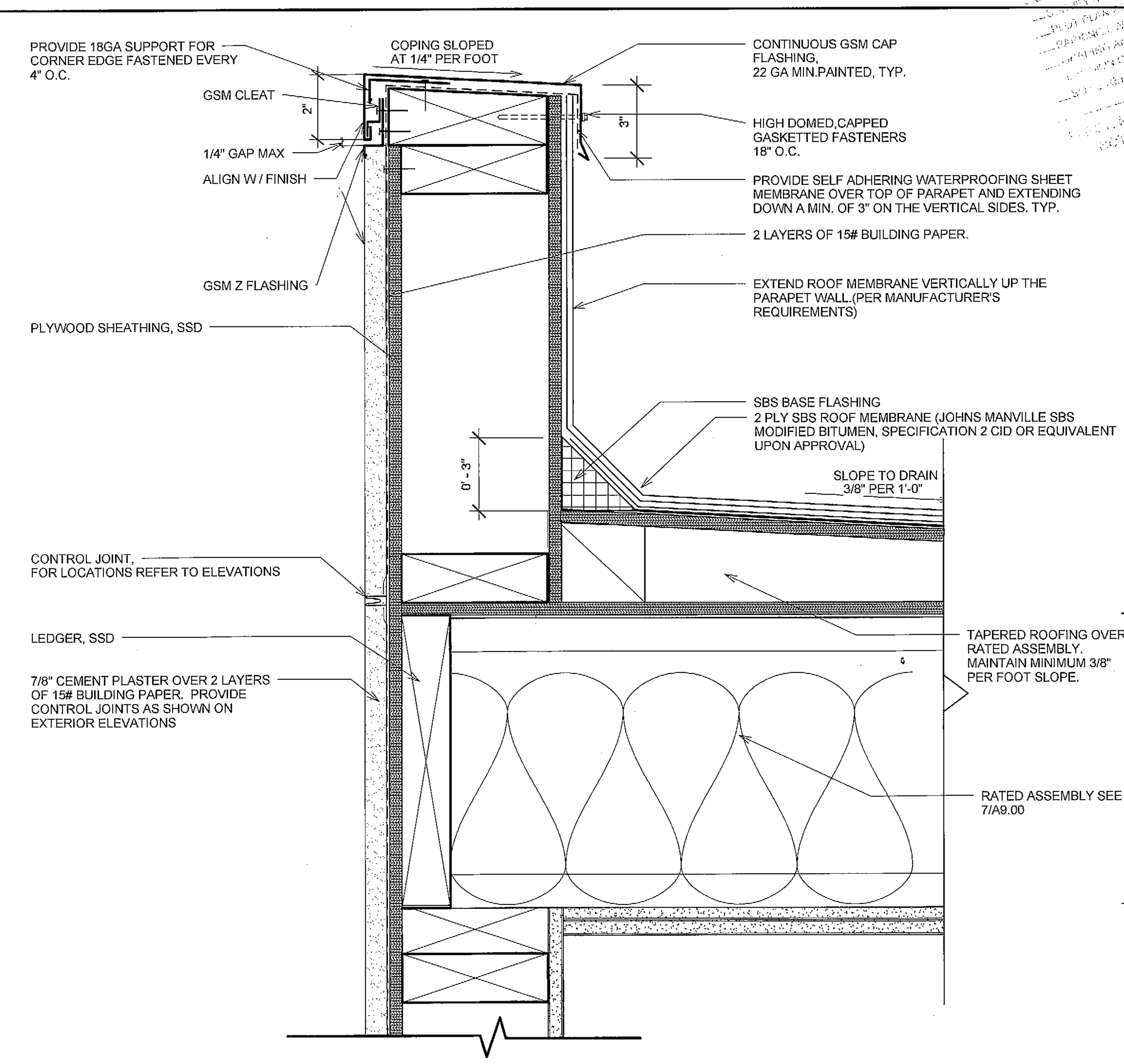
(7) COVERED ENTRY DETAIL
1/2" = 1'-0"



(4) PLAN AT OUTSIDE CORNER
1 1/2" = 1'-0"



(3) PLAN AT INSIDE CORNER
1 1/2" = 1'-0"



(1) FLAT ROOF AT PARAPET
3" = 1'-0"

ARCHITECTURE

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REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (△)	1ST PLAN CHECK REVIEW	01/14/14
1 (○)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT PHILIP BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

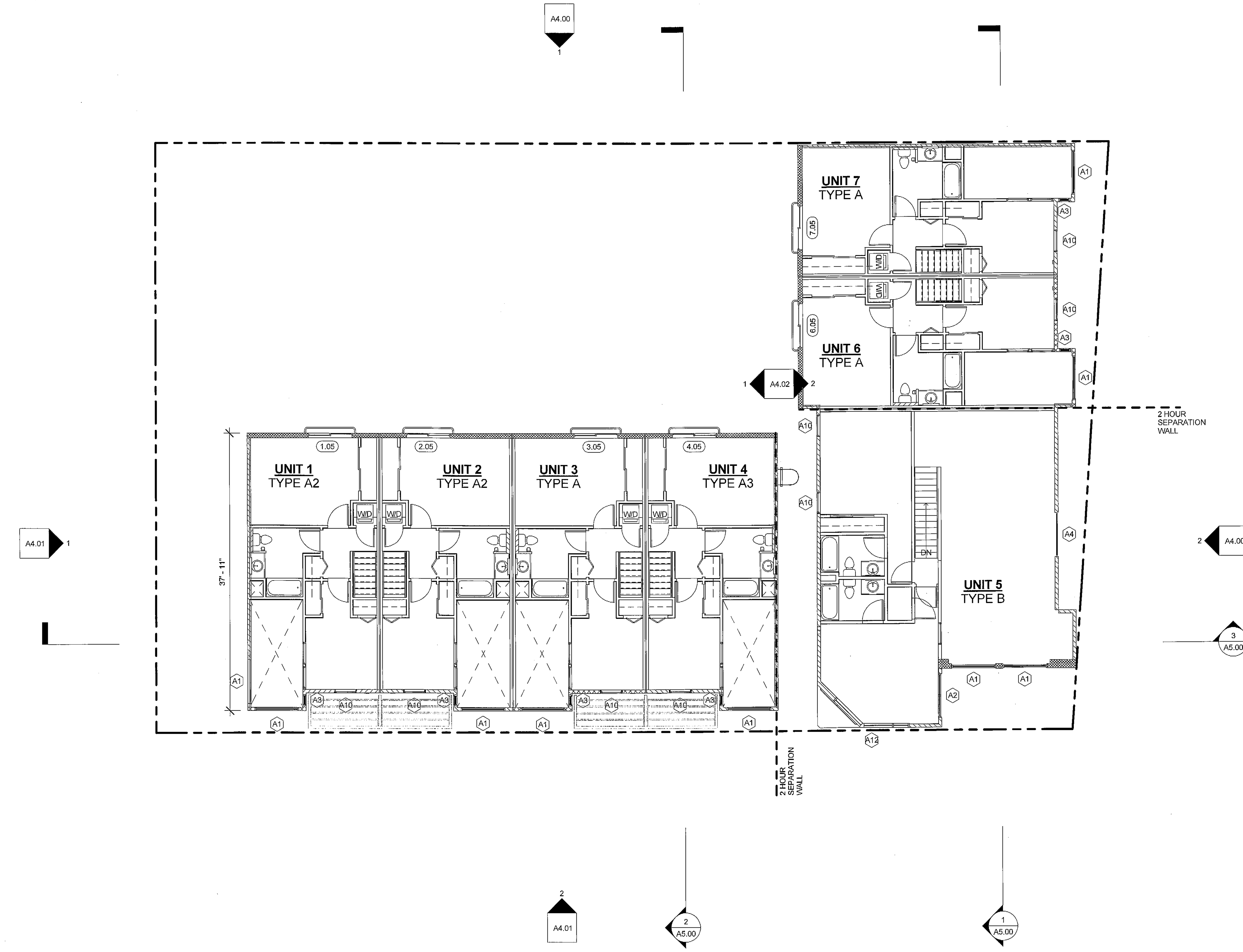
SHEET DESCRIPTION:

EXTERIOR DETAILS

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

A10.01

12/7/2013 4:01:48 PM



APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK SECTION
For Substantial Compliance With Codes and Ordinances
REVISIONS NEED APPROVAL

BUILDING CODE
SUBJECT TO UBC SECT 106.4.3
SECT 105.4 & IRC SECT R105.8
SURVEY (REVIEW ONLY)
PLOT PLAN REVIEW
PARKING/DWY LAYOUT
GRADING AND EROSION CONTROL
SOILS REPORT ON FILE

ELECT. MECH. PLUMB.
NOT CHECKED

(1) 3RD FLOOR AT UNITS 1-4
1/8" = 1'-0"

BUILDING PLAN LEGEND

- PLANTING AREA
- 0'-0" FINISH FLOOR ELEVATION 0'-0" SET AT 160'-0" PER SURVEY
- 2x4 STUD WALL - SEE SHEET A9.0
- 2x6 STUD WALL - SEE SHEET A9.0
- 2x8 STUD WALL - SEE SHEET A9.0
- CONCRETE

BUILDING PLAN NOTES

1. REFER TO SHEET A9.00 FOR ASSEMBLY NOTES.
2. REFER TO SHEETS A7.00 FOR DOOR SCHEDULES AND NOTES
3. REFER TO SHEETS A7.01 FOR WINDOW SCHEDULE AND NOTES
4. REFER TO SHEETS OF A10.00 SERIES FOR WATERPROOFING DETAILS
5. REFER TO SHEET A0.05 FOR ACCESSIBILITY DETAILS AND REQUIREMENTS
6. REFER TO SHEET A9.00 FOR WALL TYPE ASSEMBLIES.
7. REFER TO A2 SERIES FOR UNIT DIMENSIONS, DOOR AND WINDOW TAGS AND PARTITION INFORMATION
8. ALL DIMENSIONS TO FACE OF STUD, U.N.O.
9.
10.

ARCHITECTURE
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REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (revision)	1ST PLAN CHECK REVIEW	01/14/14
1 (issue)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School
Oakland, CA 94619

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

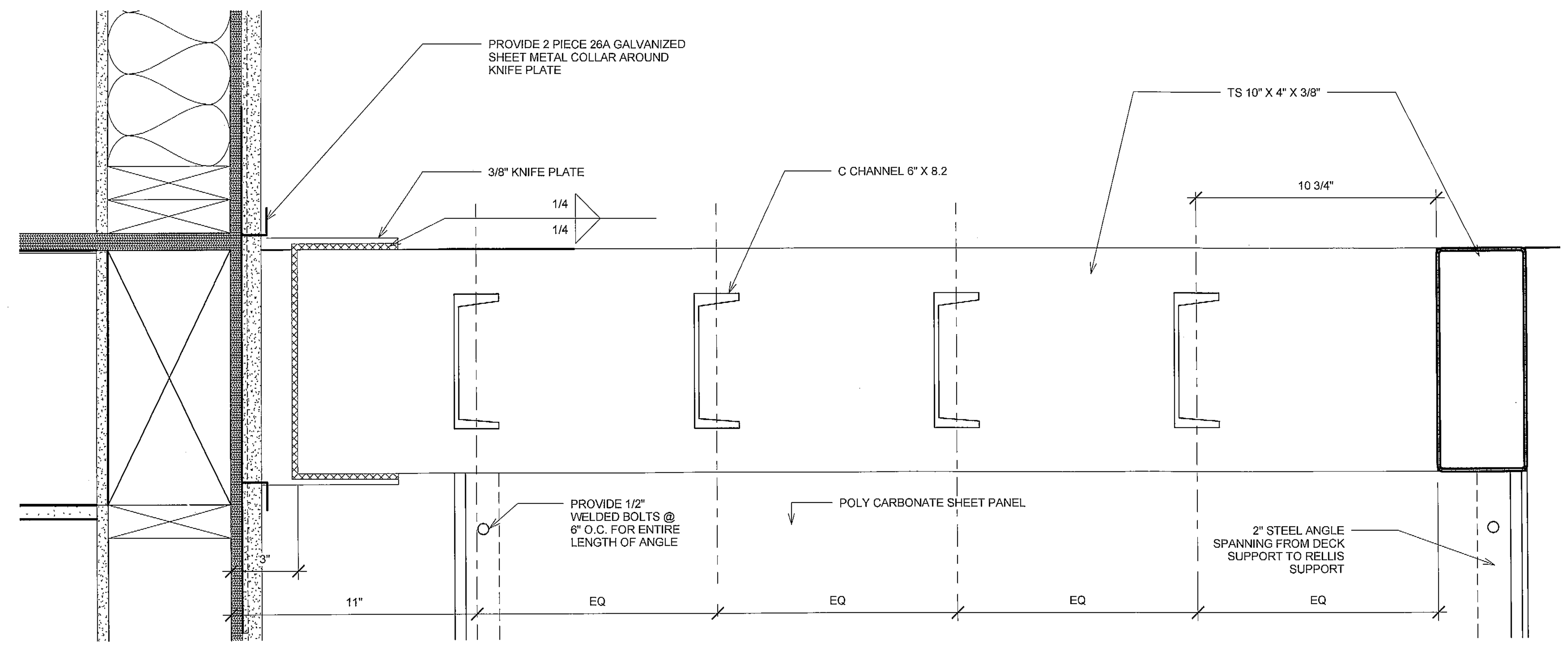
SHEET DESCRIPTION:

THIRD FLOOR PLAN

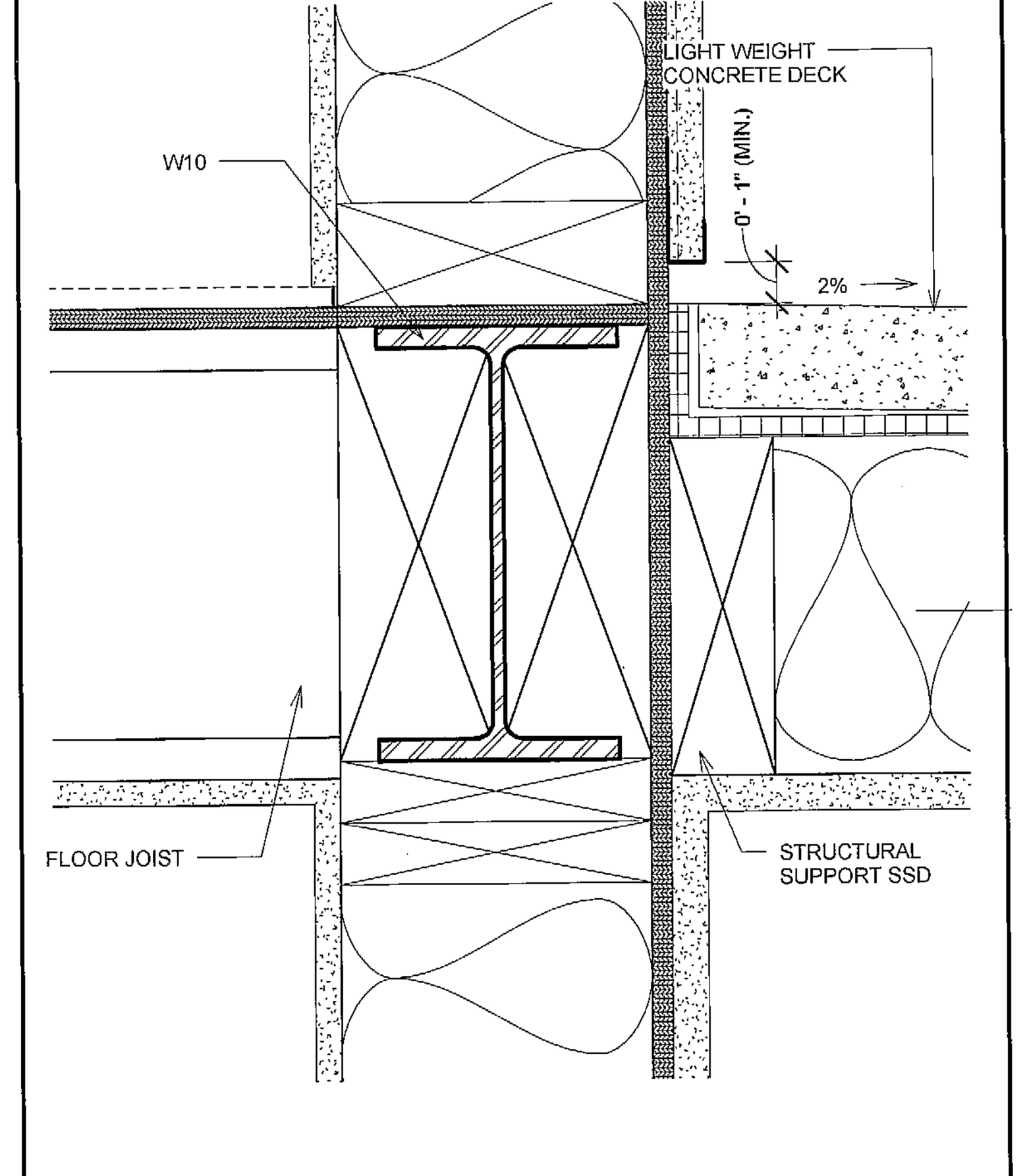
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/8" = 1'-0"

A1.03

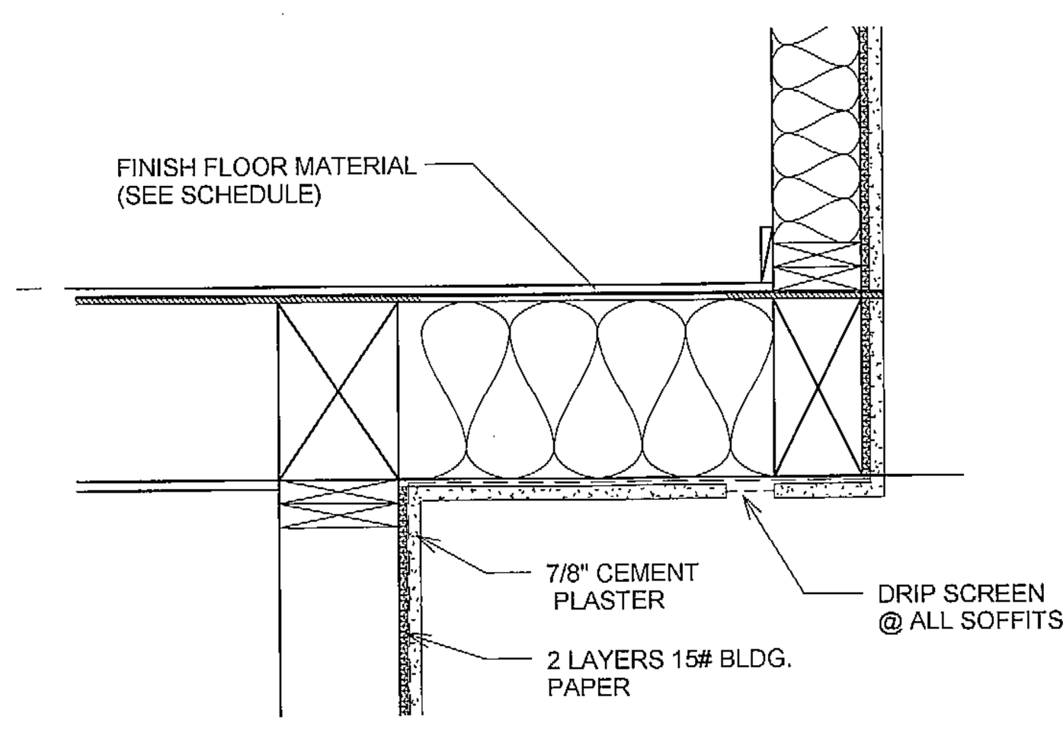
12/8/2013 6:26:13 PM



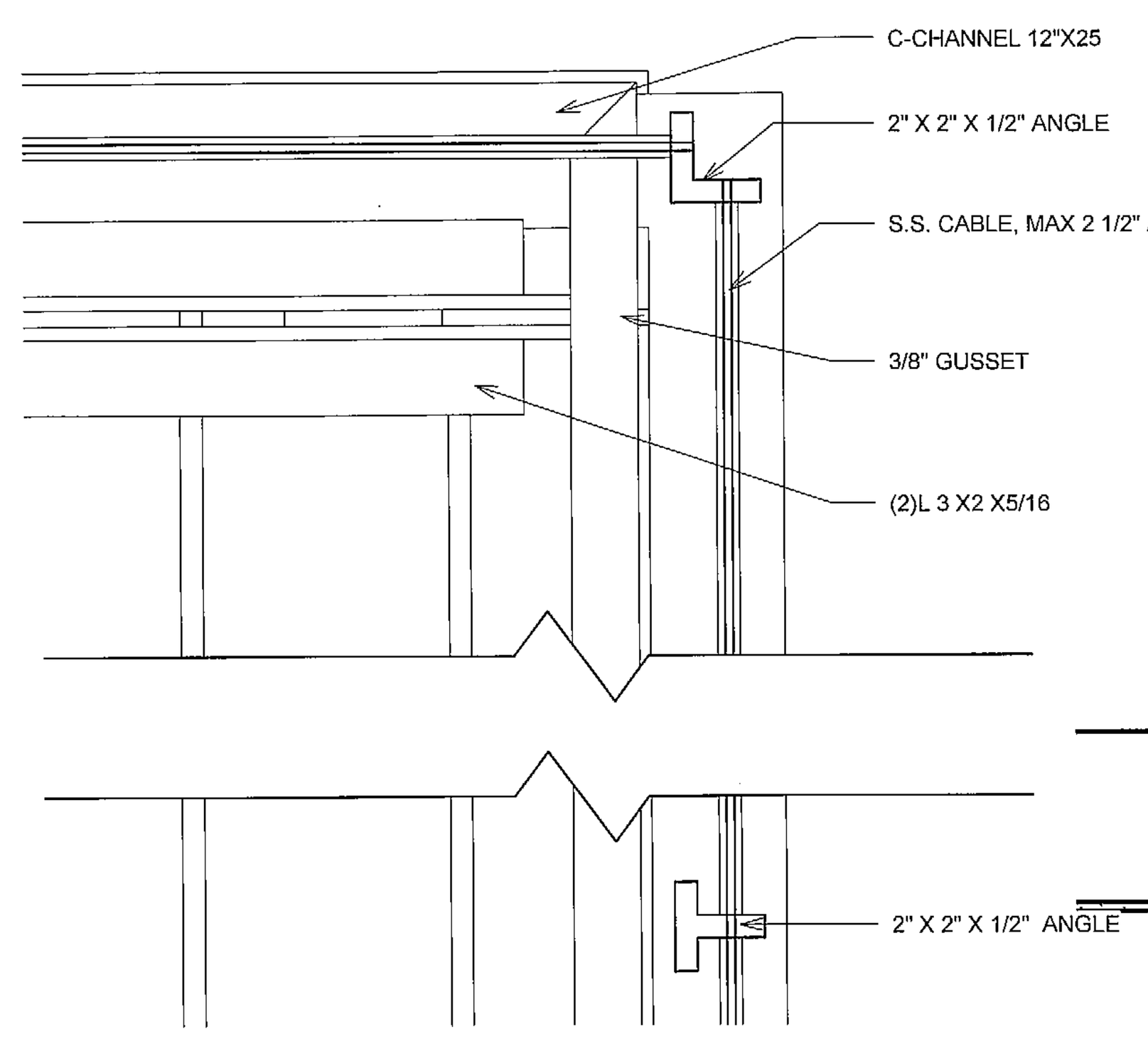
(12) TRELLIS DETAIL SECTION
3" = 1'-0"



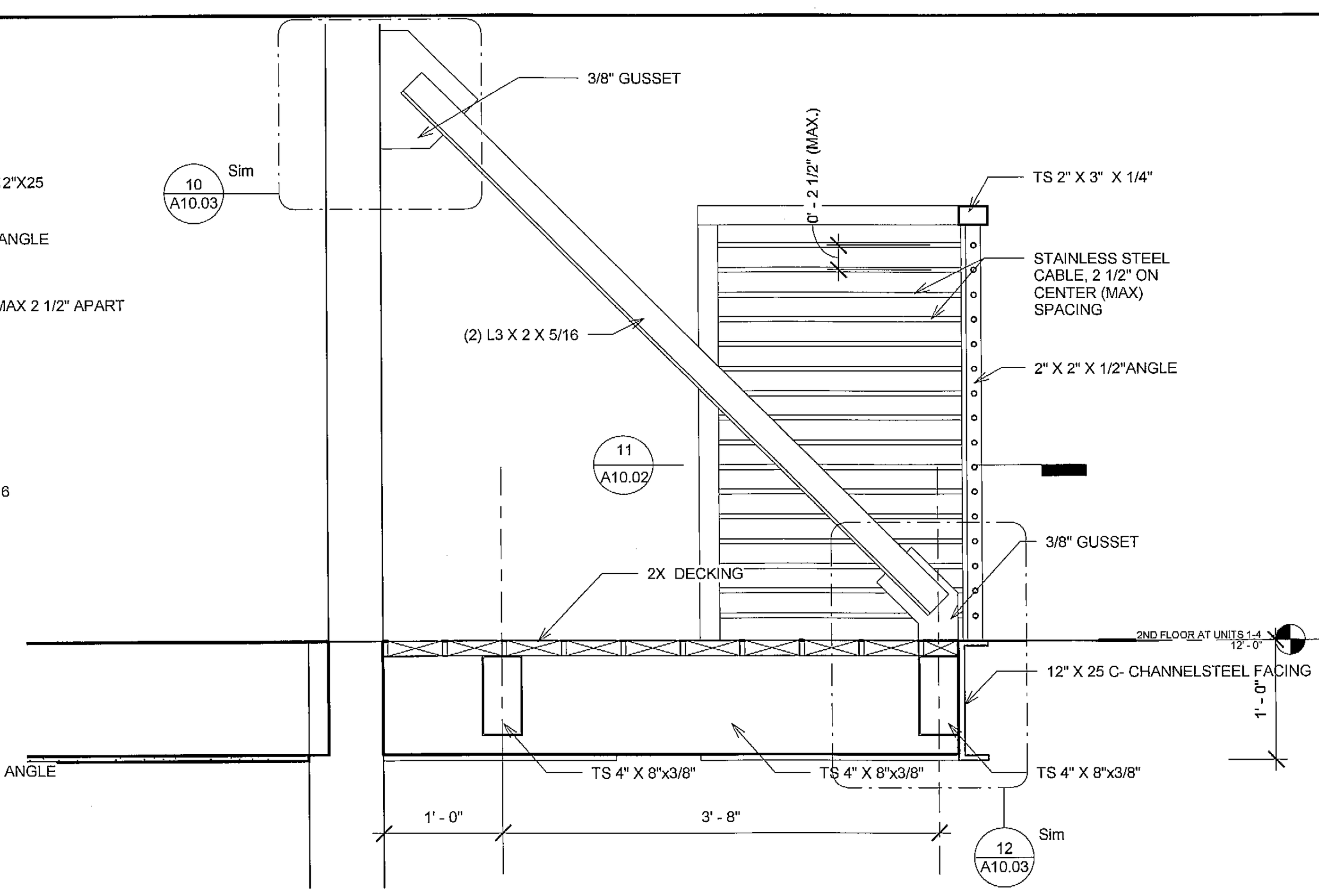
(7) DECK DETAIL
3" = 1'-0"



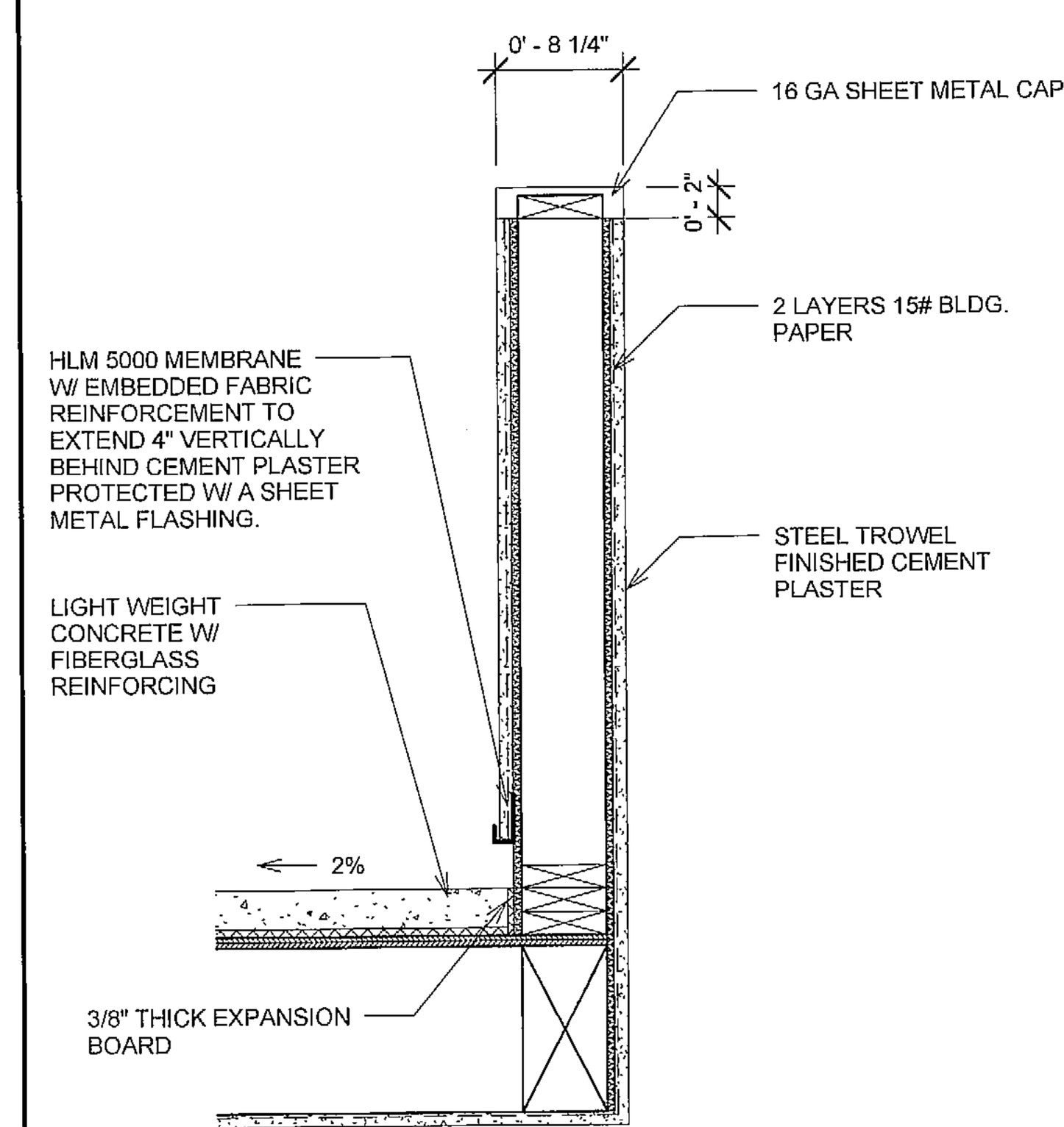
(3) BAY WINDOW SOFFIT
1" = 1'-0"



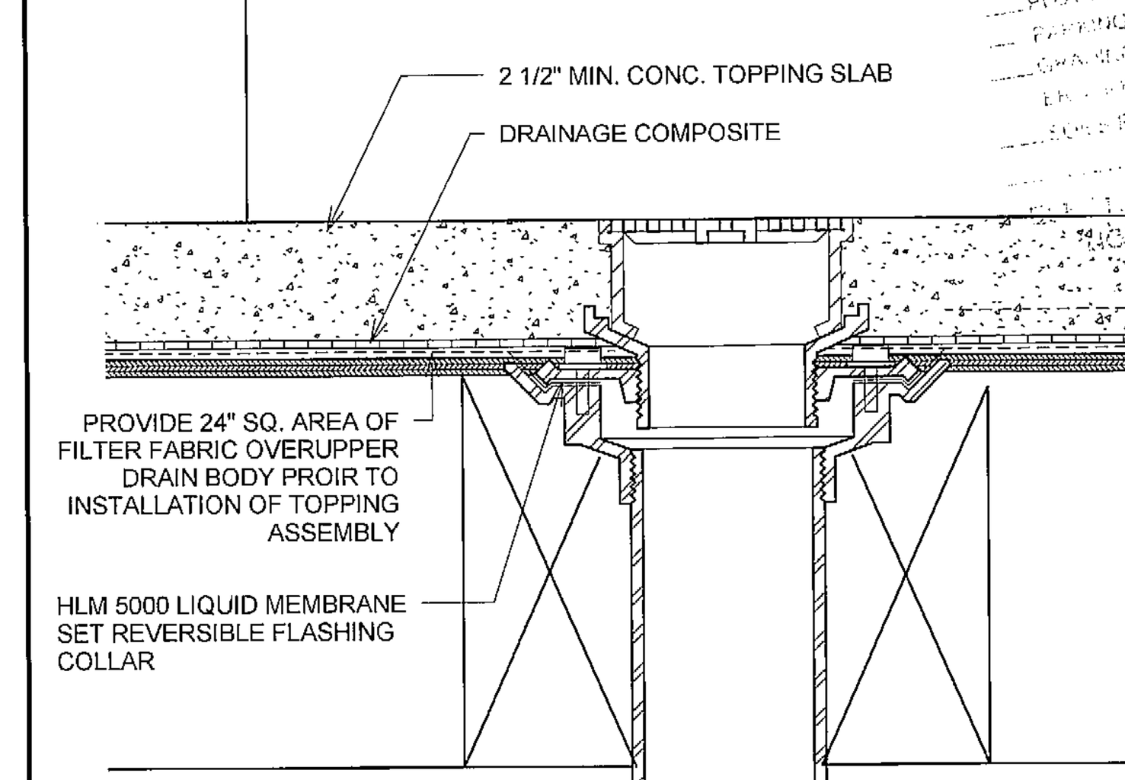
(11) DECK PLAN DETAIL
3" = 1'-0"



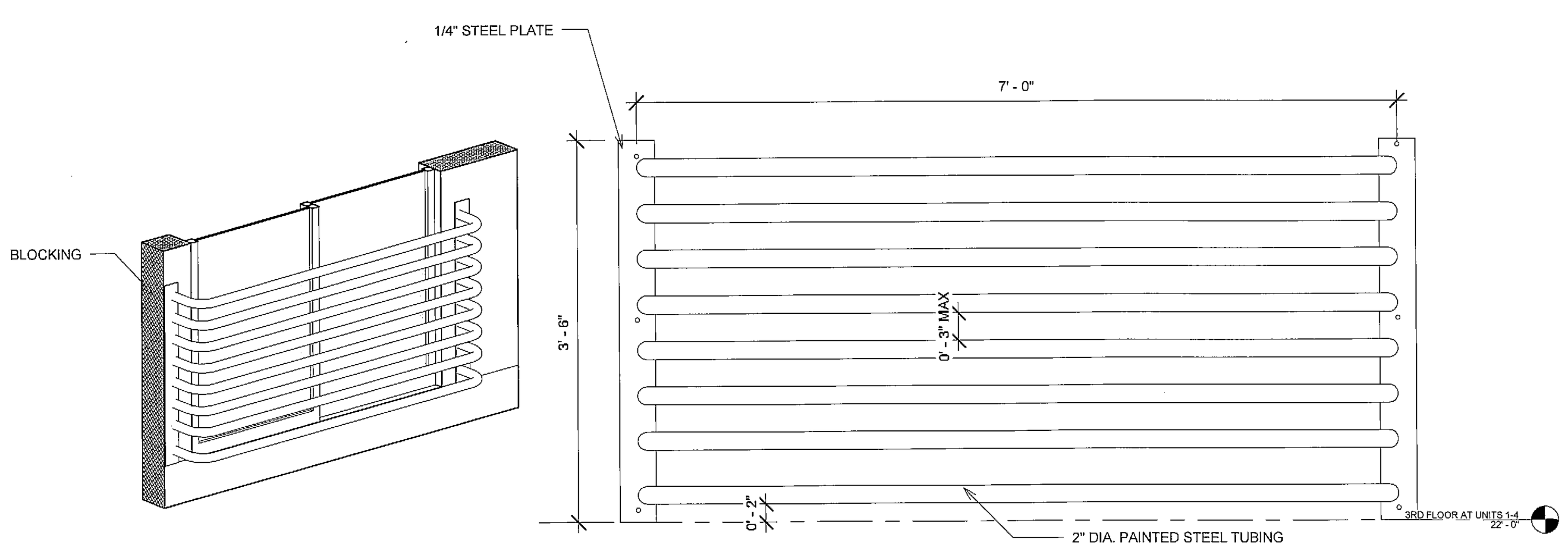
(10) RAILING DETAIL SECTION
1" = 1'-0"



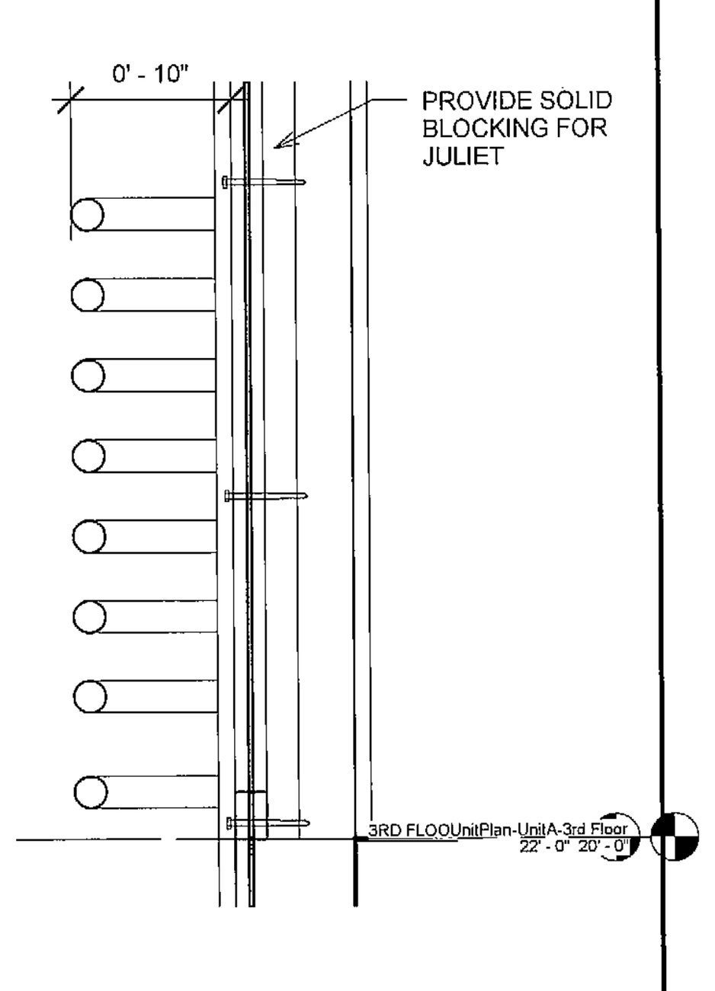
(6) DECK PARAPET - UNIT 5
1" = 1'-0"



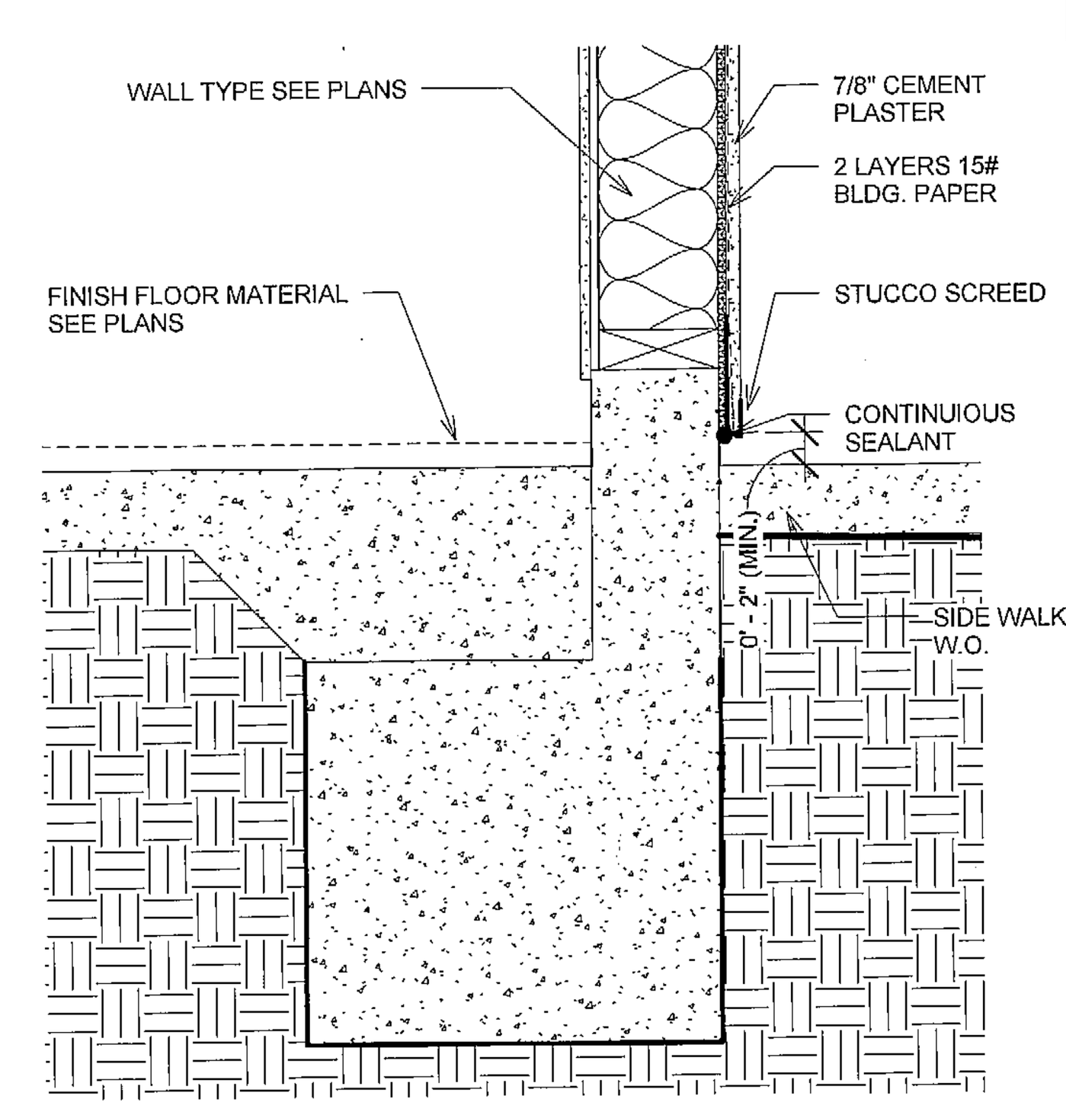
(2) DRAIN DETAIL
3" = 1'-0"



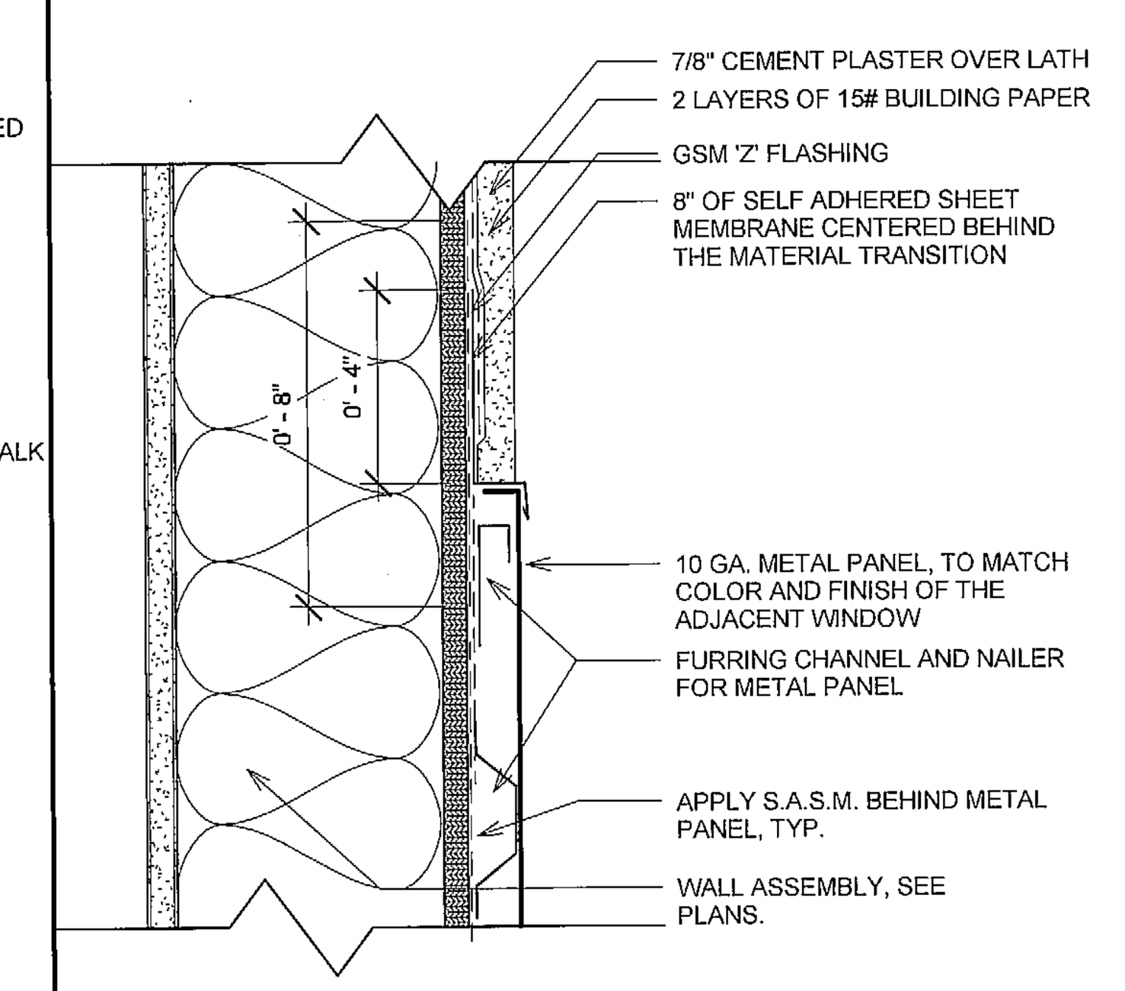
(9) JULIET RAILING FRONTVIEW
1" = 1'-0"



(8) JULIET RAILING
1" = 1'-0"



(4) WALL DETAIL AT
1" = 1'-0"



(1) EXTERIOR DETAIL AT BAY WINDOW
3" = 1'-0"

ARCHITECTURE
PHILIP BANTA & ASSOCIATES
6050 HOLLIS STREET
EMERYVILLE, CALIFORNIA 94608
TEL | 510.654.3255
FAX | 510.654.3259
www.pbantadesign.com

REVISIONS: △ ISSUES: ○

No.	Description	Date
1	1ST PLAN CHECK REVIEW	01/14/14
1	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

SHEET DESCRIPTION:

EXTERIOR DETAILS

APPLICANT COPY

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

A10.02

12/8/2013 6:26:37 PM

CITY OF OAKLAND

[illegible] FRANK H. OGAWA PLAZA • SUITE [illegible] • OAKLAND, CALIFORNIA [illegible]

Community and Economic Development Agency
Planning & Zoning Services Division

TEL [illegible]
FAX [illegible]
TDD [illegible]

May 30, 2007

RECEIVED JUN 01 2007

Philip Banta
6050 Hollis Street
Emeryville, CA 94608

RE: Case File No. CDV06-014, 3101 35th Avenue (APN 028-0951-012-01)

Dear Mr. Banta:

Your application for Regular Design Review and a Minor Conditional Use Permit to provide for seven residential units and Variances for a 0'00" front yard setback along 35th Avenue where 7'06" is required, a 5'00" street side setback along School Street where 10'00" is required, and a height variance for 32' along the interior side yard adjacent to the R-50 zone where 30' is permitted has been **APPROVED**. The application complies with the Minor Conditional Use Permit, Minor Variance and Design Review criteria contained in Sections 17.134, 17.148.050 and 17.136.070.A as set forth in the Oakland Zoning Regulations of the Oakland Planning Code. Attachment A contains the Conditions of Approval for the project. Attachment B contains the findings required for this approval and the reasons your proposal satisfies them. This approval is effective ten (10) days after the date of this letter unless appealed as explained below.

Information regarding the proposed project is summarized below:

General Plan Land Use Classification: Mixed Housing Type Residential
Zoning Designation: C-20 Shopping Center Commercial Zone
Environmental Determination: Exempt, Section 15332 of the State CEQA Guidelines: in-fill development project and 15183.
Historic Status: Not a Potentially Designated Historic Property (PDHP); Survey rating: F3
Service Delivery District: IV
City Council District: 4

An Appeal to the City Planning Commission of this Administrative Case decision may be submitted within ten (10) calendar days after the date of this letter, and by 4:00 p.m. An appeal shall be on a form provided by the Planning and Zoning Division of the Community and Economic Development Agency, and submitted to the same at 250 Frank H. Ogawa Plaza, Suite 2114, to the attention of Leigh McCullen, Planner III. The appeal shall state specifically wherein it is claimed there was error or abuse of discretion by the Zoning Administrator or wherein his/her decision is not supported by substantial evidence and must include payment of $710.31 in accordance with the City of Oakland Master Fee Schedule. The appeal itself must raise each and every issue that is contested, along with all the arguments and evidence in the record which supports the basis of the appeal; failure to do so may preclude you from raising such issues during your appeal and/or in court. If you challenge a Commission decision in court, you may be limited to issues raised at the hearing or in correspondence delivered to the Zoning Division, Community and Economic Development Agency, at, or prior to, the Appeal hearing. Any party seeking to challenge in court those decisions that are final and not administratively appealable to the City Council must do so within ninety (90) days of the date of the announcement of the Commission's final decision.

You **may** choose to record a signed Notice of Exemption (NOE) certifying that the project has been found to be exempt from CEQA review, the Environmental Declaration, and, if applicable, the De Minimis Impact Findings at the Alameda County Clerk's office at 1106 Madison Street, Oakland, CA 94612, at a cost of $25.00 made payable to the Alameda County Clerk. A NOE will be provided to you upon request. Please bring the original NOE related documents and five copies to the Alameda County Clerk, and return one date stamped copy to the Zoning Division, to the attention of Leigh McCullen, Planner III. Although recordation of the Notice of Exemption (NOE) **is optional** pursuant to Section 15062(d) of the California Environmental Quality Act (CEQA) Guidelines, recordation of the NOE reduces the statute of limitations on challenges to your project, based on environmental issues, to 35 days after the NOE is recorded with the County. In the absence of a recorded NOE, the statute of limitations for challenges extends to 180 days.

If you have any questions, please contact the case planner, Leigh McCullen, Planner III at (510) 238-4977 or lmccullen@oaklandnet.com.

Sincerely,

Scott Miller (signature)

Scott Miller
Zoning Manager

Attachments:
A. Conditions of Approval
B. Findings for Approval

ATTACHMENT A

The proposal is hereby approved subject to the following Conditions of Approval:

STANDARD CONDITIONS:

1. **Approved Use.**
 a. *Ongoing.*
 The project shall be constructed and operated in accordance with the authorized use as described in this letter and the plans submitted on **April 16, 2007**, and as amended by the following conditions. Any additional uses or facilities other than those approved with this permit, as described in the project description and the approved plans, will require a separate application and approval. Any deviation from the approved drawings, conditions of approval or use shall required prior written approval from the Zoning Administrator.

2. **Effective Date, Expiration, and Extensions**
 a. *Ongoing.*
 This permit shall expire **two calendar years** from the date of this letter, the effective date of its granting, unless a building permit for the project has been issued, or actual commencement of the authorized activities in the case of a permit not involving construction or alteration, has begun under necessary permits by this date. Expiration of any valid building permit for this project may invalidate this approval. Upon written request and payment of appropriate fees submitted no later than the expiration date of this permit, the Zoning Administrator may grant an extension of this permit, and up to two subsequent extensions upon receipt of a subsequent written request and payment of appropriate fees received no later than the expiration date of the previous extension.

3. **Scope of This Approval; Changes to Approval**
 a. *Ongoing.*
 The project is approved pursuant to the Planning Code only and shall comply with all other applicable codes, requirements, regulations and guidelines, including but not limited to those imposed by the City's Building Services Division and the City's Fire Marshal. Minor changes to approved plans may be approved administratively by the Zoning Administrator. Major changes to the approved plans shall be reviewed by the Zoning Administrator to determine whether such changes require submittal and approval of a new, independent permit. The City of Oakland reserves the right at any time during construction to require certification by a licensed professional that the as-built project conforms to all applicable zoning requirements, including but not limited to approved maximum heights and minimum setbacks. Failure to construct the project in accordance with approved plans may result in remedial reconstruction.

4. **Modification of Conditions or Revocation**
 a. *Ongoing.*
 The City Planning Department reserves the right, after notice and public hearing, if required, to alter Conditions of Approval or revoke this permit if it is found that the approved facility or use is violating any of the Conditions of Approval, any applicable codes, requirements, regulations or guidelines, or is causing a public nuisance.

5. **Reproduction of Conditions on Building Plans**
 a. *Prior to issuance of building permit.*
 These conditions of approval shall be reproduced on page one of any plans submitted for a building permit for this project.

6. **Defense, Indemnification & Holdharmless**
 a. Within ten (10) business days of the filing of a claim, action or proceeding that is subject to this provision, the applicant shall execute a Letter Agreement with the City, acceptable to the Office of the City Attorney, which memorializes this condition of approval.

 The applicant shall defend (with counsel reasonably acceptable to the City), indemnify, and hold harmless the City of Oakland, the City of Oakland Redevelopment Agency, the Oakland City Planning Commission and their respective agents, officers, and employees from any claim, action, or proceeding (including legal costs and attorney's fees) against the City of Oakland, Oakland Redevelopment Agency, Oakland City Planning Commission and their respective agents, officers or employees to attack, set aside, void or annul, an approval by the City of Oakland, the Planning and Zoning Division, Oakland City Planning Commission, the City of Oakland Redevelopment Agency or City Council relating to this project. The City shall promptly notify the applicant of any claim, action or proceeding and the City shall cooperate fully in such defense. The City may elect, in its sole discretion, to participate in the defense of said claim, action or proceeding.

7. **Waste Reduction and Recycling**
 a. *Prior to issuance of a building or demolition permit*
 The applicant may be required to complete and submit a "Waste Reduction and Recycling Plan," and a plan to divert 50 percent of the solid waste generated by the operation of the project, to the Public Works Agency for review and approval, pursuant to City of Oakland Ordinance No. 12253. This condition applies to 1) new residential and commercial construction, 2) commercial and apartment house demolition, and 3) commercial and apartment house additions and alterations with a permit valuation of greater than $50,000. Contact the City of Oakland Environmental Services Division of Public Works at (510) 238-7073 for information.

8. **Recycling Space Allocation Requirements**
 a. *Prior to issuance of a building permit*
 The design, location and maintenance of recycling collection and storage areas must substantially comply with the provision of the Oakland City Planning Commission "Guidelines for the Development and Evaluation of Recycling Collection and Storage Areas", Policy 100-28. Pursuant to Section 17.118.030 of the Oakland Planning Code, this condition shall apply to 1) new residential development of five or more units, 2) new commercial and industrial development that requires a building permit and 3) additions that increase the gross floor area of the aforementioned projects by more than 30 percent. A minimum of two cubic feet of storage and collection area shall be provided for each dwelling unit and for each 1,000 square feet of commercial space.

PROJECT SPECIFIC CONDITIONS

9. **Exterior Materials Details**
 a. *Prior to issuance of building permit.*
 The applicant shall submit for review and approval of the Planning and Zoning Division, plans that show the details of the exterior of each building. These details shall include the labeling of all the materials and treatments proposed for the exterior of each building. The applicant shall also provide a material and color board for review and approval of the Planning and Zoning Division. All materials and treatments shall be of high quality that provides the building with significant visual interest. All material at ground level shall be made of durable material that can be maintained in an urban environment.

10. **Trash and Recyclables Enclosure**
 a. *Prior to issuance of any building permits.*
 The applicant shall submit for review and approval by the Planning and Zoning Division plans showing all trash and recyclables collection areas on the site. The location of the proposed collection areas shall be shown on the building permit plan set. This collection area enclosure shall be screened from the street and adjacent properties by a wall, fence, or dense landscaping with a minimum height of six (6) feet, and with an opaque covered closure. No trash shall be stored outside the designated trash collection area.

11. **Street Trees**
 a. *Prior to issuance of building permit.*
 The landscape and irrigation plan shall include a minimum of minimum one 24 inch box sized street tree per every 25 feet of street frontage. The species and locations shall be subject to review and approval by the Zoning Administrator and the Tree Division.

12. **Utilities**
 a. *Prior to issuance of building permit.*
 All new electric and telephone facilities (including transformers), fire alarm conduits, street light wiring, and other wiring, conduits, and similar facilities shall be placed underground by the developer from the applicant's structures to the point of service. This change shall be indicated on the building permit plan set and shall be subject to review and approval by the Zoning Administrator.
 b. *Prior to issuance of building permit.*
 The building permit plan set shall indicate the location of all proposed utility meters and transformers. These features shall be located within a box set within the building, located on a non-street facing elevation, or screened from view from any public right of way. This change shall be indicated on the building permit plan set and shall be subject to review and approval by the Zoning Administrator.

13. **Landscape Plan**
 a. *Prior to issuance of building permit.*
 The building plan sets shall include a landscape plan detailing the size, species and location of all planting materials to be located within the group usable open space area. The landscape plan shall also include the location and method of irrigation. Planting materials shall be chosen to enhance the usability of the open space.

14. **Landscape Maintenance**
 a. *Ongoing.*
 All proposed landscaping shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with all applicable landscaping requirements.

15. **Construction hours**
 a. *During all construction activities.*
 Construction shall only take place between 7:30AM and 6:00PM, on Monday through Friday, 9:00AM to 5:00PM on Saturdays. No construction shall occur on Sundays or Federal holidays.

16. **Neighbor Noticing of Access Obstructions**
 a. *During all construction activities.*
 Construction vehicles, materials and other equipment shall not block the road so that neighbors would be adversely affected from getting to and from their properties. The applicant shall ensure that immediately adjacent property owners are notified in writing no less than 48 hours before any major delivery, hauling, detours, or lane closures related to the project's construction activities occur.

17. **Encroachment Permit**
 a. *Prior to issuance of any building permit.*
 The applicant shall obtain any encroachment permits, privately constructed public improvements, waiver of damages or other approvals required by the Building Services Division: prior to grading permit and building permit issuance location of any permanent or temporary elements located in the public right of way.

18. **Site Maintenance**
 a. *During all construction activities.*
 The applicant shall ensure that debris and garbage is collected and removed from the site daily.

19. **Lighting Plan**
 a. *Prior to issuance of building permit.*
 The applicant shall submit a lighting plan for review and approval by the Planning and Zoning Division, with referral to other City departments as appropriate. The plan shall include the design and location of all lighting fixtures or standards. The plan shall indicate lighting fixtures that are adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties. All lighting shall be architecturally integrated into the site.

20. **Public Improvements Plan**
 a. *Prior to issuance of a building permit.*
 The applicant shall submit Public Improvement Plans for adjacent public rights-of-way showing all proposed improvements and compliance with conditions of approval and City requirements, including but not limited to curbs, gutters, sewer laterals, storm drains, street trees, paving details, locations of transformers and other above-ground utility structures, the design, specifications locations of facilities required by the East Bay Municipal Utility District (EBMUD), street lighting, on-street parking and accessibility improvements compliant with applicable standards, and any other improvements or requirements for the project as provided for in this approval. Encroachment permits shall be obtained as necessary for any applicable improvements. The Planning and Zoning Division, Building Services Division and the Public Works Agency will review and approve designs and specifications for the improvements. Improvements shall be completed prior to issuance of certificate of occupancy.

21. **Underground Utilities**
 a. *Prior to issuance of building permits.*
 The applicant shall submit plans for review and approval of the Planning and Zoning Division, Building Services Division and the Public Works Agency, and other relevant agencies as appropriate, plans that show all new electric and telephone facilities; fire alarm conduits; street light wiring; and other wiring, conduits, and similar facilities placed underground by the developer from the applicant's structures to the point of service. The plans shall show all electric and telephone facilities installed in accordance with standard specifications of the serving utilities.

22. **Lease Agreement on Maintenance**
 a. *Prior to sale or lease of any unit, tenant space or building.*
 That all leases, use and rental agreements and instruments of sale affecting the building and related property shall include a clause stating that it shall be the duty of every person upon vacating dwellings, or storerooms, to remove all materials and waste from such buildings and premises and also the grounds appurtenant thereto and agreement shall also state that no person shall throw or deposit or permit to accumulate materials in or about any yard, lot, place, premises, or upon any adjacent street alley or sidewalk so that it is or is likely to 1) be a source of obnoxious or offensive conditions or odors to public interest or health, or 2) attract flies or fly breeding and/or afford food or harborage for rodents or rats.

23. **Meter Shielding**
 a. *Prior to issuance of building permit*
 The applicant shall submit for review and approval by the Zoning Administrator plans that show any and all utility meters, transformers, and the like screened from view from any public right of way.

ATTACHMENT B

FINDINGS FOR APPROVAL:
This proposal meets all the required findings under Minor Variance and Residential Design Review criteria contained in Section 17.148.050 and 17.136.070.A as set forth below and which are required to approve your application. Required findings are shown in bold type; reasons your proposal satisfies them are shown in normal type.

17.136.070A - RESIDENTIAL DESIGN REVIEW CRITERIA:

A. The proposed design will create a building or set of buildings that are well related to the surrounding area in their setting, scale, bulk, height, materials, and textures.

This project would provide for the construction of a mixed use building containing seven dwelling units a ground floor commercial space. The subject site is located at the northeast corner of School Street and 35th Avenue near the Laurel Shopping District. This section of 35th Avenue is characterized by a mixture of residential buildings interspersed with commercial uses while School Street consists primarily of single-family residential dwellings. The project has been designed to reflect the change in context between 35th Avenue and School Street. The portion of the building facing School Street would be lower in height and have a landscaped front setback to create a transition between the higher densities along 35th Avenue to the single-family dwellings along School. The building facing 35th Avenue, which would include the ground floor commercial unit, would be slightly taller with a minimum front setback. Parking would be accessed from behind the building and not visible from the street. The overall the commercial and residential components of the development would contribute to the setting of surrounding area.

There is no defining architectural context, and the scale, bulk, height, materials, and textures found within the neighborhood vary. The simple building design would not conflict with or diminish the varied architectural context of the neighborhood. The building would feature a corner element, well proportioned and positioned window and door openings. Overall the proposed design would be well-related to the surrounding area.

B. The proposed design will protect, preserve, or enhance desirable neighborhood characteristics.

The proposed pedestrian oriented design of the building and the mixture of commercial and residential uses of the building would contribute to the successful operation of this corridor.

C. The proposed design will be sensitive to the topography and landscape.

The subject site does not contain any significant topographic features.

D. If situated on a hill, the design and massing of the proposed building relates to the grade of the hill.

The proposed building would not be situated on a hill.

E. The proposed design conforms in all significant respects with the Oakland Comprehensive Plan and with any applicable district plan or development control map which has been adopted by the City Council.

The Oakland General Plan recommends Mixed Housing Type Residential development for the subject site Mixed Housing Type Residential areas are intended to create, maintain and enhance residential areas characterized by a mixture of housing types and neighborhood servicing businesses. The proposed development consisting of 7 dwelling units and one commercial space would be consistent with the General Plan.

SECTION 17.148.050(a) - MINOR VARIANCE FINDINGS:

A. That strict compliance with the specified regulation would result in practical difficulty or unnecessary hardship inconsistent with the purposes of the zoning regulations, due to unique physical or topographic circumstances or conditions of design; or as an alternative in the case of a minor variance, that such strict compliance would preclude an effective design solution improving livability, operational efficiency, or appearance.

The proposed building would have a zero-foot setback along 35th Avenue where 7.5 feet would be required. The building has been designed to create a pedestrian oriented, urban edge along the street reflective of the characteristics of the existing streetscape. Strict compliance of the setback requirement would diminish the buildings interaction with the street and the pedestrian experience. The building would also have a 5'00" setback along School Street where 10'00" is required. The proposed setback is consistent with the setbacks of the adjacent dwellings located along School Street. A height variance is also required for 32' along the interior side yard adjacent to the R-50 zone where a maximum height of 30' is permitted. This height limit is required due to the fact that the subject site is zoned C-20 and the neighboring site on 35th Avenue is zoned R-50. The purpose of this height limit is to create a transition between more intense commercial buildings typically found in the C-20 zone to lower intensity residential buildings found in the R-50 zone. In this case the required height limit is unwarranted because, although zoned R-50, the adjacent property is occupied by a mixed use building containing a liquor store on the ground floor with residential and office use on the second floor.

B. That strict compliance with the regulations would deprive the applicant of privileges enjoyed by owners of similarly zoned property; or, as an alternative in the case of a minor variance, that such strict compliance would preclude an effective design solution fulfilling the basic intent of the applicable regulation.

The proposed buildings have been designed to reflect the pattern of development of the neighborhood. The design and site planning solution successfully incorporates an urban edge to the building while maintaining openness between the proposed mixed use development and the adjacent residential development.

C. That the variance, if granted, will not adversely affect the character, livability, or appropriate development of abutting properties or the surrounding area, and will not be detrimental to the public welfare or contrary to adopted plans or development policy.

The design and site planning solution successfully incorporates an urban edge to the building while maintaining openness and a transition between the proposed mixed use development and the adjacent residential development.

D. That the variance will not constitute a grant of special privilege inconsistent with limitations imposed on similarly zoned properties or inconsistent with the purposes of the zoning regulations.

The proposed variance would not be inconsistent with the purposes of the zoning regulations since the site has been designed to meet the intent of providing a transition between developments located in commercial zones and adjacent residential development.

E. For proposals involving one or two dwelling units on a lot: That the elements of the proposal requiring the variance (e.g. elements such as buildings, walls, fences, driveways, garages and carports, etc.) conform with the design review criteria set forth in the design review procedure at Section 17.136.070.

The proposal involves more the two units.

F. For proposals involving one or two dwelling units on a lot and not requiring design review or site development and design review: That all elements of the proposal conform to the "Special Residential Design Review Checklist Standards and Discretionary Criteria" as adopted by the City Planning Commission.

The proposal involves more the two units.

G. For proposals involving one or two residential dwelling units on a lot: That, if the variance would relax a regulation governing maximum height, minimum yards, maximum lot coverage or building length along side lot lines, the proposal also conforms with at least one of the following criteria:

a. The proposal when viewed in its entirety will not adversely impact abutting residences to the side, rear, or directly across the street with respect to solar access, view blockage and privacy to a degree greater than that which would be possible if the residence were built according to the applicable regulation and, for height variances, the proposal provides detailing, articulation or other design treatments that mitigate any bulk created by the additional height; or

The proposal involves more the two units.

b. Over 60 percent of the lots in the immediate vicinity are already developed and the proposal does not exceed the corresponding as-built condition on these lots and, for height variances, the proposal provides detailing, articulation or other design treatments that mitigate any bulk created by the additional height. The immediate context shall consist of the five closest lots on each side of the project site plus the ten closest lots on the opposite side of the street

RETURN TO:

City of Oakland
Community and Economic Development Agency
Zoning Division
250 Frank H. Ogawa Plaza, Suite 2114
Oakland, CA 94612

NOTICE OF EXEMPTION

TO: Alameda County Clerk
1106 Madison Street
Oakland, CA 94612

Project Title: CDV06-014

Project Applicant: Philip Banta

Project Location: 3101 35th avenue / Oakland CA

Project Description: 7 residential unit and 1 commercial unit mixed use project.

Exempt Status: (check one)

Statutory Exemptions [Article 18:Section 21080; 15260]	Categorical Exemptions [Article 19:Section 21084; 15300]
[ ] Ministerial [Sec.15268]	[ ] Existing Facilities [Sec.15301]
[ ] Feasibility/Planning Study [Sec.15262]	[ ] Replacement or Reconstruction [Sec.15302]
[ ] Emergency Project [Sec.15269]	[ ] Small Structures [Sec.15303]
[ ] General Rule [Sec.15061 (b)(3)]	[ ] Minor Alterations [Sec.15304]
[X] Other: [Sec.15183]	[ ] Minor Subdivisions [Sec.15315]
	[X] Infill Projects [Sec.15332]

Reasons why project is exempt: The project is consistent with the General Plan and Zoning, is within city limits, is less than 5 acres in an urban area, has no special studies species habitat, would not result in any significant impacts, and is served by utilities and services.

Lead Agency: City of Oakland, Community and Economic Development Agency, Zoning Division, 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, CA 94612

Department/Contact Person: Scott Miller (signature)
Scott Miller, Zoning Manager

Phone:
Date: 5-30-07

Pursuant to Section 711.4(d)(1) of the Fish and Game Code, statutory and categorical exemptions are also exempt from Department of Fish and Game filing fees.

(see Illustration 1-4b); however, the Director of City Planning may make an alternative determination of immediate context based on specific site conditions. Such determination shall be in writing and included as part of any decision on any variance.

ENVIRONMENTAL DECLARATION
(CALIF. FISH AND GAME CODE SEC. 711.4)

FOR CLERK'S USE ONLY

NAME AND ADDRESS OF APPLICANT OR LEAD AGENCY

LEAD AGENCY: **COMMUNITY & ECONOMIC DEVELOPMENT AGENCY/PLANNING**
250 Frank H. Ogawa Plaza
Room 2114
Oakland, CA 94612

APPLICANT: Philip Banta

Contact: Philip Banta

FILING NO. CDV06-014

CLASSIFICATION OF ENVIRONMENTAL DOCUMENT — CLERK'S USE ONLY

1. NOTICE OF EXEMPTION STATEMENT OF EXEMPTION — PLU 117
 [X] A - STATUTORILY OR CATEGORICALLY EXEMPT
 $50.00 (Fifty Dollars) - CLERK'S FEE
 [ ] B - DE MINIMUS IMPACT - CERTIFICATE OF FEE EXEMPTION REQUIRED — PLU 117
 $25.00 (Twenty-five Dollars) CLERK'S FEE

2. NOTICE OF DETERMINATION - FEE REQUIRED
 [ ] A NEGATIVE DECLARATION — PLU 116
 $1,250.00 (Twelve Hundred Fifty Dollars) STATE FILING FEE
 $25.00 (Twenty-five Dollars) - CLERK'S FEE
 [ ] B - ENVIRONMENTAL IMPACT REPORT — PLU 115
 $850.00 (Eight Hundred Fifty Dollars) STATE FILING FEE
 $25.00 (Twenty-five Dollars) CLERK'S FEE
 [ ] C - Certificate of Fee Exemption & De Minimus Impact Fee — PLU 117
 $25.00 (Twenty-five Dollars) - CLERK'S FEE

*THIS FORM MUST BE COMPLETED AND SUBMITTED WITH ALL ENVIRONMENTAL DOCUMENTS FILED WITH THE ALAMEDA COUNTY CLERK'S OFFICE

FIVE COPIES OF ALL NECESSARY DOCUMENTATION ARE REQUIRED FOR FILING PURPOSES.

APPLICABLE FEES MUST BE PAID AT THE TIME OF FILING AN ENVIRONMENTAL DOCUMENT WITH THE ALAMEDA COUNTY CLERK'S OFFICE.

MAKE CHECK PAYABLE TO: ALAMEDA COUNTY CLERK

ARCHITECTURE

PHILIP BANTA & ASSOCIATES
6050 HOLLIS STREET
EMERYVILLE, CALIFORNIA 94608
TEL | 510 654 3255
FAX | 510 654 3259
www | bantadesign.com

REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (△)	1ST PLAN CHECK REVIEW	01/14/14
1 (○)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT — PHILIP BANTA — No. C-14646 — Ren. 4/30/15 — STATE OF CALIFORNIA

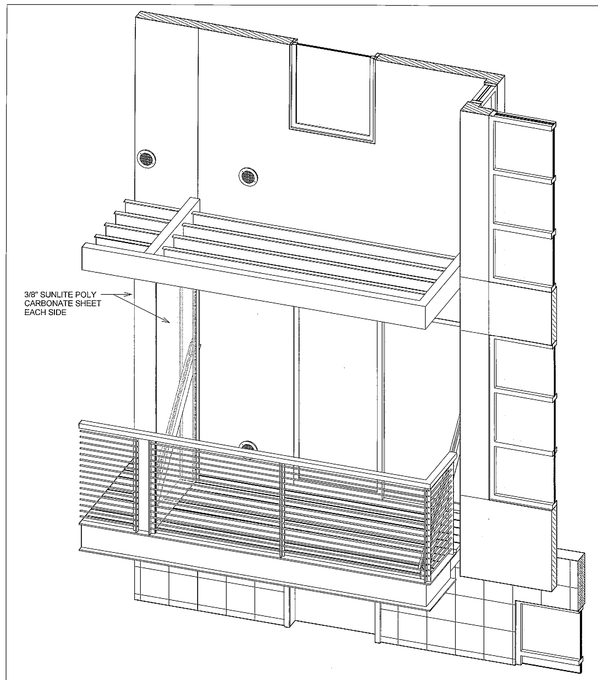
SHEET DESCRIPTION:

APPLICATION APPROVAL

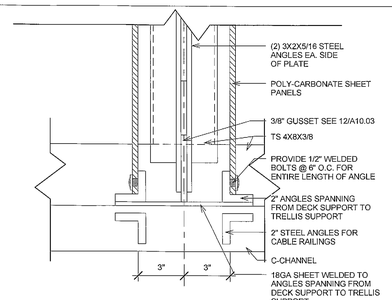
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	

GEN-03

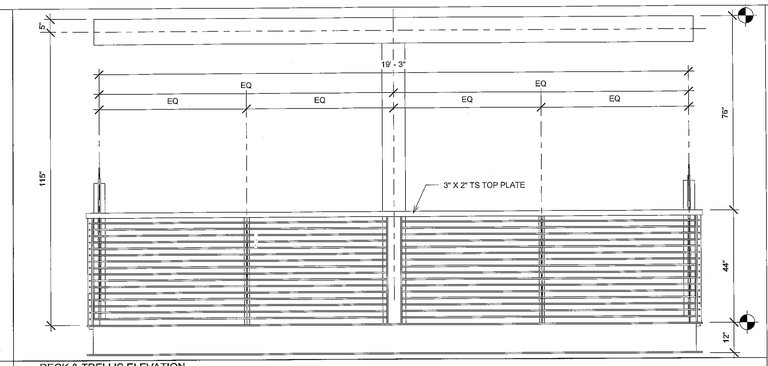
12/7/2013 4:02:25 PM



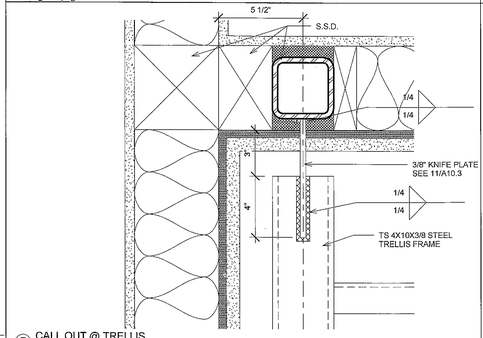
14 TRELLIS/DECK AXON



8 TRELLIS PARTION CONNECTION @ DECK
3" = 1'-0"



4 DECK & TRELLIS ELEVATION
1/2" = 1'-0"



7 CALL OUT @ TRELLIS
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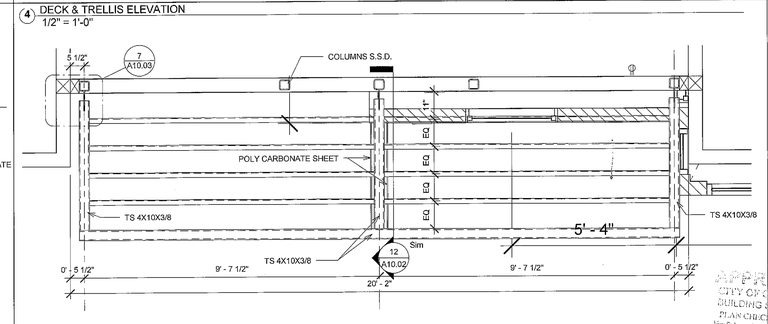
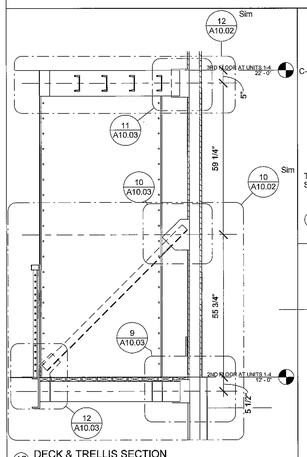
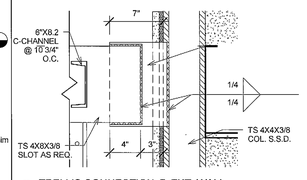


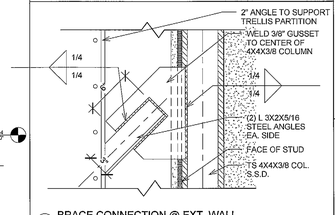
3 TRELLIS PLAN
1/2" = 1'-0"



13 DECK & TRELLIS SECTION
1/2" = 1'-0"



11 TRELLIS CONNECTION @ EXT. WALL
1 1/2" = 1'-0"



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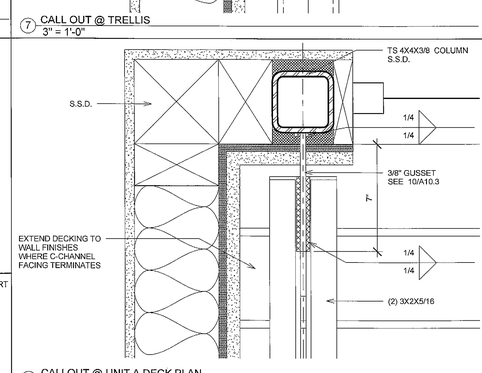
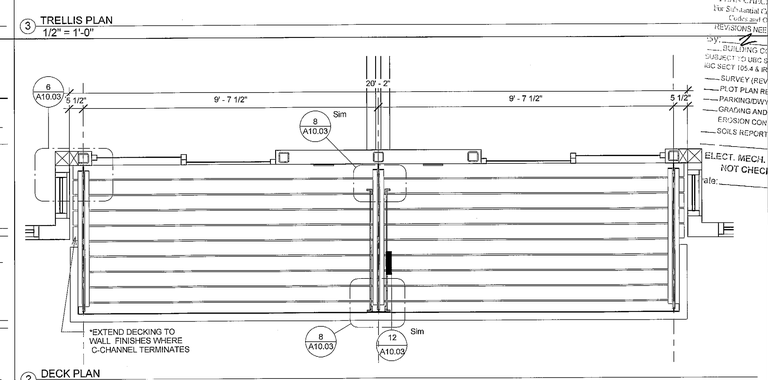
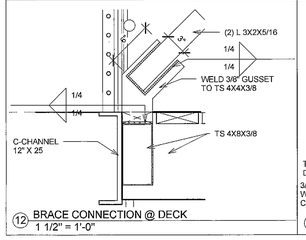
1 1/2" = 1'-0"



6 CALLOUT @ UNIT A DECK PLAN
3" = 1'-0"



2 DECK PLAN
1/2" = 1'-0"



12 BRACE CONNECTION @ DECK
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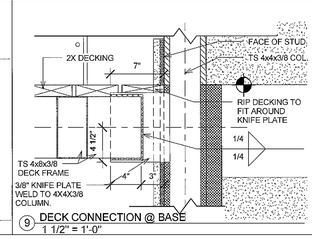

9 DECK CONNECTION @ BASE
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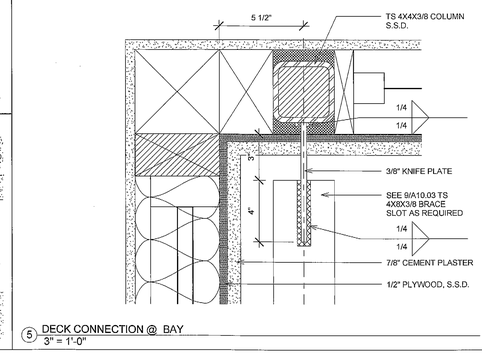

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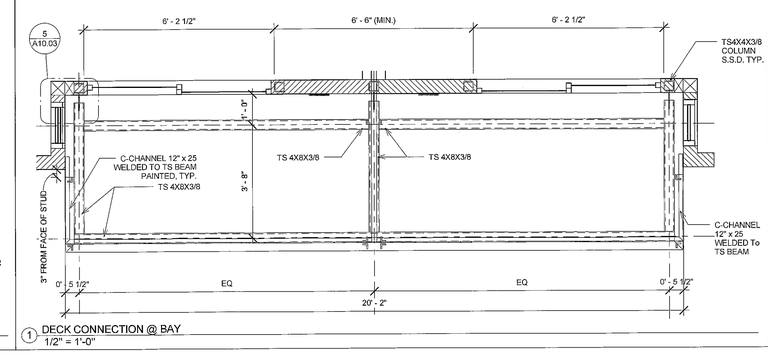


1 DECK CONNECTION @ BAY
1/2" = 1'-0"

ARCHITECTURE

PHILIP BANTA & ASSOCIATES

6050 HOLLIS STREET
EMERYVILLE, CALIFORNIA 94608

TEL: 510.654.3255
FAX: 510.654.3299
www.philbantadesign.com

REVISIONS: △ ISSUES: ○

No.	Description	Date

CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK SECTION
For Substantial Compliance With Codes and Ordinances
REVISIONS NEED TO BE ADDRESSED BY:

2	FINAL 1ST PLAN CHECK REVIEW	01/14/14
1	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

SUBJECT TO UBC SECTION 105.4 & IBC SECT 108.5
SURVEY (REVIEW)
PLOT PLAN REVIEW
PARKING/DWY LAYOUT
GRADING AND EROSION CONTROL
SOILS REPORT ON FILE
ELECT, MECH, PLUMB. NOT CHECKED
Date:

LICENSED ARCHITECT PHILIP BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

SHEET DESCRIPTION:

DECK & TRELLIS DETAILS

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

A10.03

12/8/2013 6:35:46 PM

MATERIALS

12" X 12" GRANITE TILE - GRANITE TILE FLAMED - VERDE UBATUBA

ASPHALT SINGLES

CEMENT PLASTER

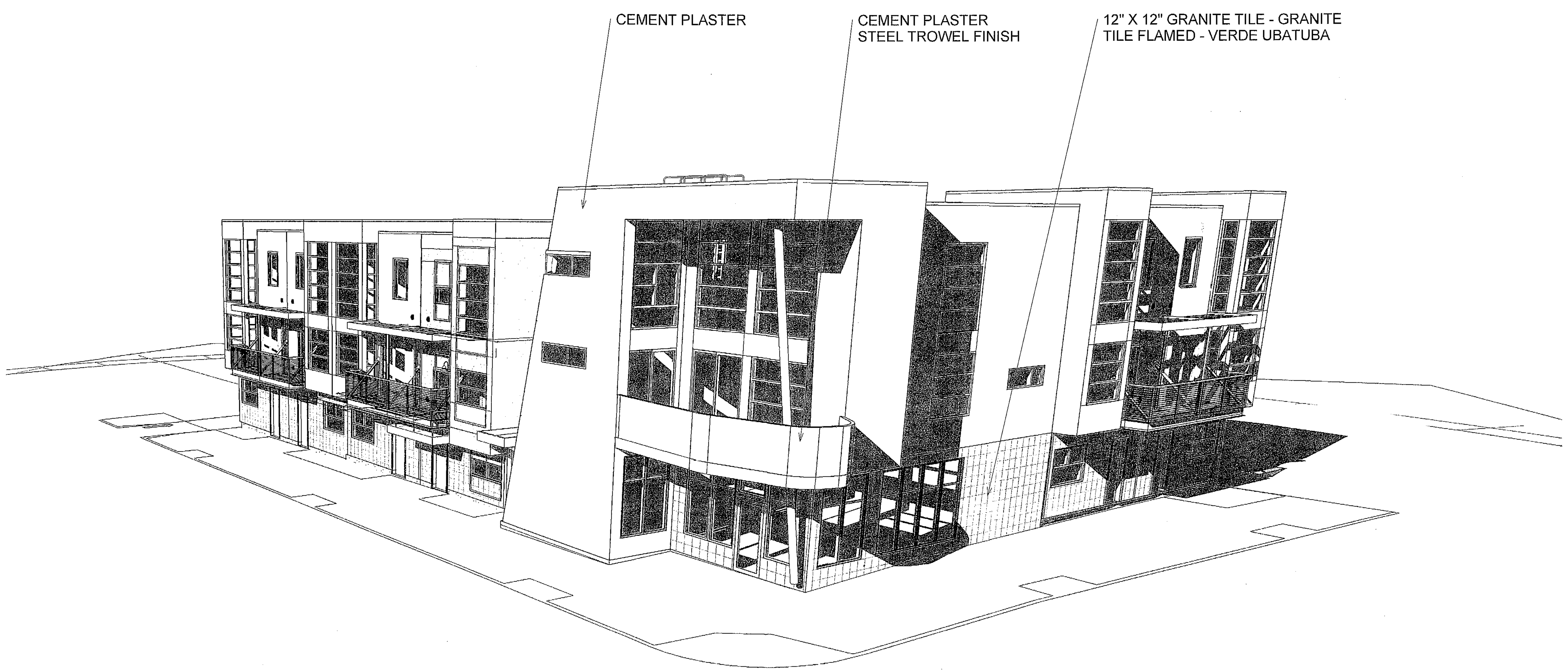
COLORS

LIGHT YELLOW T.B.D.

LIGHT BROWN T.B.D.

YELLOW T.B.D.

APPLE GREEN T.B.D.



ARCHITECTURE
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FAX | 510.654.3259
www | bantadesign.com

REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (△)	1ST PLAN CHECK REVIEW	01/14/14
1 (○)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT
PHILIP L. BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

SHEET DESCRIPTION:

COLOR AND MATERIAL BOARD

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/8" = 1'-0"

A11.0 △1 NEW SHEET

1/10/2014 1:42:13 PM

IMPROVEMENT PLANS FOR

HSIEH PROPERTY

CITY OF OAKLAND CALIFORNIA

NOVEMBER 2007

STANDARD NOTES:

1. BASIS OF ELEVATION: THE NORTHWEST CURB RETURN OF THE NORTHERN CORNER AT THE INTERSECTION OF 35TH AVENUE AND SCHOOL STREET. ELEVATION = 162.8' PER CITY OF OAKLAND MONUMENT MAP #171.

2. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT WILL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THE CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CONSULTING ENGINEER, OWNER AND THE CITY OF OAKLAND HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF OWNER OR WOOD RODGERS, INC.

3. ALL MATERIALS, METHODS, AND WORKMANSHIP SHALL CONFORM TO THE CITY OF OAKLAND PUBLIC WORKS CONSTRUCTION STANDARDS AND SPECIFICATIONS. ALL WORK IS SUBJECT TO THE APPROVAL OF THE PROJECT ENGINEER OR HIS AUTHORIZED REPRESENTATIVE. CERTIFICATION FOR CONFORMANCE WITH CITY SPECIFICATIONS WILL BE REQUIRED FOR ALL MATERIALS USED ON THE PROJECT UNLESS SPECIFICALLY WAIVED BY THE PROJECT ENGINEER.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND NOTIFYING THE OWNER AND PROJECT ENGINEER FOR A PRE-CONSTRUCTION CONFERENCE 72-HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES. NO CONSTRUCTION WORK SHALL COMMENCE UNTIL AFTER THE PRE-CONSTRUCTION CONFERENCE IS HELD AND THE OWNER AND PROJECT ENGINEER APPROVE.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF EXISTING PUBLIC AND PRIVATE IMPROVEMENTS WITHIN THE WORK AREA AND SHALL ADEQUATELY BARRICADE PROJECT TO KEEP THE GENERAL PUBLIC FROM THE SITE. ANY DAMAGE TO CITY, OWNER OR PRIVATE IMPROVEMENTS SHALL BE REPLACED BY THE CONTRACTOR AT ITS EXPENSE.

6. THE CONTRACTOR SHALL PROVIDE FOR INGRESS AND EGRESS FOR PRIVATE PROPERTY ADJACENT TO WORK THROUGHOUT THE PERIOD OF CONSTRUCTION.

7. THE TYPES, LOCATIONS, SIZES, AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY, THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATING WILL REVEAL THE TYPES, SIZE, LOCATION, AND DEPTH OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE ALL UNDERGROUND WORKS, HOWEVER, WOOD RODGERS, INC. CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND WORKS NOR THE EXISTENCE OF OTHER BURIED OBJECTS WHICH MAY BE ENCOUNTERED BUT WHICH ARE NOT SHOWN ON THESE PLANS. IF NO ELEVATION IS SHOWN IN THE PLANS THE CONTRACTOR SHALL ASSUME THE ELEVATION TO BE UNKNOWN AND POTHOLE WHEREVER NEEDED.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ALL CONFLICTS, ERRORS, OMISSIONS, ETC. TO WOOD RODGERS INC. IMMEDIATELY UPON DISCOVERY. IF SO DIRECTED BY THE PROJECT ENGINEER, THE CONTRACTOR SHALL STOP WORK UNTIL MITIGATION CAN BE MADE. ANY COSTS INCURRED RESULTING FROM THE CONTRACTOR'S FAILURE TO STOP WORK AS DIRECTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

9. EXCAVATIONS SHALL BE ADEQUATELY SHORED, BRACED AND SHEETED SO THAT THE EARTH WILL NOT SLIDE OR SETTLE AND SO THAT ALL EXISTING IMPROVEMENTS OF ANY KIND WILL BE FULLY PROTECTED FROM DAMAGE. ANY DAMAGE RESULTING FROM A LACK OF ADEQUATE SHORING, BRACING OR SHEETING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND HE SHALL AFFECT NECESSARY REPAIRS OR RECONSTRUCTION AT HIS OWN EXPENSE. WHERE THE EXCAVATION FOR A CONDUIT TRENCH AND STRUCTURE IS FIVE FEET OR MORE IN DEPTH THE CONTRACTOR SHALL CONFORM TO THE APPLICABLE CONSTRUCTION SAFETY ORDERS OF THE DIVISION OF INDUSTRIAL SAFETY OF THE STATE OF CALIFORNIA. THE CONTRACTOR SHALL ALWAYS COMPLY WITH OSHA REQUIREMENTS.

10. CONSTRUCTION OPERATIONS SHALL CEASE IN THE VICINITY OF ANY SUSPECTED ARCHAEOLOGICAL RESOURCE UNTIL AN ARCHAEOLOGIST IS CONSULTED AND HIS OR HER RECOMMENDATION FOLLOWED SUBJECT TO APPROVAL BY THE PLANNING DIRECTOR. IF EVIDENCE OF HUMAN REMAINS IS DISCOVERED ON THE SITE, THE CITY/COUNTY CORONER SHALL BE NOTIFIED IMMEDIATELY.

11. WHEN WIDENING THE PAVEMENT ON AN EXISTING ROAD, THE EXISTING PAVEMENT SHALL BE CUT TO A NEAT LINE AND REMOVED TO AN EXISTING ADEQUATE STRUCTURAL SECTION, OR TO THE ORIGINAL ROAD SECTION. AN EXPLORATORY TRENCH, OR POTHOLING, MAY BE REQUIRED TO DETERMINE THE LIMITS OF PAVEMENT REMOVAL.

12. NO TREES SHALL BE REMOVED UNLESS THEY ARE SHOWN AND NOTED TO BE REMOVED ON THE IMPROVEMENT PLANS. IF ANY TREES ARE TO BE REMOVED, THE IMPROVEMENT PLANS MUST BE REVIEWED AND ACKNOWLEDGED BY THE PLANNING DEPARTMENT. ALL TREES CONFLICTING WITH GRADING, UTILITIES, OR OTHER IMPROVEMENTS, OR OVERHANGING THE SIDEWALK OR PAVEMENT SO AS TO FORM A NUISANCE OR HAZARD, SHALL BE TRIMMED, PROPERLY TREATED AND SEALED.

13. WATER TESTING IS REQUIRED FOR ALL CURB GRADES LESS THAN ONE PERCENT.

14. EXISTING CURB AND SIDEWALK WITHIN THE PROJECT LIMITS DAMAGED OR DISPLACED, EVEN THOUGH NOT PROPOSED TO BE REMOVED, SHALL BE REPAIRED OR REPLACED EVEN IF DAMAGE OR DISPLACEMENT OCCURRED PRIOR TO ANY WORK PERFORMED BY THE CONTRACTOR.

15. IT IS THE RESPONSIBILITY OF CONTRACTOR TO OBTAIN PERMITS NECESSARY TO PERFORM THE WORK SHOWN IN THESE PLANS FROM THE APPROPRIATE AGENCIES.

16. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN OR OTHER DEVICES NECESSARY TO PROVIDE FOR SAFETY.

17. THE CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR POLICE, FIRE, AMBULANCE AND THOSE AGENCIES RESPONSIBLE FOR MAINTENANCE OF UTILITIES IN THE VICINITY OF JOB SITE.

18. ANY EXTRA CONSTRUCTION STAKING NECESSITATED SOLELY BY THE CONTRACTOR'S NEGLIGENCE WILL BE CHARGED TO THE CONTRACTOR ON A TIME AND MATERIAL BASIS AND PAID FOR BY THE CONTRACTOR.

19. ALL RETURN RADII AND CURB DATA ARE TO FACE OF CURB.

STANDARD NOTES: (CONTINUED)

20. EARTHWORK:

A. ALL UNSUITABLE AND SURPLUS MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE UNLESS SPECIFIED OTHERWISE BY THE OWNER.

B. SUFFICIENT EQUIPMENT SHALL BE AVAILABLE TO PROVIDE MUD AND DUST CONTROL AT ALL TIMES DURING CONSTRUCTION, DURING NON-WORKING HOURS A WATER TRUCK SHALL BE USED, WHEN REQUIRED, TO MAINTAIN ADEQUATE DUST CONTROL AREAS SURROUNDING WORK SHALL BE KEPT CLEAN AND RETURNED TO ORIGINAL CONDITION UPON COMPLETION OF CONTRACT

21. UTILITIES:

A. ALL UTILITIES ARE MEMBERS OF THE UNDERGROUND SERVICE ALERT (U.S.A) ONE-CALL PROGRAM. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS PROJECT WILL BE REQUIRED TO NOTIFY (U.S.A) 48-HOURS IN ADVANCE OF PERFORMING EXCAVATION WORK BY CALLING THE TOLL-FREE NUMBER (800) 227-2600.

B. FOR ALL TRENCH EXCAVATIONS 5 FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL ORTAIN A PERMIT FROM THE DIVISION OF SAFETY PRIOR TO BEGINNING OF CONSTRUCTION SITE AT ALL TIMES.

22. STORM DRAINS:

A. THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE WORKS WITHIN THE CONSTRUCTION AREA UNTIL NEW DRAINAGE IMPROVEMENTS ARE IN PLACE AND FUNCTIONING.

B. THE CONTRACTOR SHALL NOT ALLOW ANY SEDIMENT TO BE WASHED INTO OR ENTER STORM DRAINAGE WORKS. SHOULD EXCESSIVE SEDIMENTATION OCCUR, THE CONTRACTOR SHALL BE REQUIRED TO FLUSH OUT AND CLEAN THE WORKS SUBJECT TO APPROVAL BY THE PROJECT ENGINEER PRIOR TO THE FINAL ACCEPTANCE.

C. ALL STORM DRAIN CONSTRUCTION AND MATERIALS SHALL CONFORM TO THESE PLANS, BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS, AND BE IN ACCORDANCE WITH THE CITY OF OAKLAND PUBLIC WORKS CONSTRUCTION STANDARDS.

23. EROSION CONTROL AND WINTERIZATION:

A. IF PAVING AND SITE IMPROVEMENTS ARE NOT COMPLETED BY OCTOBER 15, TEMPORARY SILT AND DRAINAGE CONTROL FACILITIES SHALL BE INSTALLED TO CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND TO PROVIDE FOR THE SAFE DISCHARGE OF STORM WATERS INTO EXISTING STORM WATER FACILITIES. DESIGN OF THESE FACILITIES MUST BE APPROVED BY THE BUILDING INSPECTION DEPARTMENT.

B. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PREVENT DISCHARGE OF SEDIMENT FROM THE SITE TO ANY WATERCOURSE, DRAINAGE SYSTEM, OR ONTO ADJACENT PROPERTIES AND TO PREVENT DAMAGE BY EROSION OR DEPOSITION OF SEDIMENT WHICH MAY RESULT FROM THE WORK.

C. THE CONTRACTOR MUST COMPLY WITH ALL FEDERAL, STATE AND LOCAL GOVERNMENT LAWS AND REGULATIONS RELATING TO THE DISCHARGE OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITIES WHETHER OR NOT THE REQUIRED WORKS OR METHODS ARE STATED ON THESE PLANS.

24. GENERAL NOTES:

A. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK AND PROVIDE FOR THE PROPER AND SAFE ROUTING OF VEHICULAR AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK.

B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING RECORD DRAWINGS FOR ALL WORK THROUGHOUT THE COURSE OF CONSTRUCTION. SUCH DRAWINGS SHALL RECORD THE LOCATION, GRADE AND INVERT ELEVATION OF ALL IMPROVEMENTS THAT ARE CONSTRUCTED AND COPIES SHALL BE DELIVERED TO THE PROJECT ENGINEER AND OWNER PRIOR TO THE ACCEPTANCE OF THE WORK.

C. PRIOR TO COMMENCING CONSTRUCTION WORK THE CONTRACTOR SHALL HAVE APPROVED PLANS IN HIS POSSESSION AT THE JOB SITE AND SHALL GIVE PROJECT ENGINEER 72 HOURS NOTICE. THE CONTRACTOR SHALL DESIGNATE A FOREMAN, WHO SHALL HAVE THE AUTHORITY TO REPRESENT AND ACT FOR THE CONTRACTOR, ON THE JOB SITE DURING ALL WORKING HOURS.

D. NOISE GENERATING CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE HOURS OF 7:30 A.M. TO 6:00 P.M., MONDAY THROUGH FRIDAY, AND SHALL BE PROHIBITED ON STATE AND FEDERAL HOLIDAYS.

E. CONTRACTOR SHALL FIT ALL INTERNAL COMBUSTION ENGINES WITH MUFFLERS WHICH ARE IN GOOD CONDITION, AND TO LOCATE STATIONARY NOISE-GENERATING EQUIPMENT SUCH AS AIR COMPRESSORS AND CONCRETE PUMPERS AS FAR AWAY FROM EXISTING RESIDENCES AS POSSIBLE.

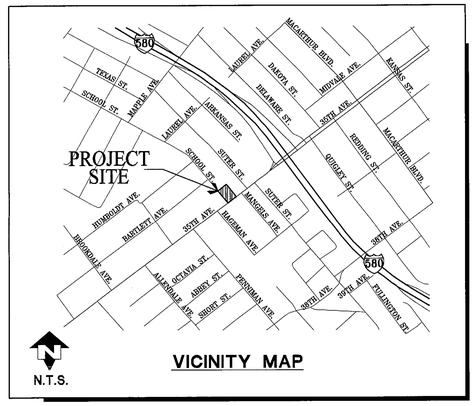
F. WOOD RODGERS, INC. HAS EXERCISED A REASONABLE AND ACCEPTABLE STANDARD OF CARE IN THE PREPARATION OF THESE PLANS. HOWEVER, THE DESIGN PROCESS INCLUDES ACTIVITIES OCCURRING AFTER PLAN SIGNATURE. THESE ACTIVITIES INCLUDE CALCULATION, PLAN CHECK AND VERIFICATIONS DURING CONSTRUCTION. SHOULD PERSONS OTHER THAN WOOD-RODGERS, INC. PERFORM THE CONSTRUCTION STAKING OPERATIONS, THEY SHALL INDEMNIFY WOOD RODGERS, INC. FROM ANY DAMAGES RESULTING FROM FAILURE TO PERFORM THESE TASKS OR ANY EXPENSE OR DAMAGE RESULTING FROM OMISSION OR ERROR CONTAINED IN THE PLANS WHICH WOULD REASONABLY HAVE BEEN DISCOVERED AND CORRECTED BY WOOD RODGERS, INC.

25. BAAQMD - FUGITIVE DUST CONTROL MITIGATION MEASURES:

A. CONSTRUCTION SITES SHALL BE WATERED AS DIRECTED BY THE PROJECT ENGINEER, DEPARTMENT OF PUBLIC WORKS OR AIR QUALITY MANAGEMENT DISTRICT AND AS NECESSARY TO PREVENT FUGITIVE DUST VIOLATIONS.

B. ONSITE DIRT PILES OR OTHER STOCKPILED PARTICULATE MATTER SHOULD BE COVERED, WIND BREAKS INSTALLED, AND WATER AND/OR SOIL STABILIZERS EMPLOYED TO REDUCE WIND BLOWN DUST EMISSIONS. INCORPORATE THE USE OF APPROVED NON-TOXIC SOIL STABILIZERS ACCORDING TO MANUFACTURER'S SPECIFICATIONS TO ALL INACTIVE CONSTRICTION AREAS.

C. PAVED STREETS SHALL BE SWEPT FREQUENTLY (WATER SWEEPER WITH RECLAIMED WATER RECOMMENDED; WET BROOM) IF SOIL MATERIAL HAS BEEN CARRIED ONTO ADJACENT PAVED, PUBLIC THOROUGHFARES FROM THE PROJECT SITE.



VICINITY MAP

SHEET INDEX

LEGEND

EXISTING	PROPOSED	DESCRIPTION
⊙		FOUND WELL MONUMENT
		BUILDING FOOTPRINT
— o —		CHAIN LINK FENCE
		FIRE HYDRANT
		SIGN POLE
		JOINT POLE
	◉	SANITARY SEWER MANHOLE
—W—		WATER PIPE
		SANITARY SEWER PIPE
		WATER METER
8"S	6"S	SEWER PIPE SIZE AND DIRECTION

ABBREVIATIONS

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
BLDG	BUILDING
B/W	BACK OF WALK
BOW	BOTTOM OF WALKWAY
CB	CATCH BASIN
C&G	CURB AND GUTTER
CLF	CHAIN LINK FENCE
CONC	CONCRETE
COTG	CLEANOUT TO GRADE
DI	DROP INLET
D	DIAMETER
DWY	DRIVEWAY
E	EAST
EL	ELEVATION
ELECT	ELECTRIC
EP	EDGE OF PAVEMENT
EX	EXISTING
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FOC F/C	FACE OF CURB
GB	GRADE BREAK
GR	GRATE ELEVATION
GS	GALVANIZE STEEL
HCR	HANDICAP RAMP
HP	HIGH POINT
INV	INVERT
L=	LENGTH
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MTR	METER
N	NORTH
NTS	NOT TO SCALE
OC	ON CENTER
PAVE	PAVEMENT
R=	RADIUS
RIM	RIM ELEVATION
S	SOUTH
STD	STANDARD
SW/SWK	SIDEWALK
TC	TOP OF CURB
TE	TRASH ENCLOSURE
TOW	TOP OF WALKWAY
TSB	TRAFFIC SIGNAL BOX
TYP	TYPICAL
UB	UTILITY BOX
VLT	VAULT
W	WEST
WM	WATER METER

REGISTERED PROFESSIONAL ENGINEER
MARK WALDMAN
No. 38905
Exp.03-31-15
CIVIL
STATE OF CALIFORNIA

Pacific Engineering & Construction, Inc.
Consulting Engineers & Contractors
35 Stillman Street, Suite 126, San Francisco, CA 94107
Phone/Fax: (415) 974-1853 Cell phone: (415) 516-8545
email: amwaldman@sbcglobal.net

No.	Description	Date

35th @ School

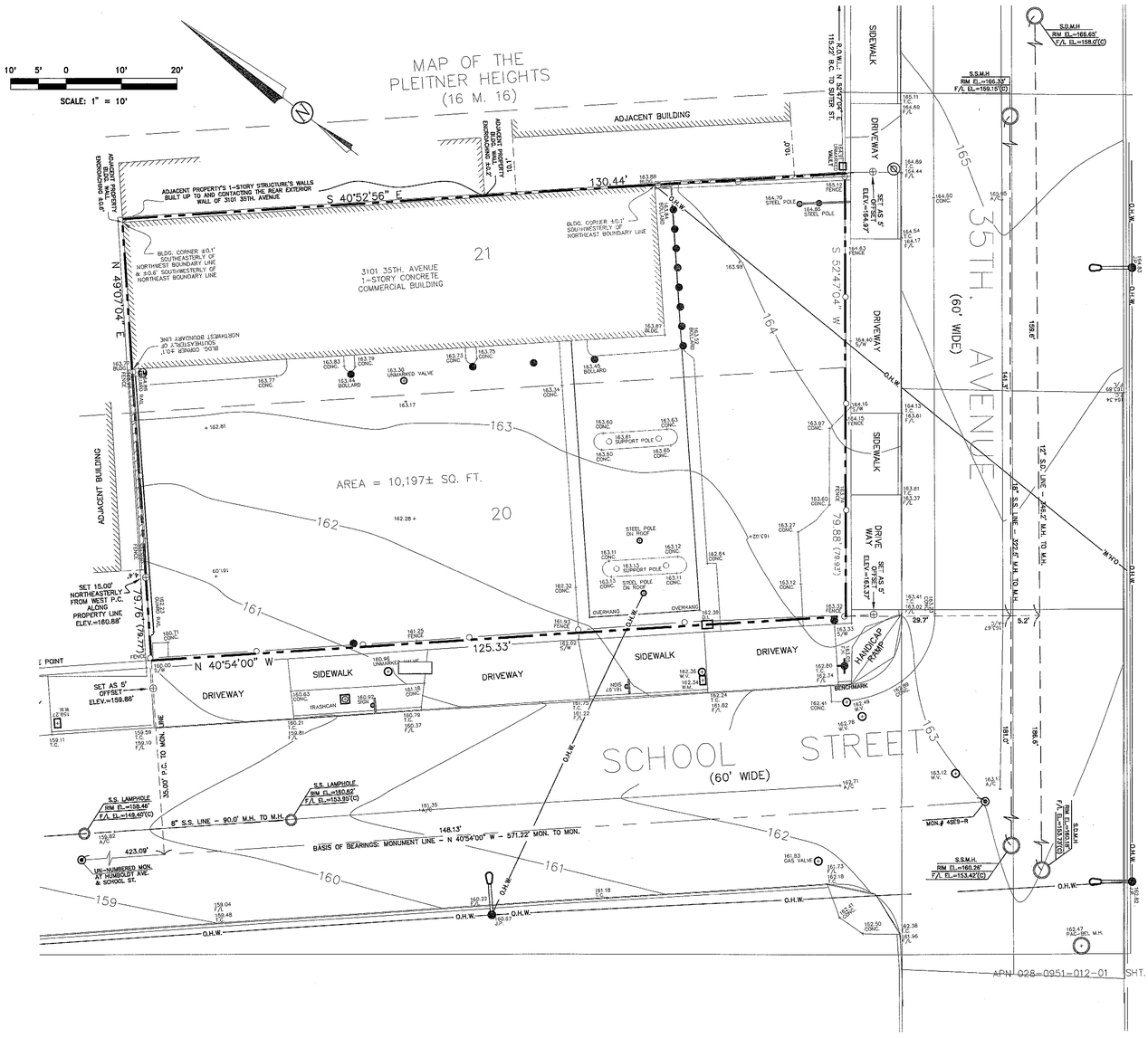
Oakland, CA 94619

APN 028-0951-012-01

COVER SHEET & NOTES

JOB NO.	0714
DATE	11/14/07
SCALE	PVT
DRAWN BY	AMW
CHECKED BY	AS SHOWN

C1.0



LEGEND			
◉	FD. WELL MONUMENT	F.H.	FIRE HYDRANT
	BUILDING FOOTPRINT	J.P.	JOINT POLE
— o —	CHAIN LINK FENCE	M.H.	MANHOLE
	FIRE HYDRANT	O.H.W.	OVERHEAD WIRE
"S"	SIGN POLE	R.O.W.L.	RIGHT-OF-WAY LINE
	ASPHALT	S/W	SIDEWALK POINT
	CONCRETE	S.D.	STORM DRAIN
A/C	ASPHALT CROWN	S.S.	SANITARY SEWER
P.C.	PROPERTY CORNER	T.C.	TOP OF CURB
BLDG.	BUILDING POINT	W.V.	WATER VALVE
(C)	CITY DATA	○	SET NAIL & BRASS TAG, L.S. 7170
CONC.	CONCRETE POINT		BOUNDARY LINE
F/L	FLOW LINE		TRACT LOT LINE

OWNER:
MONA HSIEH &
PATRICK KONG
118 ASHBY BAY
ALAMEDA, CA 94502

BENCHMARK:
THE NORTHWEST CURB RETURN OF THE NORTHERN CORNER AT THE INTERSECTION OF 35TH. AVENUE AND SCHOOL STREET ELEV.=162.8' PER CITY OF OAKLAND MONUMENT MAP#171.

BASIS OF BEARINGS:
MONUMENT LINE IN SCHOOL STREET, TAKEN AS N 40°54'00"W AS SHOWN ON P.M. 3721 (133 M. 72), RECORDS OF ALAMEDA COUNTY.

NOTES:
THERE ARE NO VERTICAL CURVES WITHIN 300 FEET OF THE PROPERTY.

THERE ARE NO HORIZONTAL CURVES WITH-300 FEET OF THE PROPERTY.
THERE ARE NO PROTECTED TREES ON THIS PROPERTY.

SURVEYOR'S STATEMENT:

THIS MAP CORRECTLY REPRESENTS A FIELD SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE LAND SURVEYOR'S ACT AT THE REQUEST OF MONA HSIEH ON SEPTEMBER 25, 2007.

I HEREBY STATE THAT ALL EXISTING GRADES AND CONTOURS DELINEATED UPON THIS PLAT ARE BASED UPON CITY OF OAKLAND DATUM.

I HEREBY FURTHER STATE THAT TO THE BEST OF MY KNOWLEDGE ALL PROVISIONS OF APPLICABLE STATE LAW AND LOCAL ORDINANCES HAVE BEEN COMPLIED WITH.

I FURTHER STATE THAT THE PARCEL DESIGNATED BY MY SURVEY AND SHOWN ON THIS MAP IS THE SAME AS THAT SHOWN ON THAT CERTAIN MAP ENTITLED "MAP OF THE PLEITNER HEIGHTS TRACT" FILED ON MARCH 12, 1901 IN BOOK NO. 16, PAGE 16, ALAMEDA COUNTY RECORDER'S OFFICE.

I HEREBY FURTHER STATE THAT IN ACCORDANCE WITH THE PROFESSIONAL LAND SURVEYOR'S ACT THE PERFORMANCE OF THIS SURVEY:

REQUIRES THAT A RECORD OF SURVEY BE FILED WITH THE ALAMEDA COUNTY SURVEYOR AND I WILL FILE SAME IN A TIMELY MANNER; AND IF CHANGES ARE NECESSARY TO THIS SURVEY SUBMITTED TO THE CITY OF OAKLAND DUE TO PROCESSING OF THE RECORD OF SURVEY I WILL SUBMIT A CORRECTED COPY OF THIS SURVEY TO THE CITY.

MICHAEL J. FOSTER, L.S. 7170
EXP. DATE DECEMBER 31, 2007

DATE:

BOUNDARY AND TOPOGRAPHIC SURVEY

3101 35TH. AVENUE
OAKLAND
PORTIONS OF LOTS 20 & 21
MAP OF THE PLEITNER HEIGHTS TRACT
(16 M. 16),
CITY OF OAKLAND, COUNTY OF ALAMEDA,
STATE OF CALIFORNIA.

OCTOBER, 2007 – SCALE: 1" = 8'

BAY AREA LAND SURVEYING INC.
961 MITCHELL WAY
EL SOBRANTE, CALIFORNIA
94803
(510) 223-5167

APN 028-0951-012-01 SHT. 1 OF 1 F.B. NO. 291 /35TH1439B&T.DWG JOB NO. 07-1439

REVISIONS: △ ISSUES: ○

No.	Description	Date
(1)	BUILDING PERMIT	11/17/07

PROJECT:

35th @ School

Oakland, CA 94619

APN 028-0951-012-01

SHEET DESCRIPTION:

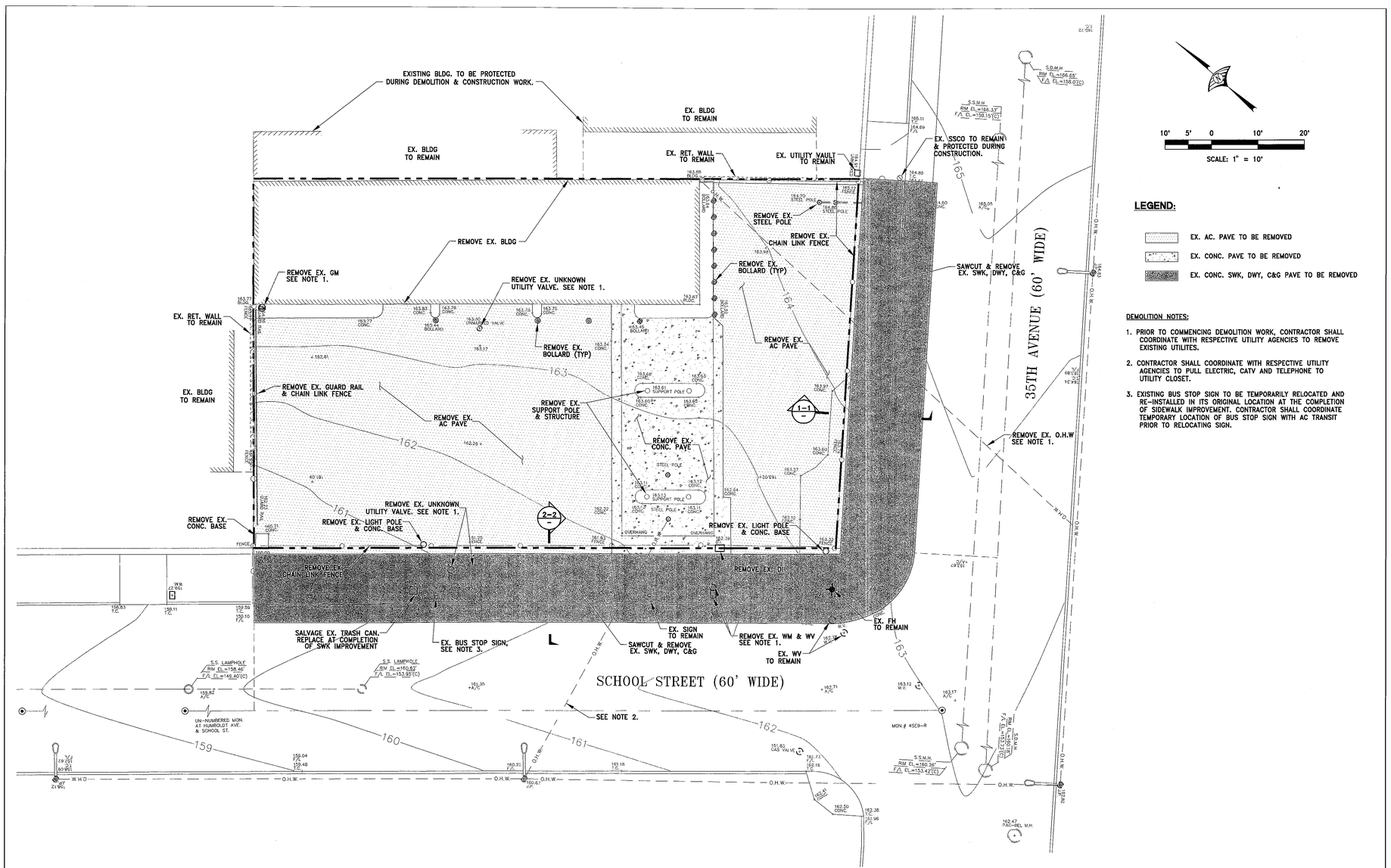
BOUNDARY AND TOPOGRAPHIC SURVEY

REGISTERED PROFESSIONAL ENGINEER
No. 38905
Exp. 03-31-15
CIVIL
STATE OF CALIFORNIA

Pacific Engineering & Construction, Inc.
Consulting Engineers & Contractors
35 Stillman Street, Suite 126, San Francisco, CA 94107
Phone/Fax: (415) 974-1853 Cell phone: (415) 516-8545
email: amwaldman@sbcglobal.net

PROJECT NUMBER:	0714
DATE:	11/14/07
DRAWN BY:	PVT
CHECKED BY:	AMW
SCALE:	1"=10'

C2.0

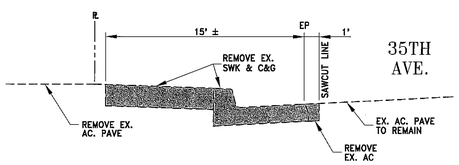


LEGEND:

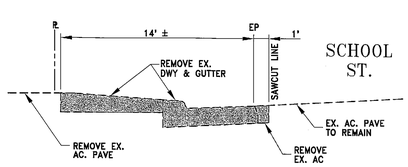
- EX. AC. PAVE TO BE REMOVED
- EX. CONC. PAVE TO BE REMOVED
- EX. CONC. SWK, DWY, C&G PAVE TO BE REMOVED

DEMOLITION NOTES:

1. PRIOR TO COMMENCING DEMOLITION WORK, CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY AGENCIES TO REMOVE EXISTING UTILITES.
2. CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY AGENCIES TO PULL ELECTRIC, CATV AND TELEPHONE TO UTILITY CLOSET.
3. EXISTING BUS STOP SIGN TO BE TEMPORARILY RELOCATED AND RE-INSTALLED IN ITS ORIGINAL LOCATION AT THE COMPLETION OF SIDEWALK IMPROVEMENT. CONTRACTOR SHALL COORDINATE TEMPORARY LOCATION OF BUS STOP SIGN WITH AC TRANSIT PRIOR TO RELOCATING SIGN.



1-1 TYPICAL SECTION: SIDEWALK & CURB REMOVAL
N.T.S.



2-2 TYPICAL SECTION: DRIVEWAY REMOVAL
N.T.S.

No.	Description	Date

35th @ School

Oakland, CA 94619

APN 028-0951-012-01

DEMOLITION PLAN

REGISTERED PROFESSIONAL ENGINEER ALAN MARK WALDMAN No. 38905 Exp.03-31-15 CIVIL STATE OF CALIFORNIA

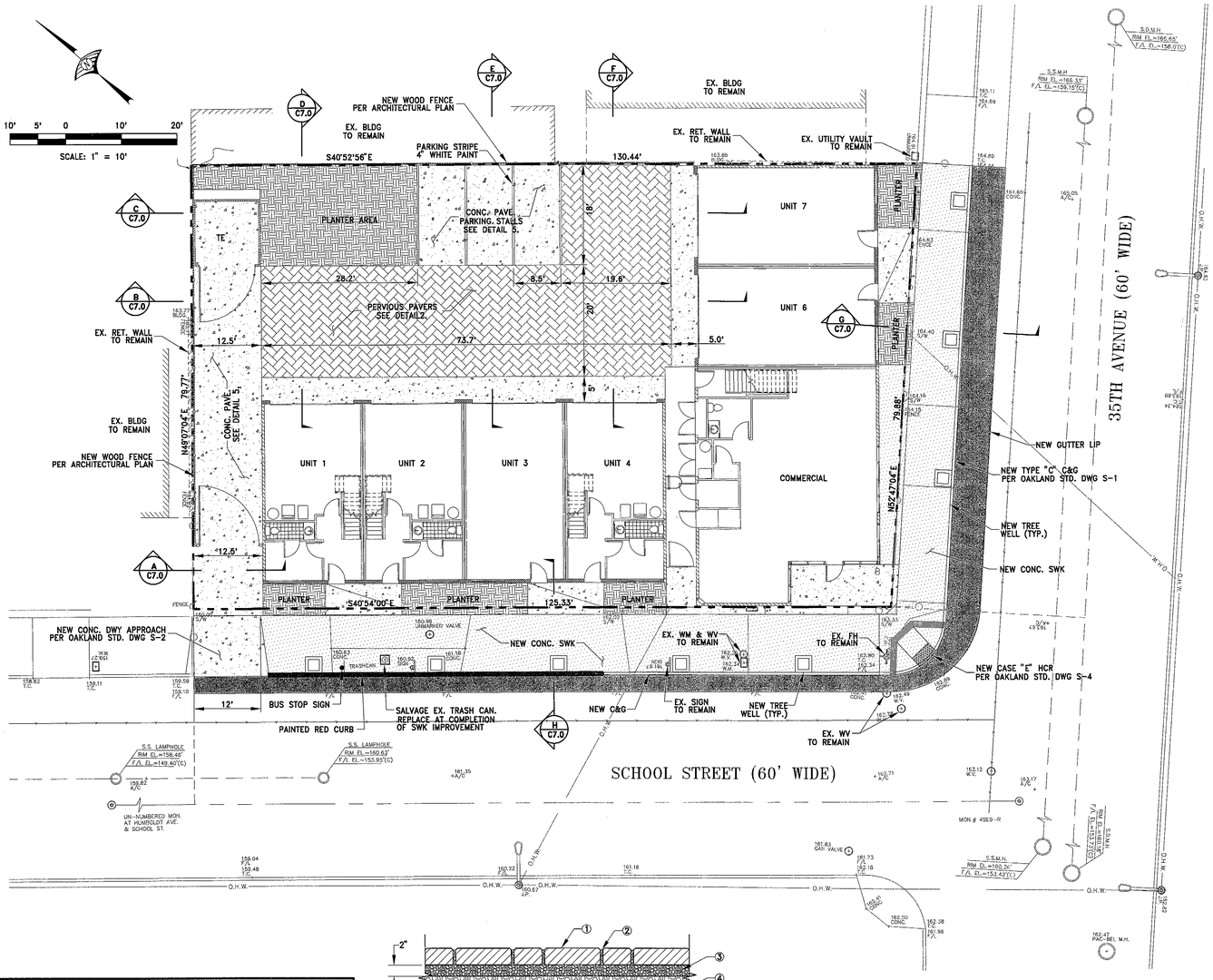
Pacific Engineering & Construction, Inc.

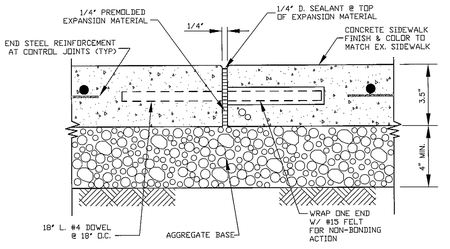
Consulting Engineers & Contractors

35 Stillman Street, Suite 126, San Francisco, CA 94107
Phone/Fax: (415) 974-1853 Cell phone: (415) 516-8545
email: amwaldman@sbcglobal.net

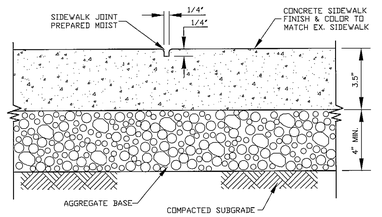
0714	
11/14/07	
PVT	
AMW	
1"=10'	

C3.0

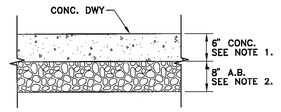




3 ~ **TYPICAL SIDEWALK EXPANSION JOINT**
N.T.S.

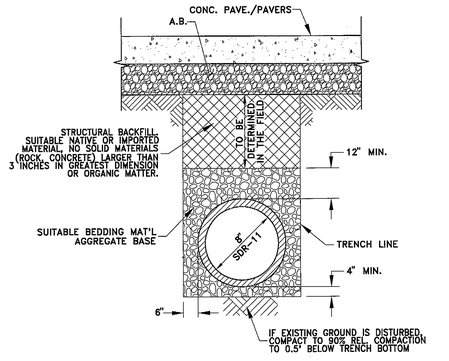


4 ~ **SIDEWALK CONTROL JOINT DETAIL**
N.T.S.

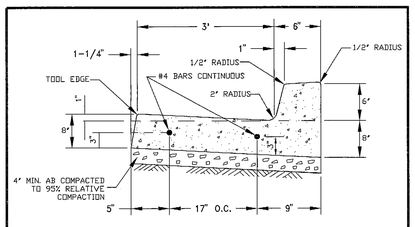


NOTE: 1. CONCRETE SHALL BE MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2500 PSI IN ACCORDANCE WITH SUB-SECTION 201-1 OF THE CITY OF OAKLAND STANDARD SPECIFICATIONS, UNLESS OTHERWISE NOTED.
2. BASE MATERIAL SHALL CONFORM TO SUB-SECTION 200-2.5 OF THE CITY OF OAKLAND STANDARD SPECIFICATIONS, UNLESS OTHERWISE NOTED.

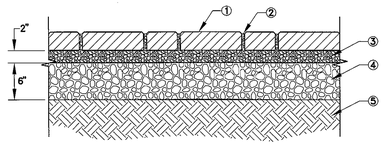
5 ~ **CONCRETE DRIVEWAY SECTION**
N.T.S.



6 ~ **TRENCH PAVEMENT RESTORATION DETAIL**
N.T.S.



1 ~ **MODIFIED CURB AND GUTTER DETAIL**
N.T.S.



① PERMEABLE INTERLOCKING PAVERS FINISH/COLOR: PER OWNER.
② TYPICAL NO. 8 AGGREGATE IN OPENINGS
③ BEDDING 2" THICK (TYP. NO. 8 AGGREGATE)
④ 6" MIN. THICK NO. 2 STONE SUBBASE
⑤ SUBGRADE COMPACTED TO 95%

NOTE: PERMEABLE PAVERS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. PAVERS AVAILABLE AT CALSTONE (408) 984-8800; SUNNYVALE, CA.

2 ~ **PERMEABLE PAVERS DETAIL**
N.T.S.

REGISTERED PROFESSIONAL ENGINEER MARK WALDMAN No. 38905 Exp.03-31-15 CIVIL STATE OF CALIFORNIA

Pacific Engineering & Construction, Inc.
Consulting Engineers & Contractors
35 Stillman Street, Suite 126, San Francisco, CA 94107
Phone/Fax: (415) 974-1853 Cell phone: (415) 516-8545
email: amwaldman@sbcglobal.net

No.	Description	Date

35th @ School

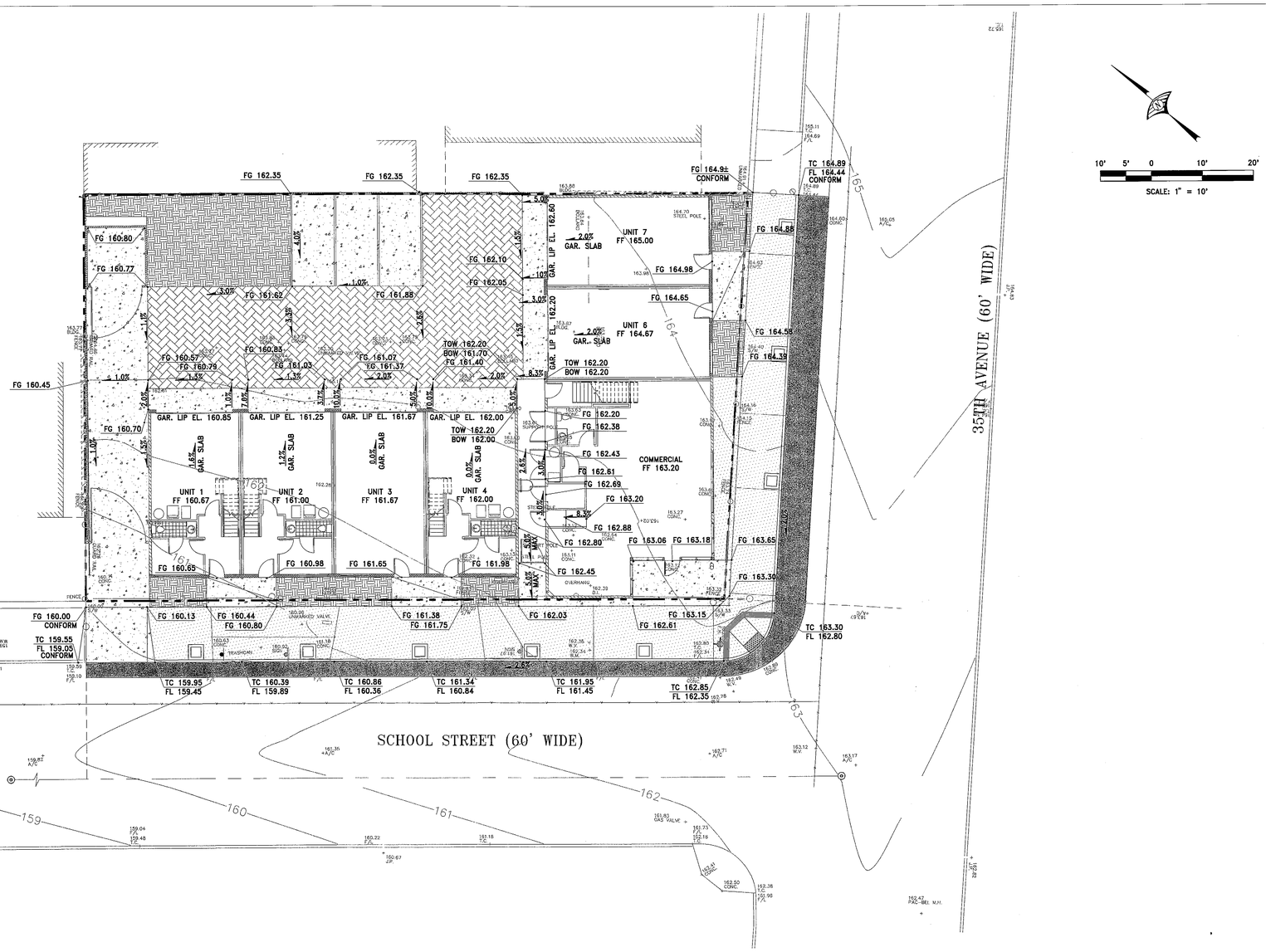
Oakland, CA 94619

APN 028-0951-012-01

SITE PLAN

0714	
11/14/07	
PVT	
AMW	
1"=10'	

C4.0



No.	Description	Date

35th @ School

Oakland, CA 94619

APN 028-0951-012-01

GRADING & PAVING PLAN

0714
11/14/07
PVT
AMW
1"=10'

C5.0

REGISTERED PROFESSIONAL ENGINEER
MARK WALDMAN
No. 38905
Exp.03-31-15
CIVIL
STATE OF CALIFORNIA

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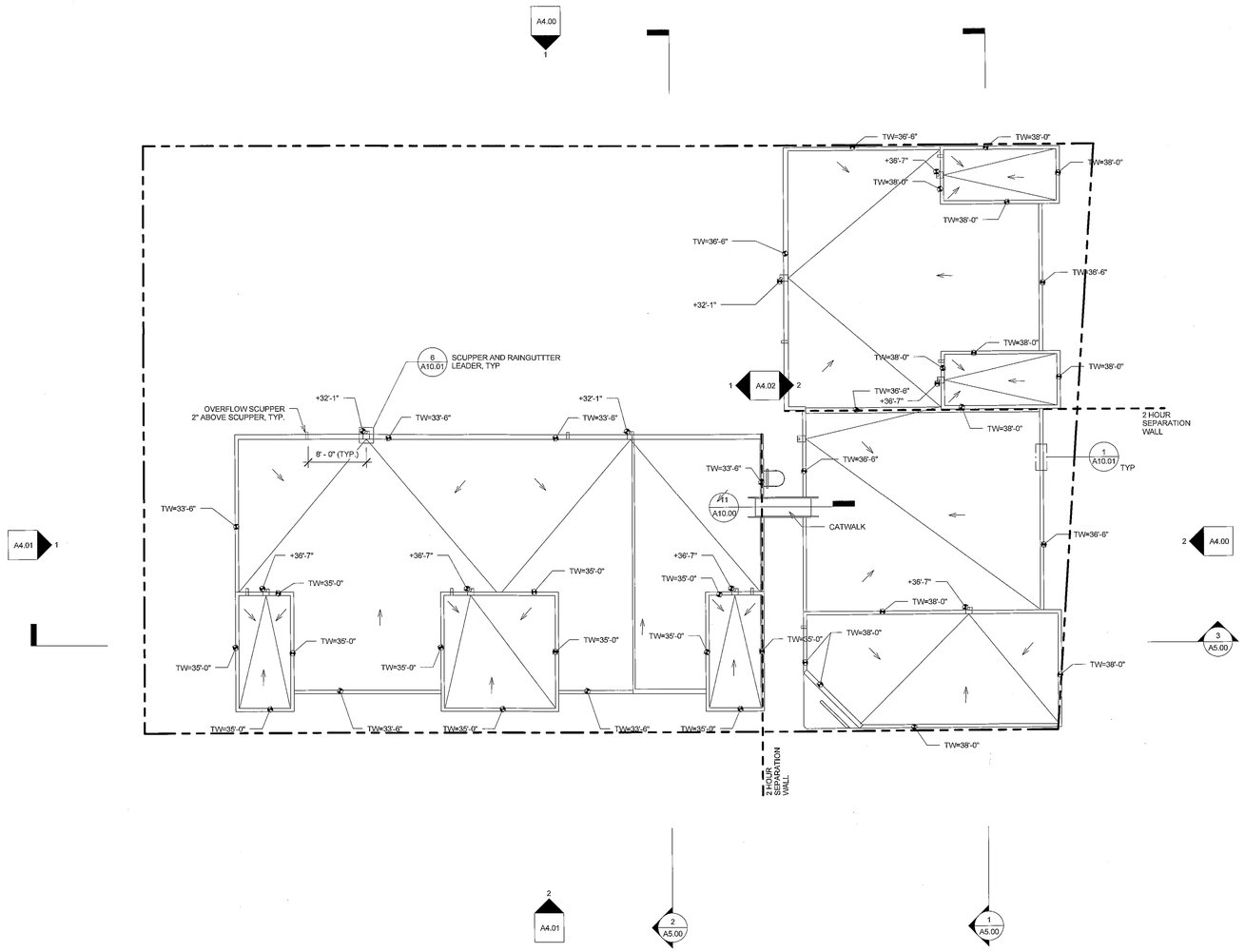


1 ROOF AT UNITS 1-4
1/8" = 1'-0"

ROOF PLAN LEGEND	ROOFING NOTES
	1. REFER TO SERIES A10 FOR TYPICAL FLASHING AT ROOF PENETRATIONS 2. ROOFING MATERIAL TO BE CLASS 'A' FOUR PLY, BUILT-UP ROOFING WITH A MINERAL CAP SHEET. UL CLASSIFICATION , CLASS 'A' INSTALLATION PER MANUFACTURER'S SPECIFICATION SEE DETAIL 1 ON SHEET A10.01 3. ALL BUILT-UP ROOFS TO HAVE A MINIMUM 1/4" PER FOOT SLOPE IN ALL DIRECTIONS INCLUDING CRICKETS AND VALLEYS 4. REFER TO DETAIL 7 ON SHEET A9.00 FOR ROOF ASSEMBLY 5. 6. 7.

ARCHITECTURE

PHILIP BANTA & ASSOCIATES

8050 HOLLIS STREET
EMERYVILLE, CALIFORNIA 94608

TEL. | 510.654.3255
FAX. | 510.654.3250
www.bantadesign.com

REVISIONS: △ ISSUES: ○

No.	Description	Date
△	1ST PLAN CHECK REVIEW	01/14/14
(1)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

APPROVED
BUILDING SERVICES
PLAN CHECK SECTION
For Substantial Compliance With
Codes and Ordinances
REVISIONS NEED APPROVAL
BY:
BUILDING CODE
SUBJECT TO UBC SECT 105.4.3
NC SECT 105.4 & IRC SECT R105.6
SURVEY (REVIEW ONLY)
PLOT PLAN REVIEW
PARKING/DWY LAYOUT
GRADING AND
EROSION CONTROL
SOILS REPORT ON FILE
BY:
DATE:
HEIGHT ZONING RECORD

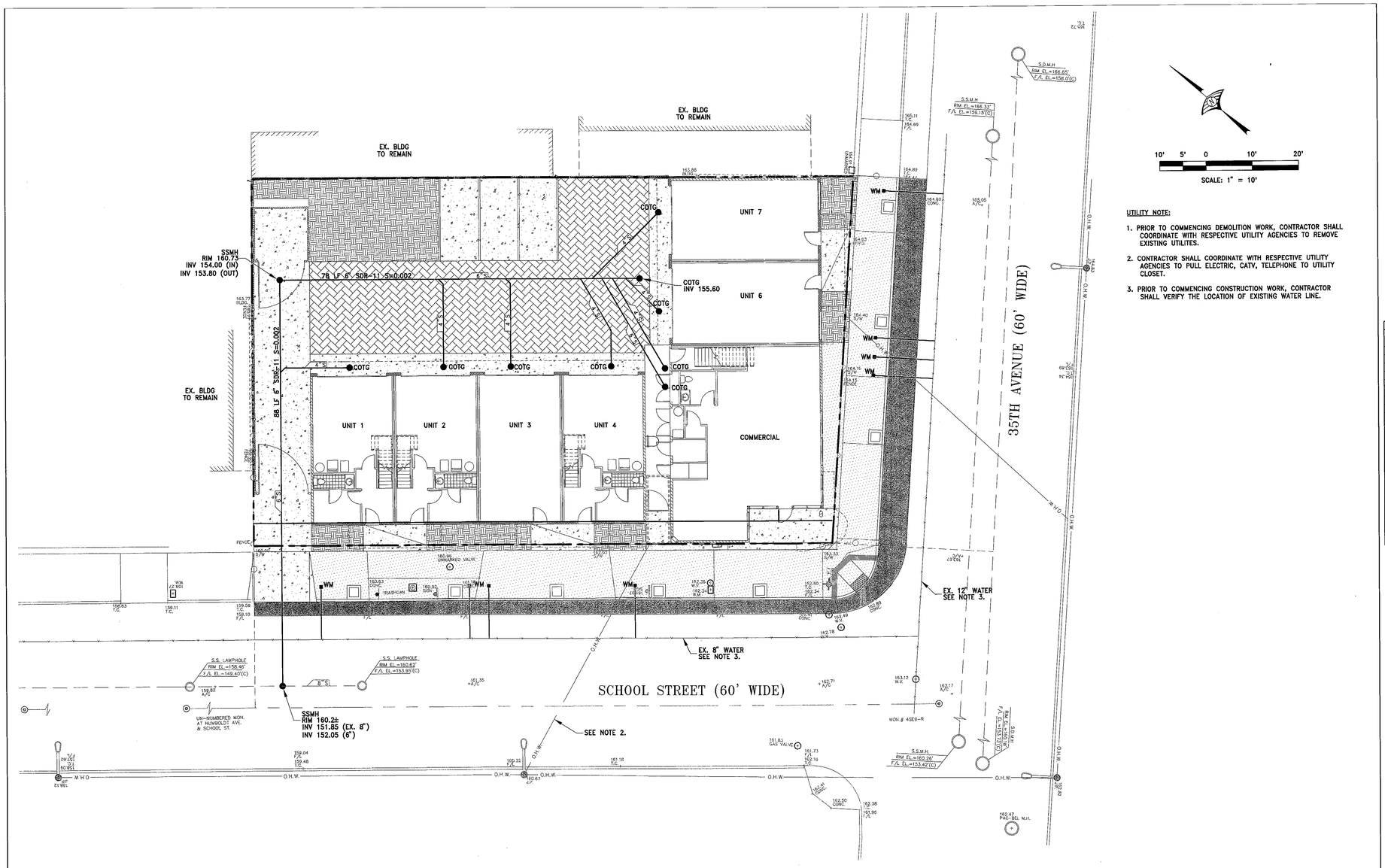
SHEET DESCRIPTION:

ROOF PLAN

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/8" = 1'-0"

A1.04

12/7/2013 4:05:59 PM



UTILITY NOTE:

1. PRIOR TO COMMENCING DEMOLITION WORK, CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY AGENCIES TO REMOVE EXISTING UTILITES.
2. CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY AGENCIES TO PULL ELECTRIC, CATV, TELEPHONE TO UTILITY CLOSET.
3. PRIOR TO COMMENCING CONSTRUCTION WORK, CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING WATER LINE.

No.	Description	Date

35th @ School

Oakland, CA 94619

APN 028-0951-012-01

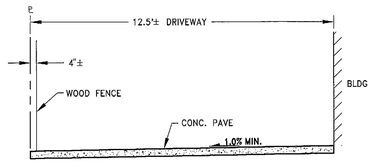
UTILITY PLAN

REGISTERED PROFESSIONAL ENGINEER
ARM WARK WALDMAN
No. 38905
Exp.03-31-15
CIVIL
STATE OF CALIFORNIA

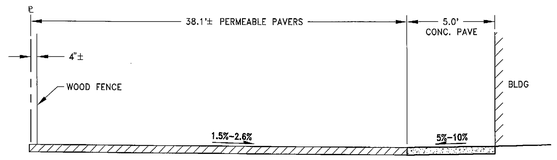
Pacific Engineering & Construction, Inc.
Consulting Engineers & Contractors
35 Stillman Street, Suite 126, San Francisco, CA 94107
Phone/Fax: (415) 974-1853 Cell phone: (415) 516-8545
email: amwaldman@sbcglobal.net

	0714
	11/14/07
	PVT
	AMW
	1"=10'

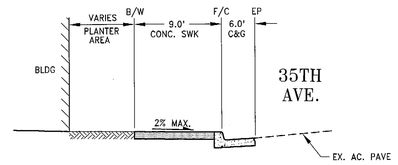
C6.0



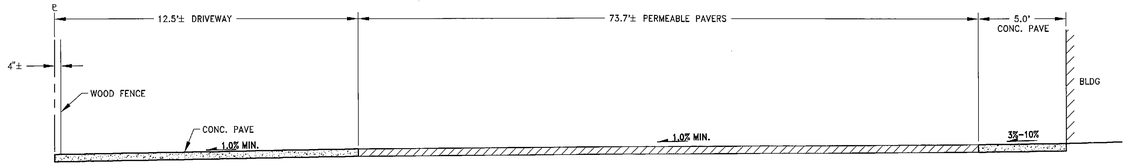
A C4.0 **CROSS-SECTION A**
N.T.S.



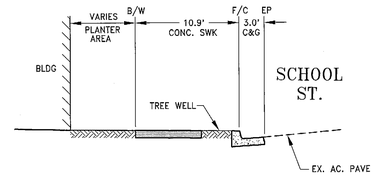
F C4.0 **CROSS-SECTION F**
N.T.S.



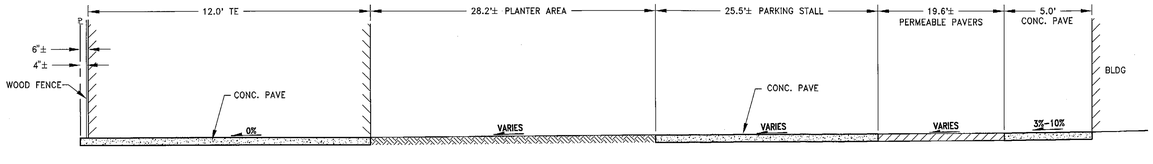
G C4.0 **CROSS-SECTION G**
N.T.S.



B C4.0 **CROSS-SECTION B**
N.T.S.



H C4.0 **CROSS-SECTION H**
N.T.S.



C C4.0 **CROSS-SECTION C**
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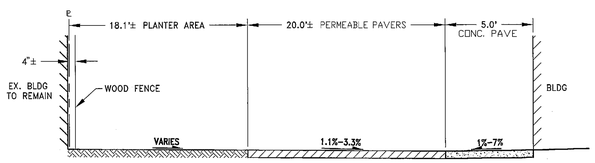
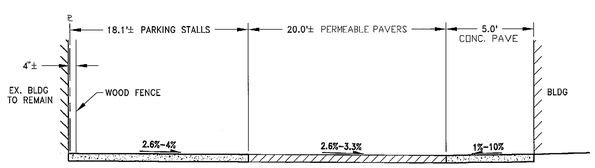


D C4.0 **CROSS-SECTION D**
N.T.S.



E C4.0 **CROSS-SECTION E**
N.T.S.

No.	Description	Date

35th @ School

Oakland, CA 94619

APN 028-0951-012-01

SECTIONS & DETAILS

REGISTERED PROFESSIONAL ENGINEER
ALAN MARK WALDMAN
No. 38905
Exp. 03-31-15
CIVIL
STATE OF CALIFORNIA

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Consulting Engineers & Contractors
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Phone/Fax: (415) 974-1853 Cell phone: (415) 516-8545
email: amwaldman@sbcglobal.net

	0714
	11/14/07
	PVT
	AMW
	AS SHOWN

C7.0

GAS FURNACE & COOLING COIL SCHEDULE

EQUIP. TAG	MANUFACTURER & MODEL	AREA SERVED	SUPPLY FAN SECTION: LOCATION	SUPPLY AIR (cfm)	OUTSIDE AIR (cfm)	PRESSURE DROP (inWC)	MOTOR HORSE-POWER (hp)	COOLING/HEATING: ENTERING AIR TEMP. DB/WB (degF)	SENSIBLE COOLING CAPACITY (Mbtuh)	TOTAL COOLING CAPACITY (Mbtuh)	AMBIENT TEMP (degF)	EER	SEER	2ND STAGE HEATING INPUT (Mbtuh)	AFUE	ELECTRICAL REQUIREMENTS: ELECTRICAL SERVICE (V/ph/Hz)	MCA (A)	MOCP (A)	DX PIPE GAS/LIQ. CONN. (in)	PIPE CONN. (in)	OPERATING WEIGHT (lbs)	REMARKS
GFF 1	CARRIER 58CTA070-12	COMMERCIAL TENANT	MECH. CLOSET	1,200	165	0.50	0.5	75.5/59.8	26.4	33.0	89	11.2	13.5	66.0	80	115/1/60	7.3	15.0	3/4 / 3/8	1/2	124	1 2 3 4 5 6 7
GFF 2	CARRIER 58CTA070-12	RESIDENTIAL UNIT TYPE A & A2	MECH. CLOSET	1,200	SEE TABLE	0.50	0.5	78.0/61.3	26.4	33.0	89	11.2	13.5	66.0	80	115/1/60	7.3	15.0	3/4 / 3/8	1/2	124	1 2 3 4 5 6 7
GFF 3	CARRIER 58CTA110-22	RESIDENTIAL UNIT TYPE B	MECH. CLOSET	1,990	SEE TABLE	0.50	0.75	78.0/61.2	44.8	56.0	89	11.0	13.2	110.0	80	115/1/60	13.7	20.0	1-1/8 / 3/8	1/2	163	1 2 3 4 5 6 7

NOTES:

1. VERTICALLY MOUNTED GAS FURNACE WITH COOLING COIL.
2. REFRIGERANT LIQUID PIPING COMPONENTS: SHUT OFF VALVE, FILTER DRYER, ACCESS PORT, SOLENOID VALVE, MOISTURE & LIQUID INDICATOR AND THERMAL EXPANSION VALVE.
3. PROVIDE VIBRATION ISOLATORS.
4. PROVIDE MERV-13 FILTER FOR OUTSIDE AND RETURN AIR.
5. THERMOSTAT TO BE HONEYWELL TA 112-131.
6. GAS FURNACE TO BE LOCATED IN THE ROOM HAVING AT LEAST 50 CF PER 1,000 BTU OF GAS INPUT RATING.
7. REFRIGERANT DON'T CONTAIN CFC-S AND HALONS.

ASHRAE 62.2
REQUIRED FRESH AIR: (TOTAL SQFT/100) + (# OF BEDROOMS +1) X 7.5 CFM

TYPICAL RESIDENTIAL APARTMENT	UNIT A	UNIT B
PER ASHRAE 62.2	50 CFM	60 CFM

SPLIT SYSTEM COOLING ONLY CONDENSING UNIT SCHEDULE

UNIT NO.	SERVES	MANUFACTURER	MODEL	PERFORMANCE: COOLING (MBH)	EER/SEER	HEATING (MBH)	HSPF	CONDENSER: FANS	HP EACH	FLA (AMPS)	AMB TEMP	SATURATED SUCT. TEMP	ELECTRICAL REQUIREMENTS: MCA	MOCP	VOLT/PH/Hz	COMPRESSOR: NO.	R.L. AMPS L.R. AMPS	WEIGHT LBS	REMARKS
CU-1	GFF-1	CARRIER	24ACA336-30	33.0	11.2/13.5	–	–	1	1/4	1.4	89	45	19.0	30	208/1/60	1	14.1/77.0	166	1 2 3 4 5 6
CU-2	GFF-2	CARRIER	24ACA336-30	33.0	11.2/13.5	–	–	1	1/4	1.4	89	45	19.0	30	208/1/60	1	14.1/77.0	166	1 2 3 4 5 6
CU-3	GFF-3	CARRIER	24ACA360-30	56.0	11.0/13.2	–	–	1	1/5	1.2	89	45	34.2	50	208/1/60	1	26.4/134.0	261	1 2 3 4 5 6

NOTES:

1. ROOF MOUNTED COOLING ONLY CONDENSING UNIT.
2. PROVIDE WITH VIBRATION ISOLATORS AND SEISMIC RESTRAINT.
3. PROVIDE WITH DISCONNECT SWITCH.
4. PROVIDE WITH COMPRESSOR SHORT CYCLE PROTECTOR.
5. PROVIDE WITH LOW AMBIENT CONTROL.
6. VERIFY REFRIGERANT PIPE SIZES TO COMPLY WITH MANUFACTURER'S RECOMMENDATIONS.

EXHAUST FAN SCHEDULE

EQUIP. TAG	MANUFACTURER & MODEL	SERVICE	LOCATION	AIR FLOW (cfm)	TOTAL STATIC PRESSURE (inWC)	REVOL./ MINUTE (rpm)	MOTOR HORSE-POWER (hp)	ELECTRICAL SERVICE (V/ph/Hz)	OPERATING WEIGHT (lbs)	REMARKS
EF 1	PANASONIC FV-15VQL4	UNITS' RESTROOMS & BATHROOMS	CEILING	40-95	0.3	1,240	35.7 watts	115/1/60	14	1 2 3 4 5
DBF 1	FANTECH RVF4XL	APARTMENT DRYERS	EXTERIOR WALL	100	0.90	2,690	92.0	115/1/60	–	6 7
DBF 2	FANTECH FR110	APARTMENT DRYER-UNIT 5	CEILING	100	0.90	2,761	78.0 watts	115/1/60	–	7 8

NOTES:

1. CEILING MOUNTED COMBINATION GRILLE/LIGHT/EXHAUST FAN.
2. TOILET LIGHT SWITCH OPERATED, WITH 10 SECONDS DELAY OF SWITCHING OFF.
3. PROVIDE BACKDRAFT DAMPER.
4. PROVIDE WITH FLEXIBLE DUCT CONNECTIONS.
5. PROVIDE WITH VIBRATION ISOLATORS.
6. DRYER BOOSTER FAN (EXTERIOR WALL MOUNTED).
7. EQUIPPED WITH DRYER BOOSTING KIT AND SECONDARY LINT FILTER TRAP.
8. DRYER BOOSTER FAN (IN-LINE CEILING MOUNTED).

AIR DEVICE SCHEDULE

MARK	NECK SIZE	DIFFUSER FACE OR CEILING GRID SIZE (INCHES)	TYPE: DIFFUSER	REGISTER	GRILLE	(NO.) & AIR PATTERN / CFM RANGE	MOUNTING: LAY-IN	SURFACE	DUTY: SUPPLY	RETURN	EXHAUST	TRANSFER	MFR.	MODEL NO.	REMARKS
SG-1	10"X6"	11-3/4"X7-3/4"	–	–	X	100-180	–	X	X	–	–	–	TITUS	300RS	1 2 3
SG-2	14"X6"	15-3/4"X7-3/4"	–	–	X	245	–	X	X	–	–	–	TITUS	300RS	1 2 3
SG-3	6"ø	11-3/4"X11-3/4"	–	–	X	50-90	–	X	X	–	–	–	TITUS	300RS	1 2 3
SG-4	30"X6"	31-3/4"X7-3/4"	–	–	X	450	–	X	X	–	–	–	TITUS	300RS	1 2 3
RG-1	20"X20"	20-3/4"X20-3/4"	–	–	X	-1,200	–	X	–	X	–	–	TITUS	350RL	2 3
RG-2	24"X22"	24-3/4"X22-3/4"	–	–	X	-1,990	–	X	–	X	–	–	TITUS	350RL	2 3
RG-3	24"X16"	24-3/4"X16-3/4"	–	–	X	-1,200	–	X	–	X	–	–	TITUS	350RL	2 3
TG-1	18"X12"	20-1/4"X14-1/4"	–	–	X	90-180	–	X	–	–	–	X	TITUS	T-700L	2 3 4
TG-2	30"X28"	32-1/4"X30-1/4"	–	–	X	90-180	–	X	–	–	–	X	TITUS	T-700L	2 3 4

NOTES:

1. PROVIDE OPPOSED BLADE DAMPER.
2. TYPE AND CFM SHALL BE AS INDICATED ON DRAWING M2.1&M2.2 AT EACH GRILLE OR DIFFUSER.
3. SELECTION OF THE FINISHES OF AIR DISTRIBUTION DEVICES BY INTERIOR DESIGNER/ARCHITECT.
4. DOOR MOUNTING APLICATION.

MECHANICAL LEGEND

SYMBOL & ABBREVIATION	DESCRIPTION
SA/SUP	SUPPLY AIR (RISE/DROP)
RA/RET	RETURN AIR DUCT (RISE/DROP)
EA/EXH	EXHAUST AIR DUCT (RISE/DROP)
CD/SR	CEILING DIFFUSER/SUPPLY REGISTER (ARROWHEAD REPRESENTS NUMBER OF THROW)
RR/RG	RETURN REGISTER/GRILLE
ER/EG	EXHAUST REGISTER/GRILLE
	RECTANGULAR DUCT ELBOW WITH TURNING VANES
FC	FLEXIBLE CONNECTION
MVD	MANUAL VOLUME DAMPER
FD	FIRE DAMPER
(L)	DUCT LINING (1" THICK UNLESS OTHERWISE NOTED)
SD	SMOKE DETECTOR
	DUCT TRANSITION (RECTANGULAR TO ROUND)
FLEX	FLEXIBLE DUCT (5'-0 MAXIMUM)
T	T-STAT PROGRAMABLE THERMOSTAT AT 48" AFF
S	SENSOR AT 48" AFF
CD	CONDENSATE DRAIN
Ø DIA.	DIAMETER
DL	DOOR LOUVER
UC	DOOR UNDERCUT (3/4" MINIMUM)
M	FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.
E	FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
ME	FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.
CO2	CARBON DIOXIDE SENSOR
SD-1 100	AIR OUTLET/INLET DEVICE DESIGNATION(S-SUPPLY, R-RETURN, E-EXHAUST) AIR QUANTITY IN CFM
A.F.F.	ABOVE FINISHED FLOOR
BD	BALANCING DAMPER
BDD	BACK DRAFT DAMPER
BHP	BRAKE HORSEPOWER
BMS	BUILDING MANAGEMENT SYSTEM
BTU	BRITISH THERMAL UNIT
CB	CIRCUIT BREAKER
CC	COOLING COIL
CFF	CAP FOR FUTURE
CLG.	CEILING
CONN.	CONNECT/CONNECTION
CONT.	CONTINUATION
CONT'R	CONTRACTOR
CFM	CUBIC FEET PER MINUTE
DB	DRY BULB
DIA	DIAMETER
DET.	DETAIL
DISC.	DISCONNECT
DWN.	DOWN
DX	DIRECT EXPANSION
(E)	EXISTING
EAT	ENTERING AIR TEMPERATURE
EDB	ENTERING DRY BULB
EF	EXHAUST FAN
EFF	EFFICIENCY W/ WITH
EWB	ENTERING WET BULB
°F	DEGREES FAHRENHEIT
FLEX.	FLEXIBLE CONNECTION
FLA	FULL LOAD AMPERES
FT.	FEET
GA.	GAGE/GAUGE
GC	GENERAL CONTRACTOR
HP	HORSE POWER
HR	HOUR
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
ID	INSIDE DIMENSION
IN	INCHES
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LRA	LOCKED ROTOR AMPERES
MAX	MAXIMUM
MBH	THOUSAND BTU PER HOUR
MFG	MANUFACTURER
MECH.	MECHANICAL
MIN	MINIMUM
(N)	NEW
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OA/OSA	OUTSIDE AIR
PD	PRESSURE DROP
PSI	POUNDS PER SQUARE INCH
R	RISE
(R)	EXISTING TO BE RELOCATED
RA	RETURN AIR
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
SA	SUPPLY AIR
SENS	SENSIBLE
SF	SUPPLY FAN OR SQUARE FEET
SP	STATIC PRESSURE
S/S	STAINLESS STEEL
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VAR	VARIABLE
VFD	VARIABLE FREQUENCY DRIVE
WB	WET BULB
WG	WATER GAUGE
AC 1	MECHANICAL EQUIPMENT DESIGNATION DESIGNATED NUMBER

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS ARE NECESSARILY USED IN THIS PROJECT.

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO 2010 CALIFORNIA MECHANICAL CODE WITH LOCAL AMENDMENTS(2010 CALIFORNIA BUILDING CODE WITH LOCAL AMENDMENTS AND ALL OTHER APPLICABLE CODES AND REGULATIONS.
2. THE CONTRACTOR SHALL PAY FOR ALL PERMITS AND FEES.
3. CONDENSATE DRAIN PIPING AND FINAL CONNECTION TO UNIT BY PLUMBING CONTRACTOR.
4. ROOF CURB FOR ROOF MOUNTED UNIT, DUCT PENETRATION, CUTTING AND PATCHING BY GENERAL CONTRACTOR, UNLESS OTHERWISE NOTED ON PLAN.
5. CONNECT MAIN DUCT TO AIR CONDITIONING UNIT WITH WEATHERPROOF FLEXIBLE CONNECTION. SUN SHIELD OVER ENTIRE FLEXIBLE CONNECTION IS REQUIRED IF FLEXIBLE CONNECTION IS EXPOSED TO WEATHER.
6. THIS CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR FOR SIZE AND LOCATION OF DUCTWORK ROOF OPENINGS AND WITH ELECTRICAL CONTRACTOR FOR ELECTRICAL REQUIREMENTS OF ALL MECHANICAL EQUIPMENT AND ARCHITECTURAL DRAWINGS FOR AIR DISTRIBUTION LOCATION.
7. THE CONTRACTOR SHALL SUBMIT BID BASED ON THE DRAWINGS AND ALTERNATE FOR COST SAVING. THESE DRAWINGS ARE FOR BIDDING PURPOSES.
8. COORDINATE ENTIRE INSTALLATION OF ROOFTOP UNITS WITH THE WORK OF ALL OTHER TRADES PRIOR TO ANY INSTALLATION, PROVIDE ALL FITTINGS, OFFSETS, AND TRANSITIONS AS REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
9. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, EQUIPMENT, TRANSPORTATION AND SERVICES NECESSARY FOR COMPLETION OF THE WORK. ALL MATERIALS AND WORK SHALL COMPLY WITH APPLICABLE CODES AND GOVERNING REGULATIONS AND MEET THE APPROVAL OF THE LOCAL JURISDICTION.
10. ANY MATERIAL, ARTICLE OR PIECE OF EQUIPMENT OTHER THAN THAT INDICATED SHALL NOT BE USED UNLESS APPROVED IN WRITING BY THE ENGINEER AND ANY CHANGES IN MECHANICAL, ELECTRICAL AND/OR OTHER SYSTEMS REQUIRED DUE TO SUCH SUBSTITUTION SHALL BE THE RESPONSIBILITY OF THE HVAC CONTRACTOR; AND AT NO ADDITIONAL COST TO THE OWNER.
11. EXHAUST TERMINATION SHALL BE MINIMUM 10'-0" AWAY OR 3'-0" ABOVE ANY FRESH AIR INTAKE, OPERABLE WINDOWS, DOORS AND 10'-0" MINIMUM ABOVE GRADE.
12. TAKE ALL PRECAUTIONS NECESSARY TO PROTECT THE MATERIALS BEFORE, DURING AND AFTER INSTALLATION. IN THE EVENT OF DAMAGE, IMMEDIATELY REPAIR ALL DAMAGED AND DEFECTIVE WORK TO THE APPROVAL OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
13. THREE SETS OF OPERATING AND MAINTENANCE MANUALS SHALL BE SUBMITTED UPON COMPLETION OF PROJECT.
14. IN ADDITION TO EQUIPMENT WARRANTIES, FURNISH A WRITTEN GUARANTEE AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR ONE YEAR. GUARANTEE SHALL INCLUDE REPAIR OF DAMAGE TO, OR REPLACEMENT OF, ANY PART OF EQUIPMENT OR PREMISES CAUSED BY EQUIPMENT PROVIDED.
15. THESE DRAWINGS ARE DIAGRAMMATIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH ALL OTHER TRADES. THIS INCLUDES COORDINATING THE LOCATION AND SIZE OF ALL OPENINGS, LOCATIONS OF EQUIPMENT.
16. ALL MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION USING THE FOLLOWING:

    EQUIPMENT ON GRADE 20% OF OPERATING WEIGHT
    EQUIPMENT ON STRUCTURE 30% OF OPERATING WEIGHT

    FOR FLEXIBILITY MOUNTED EQUIPMENT (EG., SPRING ISOLATORS) USE 4 TIMES THE ABOVE VALUES, AND FOR SIMULTANEOUS VERTICAL FORCE USE 1/3 TIMES THE HORIZONTAL FORCE. THE ABOVE VALUES ARE FOR AN IMPORTANCE FACTOR 1=10.
17. EACH SYSTEM PROVIDING HEATING OR COOLING AIR IN EXCESS OF 2000 CFM SHALL BE EQUIPPED WITH AN AUTOMATIC SHUT-OFF. SHUT-OFFS SHALL STOP THE AIR MOVING EQUIPMENT WHEN SMOKE IS DETECTED IN MAIN SUPPLY AIR DUCT SERVED BY THE SYSTEM.

DRAWING SCHEDULE

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

REGISTERED PROFESSIONAL ENGINEER RYAN G. REBER No. M26078 MECHANICAL STATE OF CALIFORNIA

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
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SHEET DESCRIPTION:

LEGEND, NOTES & EQUIPMENT SCHEDULES

JOB NUMBER:	0714
SCALE:	N.T.S.
DATE:	12/12/13
DRAWN BY:	DS
CHECKED BY:	RT
CAD TITLE:	
SHEET NUMBER:	M0.01

OF SHEETS

SECTION 230000 – HEATING, VENTILATING AND AIR CONDITIONING

1.00 – GENERAL

1.01 DESCRIPTION OF WORK

Furnish and install complete and operative HVAC system as shown on the drawing and specified herein. Work shall include, but not be limited to the following:

A. AC unit, see schedules.
B. Toilet exhaust fan.
C. Automatic temperature controls system including time clock, by–pass timer, thermostats, control low–voltage interlock wiring and other associated devices.
D. Ductwork and air distribution systems.
E. Hangers and supports for ductwork, piping and HVAC equipment
F. Flashing of duct and pipe penetrations through exterior openings.
G. Roof curb and roof sleeper supports.
H. Duct Thermal and Acoustic Insulation.
I. License, Permits and associated fees.
J. Seismic restraints and bracing.

1.02 RELATED WORK INCLUDED UNDER OTHER SECTIONS

A. Plumbing, Section 15400.
B. Testing and Balancing Section 15990.
C. Line Voltage and Power Wiring, Electrical Section 16000.

1.03 EXAMINATION OF SITE

Visit site before submitting bid and check location of all existing conditions which will affect this work, verify dimensions and locations shown on drawings and cover all costs. Contractor shall assume reasonable variations or minor omissions and shall complete proposed work without additional cost. Failure to visit site will not lessen responsibility or entitle additional compensation for work not included in proposal.

1.04 DRAWINGS

The accompanying drawings shall be considered part of these specifications. Work and materials shown on the drawings and not mentioned in the specifications and vice versa shall be executed as if specifically mentioned or shown in both. The drawings shall be considered as schematic in nature and minor modifications of the work to comply with the structure as found shall be made.

1.05 RULES AND REGULATIONS

A. All work and material shall be in full accordance with the latest rules and regulations of the State Fire Marshal and other applicable State and local rules and regulations. Nothing in these drawings or specifications shall be construed to permit work not conforming to these codes.

B. Furnish without any extra charge any additional material and labor when required to comply with these laws, ordinances and codes regardless of whether shown or mentioned in these specifications of drawings.

1.06 SUBMITTALS

A. Submit for review to the Owner a complete and all–inclusive list of equipment and materials proposed for use (6 copies), accompanied by manufacturer's data sheets. Data shall be forwarded in a single package within 15 days after award of contract. Submit six blueline prints and one reproducible shop drawing showing proposed ductwork installation. Include sizes, locations and other required information to coordinate installation with other trades.

B. Within 5 days after award of contract, submit 6 copies of a letter stating any materials that contractor wishes to substitute, to the Owner for approval. Include such information as manufacturer's name, type of material, certified ratings, overall appearance, and necessary information to explain function and operation of material. All proposed substitutions shall be equal in quality, design, utility and appearance to material, equipment or method specified.

1.07 AS–BUILT DRAWINGS

A set of HVAC Prints will be furnished to the Contractor on which he shall indicate the installation "as–built" as the work progresses. Upon completion of the work, a set or reproducible drawings shall be obtained from the Owner at cost, and all changes as noted on the record set of prints shall be incorporated thereon. This set of reproducibles, along with one set of blueprints, shall be delivered to the Owner upon completetion and before final acceptance of the project.

1.08 GUARANTEE

The Contractor shall leave the entire installation in complete working order free from any defective material, workmanship or finish. He shall guarantee to repair or replace, without charge, defects due to faulty workmanship or material for a period of one year from the date of filing of the Notice of Completion.

1.09 OPERATION MANUALS AND OWNER INSTRUCTIONS

A. Provide complete operation and maintenance manuals covering all mechanical systems and equipment that have been installed. Three (3) copies of the manual shall be bound in hardback binders.

B. Provide instructions to store personel as to operation of all HVAC equipment and thermostats. Instruction period to commence for minimum of (2) hours and shall be scheduled at owner's convenience. Also, provide store manager with operation manual.

1.10 CUTTING AND PATCHING

A. The contractor shall do all cutting, drilling and patching which may be required for the installation of the work under this Section of the Specifications.

B. Patching shall be of the same workmanship, material, and finish and shall match accurately all surrounding construction in a manner satisfactory to the Owner. No cuting of the structure shall be permitted without written approval of the Owner.

2.00 – PRODUCTS

2.01 DUCTWORK

Shall be as specified in the following schedules. Materials shall be clearly stamped or marked with grades and gauges.

A. Sheet metal rectangular ductwork, plenums and casing construction shall be in strict accordance with the HVAC Duct Construction Standards – Metal and Flexible, and the Sheet Metal Construction For Ventilating/Air Conditioning Systems, latest edition as issued by SMACNA and ASHRAE respectively.

B. Sheet metal round: Shall be United Sheet Metal, or approved equal, spiral "Uniseal" with "Uniform" fittings, machine formed.

C. Materials for ductwork shall be galvanized steel, of gauges shown in the SMACNA HVAC Duct Construction Standards. All ductwork shall be constructed in accordance with the pressure–velocity classification standards no less than +/– 2" WG and duct sealing requirements of Class C (minimum).

2.02 PIPING

The contractor shall furnish and install a complete refrigerant piping system between the indoor fan units and outdoor units.

A. Refrigerant piping shall be type "L" hard drawn copper tubing (ASTM B88). Tubing shall be clean, capped & nitrogen charged.

B. All fittings and joints shall be wrought copper or cast bronze (ANSI B16.22). All copper to copper joints shall be brazed with copper–phosphorus alloy and all other joints shall be brazed with Silfos–5 alloy.

C. All elbows are to be long radius type.

2.03 DUCTWORK ACCESSORIES

A. Damper Operators
1. Ducts with external insulation: Ventlock #637, DuraDyne, Young, or approved equal.
2. Ducts with internal insulation and/or no insulation: Ventlock #635, DuraDyne, Young, or approved equal.

B. Flexible Connections: Ventfabrics "Ventglas", DuraDyne, or approved equal, U.L. approved with metal attachment.

C. Turning Vanes shall comply with SMACNA HVAC Duct Construction Standards All rectangular duct with mitered elbows shall be fitted with turning vanes.

D. Spin–In–Fittings are not allowed. Use United McGill Bellmouth fitting for round duct taps.

E. Support ductwork according to the SMACNA Duct Construction Standards and the drawings.

F. Access Doors In Ductwork: Shall be Ventlock, Ductmate or approved equal, stamped or formed insulated access doors complete with all hardware and sealant.

G. Joint Sealing:
1. The following items are to be sealed with Hardcast DT tape and adhesive:
a. Longitudinal and transverse seams of rectangular ductwork.
b. All round fittings and joint connectors use FTA–20 for indoor use and RTA–20 for outdoor use.

H. Bracings, hangers, nuts, etc. shall be galvanized.

I. Curved elbows shall have centerline radius equal to one and one–half times duct width in plane of turn.

J. Square elbows shall have turning vanes. Miter elbows (not square) shall have splitter vanes 3 inches o.c.

K. Volume dampers shall be constructed to SMACNA Standards and shall be Young Regulator model 4040 for round ducts and series 820 for rectangular ducts

2.04 AIR DEVICES

Diffusers, Grilles and Registers: Titus was shown.
Furnished and installed by Mechanical Contractor. Provide volume dampers and paint interior flat black. Size, finish, frame types and accessories as shown on the drawings.

2.05 AIR CONDITIONING EQUIPMENT

A. Furnish and install CARIER or equal air conditioning equipment as specified on the drawings and in these specifications.

2.06 INSULATION (Installed per Manufacturer's Recommendations)

A. Heating and Cooling Ductwork located in interior locations
1. Insulate with 1–1/2" thick Owens–Corning Fiberglas all service faced Duct Wrap Type 150 with factory applied flame retardant Foil Reinforced Kraft Facing (FRK–25 UL Labelsd), or approved equal. Installed thermal resistance shall be a minimum of 4.5.

B. Acoustical Ductwork and Plenum and Casing Liner
1. Provide internally lined ductwork where indicated on drawings. Acoustical duct liner shall be tralite duct liner, or equal, matte face, 3 lb. density, 1" thick, suitable for velocities from 1500 to 4000 fpm, in compliance w/ UL723 and UL181. Secure liner to ductwork with adhersive and mechanical fansteners per SMACNA Duct Liner application standard.
2. Where internal insulation is applied, duct and plenum sizes as shown on the drawings shall be inside clear dimensions.
3. Fiberglas duct and plenum insulation are to be applied only with manufacturer's approved adhesives, mastics and mechanical fastening devices.

C. Soft flexible duct.
1. Genflex NIL(s). 7–0" maximum length unless noted otherwise. Class 1 rating with R value of 4.2 minimum.

D. Insulation.
1. Foil faced fiberglass, Owens Corning type 75 or equal, 1–1/3" thick. Flame spread rating of not more than 25 and a smoke development rating of not more than 50.

E. Duct liner.
1. For exterior ducts: Fiberglass 1–1/2" thick with fire rated black coating, 1–1/2 Lbs. per cubic foot minimum density. Owens Corning Aeroflex type 150.
2. For other locations shown on drawings: Aeroflex type 150, as above, except 1 inch thick. Flame spread rating of not more than 25 and smoke developed rating of not more than 50.
3. An EPA–Approved biocide in the airstream coating enables Owens–Corning duct liners to resist fungal or bacterial growth when subjected to microbial attack described in ASTM C 665 and standard practices ASTM G 21 (fungus test) and G 22 (bacteria test).

2.07 TEMPERATURE CONTROL SYSTEM

A. Provide time clock control systems with interface to HVAC equipment. Control system shall be capable of providing optimal start/stop function, time of day scheduling and remote modem communications.

B. Contractor shall furnish all necessary control devices (relays, contacts, etc.) and shall obtain direction from manufacturer on actual wiring requirements.

2.08 SEISMIC RESTRAINTS AND BRACING

A. All HVAC equipment, ductwork, piping and wiring conduits shall be installed to meet the lateral bracing requirements for the applicable seismic zone. Provide seismic restraints in accordance with Seismic Hazard Level (SHL) A of the "Seismic Restraint Manual: Guidelines for Mechanical Systems" dated 1991, as published by S.M.A.C.N.A. and also in accordance with applicable local building codes.

B. All HVAC equipment shall have proper anchoring and restraint systems, and shall be secured to a structure, equipment pad or other structural member to prevent lateral, vertical or overturning movement without sacrificing any resilient vibration isolation requirements.

3.00 INSTALLATION AND EXECUTION

3.01 INSTALLATION REQUIREMENTS

A. Ductwork:
1. Duct branches shall be fitted with volume or splitter damper and where required, extraction damper. All accessible volume controls shall have locking quadrants. All inaccessible controls (dampers, etc.) shall be provided with permanent extensions to accessible spaces. Branch volume controls are in addition to volume controls at the registers and diffusers.
2. Air inlets, outlets shall be properly set in place. Registers and grilles shall be tightly sealed.
3. Transitions in size of ducts shall be made by uniformly tapering sections having 1 inch increase in width for each 7 inches of run unless construction limitations require a more abrupt transition.
4. Diffusers, Grilles and Registers: Each register and diffuser shall be equipped with a volume damper or air extractor. Paint interior surface of all units flat black. Face and trim of all units shall be finished. Size, finish, frames, accesories, capacity and pattern as shown on drawings.
5. Contractor shall provide manual volume dampers at all branch ductwork in supply air, return air and outside air systems (whether shown on plans or not) where required for air balancing of HVAC systems.

B. Refrigerant Piping:
1. Suction lines shall have adequate lift traps and/or double suction risers to meet the requirements of field conditions and equipment manufacturer's recommendations.
2. Braze all joints with silfos–5 starting at the indoor unit and working toward the outdoor unit. The seals on the outdoor unit shall be broken last. A nitrogen bleed shall be used during all brazing and any time the system is open. All open lines shall be capped and sealed before leaving the site during construction. Pressure test for leaks with an inert gas up to 245 psig. Redo leaking joints and retest until system is tight. Evacuate entire system to 200 microns of mercury. Charge system with 25 psi of R–22 and an inert gas to 245 psi and retest system with halide leak detector. All leaking joints must be completely resealed until no leaks exist. Turn on crank case heaters 24 hours prior to starting compressor to be sure all refrigerant liquid is out of the compressor.
3. Upon completion of testing, but before the refrigerant piping insulation is applied, the piping must be inspected by a representative of the local governing authority as necessary.
4. Insulate the refrigerant suction lines and condensate lines only with rubatex or armstrong 1 inch thick pipe insulation with flame spread rating of not more than 25 and a smoke developed rating of not more than 50 in accordance with industry standards. Do not insulate the hot gas (liquid) lines or any hot gas bypass lines if applicable.

3.02 TESTING AND BALANCING (also see Section 15990)

Balancing of the air conditioning system will be performed by an independent test and balancing agency. The mechanical contractor shall cooperate with the selected test and balance agency in the following manner:

A. Provide sufficent time before final completion date so that test and balancing can be accomplished.

B. Provide immediate labor and tools to make corrections when required without undue delay. Install balancing dampers as required by test and balance agency.

C. The contractor shall put all heating, ventilating and air conditioning systems and equipment into full operation and shall continue the operation of same during each working day of testing and balancing.

D. Testing and balancing agency shall be kept informed of any major changes made to system during construction and shall be provided with complete as–built drawings.

E. The mechancial contractor shall include the costs of dampers, pulley and belt changes in his contract.

END OF SECTION

SECTION 230593 – TESTING, ADJUSTING AND BALANCING

1.00 – GENERAL

1.01 DESCRIPTION
The testing and balancing work will be performed under a separate contract from the HVAC work. The work described in this section shall be performed by an independent test and balance agency, specializing in testing and balancing of HVAC systems and a member of the AABC or approved equal organization.

1.02 SCOPE OF WORK

A. HVAC System Test and Balance in accordance with procedures established by AABC or NEBB.
B. Measurement of final operating conditions of HVAC equipment.
C. Test and Balance Reports.
D. Each piece of air conditioning and heating equipment and the air distributions systems shall be tested and adjusted to insure proper functioning of all control, proper distribution of air, maintenance of temperature, elimination of drafts, noise and vibration, and left in first class operating condition. The air system shall be readjusted if required for comfort of each room.
E. The mechanical contractor will make any changes in the pulleys, belts, dampers, vanes, baffles and the like required for correct balance of system as recommended bt T&B agency and to the satisfaction of the Owner.

1.03 SUBMITTALS

A. Provide (6) six copies of test and balance report to the Owner for review and approval in soft cover, letter size, 3–ring binder manual complete with index page and indexing tabs. The report shall include a set of reduced drawings with air outlets and equipment identified to correspond with data sheets and indicating hermostat locations.

B. The test and balance report shall include, as a minimum, but not be limited to:
1. Each equipment shall be identified by equipment service number, manufacturer, model number, and serial number, motor horsepower, motor nameplate voltage, motor RPM, actual and design static pressure, actual outlet velocity, actual CFM, design CFM.
2. Each coil shall be identified by equipment service number, manufacturer, model number and size, number of rows, total CFM, air inlet and outlet dry bulb and wet bulb temperatures.
3. Each air outlet shall be identified with manufacture, model number, size, velocity, correction factor, actual CFM, design CFM.
4. Traverse reading of main supply, return and outside air ducts to establish air quantities.
5. Test and record temperatures from temperature controllers such as day thermostat, night thermostat.
6. Test and record temperatures from main supply air trunk, mixed air during the full heating and full cooling cycle and economizer cycle.
7. Exhaust system balance.

2.00 – PRODUCTS (Not Applicable)

3.00 – EXECUTION

3.01 DEFICIENCIES IN SYSTEM

Balancing Contractor shall report in writing to the Owner any discrepancies on items not installed in accordance with contract documents, all deficiencies in HVAC system, and other deficiencies. The Owner will reimburse the balancing contractor if additional work is required for his phase of work.

3.02 WARRANTY

The test and balance agency shall include an extended warranty of 90 days, after completion of work, during which time the Owner, at their discretion, may request a recheck or resetting of any outlet, supply air fan, or exhaust fan as listed in test report.

END OF SECTION

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
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info@acies.net

SHEET DESCRIPTION:

MECHANICAL SPECIFICATIONS

JOB NUMBER:	0714
SCALE:	N.T.S.
DATE:	12/12/13
DRAWN BY:	DS
CHECKED BY:	RT
CAD TITLE:	

SHEET NUMBER:

M0.02

OF SHEETS

PERFORMANCE CERTIFICATE OF COMPLIANCE (Part 1 of 3) PERF-1C

Project Name: *35 th & SCHOOL MIXED - USE* | Date: *11/20/2013*

Project Address: *OAKLAND OAKLAND* | Climate Zone: *CA Climate Zone 03* | Total Cond. Floor Area: *1,096* | Addition Floor Area: *n/a*

GENERAL INFORMATION

Building Type: ☑ Nonresidential ☐ Relocatable - indicate ☐ High-Rise Residential ☐ specific climate zone ☐ Hotel/Motel Guest Room ☐ all climates

Phase of Construction: ☑ New Construction ☐ Addition ☐ Alteration

STATEMENT OF COMPLIANCE

This certificate of compliance lists the building features and specifications needed to comply with Title 24, Parts 1 and 6 of the California Code of Regulations. This certificate applies only to a Building using the performance compliance approach.

The documentation author hereby certifies that the documentation is accurate and complete.

Documentation Author

Name: *Srdjen G Rebraca* | Signature | Date: *11/20/2013*

Company: *ACIES Engineering* | Phone: *(408) 522-5255*

Address: *111 W. Evelyn Ave. Suite 301*

City/State/Zip: *Sunnyvale, CA 94086*

The Principal Designer hereby certifies that the proposed building design represented in this set of construction documents is consistent with the other compliance forms and worksheets, with the specifications, and with any other calculations submitted with this permit application. The proposed building has been designed to meet the energy efficiency requirements contained in sections 110, 116 through 118, and 140 through 149 of Title 24, Part 6. Please check one:

ENV.	LTG.	MECH.	
☐	☐	☐	I hereby affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code to sign this document as the person responsible for its preparation; and that I am licensed in the State of California as a civil engineer, mechanical engineer, electrical engineer, or I am a licensed architect.
☐	☐	☐	I affirm that I am eligible under the provisions of Division 3 of the Business and Professions Code by section 6737.2 or 6737.3 to sign this document as the person responsible for its preparation; and that I am a licensed contractor performing this work.
☐	☐	☐	I affirm that I am eligible under Division 3 of the Business and Professions Code to sign this document because it pertains to a structure or type of work described as exempt pursuant to Business and Professions Code Sections 5537, 6538 and 6737.1.

Principal Envelope Designer

Name: *PHILIP BANTA & ASSOCIATES* | Signature | Date

Company: *PHILIP BANTA & ASSOCIATES* | License #

Address: *6050 HOLLIS STREET* | Phone: *510.654.3255*

City/State/Zip: *EMERYVILLE, CA 94608*

Principal Mechanical Designer

Name: *Srdjen Rebraca* | Signature | Date: *11/20/2013*

Company: *Acies Engineering* | License #: *M28498*

Address: *111 W. Evelyn Avenue, Suite 301* | Phone: *(408) 522-5255*

City/State/Zip: *Sunnyvale, CA 94086*

Principal Lighting Designer

Name | Signature | Date

Company: *Lighting Compliance Not In The Scope Of This Submittal)* | License #

Address | Phone

City/State/Zip

INSTRUCTIONS TO APPLICANT COMPLIANCE & WORKSHEETS (check box if worksheets are included)

☑	ENV-1C	Certificate of Compliance. Required on plans.	☑	MECH-1C	Certificate of Compliance. Required on plans.
☐	LTG-1C	Certificate of Compliance. Required on plans.	☑	MECH-2C	Air/Water Side/Service Hot Water & Pool Requirements.
☐	LTG-2C	Lighting Concepts Credit Worksheet.	☑	MECH-3C	Mechanical Ventilation and Reheat.
☐	LTG-3C	Indoor Lighting Power Allowance.	☑	MECH-5C	Mechanical Equipment Details.

PERFORMANCE CERTIFICATE OF COMPLIANCE (Part 2 of 3) PERF-1C

Project Name: *35 th & SCHOOL MIXED - USE* | Date: *11/20/2013*

ANNUAL TDV ENERGY USE SUMMARY (kBtu/sqft-yr)

Energy Component	Standard Design	Proposed Design	Compliance Margin
Space Heating	13.16	13.00	0.16
Space Cooling	57.73	43.39	14.33
Indoor Fans	52.93	39.73	13.20
Heat Rejection	0.00	0.00	0.00
Pumps & Misc.	0.00	0.00	0.00
Domestic Hot Water	16.00	10.22	5.78
Lighting	54.91	54.91	0.00
Receptacle	81.62	81.62	0.00
Process	0.00	0.00	0.00
Process Lighting	0.00	0.00	0.00
TOTALS	276.35	242.88	33.47

Heating, Cooling, Fans, Heat Rej, Pumps, DHW, Lighting, Receptacle, Process, Process Ltg

Percent better than Standard: 12.1 % (12.1 % excluding process)

BUILDING COMPLIES

GENERAL INFORMATION

Building Orientation	(S) 180 deg	Conditioned Floor Area	1,096 sqft.
Number of Stories	1	Unconditioned Floor Area	0 sqft.
Number of Systems	1	Conditioned Footprint Area	1,096 sqft.
Number of Zones	2	Natural Gas Available On Site	Yes

	Orientation	Gross Area	Glazing Area	Glazing Ratio
Front Elevation	(S)	396 sqft.	102 sqft.	25.8 %
Left Elevation	(W)	444 sqft.	0 sqft.	0.0 %
Rear Elevation	(N)	0 sqft.	0 sqft.	0.0 %
Right Elevation	(E)	528 sqft.	144 sqft.	27.3 %
Total		1,368 sqft.	246 sqft.	18.0 %
Roof		0 sqft.	0 sqft.	0.0 %

	Standard	Proposed	
Prescriptive Lighting Power Density	0.685 W/sqft.	0.685 W/sqft.	Prescriptive Values for Comparison only. See LTG-1C for allowed LPD.
Prescriptive Envelope TDV Energy	40,311	29,111	

Remarks:

PERFORMANCE CERTIFICATE OF COMPLIANCE (Part 3 of 3) PERF-1C

Project Name: *35 th & SCHOOL MIXED - USE* | Date: *11/20/2013*

ZONE INFORMATION

System Name	Zone Name	Occupancy Type	Floor Area (sqft.)	Inst. LPD (W/sf)[1]	Ctrl. Credits (W/sf)[1]	Allowed LPD Area (W/sf)[2]	Allowed LPD Tailored (W/sf)[2]	Proc. Loads (W/sf)
CU-1/GFF-1	*COMMERCIAL- RESTROO*	*Corridor/Restroom/Support*	*53*	*0.600*				
	COMMERCIAL TENANT	*Office > 250 sqft*	*1,043*	*0.900*				

Notes: 1. See LTG-1C (Items marked with asterisk, see LTG-1-C by others) 2. See LTG-2C 3. See LTG-3C (by others) 4. See LTG-4C

Items above require special documentation

EXCEPTIONAL CONDITIONS COMPLIANCE CHECKLIST

The local enforcement agency should pay special attention to the items specified in this checklist. These items require special written justification and documentation, and special verification to be used with the performance approach. The local enforcement agency determines the adequacy of the justifications, and may reject a building or design that otherwise complies based on the adequacy of the special justification and documentation submitted.

The exceptional features listed in this performance approach application have specifically been reviewed. Adequate written justification and documentation for their use have been provided by the applicant.

Authorized Signature or Stamp _____

CERTIFICATE OF COMPLIANCE AND FIELD INSPECTION ENERGY CHECKLIST (Part 1 of 3) ENV-1C

Project Name: *35 th & SCHOOL MIXED - USE* | Date: *11/20/2013*

Project Address: *OAKLAND OAKLAND* | Climate Zone: *3* | Total Cond. Floor Area: *1,096* | Addition Floor Area: *n/a*

GENERAL INFORMATION

Building Type: ☑ Nonresidential ☐ High-Rise Residential ☐ Hotel/Motel Guest Room

☐ Schools (Public School) ☐ Relocatable Public School Bldg ☑ Conditioned Spaces ☐ Unconditioned Spaces

☐ Skylight Area for Large Enclosed Space ≥ 8000 ft² (If checked include the ENV-4C with submittal)

Phase of Construction: ☑ New Construction ☐ Addition ☐ Alteration

Approach of Compliance: ☐ Component ☑ Overall Envelope ☐ Unconditioned (file affidavit)

Front Orientation: N, E, S, W or In Degrees: *180 deg*

FIELD INSPECTION ENERGY CHECKLIST

OPAQUE SURFACE DETAILS

Tag/ID	Assembly Type	Area (ft²)	Orientation N, E, S, W	U-Factor	Cavity R-Value	Exterior R-Value	Exterior Framing	Interior R-Value	Interior Framing	Joint Appendix 4	Condition Status	Pass	Fail[1]
1	Slab	53	(N)	0.730	None					4.4.7-A1	New	☐	☐
2	Wall	120	(W)	0.074	R-19					4.3.1-A5	New	☐	☐
3	Wall	294	(S)	0.074	R-19					4.3.1-A5	New	☐	☐
4	Slab	1,043	(N)	0.730	None					4.4.7-A1	New	☐	☐
5	Wall	384	(E)	0.074	R-19					4.3.1-A5	New	☐	☐
6	Wall	303	(W)	0.074	R-19					4.3.1-A5	New	☐	☐
7	Door	21	(W)	0.500	None					4.5.1-A4	New	☐	☐
												☐	☐
												☐	☐

1. See Instructions in the Nonresidential Compliance Manual, page 3-96.
2. If Fail, then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. A fail does not meet compliance.

FENESTRATION SURFACE DETAILS

Tag/ID	Fenestration Type	Area (ft²)	Orientation N, E, S, W	Max U-Factor	U-Factor Source	Max (SHGC)	SHGC Source	Overhang	Conditions Status	Pass	Fail[2]
1	Window	24	(S)	0.590	NFRC	0.450	NFRC	☑	New	☐	☐
2	Window	24	(S)	0.590	NFRC	0.450	NFRC	☑	New	☐	☐
3	Window	30	(S)	0.590	NFRC	0.450	NFRC	☑	New	☐	☐
4	Window	24	(S)	0.590	NFRC	0.450	NFRC	☑	New	☐	☐
5	Window	144	(E)	0.590	NFRC	0.450	NFRC	☐	New	☐	☐
								☐		☐	☐
								☐		☐	☐
								☐		☐	☐
								☐		☐	☐

1. See Instructions in the Nonresidential Compliance Manual, page 3-96.
2. If Fail then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.

CERTIFICATE OF COMPLIANCE AND FIELD INSPECTION ENERGY CHECKLIST (Part 2 of 3) ENV-1C

Project Name: *35 th & SCHOOL MIXED - USE* | Date: *11/20/2013*

ROOFING PRODUCT (COOL ROOFS)

(Note if the roofing product is not CRRC certified, this compliance approach cannot be used). Go to Overall Envelope Approach or Performance Approach.

CHECK APPLICABLE BOX BELOW IF EXEMPT FROM THE ROOFING PRODUCT "COOL ROOF" REQUIREMENTS:	Pass	Fail[1]	N/A
☐ Roofing compliance not required in Climate Zones 1 and16 with a Low-Sloped, 2:12 pitch or less.	☐	☐	☐
☐ Roofing compliance not required in Climate Zone 1 with a Steep-Sloped with less than 5 lb/ft². Greater than 2:12 pitch.	☐	☐	☐
☐ Low-sloped Wood framed roofs in Climate Zones 3 and 5 are exempted, solar reflectance and thermal emittance or SRI that have a U-factor of 0.039 or lower. See Opaque Surface Details roof assembly, Column H of ENV-2C.	☐	☐	☐
☐ Low-sloped Metal building roofs in Climate Zone 3 and 5 are exempted, solar reflectance and thermal emittance or SRI that have a U-factor of 0.048 or lower. See Opaque Surface Details roof assembly below, Column H of ENV-2C.	☐	☐	☐
☐ The roof area covered by building integrated photovoltaic panels and building integrated solar thermal panels are exempted. Solar reflectance and thermal emittance or SRI, see spreadsheet calculator at www.energy.ca.gov/title24/	☐	☐	☐
☐ Roof constructions that have thermal mass over the roof membrane with a weight of at least 25 lb/ft² are exempt from the Cool Roof criteria below.	☐	☐	☐
☐ High-rise residential buildings and hotels and motels with low-sloped roofs in Climate Zones 1 through 9, 12 and 16 are exempted from the low-sloped roofing criteria.	☐	☐	☐

1. If Fail then describe on this page of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.

CRRC Product ID Number[2]	Roof Slope ≤ 2:12	Roof Slope > 2:12	Product Weight < 5lb/ft²	Product Weight ≥ 5lb/ft²	Product Type[3]	Aged Solar Reflectance[4]	Thermal Emittance	SRI[5]	Pass	Fail[6]
	☐	☐	☐	☐		☐ [4]			☐	☐
	☐	☐	☐	☐		☐ [4]			☐	☐
	☐	☐	☐	☐		☐ [4]			☐	☐
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	☐	☐	☐	☐		☐ [4]			☐	☐
	☐	☐	☐	☐		☐ [4]			☐	☐

1. The CRRC Product ID Number can be obtained from the Cool Roof Rating Council's Rated Product Directory at www.coolroofs.org/products/search.php
2. Indicate the type of product is being used for the roof top, i.e. single-ply roof, asphalt roof, metal roof, etc.
3. If the Aged Reflectance is not available in the Cool Roof Rating Council's Rated Product Directory then use the Initial Reflectance value from the same directory and use the equation $(0.2+0.7(\rho_{Initial}-0.2)$ to obtain a calculated aged value. Where ρ is the Initial Solar Reflectance from the Cool Roof Rating Council's Rated Product Directory.
4. Check box if the Aged Reflectance is a calculated value using the equation above.
5. The SRI value needs to be calculated from a spreadsheet calculator at http://www.energy.ca.gov/title24/
6. If Fail then describe on this page of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.

To apply **Liquid Field Applied Coatings**, the coating must be applied across the entire roof surface and meet the dry mil thickness or coverage recommended by the coatings manufacturer and meet minimum performance requirements listed in §118(i)4. Select the applicable coating:

☐ Aluminum-Pigmented Asphalt Roof Coating ☐ Cement-Based Roof Coating ☐ Other _____

Discrepancies:

CERTIFICATE OF COMPLIANCE AND FIELD INSPECTION ENERGY CHECKLIST (Part 3 of 3) ENV-1C

Project Name: *35 th & SCHOOL MIXED - USE* | Date: *11/20/2013*

Required Acceptance Tests

Designer:

This form is to be used by the designer and attached to the plans. Listed below is the acceptance test for Envelope Fenestrations system. The designer is required to check the acceptance tests and list all the fenestration products that require an acceptance test. If all the site-built fenestration of a certain type requires a test, list the different fenestration products and the number of systems. The NA7 Section in the Appendix of the Nonresidential Reference Appendices Manual describes the test. Since this form will be part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately.

Enforcement Agency:

Systems Acceptance. Before Occupancy Permit is granted for a newly constructed building or space or whenever new fenestration is installed in the building or space shall be certified as meeting the Acceptance Requirements.
The ENV-2A form is not considered a complete form and is not to be accepted by the enforcement agency unless the boxes are checked and/or filled and signed. In addition, a Certificate of Acceptance forms shall be submitted to the enforcement agency that certifies plans, specifications, installation certificates, and operating and maintenance information meet the requirements of §10-103(b) of Title 24 Part 6. The field inspector must receive the properly filled out and signed forms before the building can receive final occupancy. A copy of the ENV-2A for each different fenestration product line must be provided to the owner of the building for their records.

Test Description: Fenestration Products Name or ID Requiring Testing or Verification	Area of like Products	ENV-2A: Building Envelope Acceptance Test	Test Performed By:
IWC 6200 Alum/ Low- E	*246*	☑	
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ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5269
info@acies.net

SHEET DESCRIPTION:

TITLE 24

JOB NUMBER:	0714
SCALE:	N.T.S.
DATE:	12/12/13
DRAWN BY:	DS
CHECKED BY:	RT
CAD TITLE:	

SHEET NUMBER:

M0.3

OF SHEETS

CERTIFICATE OF COMPLIANCE and FIELD INSPECTION ENERGY CHECKLIST (Part 1 of 4) MECH-1C

Project Name *35 th & SCHOOL MIXED - USE*			Date *11/20/2013*
Project Address *OAKLAND OAKLAND*	Climate Zone *3*	Total Cond. Floor Area *1,096*	Addition Floor Area *n/a*

GENERAL INFORMATION

Building Type:	☒ Nonresidential	☐ High-Rise Residential	☐ Hotel/Motel Guest Room
☐ Schools (Public School)	☐ Relocatable Public School Bldg.	☒ Conditioned Spaces	☐ Unconditioned Spaces (affidavit)
Phase of Construction:	☒ New Construction	☐ Addition	☐ Alteration
Approach of Compliance:	☐ Component	☐ Overall Envelope TDV Energy	☐ Unconditioned (file affidavit)
Front Orientation: N, E, S, W or in Degrees:	*180 deg*		

HVAC SYSTEM DETAILS

		FIELD INSPECTION ENERGY CHECKLIST Meets Criteria or Requirements	
Equipment[2]	**Inspection Criteria**	**Pass**	**Fail – Describe Reason**[2]
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	*DHW Heater*	☐	☐
Equipment Type[3]:	*Gas Fired DHW Boiler*	☐	☐
Number of Systems	*1*	☐	☐
Max Allowed Heating Capacity[1]	*62,500 Btu/hr*	☐	☐
Minimum Heating Efficiency[1]	*0.90 EF*	☐	☐
Max Allowed Cooling Capacity[1]	*n/a*	☐	☐
Cooling Efficiency[1]	*n/a*	☐	☐
Duct Location/ R-Value	*n/a*	☐	☐
When duct testing is required, submit **MECH-4A & MECH-4-HERS**	*n/a*	☐	☐
Economizer	*n/a*	☐	☐
Thermostat	*n/a*	☐	☐
Fan Control	*n/a*	☐	☐

		FIELD INSPECTION ENERGY CHECKLIST	
Equipment[2]	**Inspection Criteria**	**Pass**	**Fail – Describe Reason**[2]
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	*CU-1/ GFF-1*	☐	☐
Equipment Type[3]:	*Split DX*	☐	☐
Number of Systems	*1*	☐	☐
Max Allowed Heating Capacity[1]	*54,000 Btu/hr*	☐	☐
Minimum Heating Efficiency[1]	*80% AFUE*	☐	☐
Max Allowed Cooling Capacity[1]	*33,000 Btu/hr*	☐	☐
Cooling Efficiency[1]	*13.5 SEER / 11.2 EER*	☐	☐
Duct Location/ R-Value	*Attic, Ceiling Ins, vented / 6.0*	☐	☐
When duct testing is required, submit **MECH-4A & MECH-4-HERS**	*No*	☐	☐
Economizer	*No Economizer*	☐	☐
Thermostat	*Setback Required*	☐	☐
Fan Control	*Constant Volume*	☐	☐

1. If the Actual installed equipment performance efficiency and capacity is less than the Proposed (from the energy compliance submittal or from the building plans) the responsible party shall resubmit energy compliance to include the new changes.
2. For additional detailed discrepancy use Page 2 of the Inspection Checklist Form. Compliance fails if a Fail box is checked.
3. Indicate Equipment Type: Gas (Pkg or, Split), VAV, HP (Pkg or split), Hydronic, PTAC, or other.

EnergyPro 5.1 by EnergySoft *User Number: 5387* ***RunCode: 2013-11-20T14:35:37*** *ID: 2007459* *Page 7 of 16*

CERTIFICATE OF COMPLIANCE and FIELD INSPECTION ENERGY CHECKLIST (Part 2 of 4) MECH-1C

Project Name *35 th & SCHOOL MIXED - USE*	Date *11/20/2013*

Discrepancies:

EnergyPro 5.1 by EnergySoft *User Number: 5387* ***RunCode: 2013-11-20T14:35:37*** *ID: 2007459* *Page 8 of 16*

CERTIFICATE OF COMPLIANCE and FIELD INSPECTION ENERGY CHECKLIST (Part 3 of 4) MECH-1C

Project Name *35 th & SCHOOL MIXED - USE*	Date *11/20/2013*

Required Acceptance Tests

Designer:

This form is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for mechanical systems. The designer is required to check the applicable boxes by all acceptance tests that apply and listed all equipment that requires an acceptance test. If all equipment of a certain type requires a test, list the equipment description and the number of systems. The NA number designates the Section in the Appendix of the Nonresidential Reference Appendices Manual that describes the test. Since this form will be part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately.

Building Departments:

Systems Acceptance: Before occupancy permit is granted for a newly constructed building or space, or a new space-conditioning system serving a building or space is operated for normal use, all control devices serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance.
Systems Acceptance: Before occupancy permit is granted. All newly installed HVAC equipment must be tested using the Acceptance Requirements.

The MECH-1C form is not considered a completed form and is not to be accepted by the building department unless the correct boxes are checked. The equipment requiring testing, person performing the test (Example: HVAC installer, TAB contractor, controls contractor, PE in charge of project) and what Acceptance test must be conducted. The following checked-off forms are required for **ALL** newly installed equipment. In addition a Certificate of Acceptance forms shall be submitted to the building department that certifies plans, specifications, installation, certificates, and operating and maintenance information meet the requirements of §10-103(b) and Title-24 Part 6. The building inspector must receive the properly filled out and signed forms before the building can receive final occupancy.

TEST DESCRIPTION		MECH-2A	MECH-3A	MECH-4A	MECH-5A	MECH-6A	MECH-7A	MECH-8A	MECH-9A	MECH-10A	MECH-11A
Equipment Requiring Testing or Verification	Qty.	Outdoor Ventilation For VAV & CAV	Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Automatic Demand Shed Control
CARRIER 24ACA336-30/ 58CTA070-12	*1*	☑	☑	☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
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EnergyPro 5.1 by EnergySoft *User Number: 5387* ***RunCode: 2013-11-20T14:35:37*** *ID: 2007459* *Page 9 of 16*

CERTIFICATE OF COMPLIANCE and FIELD INSPECTION ENERGY CHECKLIST (Part 4 of 4) MECH-1C

Project Name *35 th & SCHOOL MIXED - USE*	Date *11/20/2013*

TEST DESCRIPTION		MECH-12A	MECH-13A	MECH-14A	MECH-15A	
Equipment Requiring Testing	Qty.	Fault Detection & Diagnostics for DX Units	Automatic Fault Detection & Diagnostics for Air & Zone	Distributed Energy Storage DX AC Systems	Thermal Energy Storage (TES) Systems	Test Performed By:
CARRIER 24ACA336-30/ 58CTA070-12	*1*	☐	☐	☐	☐	
		☐	☐	☐	☐	
		☐	☐	☐	☐	
		☐	☐	☐	☐	
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EnergyPro 5.1 by EnergySoft *User Number: 5387* ***RunCode: 2013-11-20T14:35:37*** *ID: 2007459* *Page 10 of 16*

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
①	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

SRDJAN G. REBRACA
Exp. 06/30/15

ACIES
ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
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info@acies.net

SHEET DESCRIPTION:

TITLE 24

JOB NUMBER:	0714
SCALE:	N.T.S.
DATE:	12/12/13
DRAWN BY:	DS
CHECKED BY:	RT
CAD TITLE:	

SHEET NUMBER:

M0.4

OF SHEETS

AIR SYSTEM REQUIREMENTS (Part 1 of 2) MECH-2C

Project Name: 35 th & SCHOOL MIXED - USE | Date: 11/20/2013

Item or System Tags (i.e. AC-1, RTU-1, HP-1)		CU-1/ GFF-1		
Number of Systems		1		
Indicate Page Reference on Plans or Schedule and indicate the applicable exception(s)				
MANDATORY MEASURES	**T-24 Sections**			
Heating Equipment Efficiency	112(a)	80% AFUE		
Cooling Equipment Efficiency	112(a)	13.5 SEER / 11.2 EER		
HVAC Heat Pump Thermostat	112(b), 112(c)	n/a		
Furnace Controls/Thermostat	112(c), 115(a)	Required		
Natural Ventilation	121(b)	No		
Mechanical Ventilation	121(b)	164 cfm		
VAV Minimum Position Control	121(c)	No		
Demand Control Ventilation	121(c)	No		
Time Control	122(a)	Programmable Switch		
Setback and Setup Control	122(a)	Setback Required		
Outdoor Damper Control	122(f)	Auto		
Isolation Zones	122(g)	n/a		
Pipe Insulation	123			
Duct Location/ R-value	124	Attic, Ceiling Ins, vented / 6.0		
PRESCRIPTIVE MEASURES				
Calculated Design Heating Load	144(a & b)	n/a		
Proposed Heating Capacity	144(a & b)	54,000 Btu/hr		
Calculated Design Cooling Load	144(a & b)	n/a		
Proposed Cooling Capacity	144(a & b)	28,388 Btu/hr		
Fan Control	144(c)	Constant Volume		
DP Sensor Location	144(c)			
Supply Pressure Reset (DDC only)	144(c)	Yes		
Simultaneous Heat/Cool	144(d)	No		
Economizer	144(e)	No Economizer		
Heat Air Supply Reset	144(f)	Constant Temp		
Cool Air Supply Reset	144(f)	Constant Temp		
Electric Resistance Heating[1]	144(g)			
Air Cooled Chiller Limitation Duct Leakage Sealing. If Yes, a MECH-4-A must be submitted	144(i)			
	144(k)	No		

1. Total installed capacity (MBtu/hr) of all electric heat on this project exclusive of electric auxiliary heat for heat pumps. If electric heat is used explain which exception(s) to §144(j) apply.

WATER SIDE SYSTEM REQUIREMENTS (Part 2 of 2) MECH-2C

Project Name: 35 th & SCHOOL MIXED - USE | Date: 11/20/2013

Item or System Tags (i.e. AC-1, RTU-1, HP-1)[1]		WATER[2] SIDE SYSTEMS: Chillers, Towers, Boilers, Hydronic Loops		
Number of Systems				
Indicate Page Reference on Plans or Specification[2]				
MANDATORY MEASURES	**T-24 Sections**			
Equipment Efficiency	112(a)			
Pipe Insulation	123			
PRESCRIPTIVE MEASURES				
Cooling Tower Fan Controls	144(a & b)			
Cooling Tower Flow Controls	144(h)			
Variable Flow System Design	144(h)			
Chiller and Boiler Isolation	144(j)			
CHW and HHW Reset Controls	144(j)			
WLHP Isolation Valves	144(j)			
VSD on CHW, CW & WLHP Pumps>5HP	144(j)			
DP Sensor Location	144(j)			

1. The proposed equipment need to match the building plans schedule or specifications. If a requirement is not applicable, put "N/A" in the column next to applicable section.
2. For each chiller, cooling tower, boiler, and hydronic loop (or groups of similar equipment) fill in the reference to sheet number and/or specification section and paragraph number where the required features are documented. If a requirement is not applicable, put "N/A" in the column next to applicable section.

Item or System Tags (i.e. WH-1, WHP, DHW, etc...)[1]		Service Hot Water, Pool Heating		
		DHW Heater		
Number of Systems		1		
Indicate Page Reference on Plans or Schedule[2]				
MANDATORY MEASURES	**T-24 Sections**			
SERVICE HOT WATER				
Certified Water Heater	111, 113(a)	A.O. SMITH GPVX-50L		
Water Heater Efficiency	113(b)	0.90 EF		
Service Water Heating Installation	113(c)	Controls Req.		
Pipe Insulation	123	Required		
POOL AND SPA				
Pool and Spa Efficiency and Control	114(a)	n/a		
Pool and Spa Installation	114(b)	n/a		
Pool Heater – No Pilot Light	115(c)	n/a		
Spa Heater – No Pilot Light	115(d)	n/a		
Pipe Insulation	123	n/a		

1. The Proposed equipment needs to match the building plans schedule or specifications. If a requirement is not applicable, put "N/A" in the column next to applicable section.
2. For each water heater, pool heater and domestic water loop (or groups of similar equipment) fill in the reference to sheet number and/or specification section and paragraph number where the required features are documented. If a requirement is not applicable, put "N/A" in the column.

MECHANICAL VENTILATION AND REHEAT MECH-3C

Project Name: 35 th & SCHOOL MIXED - USE | Date: 11/20/2013

	MECHANICAL VENTILATION (§121(b)2)								REHEAT LIMITATION (§144(d))				
	AREA BASIS			OCCUPANCY BASIS					VAV MINIMUM				
A	B	C	D	E	F	G	H	I	J	K	L	M	N
Zone/System	Condition Area (ft²)	CFM per ft²	Min CFM By Area B X C	Number Of People	CFM per Person	Min CFM by Occupant E X F	REQ'D V.A. Max of D or G	Design Ventilation Air CFM	50% of Design Zone Supply CFM	If X 0.4 CFM / ft²	Max. of Columns H, J, K, 300 CFM	Design Minimum Air Setpoint	Transfer Air
COMMERCIAL- RESTROOM	53	0.15	8				8	8					
COMMERCIAL TENANT	1,043	0.15	156				156	156					
CU-1/ GFF-1						Total	164	164					
Totals													

Column I Total Design Ventilation Air

C	Minimum ventilation rate per Section §121, Table 121-A.
E	Based on fixed seat or the greater of the expected number of occupants and 50% of the CBC occupant load for egress purposes for spaces without fixed seating.
H	Required Ventilation Air (REQ'D V.A.) is the larger of the ventilation rates calculated on an AREA BASIS or OCCUPANCY BASIS (Column D or G).
I	Must be greater than or equal to H, or use Transfer Air (column N) to make up the difference.
J	Design fan supply CFM (Fan CFM) x 50%; or the design zone outdoor airflow rate per §121.
K	Condition area (ft²) x 0.4 CFM / ft²; or
L	Maximum of Columns H, J, K, or 300 CFM.
M	This must be less than or equal to Column L and greater than or equal to the sum of Columns H plus N.
N	Transfer Air must be provided where the Required Ventilation Air (Column H) is greater than the Design Minimum Air (Column M). Where required, transfer air must be greater than or equal to the difference between the Required Ventilation Air (Column H) and the Design Minimum Air (Column M). Column H minus M.

MECHANICAL EQUIPMENT DETAILS (Part 1 of 2) MECH-5C

Project Name: 35 th & SCHOOL MIXED - USE | Date: 11/20/2013

CHILLER AND TOWER SUMMARY

Equipment Name	Type	Qty.	Efficiency	Tons	PUMPS Qty.	GPM	BHP	Pump Control

DHW / BOILER SUMMARY

System Name	Type	Distribution	Qty.	Rated Input	Vol. (Gals).	Energy Factor or RE	Standby Loss or Pilot	Tank Ext. R-Value	Status
A.O. SMITH GPVX-50L	Small Gas	Kitchen Pipe Ins	1	62,500	50	0.90	n/a	n/a	New

MULTI-FAMILY CENTRAL WATER HEATING DETAILS

Control	Hot Water Pump Qty.	HP	Type	Hot Water Piping Length (ft) In Plenum	Outside	Buried	Add ½" Insulation
							☐
							☐
							☐

CENTRAL SYSTEM RATINGS

System Name	Type	Qty.	HEATING Output	Aux. kW	Efficiency	COOLING Output	Efficiency	Status
CARRIER 24ACA336-30/ 58CTA070-12	Split DX	1	54,000	0.0	80% AFUE	33,000	13.5 SEER / 11.2 EER	New

CENTRAL SYSTEM FAN SUMMARY

System Name	Fan Type	Economizer Type	SUPPLY FAN CFM	BHP	RETURN FAN CFM	BHP
CARRIER 24ACA336-30/ 58CTA070-12	Constant Volume	No Economizer	1,200	0.50	none	

ENVELOPE MANDATORY MEASURES: NONRESIDENTIAL ENV-MM

Project Name: 35 th & SCHOOL MIXED - USE | Date: 11/20/2013

DESCRIPTION

Building Envelope Measures:

§118(a):	Installed insulating material shall have been certified by the manufacturer to comply with the California Quality Standards for insulating material, Title 20 Chapter 4, Article 3.
§118(c):	All Insulating Materials shall be installed in compliance with the flame spread rating and smoke density requirements of Sections 2602 and 707 of Title 24, Part 2.
§118(f):	The opaque portions of framed demising walls in nonresidential buildings shall have insulation with an installed R-value of no less than R-13 between framing members.
§117(a):	All Exterior Joints and openings in the building that are observable sources of air leakage shall be caulked, gasketed, weatherstripped or otherwise sealed
§116(a) 1:	Manufactured fenestration products and exterior doors shall have air infiltration rates not exceeding 0.3 cfm/ft.² of window area, 0.3 cfm/ft.² of door area for residential doors, 0.3 cfm/ft.² of door area for nonresidential single doors (swinging and sliding), and 1.0 cfm/ft.² for nonresidential double doors (swinging).
§116(a) 2:	Fenestration U-factor shall be rated in accordance with NFRC 100, or the applicable default U-factor.
§116(a) 3:	Fenestration SHGC shall be rated in accordance with NFRC 200, or NFRC 100 for site-built fenestration, or the applicable default SHGC.
§116(b):	Site Constructed Doors, Windows and Skylights shall be caulked between the unit and the building, and shall be weatherstripped (except for unframed glass doors and fire doors).

MECHANICAL MANDATORY MEASURES: NONRESIDENTIAL MECH-MM

Project Name: 35 th & SCHOOL MIXED - USE | Date: 11/20/2013

Equipment and System Efficiencies

§111:		Any appliance for which there is a California standard established in the Appliance Efficiency Regulations will comply with the applicable standard.
§115(a):		Fan type central furnaces shall not have a pilot light.
§123:		Piping, except that conveying fluids at temperatures between 60 and 105 degrees Fahrenheit, or within HVAC equipment, shall be insulated in accordance with Standards Section 123.
§124:		Air handling duct systems shall be installed and insulated in compliance with Sections 601, 602, 603, 604, and 605 of the CMC Standards.

Controls

§122(e):		Each space conditioning system shall be installed with one of the following:
	1A.	Each space conditioning system serving building types such as offices and manufacturing facilities (and all others not explicitly exempt from the requirements of Section 112 (d)) shall be installed with an automatic time switch with an accessible manual override that allows operation of the system during off-hours for up to 4 hours. The time switch shall be capable of programming different schedules for weekdays and weekends and have program backup capabilities that prevent the loss of the device's program and time setting for at least 10 hours if power is interrupted; or
	1B.	An occupancy sensor to control the operating period of the system; or
	1C.	A 4-hour timer that can be manually operated to control the operating period of the system.
	2.	Each space conditioning system shall be installed with controls that temporarily restart and temporarily operate the system as required to maintain a setback heating and/or a setup cooling thermostat setpoint.
§122(g):		Each space conditioning system serving multiple zones with a combined conditioned floor area more than 25,000 square feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square feet; shall be provided with isolation devices, such as valves or dampers that allow the supply of heating or cooling to be setback or shut off independently of other isolation areas; and shall be controlled by a time control device as described above.
§122(c):		Thermostats shall have numeric setpoints in degrees Fahrenheit (F) and adjustable setpoint stops accessible only to authorized personnel.
§122(b):		Heat pumps shall be installed with controls to prevent electric resistance supplementary heater operation when the heating load can be met by the heat pump alone
§122(a&b):		Each space conditioning system shall be controlled by an individual thermostat that responds to temperature within the zone. Where used to control heating, the control shall be adjustable down to 55 degrees F or lower. For cooling, the control shall be adjustable up to 85 degrees F or higher. Where used for both heating and cooling, the control shall be capable of providing a deadband of at least 5 degrees F within which the supply of heating and cooling is shut off or reduced to a minimum.

Ventilation

§121(e):	Controls shall be provided to allow outside air dampers or devices to be operated at the ventilation rates as specified on these plans.
§122(f):	All gravity ventilating systems shall be provided with automatic or readily accessible manually operated dampers in all openings to the outside, except for combustion air openings.
§121(f):	Ventilation System Acceptance. Before an occupancy permit is granted for a newly constructed building or space, or a new ventilating system serving a building or space is operated for normal use, all ventilation systems serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance.

Service Water Heating Systems

§113(c)		Installation
	3.	Temperature controls for public lavatories. The controls shall limit the outlet Temperature to 110°F.
	2.	Circulating service water-heating systems shall have a control capable of automatically turning off the circulating pump when hot water is not required.

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ROYAL G. REDD JR. — No. M2515 — MECHANICAL — STATE OF CALIFORNIA

ACIES ENGINEERING
111 W Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
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SHEET DESCRIPTION:

TITLE 24

JOB NUMBER:	0714
SCALE:	N.T.S.
DATE:	12/12/13
DRAWN BY:	DS
CHECKED BY:	RT
CAD TITLE:	

SHEET NUMBER:

M0.5

OF SHEETS

PERFORMANCE CERTIFICATE: Residential (Part 1 of 5) CF-1R

Project Name	Building Type		Date
35 th & SCHOOL MIXED - USE	☐ Single Family ☐ Addition Alone ☑ Multi Family ☐ Existing+ Addition/Alteration		11/20/2013
Project Address	**California Energy Climate Zone**	**Total Cond. Floor Area**	**Addition**	**# of Stories**
3101 35th Street OAKLAND	CA Climate Zone 03	9,580	n/a	3

FIELD INSPECTION ENERGY CHECKLIST

☐ Yes ☑ No HERS Measures -- If Yes, A CF-4R must be provided per Part 2 of 5 of this form.

☐ Yes ☑ No Special Features -- If Yes, see Part 2 of 5 of this form for details.

INSULATION

Construction	Type	Cavity	Area (ft^2)	Special Features (see Part 2 of 5)	Status
Wall	Wood Framed	R-19	9,223		New
Door	Opaque Door	None	138		New
Slab	Untreated Slab-on-Grade	None	1,146	Perim = 168'	New
Roof	Wood Framed Rafter	R-30	3,459		New

FENESTRATION

Orientation	Area(ft^2)	U-Factor	SHGC	Overhang	Sidefins	Exterior Shades	Status
Front (S)	702.0	0.590	0.45	none	none	Bug Screen	New
Left (W)	354.0	0.590	0.45	none	none	Bug Screen	New
Front (S)	84.0	0.590	0.45	5.0	none	Louvered Sunscreen	New
Right (E)	18.0	0.590	0.45	10.0	none	Louvered Sunscreen	New
Rear (N)	351.0	0.590	0.45	none	none	Bug Screen	New
Right (E)	504.0	0.590	0.45	none	none	Bug Screen	New
Front (S)	84.0	0.590	0.45	5.0	none	Louvered Sunscreen	New
Left (W)	18.0	0.590	0.45	10.0	none	Louvered Sunscreen	New
Front (S)	48.0	0.590	0.45	none	7.5/0.0	Bug Screen	New
Front (S)	36.0	0.590	0.45	none	7.5/0.0	Bug Screen	New
Right (SE)	7.5	0.590	0.45	none	none	Bug Screen	New

HVAC SYSTEMS

Qty.	Heating	Min. Eff	Cooling	Min. Eff	Thermostat	Status
1	Central Furnace	80% AFUE	Split Air Conditioner	13.5 SEER	Setback	New
1	Central Furnace	80% AFUE	Split Air Conditioner	13.5 SEER	Setback	New
1	Central Furnace	80% AFUE	Split Air Conditioner	13.5 SEER	Setback	New

HVAC DISTRIBUTION

Location	Heating	Cooling	Duct Location	Duct R-Value	Status
CU-2/ GFF-2 UNIT 1	Ducted	Ducted	Attic, Ceiling Ins; vented	6.0	New
CU-2/ GFF-2 UNIT 2	Ducted	Ducted	Attic, Ceiling Ins, vented	6.0	New
CU-2/ GFF-2 UNIT 3	Ducted	Ducted	Attic, Ceiling Ins, Vented	6.0	New

WATER HEATING

Qty.	Type	Gallons	Min. Eff	Distribution	Status
7	Small Gas	50	0.90	Kitchen Pipe Ins	New

PERFORMANCE CERTIFICATE: Residential (Part 1 of 5) CF-1R

Project Name	Building Type		Date
35 th & SCHOOL MIXED - USE	☐ Single Family ☐ Addition Alone ☑ Multi Family ☐ Existing+ Addition/Alteration		11/20/2013
Project Address	**California Energy Climate Zone**	**Total Cond. Floor Area**	**Addition**	**# of Stories**
3101 35th Street OAKLAND	CA Climate Zone 03	9,580	n/a	3

FIELD INSPECTION ENERGY CHECKLIST

☐ Yes ☑ No HERS Measures -- If Yes, A CF-4R must be provided per Part 2 of 5 of this form.

☐ Yes ☑ No Special Features -- If Yes, see Part 2 of 5 of this form for details.

INSULATION

Construction	Type	Cavity	Area (ft^2)	Special Features (see Part 2 of 5)	Status

FENESTRATION

Orientation	Area(ft^2)	U-Factor	SHGC	Overhang	Sidefins	Exterior Shades	Status
Right (E)	42.0	0.590	0.45	5.0	none	Louvered Sunscreen	New
Rear (N)	9.0	0.590	0.45	10.0	none	Louvered Sunscreen	New
Right (E)	42.0	0.590	0.45	5.0	none	Louvered Sunscreen	New
Front (S)	9.0	0.590	0.45	10.0	none	Louvered Sunscreen	New

HVAC SYSTEMS

Qty.	Heating	Min. Eff	Cooling	Min. Eff	Thermostat	Status
1	Central Furnace	80% AFUE	Split Air Conditioner	13.5 SEER	Setback	New
1	Central Furnace	80% AFUE	Split Air Conditioner	13.2 SEER	Setback	New
1	Central Furnace	80% AFUE	Split Air Conditioner	13.5 SEER	Setback	New

HVAC DISTRIBUTION

Location	Heating	Cooling	Duct Location	Duct R-Value	Status
CU-2/ GFF-2 UNIT 4	Ducted	Ducted	Attic, Ceiling Ins, vented	6.0	New
CU-3/ GFF-3 UNIT 5	Ducted	Ducted	Attic, Ceiling Ins, vented	6.0	New
CU-2/ GFF-2 UNIT 6	Ducted	Ducted	Attic, Ceiling Ins, vented	6.0	New

WATER HEATING

Qty.	Type	Gallons	Min. Eff	Distribution	Status

PERFORMANCE CERTIFICATE: Residential (Part 1 of 5) CF-1R

Project Name	Building Type		Date
35 th & SCHOOL MIXED - USE	☐ Single Family ☐ Addition Alone ☑ Multi Family ☐ Existing+ Addition/Alteration		11/20/2013
Project Address	**California Energy Climate Zone**	**Total Cond. Floor Area**	**Addition**	**# of Stories**
3101 35th Street OAKLAND	CA Climate Zone 03	9,580	n/a	3

FIELD INSPECTION ENERGY CHECKLIST

☐ Yes ☑ No HERS Measures -- If Yes, A CF-4R must be provided per Part 2 of 5 of this form.

☐ Yes ☑ No Special Features -- If Yes, see Part 2 of 5 of this form for details.

INSULATION

Construction	Type	Cavity	Area (ft^2)	Special Features (see Part 2 of 5)	Status
					*

FENESTRATION

Orientation	Area(ft^2)	U-Factor	SHGC	Overhang	Sidefins	Exterior Shades	Status

HVAC SYSTEMS

Qty.	Heating	Min. Eff	Cooling	Min. Eff	Thermostat	Status
1	Central Furnace	80% AFUE	Split Air Conditioner	13.5 SEER	Setback	New

HVAC DISTRIBUTION

Location	Heating	Cooling	Duct Location	Duct R-Value	Status
CU-2/ GFF-2 UNIT 7	Ducted	Ducted	Attic, Ceiling Ins, vented	6.0	New

WATER HEATING

Qty.	Type	Gallons	Min. Eff	Distribution	Status

PERFORMANCE CERTIFICATE: Residential (Part 2 of 5) CF-1R

Project Name	Building Type		Date
35 th & SCHOOL MIXED - USE	☐ Single Family ☐ Addition Alone ☑ Multi Family ☐ Existing+ Addition/Alteration		11/20/2013

SPECIAL FEATURES INSPECTION CHECKLIST

The enforcement agency should pay special attention to the items specified in this checklist. These items require special written justification and documentation, and special verification to be used with the performance approach. The enforcement agency determines the adequacy of the justification, and may reject a building or design that otherwise complies based on the adequacy of the special justification and documentation submitted.

HERS REQUIRED VERIFICATION

Items in this section require field testing and/or verification by a certified HERS Rater. The inspector must receive a completed CF-4R form for each of the measures listed below for final to be given.

PERFORMANCE CERTIFICATE: Residential (Part 3 of 5) CF-1R

Project Name	Building Type		Date
35 th & SCHOOL MIXED - USE	☐ Single Family ☐ Addition Alone ☑ Multi Family ☐ Existing+ Addition/Alteration		11/20/2013

ANNUAL ENERGY USE SUMMARY

TDV (kBtu/ft^2-yr)	Standard	Proposed	Margin
Space Heating	14.65	19.79	-5.14
Space Cooling	6.69	4.00	2.69
Fans	4.23	4.11	0.12
Domestic Hot Water	23.69	14.61	9.09
Pumps	0.00	0.00	0.00
Totals	49.26	42.51	6.75
Percent Better Than Standard:			13.7 %

BUILDING COMPLIES - NO HERS VERIFICATION REQUIRED

				Fenestration Area
Building Front Orientation:	(S) 180 deg	Ext. Walls/Roof	Wall Area	
Number of Dwelling Units:	7.00	(S)	3,088	963
Fuel Available at Site:	Natural Gas	(W)	2,772	372
Raised Floor Area:	0	(N)	2,496	360
Slab on Grade Area:	1,146	(E)	3,316	614
Average Ceiling Height:	10.0	Roof	3,459	0
Fenestration Average U-Factor:	0.59		TOTAL:	2,309
Average SHGC:	0.45		Fenestration/CFA Ratio:	24.1 %

REMARKS

STATEMENT OF COMPLIANCE

This certificate of compliance lists the building features and specifications needed to comply with Title 24, Parts 1 the Administrative Regulations and Part 6 the Efficiency Standards of the California Code of Regulations.

The documentation author hereby certifies that the documentation is accurate and complete.

Documentation Author

Company	ACIES Engineering			11/20/2013
Address	111 W. Evelyn Ave. Suite 301	Name	Srdjan G Rebraca	
City/State/Zip	Sunnyvale, CA 94086	Phone	(408) 522-5255	Signed / Date

The individual with overall design responsibility hereby certifies that the proposed building design represented in this set of construction documents is consistent with the other compliance forms and worksheets, with the specifications, and with any other calculations submitted with this permit application, and recognizes that compliance using duct design, duct sealing, verification of refrigerant charge, insulation installation quality, and building envelope sealing require installer testing and certification and field verification by an approved HERS rater.

Designer or Owner (per Business & Professions Code)

Company	PHILIP BANTA & ASSOCIATES			
Address	6050 HOLLIS STREET	Name	PHILIP BANTA & ASSOCIATES	
City/State/Zip	EMERYVILLE, CA 94608	Phone	510.654.3255	Signed / License # / Date

CERTIFICATE OF COMPLIANCE: Residential (Part 4 of 5) CF-1R

Project Name	Building Type		Date
35 th & SCHOOL MIXED - USE	☐ Single Family ☐ Addition Alone ☑ Multi Family ☐ Existing+ Addition/Alteration		11/20/2013

OPAQUE SURFACE DETAILS

Surface Type	Area	U-Factor	Insulation Cavity	Insulation Exterior	Insulation Frame	Insulation Interior	Insulation Frame	Azm	Tilt	Status	Joint Appendix 4	Location/Comments
Wall	120	0.065	R-19					270	90	New	4.3.1-A7	UNIT 1 TYPE A2 (GROUN
Wall	158	0.065	R-19					180	90	New	4.3.1-A7	UNIT 1 TYPE A2 (GROUN
Door	23	1.450	None					180	90	New	4.5.1-A1	UNIT 1 TYPE A2 (GROUN
Slab	191	0.730	None					0	180	New	4.4.7-A1	UNIT 1 TYPE A2 (GROUN
Wall	344	0.065	R-19					270	90	New	4.3.1-A7	UNIT 1 TYPE A2 (SECON
Wall	97	0.065	R-19					180	90	New	4.3.1-A7	UNIT 1 TYPE A2 (SECON
Wall	59	0.065	R-19					90	90	New	4.3.1-A7	UNIT 1 TYPE A2 (SECON
Wall	133	0.065	R-19					0	90	New	4.3.1-A7	UNIT 1 TYPE A2 (SECON
Wall	320	0.065	R-19					270	90	New	4.3.1-A7	UNIT 1 TYPE A2 (THIRD)
Wall	100	0.065	R-19					180	90	New	4.3.1-A7	UNIT 1 TYPE A2 (THIRD)
Wall	63	0.065	R-19					90	90	New	4.3.1-A7	UNIT 1 TYPE A2 (THIRD)
Wall	133	0.065	R-19					0	90	New	4.3.1-A7	UNIT 1 TYPE A2 (THIRD)
Roof	476	0.026	R-30					0	0	New	4.3.2-A16	UNIT 1 TYPE A2 (THIRD)
Wall	158	0.065	R-19					180	90	New	4.3.1-A7	UNIT 2 TYPE A2 (GROUN
Door	23	1.450	None					180	90	New	4.5.1-A1	UNIT 2 TYPE A2 (GROUN
Slab	191	0.730	None					0	180	New	4.4.7-A1	UNIT 2 TYPE A2 (GROUN

FENESTRATION SURFACE DETAILS

ID	Type	Area	U-Factor[1]	SHGC[2]	Azm	Status	Glazing Type	Location/Comments
1	Window	24.0	0.590 NFRC	0.45 NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 1 TYPE A2 (GROUND)
2	Window	36.0	0.590 NFRC	0.45 NFRC	270	New	IWC 6200 Alum/Low-E	UNIT 1 TYPE A2 (SECOND)
3	Window	36.0	0.590 NFRC	0.45 NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 1 TYPE A2 (SECOND)
4	Window	42.0	0.590 NFRC	0.45 NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 1 TYPE A2 (SECOND)
5	Window	9.0	0.590 NFRC	0.45 NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 1 TYPE A2 (SECOND)
6	Window	42.0	0.590 NFRC	0.45 NFRC	0	New	IWC 6200 Alum/Low-E	UNIT 1 TYPE A2 (SECOND)
7	Window	60.0	0.590 NFRC	0.45 NFRC	270	New	IWC 6200 Alum/Low-E	UNIT 1 TYPE A2 (THIRD)
8	Window	15.0	0.590 NFRC	0.45 NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 1 TYPE A2 (THIRD)
9	Window	60.0	0.590 NFRC	0.45 NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 1 TYPE A2 (THIRD)
10	Window	15.0	0.590 NFRC	0.45 NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 1 TYPE A2 (THIRD)
11	Window	42.0	0.590 NFRC	0.45 NFRC	0	New	IWC 6200 Alum/Low-E	UNIT 1 TYPE A2 (THIRD)
12	Window	24.0	0.590 NFRC	0.45 NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 2 TYPE A2 (GROUND)
13	Window	36.0	0.590 NFRC	0.45 NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 2 TYPE A2 (SECOND)
14	Window	42.0	0.590 NFRC	0.45 NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 2 TYPE A2 (SECOND)
15	Window	9.0	0.590 NFRC	0.45 NFRC	270	New	IWC 6200 Alum/Low-E	UNIT 2 TYPE A2 (SECOND)
16	Window	42.0	0.590 NFRC	0.45 NFRC	0	New	IWC 6200 Alum/Low-E	UNIT 2 TYPE A2 (SECOND)

(1) U-Factor Type: 110-A = Default Table from Standards, NFRC = Labeled Value
(2) SHGC Type: 110-B = Default Table from Standards, NFRC = Labeled Value

EXTERIOR SHADING DETAILS

ID	Exterior Shade Type	SHGC	Window Hgt	Window Wd	Overhang Len	Overhang Hgt	Overhang LExt	Overhang RExt	Left Fin Dist	Left Fin Len	Left Fin Hgt	Right Fin Dist	Right Fin Len	Right Fin Hgt
1	Bug Screen	0.76												
2	Bug Screen	0.76												
3	Bug Screen	0.76												
4	Louvered Sunscreen	0.27	7.0	6.0	5.0	2.0	1.0	3.0						
5	Louvered Sunscreen	0.27	6.0	1.5	10.0	0.1	2.5	0.1						
6	Bug Screen	0.76												
7	Bug Screen	0.76												
8	Bug Screen	0.76												
9	Bug Screen	0.76												
10	Bug Screen	0.76												
11	Bug Screen	0.76												
12	Bug Screen	0.76												
13	Bug Screen	0.76												
14	Louvered Sunscreen	0.27	7.0	6.0	5.0	2.0	3.0	1.0						
15	Louvered Sunscreen	0.27	6.0	1.5	10.0	0.1	0.1	2.5						
16	Bug Screen	0.76												

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

TITLE 24

JOB NUMBER:	0714
SCALE:	N.T.S.
DATE:	12/12/13
DRAWN BY:	DS
CHECKED BY:	RT
CAD TITLE:	

SHEET NUMBER:

M0.6

OF SHEETS

CERTIFICATE OF COMPLIANCE: Residential (Part 4 of 5) CF-1R

Project Name: *35 th & SCHOOL MIXED - USE* | Building Type: ☐ Single Family ☐ Addition Alone ☑ Multi Family ☐ Existing+ Addition/Alteration | Date: *11/20/2013*

OPAQUE SURFACE DETAILS

Surface Type	Area	U-Factor	Insulation Cavity	Exterior	Frame	Interior	Frame	Azm	Tilt	Status	Joint Appendix 4	Location/Comments
Wall	97	0.065	R-19					180	90	New	4.3.1-A7	UNIT 2 TYPE A2 (SECON
Wall	69	0.065	R-19					270	90	New	4.3.1-A7	UNIT 2 TYPE A2 (SECON
Wall	133	0.065	R-19					0	90	New	4.3.1-A7	UNIT 2 TYPE A2 (SECON
Wall	100	0.065	R-19					180	90	New	4.3.1-A7	UNIT 2 TYPE A2 (THIRD)
Wall	63	0.065	R-19					270	90	New	4.3.1-A7	UNIT 2 TYPE A2 (THIRD)
Wall	133	0.065	R-19					0	90	New	4.3.1-A7	UNIT 2 TYPE A2 (THIRD)
Roof	476	0.036	R-30					0	0	New	4.2.2-A16	UNIT 2 TYPE A2 (THIRD)
Wall	158	0.065	R-19					180	90	New	4.3.1-A7	UNIT 3 TYPE A (GROUNI
Door	23	1.450	None					180	90	New	4.5.1-A1	UNIT 3 TYPE A (GROUNI
Slab	191	0.730	None					0	180	New	4.4.7-A1	UNIT 3 TYPE A (GROUNI
Wall	97	0.065	R-19					180	90	New	4.3.1-A7	UNIT 3 TYPE A (SECONI
Wall	69	0.065	R-19					90	90	New	4.3.1-A7	UNIT 3 TYPE A (SECONI
Wall	133	0.065	R-19					0	90	New	4.3.1-A7	UNIT 3 TYPE A (SECONI
Wall	100	0.065	R-19					180	90	New	4.3.1-A7	UNIT 3 TYPE A (THIRD)
Wall	63	0.065	R-19					90	90	New	4.3.1-A7	UNIT 3 TYPE A (THIRD)
Wall	133	0.065	R-19					0	90	New	4.3.1-A7	UNIT 3 TYPE A (THIRD)

FENESTRATION SURFACE DETAILS

ID	Type	Area	U-Factor[1]		SHGC[2]		Azm	Status	Glazing Type	Location/Comments
17	Window	15.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 2 TYPE A2 (THIRD)
18	Window	60.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 2 TYPE A2 (THIRD)
19	Window	15.0	0.590	NFRC	0.45	NFRC	270	New	IWC 6200 Alum/Low-E	UNIT 2 TYPE A2 (THIRD)
20	Window	42.0	0.590	NFRC	0.45	NFRC	0	New	IWC 6200 Alum/Low-E	UNIT 2 TYPE A2 (THIRD)
21	Window	24.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 3 TYPE A (GROUND)
22	Window	36.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 3 TYPE A (SECOND)
23	Window	42.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 3 TYPE A (SECOND)
24	Window	9.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 3 TYPE A (SECOND)
25	Window	42.0	0.590	NFRC	0.45	NFRC	0	New	IWC 6200 Alum/Low-E	UNIT 3 TYPE A (SECOND)
26	Window	15.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 3 TYPE A (THIRD)
27	Window	60.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 3 TYPE A (THIRD)
28	Window	15.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 3 TYPE A (THIRD)
29	Window	42.0	0.590	NFRC	0.45	NFRC	0	New	IWC 6200 Alum/Low-E	UNIT 3 TYPE A (THIRD)
30	Window	24.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 4 TYPE A (GROUND)
31	Window	36.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 4 TYPE A (SECOND)
32	Window	42.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 4 TYPE A (SECOND)

(1) U-Factor Type: 116-A = Default Table from Standards, NFRC = Labeled Value
(2) SHGC Type: 116-B = Default Table from Standards, NFRC = Labeled Value

EXTERIOR SHADING DETAILS

ID	Exterior Shade Type	SHGC	Window Hgt	Window Wd	Overhang Len	Overhang Hgt	Overhang LExt	Overhang RExt	Left Fin Dist	Left Fin Len	Left Fin Hgt	Right Fin Dist	Right Fin Len	Right Fin Hgt
17	Bug Screen	0.76												
18	Bug Screen	0.76												
19	Bug Screen	0.76												
20	Bug Screen	0.76												
21	Bug Screen	0.76												
22	Bug Screen	0.76												
23	Louvered Sunscreen	0.27	7.0	6.0	5.0	2.0	1.0	3.0						
24	Louvered Sunscreen	0.27	6.0	1.5	10.0	0.1	2.5	0.1						
25	Bug Screen	0.76												
26	Bug Screen	0.76												
27	Bug Screen	0.76												
28	Bug Screen	0.76												
29	Bug Screen	0.76												
30	Bug Screen	0.76												
31	Bug Screen	0.76												
32	Louvered Sunscreen	0.27	7.0	6.0	5.0	2.0	3.0	1.0						

CERTIFICATE OF COMPLIANCE: Residential (Part 4 of 5) CF-1R

Project Name: *35 th & SCHOOL MIXED - USE* | Building Type: ☐ Single Family ☐ Addition Alone ☑ Multi Family ☐ Existing+ Addition/Alteration | Date: *11/20/2013*

OPAQUE SURFACE DETAILS

Surface Type	Area	U-Factor	Insulation Cavity	Exterior	Frame	Interior	Frame	Azm	Tilt	Status	Joint Appendix 4	Location/Comments
Roof	476	0.036	R-30					0	0	New	4.2.2-A16	UNIT 3 TYPE A (THIRD)
Wall	158	0.065	R-19					180	90	New	4.3.1-A7	UNIT 4 TYPE A (GROUNI
Door	23	1.450	None					180	90	New	4.5.1-A1	UNIT 4 TYPE A (GROUNI
Slab	191	0.730	None					0	180	New	4.4.7-A1	UNIT 4 TYPE A (GROUNI
Wall	120	0.065	R-19					90	90	New	4.3.1-A7	UNIT 4 TYPE A (GROUNI
Wall	97	0.065	R-19					180	90	New	4.3.1-A7	UNIT 4 TYPE A (SECONI
Wall	69	0.065	R-19					270	90	New	4.3.1-A7	UNIT 4 TYPE A (SECONI
Wall	133	0.065	R-19					0	90	New	4.3.1-A7	UNIT 4 TYPE A (SECONI
Wall	380	0.065	R-19					90	90	New	4.3.1-A7	UNIT 4 TYPE A (SECONI
Wall	100	0.065	R-19					180	90	New	4.3.1-A7	UNIT 4 TYPE A (THIRD)
Wall	63	0.065	R-19					270	90	New	4.3.1-A7	UNIT 4 TYPE A (THIRD)
Wall	133	0.065	R-19					0	90	New	4.3.1-A7	UNIT 4 TYPE A (THIRD)
Roof	476	0.036	R-30					0	0	New	4.2.2-A16	UNIT 4 TYPE A (THIRD)
Wall	380	0.065	R-19					90	90	New	4.3.1-A7	UNIT 4 TYPE A (THIRD)
Wall	410	0.065	R-19					270	90	New	4.3.1-A7	UNIT 5 TYPE B (SECONI
Wall	258	0.065	R-19					180	90	New	4.3.1-A7	UNIT 5 TYPE B (SECONI

FENESTRATION SURFACE DETAILS

ID	Type	Area	U-Factor[1]		SHGC[2]		Azm	Status	Glazing Type	Location/Comments
33	Window	9.0	0.590	NFRC	0.45	NFRC	270	New	IWC 6200 Alum/Low-E	UNIT 4 TYPE A (SECOND)
34	Window	42.0	0.590	NFRC	0.45	NFRC	0	New	IWC 6200 Alum/Low-E	UNIT 4 TYPE A (SECOND)
35	Window	15.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 4 TYPE A (THIRD)
36	Window	60.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 4 TYPE A (THIRD)
37	Window	15.0	0.590	NFRC	0.45	NFRC	270	New	IWC 6200 Alum/Low-E	UNIT 4 TYPE A (THIRD)
38	Window	42.0	0.590	NFRC	0.45	NFRC	0	New	IWC 6200 Alum/Low-E	UNIT 4 TYPE A (THIRD)
39	Window	15.0	0.590	NFRC	0.45	NFRC	270	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (SECOND)
40	Window	15.0	0.590	NFRC	0.45	NFRC	270	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (SECOND)
41	Window	13.5	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (SECOND)
42	Window	48.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (SECOND)
43	Window	36.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (SECOND)
44	Window	48.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (SECOND)
45	Window	36.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (SECOND)
46	Window	12.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (SECOND)
47	Window	15.0	0.590	NFRC	0.45	NFRC	270	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (THIRD)
48	Window	15.0	0.590	NFRC	0.45	NFRC	270	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (THIRD)

(1) U-Factor Type: 116-A = Default Table from Standards, NFRC = Labeled Value
(2) SHGC Type: 116-B = Default Table from Standards, NFRC = Labeled Value

EXTERIOR SHADING DETAILS

ID	Exterior Shade Type	SHGC	Window Hgt	Window Wd	Overhang Len	Overhang Hgt	Overhang LExt	Overhang RExt	Left Fin Dist	Left Fin Len	Left Fin Hgt	Right Fin Dist	Right Fin Len	Right Fin Hgt
33	Louvered Sunscreen	0.27	6.0	1.5	10.0	0.1	0.1	2.5						
34	Bug Screen	0.76												
35	Bug Screen	0.76												
36	Bug Screen	0.76												
37	Bug Screen	0.76												
38	Bug Screen	0.76												
39	Bug Screen	0.76												
40	Bug Screen	0.76												
41	Bug Screen	0.76												
42	Bug Screen	0.76	8.0	6.0					2.5	7.5	0	0.0	0.0	0
43	Bug Screen	0.76	6.0	6.0					9.5	7.5	0	0.0	0.0	0
44	Bug Screen	0.76												
45	Bug Screen	0.76												
46	Bug Screen	0.76												
47	Bug Screen	0.76												
48	Bug Screen	0.76												

CERTIFICATE OF COMPLIANCE: Residential (Part 4 of 5) CF-1R

Project Name: *35 th & SCHOOL MIXED - USE* | Building Type: ☐ Single Family ☐ Addition Alone ☑ Multi Family ☐ Existing+ Addition/Alteration | Date: *11/20/2013*

OPAQUE SURFACE DETAILS

Surface Type	Area	U-Factor	Insulation Cavity	Exterior	Frame	Interior	Frame	Azm	Tilt	Status	Joint Appendix 4	Location/Comments
Wall	344	0.065	R-19					90	90	New	4.3.1-A7	UNIT 5 TYPE B (SECONI
Wall	30	0.065	R-19					0	90	New	4.3.1-A7	UNIT 5 TYPE B (SECONI
Wall	410	0.065	R-19					270	90	New	4.3.1-A7	UNIT 5 TYPE B (THIRD)
Wall	222	0.065	R-19					180	90	New	4.3.1-A7	UNIT 5 TYPE B (THIRD)
Wall	332	0.065	R-19					90	90	New	4.3.1-A7	UNIT 5 TYPE B (THIRD)
Wall	30	0.065	R-19					0	90	New	4.3.1-A7	UNIT 5 TYPE B (THIRD)
Roof	603	0.036	R-30					0	0	New	4.2.2-A16	UNIT 5 TYPE B (THIRD)
Wall	126	0.065	R-19					135	90	New	4.3.1-A7	UNIT 5 TYPE B (THIRD)
Wall	158	0.065	R-19					90	90	New	4.3.1-A7	UNIT 6 TYPE A (GROUNI
Door	23	1.450	None					90	90	New	4.5.1-A1	UNIT 6 TYPE A (GROUNI
Slab	191	0.730	None					0	180	New	4.4.7-A1	UNIT 6 TYPE A (GROUNI
Wall	97	0.065	R-19					90	90	New	4.3.1-A7	UNIT 6 TYPE A (SECONI
Wall	69	0.065	R-19					0	90	New	4.3.1-A7	UNIT 6 TYPE A (SECONI
Wall	133	0.065	R-19					270	90	New	4.3.1-A7	UNIT 6 TYPE A (SECONI
Wall	100	0.065	R-19					90	90	New	4.3.1-A7	UNIT 6 TYPE A (THIRD)
Wall	63	0.065	R-19					0	90	New	4.3.1-A7	UNIT 6 TYPE A (THIRD)

FENESTRATION SURFACE DETAILS

ID	Type	Area	U-Factor[1]		SHGC[2]		Azm	Status	Glazing Type	Location/Comments
49	Window	13.5	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (THIRD)
50	Window	60.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (THIRD)
51	Window	60.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (THIRD)
52	Window	60.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (THIRD)
53	Window	48.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (THIRD)
54	Window	7.5	0.590	NFRC	0.45	NFRC	135	New	IWC 6200 Alum/Low-E	UNIT 5 TYPE B (THIRD)
55	Window	24.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 6 TYPE A (GROUND)
56	Window	36.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 6 TYPE A (SECOND)
57	Window	42.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 6 TYPE A (SECOND)
58	Window	9.0	0.590	NFRC	0.45	NFRC	0	New	IWC 6200 Alum/Low-E	UNIT 6 TYPE A (SECOND)
59	Window	42.0	0.590	NFRC	0.45	NFRC	270	New	IWC 6200 Alum/Low-E	UNIT 6 TYPE A (SECOND)
60	Window	15.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 6 TYPE A (THIRD)
61	Window	60.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 6 TYPE A (THIRD)
62	Window	15.0	0.590	NFRC	0.45	NFRC	0	New	IWC 6200 Alum/Low-E	UNIT 6 TYPE A (THIRD)
63	Window	42.0	0.590	NFRC	0.45	NFRC	270	New	IWC 6200 Alum/Low-E	UNIT 6 TYPE A (THIRD)
64	Window	24.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 7 TYPE A (GROUND)

(1) U-Factor Type: 116-A = Default Table from Standards, NFRC = Labeled Value
(2) SHGC Type: 116-B = Default Table from Standards, NFRC = Labeled Value

EXTERIOR SHADING DETAILS

ID	Exterior Shade Type	SHGC	Window Hgt	Window Wd	Overhang Len	Overhang Hgt	Overhang LExt	Overhang RExt	Left Fin Dist	Left Fin Len	Left Fin Hgt	Right Fin Dist	Right Fin Len	Right Fin Hgt
49	Bug Screen	0.76												
50	Bug Screen	0.76												
51	Bug Screen	0.76												
52	Bug Screen	0.76												
53	Bug Screen	0.76												
54	Bug Screen	0.76												
55	Bug Screen	0.76												
56	Bug Screen	0.76												
57	Louvered Sunscreen	0.27	7.0	6.0	5.0	2.0	1.0	3.0						
58	Louvered Sunscreen	0.27	6.0	1.5	10.0	0.1	2.5	0.1						
59	Bug Screen	0.76												
60	Bug Screen	0.76												
61	Bug Screen	0.76												
62	Bug Screen	0.76												
63	Bug Screen	0.76												
64	Bug Screen	0.76												

CERTIFICATE OF COMPLIANCE: Residential (Part 4 of 5) CF-1R

Project Name: *35 th & SCHOOL MIXED - USE* | Building Type: ☐ Single Family ☐ Addition Alone ☑ Multi Family ☐ Existing+ Addition/Alteration | Date: *11/20/2013*

OPAQUE SURFACE DETAILS

Surface Type	Area	U-Factor	Insulation Cavity	Exterior	Frame	Interior	Frame	Azm	Tilt	Status	Joint Appendix 4	Location/Comments
Wall	133	0.065	R-19					270	90	New	4.3.1-A7	UNIT 6 TYPE A (THIRD)
Roof	476	0.036	R-30					0	0	New	4.2.2-A16	UNIT 6 TYPE A (THIRD)
Wall	158	0.065	R-19					90	90	New	4.3.1-A7	UNIT 7 TYPE A (GROUNI
Door	23	1.450	None					90	90	New	4.5.1-A1	UNIT 7 TYPE A (GROUNI
Slab	191	0.730	None					0	180	New	4.4.7-A1	UNIT 7 TYPE A (GROUNI
Wall	120	0.065	R-19					0	90	New	4.3.1-A7	UNIT 7 TYPE A (GROUNI
Wall	97	0.065	R-19					90	90	New	4.3.1-A7	UNIT 7 TYPE A (SECONI
Wall	69	0.065	R-19					180	90	New	4.3.1-A7	UNIT 7 TYPE A (SECONI
Wall	133	0.065	R-19					270	90	New	4.3.1-A7	UNIT 7 TYPE A (SECONI
Wall	380	0.065	R-19					0	90	New	4.3.1-A7	UNIT 7 TYPE A (SECONI
Wall	100	0.065	R-19					90	90	New	4.3.1-A7	UNIT 7 TYPE A (THIRD)
Wall	63	0.065	R-19					180	90	New	4.3.1-A7	UNIT 7 TYPE A (THIRD)
Wall	133	0.065	R-19					270	90	New	4.3.1-A7	UNIT 7 TYPE A (THIRD)
Roof	476	0.036	R-30					0	0	New	4.2.2-A16	UNIT 7 TYPE A (THIRD)
Wall	380	0.065	R-19					0	90	New	4.3.1-A7	UNIT 7 TYPE A (THIRD)

FENESTRATION SURFACE DETAILS

ID	Type	Area	U-Factor[1]		SHGC[2]		Azm	Status	Glazing Type	Location/Comments
65	Window	36.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 7 TYPE A (SECOND)
66	Window	42.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 7 TYPE A (SECOND)
67	Window	9.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 7 TYPE A (SECOND)
68	Window	42.0	0.590	NFRC	0.45	NFRC	270	New	IWC 6200 Alum/Low-E	UNIT 7 TYPE A (SECOND)
69	Window	15.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 7 TYPE A (THIRD)
70	Window	60.0	0.590	NFRC	0.45	NFRC	90	New	IWC 6200 Alum/Low-E	UNIT 7 TYPE A (THIRD)
71	Window	15.0	0.590	NFRC	0.45	NFRC	180	New	IWC 6200 Alum/Low-E	UNIT 7 TYPE A (THIRD)
72	Window	42.0	0.590	NFRC	0.45	NFRC	270	New	IWC 6200 Alum/Low-E	UNIT 7 TYPE A (THIRD)

(1) U-Factor Type: 116-A = Default Table from Standards, NFRC = Labeled Value
(2) SHGC Type: 116-B = Default Table from Standards, NFRC = Labeled Value

EXTERIOR SHADING DETAILS

ID	Exterior Shade Type	SHGC	Window Hgt	Window Wd	Overhang Len	Overhang Hgt	Overhang LExt	Overhang RExt	Left Fin Dist	Left Fin Len	Left Fin Hgt	Right Fin Dist	Right Fin Len	Right Fin Hgt
65	Bug Screen	0.76												
66	Louvered Sunscreen	0.27	7.0	6.0	5.0	2.0	3.0	1.0						
67	Louvered Sunscreen	0.27	6.0	1.5	10.0	0.1	0.1	2.5						
68	Bug Screen	0.76												
69	Bug Screen	0.76												
70	Bug Screen	0.76												
71	Bug Screen	0.76												
72	Bug Screen	0.76												

CERTIFICATE OF COMPLIANCE: Residential (Part 5 of 5) CF-1R

Project Name: *35 th & SCHOOL MIXED - USE* | Building Type: ☐ Single Family ☐ Addition Alone ☑ Multi Family ☐ Existing+ Addition/Alteration | Date: *11/20/2013*

BUILDING ZONE INFORMATION

System Name	Zone Name	Floor Area (ft²) New	Existing	Altered	Removed	Volume	Year Built
CU-2/ GFF-2 UNIT 1	UNIT 1 TYPE A2 (GROUND)	191				1,910	
	UNIT 1 TYPE A2 (SECOND)	615				6,150	
	UNIT 1 TYPE A2 (THIRD)	476				4,760	
CU-2/ GFF-2 UNIT 2	UNIT 2 TYPE A2 (GROUND)	191				1,910	
	UNIT 2 TYPE A2 (SECOND)	615				6,150	
	UNIT 2 TYPE A2 (THIRD)	476				4,760	
CU-2/ GFF-2 UNIT 3	UNIT 3 TYPE A2 (GROUND)	191				1,910	
	UNIT 3 TYPE A2 (SECOND)	615				6,150	
	UNIT 3 TYPE A2 (THIRD)	476				4,760	
CU-2/ GFF-2 UNIT 4	UNIT 2 TYPE A2 (GROUND)	191				1,910	
	UNIT 2 TYPE A2 (SECOND)	615				6,150	
	UNIT 2 TYPE A2 (THIRD)	476				4,760	
CU-3/ GFF-3 UNIT 5	UNIT 5 TYPE B (SECOND)	1,285				12,850	
	UNIT 5 TYPE B (THIRD)	603				6,030	
CU-2/ GFF-2 UNIT 6	UNIT 6 TYPE A2 (GROUND)	191				1,910	
	Totals	9,580	0	0	0		

HVAC SYSTEMS

System Name	Qty.	Heating Type	Min. Eff.	Cooling Type	Min. Eff.	Thermostat Type	Status
CU-2/ GFF-2 UNIT 1	1	Central Furnace	80% AFUE	Split Air Conditioner	13.5 SEER	Setback	New
CU-2/ GFF-2 UNIT 2	1	Central Furnace	80% AFUE	Split Air Conditioner	13.5 SEER	Setback	New
CU-2/ GFF-2 UNIT 3	1	Central Furnace	80% AFUE	Split Air Conditioner	13.5 SEER	Setback	New
CU-2/ GFF-2 UNIT 4	1	Central Furnace	80% AFUE	Split Air Conditioner	13.5 SEER	Setback	New
CU-3/ GFF-3 UNIT 5	1	Central Furnace	80% AFUE	Split Air Conditioner	13.2 SEER	Setback	New

HVAC DISTRIBUTION

System Name	Heating	Cooling	Duct Location	Duct R-Value	Ducts Tested?	Status
CU-2/ GFF-2 UNIT 1	Ducted	Ducted	Attic, Ceiling Ins, vented	6.0	☐	New
CU-2/ GFF-2 UNIT 2	Ducted	Ducted	Attic, Ceiling Ins, vented	6.0	☐	New
CU-2/ GFF-2 UNIT 3	Ducted	Ducted	Attic, Ceiling Ins, vented	6.0	☐	New
CU-2/ GFF-2 UNIT 4	Ducted	Ducted	Attic, Ceiling Ins, vented	6.0	☐	New
CU-3/ GFF-3 UNIT 5	Ducted	Ducted	Attic, Ceiling Ins, vented	6.0	☐	New

WATER HEATING SYSTEMS

System Name	Qty.	Type	Distribution	Rated Input (Btuh)	Tank Cap. (gal)	Energy Factor or RE	Standby Loss or Pilot	Ext. Tank Insul. R-Value	Status
A.O. SMITH GPVX-50L	7	Small Gas	Kitchen Pipe Ins	62,500	50	0.90	n/a	n/a	New

MULTI-FAMILY WATER HEATING DETAILS

Control	Qty.	HP	Hot Water Piping Length (ft) Plenum	Outside	Buried	Add ½" Insulation
						☐
						☐
						☐
						☐
						☐

HYDRONIC HEATING SYSTEM PIPING

System Name	Pipe Length	Pipe Diameter	Insul. Thick.

CERTIFICATE OF COMPLIANCE: Residential (Part 5 of 5) CF-1R

Project Name: *35 th & SCHOOL MIXED - USE* | Building Type: ☐ Single Family ☐ Addition Alone ☑ Multi Family ☐ Existing+ Addition/Alteration | Date: *11/20/2013*

BUILDING ZONE INFORMATION

System Name	Zone Name	Floor Area (ft²) New	Existing	Altered	Removed	Volume	Year Built
	UNIT 6 TYPE A (SECOND)	615				6,150	
	UNIT 6 TYPE A (THIRD)	476				4,760	
CU-2/ GFF-2 UNIT 7	UNIT 7 TYPE A (GROUND)	191				1,910	
	UNIT 7 TYPE A (SECOND)	615				6,150	
	UNIT 7 TYPE A (THIRD)	476				4,760	
	Totals	9,580	0	0	0		

HVAC SYSTEMS

System Name	Qty.	Heating Type	Min. Eff.	Cooling Type	Min. Eff.	Thermostat Type	Status
CU-2/ GFF-2 UNIT 6	1	Central Furnace	80% AFUE	Split Air Conditioner	13.5 SEER	Setback	New
CU-2/ GFF-2 UNIT 7	1	Central Furnace	80% AFUE	Split Air Conditioner	13.5 SEER	Setback	New

HVAC DISTRIBUTION

System Name	Heating	Cooling	Duct Location	Duct R-Value	Ducts Tested?	Status
CU-2/ GFF-2 UNIT 6	Ducted	Ducted	Attic, Ceiling Ins, vented	6.0	☐	New
CU-2/ GFF-2 UNIT 7	Ducted	Ducted	Attic, Ceiling Ins, vented	6.0	☐	New
					☐	
					☐	
					☐	

WATER HEATING SYSTEMS

System Name	Qty.	Type	Distribution	Rated Input (Btuh)	Tank Cap. (gal)	Energy Factor or RE	Standby Loss or Pilot	Ext. Tank Insul. R-Value	Status

MULTI-FAMILY WATER HEATING DETAILS

Control	Qty.	HP	Hot Water Piping Length (ft) Plenum	Outside	Buried	Add ½" Insulation
						☐
						☐
						☐
						☐
						☐

HYDRONIC HEATING SYSTEM PIPING

System Name	Pipe Length	Pipe Diameter	Insul. Thick.

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

REGISTERED PROFESSIONAL ENGINEER SRDJAN G. REBRACA No. M28486 Exp. 06/30/15 MECHANICAL STATE OF CALIFORNIA

SHEET DESCRIPTION:

TITLE 24

JOB NUMBER:	0714
SCALE:	N.T.S.
DATE:	12/12/13
DRAWN BY:	DS
CHECKED BY:	RT
CAD TITLE:	
SHEET NUMBER:	M0.7

OF SHEETS

MANDATORY MEASURES SUMMARY: Residential (Page 1 of 3) MF-1R

Project Name: *35 th & SCHOOL MIXED - USE* | Date: *11/20/2013*

NOTE: Low-rise residential buildings subject to the Standards must comply with all applicable mandatory measures listed, regardless of the compliance approach used. More stringent energy measures listed on the Certificate of Compliance (CF-1R, CF-1R-ADD, or CF-1R-ALT Form) shall supersede the items marked with an asterisk (*) below. This Mandatory Measures Summary shall be incorporated into the permit documents, and the applicable features shall be considered by all parties as minimum component performance specifications whether they are shown elsewhere in the documents or in this summary. Submit all applicable sections of the MF-1R Form with plans.

Building Envelope Measures:

§116(a)1: Doors and windows between conditioned and unconditioned spaces are manufactured to limit air leakage.

§116(a)4: Fenestration products (except field-fabricated windows) have a label listing the certified U-Factor, certified Solar Heat Gain Coefficient (SHGC), and infiltration that meets the requirements of §10-111(a).

§117: Exterior doors and windows are weather-stripped, all joints and penetrations are caulked and sealed.

§118(a): Insulation specified or installed meets Standards for Insulating Material. Indicate type and include on CF-6R Form.

§118(i): The thermal emittance and solar reflectance values of the cool roofing material meets the requirements of §118(i) when the installation of a Cool Roof is specified on the CF-1R Form.

*§150(a): Minimum R-19 insulation in wood-frame ceiling or equivalent U-factor.

§150(b): Loose fill insulation shall conform with manufacturer's installed design labeled R-Value.

*§150(c): Minimum R-13 insulation in wood-frame wall or equivalent U-factor.

*§150(d): Minimum R-13 insulation in raised wood-frame floor or equivalent U-factor.

§150(f): Air retarding wrap is tested, labeled, and installed according to ASTM E1677-95(2000) when specified on the CF-1R Form.

§150(g): Mandatory Vapor barrier installed in Climate Zones 14 or 16.

§150(j): Water absorption rate for slab edge insulation material alone without facings is no greater than 0.3%; water vapor permeance rate is no greater than 2.0 perm/inch and shall be protected from physical damage and UV light deterioration.

Fireplaces, Decorative Gas Appliances and Gas Log Measures:

§150(e)1A: Masonry or factory-built fireplaces have a closable metal or glass door covering the entire opening of the firebox.

§150(e)1B: Masonry or factory-built fireplaces have a combustion outside air intake, which is at least six square inches in area and is equipped with a with a readily accessible, operable, and tight-fitting damper and or a combustion-air control device.

§150(e)2: Continuous burning pilot lights and the use of indoor air for cooling a firebox jacket, when that indoor air is vented to the outside of the building, are prohibited.

Space Conditioning, Water Heating and Plumbing System Measures:

§110-§113: HVAC equipment, water heaters, showerheads, faucets and all other regulated appliances are certified by the Energy Commission.

§113(c)5: Water heating recirculation loops serving multiple dwelling units and High-Rise residential occupancies meet the air release valve, backflow prevention, pump isolation valve, and recirculation loop connection requirements of §113(c)5.

§115: Continuously burning pilot lights are prohibited for natural gas: fan-type central furnaces, household cooking appliances (appliances with an electrical supply voltage connection with pilot lights that consume less than 150 Btu/hr are exempt), and pool and spa heaters.

§150(h): Heating and/or cooling loads are calculated in accordance with ASHRAE, SMACNA or ACCA.

§150(i): Heating systems are equipped with thermostats that meet the setback requirements of Section 112(c).

§150(j)1A: Storage gas water heaters rated with an Energy Factor no greater than the federal minimal standard are externally wrapped with insulation having an installed thermal resistance of R-12 or greater.

§150(j)1B: Unfired storage tanks, such as storage tanks or backup tanks for solar water-heating system, or other indirect hot water tanks have R-12 external insulation or R-16 internal insulation where the internal insulation R-value is indicated on the exterior of the tank.

§150(j)2: First 5 feet of hot and cold water pipes closest to water heater tank, non-recirculating systems, and entire length of recirculating sections of hot water pipes are insulated per Standards Table 150-B.

§150(j)2: Cooling system piping (suction, chilled water, or brine lines),and piping insulated between heating source and indirect hot water tank shall be insulated to Table 150-B and Equation 150-A.

§150(j)2: Pipe insulation for steam hydronic heating systems or hot water systems >15 psi, meets the requirements of Standards Table 123-A.

§150(j)3A: Insulation is protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind.

§150(j)3A: Insulation for chilled water piping and refrigerant suction lines includes a vapor retardant or is enclosed entirely in conditioned space.

§150(j)4: Solar water-heating systems and/or collectors are certified by the Solar Rating and Certification Corporation.

MANDATORY MEASURES SUMMARY: Residential (Page 2 of 3) MF-1R

Project Name: *35 th & SCHOOL MIXED - USE* | Date: *11/20/2013*

§150(m)1: All air-distribution system ducts and plenums installed, are sealed and insulated to meet the requirements of CMC Sections 601, 602, 603, 604, 605 and Standard 6-5; supply-air and return-air ducts and plenums are insulated to a minimum installed level of R-4.2 or enclosed entirely in conditioned space. Openings shall be sealed with mastic, tape or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than 1/4 inch, the combination of mastic and either mesh or tape shall be used

§150(m)1: Building cavities, support platforms for air handlers, and plenums defined or constructed with materials other than sealed sheet metal, duct board or flexible duct shall not be used for conveying conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms shall not be compressed to cause reductions in the cross-sectional area of the ducts.

§150(m)2D: Joints and seams of duct systems and their components shall not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.

§150(m)7: Exhaust fan systems have back draft or automatic dampers.

§150(m)8: Gravity ventilating systems serving conditioned space have either automatic or readily accessible, manually operated dampers.

§150(m)9: Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Cellular foam insulation shall be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation that can cause degradation of the material.

§150(m)10: Flexible ducts cannot have porous inner cores.

§150(o): All dwelling units shall meet the requirements of ANSI/ASHRAE Standard 62.2-2007 Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings. Window operation is not a permissible method of providing the Whole Building Ventilation required in Section 4 of that Standard.

Pool and Spa Heating Systems and Equipment Measures:

§114(a): Any pool or spa heating system shall be certified to have: a thermal efficiency that complies with the Appliance Efficiency Regulations; an on-off switch mounted outside of the heater, a permanent weatherproof plate or card with operating instructions; and shall not use electric resistance heating or a pilot light.

§114(b)1: Any pool or spa heating equipment shall be installed with at least 36" of pipe between filter and heater, or dedicated suction and return lines, or built-up connections for future solar heating.

§114(b)2: Outdoor pools or spas that have a heat pump or gas heater shall have a cover.

§114(b)3: Pools shall have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.

§150(p): Residential pool systems or equipment meet the pump sizing, flow rate, piping, filters, and valve requirements of §150(p).

Residential Lighting Measures:

§150(k)1: High efficacy luminaires or LED Light Engine with Integral Heat Sink has an efficacy that is no lower than the efficacies contained in Table 150-C and is not a low efficacy luminaire as specified by §150(k)2.

§150(k)3: The wattage of permanently installed luminaires shall be determined as specified by §130(d).

§150(k)4: Ballasts for fluorescent lamps rated 13 Watts or greater shall be electronic and shall have an output frequency no less than 20 kHz.

§150(k)5: Permanently installed night lights and night lights integral to a permanently installed luminaire or exhaust fan shall contain only high efficacy lamps meeting the minimum efficacies contained in Table 150-C and shall not contain a line-voltage socket or line-voltage lamp holder; OR shall be rated to consume no more than five watts of power as determined by §130(d), and shall not contain a medium screw-base socket.

§150(k)6: Lighting integral to exhaust fans, in rooms other than kitchens, shall meet the applicable requirements of §150(k).

§150(k)7: All switching devices and controls shall meet the requirements of §150(k)7.

§150(k)8: A minimum of 50 percent of the total rated wattage of permanently installed lighting in kitchens shall be high efficacy. EXCEPTION: Up to 50 watts for dwelling units less than or equal to 2,500 ft2 or 100 watts for dwelling units larger than 2,500 ft2 may be exempt from the 50% high efficacy requirement when: all low efficacy luminaires in the kitchen are controlled by a manual on occupant sensor, dimmer, energy management system (EMCS), or a multi-scene programmable control system; and all permanently installed luminaries in garages, laundry rooms, closets greater than 70 square feet, and utility rooms are high efficacy and controlled by a manual-on occupant sensor.

§150(k)9: Permanently installed lighting that is internal to cabinets shall use no more than 20 watts of power per linear foot of illuminated cabinet.

MANDATORY MEASURES SUMMARY: Residential (Page 3 of 3) MF-1R

Project Name: *35 th & SCHOOL MIXED - USE* | Date: *11/20/2013*

§150(k)10: Permanently installed luminaires in bathrooms, attached and detached garages, laundry rooms, closets and utility rooms shall be high efficacy.
EXCEPTION 1: Permanently installed low efficacy luminaires shall be allowed provided that they are controlled by a manual-on occupant sensor certified to comply with the applicable requirements of §119.
EXCEPTION 2: Permanently installed low efficacy luminaires in closets less than 70 square feet are not required to be controlled by a manual-on occupancy sensor.

§150(k)11: Permanently installed luminaires located in rooms or areas other than in kitchens, bathrooms, garages, laundry rooms, closets, and utility rooms shall be high efficacy luminaires. EXCEPTION 1: Permanently installed low efficacy luminaires shall be allowed provided they are controlled by either a dimmer switch that complies with the applicable requirements of §119, or by a manual-on occupant sensor that complies with the applicable requirements of §119. EXCEPTION 2: Lighting in detached storage building less than 1000 square feet located on a residential site is not required to comply with §150(k)11.

§150(k)12: Luminaires recessed into insulated ceilings shall be listed for zero clearance insulation contact (IC) by Underwriters Laboratories or other nationally recognized testing/rating laboratory, and have a label that certifies the luminaire is airtight with air leakage less then 2.0 CFM at 75 Pascals when tested in accordance with ASTM E283; and be sealed with a gasket or caulk between the luminaire housing and ceiling.

§150(k)13: Luminaires providing outdoor lighting, including lighting for private patios in low-rise residential buildings with four or more dwelling units, entrances, balconies, and porches, which are permanently mounted to a residential building or to other buildings on the same lot shall be high efficacy. EXCEPTION 1: Permanently installed outdoor low efficacy luminaires shall be allowed provided that they are controlled by a manual on/off switch, a motion sensor not having an override or bypass switch that disables the motion sensor, and one of the following controls: a photocontrol not having an override or bypass switch that disables the photocontrol; OR an astronomical time clock not having an override or bypass switch that disables the astronomical time clock; OR an energy management control system (EMCS) not having an override or bypass switch that allows the luminaire to be always on EXCEPTION 2: Outdoor luminaires used to comply with Exception1 to §150(k)13 may be controlled by a temporary override switch which bypasses the motion sensing function provided that the motion sensor is automatically reactivated within six hours. EXCEPTION 3: Permanently installed luminaires in or around swimming pool, water features, or other location subject to Article 680 of the California Electric Code need not be high efficacy luminaires.

§150(k)14: Internally illuminated address signs shall comply with Section 148; OR not contain a screw-base socket, and consume no more than five watts of power as determined according to §130(d).

§150(k)15: Lighting for parking lots and carports with a total of for 8 or more vehicles per site shall comply with the applicable requirements in Sections 130, 132, 134, and 147. Lighting for parking garages for 8 or more vehicles shall comply with the applicable requirements of Sections 130, 131, 134, and 146.

§150(k)16: Permanently installed lighting in the enclosed, non-dwelling spaces of low-rise residential buildings with four or more dwelling units shall be high efficacy luminaires. EXCEPTION: Permanently installed low efficacy luminaires shall be allowed provided that they are controlled by an occupant sensor(s) certified to comply with the applicable requirements of §119.

ARCHITECTURE

REVISIONS △ ISSUES ○

NO.	DATE	DESCRIPTION
1	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

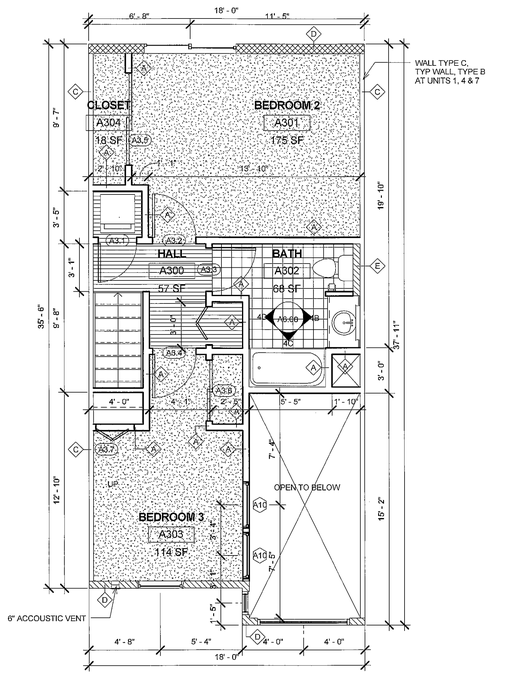
TITLE 24

JOB NUMBER:	0714
SCALE:	N.T.S.
DATE:	12/12/13
DRAWN BY:	DS
CHECKED BY:	RT
CAD TITLE:	

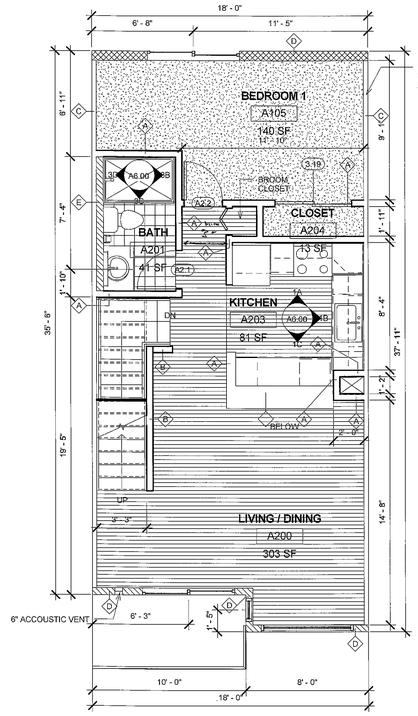
SHEET NUMBER:

M0.8

OF SHEETS



3 UNIT A 3RD FLOOR
1/4" = 1'-0"



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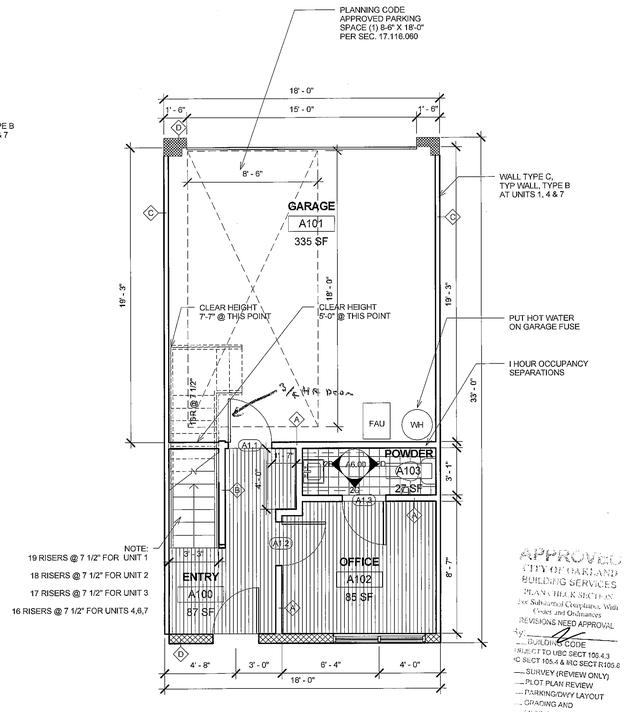

1 UNIT A 1ST FLOOR
1/4" = 1'-0"

APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK SECTION
As Submitted Complying With
Codes and Ordinances
REVISIONS NEED APPROVAL
By: _____
BUILDING CODE
SUBJECT TO UBC SECT 105.4.3
IBC SECT 105.4 AND SECT R105.6
SURVEY (REVIEW ONLY)
PLOT PLAN REVIEW
PARKING/DWY LAYOUT
GRADING AND
EROSION CONTROL
SOILS REPORT ON FILE
MECH. PLUMB.
LOCKED

BUILDING PLAN LEGEND

- CONCRETE
- CERAMIC TILE
- CARPET
- LAMINATE WOOD FLOORING
- CEILING DROPPED TO 8'-0"
- 2x4 STUD WALL
- 2x6 STUD WALL
- 2x8 STUD WALL

BUILDING PLAN NOTES

1. FOR WALL TYPES REFER PAGE 9.00
2. ALL INTERIOR WALLS TO BE WALL TYPE A UNLESS OTHERWISE NOTED
3. EXTERIOR DOOR TAGS & WINDOW TAGS ARE LOCATED IN BUILDING PLANS A.1 SERIES
4. SEE SHEET A7.00 FOR ROOM FINISH SCHEDULE

ARCHITECTURE
PHILIP BANTA & ASSOCIATES
3050 HOLLIS STREET
EMERYVILLE, CALIFORNIA 94608
TEL: (510) 654-3255
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REVISIONS: △ ISSUES: ○

No.	Description	Date
△	1ST PLAN CHECK REVIEW	01/14/14
(1)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

SHEET DESCRIPTION:

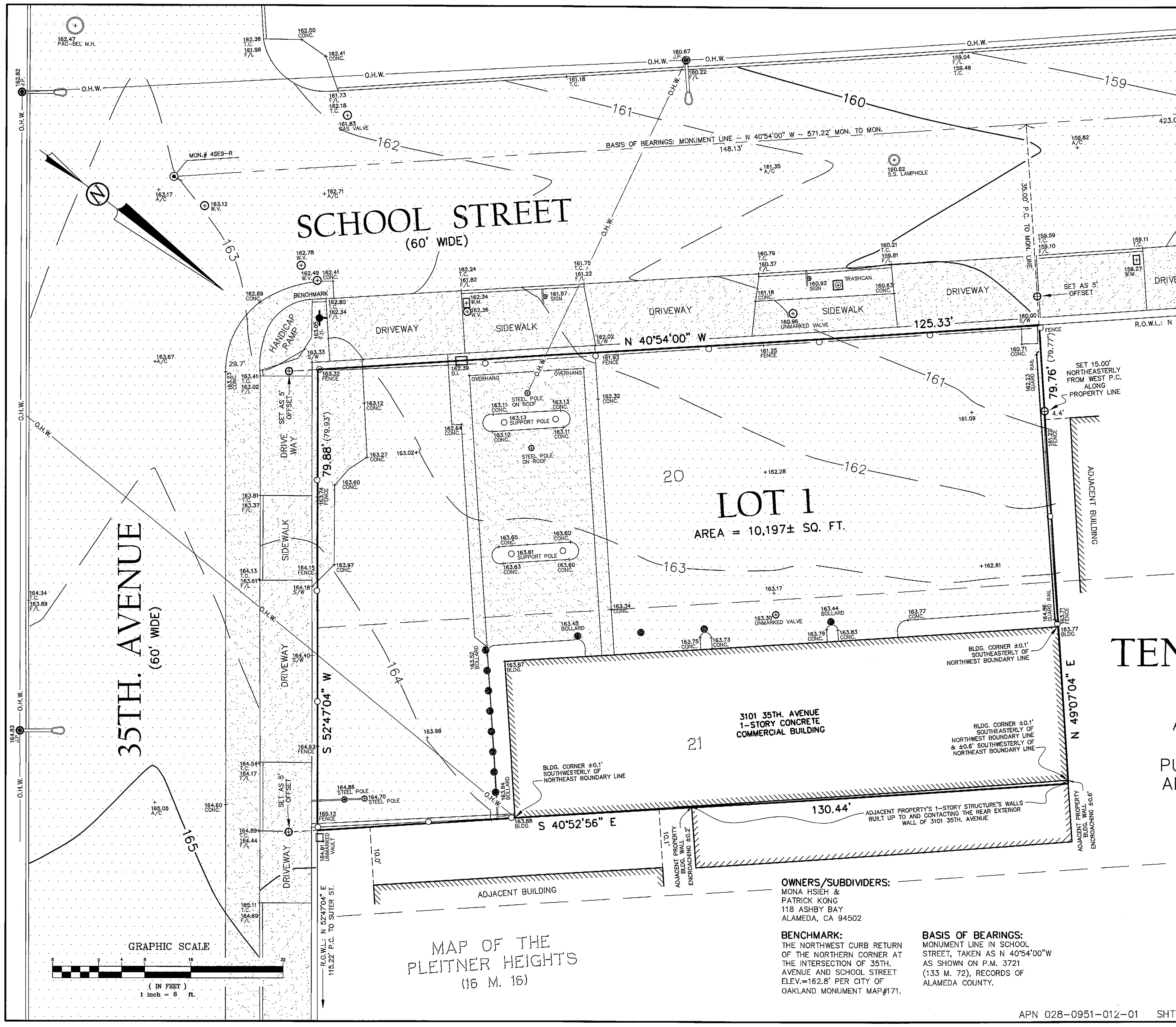
UNIT A PLANS

APPLICANT COPY

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/4" = 1'-0"

A2.00

12/7/2013 4:01:00 PM



LEGEND			
⦿	FD. WELL MONUMENT	J.P.	JOINT POLE
⟋⟋⟋	BUILDING FOOTPRINT	M.H.	MANHOLE
—o—	CHAIN LINK FENCE	O.H.W.	OVERHEAD WIRE
	FIRE HYDRANT	P.C.	PROPERTY CORNER
	SIGN POLE	R.O.W.L.	RIGHT-OF-WAY LINE
	ASPHALT	S/W	SIDEWALK POINT
	CONCRETE	S.D.	STORM DRAIN
A/C	ASPHALT CROWN	S.S.	SANITARY SEWER
BLDG.	BUILDING POINT	T.C.	TOP OF CURB
(C)	CITY DATA	W.M.	WATER METER
CONC.	CONCRETE POINT	W.V.	WATER VALVE
F/L	FLOW LINE	⊕	SET NAIL & BRASS TAG, L.S. 7170
F.H.	FIRE HYDRANT	———	PROPERTY LINE
		— —	TRACT LOT LINE

PROFESSIONAL LAND SURVEYOR MICHAEL J. FOSTER No. 7170 Exp. 12/31/09 STATE OF CALIFORNIA

Michael J. Foster
10-19-07

TENTATIVE PARCEL MAP 9677

A ONE LOT SUBDIVISION FOR CONDOMINIUM CONVERSION PURPOSES – ONE COMMERCIAL AND SEVEN RESIDENTIAL UNITS

PORTIONS OF LOTS 20 & 21
MAP OF THE PLEITNER HEIGHTS TRACT
(16 M. 16),
CITY OF OAKLAND, COUNTY OF ALAMEDA,
STATE OF CALIFORNIA.

OCTOBER, 2007 – SCALE: 1" = 8'

BAY AREA LAND SURVEYING INC.
961 MITCHELL WAY
EL SOBRANTE, CALIFORNIA
94803
(510) 223-5167

OWNERS/SUBDIVIDERS:
MONA HSIEH &
PATRICK KONG
118 ASHBY BAY
ALAMEDA, CA 94502

BENCHMARK:
THE NORTHWEST CURB RETURN OF THE NORTHERN CORNER AT THE INTERSECTION OF 35TH. AVENUE AND SCHOOL STREET ELEV.=162.8' PER CITY OF OAKLAND MONUMENT MAP#171.

BASIS OF BEARINGS:
MONUMENT LINE IN SCHOOL STREET, TAKEN AS N 40°54'00"W AS SHOWN ON P.M. 3721 (133 M. 72), RECORDS OF ALAMEDA COUNTY.

APN 028-0951-012-01 SHT. 1 OF 1 F.B. NO. 291 /35TH1439TPM.DWG JOB NO. 07-1439

ARCHITECTURE
PHILIP BANTA & ASSOCIATES
6050 HOLLIS STREET
EMERYVILLE, CALIFORNIA 94608
TEL | 510 654 3255
FAX | 510 654 3259
www | bantadesign.com

REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (△)	1ST PLAN CHECK REVIEW	01/14/14
1 (○)	BUILDING PERMIT	12/12/13

PROJECT:
35th @ School
Oakland, CA 94619

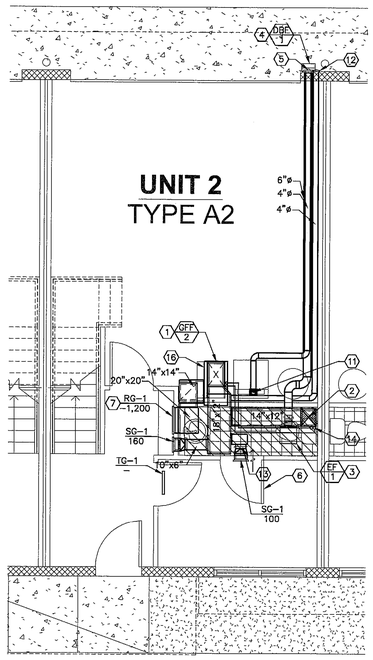
LICENSED ARCHITECT PHILIP BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

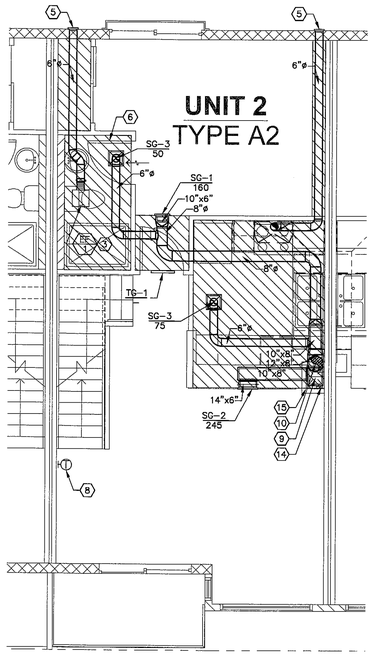
SHEET DESCRIPTION:
SURVEY △1

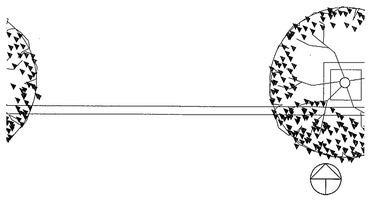
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1" = 10'-0"

GEN-04

12/7/2013 4:02:26 PM







1. VERTICALLY MOUNTED, UP FLOW DISCHARGE, MULTIPOISE INDUCED COMBUSTION FURNACE.
2. 14"x12" SUPPLY AIR DUCT WITH 1" DUCT LINER, UP.
3. CEILING MOUNTED TOILET EXHAUST FAN.
4. SIDE WALL MOUNTED DRYER BOOSTER FAN. DRYER FAN SHALL BE HARD-WIRED INTERLOCKED WITH DRYER.
5. WALL CAP.
6. UNDERCUT DOOR, TYP.
7. 12"x36" RETURN GRILLE WITH WALL MOUNTING APPLICATION AT 12" A.F.F. PROVIDE AT LEAST 38" WIDE FREE WALL AREA FOR MOUNTING THE GRILLE.
8. MOUNT THERMOSTAT AT 48" A.F.F.
9. 14"x12" SUPPLY AIR DUCT WITH 1" DUCT LINER.
10. 12"ø SUPPLY AIR DUCT, UP.
11. PROVIDE LINT TRAP MODEL DBLT-4 MANUFACTURED BY FANTECH WITH REMOVABLE LINT FILTER. LOCATE LINT TRAP IN GARAGE.
12. 4"ø PIPE FLUE VENT. TOTAL EQUIVALENT LENGTH CANNOT EXCEED 100 FEET. ONE ELBOW IS EQUIVALENT TO 5'. PIPE PENETRATION SIDE WALL.
13. MANUAL BALANCE DAMPER, TYP.
14. GAS AND LIQUID REFRIGERANT PIPES, UP TO CONDENSING UNIT ON THE ROOF.
15. PROVIDE 18"X14" MECHANICAL SHAFT.
16. RETURN AIR PLENUM (UNDER THE UNIT).

1 UNIT 2 TYPE A2 - MECHANICAL GROUND FLOOR PLAN
1/4" = 1'-0" TYP. TO UNITS 4&7
TYP. TO UNITS 1,3&6 BUT OPPOSITE HAND

2 UNIT 2 TYPE A2 - MECHANICAL 2ND FLOOR PLAN
1/4" = 1'-0" TYP. TO UNITS 4&7
TYP. TO UNITS 1,3&6 BUT OPPOSITE HAND

1 SHEET KEYNOTES
N.T.S.

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

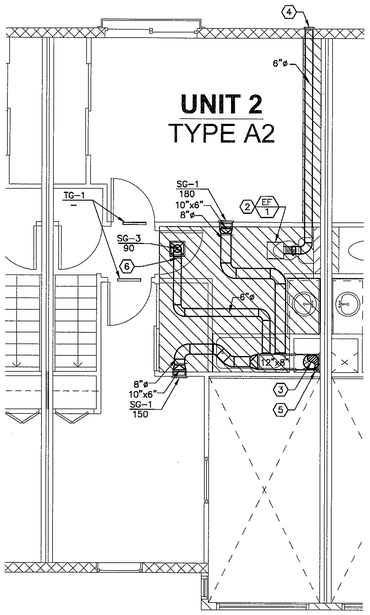
TYPICAL UNIT MECHANICAL GROUND & 2ND FLOOR PLAN

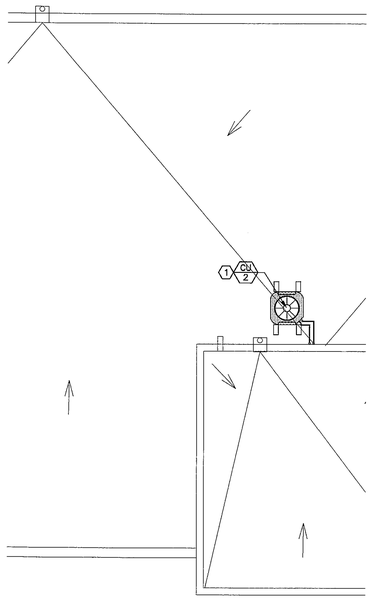
JOB NUMBER:	0714
SCALE:	AS NOTED
DATE:	12/12/13
DRAWN BY:	DS
CHECKED BY:	RT
CAD TITLE:	

SHEET NUMBER:

M2.01

OF SHEETS





1. COOLING ONLY CONDENSING UNIT ON THE ROOF.
2. CEILING MOUNTED TOILET EXHAUST FAN.
3. 12"ø SUPPLY AIR DUCT, DOWN.
4. WALL CAP.
5. GAS AND LIQUID REFRIGERANT PIPES, UP TOCONDENSING UNIT ON THE ROOF.
6. MANUAL BALANCE DAMPER, TYP.

1 UNIT 2 TYPE A2 - MECHANICAL 3RD FLOOR PLAN
1/4" = 1'-0"
TYP. TO UNITS 4&7
TYP. TO UNITS 1,3&6 BUT OPPOSITE HAND

2 UNIT 2 TYPE A2 - MECHANICAL ROOF PLAN
1/4" = 1'-0"
TYP. TO UNITS 4&7
TYP. TO UNITS 1,3&6 BUT OPPOSITE HAND

3 SHEET KEYNOTES
N.T.S.

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

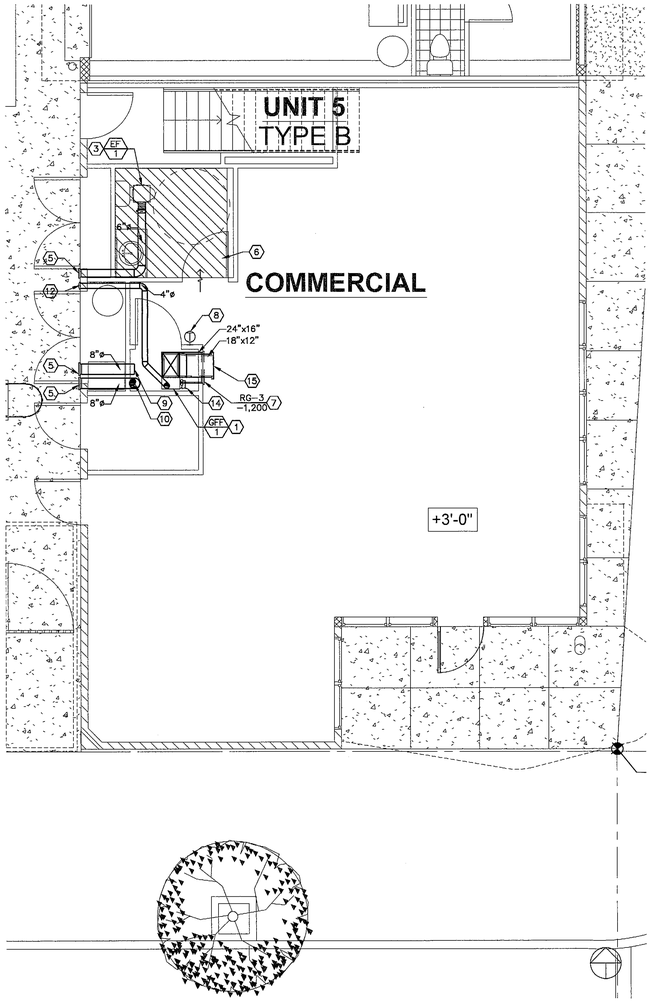
TYPICAL UNIT
MECHANICAL 3RD
FLOOR & ROOF PLAN

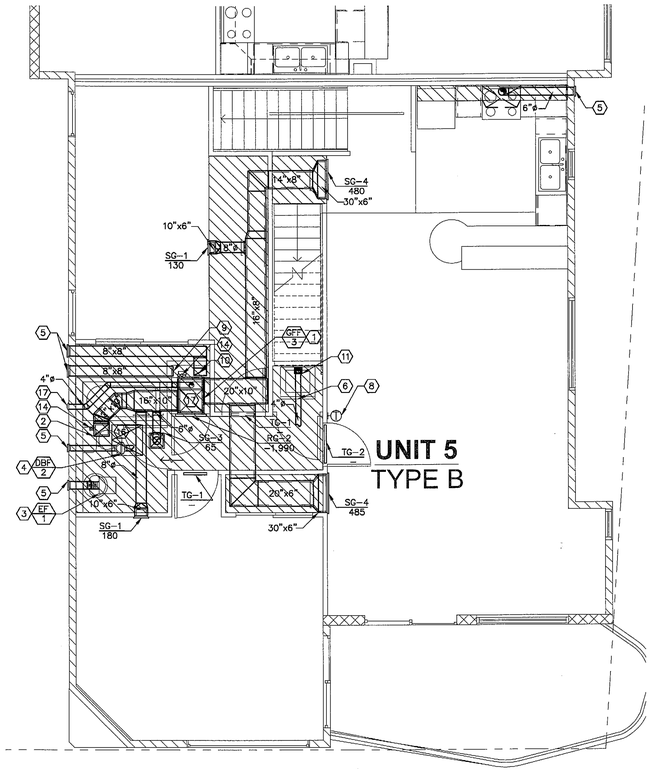
JOB NUMBER:	0714
SCALE:	AS NOTED
DATE:	12/12/13
DRAWN BY:	DS
CHECKED BY:	RT
CAD TITLE:	

SHEET NUMBER:

M2.02

OF SHEETS





1. VERTICALLY MOUNTED, UP FLOW DISCHARGE, MULTIPOISE INDUCED COMBUSTION FURNACE.
2. 12"x10" SUPPLY AIR DUCT WITH 1" DUCT LINER, UP.
3. CEILING MOUNTED TOILET EXHAUST FAN.
4. CEILING MOUNTED IN-LINE DRYER BOOSTER FAN. DRYER FAN SHALL BE HARD-WIRED INTERLOCKED WITH DRYER.
5. WALL CAP.
6. UNDERCUT DOOR, TYP.
7. 36"x12" RETURN GRILLE WITH WALL MOUNTING APPLICATION AT 12" A.F.F.
8. MOUNT THERMOSTAT AT 48" A.F.F.
9. PERMANENT 8"x8" OPENING COMMENCING 12" UNDER CEILING. PROVIDE MESH SCREEN.
10. PERMANENT 10"x6" OPENING COMMENCING 12" A.F.F. PROVIDE MESH SCREEN.
11. PROVIDE LINT TRAP MODEL DBLT-4 MANUFACTURED BY FANTECH WITH REMOVABLE LINT FILTER. LOCATE LINT TRAP IN GARAGE.
12. 4"ø PIPE FLUE VENT. TOTAL EQUIVALENT LENGTH CANNOT EXCEED 100 FEET. ONE ELBOW IS EQUIVALENT TO 5'. PIPE PENETRATION SIDE WALL.
13. MANUAL BALANCE DAMPER, TYP.
14. GAS AND LIQUID REFRIGERANT PIPES, UP TO CONDENSING UNIT ON THE ROOF.
15. CAP SUPPLY DUCT FOR FUTURE TENANT USE.
16. 24"x24" CEILING ACCESS PANEL.
17. 20"x16" SUPPLY AIR PLENUM WITH 1" DUCT LINER.

1 COMMERCIAL UNIT - MECHANICAL GROUND FLOOR PLAN
1/4" = 1'-0"

2 UNIT 5 TYPE B - MECHANICAL 2ND FLOOR PLAN
1/4" = 1'-0"

3 SHEET KEYNOTES
N.T.S.

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

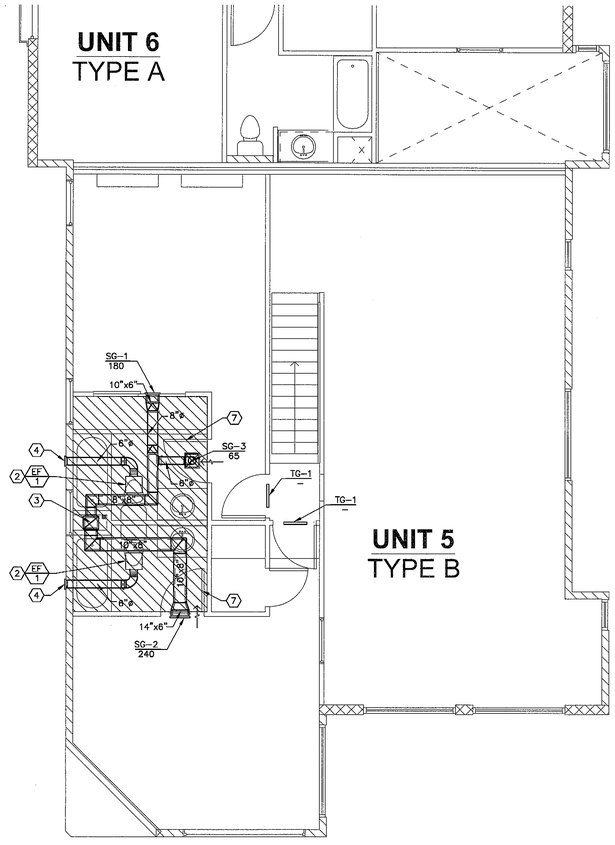
COMMERCIAL UNIT
GROUND & UNIT 5
TYPE B MECHANICAL
2ND FLOOR PLAN

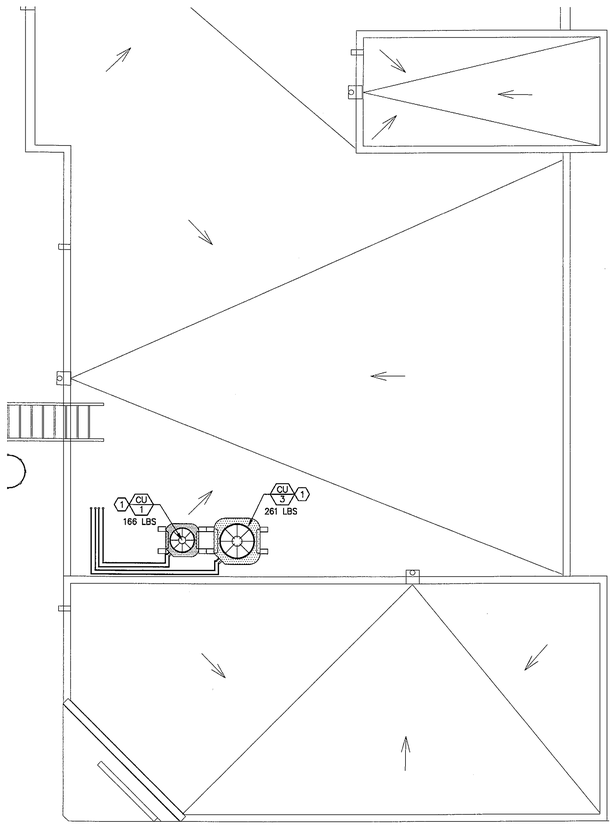
JOB NUMBER:	0714
SCALE:	AS NOTED
DATE:	12/12/13
DRAWN BY:	DS
CHECKED BY:	RT
CAD TITLE:	

SHEET NUMBER:

M2.03

OF SHEETS





1. COOLING ONLY CONDENSING UNIT ON THE ROOF.
2. CEILING MOUNTED TOILET EXHAUST FAN.
3. 12"x10" SUPPLY AIR DUCT, DOWN.
4. WALL CAP.
5. GAS AND LIQUID REFRIGERANT PIPES, UP TOCONDENSING UNIT ON THE ROOF.
6. MANUAL BALANCE DAMPER, TYP.
7. UNDERCUT DOOR, TYP.

1 UNIT 5 TYPE B - MECHANICAL 3RD FLOOR PLAN
1/4" = 1'-0"

2 UNIT 5 TYPE B - MECHANICAL ROOF PLAN
1/4" = 1'-0"

3 SHEET KEYNOTES
N.T.S.

ARCHITECTURE

REVISIONS △ ISSUES ○

NO.	DATE	DESCRIPTION
1	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

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Oakland, CA 94619

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ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

UNIT 5 TYPE B
MECHANICAL 3RD
FLOOR & ROOF PLAN

JOB NUMBER:	0714
SCALE:	AS NOTED
DATE:	12/12/13
DRAWN BY:	DS
CHECKED BY:	RT
CAD TITLE:	

SHEET NUMBER:

M2.04

OF SHEETS

DUCT CONSTRUCTION MINIMUM SHEET METAL THICKNESSES

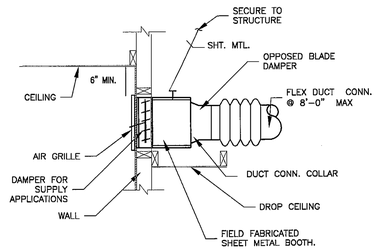
RECTANGULAR DUCTS

MAXIMUM SIZE (INCHES)	STEEL (MINIMUM THICKNESS, NOMINAL)	ALUMINUM (MINIMUM THICKNESS, NOMINAL)
THROUGH 12	0.022 INCH (26 GAGE, GALV.)	0.020 INCH (NO. 24 B&S GAGE)
13 THROUGH 30	0.028 INCH (24 GAGE, GALV.)	0.025 INCH (NO. 22 B&S GAGE)
31 THROUGH 54	0.034 INCH (22 GAGE, GALV.)	0.032 INCH (NO. 20 B&S GAGE)
55 THROUGH 84	0.040 INCH (20 GAGE, GALV.)	0.040 INCH (NO. 18 B&S GAGE)
OVER 84	0.052 INCH (18 GAGE, GALV.)	0.051 INCH (NO. 16 B&S GAGE)

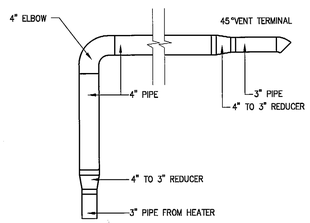
ROUND DUCTS

MAXIMUM SIZE (INCHES)	SPIRAL SEAM DUCT STEEL (MINIMUM THICKNESS, NOMINAL)	LONGITUDINAL SEAM DUCT STEEL (MINIMUM THICKNESS, NOMINAL)	FITTINGS STEEL (MINIMUM THICKNESS, NOMINAL)
THROUGH 12	0.019 INCH (28 GAGE, GALV.)	0.022 INCH (26 GAGE, GALV.)	0.022 INCH (26 GAGE, GALV.)
13 THROUGH 18	0.022 INCH (26 GAGE, GALV.)	0.028 INCH (24 GAGE, GALV.)	0.028 INCH (24 GAGE, GALV.)
19 THROUGH 28	0.028 INCH (24 GAGE, GALV.)	0.034 INCH (22 GAGE, GALV.)	0.034 INCH (22 GAGE, GALV.)
29 THROUGH 36	0.034 INCH (22 GAGE, GALV.)	0.040 INCH (20 GAGE, GALV.)	0.040 INCH (20 GAGE, GALV.)
37 THROUGH 52	0.040 INCH (20 GAGE, GALV.)	0.052 INCH (18 GAGE, GALV.)	0.052 INCH (18 GAGE, GALV.)

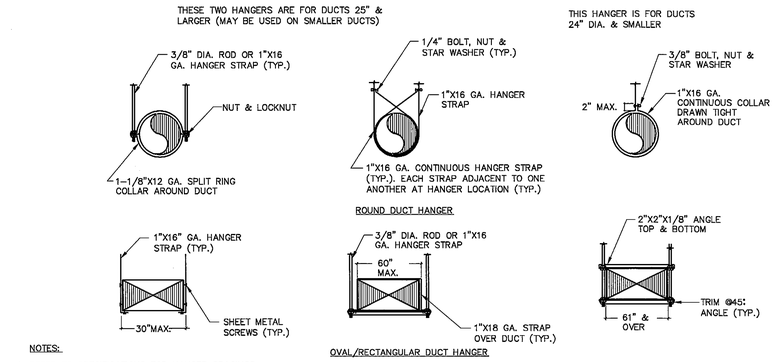
SHEET METAL GAGES | NTS | 3



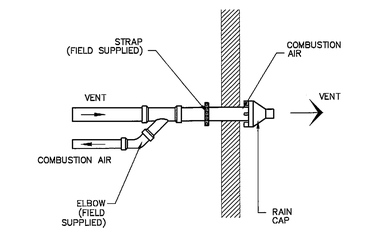
SUPPLY/RETURN AIR GRILLE DETAIL | NTS | 2



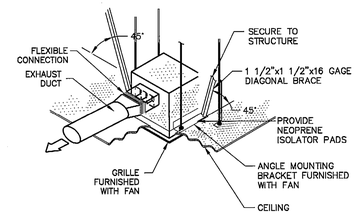
BOILER FLUE TERMINATION DETAIL | NTS | 1



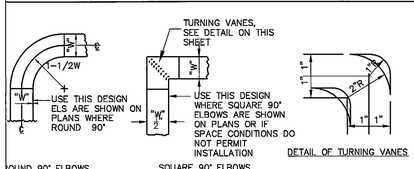
DUCT SUPPORT | NTS | 6

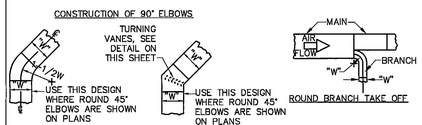


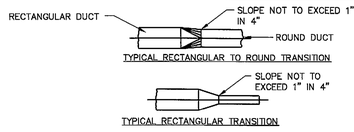
FURNACE HORIZONTAL FLUE TERMINATION | NTS | 5



CEILING EXHAUST FAN | NTS | 4





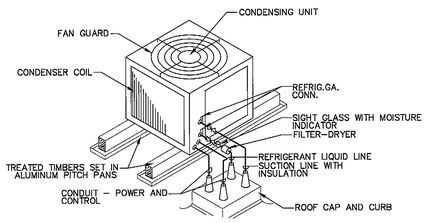


INSTALLATION NOTES

1. ALL DUCTS SHALL BE CONSTRUCTED AND ERECTED IN A NEAT AND WORKMANLIKE MANNER.
2. DUCT SHALL BE CONSTRUCTED OF THE WEIGHTS, GAGES AND MATERIAL SHOWN IN THE SCHEDULE ON THESE DRAWINGS.
3. THE DIMENSIONS SHOWN FOR ALL DUCTS SHOWN IN PLAN GIVE THE WIDTH FIRST AND THEN THE HEIGHT.
4. DUCT RISERS SHOULD BE SUPPORTED BY ANGLES AT EVERY FLOOR.
5. AIR TURN SHALL BE INSTALLED IN ALL ABRUPT ELBOWS TO PREVENT TURBULENCE.
6. DUCTS SHALL BE SECURELY ATTACHED TO THE BUILDING CONSTRUCTION IN AN APPROVED MANNER.
7. DIVERGING TRANSITION PIECES SHALL BE MADE AS GRADUAL AS POSSIBLE.
8. INSTALL FIRE DAMPERS IN ACCORDANCE WITH UL 555.
9. ACCESS PANELS SHOULD BE PLACED BEFORE AND/OR AFTER EQUIPMENT INSTALLED IN THE DUCT.
10. DUCT AREA SHOULD NOT BE DECREASED MORE THAN 10% WHEN OBSTRUCTIONS CANNOT BE AVOIDED, AND THEN A STREAMLINED FITTING SHOULD BE USED.
11. FLEXIBLE FABRIC CONNECTIONS (OR EQUAL) SHOULD BE USED ON BOTH INLETS AND OUTLETS OF ALL FANS AND AIR HANDLING UNITS.
12. JOINTS AND SEAMS OF SUPPLY DUCTS SHALL BE FASTENED SECURELY AND MADE AIR TIGHT.

DUCT CONSTRUCTION DETAILS | NTS | 9

NOT USED | NTS | 8



N.T.S.

CONDENSING UNIT DETAIL | NTS | 7

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
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info@acies.net

SHEET DESCRIPTION:

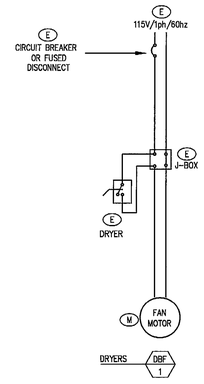
MECHANICAL DETAILS

JOB NUMBER:	0714
SCALE:	N.T.S.
DATE:	12/12/13
DRAWN BY:	DS
CHECKED BY:	RT
CAD TITLE:	
SHEET NUMBER:	

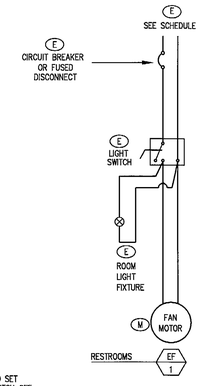
M6.01

OF SHEETS

DRYER BOOSTER EXHAUST FAN CONTROLS — NTS 4



EXHAUST FAN CONTROLS — NTS 3



NOTE:
CONTRACTOR TO SET THE FAN TO SWITCH OFF WITH 10 SECONDS DELAY.

LEGEND — NTS 2

SYMBOL	ABBREVIATION	DESCRIPTION
	DI	DIGITAL INPUT
	DO	DIGITAL OUTPUT
	AI	ANALOG INPUT
	AO	ANALOG OUTPUT
	DDC	DIRECT DIGITAL CONTROL
	LAN	LOCAL AREA NETWORK
	I/O	INPUT/OUTPUT
	BMS	BUILDING MANAGEMENT SYSTEM
	EMS	ENERGY MANAGEMENT SYSTEM
		POWER WIRING BY ELECTRICAL CONTRACTOR
		LOW VOLTAGE BY TEMPETATURE CONTROL/BMS CONTRATOR
		DATA LINE BY TEMPERATURE CONTROL/BMS CONTRACTOR
E		FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR
M		FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR
C		FURNISHED AND INSTALLED BY TEMPERATURE CONTROL/BMS CONTRACTOR

NOTES — NTS 1

THIS DRAWING IS FOR COORDINATION ONLY.
TEMPERATURE CONTROL/BMS CONTRACTOR IS FULLY RESPONSIBLE FOR THE COMPLETE HVAC CONTROL DDC SYSTEM AND BMS NETWORK OPERATION, AND SHOULD INCLUDE IN HIS BID ALL NECESSARY ITEMS.

TEMPERATURE CONTROL/EMS CONTRACTOR TO VERIFY CONTROL AND WIRING DIAGRAMS WITH ACTUAL MANUFACTURERS CONTROL DIAGRAMS.

MECHANICAL CONTRACTOR TO PROVIDE DETAILED WIRING DIAGRAMS OF ALL HVAC EQUIPMENT FOR REVIEW AND COORDINATION WITH ELECTRICAL AND TEMPERATURE CONTROL/EMS CONTRTACTOR.

THE FINAL CONNECTION AND SUPERVISION OF ALL CONTROL WIRING AND INTERLOCK WIRING SHALL BE THE RESPONSIBILITY OF TEMPERATURE CONTROL/BMS CONTRACTOR.

THERMOSTAT LOCATIONS TO BE APPROVED BY OWNER AND COORDINATED WITH FURNITURE LAYOUT.

NOT USED — NTS 8

NOT USED — NTS 7

NOT USED — NTS 6

NOT USED — NTS 5

NOT USED — NTS 12

NOT USED — NTS 11

NOT USED — NTS 10

NOT USED — NTS 9

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

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ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

MECHANICAL CONTROLS

JOB NUMBER:	0714
SCALE:	N.T.S.
DATE:	12/12/13
DRAWN BY:	DS
CHECKED BY:	RT
CAD TITLE:	

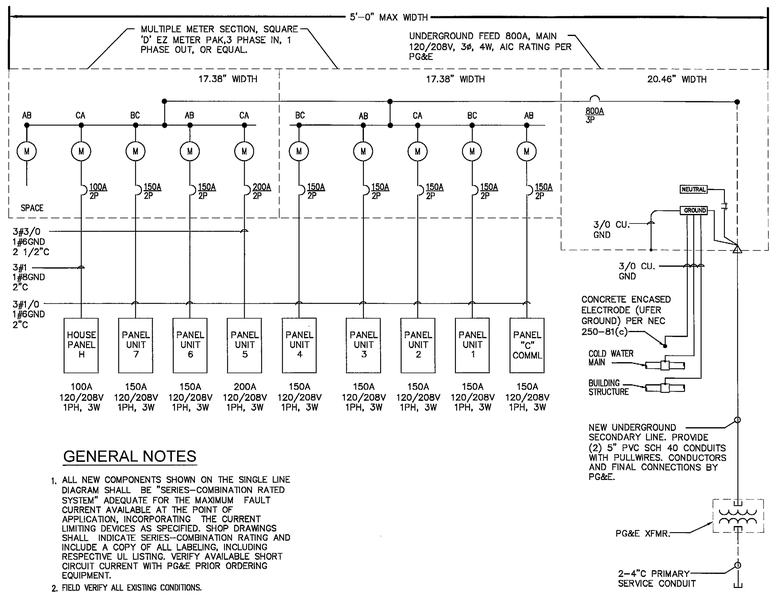
SHEET NUMBER:

M9.01

OF SHEETS

1 SINGLE LINE DIAGRAM

SCALE: N.T.S.



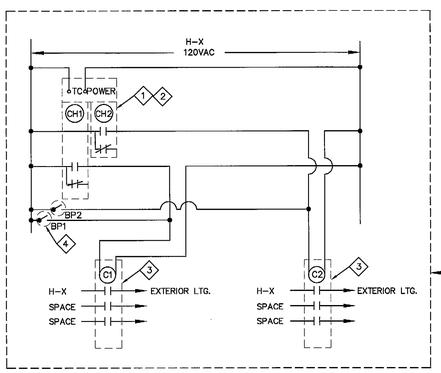
GENERAL NOTES

1. ALL NEW COMPONENTS SHOWN ON THE SINGLE LINE DIAGRAM SHALL BE "SERIES-COMBINATION RATED SYSTEM" ADEQUATE FOR THE MAXIMUM FAULT CURRENT AVAILABLE AT THE POINT OF APPLICATION, INCORPORATING THE CURRENT LIMITING DEVICES AS SPECIFIED. SHOP DRAWINGS SHALL INDICATE SERIES-COMBINATION RATING AND INCLUDE A COPY OF ALL LABELING, INCLUDING RESPECTIVE UL LISTING. VERIFY AVAILABLE SHORT CIRCUIT CURRENT WITH PG&E PRIOR ORDERING EQUIPMENT.
2. FIELD VERIFY ALL EXISTING CONDITIONS.
3. ALL WIRE IS COPPER.
4. ONLY U.L. LISTED EQUIPMENT SHALL BE USED.
5. RATING OF ALL OVERCURRENT PROTECTION DEVICES, SWITCHES AND MAGNETIC STARTERS TO BE VERIFIED WITH NAMEPLATE RATING OF ASSOCIATED UNIT AND TO BE REVISED AS REQUIRED.

2 LIGHTING CONTROL "LC" DIAGRAM

SCALE: N.T.S.

EXTERIOR LTG CONTROLS



1. ELECTRONIC TIME SWITCH WITH FULL YEAR AND ASTRONOMIC PROGRAMMING AND BACK-UP POWER. INSTALL INSIDE NEMA-1 ENCLOSURE.
2. PROVIDE DEVICE CERTIFIED BY THE MANUFACTURER AND LISTED IN THE ENERGY COMMISSION DIRECTORY.
3. 20A.,3P.,120V. LIGHTING CONTACTOR, ELECTRICALLY HELD WITH N.O. CONTACTS AND 120V. CONTROL COIL. INSTALL INSIDE NEMA-1 ENCLOSURE ADJACENT TO TIME SWITCH
4. BY-PASS SWITCH. COMPLY WITH TITLE 24 REQUIREMENTS.

3 GENERAL NOTES

SCALE: N.T.S.

1. PLANS ARE PREPARED WITH REQUIRED BRANCH CIRCUITS INDICATED BY CIRCUITS NUMBERS. PROVIDE AND INSTALL ALL CONDUITS, CONDUCTORS, BOXES, MISCELLANEOUS FITTINGS, ETC. FOR A COMPLETE AND OPERABLE SYSTEM (HOME RUN SHOWN). BRANCH CIRCUIT INSTALLATION SHALL COMPLY WITH SPECIFICATIONS AND N.E.C.

2. HOMERUNS SHOWN ARE SCHEMATIC. CONTRACTOR MAY ORIGINATE HOMERUNS FROM DIFFERENT LOCATIONS. ALL WIRE INCLUDING HOMERUNS SHALL BE DELINEATED ON AS-BUILT DRAWINGS.

3. PRIOR TO ANY REQUIRED CUTTING AND PATCHING OF CONCRETE FLOOR AND/OR CUTTING OF ROOF CONTRACTOR SHALL COORDINATE WITH BUILDING ENGINEER.

4. REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATION DETAILS. ALL FIXTURE AND DEVICE LOCATIONS SHOWN ON ARCHITECTURAL DRAWINGS SUPERSEDE THOSE SHOWN ON ELECTRICAL PLANS.

4 ABBREVIATIONS

SCALE: N.T.S.

ABB.	DESCRIPTION	ABB.	DESCRIPTION
IG	ISOLATED GROUND	GFI	GROUND FAULT INTERUPTER
AE	APPROVED EQUIVALENT	SMD	SEE MECHANICAL DRAWINGS
AFF	ABOVE FINISHED FLOOR	UAC	UNDER ANOTHER CONTRACT
EF	EXHAUST FAN	UAS	UNDER ANOTHER SECTION
EM	EMERGENCY LIGHT	UON	UNLESS OTHERWISE NOTED
NL	NIGHT LIGHT	WP	WEATHERPROOF
NTS	NOT TO SCALE	(E)	EXISTING TO REMAIN
PROVIDE	FURNISH, INSTALL AND CONNECT.	(N)	NEW
SAD	SEE ARCHITECTURAL DRAWINGS		

5 DRAWING SCHEDULE

SCALE: N.T.S.

E0.01	LEGEND, NOTES AND DIAGRAMS
E0.02	LOAD CALCULATIONS
E0.03	TITLE 24
E0.04	SPECIFICATIONS
E1.01	SITE ELECTRICAL PLAN
E2.01	GROUND FLOOR ELECTRICAL PLAN
E2.02	SECOND FLOOR ELECTRICAL PLAN
E2.03	THIRD FLOOR ELECTRICAL PLAN
E2.04	ROOF ELECTRICAL PLAN

SYMBOL	DESCRIPTION
	FLEXIBLE CONDUIT WITH CONNECTION TO EQUIPMENT
	PANELBOARD, SURFACE, FLUSH.
	BRANCH CIRCUIT WIRING IN CONDUIT CONCEALED IN CEILING OR WALL.
	BRANCH CIRCUIT WIRING IN CONDUIT CONCEALED UNDER FLOOR OR UNDERGROUND.
	BRANCH CIRCUIT HOMERUN TO PANEL.
CSD	COMBINATION CARBON MONOXIDE & SINGLE STATION SMOKE DETECTOR, 120VAC, WITH BATTERY BACK-UP, TANDEM WIRED WITH OTHER DETECTORS IN THE SAME UNIT.

6 ELECTRICAL LEGEND

SCALE: N.T.S.

SYMBOL	DESCRIPTION
$Sx	SINGLE POLE SINGLE THROW SWITCH, +44" AFF U.O.N. X MEANS: a – CONTROLLING FIXTURE OR OUTLET "a" 2 – DOUBLE POLE 4 – FOUR WAY 3 – THREE WAY D – DIMMER (RATING AS REQUIRED) K – KEY OPERATED V – VARIABLE SPEED EXAMPLE $Sb/3-1T MEANS: THREE WAY SWITCH THAT CONTROLS CIRCUIT # 17 @ PANEL 'B'
$T	DOUBLE OR THREE POLE HP RATED TOGGLE SWITCH
$TT	DOUBLE OR THREE POLE HP RATED TOGGLE SWITCH WITH THERMAL OVERLOADS
OS , OS	OCCUPANCY SENSOR CEILING OR WALL MOUNTED (SWITCH SHOULD BE SET FOR MANUAL 'ON' OPERATION).
DS	OCCUPANCY SENSOR CEILING MOUNTED, WITH POWER PACK AND RELAY.
	DUPLEX RECEPTACLE 15A OR 20A, 125V, 3WG, MOUNTED +15"AFF UON. (WP= WEATHERPROOF, D= DEDICATED, GFI=GROUND GAULT INTERRUPTER)
	DOUBLE DUPLEX RECEPTACLES, MOUNTED +15"AFF UON.
	DUPLEX RECEPTACLES 15A, 125V, NEMA 5-20R HALF SWITCHED.
	PHONE OUTLET, FLUSH WALL MOUNTED +15"AFF UON.
	FLUSH FLOOR OUTLET. RECEPTACLE INSIDE, 20A, 125V, 3WG, NEMA 5-20R
	FLUSH FLOOR OUTLET, DATA/PHONE OUTLET INSIDE. PROVIDE 1"C CONDUIT TO BE INSTALLED UNDERFLOOR, UP THRU WALL SPACE AND STUBBED ABOVE ACCESSIBLE CEILING.
	DATA/PHONE OUTLET, FLUSH MOUNT IN WALL, +18" AFF UON. PROVIDE 1"C CONDUIT TO BE CONCEALED UP IN WALL AND STUBBED ABOVE ACCESSIBLE CEILING.
	FLUSH FLOOR OUTLET, DATA OUTLET INSIDE. PROVIDE 1"C CONDUIT TO BE INSTALLED UNDERFLOOR, UP THRU WALL SPACE AND STUBBED ABOVE ACCESSIBLE CEILING.
J	JUNCTION OR OUTLET BOX - MOUNT ABOVE CEILING WITH BLANK COVER. (F= FLUSH IN FINISHED CEILING)
J	WALL MOUNTED JUNCTION OR OUTLET BOX WITH BLANK COVER, FLUSH, HEIGHT AS INDICATED.
	FUSED DISCONNECT SWITCH WITH DUAL ELEMENT FUSES (UON), RATING AS SHOWN.
	NON-FUSED DISCONNECT SWITCH, RATING AS SHOWN
	MAGNETIC STARTER, SIZE AS REQUIRED.
M	MOTOR OUTLET AND FLEX CONNECTION TO MOTOR.
T	DRY TYPE TRANSFORMER
DD	DUCT SMOKE DETECTOR
TS	WALL MOUNTED TIMESWITCH.
	CONDUIT UP.
	CONDUIT DOWN.
	FLEXIBLE CONDUIT
	CONDUIT STUBBED OUT IN ACCESSIBLE LOCATION, CAP AND MARK LOCATION.
	HOME RUN POINT OF BRANCH CIRCUIT GROUPING (BRANCH WIRING SEE GENERAL NOTE).

7 RESIDENTIAL LIGHTING MEASURE

SCALE: N.T.S.

§150(k)1: High efficacy luminaires or LED Light Engine with integral Heat Sink has an efficacy that is no lower than the efficacies contained in Table 150-C and is not a low efficacy luminaire as specified by §150(k)2.
§150(k)3: The wattage of permanently installed luminaires shall be determined as specified by §130(d).
§150(k)4: Ballasts for fluorescent lamps rated 13 Watts or greater shall be electronic and shall have an output frequency no less than 20 kHz.
§150(k)5: Permanently installed night lights and night lights integral to a permanently installed luminaire or exhaust fan shall contain only high efficacy lamps meeting the minimum efficacies contained in Table 150-C and shall not contain a line-voltage socket or line-voltage lamp holder; OR shall be rated to consume no more than five watts of power as determined by §130(d), and shall not contain a medium screw-base socket.
§150(k)6: Lighting integral to exhaust fans, in rooms other than kitchens, shall meet the applicable requirements of §150(k).
§150(k)7: All switching devices and controls shall meet the requirements of §150(k)7.
§150(k)8: A minimum of 50 percent of the total rated wattage of permanently installed lighting in kitchens shall be high efficacy.
EXCEPTION: Up to 50 watts for dwelling units less than or equal to 2,500 ft2 or 100 watts for dwelling units larger than 2,500 ft2 may be exempt from the 50% high efficacy requirement when: all low efficacy luminaires in the kitchen are controlled by a manual on occupant sensor, dimmer, energy management system (EMCS), or a multi-scene programmable control system; and all permanently installed luminaries in garages, laundry rooms, closets greater than 70 square feet, and utility rooms are high efficacy and controlled by a manual-on occupant sensor.
§150(k)9: Permanently installed lighting that is internal to cabinets shall use no more than 20 watts of power per linear foot of illuminated cabinet.
§150(k)10: Permanently installed luminaires in bathrooms, attached and detached garages, laundry rooms, closets and utility rooms shall be high efficacy.
EXCEPTION 1: Permanently installed low efficacy luminaires shall be allowed provided that they are controlled by a manual-an occupant sensor certified to comply with the applicable requirements of §119.
EXCEPTION 2: Permanently installed low efficacy luminaires in closets less than 70 square feet are not required to be controlled by a manual-an occupant sensor.
§150(k)11: Permanently installed luminaires located in rooms or areas other than in kitchens, bathrooms, garages, laundry rooms, closets, and utility rooms shall be high efficacy luminaires.
EXCEPTION 1: Permanently installed low efficacy luminaires shall be allowed provided they are controlled by either a dimmer switch that complies with the applicable requirements of §119, or by a manual-on occupant sensor that complies with the applicable requirements of §119.
EXCEPTION 2: Lighting in detached storage building less than 1000 square feet located on a residential site is not required to comply with §150(k)11.
§150(k)12: Luminaires recessed into insulated ceilings shall be listed for zero clearance insulation contact (IC) by Underwriters Laboratories or other nationally recognized testing/rating laboratory; and have a label that certifies the luminaire is airtight with air leakage less than 2.0 CFM at 75 Pascals when tested in accordance with ASTM E283; and be sealed with a gasket or caulk between the luminaire housing and ceiling.
§150(k)13: Luminaires providing outdoor lighting, including lighting for private patios in low-rise residential buildings with four or more dwelling units, entrances, balconies, and porches, which are permanently mounted to a residential building or to other buildings on the same lot shall be high efficacy.
EXCEPTION 1: Permanently installed outdoor low efficacy luminaires shall be allowed provided that they are controlled by a manual on/off switch, a motion sensor not having an override or bypass switch that disables the motion sensor, and one of the following controls: a photocontrol not having an override or bypass switch that disables the photocontrol; OR an astronomical time clock not having an override or bypass switch that disables the astronomical time clock; OR an energy management control system (EMCS) not having an override or bypass switch that allows the luminaire to be always on
EXCEPTION 2: Outdoor luminaires used to comply with Exception1 to §150(k)13 may be controlled by a temporary override switch which bypasses the motion sensing function provided that the motion sensor is automatically reactivated within six hours.
EXCEPTION 3: Permanently installed luminaires in or around swimming pool, water features, or other location subject to Article 680 of the California Electric Code need not be high efficacy luminaires.
§150(k)14: Internally illuminated address signs shall comply with Section 148; OR not contain a screw-base socket, and consume no more than five watts of power as determined according to §130(d).
§150(k)15: Lighting for parking lots and carports with a total of for 8 or more vehicles per site shall comply with the applicable requirements in Sections 130, 132, 134, and 147. Lighting for parking garages for 8 or more vehicles shall comply with the applicable requirements of Sections 130, 131, 134, and 146
§150(k)16: Permanently installed lighting in the enclosed, non-dwelling spaces of low-rise residential buildings with four or more dwelling units shall be high efficacy luminaires.
EXCEPTION: Permanently installed low efficacy luminaires shall be allowed provided that they are controlled by an occupant sensor(s) certified to comply with the applicable requirements of §119.

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	01/14/14	1ST PLAN CHECK REVIEW
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5265
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

LEGEND, NOTES & DIAGRAMS

JOB NUMBER:	0714
SCALE:	
DATE:	12/12/13
DRAWN BY:	RP
CHECKED BY:	JS
CAD TITLE:	
SHEET NUMBER:	

E0.01

OF SHEETS

1 SCALE: N.T.S.

LOAD SUMMARY

35th & SCHOOL
LOAD CALCULATIONS

TOTAL BLDG.

DWELLING GENERAL LIGHTING & SMALL APPL.:

TYPE:	QTY	VA/UNIT	VA	KVA
A	6	7180.0	43080.0	43.1
B	1	8640.0	8640.0	8.6
SUB TOTAL			51720.0	51.7
LAUNDRY:	7	1500.0	10500.0	10.5
RANGE:	7	8000.0	56000.0	56.0
DISHWASHER:	7	1200.0	8400.0	8.4
CLOTHES DRYER:	7	5000.0	35000.0	35.0
KITCHEN DISPOSAL:	7	1200.0	8400.0	8.4
HVAC EQUIPT. LOADS				
UNITS 1,2,3,4,6,7	6		25116.0	25.1
UNIT 5	1		7444.0	7.4
TOTAL GENERAL LOAD			202580.0	202.6
NET CALCULATED LOAD (44% DEMAND FACTOR): (NEC TABLE 220.84)				89.1
COMMON AREA LIGHTS (INTERIOR & EXTERIOR)				7.2
COMMERCIAL SPACE				25.0
TOTAL LOAD:				121.3
TOTAL LOAD WITH 20% SPARE				145.6

120/208V, THREE PHASE, 4W 404.16 AMPS

USE MINIMUM SERVICE = 800 AMPS.

35th & SCHOOL
LOAD CALCULATIONS

		KVA
COMMON AREA		
OUTDOOR LIGHTING		6.0
TOTAL LOAD		6.0
TOTAL LOAD WITH 20% SPARE		7.2
I at 120/208V, 1 PHASE	34.6 AMPS	
USE 100A SERVICE.		

35th & SCHOOL
LOAD CALCULATIONS (AIR CONDITIONING LARGER THAN HEATING)

	AREA	VA/SF	VA	KVA
COMMERCIAL SPACE				
LIGHTING:				
OFFICES	1250	3	3750	
SUB TOTAL			3750	
TOTAL LTG LOAD				3.8
RECEPTACLE:				
OFFICES	1250	1	1250	
SUB TOTAL			1250	
TOTAL RECEPT. LOAD				1.3
MISC EQUIPT. LOADS	1250	3		3.8

HVAC EQUIPT. LOADS

QTY	EQ. ITEM	VA
1	GFF-1	839.50
1	CU-1	3218.80
1	EF-1	35.70

SUB TOTAL		4.09
TOTAL LOAD		8.8
TOTAL LOAD WITH 20% SPARE		10.5
I at 120/208V, 1 PHASE, 3 WIRE	50.5 AMPS	
USE 150A SERVICE		
AT WORST CONDITION COMMERCIAL SPACE AT 80% of 150A load:		25

35th & SCHOOL
LOAD CALCULATIONS (AIR CONDITIONING LARGER THAN HEATING)

UNIT # 5

	AREA	VA/SF	VA	KVA
GENERAL LIGHTING:				
DWELLING	1880.00	3.00	5640.00	
GARAGE	0.00	0.50	0.00	
SUB TOTAL			5640.00	
TOTAL LTG LOAD				
SMALL APPLIANCE:			3000.00	
TOTAL GEN. LOADS W/O DF			8640.00	
FIRST 3KVA AT 100%			3000.00	
REMAINDER AT 35%			1974.00	
TOTAL GENERAL LOAD:			4974.00	4.97
LAUNDRY:				1.50
RANGE (80% DEMAND FACTOR): 8000VA X 0.8				6.40
DISHWASHER:				1.20
CLOTHES DRYER:				5.00
KITCHEN DISPOSAL:				1.2

HVAC EQUIPT. LOADS

QTY	EQ. ITEM	VA
1	GFF-2	1575.50
1	CU-3	5740.80
1	DBF-1	92.00
3	EF-1	35.70
SUB TOTAL		7.44

TOTAL LOAD		27.72
TOTAL LOAD WITH 20% SPARE		33.26
I at 120/208V, 1 PHASE, 3 WIRE	159.91 AMPS	
USE 200A SERVICE		

35th & SCHOOL
LOAD CALCULATIONS (AIR CONDITIONING LARGER THAN HEATING)

UNIT # 1,2,3,4,6 & 7

	AREA	VA/SF	VA	KVA
GENERAL LIGHTING:				
DWELLING	1335.00	3.00	4005.00	
GARAGE	350.00	0.50	175.00	
SUB TOTAL			4180.00	
TOTAL LTG LOAD				
SMALL APPLIANCE:			3000.00	
TOTAL GEN. LOADS W/O DF			7180.00	
FIRST 3KVA AT 100%			3000.00	
REMAINDER AT 35%			1463.00	
TOTAL GENERAL LOAD:			4463.00	4.46
LAUNDRY:				1.50
RANGE (80% DEMAND FACTOR):				6.40
DISHWASHER:				1.20
CLOTHES DRYER:				5.00
KITCHEN DISPOSAL:				1.2

HVAC EQUIPT. LOADS

QTY	EQ. ITEM	VA
1	GFF-2	839.50
1	CU-2	3218.80
1	DBF-1	92.00
3	EF-1	35.70
SUB TOTAL		4.19

TOTAL LOAD		23.95
TOTAL LOAD WITH 20% SPARE		28.74
I at 120/208V, SINGLE PHASE,	138.17 AMPS	
USE 150A SERVICE		

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

LOAD SUMMARY

JOB NUMBER:	0714
SCALE:	
DATE:	12/12/13
DRAWN BY:	RP
CHECKED BY:	JS
CAD TITLE:	

SHEET NUMBER:

E0.02

OF SHEETS

1 SCALE: N.T.S.

TITLE 24 FORMS

CERTIFICATE OF COMPLIANCE (Page 1 of 4) LTG-1C

Project Name: **35TH @ SCHOOL**			Date: **12/12/13**
Project Address: **35TH STREET OAKLAND, CA , 94619**		Climate Zone: **3**	Building CFA: Conditioned Floor Area: **11,990**

General Information

Building Type: ☐ Nonresidential ☐ High-Rise Residential ☐ Hotel/Motel			
☐ Schools ☐ Relocatable Public Schools ☒ Conditioned Spaces ☐ Unconditioned Spaces			
Phase of Construction: ☒ New Construction ☐ Addition ☐ Alteration			
Method of Compliance: ☐ Complete Building ☒ Area Category ☐ Tailored			

Documentation Author's Declaration Statement

- I certify that this Certificate of Compliance documentation is accurate and complete.

Name: **TOMISLAV GAJIC**	Signature
Company: **Acies Engineering**	Date: **12/12/13**
Address: **111 West Evelyn Ave., Suite 301**	If applicable: CEA # CEP/EI E15130
City/State/Zip: **Sunnyvale, CA 94086**	Phone: **(408) 522-5255**

Principal Lighting Designer's Declaration Statement

- I am eligible under Division 3 of the California Business and Professional Code to accept responsibility for the lighting design.
- This Certificate of Compliance identifies the lighting features and performance specifications required for compliance with Title 24, Pages 1 and 6 of the California Code of Regulations.
- The design features represented on this Certificate of Compliance are consistent with the information provided to document the design on the other applicable compliance forms, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

Name: **TOMISLAV GAJIC**	Signature
Company: **Acies Engineering**	Phone: **(408) 522-5255**
Address: **111 West Evelyn Ave., Suite 301**	License # **EI 5130**
City/State/Zip: **Sunnyvale, CA 94086**	Date: **12/12/13**

Lighting Mandatory Measures
Indicate location on building plans of Mandatory Measure Note Block: **THIS SHEET**

LIGHTING COMPLIANCE FORMS & WORKSHEETS (check box if worksheet is included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, please refer to the Nonresidential Manual published by the California Energy Commission.

☒ LTG-1-C, Pages 1 through 4	Certificate of Compliance. All pages required on plans for all submittals.
☒ LTG-2C	Lighting Controls Credit Worksheet
☒ LTG-3C	Indoor Lighting Power Allowance
☐ LTG-4C Pages 1 through 4	Tailored Method Worksheet
☐ LTG-5C Pages 1 and 2	Line Voltage Track Lighting Worksheet

INDOOR LIGHTING SCHEDULE (Page 2 of 4) LTG-1C

INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST

PROJECT NAME: **35TH @ SCHOOL**	DATE: **12/12/13**

Installation Certificate, LTG-1-INST (Retain a copy and verify form is completed and signed) **Field Inspector** ☐

Certificate of Acceptance, LTG-2A and LTG-3A (Retain a copy and verify form is completed and signed) **Field Inspector** ☐

A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces Installed Lighting Power listed on this Lighting Schedule is only for:

☒ CONDITIONED SPACE ☐ UNCONDITIONED SPACE

☐ *The actual indoor lighting power listed below includes all installed permanent and portable lighting systems in accordance with §140(a).*

☐ *Only for offices: Up to the first 0.2 watts per square foot of portable lighting shall not be required to be included in the calculation of actual indoor lighting power density in accordance with the exception to §140(a). All portable lighting in excess of 0.2 watts per square foot is installed below.*

A	B	C	D	E	F	G	Field Inspector*	
	Luminaire Schedule (Type, Lamps, Ballasts)	**Installed Watts**						
Name or Item Tag	Complete Luminaire Description (i.e., 3 lamp fluorescent troffer, FS2TB, one dimmable electronic ballast)	Watts per Luminaire*	How wattage was determined: CEC Default from NAS	How wattage was determined: According to §130 (d or e)	Number of Luminaires	Installed Watts (D×F)	Pass	Fail
L1	(1) 54W COMPACT FLUORESCENT LIGHT	27	☒	☐	1	**27**	☐	☐
L2	(1) 17W 2' FLUORESCENT LIGHT	24	☒	☐	1	**24**	☐	☐
L4	(3)32W, 2'X4' FLUORESCENT LIGHT	88	☒	☐	10	**880**	☐	☐
L6	(1)32W, FLUORESCENT LIGHT	33	☒	☐	1	**33**	☐	☐
L7	(2)32W, STRIP FLUORESCENT LIGHT	62	☒	☐	1	**62**	☐	☐
			☐	☐		**0**	☐	☐
			☐	☐		**0**	☐	☐
			☐	☐		**0**	☐	☐
			☐	☐		**0**	☐	☐
			☐	☐			☐	☐
			☐	☐			☐	☐
			☐	☐			☐	☐
			☐	☐			☐	☐
			☐	☐			☐	☐
			☐	☐			☐	☐
			☐	☐			☐	☐
			☐	☐			☐	☐
					INSTALLED WATTS PAGE TOTAL:	**1026**		
Building total number of pages: 1					Installed Watts Building Total (Sum of all pages)	**1026**		

Enter into LTG-1C Page 4 of 4

1. *Wattage shall be determined according to Section 130(d and e). Wattage shall be rating of light future, not rating of bulb.*
2. *If fail then deatrike on Page 2 of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.*

CERTIFICATE OF COMPLIANCE (Page 3 of 4) LTG-1C

PROJECT NAME: **35TH @ SCHOOL**	DATE: **12/12/13**

INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST

Fill in controls for all spaces: a) area controls, b) multi-level controls, c) manual daylighting controls for daylit areas > 250 ft², automatic daylighting controls for daylit areas > 2,500 ft², d) shut-off controls, e) display lighting controls, f) tailored lighting controls - general lighting controlled separately from display, ornamental and display case lighting and g) demand responsive automatic controls for retail stores > 50,000 ft², in accordance with Section 131.

MANDATORY LIGHTING CONTROLS - FIELD INSPECTION ENERGY CHECKLIST

Type / Description	Number of Units	Location in Building	Field Inspector: Pass	Field Inspector: Fail
LIGHTING CONTROLLER	LC	ELECTRICAL ROOM	☐	☐
OCCUPANCY SENSOR	OS	VARIOUS, SEE PLAN	☐	☐
MANUAL SWITCHES	SS	VARIOUS, SEE PLAN	☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐

Field Inspector's Notes or Discrepancies:

CERTIFICATE OF COMPLIANCE (Page 4 of 4) LTG-1C

PROJECT NAME: **35TH @ SCHOOL**	DATE: **12/12/13**

Conditioned and Unconditioned Space Lighting must not be combined for compliance

Indoor Lighting Power for Conditioned Spaces			Indoor Lighting Power for Unconditioned Spaces		
Installed Lighting (from Conditioned LTG-1C Page 2)		Watts: **1026**	**Installed** Lighting (from Unconditioned LTG-1C Page 2)		Watts: **0**
Lighting Control Credit: Conditioned Spaces (from LTG-2C)	-	**11.2**	Lighting Control Credit: Unconditioned Spaces (from LTG-2C)	-	**0**
Adjusted **Installed** Lighting Power	=	**1014.8**	Adjusted **Installed** Lighting Power	=	**0**
Complies if **Installed** ≤ **Allowed**	↕		Complies if **Installed** ≤ **Allowed**	↕	
Allowed Lighting Power: Conditioned Spaces (from LTG-3C)		**1019**	**Allowed** Lighting Power: Unconditioned Spaces (from LTG-3C)		**0**

Required Acceptance Tests

Designer:

This form is to be used by the designer and attached to the plans. Listed below is the acceptance test for the lighting system, LTG-2A and LTG-3A. The designer is required to check the acceptance tests and list all control devices serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance. If all the lighting system or control of a certain type requires a test, list the different lighting and the number of systems. The NA1 Section in the Appendix of the Nonresidential Reference Appendices Manual describes the test. Since this form will be part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately. Forms can be grouped by type of Luminaire controlled.

Enforcement Agency:

Systems Acceptance. Before Occupancy Permit is granted for a newly constructed building or space or when ever new lighting system with controls is installed in the building or space shall be certified as meeting the Acceptance Requirements.

The LTG-2A and LTG-3A forms is not considered a complete form and are not to be accepted by the enforcement agency unless the boxes are checked and/or filled and signed. In addition, a Certificate of Acceptance form shall be submitted to the enforcement agency that certifies plans, specifications, installation certificates, and operating and maintenance information meet the requirements of §10-103(b) of Title 24 Part 6. The field inspector must receive the properly filled out and signed forms before the building can receive final occupancy. A copy of the LTG-2A and LTG-3A for each different lighting luminaire controlled must be provided to the owner of the building for their records.

Equipment Requiring Testing	Description	Number of like Controls	Location	Luminaires Controlled: Controls and Sensors and Automatic Daylighting Controls Acceptance (LTG-2A and 3A)
LIGHTING CONTROLLER	"LGC"	1	OFFICE CORRIDOR	☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐

LIGHTING CONTROLS CREDIT WORKSHEET (Page 1 of 2) LTG-2C

PROJECT NAME: **35TH @ SCHOOL**	DATE: **12/12/13**

POWER ADJUSTMENT FACTORS (PAF) FOR NON-DAYLIGHT CONTROLS

A Separate PAF Worksheet Must Be Filled Out for Conditioned and Unconditioned Spaces. Control Credits listed on this schedule are only for:

☒ CONDITIONED SPACES ☐ UNCONDITIONED SPACES

A	B	C	D	E	F	G
Room # Zone ID Areas	Lighting Control Description[1]	Plan Reference	Room Area (ft²)	Watts of Control Lighting	Power Adjustment Factor[2]	Control Credit Watts (E X F)
TOILET	OCCUPANCY	E2.1	50	56	0.2	11.2
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
					PAGE TOTAL	11.2
					Number of Pages of LTG-2C Page 1 of 2	1
Note: Conditioned and Unconditioned Spaces Shall Be Separately Totaled	Building total of non-daylight control credit watts for all pages of LTG-2C Page 1 of 2					11.2
	Enter building total for all daylight controls credit watts from LTG-2C Page 2 of 2					0
	BUILDING TOTAL OF ALL CONTROL CREDIT WATTS (FOR BOTH NON-DAYLIGHT AND DAYLIGHT CONTROL CREDITS) Enter in LTG-1C Page 4 Lighting Control Credit as appropriate for CONDITIONED or UNCONDITIONED Spaces					11.2

1. Description shall be consistent with Type of Control defined in Table 146-C
2. Power Adjustment Factor taken from Table 146-C

INDOOR LIGHTING POWER ALLOWANCE LTG-3C

PROJECT NAME: **35TH @ SCHOOL**	DATE: **12/12/13**

ALLOWED LIGHTING POWER (Choose One Method)

A Separate LTG-3C must be filled out for Conditioned and Unconditioned Spaces. Indoor Lighting Power Allowance listed on this page are only for: ☒ CONDITIONED spaces ☐ UNCONDITIONED spaces

COMPLETE BUILDING METHOD

BUILDING CATEGORY (From § 146 table 146-E)	WATTS PER (ft²)	X	COMPLETE BLDG. AREA	=	ALLOWED WATTS
					0
					0
					0
TOTALS			0		0
			AREA		WATTS

AREA CATEGORY METHOD - Part A

A	B		C		D
AREA CATEGORY (From § 146 Table 146-F)	WATTS PER (ft²)	X	AREA (ft²)	=	ALLOWED WATTS
OFFICES (COMMERCIAL SPACE)	0.9		1040		936
RESTROOMS (COMMERCIAL SPACES)	0.6		50		30
UTILITY ROOMS	0.7		75		52.5
					0
					0
					0
					0
					0
					0
Sum of Additional Allowed Watts from Area Category Method - Part B (from table below)					
TOTALS			1165		1038.5
			AREA		WATTS

AREA CATEGORY METHOD - Part B Additional Wattage Allowance (from Table 146-F Footnotes)

A	B	C	D	E	F	G
Primary Function	Sq Ft	Additional Watts Per ft² Allowed	Wattage Allowance (B×C)	Description(s) and Quantity of Special Luminaire [3] Types in each Primary Function Area	Total Design Watts	ALLOWED WATTS Smaller of D or F
						0
						0
						0
						0
TOTALS - Enter into Area Category Method - Part A (table above)						0

[1] Additional watts available only when allowed according to the footnotes on the bottom of Table 146-F for chandelier or sconce, art, craft, assembly or manufacturing specialized task work; precision commercial/industrial work; or lab specialized task work.
[2] Special luminaires are light fixtures described in the Table 146-F Footnotes that are subject to an additional wattage allowance.

TAILORED METHOD

Total Allowed Watts using the Tailored Method taken from LTG-4C (Page 1 of 4) Row 1	0

The indoor lighting power allowance using the Tailored Method of compliance shall be determined using the LTG-4C set of forms. A separate set of LTG-4C forms shall be filled out for CONDITIONED and UNCONDITIONED spaces.

INDOOR LIGHTING MANDATORY MEASURES LTG-MM

☒ **LIGHTING CONTROLS AND EQUIPMENT**
All lighting controls and equipment shall be installed in accordance with manufacturer's instructions.

☒ **INDIVIDUAL ROOM/ AREA CONTROLS:**
Each room and area enclosed by ceiling-height partitions is equipped with a separate switch or control device

☒ **UNIFORM REDUCTION FOR INDIVIDUAL ROOMS:**
All rooms and enclosed areas greater than 100 square feet and more than 0.8 watts per square foot of lighting load are multi-level controlled with switches and/or dimmers for uniform reduction of lighting within the room
Exceptions: 1. For lights in corridors
2. Spaces having only one luminaire with no more than 2 lamps

☐ **DAYLIGHT AREA CONTROL:**
All rooms and enclosed spaces with combined window and skylight areas that are greater than 250 square feet shall have 50 percent of the lighting power in each daylight area controlled separately from other lighting in the enclosed space and separate lighting controls to control lights in windows independent from lights under skylights.

☒ **BUILDING LIGHTING SHUT-OFF:**
The building lighting shut-off consists of automatic time switch or occupancy sensor with manual override switches.
Exceptions: 1. Lighting that must be continuously lit
2. Lighting in corridors, guestrooms, dwelling units of high-rise residential buildings and hotel/motels, and parking garages
3. Up to 0.3 watts per square foot of lighting for building security or emergency egress purposes.

☐ **DISPLAY LIGHTING CONTROL:**
A separate switch shall be used to control lighting for floor and wall display, window display, and case display.

☐ **DEMAND RESPONSIVE LIGHTING CONTROLS:**
Demand responsive automatic lighting controls that uniformly reduce lighting power consumption by a minimum of 15 percent shall be installed in retail buildings with sales for areas greater than 50,000 square feet.

☒ **FLUORESCENT BALLAST AND LUMINAIRES CERTIFIED:**
All fluorescent light fixtures subject to the certification and specified for the project are certified.

☒ **TANDEM WIRING FOR TWO-LAMP BALLASTS:**
Tandem wiring for two lamp ballast is used wherever possible.

☒ **LIGHTING EQUIPMENT CERTIFICATION**
All lighting control devices, ballasts and luminaires specified are certified by the manufacturer.

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

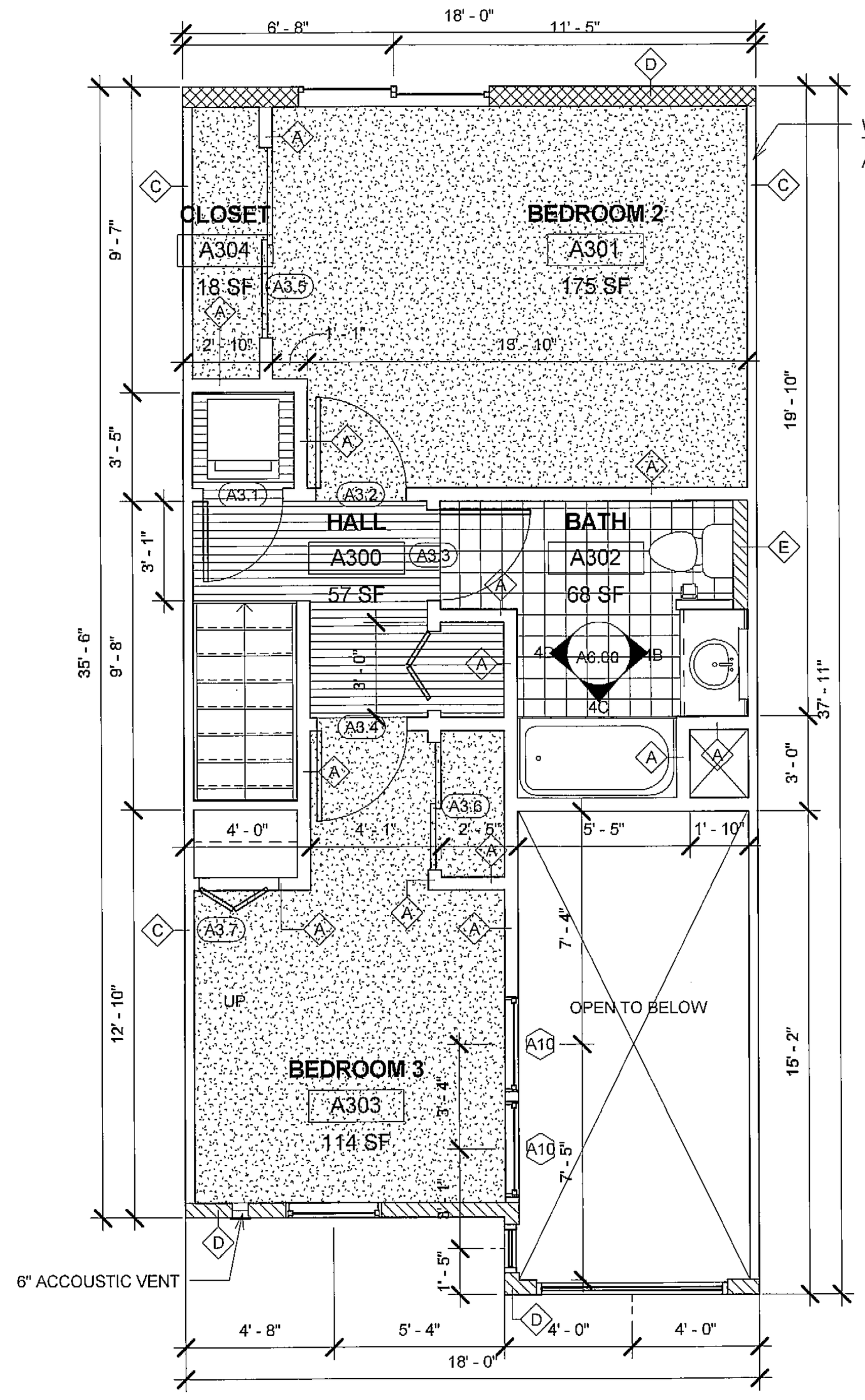
ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

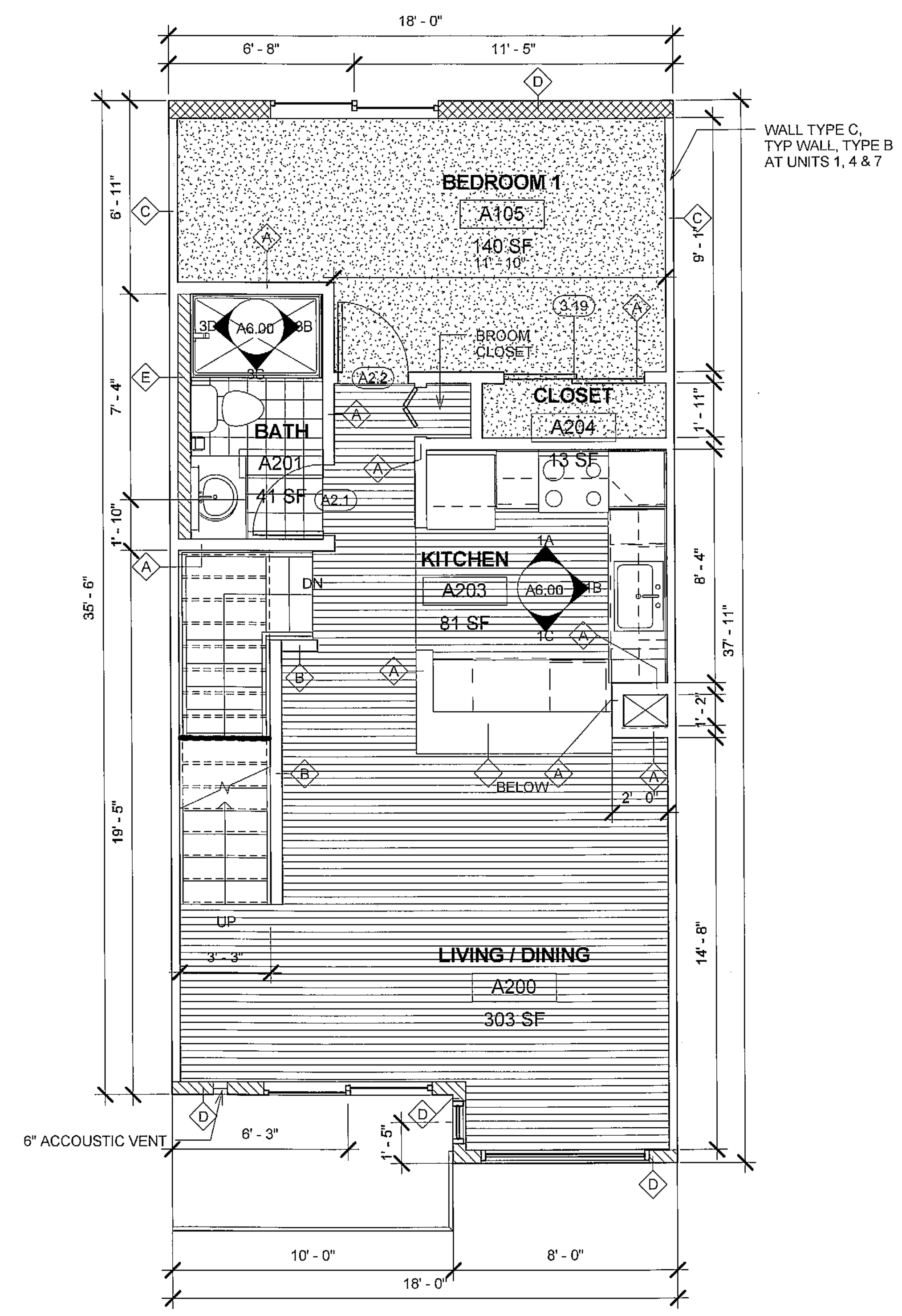
TITLE 24

JOB NUMBER:	0714
SCALE:	
DATE:	12/12/13
DRAWN BY:	RP
CHECKED BY:	JS
CAD TITLE:	
SHEET NUMBER:	E0.03

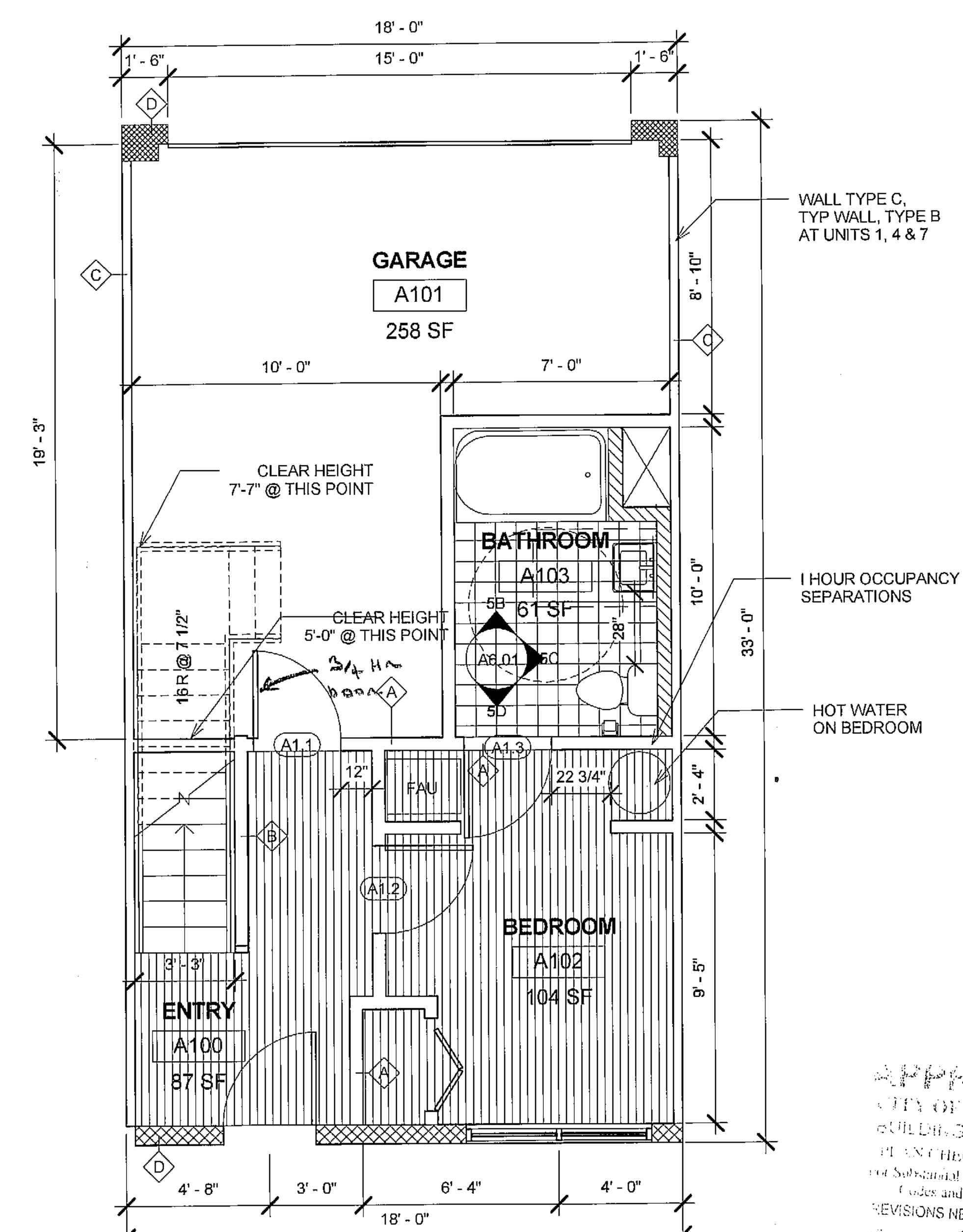
OF SHEETS



3 UNIT A3 3RD FLOOR
1/4" = 1'-0"



2 UNIT A3 2ND FLOOR
1/4" = 1'-0"



1 UNIT A3 1ST FLOOR
1/4" = 1'-0"

APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK SECTION
For Substantial Compliance With
Codes and Ordinances
REVISIONS NEED APPROVAL
BUILDING CODE
SUBJECT TO UBC SECT 106.4.3
SECT 105.4 & IRC SECT R105.6
SURVEY (REVIEW ONLY)
PLOT PLAN REVIEW
PARKING/DWY LAYOUT
GRADING AND
EROSION CONTROL
REPORT ON FILE
MECH. PLUMB.
CHECKED

BUILDING PLAN LEGEND

- CONCRETE
- CERAMIC TILE
- CARPET
- LAMINATE WOOD FLOORING
- CEILING DROPPED TO 8'-0"
- 2x4 STUD WALL
- 2x6 STUD WALL
- 2x8 STUD WALL

BUILDING PLAN NOTES

1. FOR WALL TYPES REFER PAGE 9.00
2. ALL INTERIOR WALLS TO BE WALL TYPE A UNLESS OTHERWISE NOTED
3. EXTERIOR DOOR TAGS & WINDOW TAGS ARE LOCATED IN BUILDING PLANS A.1 SERIES
4. SEE SHEET A7.00 FOR ROOM FINISH SCHEDULE

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REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (△)	1ST PLAN CHECK REVIEW	01/14/14
1 (○)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

SHEET DESCRIPTION:

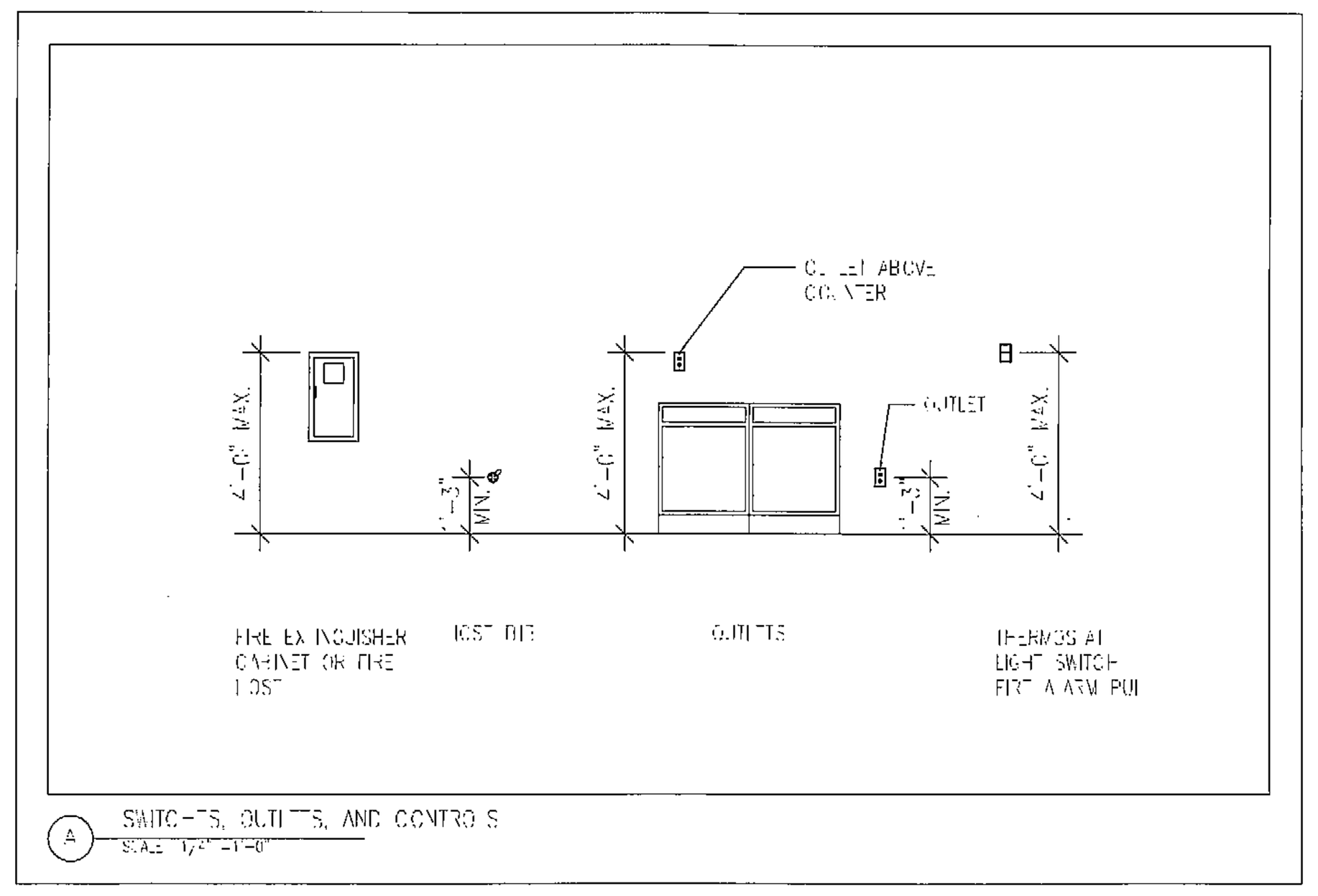
UNIT A3 PLANS

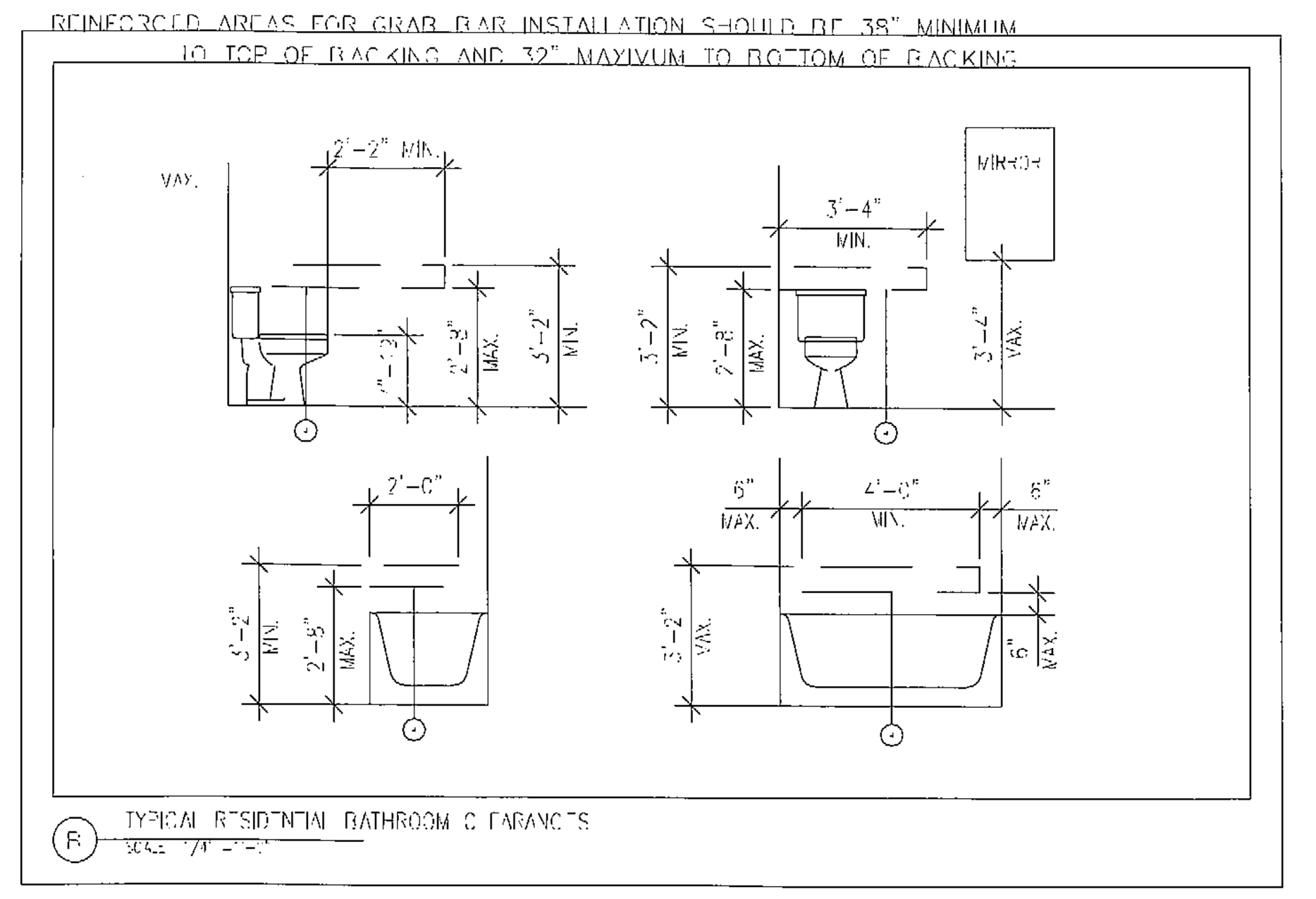
APPLICANT COPY

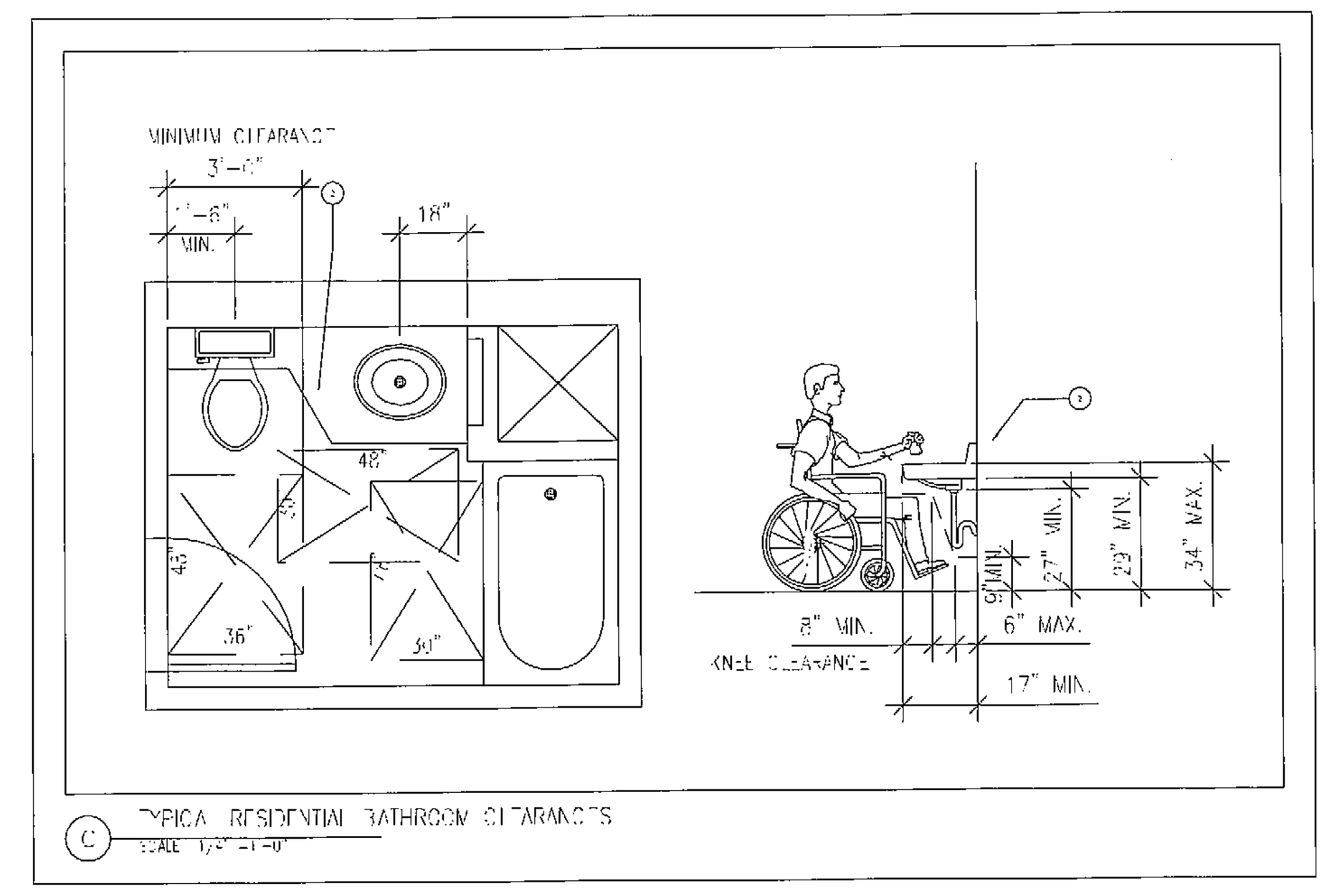
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/4" = 1'-0"

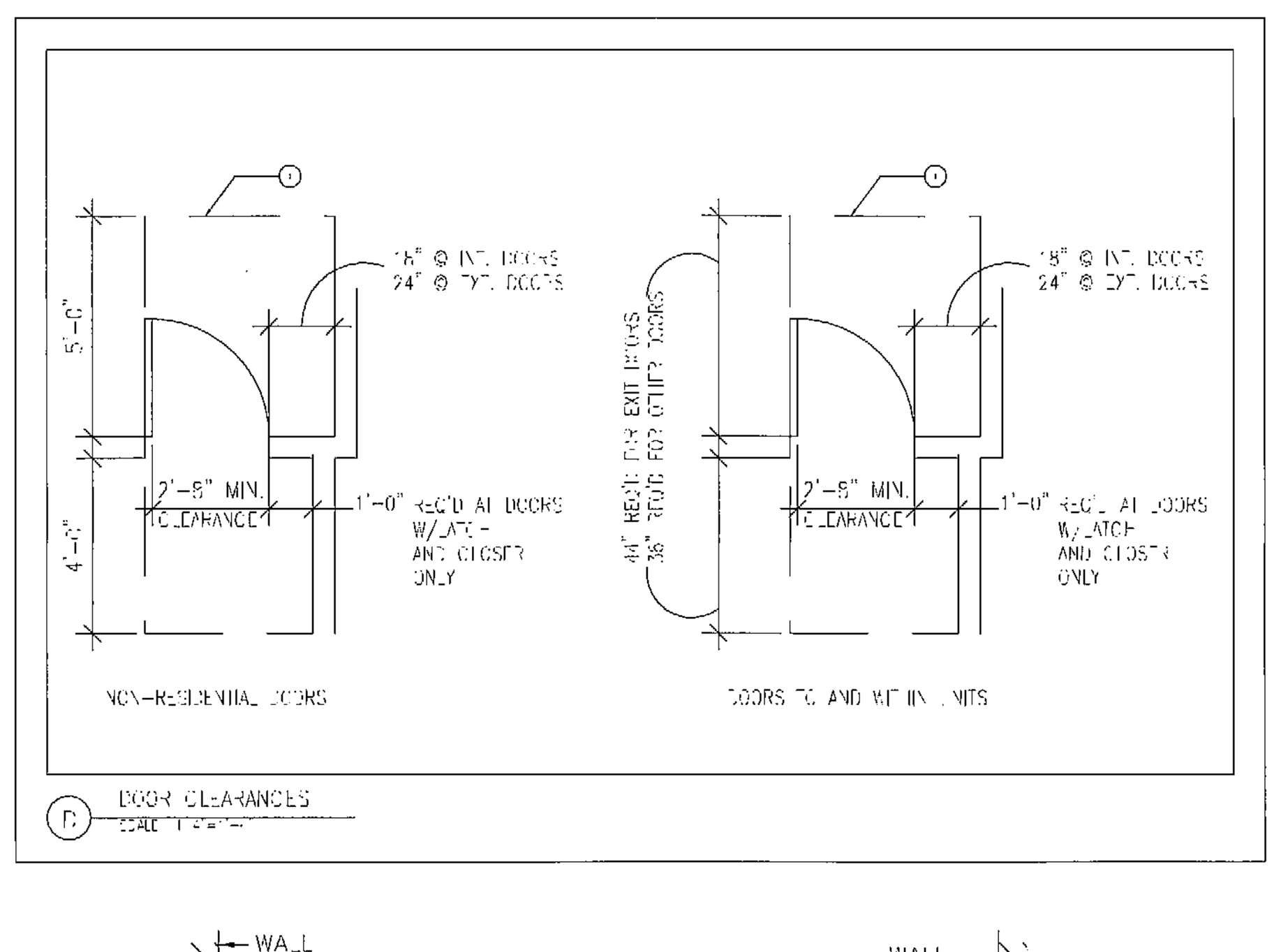
A2.01

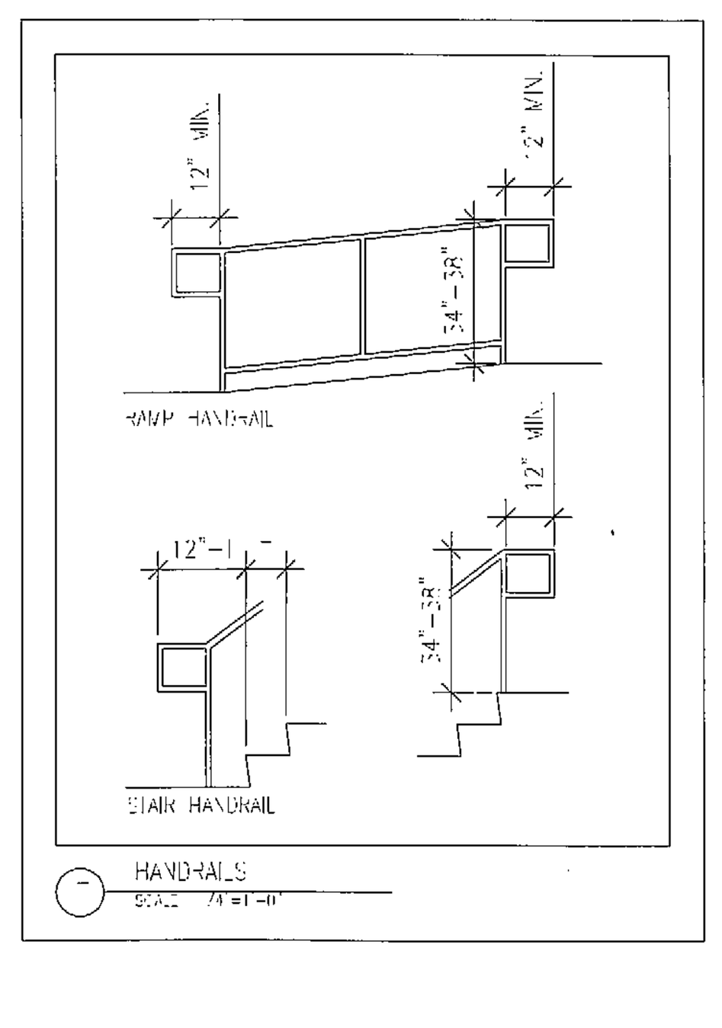
12/7/2013 4:01:01 PM

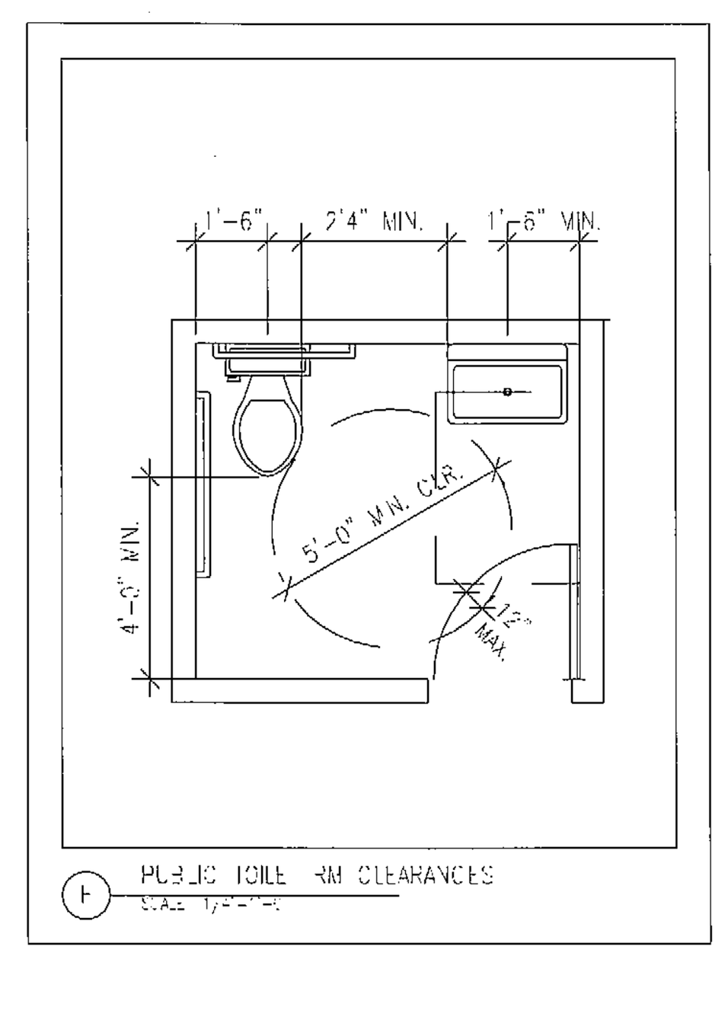


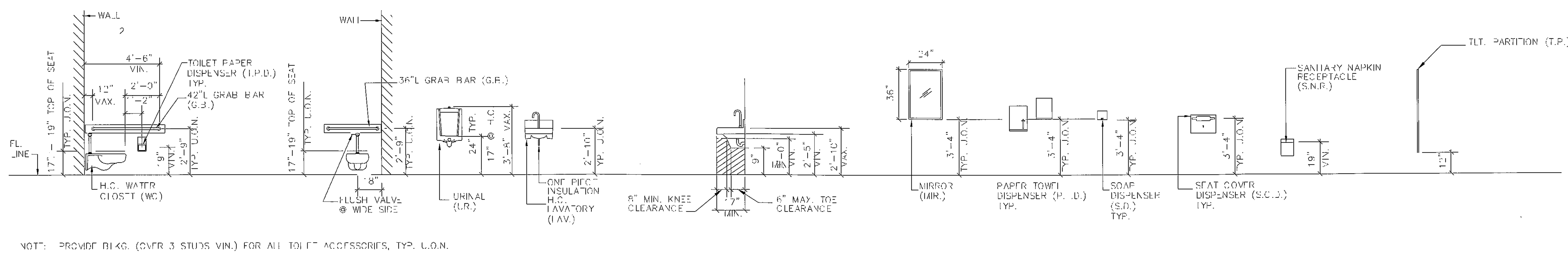




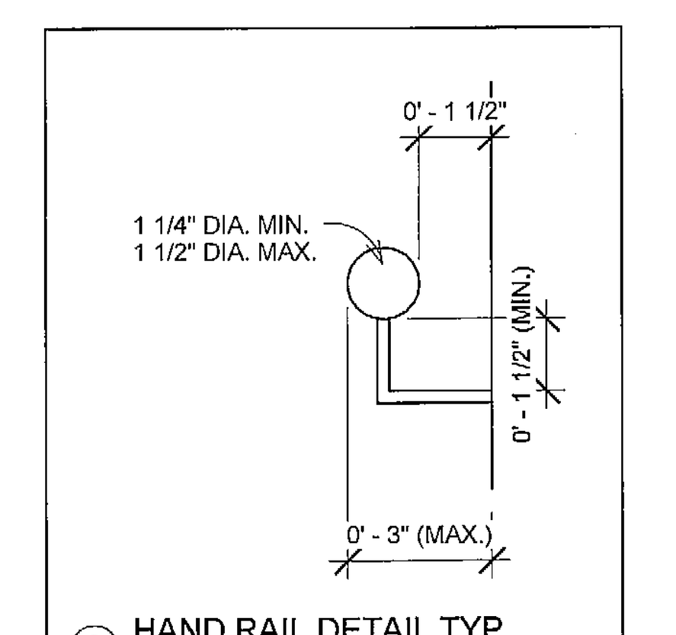








ACCESSIBILITY DETAIL 1
1/4" = 1'-0"



HAND RAIL DETAIL TYP.
3" = 1'-0"

I. COMPLIANCE REQUIREMENTS PER SECTION 1102A-3 MULTI STORY DWELLINGS

AT LEAST TEN PERCENT BUT NOT LESS THAN ONE OF THE MULTI STORY DWELLINGS IN APARTMENT BUILDINGS WITH THREEE OR MORE DWELLING UNITS AND/OR COMPANIONS WITH FOOUR OR MORE DWELLING UNITS SHALL COMPLY WITH THE FOLLOWING:

1. THE PRIMARY ENTRY TO THR DWELLING UNIT SHALL BE ON AN ACCESSIBLE ROUTE UNLESS EXEMPTED BY SITE IMPRACTIBILITY TESTS IN SECTION 1150A.
2. AT LEAST ONE POWDER ROOM OR BATHROOM SHALL BE LOCATED ON THE PREMARY ENTRY LEVEL, SERVED ON AN ACCESSIBLE ROUTE AND SHALL COMPLY WITH THE PROVISIONS IN DIVISION IV
3. ALL ROOMS OR SPACES LOCATED ON THE PRIMARY ENTRY LEVEL SHALL BE SERVED BY AN ACCESSIBLE ROUTE AND SHALL COMPLY WITH THE PROVISIONS IN DIVISION IV. ROOMS AND SPACES LOCATED ON THE PRIMARY ENTRY LEVEL AND SUBJECT TO THIS CHAPTER MAY INCLUDE BUT ARE NOT LIMITED TO KITCHENS, POWDER ROOMS, BATHROOMS, LIVING ROOMS, BEDROOMS OR HALLWAYS.
4. COMMON USE AREAS COVERED BY THIS SECTION SHALL BE ACCESSIBLE AS REQUIRED BY THIS CHAPTER. PUBLIC USE AREAS AS DEFINED IN CHAPTER 2, CHAPTER 11A AND CHAPTER 11B OF THIS CODE ARE SUBJECT TO PROVISIONS OF THE DIVISION OF THE STATE ARCHITECT (DSA/AC) AND REFERENCED IN SECTION 101.17.11

II. ENTRANCES

1. EVERY REQUIRED ENTRANCE OR PASSAGE DOORWAY SHALL BE OF A SIZE AS TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 3 FEET IN WIDTH AND NOT LESS THAN 6 FEET, 8 INCHES IN HEIGHT. DOORS SHALL BE CAPABLE OF OPENING AT LEAST 90 DEGREES AND SHALL BE SO MOUNTED THAT THE CLEAR WIDTH OF THE DOORWAY IS NOT LESS THAN 32 INCHES.
2. MAXIMUM EFFORT TO OPPERATE DOORS SHALL NOT EXCEED 8 1/2 LBS. FOR EXTERIOR DOOS AND 5LBS. FOR INTERIOR DOORS.
3. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL, SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE.
4. HAND ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 30 INCHES AND 44 INCHES ABOVE THE FLOOR.
5. ALL BUILDING ENTRANCES THAT ARE ACCESSIBLE TO AND USABLE BY PHYSICALLY HANDICAPPED/ PHYSICALLY DISABLED PERSONS SHALL BE IDENTIFIED WITH AT LEAST ONE STANDARD SIGN DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND WITH ADDITIONAL DIRECTIONAL SIGNS, AS REQUIRED, TO BE VISABLE TO ALONG APPROACHING PEDESTRIAN WAYS.
6. WALL MUST BE UNABSTRUCTED ON PULL SIDE OF DOOR FROM EDGE OF DOOR FOR 18"

III. FLOORS AND LEVELS

1. EVERY CORRIDOR SERVING AN OCCUPANT LOAD OF 10 OR MORE SHALL BE NOT LESS IN WIDTH THAN 44 INCHES

IV. SANITARY FACILITIES (GENERAL)

1. ALL DOORWAYS LEADING TO SANITARY FACILITIES SHALL HAVE 32 INCH MINIMUM CLEAR UNOBSTRUCTED OPENINGS.

V. TOILET ROOM FIXTURES AND ACCESSORIES

1. THE HEIGHT OF ACCESSIBLE WATER CLOSETS SHALL BE A MINIMUM OF 17 INCHES AND A MAXIMUM OF 19 INCHES MEASURED TO THE TOP OF THE TOILET SEAT. (ADA 17"-19") (ANSI 19"-20")
2. PROVIDE 18 INCHES FROM THE CENTER LINE OF THE WATER CLOSET TO THE ADJACENT WALL.
3. TOILET FLUSH CONTROLS SHALL BE OPERABLE WITH ONE HAND, AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. CONTROLS FOR THE FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE OF THE TOILET AREAS, NO MORE THAN 44 INCHES ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS.
4. WHERE URINALS ARE PROVIDED, AT LEAST ONE WITH A RIM PROJECTING A MINIMUM OF 14 INCHES FROM THE WALL AND AT A MAXIMUM OF 17 INCHES (ANSI 17" MAX.) ABOVE THE FLOOR SHALL BE PROVIDED.
5. URINAL FLUSH CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST AND SHALL BE MOUNTED NO MORE THAN 44 INCHES ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS PER FOOT.
6. LAVATORIES SHALL BE MOUNTED WITH A CLEARANCE OF AT LEAST 29 INCHES FROM THE FLOOR TO THE BOTTOM OF THE APRON WITH KNEE CLEARANCE UNDER THE FRONT LIP EXTENDING A MINIMUM OF 30 INCHES IN WIDTH WITH 8 INCHES MINIMUM DEPTH AT THE TOP. TOE CLEARANCE SHALL BE THE SAME WIDTH AND SHALL BE A MINIMUM OF 9 INCHES HIGH FROM THE FLOOR AND A MINIMUM OF 17 INCHES DEEP FROM THE FRONT OF THE LAVATORY.
7. A PROJECTION OF A LAVATORY BOWL INTO THE 8 INCH CLEAR SPACE, THEREBY REDUCING THE CLEAR HEIGHT BELOW THE LAVATORY TO NO LESS THE 27 INCHES AT 8 INCHES BACK FROM THE APRON, MEETS THE REQUIREMENT FOR PROVIDING KNEE CLEARANCE. A MAXIMUM HEIGHT OF 34 INCHES TO THE TOP OF THE LAVATORY IS RECOMMENDED.
8. HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED (SEE SHEET P-1 FOR PLUMBING NOTES). THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.
9. FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBS. LEVER-OPERATED, PUSH-TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF-CLOSING VALVES ARE ALLOWED IF THE FACET REMAINS OPEN FOR AT LEAST 10 SECONDS.
10. MIRRORS SHALL BE MOUNTED WITH THE BOTTOM EDGE NOT MORE THAN 40" FROM THE FLOOR.
11. LOCATE TOWEL, SANITARY NAPKIN, AND WASTE RECEPTACLES WITH ALL OPERABLE PARTS NOT MORE THAN 40 INCHES FROM THE FLOOR.
12. LOCATED TOILET TISSUE DISPENSER ON THE WALL WITHIN 12 INCHES OF THE FRONT EDGE OF THE TOILET SEAT.
13. GRAB BARS, TUB AND SHOWER SEATS, FASTENER AND MOUNTING DEVICES SHALL BE DESIGNED FOR 250 LBS. PER LINEAR FT. LOAD.

VI. GRAB BARS

1. GRAB BARS SHALL BE LOCATED ON EACH SIDE, OR ONE SIDE AND THE BACK OF THE PHYSICALLY DISABLED TOILET STALL OR COMPARTMENT AND SHALL BE SECURELY ATTACHED 33 INCHES (ADA 33"-36") ABOVE AND PARALLEL TO THE FLOOR.
2. GRAB BARS AT THE SIDE SHALL BE AT LEAST 42 INCHES LONG WITH THE FRONT END POSITIONED 24 INCHES IN FRONT OF THE WATER CLOSET STOOL, AND GRAB BARS AT THE BACK SHALL BE NOT LESS THAN 36 INCHES LONG.
3. THE DIAMETER OR WIDTH OF THE GRIPPING SURFACES OF A GRAB BAR SHALL BE 1-1/4 INCHES TO 1-1/2 INCHES OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE.
4. IF THE GRAB BARS ARE MOUNTED ADJACENT TO A WALL, THE SPACE BETWEEN THE WALL AND THE GRAB BARS SHALL BE 1-1/2 INCHES.
5. A GRAB BAR AND ANY WALL OR OTHER SURFACE ADJACENT TO IT SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS.
6. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
7. EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8 INCH.

VII. ADDITIONAL REQUIREMENTS

1. THE CENTER OF RECEPTACLE OUTLETS SHALL BE NOT LESS THAN 15 INCHES ABOVE THE FLOOR OR WORKING PLATFORM.
2. THE CENTER OF THE GRIP OF THE OPERATING HANDLE OF SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS, APPLIANCES, OR COOLING, HEATING AND VENTILATING EQUIPMENT, SHALL BE NOT LESS THAN 3 FEET NOR MORE THAN 4 FEET ABOVE THE FLOOR OR WORKING PLATFORM.
3. THE CENTER OF FIRE ALARM INITIATING DEVICES (BOXES) SHALL BE LOCATED 48 INCHES ABOVE THE LEVEL OF THE FLOOR, WORKING, GROUND SURFACE OR SIDEWALK.
4. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL BE THE STANDARD USED TO IDENTIFY FACILITIES THAT ARE ACCESSIBLE TO AND USABLE BY PHYSICALLY DISABLED PERSONS AS SET FORTH IN THESE BUILDING STANDARDS. THE SYMBOL SPECIFIED ABOVE SHALL CONSIST OF A WHITE FIGURE ON A BLUE BACKGROUND.
5. THE BLUE SHALL BE EQUAL TO COLOR NO. 15090 IN FEDERAL STANDARD 595A.

VIII. MISCELLANEOUS

1. LAVATORIES SHALL BE MOUNTED WITH A MINIMUM DISTANCE OF 18" TO THE CENTER LINE OF THE FIXTURE. ACCESSIBLE LAVATORIES SHALL BE MOUNTED WITH THE RIM OR COUNTER SURFACE NO HIGHER THAN 34" ABOVE THE FINISHED FLOOR.
2. THE DISTANCE BETWEEN THE CENTER LINE OF A WATER CLOSET AND AN ADJOINING WALL SHALL BE 18 INCHES.
3. ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE SHALL NOT EXCEED 1/2-INCH. WHEN CHANGES IN LEVEL DO OCCUR, THEY SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:12 EXCEPT THAT LEVEL CHANGES NOT EXCEEDING 1/4-INCH MAY BE VERTICAL.
4. ACCESSIBLE CHECK STANDS SHALL BE IDENTIFIED BY THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND SHALL STATE, "THIS CHECK STAND TO BE OPEN AT ALL TIMES FOR DISABLED CUSTOMERS."

IX. ADA COMPLIANCE

THE AMERICANS WITH DISABILITIES ACT, (ADA), PROVIDES THAT ALTERATIONS TO A FACILITY MUST BE MADE IN SUCH A MANNER THAT, TO THE MAXIMUM EXTENT FEASIBLE, THE ALTERED PORTIONS OF THE FACILITY ARE READILY ACCESSIBLE TO AND BY INDIVIDUALS WITH DISABILITIES. THE CLIENT ACKNOWLEDGES THAT THE REQUIREMENTS OF THE ADA WILL BE SUBJECT TO VARIOUS AND POSSIBLY CONTRADICTORY INTERPRETATIONS. THE DESIGN PROFESSIONAL, (PBAA), THEREFORE, WILL USE THEIR REASONABLE PROFESSIONAL EFFORTS AND JUDGMENT TO INTERPRET APPLICABLE ADA REQUIREMENTS AND OTHER FEDERAL, STATE AND LOCAL LAWS, RULES, CODES, ORDINANCES AND REGULATIONS AS THEY APPLY TO THE PROJECT. THE DESIGN PROFESSIONAL, (PB&A), HOWEVER, CANNOT AND DOES NOT WARRANT OR GUARANTEE THAT THE CLIENT'S PROJECT WILL COMPLY WITH ALL INTERPRETATIONS OF THE ADA REQUIREMENTS AND/OR THE REQUIREMENTS OF THE OTHER FEDERAL, STATE AND LOCAL LAWS, RULES, CODES, ORDINANCES AND REGULATIONS AS THEY APPLY TO THE PROJECT.

NOTES IN COMPLIANCE WITH: (ADA PART III 28 CFR PART 36), (ADA PART IV 28 CFR PART 35), (ANSI A117.1-1986) AND (TITLE 24 CALIFORNIA) GUIDELINES.

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REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (△)	1ST PLAN CHECK REVIEW	01/14/14
1 (○)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT PHILIP BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

SHEET DESCRIPTION:

ACCESSIBILITY DETAILS/INFORMATION

APPLICANT COPY

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

GEN-05

12/7/2013 4:02:27 PM

SPECIFICATION - ELECTRICAL

PART 1 – GENERAL

1.01 SCOPE OF WORK:
Furnish and install all materials and equipment and provide all labor, tools, transportation, superintendence and services required and necessary to complete the work shown on the drawings and/or specified herein. Also include all other work and miscellaneous items, not specifically mentioned, but reasonably inferred for a complete installation including all accessories and appurtenances required for testing the system. It is the intent of the drawings and specifications that all systems be complete, and ready for operation.

1.02 REGULATORY REQUIREMENTS:
Code compliance is mandatory. Nothing in these Drawings and Specifications permits work not conforming to these codes. Where work is shown to exceed minimum code requirements, comply with drawings and specifications. All work and materials shall comply with the latest rules, codes and regulations, including, but not limited to the following:
1. Occupational Safety and Health Act Standards (OSHA).
2. NFPA #70: National Electric Code (NEC)./California Electrical Code (CEC)
3. NFPA #101: Life Safety Code.
4. State Fire Marshal.
5. Local Utilities Companies.
6. Landlord requirements.

1.03 LICENSE, FEES AND PERMITS:
Electrical contractor shall pay for all licenses, permits and inspection fees required by the authority having jurisdiction and shall arrange for all required inspections.

1.04 SAFETY AND INDEMNITY:
The Contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of work. This requirement will apply continuously and not be limited to normal working hours. No act, service, drawing review or construction review by the Owner, the Engineers or their Consultants, is intended to include review of the adequacy of the Contractor's safety measures, in, on, or near the construction site.

1.05 DRAWINGS AND SPECIFICATIONS:
All drawings and all Divisions of these specifications shall be considered as a whole and work of this Division shown anywhere therein shall be furnished under this Division. Drawings are diagrammatic and indicate the general arrangement of equipment and wiring. Most direct routing of conduits and wiring is not assured. Exact requirements shall be governed by conditions of the job. Consult all other drawings in preparation of the bid. Extra lengths of wiring or addition of pull or junction boxes, etc., necessitate by such conditions shall be included in the bid.

1.06 CONDITIONS AT SITE:
The electrical contractor shall have examined the site and familiarized themselves with all discernible existing conditions. No extra payment will be allowed for work required because of these conditions, whether specifically mentioned or not.

1.07 WORKMANSHIP AND CONTRACTOR'S QUALIFICATIONS:
Only quality workmanship will be accepted. Haphazard or poor installation will be cause for rejection of work.

1.08 SHOP DRAWINGS AND MATERIALS LISTS:
Submit to Owner in a single package six (6) copies of complete shop drawings and materials list, as noted below, for review within fifteen (15) days after award of contract.
Submittals required as follows:
1. Wiring devices: switches, receptacles, device plates.
2. Enclosures for utility company metering.
3. Main fused disconnect switch.
4. Panelboards.
5. Disconnect switches.
6. Lighting fixtures, lamps and lighting control equipment.

1.09 SUBSTITUTIONS:
One or more makes of materials or methods may have been specified to establish the standard of quality, workmanship, finish and design required, but other materials or methods equal in quality, workmanship, finish, design, and guaranteed performance, will be accepted. However, all changes and substitutions shall be requested in letter form and shall be accompanied with a statement of the amount of money to be returned to the contract if the substitution is permitted.
No work involving materials submitted for substitution shall proceed until written acceptance is received from the Owner. The Owner is the sole judge of acceptability of preferred substitutions. If a substitution item is permitted, and any re-design effort is thereby necessitated, the required re- design shall be at the Contractor's expense.

1.10 COORDINATION:
Coordinate work with other trades to avoid conflict and to provide correct rough-in and connection for equipment furnished under other trades that require electrical connections. Inform Contractors of other trades of the required access to and clearances around electrical equipment to maintain service ability and code compliance.
Verify equipment dimensions and requirements with provisions specified under this Section. Check actual job conditions before fabricating work. Report necessary changes in time to prevent needless work. Changes or additions, subject to additional compensation, which are made without written authorization and an agreed price, shall be at the Contractor's risk and expense.

1.11 CUTTING AND PATCHING:
All cutting and patching required for work of this Division is included herein. Coordination with General Contractor and other trades is imperative. Contractor shall bear the responsibility for and the added expense of adjusting for improper holes, supports, etc.

1.12 ACCEPTANCE DEMONSTRATION:
Upon completion of the work, at a time to be designated by the Owner, the Contractor shall demonstrate for the Owner the operation of the electrical installation, including any and all special items installed by him or installed under his supervision. Properly set automatic time switches to perform switching operations in accordance with schedules provided by the Owner's representative, and demonstrate (using the manufacturer's operating instructions) how to override and/or test time switches programming.

1.13 RECORD DRAWINGS, EQUIPMENT DATA:
Maintain one set of clean working drawings at the job site and enter daily such "as-built" information as feeder and service routes, pull box locations and changes in layout or arrangement which occur during construction. Deliver completed drawings to the Owner.
Deliver to the Owner's representative three copies of data sheets or other current manufacturers' publications for each item of electrical equipment furnished for the project including at least these data:
1. Technical description and replaceable parts list.
2. Physical description and installation instructions.
3. User's manual and operating instructions.
4. Manufacturer's Warranty.

1.14 CLEAN-UP:
Rid the premises of scrap materials, trash and debris both during construction and at completion of the project. Leave the building and surrounding area in a clean and orderly condition.

1.15 GUARANTEE:
Guarantee the installation free from defects of workmanship and materials for a period of one year after Date of Certification of final payment and promptly remedy any defects developing during this period, without charge.

1.16 TEMPORARY SERVICES:
Provide adequate and safe temporary electrical power and lighting throughout the construction and finishing of the premises. In addition to special or unusual requirements, provide at least these items:
1. Three 20-amp circuits for construction power tools. Provide GFI temporary circuits with coverplates to meet OSHA requirements.
2. Three or more light strings suspended approximately one foot below the height of finish ceiling with lamps spaced not more than twelve feet on centers. Strings shall be run the length of the store space parallel to the demising walls, with one string within eight feet of each wall and one (or more) intermediate string(s) arranged to limit the spacing between rows to sixteen feet or less.
3. Flood lighting and task lighting for painting and other finish work.

When permanent electrical service is operable, disconnect and remove from the premises the materials and equipment used for temporary power and lighting, and restore modifications and repair damage caused by the installation, use or removal of temporary service provisions.

PART 2 – PRODUCTS

2.01 MATERIAL APPROVAL
All materials must be new and bear Underwriter's Laboratories label. Materials that are not covered by UL testing standards shall be tested and approved by an independent testing laboratory or a governmental agency. Material not in accordance with these specifications may be rejected either before or after installation.

2.02 CONDUITS AND OTHER RACEWAYS:
A. Rigid Steel: Hot-dipped galvanized.
B. Intermediate Metal Conduit (IMC): Hot-dipped galvanized.
C. Electrical Metallic Tubing (EMT): Electro-galvanized.
D. Wireway: Code gauge steel, with knockouts and hinged cover, corrosion resistant gray baked enamel finish.
E. Provide fittings and accessories approved for the purpose equal in all respects to the conduit or raceway. EMT connectors and couplings shall be steel setscrew type indoors and steel compression type in wet locations and outdoors.

2.03 WIRES AND CABLES:
A. For power and lighting system 600V or less:
1. Conductor: minimum size #12 AWG.
a. #12 and #10 AWG solid copper.
b. #8 AWG and larger shall be stranded copper.
2. Insulation type:
a. #12 to #1 AWG: THWN for wet or underground and THHN for dry locations.
b. #1/0 through #4/0 AWG: XHHW (55 mils).
c. #250 MCM and larger: XHHW (65 mils).
d. Grounding wire: TW.
B. For signal and communications circuit:
1. Special cables shall be as specified on drawings.
2. Conductors for general use shall be stranded copper conductor, #16 AWG minimum, with THWN insulation for underground or wet locations and THHN insulation for dry locations.
C. Acceptable Products: General Electric, Anaconda, Okonite, Paranite or Triangle products conforming or exceeding applicable IPCEA standards.

2.04 OUTLET BOXES, JUNCTION AND PULL BOXES:
A. Outlet boxes: 4" square x 1-1/2" deep (or larger) galvanized sheet steel KO-type with plaster ring and cover for general interior use and cast metal type FS or FD with matching screw covers for exterior and exposed interior locations (gasketed in damp or wet locations).
B. Junction boxes shall be same as outlet boxes up to 42 cu. in. and code-gauge steel in larger sizes with surface or flush-type screw-mounted trim covers, both boxes and covers inhibitor-primed and painted inside out.
C. Pull boxes shall be same as junction boxes unless indicated otherwise on the drawings, with covers.
D. Telephone outlet boxes shall be the type and size required by the serving telephone company but not smaller than 4-11/16" square x 2-1/8" deep with single-gang ring and Sierra #S-754N split plate bushing.
E. All 15A & 20A, 120V receptacles in dwelling units shall be tamper resistant per nec 406.11.

2.05 WIRING DEVICES AND PLATES:
Wiring devices and plates shall be by Pass and Seymour or approved equal.
1. Standard design:
a. Switch and receptacles devices shall be plastic bodies, color per architect.
b. Wall plates shall be metal type 430, stainless steel, color per architect.
c. Isolated ground receptacles shall be white with orange triangle as required per NEC, manufactured by "Leviton" # 5362-IGW or approved equal.

2.06 CONDUIT HANGERS:
For individual conduit runs not directly fastened to the structure, use rod hangers manufactured by Caddy, Unistrut or Powerstrut. For multiple conduit runs, use Unistrut or Powerstrut trapeze type conduit support designed for maximum deflection not greater than 1/8".

2.07 WIRE CONNECTORS:
For wire sizes #8 AWG and smaller: Insulated pressure type (with live spring) rated 105 degrees C, 600V, for building wiring and 1000V in signs or fixtures. Scotchlok or Ideal. For wire size #6 AWG and larger: T & B or equivalent compression type with 3M #33+ or Plymouth "Slipknot Grey" tape insulation.

2.08 PANELBOARDS:
A. Construction: Cabinets shall be of code gauge, galvanized steel, surface or flush mounted as indicated. Doors shall be of cold-rolled steel with concealed hinges and flush catch and lock. All panels shall be keyed alike. Panels located adjacent to each other shall have identically sized enclosure and trims. Minimum panel width shall be 20". Finish exposed part with one coat of primer and one coat of light grey enamel suitable for overpainting in field if desired.
B. Bus Bars: Provide ground block with full complement of terminals in addition to insulated neutral bus. Future breaker spaces shall have complete provision including busses and connecting hardware.
C. Manufacturers: Panelboards shall be General Electric Type "AQ" or type "AE" or equivalent products of Westinghouse, Square-D or Siemens-ITE.
D. Circuit Breakers: Shall be quick-make, quick-break, molded case type:
1. 120/240 Volt Panels: Shall be General Electric Type "Q" line, bolt-on type, with minimum symmetrical interrupting capacity as shown.
2. Provide multi-pole units with common trip element.
3. Circuit breakers used on "ON-OFF" control of fluorescent lighting (panelboard switching) shall be Underwriters' Laboratories listed and marked "SWD" to indicate their suitability.
4. All 120-volt, single phase 15 and 20 ampere branch circuits supplying outlets installed in dwelling unit family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways or similar rooms or areas shall be protected by a listed arc-fault circuit interrupter, combination-type, installed to provide protection of the branch circuit, per NEC 210.12 (b)
E. Identification: Provide screwed-on (no adhesives) bakelite or photo-etched metallic nameplate identification on outside of each panel showing panel designation, voltage and phase in minimum 1/8" high letters. Each panel shall contain a metal-framed circuit directory inside cover, with plastic protector.
F. Complete shop drawings are required. See Article 1.08.

2.10 LIGHTING:
A. Furnish and install all fixtures complete, including lamps and ballast ready for service.
B. Supports: Proper supports and mounting accessories, such as hangers, stems, yokes, plaster frames, etc. shall be provided as required by the type of ceiling installed. Where swivel canopies or ball aligners are specified, they shall couse fixture to hang plumb regardless of ceiling slope.
C. Fixture Designation: Fixture types are designated on drawings. Where only one fixture designation is shown, it applies to all fixtures in that room or area. For exact fixture count and location refer to reflected ceiling plan.
D. Wire 1-lamp and 3-lamp fluorescent fixtures in tandem where required by code.
E. Ballasts: Advance, GE, or Approved high frequency electronic, full light output, energy saving, Class "P", high power factor, ETL certified, sound rating "A" or as indicated on drawings.

2.12 MISCELLANEOUS MATERIALS:
A. Safety Switches: Heavy duty type, 600V, horsepower rated for motors, fused or non-fused as required. Mount in enclosure with NEMA rating as required for the specific application General Electric, Square D or Westinghouse.

PART 3 – EXECUTION

3.01 GENERAL:
A. Electric system layouts indicated on the drawings are generally diagrammatic and shall be followed as closely as actual construction and work of other trades will permit. Govern exact routing of cable and wiring and the locations of outlets by the structure and equipment served. Take all dimensions from architectural drawings.
B. Consult all other drawings, verify scales and report any dimensional discrepancies or other conflicts with Owner before submitting bid.
C. All home runs to panelboards are indicated as starting from the outlet nearest the panel and continuing in the general direction of that panel. Continue such circuits to the panel as though the routes were completely indicated. Terminate homeruns of signal, alarm, and communication systems in a similar manner.
D. Avoid cutting and boring holes through structure or structural members wherever possible. Obtain prior approval of Owner and conform to all structural requirements when cutting or boring the structure is necessary and permitted.
E. Furnish and install all necessary hardware, hangers, blocking, brackets, bracing, runners, etc. required for equipment specified under this Section.
F. Provide necessary backing required to insure rigid mounting of outlet boxes.

3.02 WIRING METHODS:
A. In concealed spaces where the use of "ROMEX" and "BX" wiring is permitted by all applicable codes and regulations, provide factory-fabricated, pre-assembled UL-labeled type "NMC" and type "AC" cables as preffered wiring method for branch circuits. A grounding conductor shall be provided in each cable.
B. When conditions determined in "A" above are not met, install all wiring in raceway, or use MC cable where approved by all applicable codes and regulations.
Conduit shall be rigid steel, IMC or EMT as follows:
1. Above ground: Use rigid steel, IMC or EMT.
a. Wet locations: Rigid steel or IMC only.
b. Locations subject to mechanical injury: Rigid steel or IMC only.
c. Dry locations and not subject to mechanical injury: EMT, IMC or rigid steel conduit.
2. Underground: Use rigid steel.
C. Use flexible conduits or MC cable in the following applications:
1. Final connections to motor.
2. Final connections into and out of the transformer.
3. Final connections to vibrating equipment.
4. Inter-connections between all light fixtures (not to include homerun from fixture or device to panelboard, which must be rigid).
5. Final connections where rigid conduit is not practical.
6. In walls (for light switches and 120V power receptacles and HVAC control equipment).
D. Flexible metalic conduit or MC cable must be the same size as the rigid conduit to which it is connected.
E. The connection to outdoor equipment must be weatherproof, i.e. liquidtight or sealtight.
F. Minimum size of conduit shall be 1/2" for individual lighting fixture connections or to individual light switches if approved by all applicable codes. Minimum size for all other locations shall be 3/4". If HVAC control wiring is required to be run in conduit, it shall be a 3/4" minimum, unless otherwise noted on drawings. All in/under floor conduits shall be 3/4" minimum size.

3.03 INSTALLATION OF CONDUITS:
A. General:
1. Run all conduit concealed unless otherwise noted or shown.
2. Run all conduit parallel to or at right angles to center lines of columns and beams.
3. Conduits above ceilings shall not obstruct removal of ceiling tiles, lighting fixtures, air diffusers, etc.
4. Conduits shall not cross any duct shaft or area designated as future duct shaft horizontally. Conduit risers when allowed in duct shaft must be coordinated with Mechanical work to avoid any conflict.

B. Conduit Supports:
1. Support conduits with Underwriter's Laboratories listed steel conduit supports at intervals required by the National Electric Code. Wires or sheet metal strips are not acceptable for conduit support. Use conduit hangers for all conduits not directly fastened to structure and for all multiple conduit runs. Do not attach any conduit to mechanical ducts or pipes.
2. Individual conduits 1/2" and 3/4" size for lighting may be supported from ceiling support wires with Caddy clips only if acceptable to local code. Only one conduit is permitted to be attached to any ceiling support wire. Hang such conduit so as not to affect level of ceiling.
3. Avoid attaching conduit to fan plenums. When it is necessary to support conduit from fan plenum, provide a length of flexible conduit between portion attached fan plenum and portion attached to the building to minimize transmission of vibration to the building structure.

C. Conduit Penetration:
1. Penetrating fire rated floor or wall: Install conduit in conduit sleeve or framed opening. Seal penetration with fire retardant sealant specified herein.
2. Penetrating roof or exterior wall: Avoid penetrating roof or exterior wall where possible. Where penetrations are necessary, building weatherproof integrity must be preserved.
3. Penetrating sound insulated or air plenum wall: Install conduit in conduit sleeve and seal penetration as detailed on the drawings.
4. Penetrating non-fire rated dry wall: Conduit sleeves are not required. Penetrations must be sealed with plaster prior to painting. Penetrations made after wall finish is applied must be as small as possible and provided with escutcheons, one on each side of wall.
5. Penetrating suspended ceiling: Cut hole as small as possible to permit conduit penetration. Provide escutcheon for each conduit below ceiling.

3.04 CONNECTIONS TO EQUIPMENT:
A. General:
1. Furnish and install required power supply conduit and wiring to all equipment. See below for other wiring required.
2. Furnish and install a disconnect switch immediately ahead of and adjacent to each magnetic motor starter or appliance unless the motor appliance is located adjacent and within sight of the serving panelboard, circuit breaker or switch. Verify all equipment nameplate current ratings prior to installation.
3. Install all rough-in work for equipment from approved shop drawings to suit the specific requirements of the equipment.
4. Furnish and install manual thermal protection for all motors not integrally equipped with thermal protection.
5. Furnish 120 Volt power to each control panel and time switch requiring a source of power to operate.

3.05 INSTALLATION OF WIRES:
A. Pull no wire into any portion of the conduit system until all construction work which might damage the wire has been completed.
B. Install all wire continuous from outlet to outlet or terminal to terminal. Splices in cables when required shall be made in handholes, pull boxes or junction boxes. Make branch circuit splices in outlet boxes with 8" of correctly color-coded tails left in the box.
C. Splices in wires and cables shall be made utilizing materials and methods described herein before.
D. Make all ground, neutral and line connections to receptacle and wiring device terminals as recommended by manufacture. Provide ground jumper from outlet box to ground terminal of devices when the device is not approved for grounding through the mounting screws.
E. Provide Brady wire markers where number of conductors in a box exceeds four.
F. Megger and record insulation resistance of all 600 Volt insulated conductors size #4/0 and larger using 500 Volt megger for one minute. Make tests with circuits isolated from source and load.

3.06 WIRE COLOR CODE:
Color coding shall be continuous for wire #12 through #10 AWG. Phase conductors #8 and larger and conductors of any size in cable assemblies may have colored phasing tape at terminations. Color code wires as follows:

Voltage	Phase A	Phase B	Phase C	Neutral	Ground
120/208V	Black	Red	Blue	White	Green

3.07 IDENTIFICATION:
A. Provide nameplates for switchgears, panelboards, and all similar devices. Nameplates shall be screwed (no adhesives) engraved bakelite or photo-etched metallic nameplate identification showing panel designation, voltage and phase in minimum 1/4" high letters.
B. Provide dymo labels on all lighting switches and convenience and special purpose receptacles to show panel and circuit number to which the device is connected.
C. Each panelboard shall contain a metal-framed circuit directory inside cover, with plastic protector.
D. Panelboard Schedule: After completion of work, provide typewritten updated panelboard schedules for all panelboards.

3.09 GROUNDING:
A. Electrical service and separately derived alternating current system shall be grounded in accordance with NEC Article 250-3 to 250-26, inclusive.
B. Ground non-current carrying metal parts of electrical equipment enclosures, frames, conductor raceways or cable trays to provide a low impendance path for line-to-ground fault current and to bond all non-current carrying metal parts together. Provide ground conductor in each raceway system in addition to conductors shown. Equipment ground conductor shall be electrically and mechanically continuous from the electrical circuit source to the equipment to be grounded. Size ground conductors per NEC Article 250-122 unless larger conductors are shown on drawings.
C. Grounding conductors shall be identified with green insulation. Where green insulation is not available on larger sizes, black insulation shall be used and suitable identified with green tape at each junction box or device enclosure.

END OF SECTION – 35TH @ SCHOOL

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
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ph: (408) 522-5255
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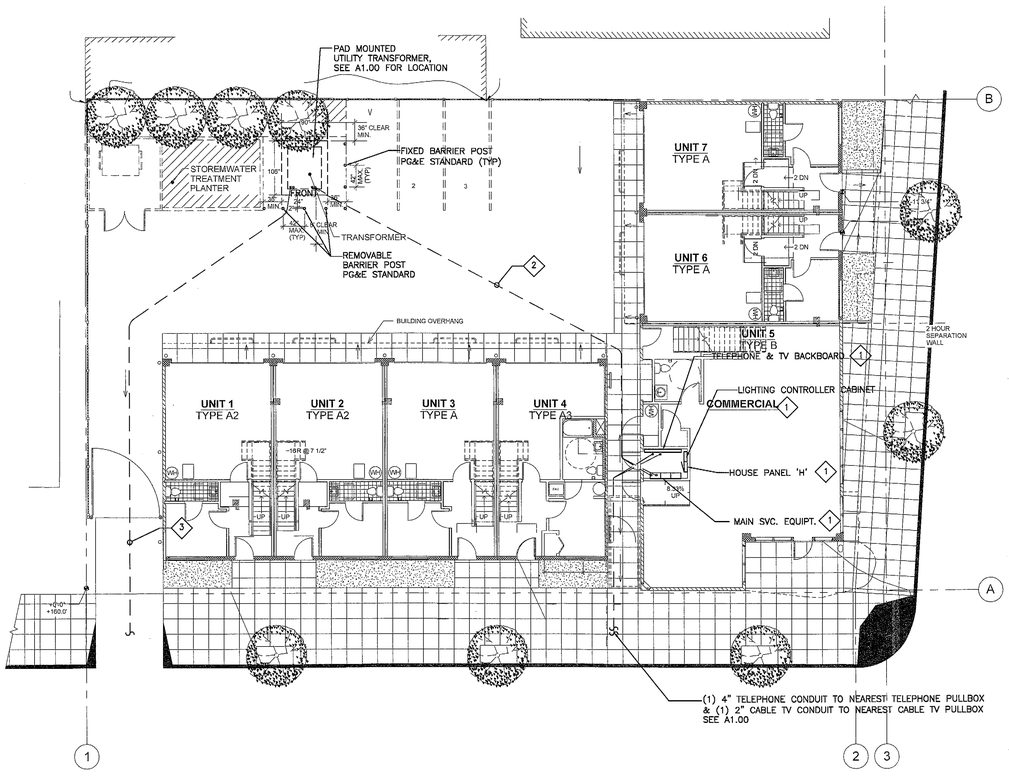
SHEET DESCRIPTION:
SPECIFICATION

JOB NUMBER:	0714
SCALE:	
DATE:	12/12/13
DRAWN BY:	RP
CHECKED BY:	JS
CAD TITLE:	

SHEET NUMBER:
E0.04
OF SHEETS

1 SCALE: 1"=10'

SITE PLAN



2 SCALE: N.T.S.

SHEET NOTES

1. SEE E2.01 FOR METER, PANEL, CONTROLLER & BACKBOARD LOCATIONS IN UTILITY ROOM.
2. SECONDARY SERVICE UNDERGROUNDED CONDUITS FROM TRANSFORMER TO MAIN SERVICE EQUIPMENT.
3. PRIMARY SERVICE UNDERGROUNDED CONDUITS FROM PG&E SOURCE.

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
△1	01/14/14	1ST PLAN CHECK REVIEW
○1	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

REGISTERED PROFESSIONAL ENGINEER JOSEPH AV ZOCC No. E15130 Exp. 06/30/14 ELECTRICAL STATE OF CALIFORNIA

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SHEET DESCRIPTION: △1

SITE ELECTRICAL PLAN

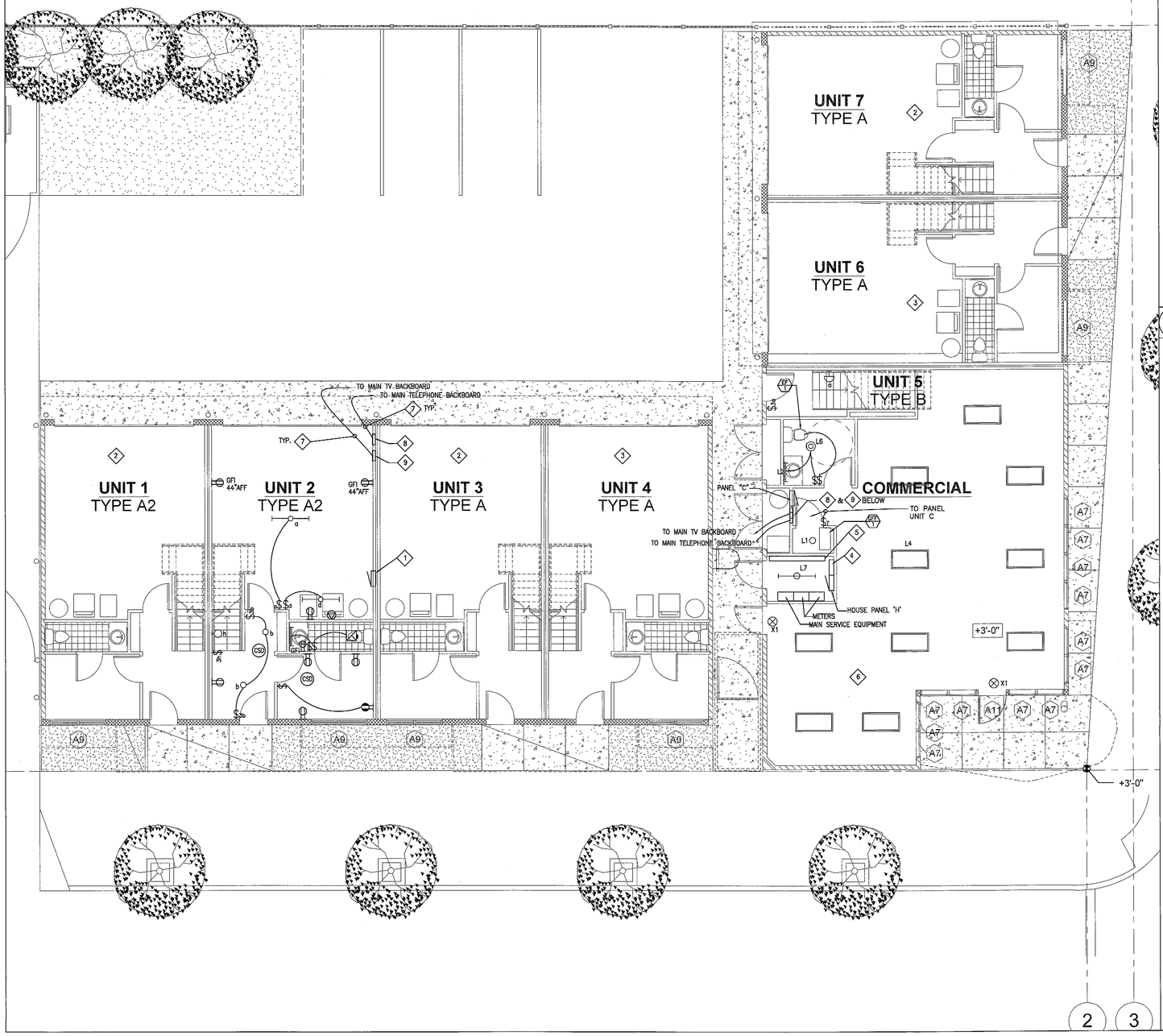
JOB NUMBER:	0714
SCALE:	
DATE:	12/12/13
DRAWN BY:	RP
CHECKED BY:	JS
CAD TITLE:	
SHEET NUMBER:	

E1.01

OF SHEETS

1 GROUND FLOOR ELECTRICAL PLAN

SCALE: 3/16"=1'



2 GENERAL NOTES

SCALE: N.T.S.

1. DEVICES AND LIGHTING FIXTURE SHOW ARE FOR GUIDANCE ONLY AND REFERENCE FOR TITLE 24 COMPLIANCE. DESIGN SHALL BE FOR COMPLETION BY DESIGN–BUILD CONTRACTOR.
2. UNDERGROUND SERVICE CONDUITS SHALL BE SEALED PER NEC ARTICLE 230–8.
3. FOR ALL RECESSED LIGHT FIXTURES IN FIRE RATED CEILING, PROVIDE ADDITIONAL GYP–BOARD ENCLOSURE AROUND THE FIXTURE TO MAINTAIN THE CEILING RATING. SEE 1/E0.1.

2 SHEET NOTES

SCALE: N.T.S.

1. ELECTRICAL PANEL FOR UNIT, FLUSH MOUNTED
2. MIRROR IMAGE OF UNIT 2, TYPE A2.
3. SAME AS UNIT 2, TYPE A2.
4. LTG CONTROL CABINET "LC"
5. MAIN TEL & TV BACKBOARD, 3/4" THK 4'HX6'W, FIRE RESISTANT.
6. SEE E0.03 FOR TITLE 24 LIGHTING COMPLIANCE.
7. 1–1 1/4" C WITH PULLWIRE
8. TELEPHONE BOX, 11"X14"X5"D, WITH 3/4" THK TREATED PLYWOOD BACKBOARD, FLUSH MOUNTED
9. CABLE TV BOX, 11"X14"X5"D, WITH 3/4" THK TREATED PLYWOOD BACKBOARD, FLUSH MOUNTED.

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

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Oakland, CA 94619

CONSULTANTS:

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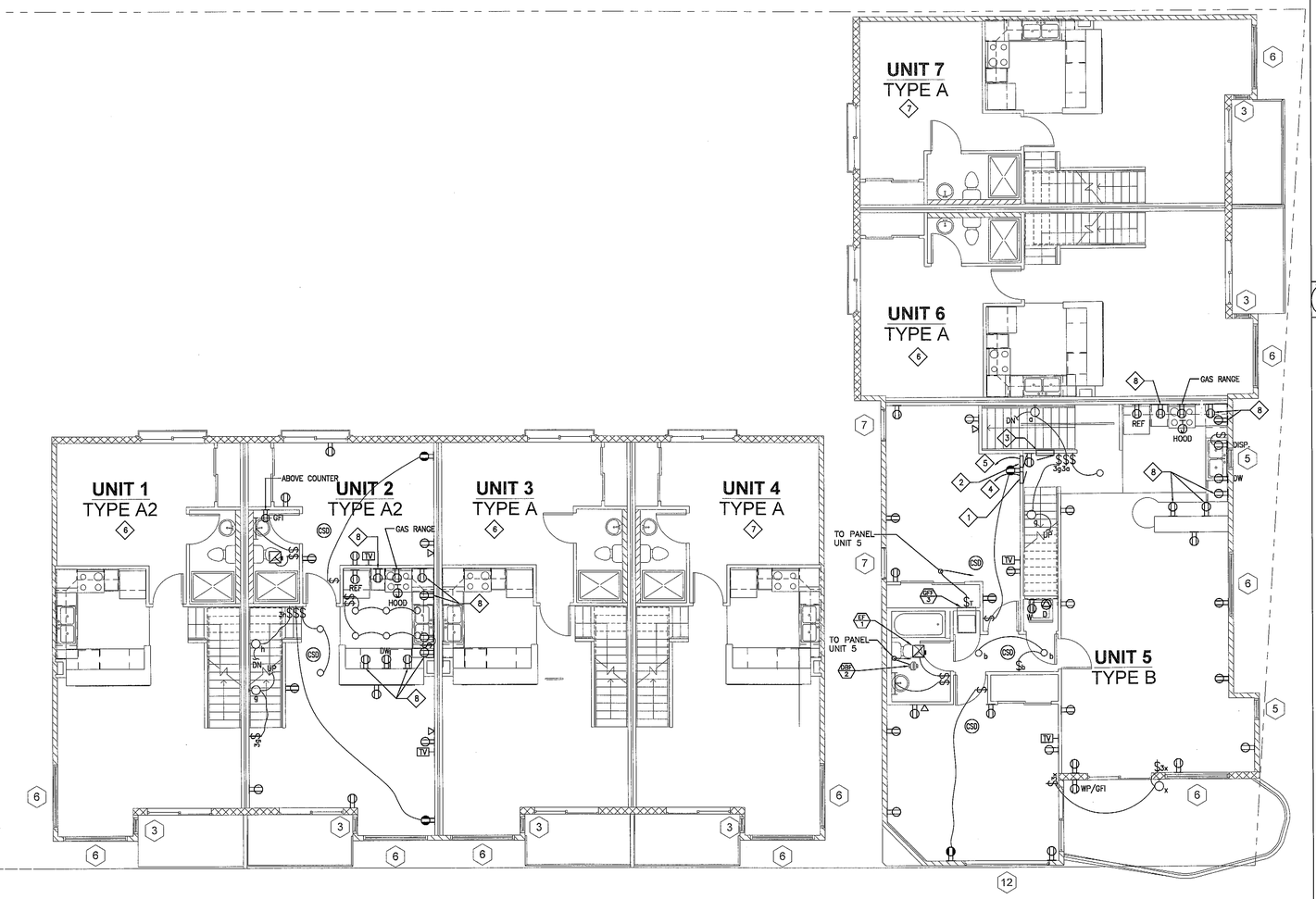
SHEET DESCRIPTION:

GROUND FLOOR ELECTRICAL PLAN

JOB NUMBER:	0714
SCALE:	
DATE:	12/12/13
DRAWN BY:	RP
CHECKED BY:	JS
CAD TITLE:	
SHEET NUMBER:	E2.01

OF SHEETS

1 SCALE: 3/16"=1' **SECOND FLOOR ELECTRICAL PLAN**



2 SCALE: N.T.S. **GENERAL NOTES**

1. FIXTURES AND DEVICES SHOWN ARE FOR GUIDANCE ONLY. DESIGN SHALL BE COMPLETED BY THE DESIGN/BUILT CONTRACTOR.

2 SCALE: N.T.S. **SHEET NOTES**

1. CABLE TV BOX, 11"X14"X5"D WITH 3/4" THK. TREATED PLYWOOD BACKBOARD, FLUSH MOUNTED.
2. TELEPHONE BOX, 11"X14"X5"D WITH 3/4" THK. TREATED PLYWOOD BACKBOARD, FLUSH MOUNTED.
3. PANEL FOR UNIT 5, FLUSH MOUNTED.
4. PROVIDE 1-1 1/4"C WITH PULLWIRE HOMERUN TO MAIN CABLE TV BACKBOARD AT GROUND FLOOR.
5. PROVIDE 1-1 1/4"C WITH PULLWIRE HOMERUN TO MAIN TEL. BACKBOARD AT GROUND FLOOR.
6. MIRROR IMAGE OF UNIT 2, TYPE A2.
7. SAME AS UNIT 2, TYPE A2.
8. GFI TYPE RECEPTACLE ABOVE COUNTER.

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
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PROJECT:

35th @ School
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CONSULTANTS:

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SHEET DESCRIPTION:

SECOND FLOOR ELECTRICAL PLAN

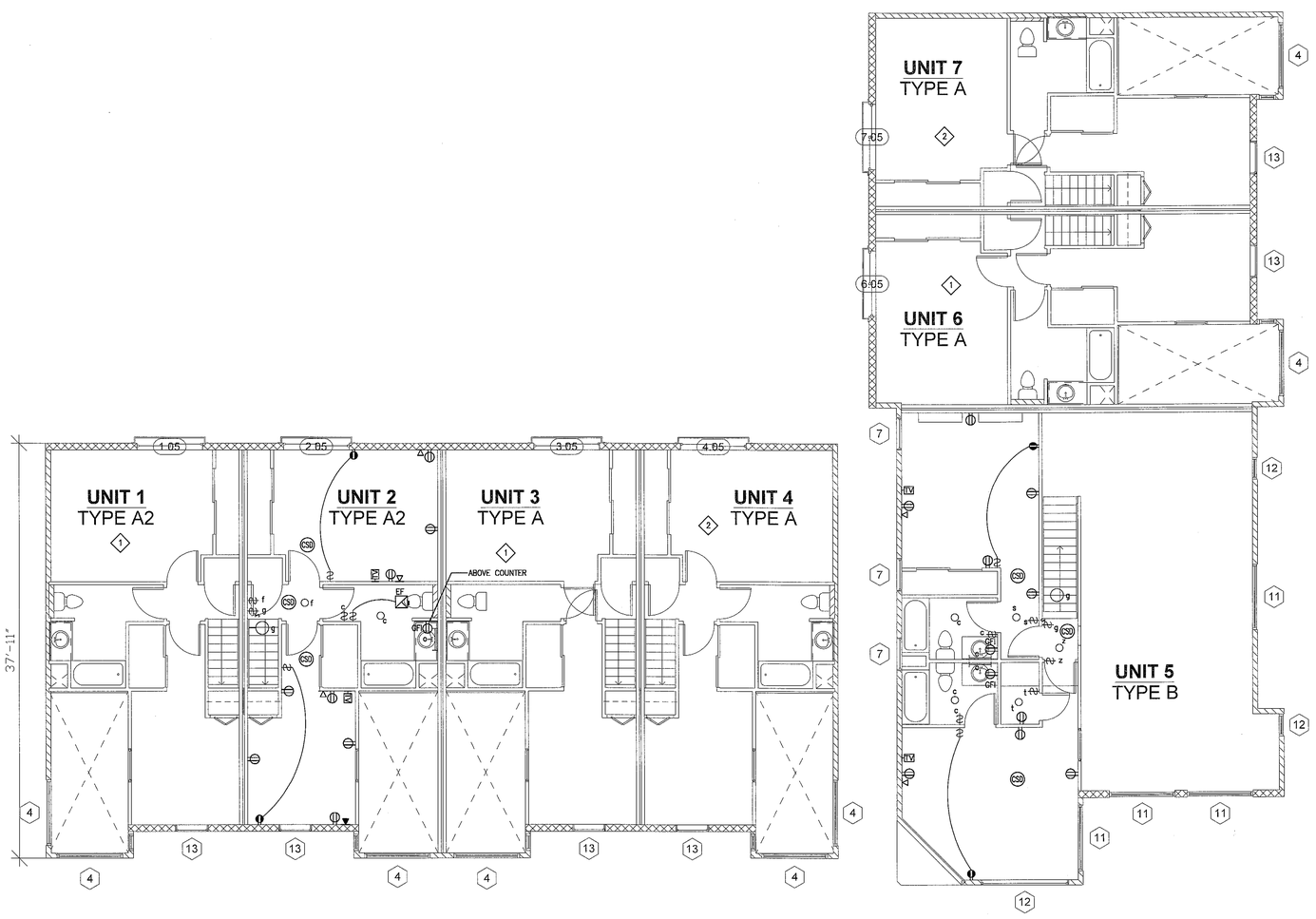
JOB NUMBER:	0714
SCALE:	
DATE:	12/12/13
DRAWN BY:	RP
CHECKED BY:	JS
CAD TITLE:	

SHEET NUMBER:

E2.02

OF SHEETS

1 SCALE: 3/16"=1' **THIRD FLOOR ELECTRICAL PLAN**



2 SCALE: N.T.S. **GENERAL NOTES**

1. FIXTURES AND DEVICES SHOWN ARE FOR GUIDANCE ONLY. DESIGN SHALL BE COMPLETED BY THE DESIGN/BUILT CONTRACTOR.

2 SCALE: N.T.S. **SHEET NOTES**

1. MIRROR IMAGE OF UNIT 2, TYPE A2.
2. SAME AS UNIT 2, TYPE A2.

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

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SHEET DESCRIPTION:

THIRD FLOOR ELECTRICAL PLAN

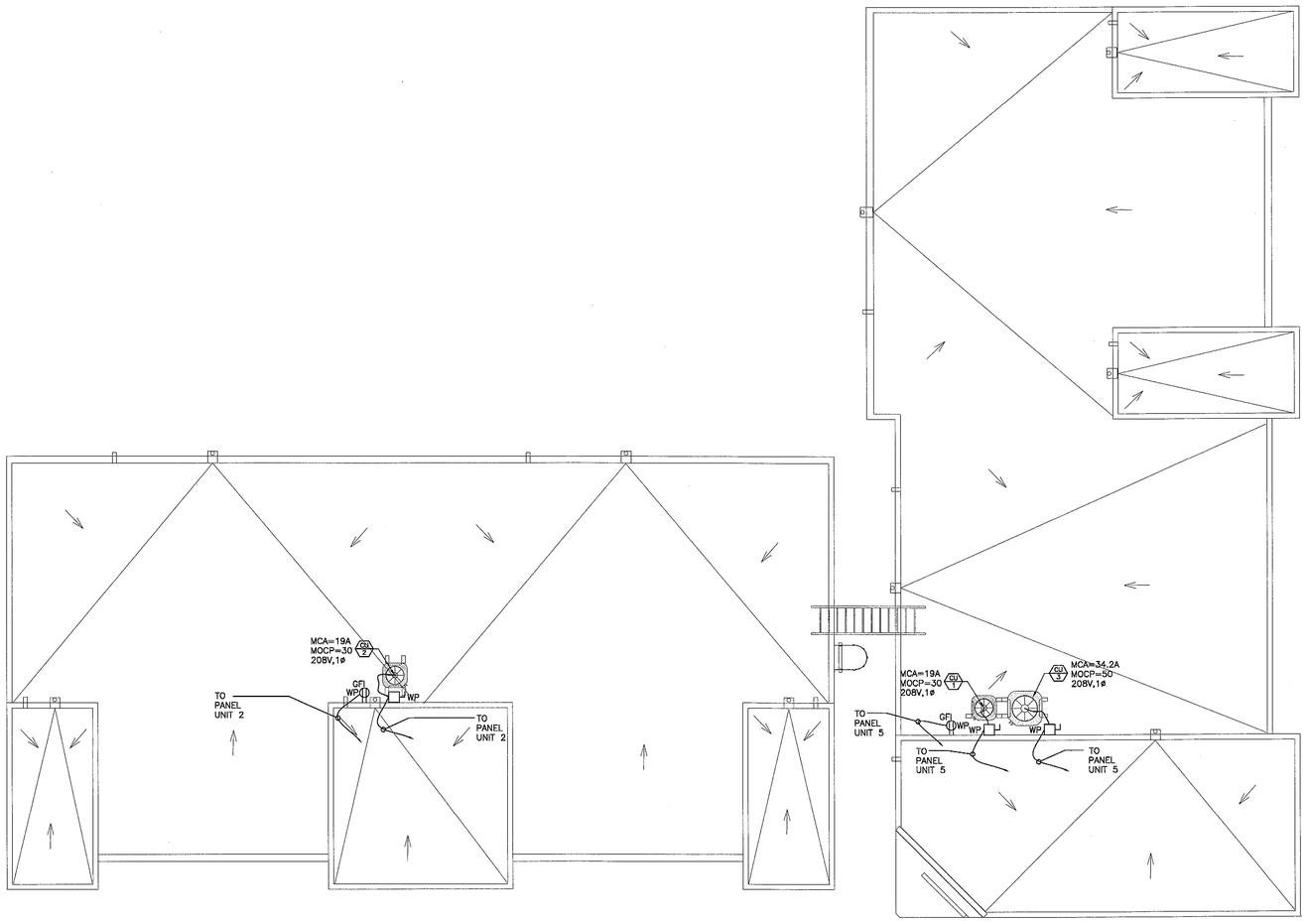
JOB NUMBER:	0714
SCALE:	
DATE:	12/12/13
DRAWN BY:	RP
CHECKED BY:	JS
CAD TITLE:	
SHEET NUMBER:	

E2.03

OF SHEETS

1 SCALE: 3/16"=1'

ROOF ELECTRICAL PLAN



ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

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E2.04

OF SHEETS

PLUMBING FIXTURE LOAD CALCULATION - TYPE A&A2

FIXTURE ID	QTY.	SANITARY F.U. EACH	SANITARY F.U. TOTAL	WATER F.U. COLD EACH	WATER F.U. COLD TOTAL	WATER F.U. HOT & TEMPERED EACH	WATER F.U. HOT & TEMPERED TOTAL
WC-1&WC-2	3	4	12	2.5	7.5		
LAV-1&LAV-2	3	1	3	1	3	1	3
KS-1	1	2	2	1.5	1.5	1.5	1.5
DW-1	1	2	2			1.5	1.5
CW-1	1	3	3	4	4	4	4
SH-1 & BT-1	2	2	4	2	4	2	4
REF-1	1			0.5	0.5		
TOTAL			26		20.5		14

UTILITY LOADS

SANITARY	(N) 4"	26 F.U.
COLD WATER	(N) 1"	20.5 F.U. = 15 GPM

NOTES:
1. WATER SUPPLY FIXTURE UNITS ARE BASED ON 2010 CPC, APPENDIX A, TABLE A-2.
2. DRAINAGE FIXTURE UNITS ARE BASED ON 2010 CPC, CHAPTER 7, TABLE 7-3.

PLUMBING FIXTURE LOAD CALCULATION - TYPE B

FIXTURE ID	QTY.	SANITARY F.U. EACH	SANITARY F.U. TOTAL	WATER F.U. COLD EACH	WATER F.U. COLD TOTAL	WATER F.U. HOT & TEMPERED EACH	WATER F.U. HOT & TEMPERED TOTAL
WC-2	3	4	12	2.5	7.5		
LAV-2	3	1	3	1	3	1	3
KS-1	1	2	2	1.5	1.5	1.5	1.5
DW-1	1	2	2			1.5	1.5
CW-1	1	3	3	4	4	4	4
BT-1	3	2	6	2	6	2	6
REF-1	1			0.5	0.5		
TOTAL			28		22.5		16

UTILITY LOADS

SANITARY	(N) 4"	28 F.U.
COLD WATER	(N) 1"	22.5 F.U. = 16 GPM

NOTES:
1. WATER SUPPLY FIXTURE UNITS ARE BASED ON 2010 CPC, APPENDIX A, TABLE A-2.
2. DRAINAGE FIXTURE UNITS ARE BASED ON 2010 CPC, CHAPTER 7, TABLE 7-3.

DOMESTIC COLD WATER CALCULATIONS

PIPE LENGTH FROM THE METER TO THE LAST FIXTURE	=	150	FEET
TOTAL DEVELOPED LENGTH (150 X 1.3 LOSS FOR FITTINGS)	=	195	FEET
STREET PRESSURE = 75 PSI			
LOSSES : LOSSES :			
RESIDUAL PRESSURE REQUIRE AT THE REMOTE FIXTURE	=	20	PSI
STATIC BUILDING LOSS (30 FEET X 0.43)	=	12.9	PSI
THROUGH WATER METER & BACKFLOW PREVENTER	=	16	PSI
TOTAL PRESSURE LOSS	=	48.9	PSI
DIFFERENCE PRESSURE (75 - 48.9)	=	26.1	PSI
MAXIMUM PRESSURE DROP ALLOWABLE PER 100 FT OF PIPE {(26.1 X 100) / 195 }	=	13.38	PSI

DESIGN VELOCITY <= 8 FPS & DESIGN PRESSURE DROP PER 100 FT <= 13 PSI
THE MAXIMUM FLOW RATE FOR EACH PIPE SIZE CAN CARRY

PIPE SIZE	1/2"	3/4"	1"	1-1/4"
GPM	2.7	8.0	17.0	29.0
F.U. (FLUSH TANK)	3	10	24	51

BASED ON THE CPC 2010 APPENDIX A

PLUMBING FIXTURE SCHEDULE

FIXT. ID	DESCRIPTION	MANUFACTURER	MODEL	ROUGH-IN W	V	CW	HW	REMARKS
WC-1	WATER CLOSET ADA COMPLIANT TANK TYPE	-	-	3"	2"	1/2"	-	SELECTED BY THE ARCHITECT, TO BE INSTALLED BY PLUMBING CONTRACTOR. MAXIMUM FLOW 1.28 GPF.
LAV-1	LAVATORY ADA COMPLIANT	-	-	1-1/2"	1-1/2"	1/2"	1/2"	SELECTED BY THE ARCHITECT, TO BE INSTALLED BY PLUMBING CONTRACTOR. MAXIMUM FLOW 0.4 GPF.
WC-2	WATER CLOSET TANK TYPE	-	-	3"	2"	1/2"	-	SELECTED BY THE ARCHITECT, TO BE INSTALLED BY PLUMBING CONTRACTOR. MAXIMUM FLOW 1.28 GPF.
LAV-2	LAVATORY	-	-	1-1/2"	1-1/2"	1/2"	1/2"	SELECTED BY THE ARCHITECT, TO BE INSTALLED BY PLUMBING CONTRACTOR. MAXIMUM FLOW 0.4 GPF.
KS-1	KITCHEN SINK	-	-	2"	1-1/2"	1/2"	1/2"	SELECTED BY THE ARCHITECT, TO BE INSTALLED BY PLUMBING CONTRACTOR. MAXIMUM FLOW 1.8 GPM.
GD-1	GARBAGE DISPOSER	-	-	2"	-	1/2"	-	SELECTED BY THE ARCHITECT, TO BE INSTALLED BY PLUMBING CONTRACTOR.
FCO	FLOOR CLEANOUT	ZURN	Z-1400	SAME AS PIPE SIZE	-	-	-	FLOOR CLEANOUT WITH WATER -GAS TIGHT ABS THREADED PLUG, ROUND STAINLESS STEEL ACCESS COVER.
WCO	WALL CLEANOUT	ZURN	Z-1441	SAME AS PIPE SIZE	-	-	-	WALL CLEANOUT WITH WATER-GAS TIGHT COUNTERSUNK IRON THREADED PLUG, POLISHED NICKEL BRONZE SCORIATED ACCESS COVER.
WH-1	GAS WATER HEATER	A.O.SMITH	GPVX-50L	-	-	3/4"	3/4"	50 GALLON CAPACITY, 62,500 BTU/HR GAS INPUT, 66 GALLONS RECOVERY AT 90°F RISE.
ET-1	EXPANSION TANK	AMTROL	ST-5	-	-	3/4"	-	2.0 GALLONS CAPACITY
CW-1	CLOTHES WASHER	-	-	2"	-	3/4"	3/4"	SELECTED BY THE ARCHITECT, TO BE INSTALLED BY PLUMBING CONTRACTOR.
DW-1	DISHWASHER	-	-	2"	-	3/4"	3/4"	SELECTED BY THE ARCHITECT, TO BE INSTALLED BY PLUMBING CONTRACTOR.
REF-1	REFRIGERATOR	-	-	-	-	1/2"	-	SELECTED BY THE ARCHITECT, TO BE INSTALLED BY PLUMBING CONTRACTOR.
SH-1	SHOWER	-	-	2"	1-1/2"	3/4"	3/4"	SELECTED BY THE ARCHITECT, TO BE INSTALLED BY PLUMBING CONTRACTOR. MAXIMUM FLOW 2 GPF.
BT-1	BATH TAB	-	-	2"	1-1/2"	3/4"	3/4"	SELECTED BY THE ARCHITECT, TO BE INSTALLED BY PLUMBING CONTRACTOR. MAXIMUM FLOW 2 GPF.
CD-1	CLOTHES DRYER	-	-	-	-	-	-	SELECTED BY THE ARCHITECT, TO BE INSTALLED BY PLUMBING CONTRACTOR.
GR-1	GAS RANGE	-	-	-	-	-	-	SELECTED BY THE ARCHITECT, TO BE INSTALLED BY PLUMBING CONTRACTOR.

GAS WATER HEATER SIZING TYPE A&A2

FIXTURE ID	FIXTURE TYPE	QUANTITY	GPH DEMAND PER FIXTURE	TOTAL GPH DEMAND
LAV-1&LAV-2	LAVATORY	3	5	15
BT-1	BATH TUB	1	20	20
SH-1	SHOWER	1	15	15
CW-1	CLOTHES WASHER	1	20	20
KS-1	KITCHEN SINK	1	45	45
DW-1	DISHWASHER	1	15	15
				130

HOT WATER DEMAND (GPH)	=	
USAGE FACTOR	=	0.4
ADDITIONAL LOAD (GPH)	=	0
TOTAL HOT WATER DEMAND (GPH)	=	52
TEMPERATURE RISE (deg.F)	=	70
WATER HEATER EFFICIENCY	=	80%
MINIMUM GAS INPUT (BTU/HR)	=	38,000

GAS WATER HEATER SIZING TYPE B

FIXTURE ID	FIXTURE TYPE	QUANTITY	GPH DEMAND PER FIXTURE	TOTAL GPH DEMAND
LAV-2	LAVATORY	3	5	15
BT-1	BATH TUB	3	20	60
CW-1	CLOTHES WASHER	1	20	20
KS-1	KITCHEN SINK	1	45	45
DW-1	DISHWASHER	1	15	15
				145

HOT WATER DEMAND (GPH)	=	
USAGE FACTOR	=	0.4
ADDITIONAL LOAD (GPH)	=	0
TOTAL HOT WATER DEMAND (GPH)	=	62
TEMPERATURE RISE (deg.F)	=	70
WATER HEATER EFFICIENCY	=	80%
MINIMUM GAS INPUT (BTU/HR)	=	42,350

PLUMBING LEGEND

SYMBOL	ABBREV.	DESCRIPTION
	CW	DOMESTIC COLD WATER
	HW	DOMESTIC HOT WATER(105'F)
	HWR	DOMESTIC HOT WATER RETURN
	SS	SANITARY SEWER
SS	SS	SANITARY SEWER HUNG PIPE
	V	VENT
G	G	NATURAL GAS (LOW PRESSURE)
OFL	OFL	OVERFLOW LEADER
RWL	RWL	RAINWATER LEADER
OD	OD	OVERFLOW DRAIN
SD	SD	STORM DRAIN
D(P)	D(P)	SUMP PUMP DRAIN
GW	GW	GREASE WASTE
KW	KW	KITCHEN WASTE
CD	CD	CONDENSATE DRAIN
	WHA	WATER HAMMER ARRESTOR
	P.O.C.	POINT-OF-CONNECTION
		CAPPED
		UNION
	UP	PIPE UP
	DN	PIPE DOWN
	DN	PIPE TEE DOWN
	BV	BALL VALVE
	CV	CHECK VALVE
	RED	REDUCER
	FCO	FLOOR CLEANOUT
	COTG	CLEANOUT TO GRADE
	HB	HOSE BIBB
	WCO	WALL CLEANOUT
		GAS COCK WITH UNION
	T&P	TEMPERATURE & PRESSURE RELIEF VALVE
	AG	ABOVE GROUND
	AFF	ABOVE FINISHED FLOOR
	BG	BELOW GROUND
	CFF	CAP FOR FUTURE
	IE	INVERT ELEVATION
	(N)	NEW
	(E)	EXISTING
	VTR	VENT THROUGH ROOF
SPKR	SPKR	SPRINLER LINE

SHEET INDEX

MATERIAL SPECIFICATIONS

SERVICES		CAST IRON NO-HUB	GALV. STEEL SCH 40	BLACK STEEL SCH 40	TYPE M COPPER	TYPE L COPPER	TYPE K COPPER	REMARKS
COLD WATER	ABOVE GROUND					•		
	BELOW GROUND						•	
HOT WATER	ABOVE GROUND					•		
	BELOW GROUND						•	
WASTE	ABOVE GROUND	•						
	BELOW GROUND	•						
VENT	ABOVE GROUND	•						
	BELOW GROUND	•						
NATURAL GAS	INDOOR			•				PAINTED WITH RUST INHIBITING PAINT
	OUTDOOR		•					
INDIRECT WASTE	INDOOR				•			
	OUTDOOR				•			
STORM DRAIN	ABOVE GROUND	•						
	BELOW GROUND	•						

ARCHITECTURE

REVISIONS: △ ISSUES: ◯

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SHEET DESCRIPTION:

PLUMBING LEGEND, NOTES & CALCULATIONS

JOB NUMBER:	0714
SCALE:	NONE
DATE:	12/12/13
DRAWN BY:	MV
CHECKED BY:	RT
CAD TITLE:	
SHEET NUMBER:	P0.01

OF SHEETS

TABLE 5.303.2.3
FIXTURE FLOW RATES

FIXTURE TYPE	FLOW RATE	MAXIMUM FLOW RATE AT 20 PERCENT REDUCTION
SHOWERHEADS	2.5 GPM @80 PSI	2 GPM @80 PSI
LAVATORY FAUCETS – NONRESIDENTIAL	0.5 GPM @60 PSI	0.4 GPM @60 PSI
KITCHEN FAUCETS	2.2 GPM @60 PSI	1.8 GPM @60 PSI
WASH FOUNTAINS	2.2 (RIM SPACE (IN)/20 GPM @60 PSI)	1.8 (RIM SPACE (IN)/20 GPM @60 PSI)
METERING FAUCETS	0.25 GALLONS PER CYCLE	0.20 GALLONS PER CYCLE
METERING FAUCETS FOR WASH FOUNTAINS	.25 (RIM SPACE (IN)/20 GPM @60 PSI)	.20 (RIM SPACE (IN)/20 GPM @60 PSI)
GRAVITY TANK TYPE WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH [1]
FLUSHOMETER TANK WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH [1]
FLUSHOMETER VALVE WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH [1]
ELECTROMECHANICAL HYDRAULIC WATER CLOSETS	1.6 GALLONS/FLUSH	1.28 GALLONS/FLUSH [1]
URINALS	1.0 GALLONS/FLUSH	0.5 GALLONS/FLUSH

1. INCLUDES SINGLE AND DUAL FLUSH WATER CLOSETS WITH AN EFFECTIVE FLUSH OF 1.28 GALLONS OR LESS:
SINGLE FLUSH TOILETS–THE EFFECTIVE FLUSH VOLUME SHALL NOT EXCEED 1.28 GALLONS (4.8 LITERS). THE EFFECTIVE FLUSH VOLUME IS THE AVERAGE FLUSH FLUSH VOLUME WHEN TESTED IN ACCORDANCE WITH ASME A119.19.233.2.
DUAL FLUSH TOILETS–THE EFFECTIVE FLUSH VOLUME SHALL NOT EXCEED 1.28 GALLONS (4.8 LITERS). THE EFFECTIVE FLUSH VOLUME IS DEFINED AS THE COMPOSITE, AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSHES AND ONE FULL FLUSH. FLUSH VOLUMES WILL BE TESTED IN ACCORDANCE WITH ASME A 112.19.14.

GAS LOAD AND PIPE SIZING
FOR UNIT'S TYPE A&A2

TAG	QTY.	DESCRIPTION	BTU PER HOUR	PIPE SIZE
WH–1	1	WATER HEATER	62,500	3/4"
GR–1	1	GAS RANGE	38,000	3/4"
FURNACE	1	GAS FURNACE	66,000	3/4"
CD–1	1	CLOTHES DRYER	40,000	3/4"
		TOTAL	204,500	1–1/4"

TOTAL LENGTH OF PIPE FROM THE METER TO THE MOST REMOTE UNIT IS 130 FEET

PIPE SIZE	1/2"	3/4"	1"	1–1/4"	
BTU/HR	40,000	84,000	158,000	324,000	

BASED ON TABLE 12–8 CALIFORNIA PLUMBING CODE 2010 FOR 150 FEET PIPE LENGTH

GAS LOAD AND PIPE SIZING
FOR UNIT B

TAG	QTY.	DESCRIPTION	BTU PER HOUR	PIPE SIZE
WH–1	1	WATER HEATER	62,500	3/4"
GR–1	1	GAS RANGE	38,000	3/4"
FURNACE	1	GAS FURNACE	110,000	3/4"
CD–1	1	CLOTHES DRYER	40,000	3/4"
		TOTAL	250,500	1–1/4"

TOTAL LENGTH OF PIPE FROM THE METER TO THE MOST REMOTE UNIT IS 65 FEET

PIPE SIZE	1/2"	3/4"	1"	1–1/4"	
BTU/HR	61,000	127,000	239,000	490,000	

BASED ON TABLE 12–8 CALIFORNIA PLUMBING CODE 2010 FOR 70 FEET PIPE LENGTH

GENERAL NOTES

1. SOIL OR WASTE PIPE SHALL SLOPE 2% MINIMUM, UNLESS OTHERWISE NOTED OR REQUIRED BY CODE.

2. ALL DRAIN, WATER & GAS LINES SHALL BE KEPT TIGHT TO THE UNDERSIDE OF EQUIPMENT & SECURED IN PLACE.

3. CONTRACTOR SHALL VERIFY THE LOCATION OF THE SANITARY SEWER AT SITE AND SHALL REVISE THE SEWER SYSTEM AS REQUIRED.

4. ALL CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. THE CONTRACTOR SHALL COORDINATE ALL CLEANOUT LOCATIONS WITH EQUIPMENT, CABINETS, ETC. AND THE ARCHITECT PRIOR TO ANY INSTALLATION.

5. ALL VALVES, TRAP PRIMERS, WATER HAMMERS ARRESTORS OR OTHER EQUIPMENT SHOWN IN WALLS OR ABOVE NON–ACCESSIBLE CEILING SHALL BE INSTALLED BEHIND AN ACCESS PANEL.

6. ALL PLUMBING FIXTURE VENTS TO TERMINATE A MINIMUM OF 12 INCHES FROM ANY VERTICAL SURFACE AND 10 FEET FROM ANY OUTSIDE AIR INTAKE.

7. INSTALLATION SHALL CONFORM TO THE ENERGY CODE FOR NEW NON–RESIDENTIAL BUILDINGS.

8. PRIOR TO COMMENCING WORK ON THIS PROJECT, CONTRACTOR SHALL VERIFY DEPTH, SIZE, LOCATION AND CONDITION OF ALL EXISTING UTILITIES IN FIELD BEFORE STARTING WORK. SHOULD CONDITIONS EXIST OTHER THAN THOSE INDICATED WHICH WOULD CAUSE THE DESIGN TO BE ALTERED, CONTRACTOR SHALL NOTIFY OWNER AND GENERAL CONTRACTOR IMMEDIATELY.

9. CONTRACTOR SHALL COORDINATE INSTALLATION OF PLUMBING WORK WITH ALL OTHER TRADES SO AS TO AVOID UNNECESSARY DELAY OR INTERFERENCES. CONTRACTOR TO REVIEW ARCHITECTURAL AND EQUIPMENT SHEETS.

10. ALL PLUMBING WORK AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE STATE & LOCAL ORDINANCES & REGULATIONS HAVING JURISDICTION. CONTRACTOR SHALL OBTAIN ALL APPROVALS REQUIRED FROM REGULATING AGENCIES BEFORE STARTING WORK. ALL PLUMBING WORK & MATERIALS SHALL MEET THE REQUIREMENTS OF THE LATEST EDITIONS OF THE LOCAL PLUMBING CODE, UNLESS OTHERWISE REQUIRED BY THE DEPARTMENT OF BUILDING & SAFETY. OBTAIN & PAY FOR ALL PERMITS, FEES & INSPECTIONS REQUIRED BY GOVERNING AUTHORITIES. ALL PIPING TO BE CONCEALED UNLESS NOTED OTHERWISE.

11. THE EQUIPMENT ROUGH–INS AS SHOWN ARE BASED UPON AVAILABLE INFORMATION HOWEVER, IN SOME INSTANCES, THE OWNER OR SUPPLIER MAY SUBSTITUTE OR THE EQUIPMENT ITEM MAY VARY FROM WHAT IS SHOWN, THEREFORE, THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS WITH THE OWNER PRIOR TO CONSTRUCTION. FAILURE OF THE CONTRACTOR TO VERIFY THESE DIMENSIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT RELOCATION DIRECTLY ON THE CONTRACTOR.

12. CONTRACTOR SHALL PROVIDE GAS PIPING TO UNITS AND ALL FINAL CONNECTIONS REQUIRED FOR OPERATION.

13. INSTALL SHUT–OFF VALVES ON ALL HOT & COLD WATER LINES TO FIXTURE OR APPLIANCE.

14. PROVIDE A LEVER HANDLE GAS SHUTOFF VALVE IN THE BRANCH PIPING OF EACH APPLIANCE OR PIECE OF EQUIPMENT. FOR EACH APPLIANCE INSTALL QUICK DISCONNECT, FLEXIBLE PIPE AND RESTRAINING DEVICE FURNISHED BY OWNER. PROVIDE PRESSURE REDUCING VALVES AT EACH PIECE OF EQUIPMENT OR APPLIANCE IF GAS PRESSURE GREATER THAN 8" IS USED DOWNSTREAM FROM THE METER.

15. ALL VALVES, UNIONS, ETC. TO BE SAME SIZE AS PIPE UNLESS OTHERWISE INDICATED ON DRAWINGS.

16. ENSURE THAT ALL JOINTS, GAPS AND SPACES ALONG THE PERIMETER OF PLUMBING FIXTURES ARE TO BE SEALED WITH NSF APPROVED SEALANT TO WITHIN 1/32".

17. CONSTRUCTION TO CONFORM WITH:
- 2010 CALIFORNIA BUILDING CODE, WITH LOCAL AMENDMENTS.
- 2010 CALIFORNIA MECHANICAL CODE, WITH LOCAL AMENDMENTS.
- 2010 CALIFORNIA PLUMBING CODE. WITH LOCAL AMENDMENTS.
- 2010 CALIFORNIA ELECTRICAL CODE, WITH LOCAL AMENDMENTS.
- 2010 CALIFORNIA FIRE CODE, WITH LOCAL AMENDMENTS.
- 2010 CALIFORNIA GREEN BUILDING STANDARDS CODE.
- TITLE 24 ENERGY EFFICIENCY STANDARDS, 2008 EDITION.
- ALONG WITH ANY OTHER APPLICABLE LOCAL CODE AND STATE LAWS AND REGULATIONS.

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SHEET DESCRIPTION:

PLUMBING GENERAL NOTES, AND GAS LOAD CALCULATIONS

JOB NUMBER:	0714
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OF SHEETS

PLUMBING SPECIFICATIONS (DIVISION 22)

1.00 – GENERAL

1.01 DESCRIPTION OF WORK

FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES REQUIRED FOR AND/OR REASONABLY INCIDENTAL TO THE COMPLETION OF THE FOLLOWING WORK.

A. SANITARY WASTE AND VENT PIPING SYSTEM INCLUDING CONNECTIONS TO BUILDING SEWER AS SHOWN.
B. DOMESTIC HOT AND COLD WATER SYSTEMS INCLUDING WATER HEATER, AND RELATED ACCESSORIES AND CONTROLS. CONNECTION TO BUILDING WATER AS SHOWN.
C. PLUMBING FIXTURES, TRIM AND ACCESSORIES INCLUDING INSTALLATION AND SUPPORT.
D. FLASHING AND SEALING OF ROOF AND EXTERIOR WALL PENETRATIONS FOR WATER TIGHTNESS.
E. CAULKING AND SEALING OF FLOOR AND WALL PENETRATIONS AND FORMED SHAFT PENETRATIONS.
F. BACKING FOR SECURING FIXTURES, TRIM AND PIPING.
G. ACCESS DOORS WHERE SHOWN OR REQUIRED BY CODE.
H. HANGERS, SUPPORTS, AND GUIDES.
I. CLEANUP OF DEBRIS AND FINAL CLEANUP OF DRAINS, FIXTURES AND EQUIPMENT.
J. RECORD DRAWINGS AND OPERATING MANUALS.
K. LICENSE, PERMITS AND ASSOCIATED FEES.
L. CUTTING, DRILLING AND PATCHING FOR ALL SURFACES IN RELATION TO PLUMBING WORK.
M. CONDENSATE DRAINS FROM HVAC EQUIPMENT.

1.02 RELATED WORK INCLUDED UNDER OTHER DIVISIONS.

A. DIVISION 21– FIRE SUPPRESSION
B. DIVISION 23– HEATING, VENTILATING AND AIR CONDITIONING
C. DIVISION 26– ELECTRICAL

1.03 EXAMINATION OF SITE

A. VISIT SITE BEFORE SUBMITTING BID AND CHECK LOCATION OF ALL EXISTING CONDITIONS WHICH WILL AFFECT THIS WORK, VERIFY DIMENSIONS AND LOCATIONS SHOWN ON DRAWINGS AND COVER ALL COSTS. CONTRACTOR SHALL ASSUME REASONABLE VARIATIONS OR MINOR OMISSIONS AND SHALL COMPLETE PROPOSED WORK WITHOUT ADDITIONAL COST. FAILURE TO VISIT SITE WILL NOT LESSEN RESPONSIBILITY OR ENTITLE ADDITIONAL COMPENSATION FOR WORK NOT INCLUDED IN PROPOSAL.

1.04 DRAWINGS

THE ACCOMPANYING DRAWINGS SHALL BE CONSIDERED PART OF THESE SPECIFICATIONS. WORK AND MATERIALS SHOWN ON THE DRAWINGS AND NOT MENTIONED IN THE SPECIFICATIONS AND VICE VERSA SHALL BE EXECUTED AS IF SPECIFICALLY MENTIONED OR SHOWN IN BOTH. THE DRAWINGS SHALL BE CONSIDERED AS SCHEMATIC IN NATURE AND MINOR MODIFICATIONS OF THE WORK TO COMPLY WITH THE STRUCTURE AS FOUND SHALL BE MADE.

1.05 RULES AND REGULATIONS

A. ALL WORK AND MATERIAL SHALL BE IN FULL ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF THE STATE FIRE MARSHAL AND OTHER APPLICABLE STATE AND LOCAL RULES AND REGULATIONS. NOTHING IN THESE DRAWINGS OR SPECIFICATIONS SHALL BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

B. FURNISH WITHOUT ANY EXTRA CHARGE ANY ADDITIONAL MATERIAL AND LABOR WHEN REQUIRED TO COMPLY WITH THESE LAWS, ORDINANCES AND CODES REGARDLESS OF WHETHER SHOWN OR MENTIONED IN THESE SPECIFICATIONS OF DRAWINGS.

1.06 SUBMITTALS

A. SUBMIT FOR REVIEW TO THE OWNER A COMPLETE AND ALL–INCLUSIVE LIST OF EQUIPMENT AND MATERIALS PROPOSED FOR USE (6 COPIES), ACCOMPANIED BY MANUFACTURER'S DATA SHEETS. DATA SHALL BE FORWARDED IN A SINGLE PACKAGE WRITTEN 15 DAYS AFTER AWARD OF CONTRACT. SUBMIT SIX BLUELINE PRINTS AND ONE REPRODUCIBLE SHOP DRAWING SHOWING PROPOSED PLUMBING INSTALLATION. INCLUDE SIZES, LOCATIONS AND OTHER REQUIRED INFORMATION TO COORDINATE INSTALLATION WITH OTHER TRADES.

B. WITHIN 5 DAYS AFTER AWARD OF CONTRACT, SUBMIT 6 COPIES OF A LETTER STATING ANY MATERIALS THAT CONTRACTOR WISHES TO SUBSTITUTE, TO THE OWNER FOR APPROVAL. INCLUDE SUCH INFORMATION AS MANUFACTURER'S NAME, TYPE OF MATERIAL, CERTIFIED RATINGS, OVERALL APPEARANCE, AND NECESSARY INFORMATION TO EXPLAIN FUNCTION AND OPERATION OF MATERIAL. ALL PROPOSED SUBSTITUTIONS SHALL BE EQUAL IN QUALITY, DESIGN, UTILITY AND APPEARANCE TO MATERIAL, EQUIPMENT OR METHOD SPECIFIED.

1.07 AS–BUILT DRAWINGS

A SET OF PLUMBING PLANS WILL BE FURNISHED TO THE CONTRACTOR ON WHICH HE SHALL INDICATE THE INSTALLATION "AS–BUILT" AS THE WORK PROGRESSES. UPON COMPLETION OF THE WORK, A SET OR REPRODUCIBLE DRAWINGS SHALL BE OBTAINED FROM THE OWNER AT COST, AND ALL CHANGES AS NOTED ON THE RECORD SET OF PRINTS SHALL BE INCORPORATED THEREON. THIS SET OF REPRODUCIBLES, ALONG WITH ONE SET OF BLUEPRINTS, SHALL BE DELIVERED TO THE OWNER UPON COMPLETION AND BEFORE FINAL ACCEPTANCE OF THE PROJECT.

1.08 GUARANTEE

THE CONTRACTOR SHALL LEAVE THE ENTIRE INSTALLATION IN COMPLETE WORKING ORDER FREE FROM ANY DEFECTIVE MATERIAL, WORKMANSHIP OR FINISH. HE SHALL GUARANTEE TO REPAIR OR REPLACE, WITHOUT CHARGE, DEFECTS DUE TO FAULTY WORKMANSHIP OR MATERIAL FOR A PERIOD OF ONE YEAR FROM THE DATE OF FILING OF THE NOTICE OF COMPLETION.

1.09 OPERATION MANUALS AND OWNER INSTRUCTIONS

A. PROVIDE COMPLETE OPERATION AND MAINTENANCE MANUALS COVERING ALL PLUMBING SYSTEMS AND EQUIPMENT THAT HAVE BEEN INSTALLED. THREE (3) COPIES OF THE MANUAL SHALL BE BOUND IN HARDBACK BINDERS.
B. PROVIDE INSTRUCTIONS TO OWNER AS TO OPERATION OF ALL EQUIPMENT. INSTRUCTION PERIOD TO COMMENCE FOR MINIMUM OF (2) HOURS AND SHALL BE SCHEDULED AT OWNER'S CONVENIENCE.

1.10 CUTTING AND PATCHING

A. THE CONTRACTOR SHALL DO ALL CUTTING, DRILLING AND PATCHING WHICH MAY BE REQUIRED FOR THE INSTALLATION OF THE WORK UNDER THIS SECTION OF THE SPECIFICATIONS.
B. PATCHING SHALL BE OF THE SAME WORKMANSHIP, MATERIAL, AND FINISH AND SHALL MATCH ACCURATELY ALL SURROUNDING CONSTRUCTION IN A MANNER SATISFACTORY TO THE OWNER. NO CUTTING OF THE STRUCTURE SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE OWNER.

2.00 – MATERIALS

2.01 PIPING

A. HUBLESS CAST IRON SOIL PIPE AND FITTINGS:

1. PIPE AND FITTINGS FOR BOTH UNDERGROUND AND ABOVEGROUND INSTALLATION SHALL BE NO–HUB CAST IRON PIPE AND FITTINGS MANUFACTURED FROM GRAY CAST IRON AND SHALL CONFORM TO ASTM A 888, AND CISPI 301 (CURRENT VERSION). ALL PIPE AND FITTINGS ARE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS. PRODUCTS MUST BE MARKED WITH THE NAME OF THE USPTO REGISTERED TRADEMARK OF THE MANUFACTURER. ACCEPTABLE MANUFACTURERS ARE CHARLOTTE PIPE, STAR PIPE PRODUCTS, TYLER/AB&I OR APPROVED EQUAL.

2. STANDARD COUPLINGS SHALL BE USED FOR BRANCH PIPING AND SHALL CONFORM TO CISPI STANDARD 310, ASTM C 1227, AND ASTM C 564. COUPLINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S BAND TIGHTENING SEQUENCE AND TORQUE RECOMMENDATIONS. TIGHTEN BANDS WITH A PROPERLY CALIBRATED TORQUE LIMITING DEVICE.

3. HEAVY DUTY COUPLINGS (BLUE SHIELD) SHALL BE USED FOR MAIN PIPING AND SHALL CONFORM TO ASTM C 1540, AND ASTM C 564. THIRD PARTY TESTING AND LISTING IS REQUIRED TO PROVE CONFORMANCE TO THE STANDARDS. COUPLINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S BAND TIGHTENING SEQUENCE AND TORQUE RECOMMENDATIONS. TIGHTEN BANDS WITH A PROPERLY CALIBRATED TORQUE LIMITING DEVICE.

4. THE SYSTEM SHALL BE HYDROSTATICALLY TESTED AFTER INSTALLATION TO 10 FEET OF HEAD, OR AIR TEST TO 4.3 PSI.

B. INTERIOR ABOVEGROUND SOIL, WASTE, VENT AND STORM DRAIN PIPING:
   1. 3" AND LARGER – HUBLESS CAST–IRON PIPE AND FITTINGS.
   2. 2" AND SMALLER – COPPER DWV TUBE, COPPER DRAINAGE FITTINGS, AND THREDED JOISTS.

C. INTERIOR DOMESTIC WATER PIPING:
   3" AND SMALLER – TYPE L HARD TEMPERED COPPER WITH SOLDER END FITTINGS. 95–5 TIN AND ANTIMONY SOLDER JOINTING (LEAD–FREE). USE TYPE K FOR UNDERGROUND PIPING.

D. CONDENSATE DRAIN PIPING:
   COPPER WATER TUBE ASTM B88, TYPE "M", SOLDER WITH 95–5 SOLDER, LEAD–FREE TYPE. CONDENSATE DRAIN PIPE IN CEILING SPACE SHALL BE INSULATED WITH 1/2" THICK ARMSTRONG ARMAFLEX, AND SECTIONS BUTTED FIRMLY TOGETHER.

E. THE FIRE–TEST RESPONSE CHARACTERISTIC OF ANY PIPING INSULATION SHALL HAVE A FLAME–SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE–DEVELOPED INDES OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR BY A TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, OR REQUIRED BY LOCAL CODES.

F. DOMESTIC HOT WATER, TEMPERED WATER AND HOT WATER RETURN PIPING SHALL BE INSULATED WITH 1" THICK DENSITY GLASS FIBER INSULATION, HAVING FACTORY–APPLIED, SELF–SEALING ALL–SERVICE JACKET, MOLDED TO CONFORM TO PIPING, K–VALUE AT 75 DEGREES F, MAXIMUM 0.23 BTU–IN/HR–SQ.FT. DEGREES F.

2.02 PIPE FLASHINGS
#4 LEAD WITH COUNTERFLASHING RING BY GLENCO, STONEMAN ENGINEERING OR APPROVED EQUAL.

2.03 VALVES

A. GATE VALVES: RED & WHITE 204 OR EQUAL, 3" AND SMALLER.
B. CHECK VALVES: RED & WHITE 238 OR EQUAL, 3" AND SMALLER.
C. BALL VALVEES: BRASS OR BRONZE BODY WITH CHROME –PLATED BRONZE BALL, MSS SP–110, RED & WHITE VALVE 5044F OR EQUAL.

2.04 PLUMBING FIXTURES AND TRIM:
PLUMBING FIXTURES TO BE FURNISHED AND INSTALLED UNDER THIS CONTRACT. SEE PLUMBING FIXTURE SCHEDULE.

2.05 PIPE HANGERS AND SUPPORTS

A. SUPERSTRUT, GRINNELL, OR APPROVED EQUAL.
B. INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS.
C. ALL HANGERS BELOW DECK TO BE STAINLESS STEAL. ALL BOLTS AND THREADED RODS SHALL HAVE DOUBLE NUTS FOR LOCKING.

3.00 – INSTALLATION AND EXECUTION

3.01 GENERAL

A. SUPPORT C.I. SOIL PIPING AT 5 FEET ON CENTER MAXIMUM AND EACH JOINT AND/OR FITTING. SUPPORT 1/2" AND 3/4" PIPING AT 6 FEET ON CENTER MAXIMUM. SUPPORT 1" TO 1–1/2" PIPING AT 8 FEET ON CENTERS. SUPPORT 2" AND LARGER PIPING AT 10 FEET ON CENTER MAXIMUM. STEEL PIPING 4" AND LARGER MAY BE SUPPORTED AT 12 FEET ON CENTER MAXIMUM EXCEPT FOR VICTAULIC FITTED PIPING WHICH SHALL BE SUPPORTED AT 10 FEET ON CENTER MAXIMUM.

3.02 SPECIAL REQUIREMENTS, RESPONSIBILITIES AND TESTING

A. INSTALL PIPING GENERALLY LEVEL, FREE OF TRAPS AND UNNECESSARY BENDS, TO CONFORM WITH BUILDING REQUIREMENTS. PIPE TO BE FREE OF DEFECTS, AND INSTALLED TO AVOID ANY POSSIBLE GALVANIC ACTION BY ISOLATING DISSIMILAR METALS.
B. TEST AND RECORD AVAILABLE DOMESTIC WATER PRESSURE IN STATIC AND DYNAMIC CONDITIONS FOR DYNAMIC TESTING RECORD PRESSURE AND FLOW RATE IN GALLONS PER MINUTE. TRANSMIT THIS INFORMATION TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
C. PROVIDE ALL TESTS SPECIFIED HEREINAFTER AND AS OTHERWISE REQUIRED. PROVIDE ALL TEST EQUIPMENT, INCLUDING TEST PUMPS, GAUGES, INSTRUMENTS AND OTHER EQUIPMENT REQUIRED. PRESSURE GAUGES USED SHALL BE GRADUATED IN INCREMENTS NOT GREATER THAN 5 POUNDS PER SQUARE INCH.. NO PLUMBING OR DRAINAGE SYSTEM OR PART THEREOF SHALL BE COVERED, CONCEALED, OR PUT INTO USE UNLESS IT HAS BEEN SPECIFIED. CONDUCT ALL TESTS IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE, AND OBTAIN THE NECESSARY JURISDICTIONAL AUTHORITY INSPECTIONS.
D. APPLY A WATER TEST TO THE WASTE, AND VENT SYSTEMS WHETHER IN ITS ENTIRETY OR IN SECTIONS; IF APPLIED TO THE ENTIRE SYSTEM, TIGHTLY CLOSE ALL OPENINGS IN THE PIPING EXCEPT THE HIGHEST OPENING, AND FILL THE SYSTEM WITH WATER TO THE POINT OF OVERFLOW. IF THE SYSTEM IS TESTED IN SECTIONS, TIGHTLY PLUG EACH OPENING EXCEPT FOR THE HIGHEST OPENING OF THE SECTION UNDER TEST, AND FILL EACH SECTION WITH WATER, BUT TEST WITH NO LESS THAN A 10' HEAD OF WATER. IN TESTING SUCCESSIVE SECTIONS, TEST AT LEAST THE UPPER 10' OF THE NEXT PRECEDING SECTION SO THAT NO JOINT OR PIPE IN THE BUILDING (EXCEPT THE UPPERMOST 10' OF THE SYSTEM) SHALL HAVE BEEN SUBMITTED TO A TEST OF LESS THAN A 10' HEAD OF WATER. KEEP WATER IN THE SYSTEM OR IN THE PORTION UNDER TEST FOR AT LEAST 24 HOURS BEFORE INSPECTION STARTS, WITH THE SYSTEM TIGHT AT ALL POINTS.
E. DOMESTIC WATER SYSTEM SHALL BE TESTED AND PROVED TIGHT UNDER A PRESSURE OF NOT LESS THAN 150 PSI. PIPING MUST STAND THE TEST FOR A PERIOD OF 24 HOURS WITHOUT LEAKING.
F. CHLORINATION OF THE DOMESTIC COLD AND HOT WATER PIPING SYSTEMS IN ACCORDANCE WITH STANDARD TESTING PROCEDURES AND LOCAL HEALTH DEPARTMENT REQUIREMENTS. TESTING BY A FIRM SUCH AS BENNET–MARINE OR EQUAL. SUBMIT CERTIFICATE OF SATISFACTORY TEST RESULTS.
G. UPON COMPLETION OF TESTING, CERTIFY TO THE ARCHITECT, IN WRITING THAT THE SPECIFIED TESTS HAVE BEEN PERFORMED AND THAT THE INSTALLATION COMPLIES WITH THE SPECIFIED REQUIREMENTS.

3.03 PIPING INSTALLATION

A. MAKE CHANGES IN SIZE OF PIPE WITH REDUCING FITTINGS; BUSHINGS WILL NOT BE PERMITTED EXCEPT FOR BELL SHAPED COPPER BUSHINGS.
B. INSTALL DIELECTRIC INSULATING UNIONS IN WATER PIPING BETWEEN COPPER PIPING AND FERROUS PIPING OR EQUIPMENT – EPCO, OR EQUAL.
C. INSTALL EXPOSED POLISHED CHROME CONNECTIONS FROM FIXTURES OR EQUIPMENT WITH SPECIAL CARE. SHOW NO TOOL MARKS OR THREADS AT FITTINGS.
D. CAP OPENINGS IN PIPING DURING CONSTRUCTION.
E. PROVIDE BSE RED BRASS PIPE IPS, IN CONNECTION TO FAUCETS, FLUSH VALVES, HOSE BIBBS OR SIMILAR ITEMS REQUIRING RIGID PIPING. EXTEND BRASS PIPE FROM FIXTURE TO POINT WHERE PIPING CAN BE SECURELY FASTENED TO BUILDING CONSTRUCTION. ALL EXPOSED PIPING AND STOP VALVES IN CONNECTION TO FIXTURES SHALL BE CHROME PLATED BRASS.
F. INSTALL UNIONS ADJACENT TO VALVES AND WHERE NECESSARY TO FACILITATE DISASSEMBLY OF PIPING.
G. ESCUTCHEONS: FIT EXPOSED PIPES PASSING THROUGH FLOORS, WALLS OR CEILINGS WITH ESCUTCHEONS. MANUFACTURE SPECIAL SIZES OF ESCUTCHEONS FROM STEEL AND PRIME COAT SAME. CUT IN ROUND, RECTANGULAR OR SQUARE SPACE TO PROVIDE A CLEAN APPEARANCE ACCEPTABLE TO THE ARCHITECT.
H. SUPPORT PIPING INDEPENDENTLY OF EQUIPMENT TO WHICH IT IS CONNECTED.
I. MAKE COPPER SOLDER JOINTS WITH 95/5 SOLDER, OR SILFOS; CLEAN SURFACES TO BE JOINED FREE OF OIL, GREASE, RUST OR OXIDES AND APPLY FLUX TO EACH JOINT BEFORE HEATING ASSEMBLY.
J. ROUGH–IN AND MAKE FINAL CONNECTIONS TO ALL OTHER EQUIPMENT FURNISHED UNDER OTHER DIVISIONS, REQUIRING PLUMBING CONNECTIONS.

ARCHITECTURE

REVISIONS: △ ISSUES: ◯

NO.	DATE	DESCRIPTION
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
Info@acies.net

SHEET DESCRIPTION:

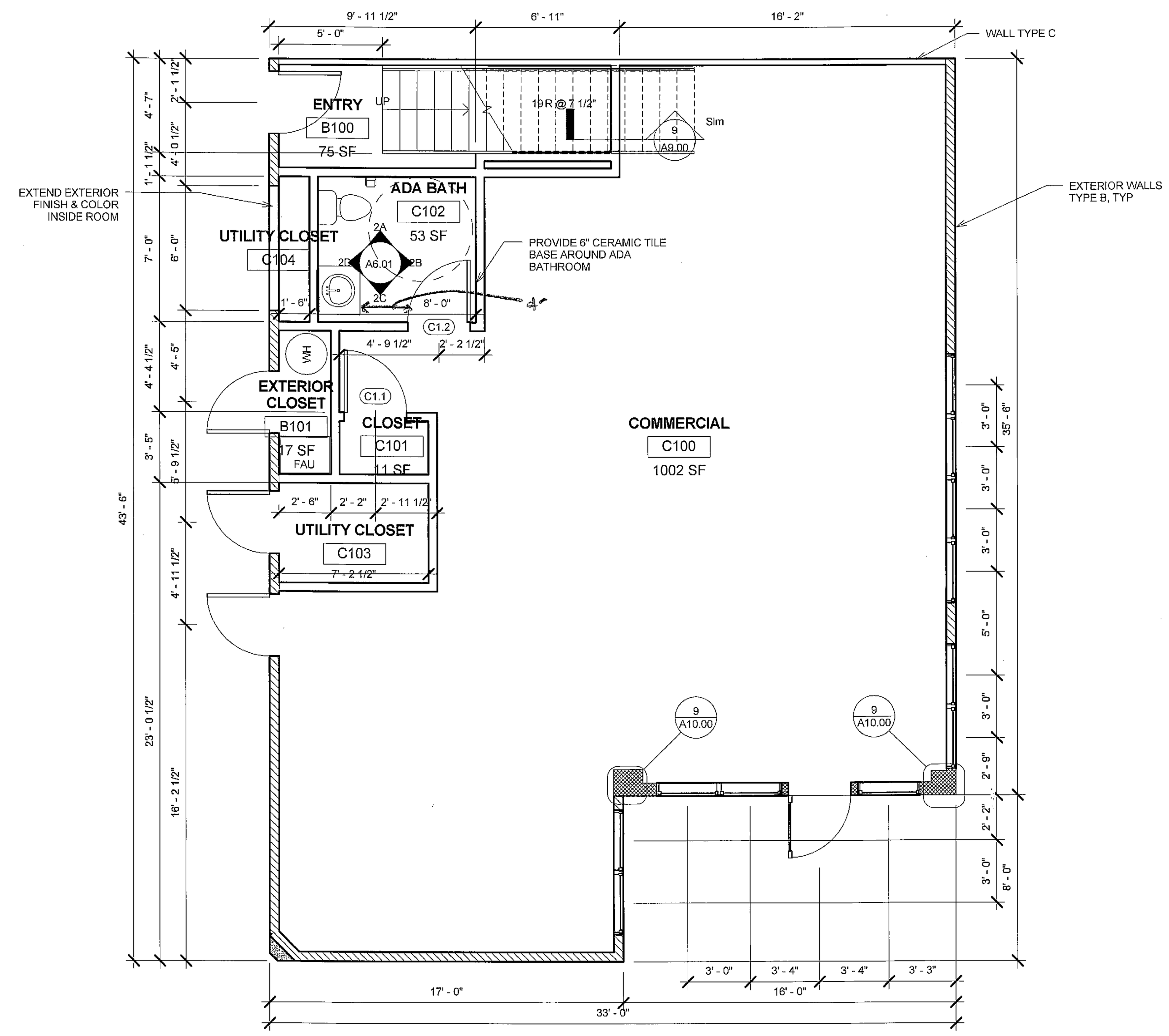
PLUMBING SPECIFICATION

JOB NUMBER:	0714
SCALE:	NONE
DATE:	12/12/13
DRAWN BY:	MV
CHECKED BY:	RT
CAD TITLE:	

SHEET NUMBER:

P0.03

OF SHEETS



(1) UNIT B 1ST FLOOR
1/4" = 1'-0"

BUILDING PLAN LEGEND

CONCRETE	2x4 STUD WALL
CERAMIC TILE	2x6 STUD WALL
CARPET	2x8 STUD WALL
LAMINATE WOOD FLOORING	
CEILING DROPPED TO 8'-0"	

BUILDING PLAN NOTES

1. FOR WALL TYPES REFER PAGE 9.00
2. ALL INTERIOR WALLS TO BE WALL TYPE A UNLESS OTHERWISE NOTED
3. EXTERIOR DOOR TAGS & WINDOW TAGS ARE LOCATED IN BUILDING PLANS A.1 SERIES
4. SEE SHEET A7.00 FOR ROOM FINISH SCHEDULE

APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK SECTION
Substantial Compliance With Codes and Ordinances
REVISIONS NEED APPROVAL
BUILDING CODE
UBC SECT 106.4.3
SECT 105.4 & IRC SECT R105.8
SURVEY (REVIEW ONLY)
PLOT PLAN REVIEW
PARKING/DWY LAYOUT
GRADING AND
EROSION CONTROL
REPORT ON FILE
ARCH. PLUMB.
CHECKED

ARCHITECTURE
PHILIP BANTA & ASSOCIATES
6050 HOLLIS STREET
EMERYVILLE, CALIFORNIA 94608
TEL | 510 654 3255
FAX | 510 654 3259
www | bantadesign.com

REVISIONS: △ ISSUES: ○

No.	Description	Date
△1	1ST PLAN CHECK REVIEW	01/14/14
(1)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

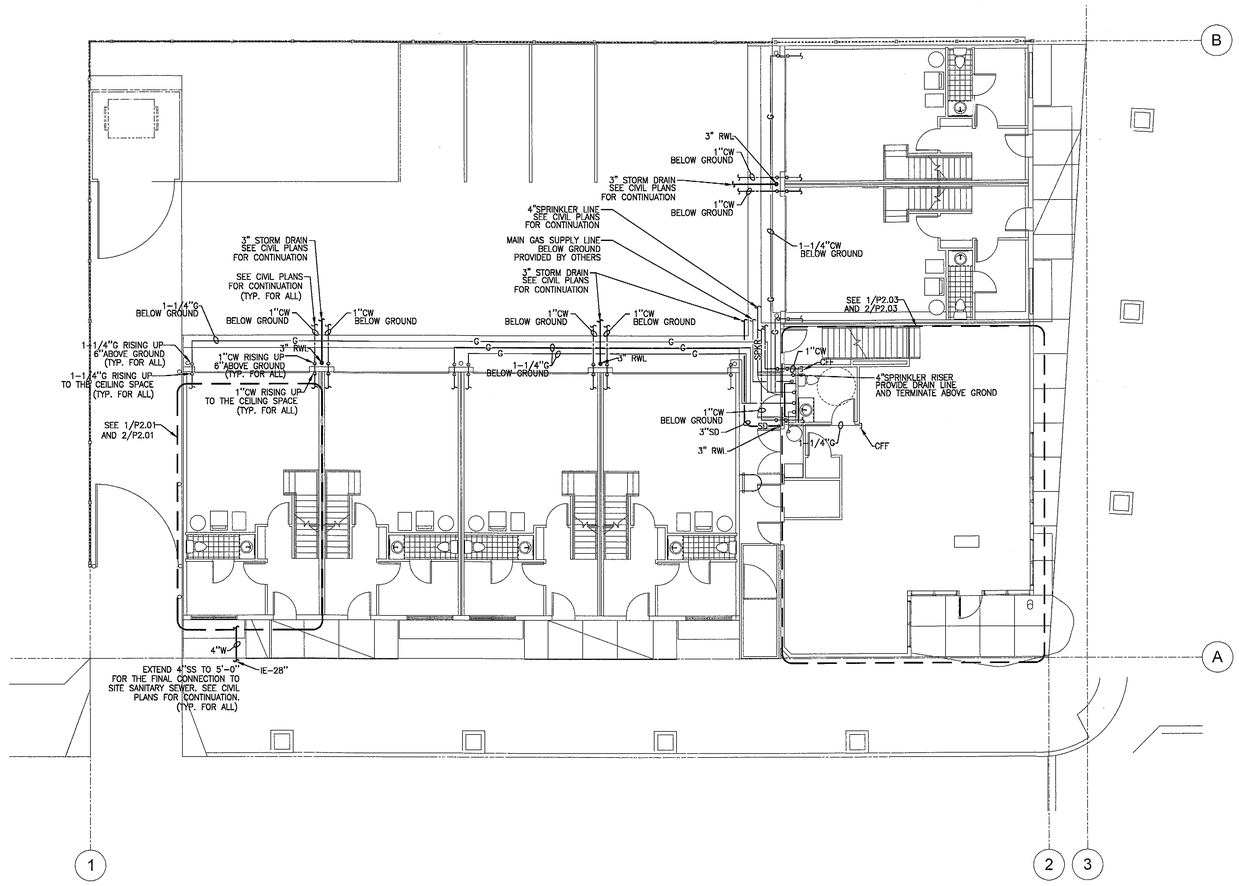
SHEET DESCRIPTION:

UNIT B PLANS (COMMERCIAL)

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/4" = 1'-0"

A2.10

12/7/2013 4:01:01 PM



1 PLUMBING GROUND FLOOR PLAN
1/8" = 1'-0"

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

PLUMBING
GROUND FLOOR
PLAN

JOB NUMBER:	0714
SCALE:	AS SHOWN
DATE:	12/12/13
DRAWN BY:	MV
CHECKED BY:	RT
CAD TITLE:	

SHEET NUMBER:

P2.00

OF SHEETS

DESIGNER'S STATEMENT

This plot plan correctly represents a plot plan made by me or under my direction.

I hereby STATE that to the best of my knowledge all provisions of applicable State laws and local ordinances have been complied with.

I hereby further State that all proposed grades, elevations, and contours delineated upon this plot plan are based upon a survey by __(name and license no. of surveyor)__ dated (date of survey) that was indicated thereon by the surveyor thereof as being based on City of Oakland datum.

OR, if applicable:

I hereby further STATE that all proposed grades, elevations, and contours delineated upon this plot plan are based upon a boundary survey by __(name and license no. of surveyor)__ dated (date of survey) and a topographic survey by __(name and license no. of surveyor)__ dated (date of survey) that were indicated thereon by surveyors thereof as being based upon City of Oakland datum.

Philip L Banta (Signature) (Date) 3.26.08

Title: ARCHITECT

License Number: C-14646 Expires 4/30/15

TRASH ENCLOSURE SEE 2 A10.00

PROVIDE 6" X 9" CALSTONE QUARRY STONE PERMEABLE PAVERS, (SIERRA GRANITE). ARCHITECT TO APPROVE PATTERN & COLOR PRIOR TO INSTALLATION SEE 3 A10.00

WOOD FENCE SEE 7 A10.00

RWL, TYP. TO EMPTY INTO PERMEABLE PAVERS, U.N.O.

PATTERNED CONCRETE WALK

ALIGN CONTROL JOINTS W/ PAVING CHANGES

BOLLARD SEE 2 A10.00

ADJACENT BUILDING

(N) CONCRETE DRIVE

CONTROL JOINT EVERY 10'-0" U.N.O.

A4.01 1

SECURITY GATE

SET 15.00' NORTHEASTERLY FROM WEST P.C. ALONG PROPERTY LINE ELEV.=160.88'

BUILDING SEWER OUTFLOW TO MAIN SSMH SEE C6.0 FOR MORE INFORMATION

R.O.W.L.: N 40°54'00" W - 517.33' TO B.C. TO SCHOOL STREET ANGLE POINT

SIDEWALK

(E) DRIVEWAY

SET AS 5' OFFSET ELEV.=159.86'

(N) SIDEWALK (N) CURB CUT PER CITY STANDARDS

MATCH PAVING PATTERNS OF ADJACENT SIDEWALK

S.S. LAMPHOLE RIM EL.=158.46' F/L EL.=149.40'(C)

S.S. LAMPHOLE RIM EL.=160.62' F/L EL.=153.95'(C)

8" S.S. LINE - 90.0' M.H. TO M.H.

423.09'

UN-NUMBERED MON. AT HUMBOLDT AVE. & SCHOOL ST.

STORM WATER TREATMENT PLANTER

TRANSFORMER

PAVED PARKING AREA

A4.00

ADJACENT BUILDING

S 40°52'56" E 130.44'

163.88 BLDG.

See Ground Floor

ROOF ACCESS LADDER

GAS METER IN UTILITY CLOSET

CATWALK

ELECTRICAL PANELS & METERS IN UTILITY CLOSET

1/2" COPPER STUB OUT FOR STREET FREE IRRIGATION, EXTEND TO EACH TREE WELL ON SCHOOL AND 35TH STREETS.

N 40°54'00" W 125.33'

(N) STREET TREES W/ 3' X 6' TREE WELL-PER CONDITIONS OF APPROVAL

SIGN

CABLE/TV TELEPHONE

W.V.

W.M.

F.H.

HANDICAP RAMP

BENCHMARK

TRASHCAN

SIDEWALK

R.O.W.L.: N 40°54'00" W - 515.22' B.C. TO SISTER ST.

SIDEWALK

S.D.M.H. RIM EL.=166.65' F/L EL.=158.0'(C)

S.S.M.H. RIM EL.=166.33' F/L EL.=159.15'(C)

SET AS 5' OFFSET ELEV.=164.97'

35TH. AVENUE

(60' WIDE)

SIDEWALK

18" S.S. LINE - 322.5' M.H. TO M.H.

36" - 6 1/16"

36" - 0"

14.5'

5.2'

SEPARATE PERMITS REQUIRED (C3 REQUIREMENT)

SCHOOL STREET

(60' WIDE)

S.S.M.H. RIM EL.=160.26' F/L EL.=153.42'(C)

S.D.M.H. RIM EL.=160.18' F/L EL.=153.73'(C)

MON.# 4SE9-R

N

O.H.W.

APPROVED
CITY OF OAKLAND
PLANNING SERVICES
PLOT PLAN CHECK SECTION
Substantial Compliance With
Codes and Ordinances
REVISIONS NEED APPROVAL
BEFORE
FINAL CODE
COMPLIANCE WILL NOT BE
CHECKED UNTIL PLANS
ARE SUBMITTED FOR PLAN REVIEW
(PLANNING ZONING REVIEW ONLY)
SEE ATTACHED ZONING LAYOUT
FOR PLANNING AND
CONDITION OF APPROVAL
REQUIREMENTS
SEE SEPARATE REPORT ON FILE
ELECT., MECH., PLUMB.
NOT CHECKED

SITE PLAN LEGEND

- PLANTING AREA
- SIDEWALK-(MATCH PAVING PATTERNS OF ADJACENT SIDEWALK)
- PERMEABLE PAVERS-(PATTERN & COLOR TO BE APPROVED BY ARCHIETECT PRIOR TO INSTALLATION)

GRAPHIC SCALE

(IN FEET)
1 inch = ft.

1 PLOT PLAN
1/8" = 1'-0"

ARCHITECTURE

PHILIP BANTA & ASSOCIATES

6050 HOLLIS STREET
EMERYVILLE, CALIFORNIA 94608
TEL: 510.654.3255
FAX: 510.654.3259
www.bantadesign.com

REVISIONS: △ ISSUES: ○

No.	Description	Date
1	1ST PLAN CHECK REVIEW	01/14/14
1	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT PHILIP L BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

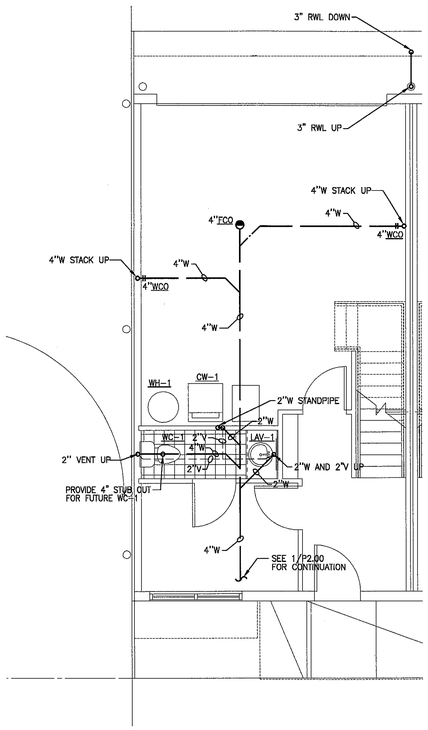
SHEET DESCRIPTION:

PLOT PLAN

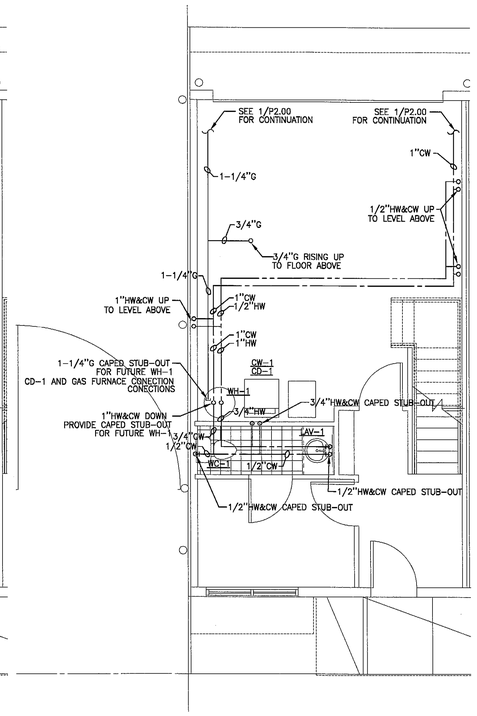
PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/8" = 1'-0"

A1.00

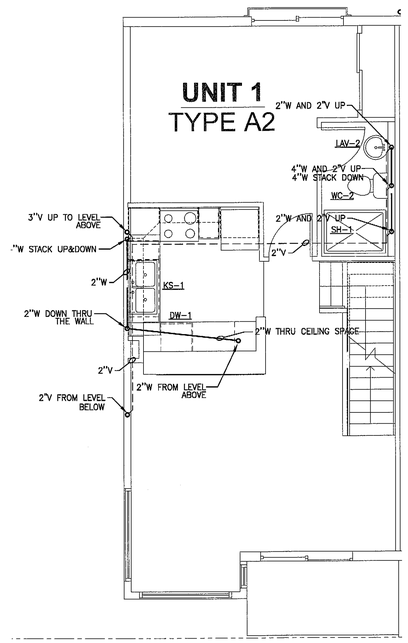
1/10/2014 3:30:19 PM



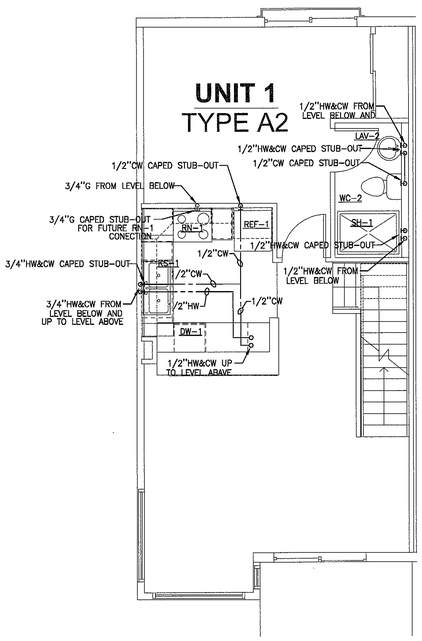
1 UNIT 1, TYPE A2 - PLUMBING WASTE AND VENT GROUND FLOOR PLAN
1/4" = 1'-0"
TYP. TO UNITS 1,3&6
TYP. TO UNITS 4&7 BUT OPPOSITE HAND



2 UNIT 1, TYPE A2 - PLUMBING SUPPLY GROUND FLOOR PLAN
1/4" = 1'-0"
TYP. TO UNITS 1,3&6
TYP. TO UNITS 4&7 BUT OPPOSITE HAND



3 UNIT 1, TYPE A2 - PLUMBING WASTE AND VENT 2ND FLOOR PLAN
1/4" = 1'-0"
TYP. TO UNITS 1,3&6
TYP. TO UNITS 4&7 BUT OPPOSITE HAND



4 UNIT 1, TYPE A2 - PLUMBING SUPPLY 2ND FLOOR PLAN
1/4" = 1'-0"
TYP. TO UNITS 1,3&6
TYP. TO UNITS 4&7 BUT OPPOSITE HAND

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

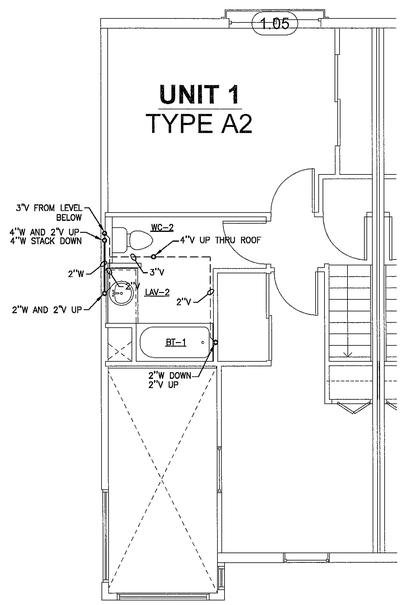
TYPICAL UNIT 1, TYPE A&A2 PLUMBING GROUND & 2ND FLOOR PLANS

JOB NUMBER:	0714
SCALE:	AS SHOWN
DATE:	12/12/13
DRAWN BY:	MV
CHECKED BY:	RT
CAD TITLE:	

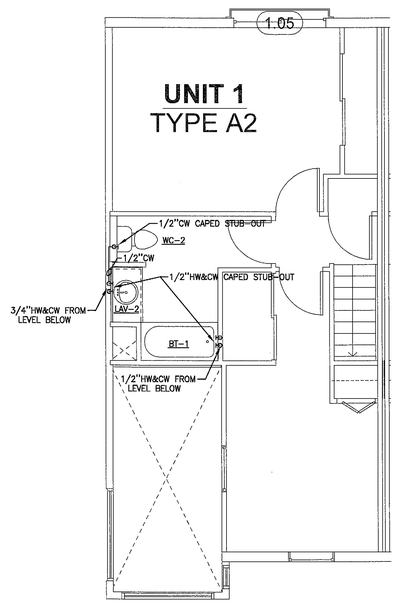
SHEET NUMBER:

P2.01

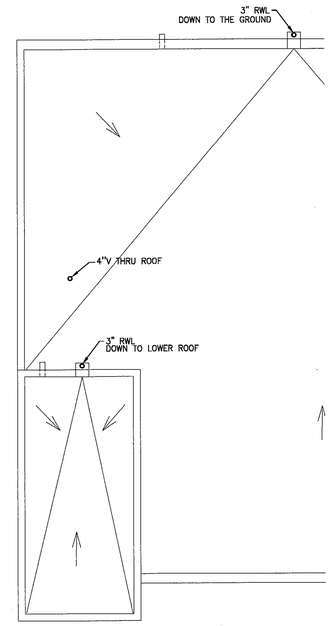
OF SHEETS



1 UNIT 1, TYPE A2 - PLUMBING WASTE AND VENT GROUND FLOOR PLAN
1/4" = 1'-0"
TYP. TO UNITS 1,3&6
TYP. TO UNITS 4&7 BUT OPPOSITE HAND



2 UNIT 1, TYPE A2 - PLUMBING SUPPLY GROUND FLOOR PLAN
1/4" = 1'-0"
TYP. TO UNITS 1,3&6
TYP. TO UNITS 4&7 BUT OPPOSITE HAND



3 UNIT 1, TYPE A2 - PLUMBING ROOF PLAN
1/4" = 1'-0"
TYP. TO UNITS 1,3&6
TYP. TO UNITS 4&7 BUT OPPOSITE HAND

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

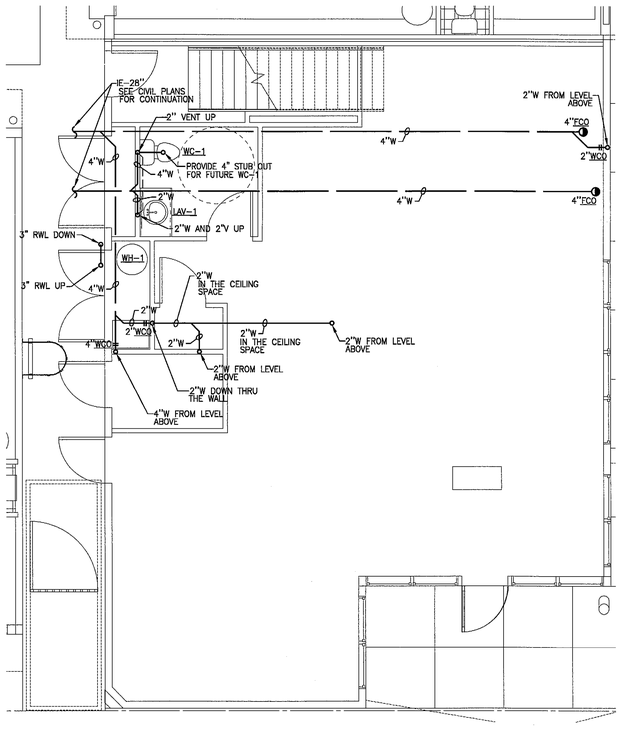
TYPICAL UNIT 1, TYPE A&A2 PLUMBING 3RD FLOOR & ROOF PLANS

JOB NUMBER:	0714
SCALE:	AS SHOWN
DATE:	12/12/13
DRAWN BY:	MV
CHECKED BY:	RT
CAD TITLE:	

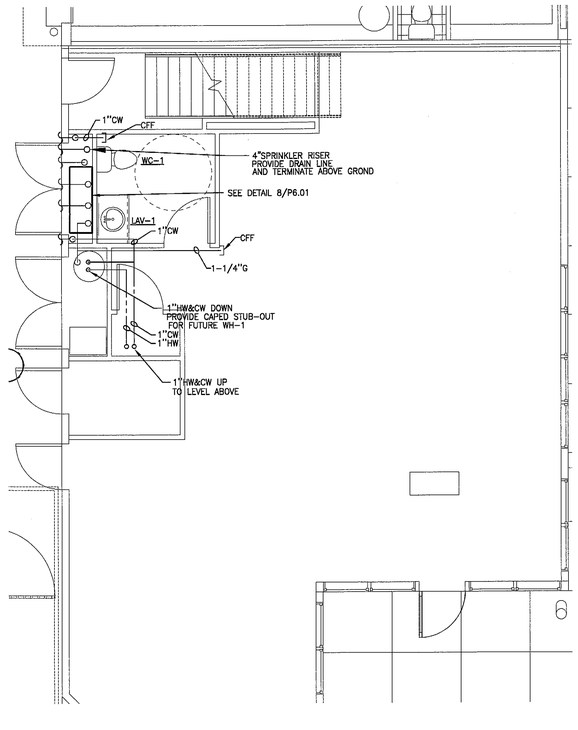
SHEET NUMBER:

P2.02

OF SHEETS



1 COMERCIAL SPACE - PLUMBING WASTE AND VENT GROUND FLOOR PLAN
1/4" = 1'-0"



2 COMERCIAL SPACE - PLUMBING SUPPLY GROUND FLOOR PLAN
1/4" = 1'-0"

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/ 13 / 2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5200
info@acies.net

SHEET DESCRIPTION:

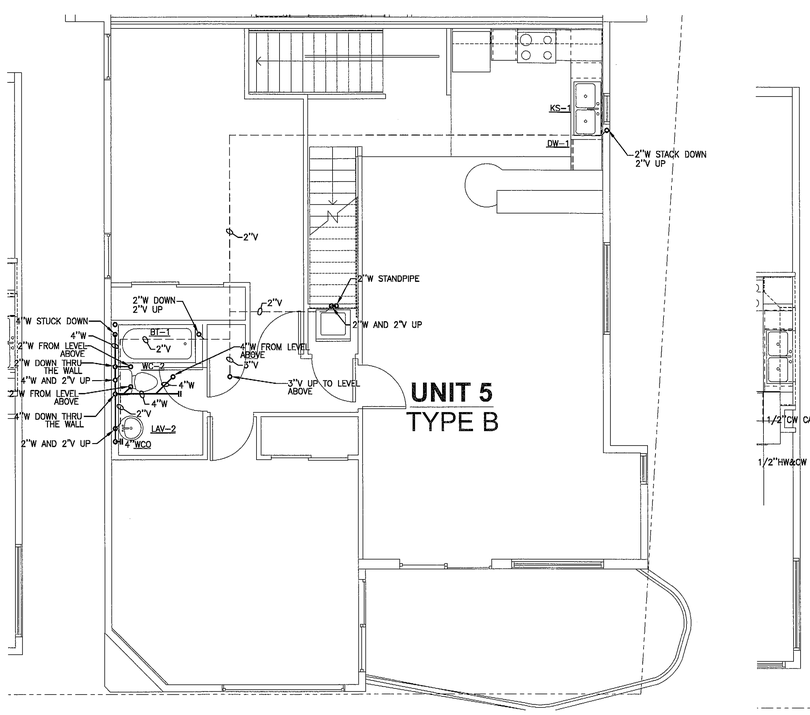
COMMERCIAL SPACE PLUMBING GROUND FLOOR PLANS

JOB NUMBER:	0714
SCALE:	AS SHOWN
DATE:	12/12/13
DRAWN BY:	MV
CHECKED BY:	RT
CAD TITLE:	

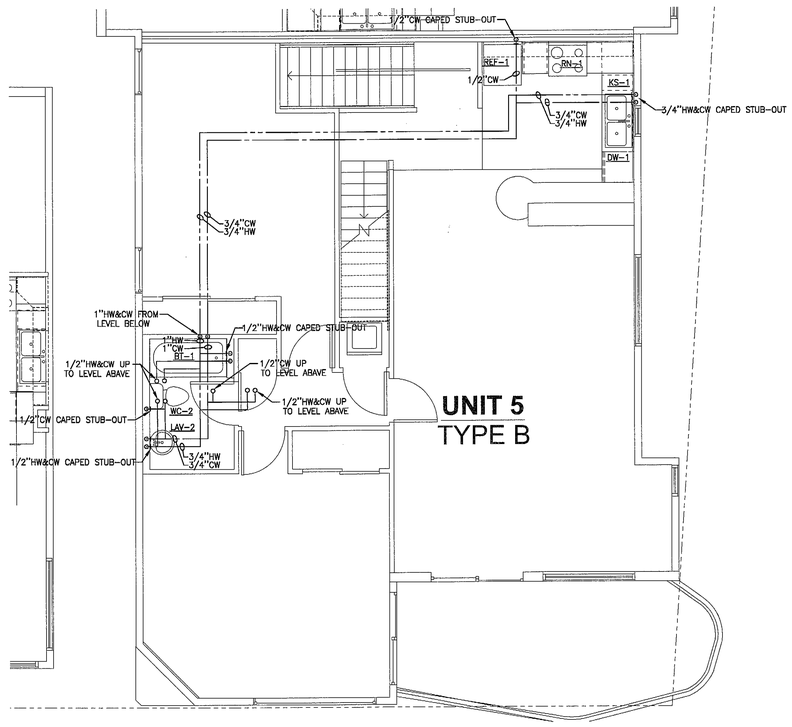
SHEET NUMBER:

P2.03

OF SHEETS



1 UNIT 5, TYPE B - PLUMBING WASTE AND VENT 2ND FLOOR PLAN
1/4" = 1'-0"



2 UNIT 5, TYPE B - PLUMBING SUPPLY 2ND FLOOR PLAN
1/4" = 1'-0"

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
Info@acies.net

SHEET DESCRIPTION:

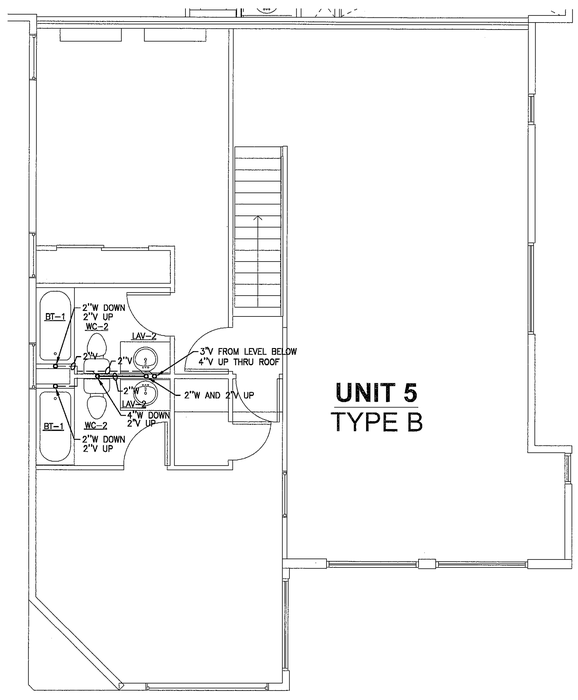
UNIT 5, TYPE B
PLUMBING 2ND
FLOOR PLANS

JOB NUMBER:	0714
SCALE:	AS SHOWN
DATE:	12/12/13
DRAWN BY:	MV
CHECKED BY:	RT
CAD TITLE:	

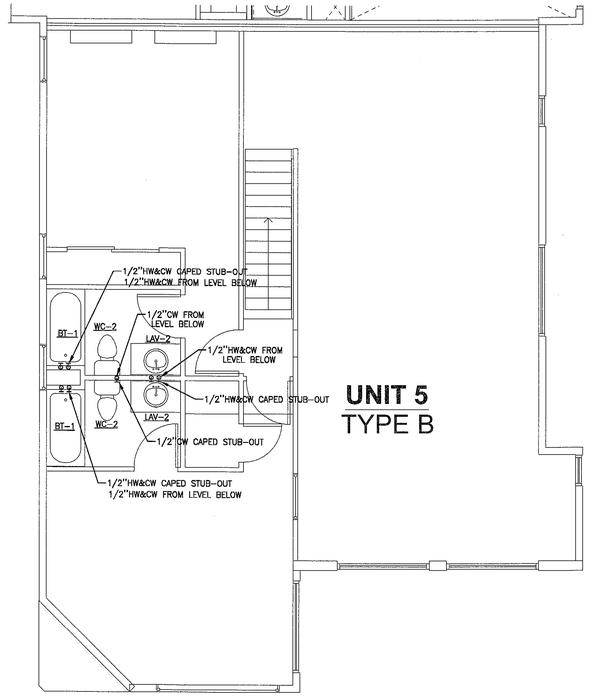
SHEET NUMBER:

P2.04

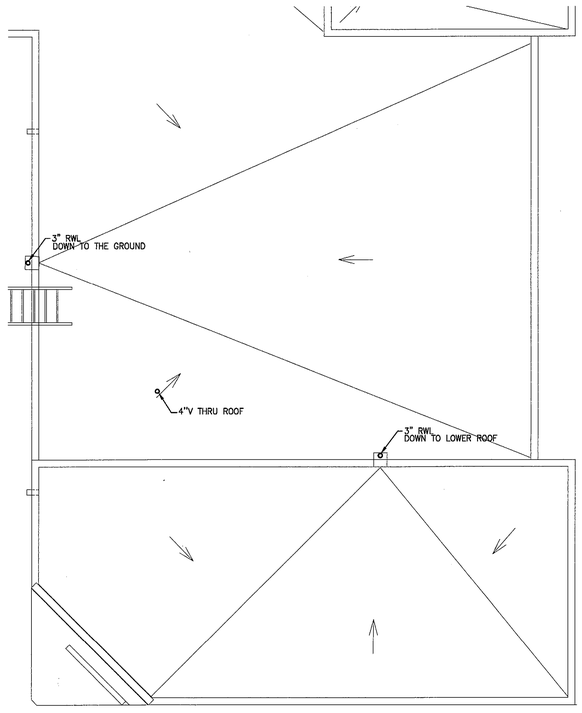
OF SHEETS



1 UNIT 5, TYPE B - PLUMBING WASTE AND VENT 3RD FLOOR PLAN
1/4" = 1'-0"



2 UNIT 5, TYPE B - PLUMBING SUPPLY 3RD FLOOR PLAN
1/4" = 1'-0"



3 UNIT 5, TYPE B - PLUMBING ROOF PLAN
1/4" = 1'-0"

ARCHITECTURE

REVISIONS: △ ISSUES: ○

NO.	DATE	DESCRIPTION
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

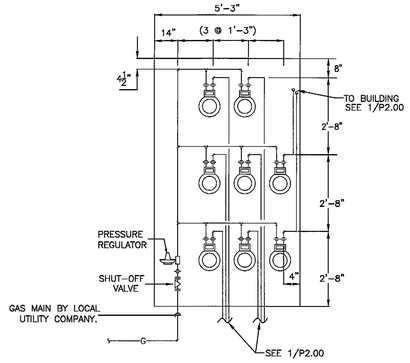
UNIT 5, TYPE B PLUMBING 3RD FLOOR PLANS AND ROOF PLAN

JOB NUMBER:	0714
SCALE:	AS SHOWN
DATE:	12/12/13
DRAWN BY:	MV
CHECKED BY:	RT
CAD TITLE:	

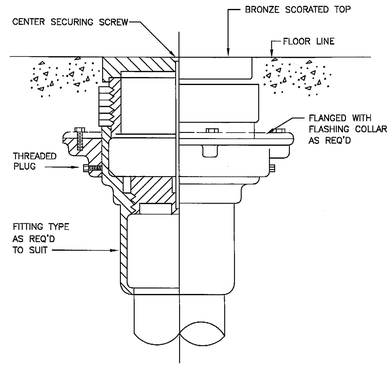
SHEET NUMBER:

P2.05

OF SHEETS



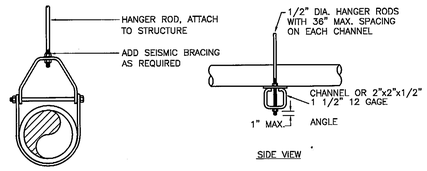
GAS METER INSTALLATION — N.T.S. — 7



FLOOR CLEANOUT DETAIL — N.T.S. — 4

TYPICAL PIPE HANGERS

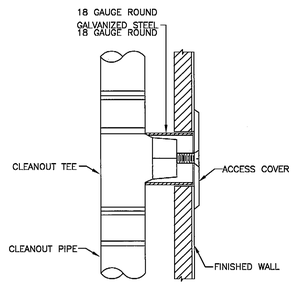
MAXIMUM PIPE/TUBING SUPPORT SPACING, FEET										
NOM. SIZE	THRU 1"	1	11/4	11/2	2	21/2	3	4		
PIPE	7 FT	7	7	9	10	11	12	14		
TUBING	5 FT	6	7	8	8	9	10	12		
NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.										



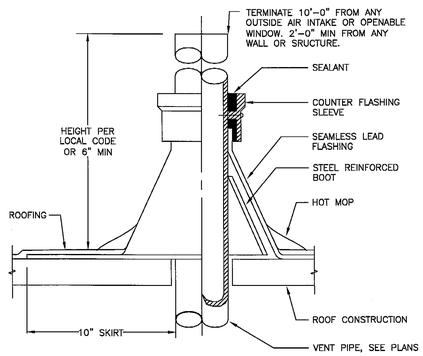
ADJUSTABLE CLEVIS HANGER TYPE 1 IN SPECIFICATIONS

TRAPEZE HANGER FOR UP TO 1000 LB. UNIFORM LOAD

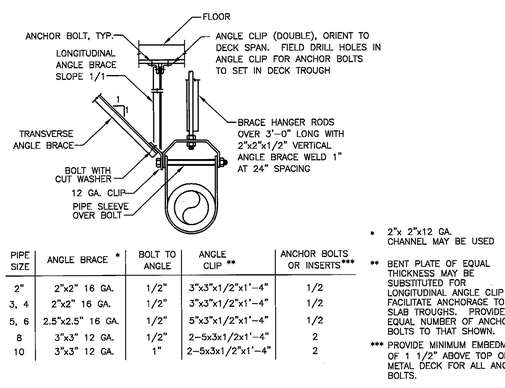
PIPE HANGER DETAIL — N.T.S. — 1



WALL CLEANOUT DETAIL — N.T.S. — 8



VENT THRU ROOF DETAIL — N.T.S. — 5



PIPE SIZE	ANGLE BRACE *	BOLT TO ANGLE	ANGLE CLIP **	ANCHOR BOLTS OR INSERTS***
2"	2"x2" 16 GA.	1/2"	3"x3"x1/2"x1'-4"	1/2
3, 4	2"x2" 16 GA.	1/2"	3"x3"x1/2"x1'-4"	1/2
5, 6	2.5"x2.5" 16 GA.	1/2"	5"x3"x1/2"x1'-4"	1/2
8	3"x3" 12 GA.	1/2"	2-5x3x1/2x1'-4"	2
10	3"x3" 12 GA.	1"	2-5x3x1/2"x1'-4"	2

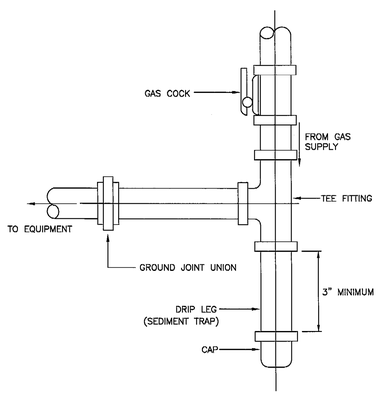
* 2"x 2"x12 GA. CHANNEL MAY BE USED

** BENT PLATE OF EQUAL THICKNESS MAY BE SUBSTITUTED FOR LONGITUDINAL ANGLE CLIP TO FACILITATE ANCHORAGE TO SLAB TROUGHS. PROVIDE EQUAL NUMBER OF ANCHOR BOLTS TO THAT SHOWN.

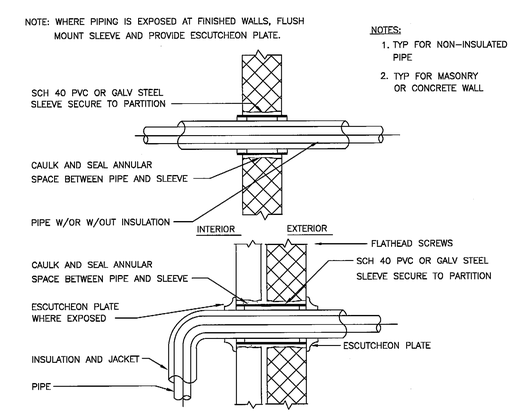
*** PROVIDE MINIMUM EMBEDMENT OF 1 1/2" ABOVE TOP OF METAL DECK FOR ALL ANCHOR BOLTS.

PIPE SUPPORT DETAIL — N.T.S. — 2

NOT USED — N.T.S. — 9



GAS PIPE CONNECTION DETAIL — N.T.S. — 6



PIPE PENETRATION THRU WALLS DETAIL — N.T.S. — 3

ARCHITECTURE

REVISIONS: △ ISSUES: ◯

NO.	DATE	DESCRIPTION
1	12/13/2013	BUILDING PERMIT SET

PROJECT:

35th @ School
Oakland, CA 94619

CONSULTANTS:

ACIES ENGINEERING
111 W. Evelyn Avenue, Suite 301,
Sunnyvale, CA 94086
ph: (408) 522-5255
fx: (408) 522-5260
info@acies.net

SHEET DESCRIPTION:

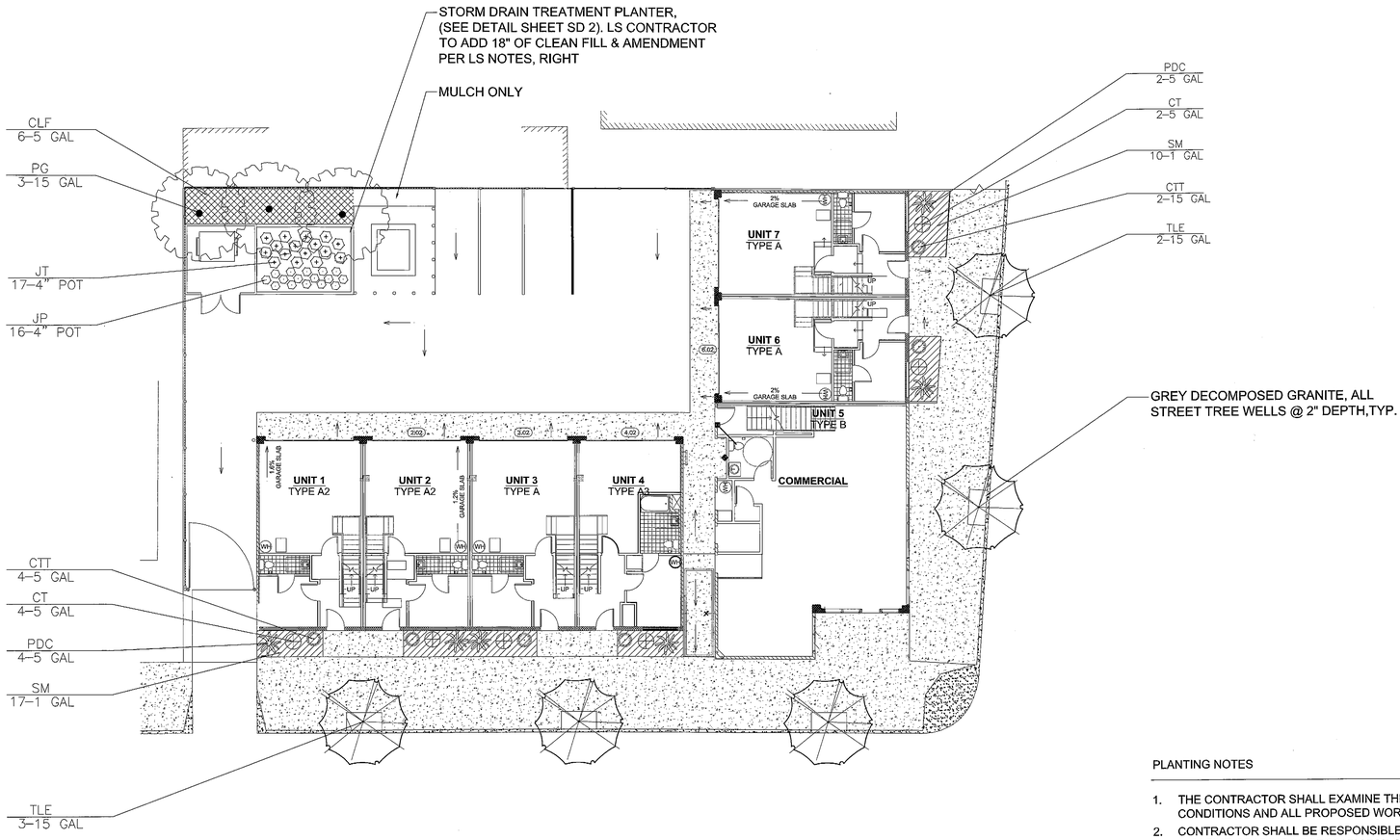
PLUMBING DETAILS

JOB NUMBER:	0714
SCALE:	AS SHOWN
DATE:	12/12/13
DRAWN BY:	MV
CHECKED BY:	RT
CAD TITLE:	

SHEET NUMBER:

P6.01

OF SHEETS



PLANT LIST

TREES	CODE	SCIENTIFIC NAME	COMMON NAME	SIZE	QTY	NOTE	SPACING
	CTT	CUPRESSUS S. 'TINY TOWERS'	DWARF ITALIAN CYPRESS	15 GAL	6	NO STAKE	
	PG	PODOCARPUS GRACILIOR	AFRICAN FERN PINE	15 GAL	3	LOW BRANCHING	10' OC
	TLE	TRISTANIA LAURINA ELEGANS	WATER GUM	15 GAL	5	STANDARD	
SHRUB	CODE	SCIENTIFIC NAME	COMMON NAME	SIZE	QTY	NOTE	SPACING
1.	CT	CHONDROPETALUM TECTORUM	SMALL CAPE RUSH	5 GAL	6		72" OC
	PDC	PHORMIUM 'DUSKY CHIEF'	NEW ZEALAND FLAX	5 GAL	6		
GROUND COVERS	CODE	SCIENTIFIC NAME	COMMON NAME	SIZE	QTY	NOTE	SPACING
	CLF	COTONEASTER 'LOWFAST'	BEARBERRY COTONEASTER	5 GAL	6		72" OC
	SM	SENICIO MANDRALISCAE	KLEINIA	1 GAL	27		30" OC
STORMWATER PLANTER	CODE	SCIENTIFIC NAME	COMMON NAME	SIZE	QTY	NOTE	SPACING
	JP	JUNCUS PATENS	CALIFORNIA GREY RUSH	4" POT	16		24" OC
	JT	JUNCUS TEXTILIS	BASKET RUSH	4" POT	17		36" OC

PLANTING NOTES

1. THE CONTRACTOR SHALL EXAMINE THE SITE CAREFULLY, NOTING ALL THE EXISTING CONDITIONS AND ALL PROPOSED WORK ON THE PLANS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH GRADES IN ALL PLANTING AREAS AND FOR ANY FINE GRADING NECESSARY FOR SURFACE DRAINAGE AND UNIFORMITY TO THE SATISFACTION OF THE LANDSCAPE DESIGNER.
3. ALL TREES AND SHRUBS SHALL BE FIELD SPOTTED OR STAKED BY CONTRACTOR. CONTRACTOR SHALL NOTIFY LANDSCAPE DESIGNER TO REVIEW AND APPROVE FINAL LOCATIONS PRIOR TO PLANTING. (ALLOW 24 HOURS NOTICE)
4. FILL ALL TREE PLANTING HOLES WITH WATER AND ALLOW TO DRAIN FOR 4 HOURS. CONTRACTOR SHALL NOTIFY LANDSCAPE DESIGNER OF ANY HOLES NOT DRAINING FOR MITIGATION MEASURES PER SOILS REPORT.
5. PROVIDE BASINS AROUND ALL TREES AND SHRUBS. STAKE ALL TREES PER DETAIL PLAN.
6. PLANT CROWNS 1" MIN. ABOVE GRADE FOR ALL TREES AND SHRUBS.
7. HOLD MULCH 4" AWAY FROM TRUNKS OF TREES AND SHRUBS CROWNS TO PREVENT ROT. 50% SOIL AMENDMENT THOROUGHLY MIXED INTO THE TOP 12" OF SOIL AROUND EACH PLANT. SOIL AMENDMENT FOR ALL PLANTED AREAS SHALL BE WONDER GROW ORGANIC COMPOST AVAILABLE FROM AMERICAN SOILS OF RICHMOND, CA. www.americansoil.com OR EQUAL.
8. TOP DRESS ALL AREAS WITH 2" LAYER OF MULCH. MULCH SHALL BE FOREST FLOOR BARK AS AVAILABLE FROM AMERICAN SOIL OF RICHMOND CA. ALL DRIP IRRIGATION SUPPLY LINE TUBING TO BE STAKED AND COMPLETELY HIDDEN UNDER MULCH.
9. CONTRACTOR IS RESPONSIBLE FOR ALL PLANT COUNTS PER PLAN. SHOULD DISCREPANCIES EXIST BETWEEN PLAN AND PLANT LIST THE PLAN SHALL GOVERN.
10. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF ALL PLANT MATERIAL FROM THE TIME PLANTS ARE DELIVERED UNTIL FINAL ACCEPTANCE OF LANDSCAPE INSTALLATION. ONGOING MAINTENANCE SHALL BE NEGOTIATED BETWEEN CONTRACTOR AND OWNER. ALL TREES SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE. ALL OTHER PLANTS SHALL BE GUARANTEED FOR A PERIOD OF 6 MONTHS FROM FINAL ACCEPTANCE.
11. LANDSCAPE DESIGNER HAS THE RIGHT TO REJECT ALL DAMAGED OR UNSUITABLE PLANT MATERIAL OR PLANT MATERIAL THAT IS NOT IN A HEALTHY AND THRIVING CONDITION.

REDBUD DESIGN
3739 16TH STREET
SAN FRANCISCO, CA
707-799-6525

PLANTING PLAN

3101 35th AVE.
OAKLAND, CA 94619

LICENSED ARCHITECT
RAJIB BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

NORTH

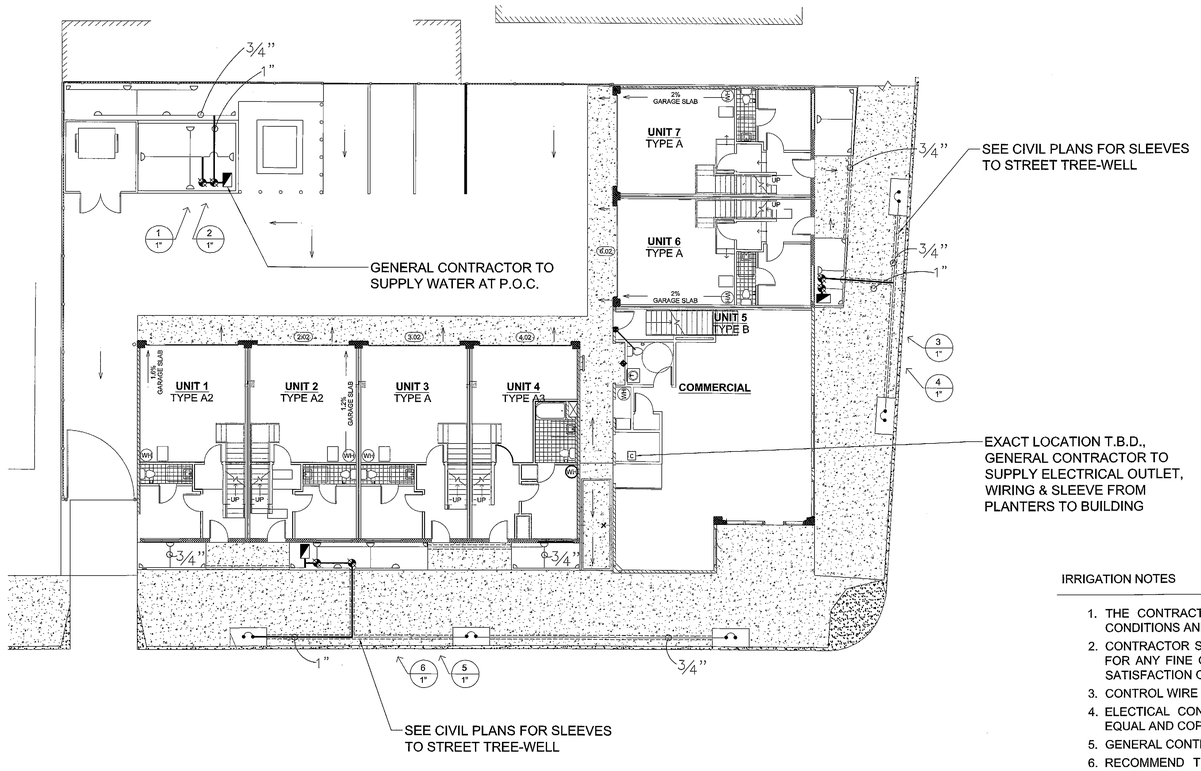
SCALE: 1" = 10'-0"

DATE: JANUARY 20, 2014

DRAWN BY: K.N.

NEW SHEET

SHEET: L1.0



SYM	SIZE	COMPONENT	MANUFACTURER	PART NUMBER	REMARKS
	1"	BACKFLOW PREVENTION DEVICE	PEBCO	825Y	PER PLAN
C		AUTOMATIC CONTROLLER	HUNTER PRO-C300	3 TO 15 STATION	OWNER TO SUPPLY OUTLET & INSTALL LOCATION
		SENSOR	HUNTER	SOLAR SYNC MODULE	MOUNT ON ROOF IN SOUTH ASPECT
	1"	REMOTE CONTROL VALVE	HUNTER	PGV-100	IN IRRIGATION VALE BOX
	1/4 GPM	TREE BUBBLER	HUNTER	PCN-25	2 PER TREE-WELL
		PROPRAY BODY	HUNTER	PROS-06-PRS30	6" POP UP, FOR SHRUB SPRAYERS ONLY
		PROPRAY BODY	HUNTER	PROS-04-PRS30	4" POP UP, FOR TREE BUBBLERS ONLY
		PRO ADJUSTABLE NOZZLE	HUNTER 4A		
———	3/4"	LATERAL PIPE	CLASS 200 PVC		
———	1"	MAINLINE PIPE	SCH 40 PVC		
=======	1-1/4"	SLEEVE	COPPER		PER CIVIL DRAWING, SEE SHEET

IRRIGATION NOTES

1. THE CONTRACTOR SHALL EXAMINE THE SITE CAREFULLY, NOTING ALL THE EXISTING CONDITIONS AND ALL PROPOSED WORK ON THE PLANS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR FINISH GRADES IN ALL PLANTING AREAS AND FOR ANY FINE GRADING NECESSARY FOR SURFACE DRAINAGE AND UNIFORMITY TO THE SATISFACTION OF THE LANDSCAPE DESIGNER.
3. CONTROL WIRE SHALL BE #14 SOLID COPPER.
4. ELECTICAL CONNECTIONS SHALL BE MADE WITH SPEARS DRI-SLICE CONNECTORS OR EQUAL AND COPPER CRIMP SLEEVES AND SEALER.
5. GENERAL CONTRACTOR TO SUPPLY 120VOLT SERVICE TO CONTROLLER STUB-OUT.
6. RECOMMEND THAT THE IRRIGATION CONTRACTOR USE A SMART CONTROLLER WITH MULTIPLYE START TIMES FOR ALL SPRAY SYSTEMS TO PREVENT POTENTIAL RUN-OFF.
7. IRRIGATION CONTRACTOR TO INTALL AN AUTOMATIC RAIN SHUT-OFF TO EACH CONTROLLER.
8. PIPE AND WIRE CHASES SHALL HAVE THE FOLLOWING SOIL COVER: MAINLINE SHALL HAVE 18" OF COVER
9. LATERAL LINES SHALL HAVE 12" OF COVER.
10. SUB-LATERAL LINES SHALL HAVE 4" OF COVER.
11. CONTROL WIRE SHALL HAVE 16" OF COVER.
12. EACH REMOTE CONTROL VALVE SHALL BE PLACED IN A SEPARATE, APPROPRIATELY SIZED VALVE BOX, SET AT GRADE AND PLACED AT LEAST 12" FROM SIDEWALKS AND BUILDINGS.
13. ADJUST SPRAY HEAD RADII AND ARCS TO MAXIMIZE COVERAGE AND MINIMIZE SPRAY OVERTHROW ONTO WALLS, BUILDINGS AND SIDEWALKS. RECOMMEND USAGE OF STREAM ROTORS FOR WHERE A SPRAY SYSTEM IS UTILIZED.
14. THIS IRRIGATION PLAN (IF SUPPLIED) IS DIAGRAMATIC, AND THEREFORE IS SUBJECT TO IN FIELD MODIFICATIONS. THE INTENT OF THIS IRRIGATION PLAN IS TO PROVIDE EQUAL COVERAGE, WHILE MINIMIZING OVERTHROW.
15. USE TEFLON TAPE ON ALL TREADED FITTINGS.
16. CONTRATOR SHALL LOCATE AND VERIFY LOCATION OF ALL UNDER GROUND UTILITIES PRIOR TO TRENCHING IN THE PROJECT SITE
17. PLACE IRRIGATIOIN MAINLINE IN SAME TRENCH AS DOMESTIC WATER MAIN. COORDINATE THIS WORK WITH THE GENERAL CONTRACTOR. FOR LOCATION OF WATER MAINLINES SEE CIVIL ENGINEERING DRAWINGS.
18. IN ADDITON TO MANUFACTURERS GAURENTEES OR WARRANTIES ALL IRRIGATION WORK SHALL BE WARRANTED FOR ONE YEAR FROM FINAL ACCEPTANCE AGAINST DEFECTS IN MATERIAL, EQUIPMENT AND WORKMANSHIP.
19. CONTRACTOR SHALL COMPLY WITH ALL LOCAL AND CITY AND/OR COUNTY WATER ORDINANCE SPECIFICATIONS.

REDBUD DESIGN
3739 16TH STREET
SAN FRANCISCO, CA
707-799-6525

IRRIGATION PLAN

3101 35th AVE.
OAKLAND, CA 94619

LICENSED ARCHITECT
PINPLBANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

NORTH

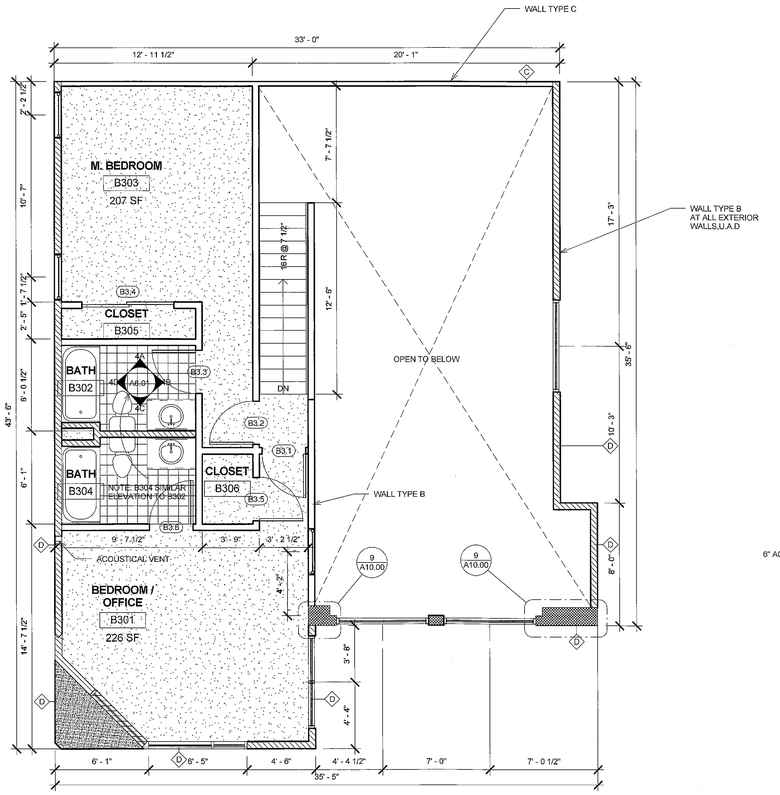
SCALE: 1" = 10'-0"

DATE: JANUARY 20, 2014

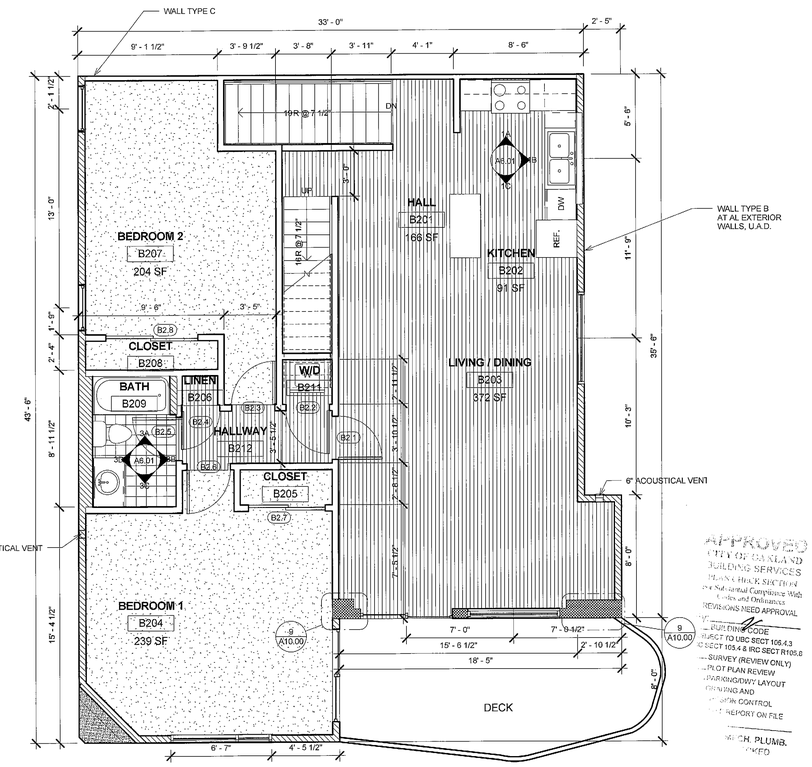
DRAWN BY: K.N.

NEW SHEET

SHEET: L2.0



2 UNIT B 3RD FLOOR
1/4" = 1'-0"



1 UNIT B 2ND FLOOR
1/4" = 1'-0"

BUILDING PLAN LEGEND			
	CONCRETE		2x4 STUD WALL
	CERAMIC TILE		2x6 STUD WALL
	CARPET		2x8 STUD WALL
	LAMINATE WOOD FLOORING		
	CEILING DROPPED TO 8'-0"		

BUILDING PLAN NOTES

1. FOR WALL TYPES REFER PAGE 9.00
2. ALL INTERIOR WALLS TO BE WALL TYPE A UNLESS OTHERWISE NOTED
3. EXTERIOR DOOR TAGS & WINDOW TAGS ARE LOCATED IN BUILDING PLANS A.1 SERIES
4. SEE SHEET A7.0 FOR ROOM FINISH SCHEDULE

ARCHITECTURE

PHILIP BANTA & ASSOCIATES

3050 HOLLIS STREET
EMERYVILLE, CALIFORNIA 94608

TEL: 510.654.3255
FAX: 510.654.3259
www.pbantadesign.com

REVISIONS: △ ISSUES: ○

No.	Description	Date
△	1ST PLAN CHECK REVIEW	01/14/14
(1)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK SECTION
Not Approved Compliance With
Codes and Ordinances
REVISIONS NEED APPROVAL
BUILDING CODE
SUBJECT TO UBC SECT 105.4.3
SUBJECT 105.4.6 IRC SECT R105.6
SURVEY (REVIEW ONLY)
PLOT PLAN REVIEW
PARKING/DWY LAYOUT
GRADING AND
EROSION CONTROL
SOILS REPORT ON FILE
MECH. PLUMB.
NOTED

LICENSED ARCHITECT
PHILIP BANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

SHEET DESCRIPTION:

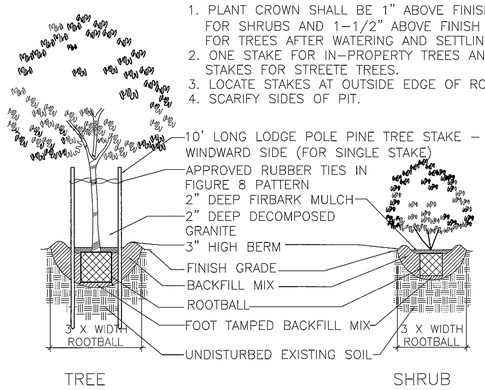
UNIT B PLANS (RESIDENTIAL)

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/4" = 1'-0"

A2.11

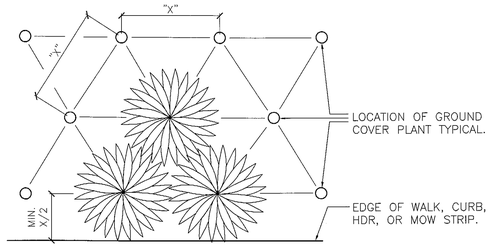
12/7/2013 4:01:04 PM

NOTES:
1. PLANT CROWN SHALL BE 1" ABOVE FINISH GRADE FOR SHRUBS AND 1-1/2" ABOVE FINISH GRADE FOR TREES AFTER WATERING AND SETTLING.
2. ONE STAKE FOR IN-PROPERTY TREES AND TWO STAKES FOR STREETE TREES.
3. LOCATE STAKES AT OUTSIDE EDGE OF ROOTBALL.
4. SCARIFY SIDES OF PIT.

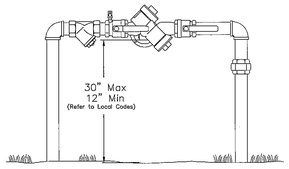


(A) TREE AND SHRUB PLANTING
1"=1'-0"

NOTE:
"X"= ON CENTER SPACING OF GROUND COVER PLANT CALLED FOR ON PLAN.

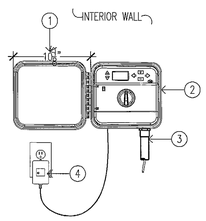


(B) GROUND COVER PLANTING
NTS



NOTE:
FEBCO BACK FLOW PREVENTION DEVIC, MODEL 825Y.
INSTALL PER MANUFACTURER INSTRUCTIONS.

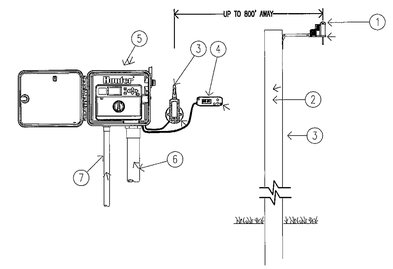
(D) BACK FLOW PREVENTION DEVICE
NTS



1. MINIMUM CLEARANCE FOR DOOR OPENING
2. MODEL PRO-C-XX00i
3. CONTROL WIRE IN ELECTRICAL CONDUIT. SIZE AND TYPE PER LOCAL CODE
4. PLUG-IN TRANSFORMER

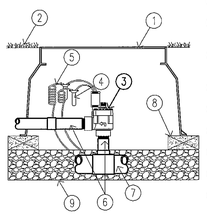
NOTE
MOUNT CONTROLLER WITH LCD SCREEN AT EYE LEVEL. PLUG-IN TRANSFORMER SHALL BE CONNECTED TO GROUNDED 110 VAC OUTLET.

(E) AUTOMATIC IRRIGATION CONTROLER
1-1/2"=1'-0"



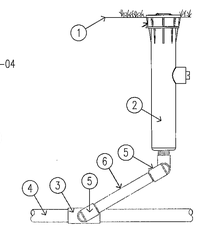
1. MODEL: WIRELESS SOLAR SYNC SENSOR, MOUNT UP TO 800' FROM RECEIVER
2. SUITABLE POST, POLE, OR GUTTER MOUNT. MOUNT IN LOCATION WHERE SENSOR CAN RECEIVE FULL SUN, IS OPEN TO RAINFALL AND OUT OF SPRINKLER SPRAY PATTERN
3. WIRELESS SOLAR SYNC RECEIVER MOUNTED ON THE WALL NEXT TO THE CONTROLLER CABINET
4. MODEL: SOLAR SYNC MODULE MOUNT LESS THAN 6' AWAY FROM CONTROLLER.
5. HUNTER I-CORE CONTROLLER
6. VALVE CONTROL WIRE CONDUIT
7. POWER SOURCE

(F) IRRIGATION SENSOR
NTS



1. STANDARD VALVE BOX
2. FINISH GRADE
3. REMOTE CONTROL VALVE MODEL PGV-101A WITH FLOW CONTROL
4. WATERPROOF CONNECTORS (2)
5. 18-24" COILED WIRE
6. SCH 80 T.O.E. NIPPLE
7. MAIN LINE PIPE & FITTINGS
8. BRICK SUPPORTS (4)
9. 3/4" MINUS WASHED GRAVEL

(G) REMOTE CONTROL VALVE
1/2"=1'-0"



1. FINISH GRADE
2. MODEL PROS-06 OR PROS-04 SPRAY HEAD, SEE NOTE
3. LATERAL TEE OR ELL
4. LATERAL PIPE
5. 1/2" PVC STREET ELLS (3)
6. SCH 80 NIPPLE

NOTE:
USE PROS-04 ON ALL STREET TREE BUBBLERS AND PROS-06 ON ALL SHRUB SPRAYERS.

(E) SPRAY AND BUBBLER BODY
3"=1'-0"

REDBUD DESIGN
3739 16TH STREET
SAN FRANCISCO, CA
707-799-6525

PLANTING & IRRIGATION DETAILS

3101 35th AVE.
OAKLAND, CA 94619

LICENSED ARCHITECT
PHILBANTA
No. C-14646
Ren. 4/30/15
STATE OF CALIFORNIA

NORTH

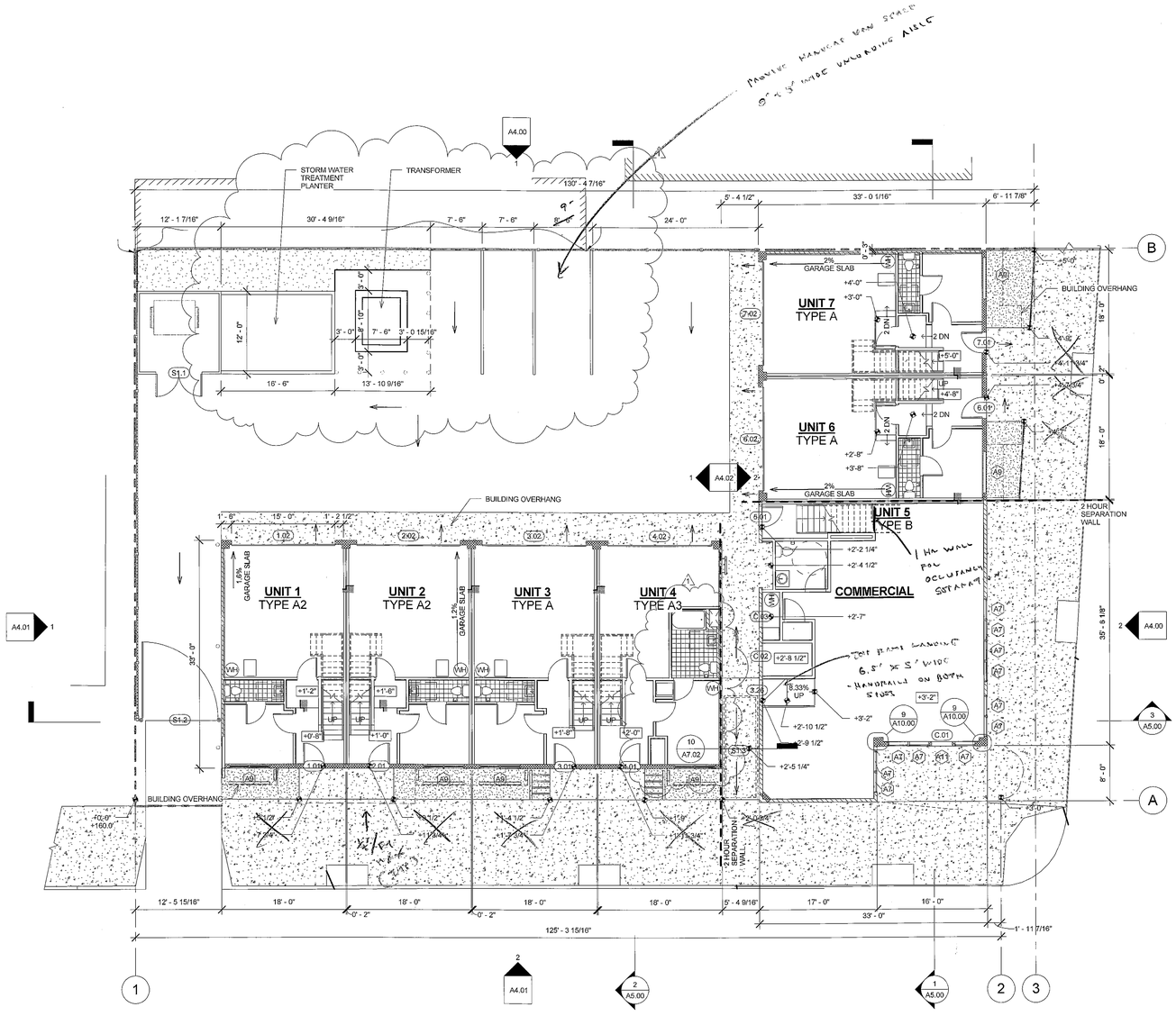
SCALE: 1" = 10'-0"

DATE: JANUARY 20, 2014

DRAWN BY: K.N.

NEW SHEET

SHEET: L3.0



1 1ST FLOOR AT UNITS 1&2
1/8" = 1'-0"

BUILDING PLAN LEGEND		BUILDING PLAN NOTES	
PLANTING AREA	2x4 STUD WALL - SEE SHEET A9.0	1. REFER TO SHEET A9.00 FOR ASSEMBLY NOTES.	7. REFER TO A2 SERIES FOR UNIT DIMENSIONS, DOOR AND WINDOW TAGS AND PARTITION INFORMATION
0'-0" FINISH FLOOR ELEVATION 0'-0" SET AT 160'-0" PER SURVEY	2x6 STUD WALL - SEE SHEET A9.0	2. REFER TO SHEETS A7.00 FOR DOOR SCHEDULES AND NOTES	8. ALL DIMENSIONS TO FACE OF STUD, U.N.O.
	2x8 STUD WALL - SEE SHEET A9.0	3. REFER TO SHEETS A7.01 FOR WINDOW SCHEDULE AND NOTES	9.
	CONCRETE	4. REFER TO SHEETS OF A10.00 SERIES FOR WATERPROOFING DETAILS	10.
		5. REFER TO SHEET A0.05 FOR ACCESSIBILITY DETAILS AND REQUIREMENTS	
		6. REFER TO SHEET A9.00 FOR WALL TYPE ASSEMBLIES.	

ARCHITECTURE
PHILIP BANTA & ASSOCIATES
6050 HOLLIS STREET
EMERYVILLE, CALIFORNIA 94608
TEL: 510.654.3255
FAX: 510.654.3259
www.bantadesign.com

REVISIONS: △ ISSUES: ○

No.	Description	Date
1	1ST PLAN CHECK REVIEW	01/14/14
(1)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619

LICENSED ARCHITECT PHILIP BANTA No. C-14646 Ren. 4/30/15 STATE OF CALIFORNIA

SHEET DESCRIPTION:

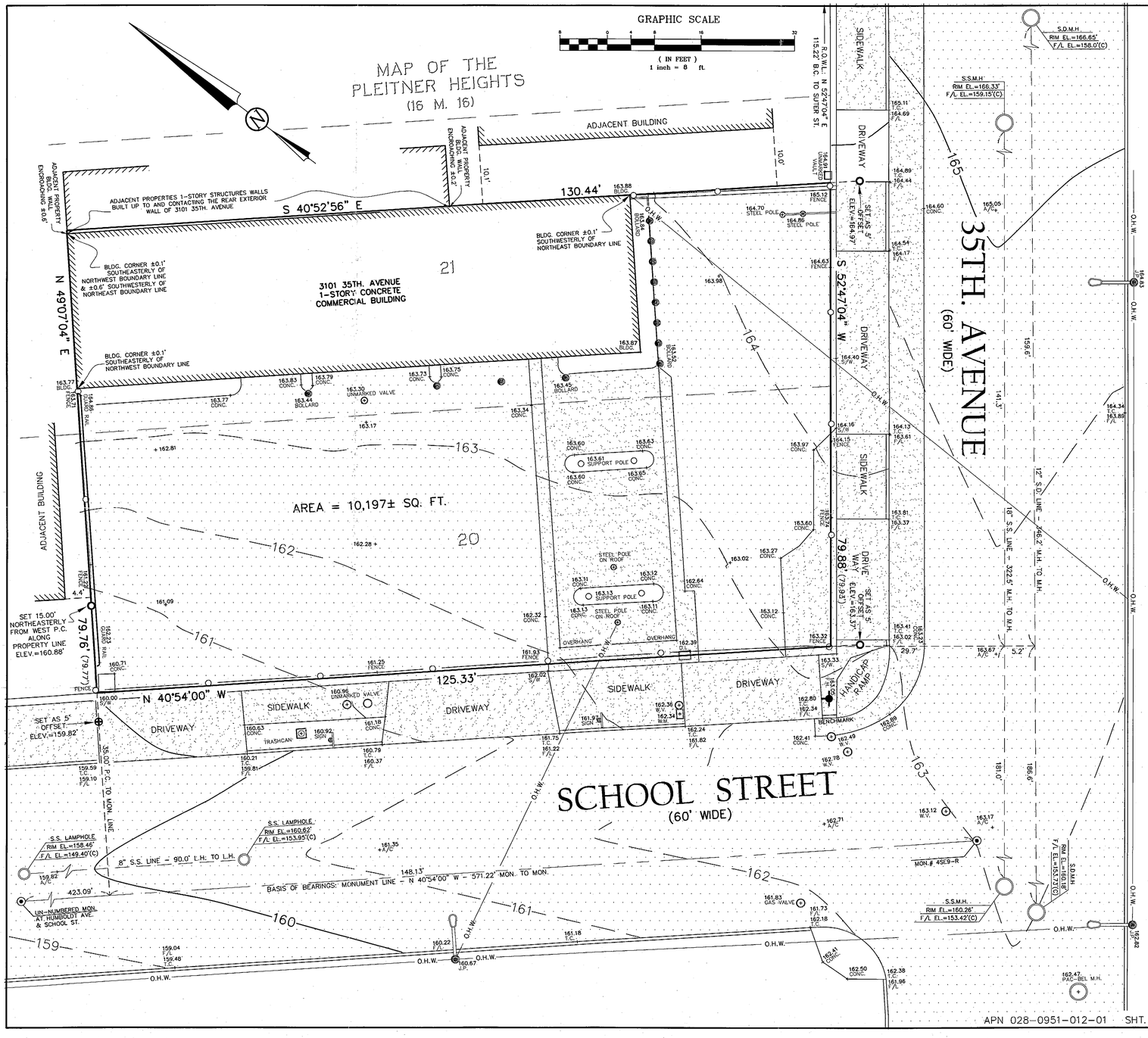
GROUND FLOOR PLAN

APPLICANT COPY

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	1/8" = 1'-0"

A1.01

1/10/2014 9:55:20 AM



LEGEND		M.H.	MANHOLE
⊙	FD. WELL MONUMENT	O.H.W.	OVERHEAD WIRE
	BUILDING FOOTPRINT	P.C.	PROPERTY CORNER
— o —	CHAIN LINK FENCE	R.O.W.L.	RIGHT-OF-WAY LINE
	FIRE HYDRANT	S/W	SIDEWALK POINT
	SIGN POLE	S.D.	STORM DRAIN
	ASPHALT	S.S.	SANITARY SEWER
	CONCRETE	T.C.	TOP OF CURB
A/C	ASPHALT CROWN	W.M.	WATER METER
BLDG.	BUILDING POINT	W.V.	WATER VALVE
(C)	CITY DATA	O	SET NAIL & BRASS TAG, L.S. 7170
CONC.	CONCRETE POINT	⊕	SET CROSS & TAG, L.S. 7170
F/L	FLOW LINE		PROPERTY LINE
F.H.	FIRE HYDRANT	—— ——	TRACT LOT LINE
J.P.	JOINT POLE		

OWNER:
MONA HSIEH &
PATRICK KONG
118 ASHBY BAY
ALAMEDA, CA 94502

BENCHMARK:
THE NORTHWEST CURB RETURN OF THE NORTHERN CORNER AT THE INTERSECTION OF 35TH. AVENUE AND SCHOOL STREET ELEV.=162.8' PER CITY OF OAKLAND MONUMENT MAP#171.

BASIS OF BEARINGS:
MONUMENT LINE IN SCHOOL STREET, TAKEN AS N40°54'00"W AS SHOWN ON P.M. 3721 (133 M. 72), RECORDS OF ALAMEDA COUNTY.

NOTES:
THERE ARE NO VERTICAL CURVES WITHIN 300 FEET OF THE PROPERTY.

THERE ARE NO HORIZONTAL CURVES WITHIN 300 FEET OF THE PROPERTY.

THERE ARE NO PROTECTED TREES ON THIS PROPERTY.

SURVEYOR'S STATEMENT:

THIS MAP CORRECTLY REPRESENTS A FIELD SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE LAND SURVEYOR'S ACT AT THE REQUEST OF MONA HSIEH ON MARCH 24, 2014.

I HEREBY STATE THAT ALL EXISTING GRADES AND CONTOURS DELINEATED UPON THIS PLAT ARE BASED UPON CITY OF OAKLAND DATUM.

I HEREBY FURTHER STATE THAT TO THE BEST OF MY KNOWLEDGE ALL PROVISIONS OF APPLICABLE STATE LAW AND LOCAL ORDINANCES HAVE BEEN COMPLIED WITH.

I FURTHER STATE THAT THE PARCEL DESIGNATED BY MY SURVEY AND SHOWN ON THIS MAP IS THE SAME AS THAT SHOWN ON THAT CERTAIN MAP ENTITLED "MAP OF THE PLEITNER HEIGHTS TRACT" FILED ON MARCH 12, 1901 IN BOOK NO. 16, PAGE 16, ALAMEDA COUNTY RECORDER'S OFFICE.

I HEREBY FURTHER STATE THAT IN ACCORDANCE WITH THE PROFESSIONAL LAND SURVEYOR'S ACT THE PERFORMANCE OF THIS SURVEY:

REQUIRES THAT A RECORD OF SURVEY BE FILED WITH THE ALAMEDA COUNTY SURVEYOR AND I WILL FILE SAME IN A TIMELY MANNER; AND IF CHANGES ARE NECESSARY TO THIS SURVEY SUBMITTED TO THE CITY OF OAKLAND DUE TO PROCESSING OF THE RECORD OF SURVEY I WILL SUBMIT A CORRECTED COPY OF THIS SURVEY TO THE CITY.

MICHAEL J. FOSTER, L.S. 7170
EXP. DATE DECEMBER 31, 2015

DATE: MARCH 26, 2014

PROFESSIONAL LAND SURVEYOR
MICHAEL J. FOSTER
No. 7170
Exp. 12/31/15
STATE OF CALIFORNIA

BUILDING DEPT.
SUBJECT TO USC § CT 105.4.3
IC SECT 105.4 & CC SECT 105.5
SURVEY (REVIEW ONLY)
PLOT PLAN REVIEW
PARKING/DWY LAYOUT
GRADING AND EROSION CONTROL
SOILS REPORT ON FILE
ELECT. MECH. PLUMB. NOT CHECKED

BOUNDARY AND TOPOGRAPHIC SURVEY

3101 35TH. AVENUE
OAKLAND
PORTIONS OF LOTS 20 & 21
MAP OF THE PLEITNER HEIGHTS TRACT
(16 M. 16),
CITY OF OAKLAND, COUNTY OF ALAMEDA,
STATE OF CALIFORNIA.

MARCH, 2014 - SCALE: 1" = 8'

APPLICANT COPY

BAY AREA LAND SURVEYING INC.
961 MITCHELL WAY
EL SOBRANTE, CA 94803
(510) 223-5167

APN 028-0951-012-01 SHT. 1 OF 1 F.B. NO. 291 /35TH1439B&T.DWG JOB NO. 07-1439

GENERAL STRUCTURAL NOTES

GENERAL

1. SEE DRAWINGS OTHER THAN STRUCTURAL FOR: TYPES OF FLOOR FINISH AND THEIR LOCATION, FOR DEPRESSIONS IN FLOOR SLABS, FOR OPENINGS IN WALLS AND FLOORS REQUIRED BY ARCHITECTURAL AND MECHANICAL FEATURES.
2. HOLES AND OPENINGS THROUGH WALLS AND FLOORS FOR DUCTS, PIPING AND VENTILATION SHALL BE COORDINATED BY THE CONTRACTOR WHO SHALL VERIFY SIZES AND LOCATION OF SUCH HOLES OR OPENINGS WITH THE MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS AND THEIR SUB-CONTRACTORS.
3. NO PIPES OR DUCTS SHALL BE EMBEDDED IN WALLS UNLESS SPECIFICALLY DETAILED OR APPROVED BY THE ARCHITECT.
4. DRAWINGS AND SPECIFICATIONS REPRESENT FINISHED STRUCTURE. CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO SHORING AND TEMPORARY BRACING. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO INSURE SAFETY OF ALL PERSONS AND STRUCTURES AT THE SITE AND ADJACENT TO THE SITE. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT, ENGINEER OR CONSTRUCTION MANAGER SHALL NOT RELIEVE THE CONTRACTOR OF SUCH RESPONSIBILITY.
5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT JOB SITE BEFORE COMMENCING WORK AND SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT.
6. OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, NOTES, AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND RESOLVED BEFORE PROCEEDING WITH THE WORK.
7. DO NOT USE SCALED DIMENSIONS; USE WRITTEN DIMENSIONS. WHERE NO DIMENSION IS PROVIDED, CONSULT THE ARCHITECT FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
8. IF CERTAIN FEATURES ARE NOT FULLY SHOWN OR CALLED FOR ON THE DRAWINGS OR SPECIFICATIONS, THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE CALLED FOR OR SHOWN.

DESIGN BASIS

1. APPLICABLE CODE: CALIFORNIA BUILDING CODE (CBC), 2010 EDITION.
2. VERTICAL LOADS:
   ROOF LIVE LOAD(REDUCIBLE): 20 PSF
   FLOOR LIVE LOAD(REDUCIBLE):
   APARTMENTS 40 PSF
   BALCONIES 60 PSF
   HALLWAY & EXIT FACILITIES 100 PSF
   RETAIL & COMMERCIAL 125 PSF
3. LATERAL LOADS:
   DESIGN WIND PRESSURE: Ps= λ(Kzt)(I)(Ps30); BASIC WIND SPEED = 85 mph
   I= 1.00 Kzt= 1.0 λ= 1.29 EXPOSURE "C"
   Ps30= 15.9 ZONE A
   Ps30= 10.6 ZONE C
   CODE SEISMIC: Vs = Cs W
   Ss=1.509 S1=0.600 Fa=1.0 Fv=1.5 I= 1.0
   R= 6.5 (LIGHT-FRAME) R=5.25 (STEEL BRACED FRAMES)
   R=3 (REINFORCED CONCRETE MOMENT FRAMES)
   SITE CLASS: "D"
   SEISMIC DESIGN CATEGORY: "D"
4. GEOTECHNICAL CRITERIA:
   FOUNDATIONS HAVE BEEN DESIGNED BASED ON THE RECOMMENDATIONS OF SOIL REPORT ENTITLED " PROPOSED TOWNHOUSE DEVELOPMENT, 3101 35th AVENUE , OAKLAND, CALIFORNIA, GEOTECHNICAL INVESTIGATION AND PAVEMENT DESIGN", PREPARED BY UNITED SOIL ENGINEERING, Inc. DATED AUGUST, 2007; AND
   SOIL REPORT UPDATE AND SUPPLEMENTAL RECOMMENDATIONS TOWNHOUSE DEVELOPMENT, 3101 35th AVENUE , OAKLAND, CALIFORNIA PREPARED BY BY GEOTRINITY CONSULTANTS, Inc. DATED OCTOBER 11, 2013.

MATERIALS

1. CONCRETE:
   REINFORCING STEEL: ASTM A615 GRADE 40 FOR #4 BARS AND SMALLER
   ASTM A615 GRADE 60 FOR #5 BARS AND LARGER
   CONCRETE STRENGTH: 3000 psi MINIMUM AT 28 DAYS; 1" MAX. AGGREGATE.
   MINIMUM CONCRETE COVER FOR REINFORCING STEEL:
   SURFACES PLACED AGAINST EARTH 3"
   FORMED SURFACES BELOW GRADE 2"
   SURFACES EXPOSED TO WEATHER 2"
   EXTERIOR WALL AT EXTERIOR FACE 1.5"
   SLABS AND WALLS NOT EXPOSED TO WEATHER 1"
2. WOOD
   SAWN LUMBER GRADES - ALL DOUGLAS FIR;
   POSTS, BEAMS, AND HEADERS: NO. 1
   PLATES, BLOCKS, LIGHT FRAMING AND MISC.: NO. 2
   ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY TO BE DECAY RESISTANT OR PRESSURE TREATED.
   PLYWOOD SHEATHING:
   ROOFS: 3/4 in., C-D EXTERIOR APA RATED 48/24 EXPOSURE 1.
   FLOORS: 3/4 in., STRUCT 1 EXTERIOR APA RATED 48/24 EXPOSURE 1. WITH TONGUE AND GROOVE EDGES. GLUE TO SUPPORT MEMBERS.
   WALLS: 15/32 in., CD EXTERIOR APA RATED 32/16 EXPOSURE 1.
   STUDS: 1.3E TIMBER STRAND LSL BY ILEVEL TRUS JOIST ESR-1387

FRAMING HARDWARE: AS MANUFACTURED BY SIMPSON COMPANY OR AN APPROVED EQUAL PRODUCT. SIMPSON DESIGNATIONS ARE ARE USED ON STRUCTURAL DRAWINGS.

NAILS:COMMON WIRE GAGE UNLESS OTHERWISE NOTED. NAILING TO CONFORM TO CBC TABLE 2304.9.1.

WOOD CONNECTION BOLTS: ASTM A307.
ANCHOR BOLTS: AT SILL PLATE USE ASTM A307; AT TIE DOWNS USE ASTM A36 AND A108

PARALLEL STRAND LUMBER (PSL):
PARALLAM DF 2.0E AS MANUFACTURED BY TRUS JOIST MACMILLAN. ESR-1387

LAMINATED VENER LUMBER (LVL):
MICROLLAM DE 1.9E AS MANUFACTURED BY TRUS JOIST MACMILLAN. ESR-1387

ALL FRAMING LUMBER SHALL HAVE 19% MAXIMUM MOISTURE CONTENT AT TIME OF INSTALLATION.

3. STEEL (SUBMIT SHOP DRAWINGS TO STRUCTURAL ENGINEER AND ARCHITECT FOR REVIEW)
   WIDE FLANGE: ASTM A992
   TUBES: ASTM A500, GRADE B.
   PLATES: ASTM A572, GRADE 50.
   WELDING ELECTRODES: E-70XX.
   NON-SHRINK GROUT: ASTM C1107, CLASS B.
   WELDED STUDS: HEADED ANCHORS TYPE H4L OR S3L BY NELSON OR EQUAL.
   HIGH STRENGTH THREADED ROD: ASTM A449

WELDING NOTES

1. WELDING AND INSPECTION SHALL BE IN ACCORDANCE WITH AWS D1.1, LATEST EDITION.
2. WELDING FILLER METAL SHALL HAVE A MINIMUM V-NOTCH TOUGHNESS OF 20 FT-LB AT 00 F (E70T-4 OR NS-3M SHALL BE SPECIFICALLY PROHIBITED).
3. ALL WELDS SHALL BE STARTED AND ENDED WITH A MINIMUM LENGTH OF ONE INCH ON WELD TABS ("RUN OFF" TABS) EXCEPT AT ACCESS HOLES IN BEAM/GIRDER WEBS. ALL WELD TABS SHALL BE REMOVED, THE AFFECTED AREA GROUND SMOOTH AND MAGNETIC PARTICLE TESTED FOR DEFECTS.
4. IF BACKING BARS ARE USED UNDER THE BOTTOM BEAM FLANGE TO COLUMN FLANGE CJP GROOVE WELD, THE BACKING BAR SHALL BE REMOVED, THE REMOVAL AREA GROUND TO SOUND, BRIGHT METAL AND THE AREA MAGNETIC PARTICLE TESTED FOR DEFECTS. A REINFORCING FILLET WELD, AT LEAST 1 /4 OF THE BOTTOM FLANGE THICKNESS BUT NOT GREATER THAT 3 /8", SHALL BE PLACED IN THIS LOCATION.
5. IF BACKING BAR IS USED UNDER THE TOP BEAM FLANGE TO COLUMN CJP GROOVE WELD, AND IS NOT REMOVED, THE BACKING BAR SHALL BE ATTACHED TO THE COLUMN AND BEAM FLANGES BY EITHER A FILLET WELD ALONG THE COMPLETE BAR LENGTH OF THE UNDER SIDE OF THE BAR, OR BY A PARTIAL PENETRATION WELD FROM THE UNDERSIDE OF THE BAR, FOR THE FULL LENGTH OF THE BAR.
6. WELD "DAMS" SHALL NOT BE ALLOWED.
7. ALL GROOVE WELDS SHALL BE ULTRASONICALLY (UT) EXAMINED FOR THE FULL LENGTH. BACKING BAR REMOVAL AREAS AND FILLET WELDS ON CONTINUITY PLATES SHALL BE EXAMINED FOR THE FULL LENGTH BY THE MAGNETIC PARTICLE TESTING (MPT) METHOD.
8. A COMPLETE WELDING PROCEDURE SHALL BE SUBMITTED TO AND APPROVED BY THE STRUCTURAL ENGINEER-OF-RECORD AND THE BUILDING DEPARTMENT BEFORE ANY WELDING IS COMMENCED.
9. WELD ACCESS HOLES SHALL BE PER FEMA 350 SECTION 3.3.2.7 AND FIGURE 3-5.
10. SHOPPING DRAWING OF SMRF SHOULD BE PROVIDED BY CONTRACTOR FOR REVIEW.

NAILING SCHEDULE (Table 2304.9.1)

(ALL NAILS SHALL BE UTILIZE COMMON NAILS.)	FASTENING	LOCATION
1. JOIST TO SILL OR GIRDER	3 - 8d	TOENAIL
2. BRAIDING TO JOIST	2 - 8d	TOENAIL EACH END
3. 1X6 SUB FIR OR LESS TO EA. JOIST	2 - 8d	FACE NAIL
4. WIDER THAN 1X6 SUB FLR. TO EA. JOIST	3 - 8d	FACE NAIL
5. 2" SUB FLOOR TO JOIST OR GIRDER	2 - 16d	BLIND AND FACE NAIL
6. SOLE PL. TO JOIST OR BLKING	16d @ 16" O.C.	TYPICAL FACE NAIL
TO JOIST OR BLKING AT BRACED WALL PANELS	3"-16d @ 16" O.C.	BRACED WALL PANELS
7. TOP PL. TO STUD	2-16d	END NAIL
8. STUD TO SOLE PL.	4-8d	TOENAIL
	2-16d	END NAIL
9. DOUBLE STUDS	16d @ 24" O.C.	FACE NAIL
10. DOUBLE TOP PLS.	16d @ 16" O.C.	TYPICAL FACE NAIL
DOUBLE TOP PLS.	8-16d	LAP SPLICE
11. BLK'G BETWEEN JOISTS OR RAFTERS TO TOP PL.	3-8d	TOENAIL
12. RIM JOIST TO TOP PL.	8d AT 6" O.C.	TOENAIL
13. TOP PLS., LAPS AND INTERSECTIONS	2 - 16d	FACE NAIL
14. CONTINUOUS HDR. TWO PIECES.	16d	16" O.C. ALONG EDGE
15. CLG. JOISTS TO PL.	3 - 8d	TOENAIL
16. CONTINUOUS HDR. TO STUD	4 - 8d	TOENAIL
17. CLG. JOISTS LAPS OVER PARTITIONS	3 - 16d	FACE NAIL
18. CLG. JOISTS TO PARALLEL RAFTERS	3 - 16d	FACE NAIL
19. RAFTER TO PL.	3 - 8d	TOENAIL
20. 1" BRACE TO EA. STUD $ PL.	2 - 8d	FACE NAIL
21. 1X8 SHT'G TO EA. BEARING	3-8d	FACE NAIL
22. WIDER THAN 1X8 SHT'G TO EA. BEARING	3 - 8d	FACE NAIL
23. BUILT-UP CNR. STUDS.	16d @ 24" O.C.	
24. BUILT-UP GIRDER AND BEAMS AT T&B STAGGERED	20d AT 32" O.C.	FACE NAIL ON B.S.
AT ENDs AND AT EACH SPLIC	2-20d	FACE NAIL
25. 2" PLANKs	16d	AT EACH BEARING
26. COLLAR TIE TO RAFTER	3-10d	FACE NAIL
27. JACK RAFTER TO HIP	3-10d	TOENAIL
	2-16d	FACE NAIL
28. ROOF RAFTER TO 2x RIDGE BEAM	2-16d	FACE NAIL / TOENAIL
29. JOIST TO BAND JOIST	3-16d	FACE NAIL

STRUCTURAL SHEET INDEX

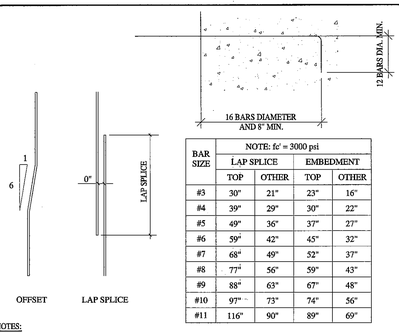
PROJECT SITE IMPROVEMENTS

1. PRIOR TO ISSUANCE OF BUILDING PERMITS, THE APPLICANT SHALL PROVIDE AN UPDATED GEOTECHNICAL ENGINEERING INVESTIGATION REPORT FOR THE PROJECT SITE. THE REPORT SHOULD ADDRESS THE SEISMIC HAZARD MAP REQUIREMENTS.
2. PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE PROJECT'S GEOTECHNICAL ENGINEER OF RECORD SHALL REVIEW AND APPROVE SITE DRAINAGE.

ABBREVIATIONS

&	AND
@	AT
A.B.	ANCHOR BOLT
ARCH.	ARCHITECTURAL
BD.	BOARD
BFE	BASE FLOOD ELEVATION
BLDG.	BUILDING
BLKG.	BLOCKING
BM.	BEAM
BOT.	BOTTOM
C.L.	CENTER LINE
C.B.	COLUMN BASE
C.J.	CONTROL JOINT
COL.	COLUMN
CONT.	CONTINUOUS
DET.	DETAIL
D.F.	DOUGLAS FIR
D.F.S.S.	DOUGLAS FIR SELECT STRUCTURAL
DWG.	DRAWING
EA.	EACH
E.N.	EDGE NAILING
EL.	ELEVATION
E.W.	EACH WAY
EXT.	EXTERIOR
F.S.	FAR SIDE
FDN.	FOUNDATION
FIN.	FINISH
FLR.	FLOOR
F.O.C.	FACE OF CONCRETE
F.O.S.	FACE OF STUD
FTG.	FOOTING
GLB	GLU LAM BEAM
H.D.	HOLD DOWN
HDR.	HEADER
HORIZ.	HORIZONTAL
J.H.	JOIST HANGER
LVL	LAMINATED VENEER LUMBER
LSL	LAMINATED STRAND LUMBER
M.B.	UNFINISHED MACHINE BOLTS
MAX.	MAXIMUM
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M.F.	MOMENT FRAME
N.S.	NEAR SIDE
NTS.	NOT TO SCALE
O.C.	ON CENTER
OPG.	OPENING
OPP.	OPPOSITE
P.A.	POST ABOVE
PL	PLATE
PAR.	PARALLEL
PB.	POST BASE
PC	POST CAP
PERP.	PERPENDICULAR
PHD	PREDEFLECTED HOLD DOWN
PLY.	PLYWOOD
PSL	PARALLEL STRAND LUMBER
REINF.	REINFORCEMENT
REQ.	REQUIRED
S.A.D.	SEE ARCHITECTURAL DRAWINGS
S.B.C.	SLOPED BOTTOM CHORD
SCHED.	SCHEDULE
SDS	SIMPSON WOOD SCREW
SIM.	SIMILAR
S.J.	SEISMIC JOINT
SPEC.	SPECIFICATION
SQ.	SQUARE
ST.	STRAP TIE
STD.	STANDARD
SYM.	SYMMETRICAL
T&B	TOP AND BOTTOM
T.D.	TIE DOWN
T&G	TONGUE AND GROOVE
T.O.C.	TOP OF CONCRETE
T.P.	TOP OF PLATE
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
V.I.F.	VERIFY IN FIELD
VERT.	VERTICAL
W/	WITH
W/O	WITHOUT

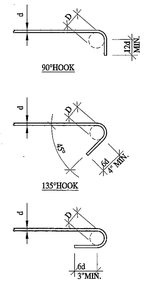
SPECIAL INSPECTIONS DONE PER 1704 WELDING H.D. BOLTS SHEAR WALL MASONRY



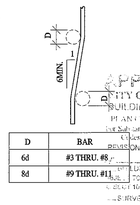
BAR SIZE	NOTE: fc' = 3000 psi			
	LAP SPLICE		EMBEDMENT	
	TOP	OTHER	TOP	OTHER
#3	30"	21"	23"	16"
#4	39"	29"	30"	22"
#5	49"	36"	37"	27"
#6	59"	42"	45"	32"
#7	68"	49"	52"	37"
#8	77"	56"	59"	43"
#9	88"	63"	67"	48"
#10	97"	73"	74"	56"
#11	116"	90"	89"	69"

NOTES:
1 SPLICES OF HORIZONTAL REINFORCEMENT IN WALLS SHALL BE STAGGERED. SPLICES ARE CLASS "B".
2. 0.80 OF SPLICE LENGTH MAY USED IF LESS THAN 1/2 OF THE BARS ARE LAP SPLICED WITHIN A REQUIRED LAP LENGTH, OR BARS SPACED AT 6d O.C. OR GREATER.
2. TOP BARS REFER TO HORIZONTAL BARS WITH MORE 12" CONCRETE PLACE BELOW DURING A POUR OTHER BARS ARE BOTTOM OR VERTICAL BARS.
4. WHERE REQIRED EMBEDMENT CANNOT BE OBTAINED WITH STRAIGHT BARS PROVIDE 180°OR 90 HOOK EQUALING LENGTH SHOWN BELOW

TYP. CONC REINF. LAP AND EMBED | 1



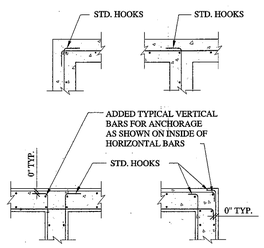
TYP. REBAR HOOK



D	BAR
6d	#3 THRU. #8
8d	#9 THRU. #11

APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLAN CHECK SECTION
Not Satisfactory Compliance With Codes and Ordinances
REVISIONS NEED APPROVAL
BY BUILDING CODE
USE: TO USE SEC 106.4.3
SEC 106.4 IFC SEC 106.4
SURVEY (REVISIT CHK)
FOOT PLAN REVIEW
PAPERWORK/DRY LAYOUT
GRADING AND EROSION CONTROL
SOILS REPORT ON FILE
ELECT, MECH, PLUMB.
NOT CHECKED

REINF. STEEL STD. HOOK LENGTHS | 2



CONCRETE MEMBERS INTERSECTIONS | 3

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REGISTERED PROFESSIONAL ENGINEER JIYA-RONG YANG No. C 48855 Exp. 06/30/16 CIVIL STATE OF CALIFORNIA
Jerry Yang, P.E., G.E.

OWNER:
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888 Brannan St. #101
San Francisco, CA 94103
Tel : 510-928-7888

No.		Date

Project Name and Address
NEW MIXED-USE BUILDING
35th St. & School St.
Oakland, CA

Sheet Title
STRUCTURAL NOTES

Project	GE2382	Sheet
Date	3/28/2014	S0.0
Scale		

STRUCTURAL TESTS AND SPECIAL INSPECTIONS

GENERAL

THESE PROVISIONS SHALL GOVERN THE QUALITY, WORKMANSHIP AND REQUIREMENTS FOR MATERIALS COVERED. MATERIALS OF CONSTRUCTION AND TESTS SHALL CONFORM TO THE APPLICABLE STANDARDS LISTED.

DEFINITIONS

QUALITY CONTROL. INSPECTION PROVIDED BY THE CONTRACTOR BY A QUALIFIED PERSON OF MATERIAL AND WORK PERFORMED BY THE CONTRACTOR.

QUALITY ASSURANCE. INSPECTION PROVIDED BY THE OWNER BY A QUALIFIED PERSON OF MATERIAL, WORK AND QUALITY CONTROL DOCUMENTS OR PROCEDURES.

SPECIAL INSPECTION, CONTINUOUS. THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED.

SPECIAL INSPECTION, PERIODIC. THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK.

SPECIAL INSPECTIONS

THE CONTRACTOR SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED HERE. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE. TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATON REQUIRING SPECIAL INSPECTION.

REPORT REQUIREMENT. THE INSPECTOR OF RECORD AND SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE CITY, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CITY AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK.
A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED AT A POINT IN TIME AGREED UPON BY THE PERMIT APPLICANT AND THE CITY PRIOR TO THE START OF WORK.

INSPECTION OF FABRICATORS. WHERE FABRICATION OF STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES IS BEING PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP, THE SPECIAL INSPECTOR SHALL VERIFY THAT THE FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR INSPECTION CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS. THE SPECIAL INSPECTOR SHALL REVIEW THE PROCEDURES FOR THE COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK.

STEEL CONSTRUCTION.

THE SPECIAL INSPECTIONS FOR STEEL ELEMENTS OF BUILDINGS AND STRUCTURES SHALL BE AS REQUIRED BY SECTION 1705.2 AND 1705.11.1 AND TABLE 1705.2.

EXCEPTIONS:

1. SPECIAL INSPECTION OF THE STEEL FABRICATION PROCESS SHALL NOT BE REQUIRED WHERE THE FABRICATOR DOES NOT PERFORM ANY WELDING, THERMAL CUTTING OR HEATING OPERATION OF ANY KIND AS PART OF THE FABRICATION PROCESS. IN SUCH CASE, THE FABRICATOR SHALL BE REQUIRED TO SUBMIT A DETAILED PROCEDURE FOR MATERIAL CONTROL THAT DEMONSTRATES THE FABRICATOR'S ABILITY TO MAINTAIN SUITABLE RECORDS AND PROCEDURES SUCH THAT, AT ANY TIME DURING THE FABRICATION PROCESS, THE MATERIAL SPECIFICATION, GRADE AND MILL TEST REPORTS FOR THE MAIN STRESS-CARRYING ELEMENTS ARE CAPABLE OF BEING DETERMINED.

2. THE SPECIAL INSPECTOR NEED NOT BE CONTINUOUSLY PRESENT DURING WELDING OF THE FOLLOWING ITEMS, PROVIDED THE MATERIALS, WELDING PROCEDURES AND QUALIFICATIONS OF WELDERS ARE VERIFIED PRIOR TO THE START OF THE WORK; PERIODIC INSPECTIONS ARE MADE OF THE WORK IN PROGRESS; AND A VISUAL INSPECTION OF ALL WELDS IS MADE PRIOR TO COMPLETION OR PRIOR TO SHIPMENT OF SHOP WELDING.

2.1. SINGLE-PASS FILLET WELDS NOT EXCEEDING 5/16 INCH IN SIZE.
2.2. ROOF DECK WELDING.
2.3. WELDED STUDS WHEN USED FOR STRUCTURAL DIAPHRAGM.
2.4. WELDING SHEET STEEL FOR COLD-FORMED STEEL FRAMING MEMBERS SUCH AS STUDS AND JOISTS.
2.5. WELDING OF STAIRS AND RAILING SYSTEMS.

TABLE 1705.2
REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD [a]
1. Material verification of cold-formed steel deck:			
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	—	X	Applicable ASTM material standards
b. Manufacturer's certified test reports.	—	X	
2. Inspection of welding:			
a. Cold-formed steel deck:			
1) Floor and roof deck welds:	—	X	AISC 360, Section M2.5
b. Reinforcing steel:			
1) verification of weldability of reinforcing steel other than ASTM A706.	—	X	AWS D1.4 ACI 318: Section 3.5.2
2) Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special structural walls of concrete and shear reinforcement.	X	—	
3) Shear reinforcement.	X	—	
4) Other reinforcing steel.	—	X	

a. Where applicable, see also Section 1707.1, Special inspection for seismic resistance.

WELDING.

WELDING INSPECTION SHALL BE IN COMPLIANCE WITH AWS D1.1. THE BASIS FOR WELDING INSPECTOR QUALIFICATION SHALL BE AWS D1.1.

INSPECTION OF WELDING. INSPECTION OF ALL SHOP AND FIELD-WELDING OPERATIONS, INCLUDING THE INSTALLATION OF AUTOMATIC END-WELDED STUD SHEAR CONNECTORS, SHALL BE MADE BY A QUALIFIED WELDING INSPECTOR APPROVED BY THE ENFORCEMENT AGENCY. SUCH INSPECTOR SHALL BE A PERSON TRAINED AND THOROUGHLY EXPERIENCED IN INSPECTING WELDING OPERATIONS. THE INSPECTOR'S ABILITY TO DISTINGUISH BETWEEN SOUND AND UNSOUND WELDING SHALL BE RELIABLY ESTABLISHED. THE MINIMUM REQUIREMENTS FOR A QUALIFIED INSPECTOR SHALL BE AS THOSE FOR AN AWS-CERTIFIED WELDING INSPECTOR (CWI), AS DEFINED IN THE PROVISIONS OF THE AWS QC1. ALL WELDING INSPECTORS SHALL BE AS APPROVED BY THE ENFORCEMENT AGENCY.

THE ABILITY OF EACH WELDER TO PRODUCE SOUND WELDS OF ALL TYPES REQUIRED BY THE WORK SHALL BE ESTABLISHED BY WELDER QUALIFICATION SATISFACTORY TO THE ENFORCEMENT AGENCY.

WELDING INSPECTION OF STRUCTURAL WELDING SHALL CONFORM TO THE REQUIREMENTS OF AWS D1.1, EXCEPT AS MODIFIED BY THIS SECTION.

THE WELDING INSPECTOR SHALL MAKE A SYSTEMATIC RECORD OF ALL WELDS. THIS RECORD SHALL INCLUDE IN ADDITION TO OTHER REQUIRED RECORDS:
1. IDENTIFICATION MARKS OF WELDERS.
2. LIST OF DEFECTIVE WELDS.
3. MANNER OF CORRECTION OF DEFECTS.

THE WELDING INSPECTOR SHALL CHECK THE MATERIAL, EQUIPMENT. DETAILS OF CONSTRUCTION AND PROCEDURE, AS WELL AS THE WELDER. THE INSPECTOR SHALL ALSO CHECK THE ABILITY OF THE WELDER. THE INSPECTOR SHALL VERIFY THAT THE INSTALLATION PROCEDURE FOR AUTOMATIC END-WELDED STUD SHEAR CONNECTORS IS IN ACCORDANCE WITH THE REQUIREMENTS OF AWS D1.1 AND THE APPROVED PLANS AND SPECIFICATIONS. THE INSPECTOR SHALL FURNISH THE ARCHITECT. STRUCTURAL ENGINEER AND THE ENFORCEMENT AGENCY WITH A VERIFIED REPORT THAT THE WELDING IS PROPER AND HAS BEEN DONE IN CONFORMITY WITH AWS D1.1 AND THE APPROVED PLANS AND SPECIFICATIONS. THE INSPECTOR SHALL USE ALL MEANS NECESSARY TO DETERMINE THE QUALITY OF THE WELD. THE INSPECTOR MAY USE GAMMA RAY. MAGNAFLUX. TREPANNING, SONICS OR ANY OTHER AID TO VISUAL INSPECTION WHICH THE INSPECTOR MAY DEEM NECESSARY TO BE ASSURED OF THE ADEQUACY OF THE WELDING.

NON-DESTRUCTIVE TESTING (NDT)

100% OF BEAM FLANGE WELDS SHALL BE TESTED WITH RECEIVE ULTRASONIC TESTING PERFORMED BY QUALITY ASSURAN PERSONNEL. THE WELDING TESTING SHALL CONFORM TO THE REQUIREMENTS OF AISC 431 APPENDIX Q SECTION Q5.2.

THE WELD PROCEDURE SHALL BE REVIEWED AND APPROVED BY THE PROJECT ENGINEER OF RECORD. COPIES OF THE NDT REPORTS SHALL BE PROVIDED TO THE BUILDING INSPECTOR UPON MOMENT FRAME INSPECTION.

DETAILS.

THE SPECIAL INSPECTOR SHALL PERFORM AN INSPECTION OF THE STEEL FRAME TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE APPROVED CONSTRUCTION DOCUMENTS. SUCH AS BRACING. STIFFENING. MEMBER LOCATIONS AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION.

INSPECTION OF SHOP FABRICATION. INSPECTION OF SHOP FABRICATION SHALL BE REQUIRED FOR SIGNIFICANT STRUCTURAL DETAILED CONNECTION AND FABRICATION WORK AS DIRECTED BY THE ENFORCEMENT AGENCY. THIS INSPECTION SHALL BE MADE BY A QUALIFIED INSPECTOR APPROVED BY THE ENFORCEMENT AGENCY. THE INSPECTOR SHALL FURNISH THE ARCHITECT. STRUCTURAL ENGINEER AND THE ENFORCEMENT AGENCY WITH A REPORT THAT THE MATERIALS AND WORKMANSHIP CONFORM TO THE APPROVED PLANS AND SPECIFICATIONS.

HIGH-STRENGTH BOLTS.

INSTALLATION OF HIGH-STRENGTH BOLTS SHALL BE PERIODICALLY INSPECTED IN ACCORDANCE WITH AISC SPECIFICATIONS.

GENERAL. WHILE THE WORK IS IN PROCESS, THE SPECIAL INSPECTOR SHALL DETERMINE THAT THE REQUIREMENTS FOR BOLTS, NUTS, WASHERS AND PAINT; BOLTED PARTS AND INSTALLATION AND TIGHTENING IN SUCH STANDARDS ARE MET. FOR BOLTS REQUIRING PRETENSIONING, THE SPECIAL INSPECTOR SHALL OBSERVE THE PREINSTALLATION TESTING AND CALIBRATION PROCEDURES WHEN SUCH PROCEDURES ARE REQUIRED BY THE INSTALLATION METHOD OR BY PROJECT PLANS OR SPECIFICATIONS; DETERMINE THAT ALL PLIES OF CONNECTED MATERIALS HAVE BEEN DRAWN TOGETHER AND PROPERLY SNUGGED AND MONITOR THE INSTALLATION OF BOLTS TO VERIFY THAT THE SELECTED PROCEDURE FOR INSTALLATION OF BOLTS TO VERIFY THAT THE SELECTED PROCEDURE FOR INSTALLATION IS PROPERLY USED TO TIGHTEN BOLTS. FOR JOINTS REQUIRED TO BE TIGHTENED ONLY TO THE SNUG-TIGHT CONDITION, THE SPECIAL INSPECTOR NEED ONLY VERIFY THAT THE CONNECTED MATERIALS HAVE BEEN DRAWN TOGETHER AND PROPERLY SNUGGED.

PERIODIC MONITORING. MONITORING OF BOLT INSTALLATION FOR PRETENSIONING IS PERMITTED TO BE PERFORMED ON A PERIODIC BASIS WHEN USING THE TURN-OF-NUT METHOD WITH MATCHMARKING TECHNIQUES, THE DIRECT TENSION INDICATOR METHOD OR THE ALTERNATE DESIGN FASTENER (TWIST-OFF BOLT) METHOD. JOINTS DESIGNATED AS SNUG TIGHT NEED BE INSPECTED ONLY ON A PERIODIC BASIS.

CONTINUOUS MONITORING. MONITORING OF BOLT INSTALLATION FOR PRETENSIONING USING THE CALIBRATED WRENCH METHOD OR THE TURN-OF-NUT METHOD WITHOUT MATCHMARKING SHALL BE PERFORMED ON A CONTINUOUS BASIS.

CONCRETE CONSTRUCTION.

THE SPECIAL INSPECTIONS AND VERIFICATIONS FOR CONCRETE CONSTRUCTION SHALL BE AS REQUIRED BY THE SECTION 1705.3 AND TABLE 1705.3.

MATERIALS. IN THE ABSENCE OF SUFFICIENT DATA OR DOCUMENTATION PROVIDING EVIDENCE OF CONFORMANCE TO QUALITY STANDARDS FOR MATERIALS IN CHAPTER 3 OF ACI 318, THE BUILDING OFFICIAL SHALL REQUIRE TESTING OF MATERIALS IN ACCORDANCE WITH THE APPROPRIATE STANDARDS AND CRITERIA FOR THE MATERIAL IN CHAPTER 3 OF ACI 318. WELDABILITY OF REINFORCEMENT, EXCEPT THAT WHICH CONFORMS TO ASTM A706, SHALL BE DETERMINED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 3.5.2 OF ACI 318.

BATCH PLANT INSPECTION. THE QUALITY AND QUANTITY OF MATERIALS USED IN TRANSIT-MIXED CONCRETE AND IN BATCHED AGGREGATES SHALL BE CONTINUOUSLY INSPECTED AT THE LOCATION WHERE MATERIALS ARE MEASURED BY AN APPROVED SPECIAL INSPECTOR.

WAIVER OF BATCH PLANT INSPECTION. BATCH PLANT INSPECTION MAY BE WAIVED UNDER EITHER OF THE FOLLOWING CONDITIONS.

1. THE CONCRETE PLANT COMPLIES FULLY WITH THE REQUIREMENTS OF ASTM C 94, SECTIONS 8 AND 9, AND HAS A CURRENT CERTIFICATE FROM THE NATIONAL READY MIXED CONCRETE ASSOCIATION OR ANOTHER AGENCY ACCEPTABLE TO THE ENFORCEMENT AGENCY. THE CERTIFICATION SHALL INDICATE THAT THE PLANT HAS AUTOMATIC BOTCHING AND RECORDING CAPABILITIES.

WHEN BATCH PLANT INSPECTION IS WAIVED, THE FOLLOWING REQUIREMENTS SHALL APPLY AND SHALL BE DESCRIBED IN THE CONTRACT SPECIFICATIONS.

1. APPROVED INSPECTOR OF THE TESTING LABORATORY SHALL CHECK THE FIRST BATCHING AT THE START OF REQUIRED WORK AND FURNISH MIX PROPORTIONS TO THE LICENSED WEIGHMASTER.
2. LICENSED WEIGHMASTER TO POSITIVELY IDENTIFY MATERIALS AS TO QUANTITY AND CERTIFY TO EACH LOAD BY A TICKET.
3. TICKETS SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY A TRUCK DRIVER WITH LOAD IDENTIFIED THEREON. THE INSPECTOR WILL NOT ACCEPT THE LOAD WITHOUT A LOAD TICKET IDENTIFYING THE MIX AND WILL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK, ITS LOAD AND TIME OF RECEIPT AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND WILL TRANSMIT A COPY OF THE DAILY RECORD TO THE ENFORCEMENT AGENCY.
4. AT THE END OF THE PROJECT, THE WEIGHMASTER SHALL FURNISH AN AFFIDAVIT TO THE ENFORCEMENT AGENCY CERTIFYING THAT ALL CONCRETE FURNISHED CONFORMS IN EVERY PARTICULAR TO PROPORTIONS ESTABLISHED BY MIX DESIGNS.

TABLE 1705.3
REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD[a]	IBC REFERENCE
1. Inspection of reinforcing steel, including prestressing tendons, and placement.	—	X	ACI318: 3.5, 7.1-7.7	1910.4
2. Inspection of reinforcing steel welding in accordance with Tablel 705.2.2, Item 2b.	—	—	AWSD1.4 ACI318:3.5.2	—
3. Inspection of anchors case in concrete where allowable loads have been increased or where strength design is used.	—	X	ACI318: 8.1.3, 21.2.8	1908.5, 1909.1
4. Inspection of anchors post-installed in hardened concrete members[b].	—	X	ACI318: 3.8.6,8.1.3,.21.2.8	1909.1
5. Verifying use of required design mix.	—	X	ACI318: Ch.4,5.2-5.4	1904A.2, 1910.2, 1910.3
6. At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	X	—	ASTM C 172 ASTM C 31 ACI318:5.6,5.8	1910.10
7. Inspection of concrete and shotcrete placement for proper application techniques.	X	—	ACI318: 5.9,5.10	1910.6,1910.7, 1910.8
8. Inspection for maintenance of specified curing temperature and techniques.	—	X	ACI318: 5.11-5.13	1910.9
9. Inspection of prestressed concrete: a. Application of prestressing forces. b. Grouting of bonded prestressing tendons in the seismic force-resisting system.	X X	— —	ACI318: 18.20 ACI318: 18.18.4	—
10. Erection of precast concrete members.	—	X	ACI318: Ch.16	1910.9
11. verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	—	X	ACI318:6.2	—
12. Inspect formwork for shape, location and dimensioris of the concrete member being formed.	—	X	ACI318:6.1.1	—

a. Where applicable, see also Section 1705.11, Special inspection for seismic resistance.

b. Specific requirements for special inspection shall be included in the research report for the anchor issued by an approved source in accordance with ACI 355.2 or other qualification procedures. Where specific requirements are not provided, special inspection requirements shall be specified by the registered design professional and shall be approved by the building official prior to the commencement of the work.

SUBMIT TO ENGINEER FOR REVIEW:

1. STRUCTURAL STEEL SHOP DRAWINGS
2. STRUCTURAL STEEL CERTIFICATE
3. WELDING PROCEDURE SPECIFICATION
4. WELDER CERTIFICATE

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REGISTERED PROFESSIONAL ENGINEER
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No. C 48655
Exp. 08/30/16
CIVIL
STATE OF CALIFORNIA

Jerry Yang, P.E.; G.E.

OWNER:
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No.		Date

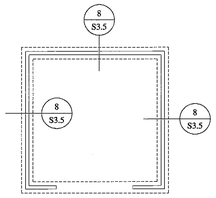
Project Name and Address

NEW MIXED-USE BUILDING
35th St. & School St.
Oakland, CA

Sheet Title

TESTING AND SPECIAL INSPECTION

Project GE2382	Sheet S0.1
Date 3/28/2014	
Scale	



FOUNDATION PLAN

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

PLAN NOTES:

SEE S-0 FOR GENERAL NOTES AND TYPICAL DETAILS.

ALL NEW POSTS SHOWN ON PLAN TO BE 6x6 D.F. NO. 1, U.O.N.

ALL NEW WALL STUDS TO BE 2x6 D.F. NO.2 AT 16" O.C. U.O.N.

SEE GENERAL NOTES FOR ROOF & FLOOR SHEATHING SPECIFICATION AND DETAIL 4/S2.4 FOR NAILING

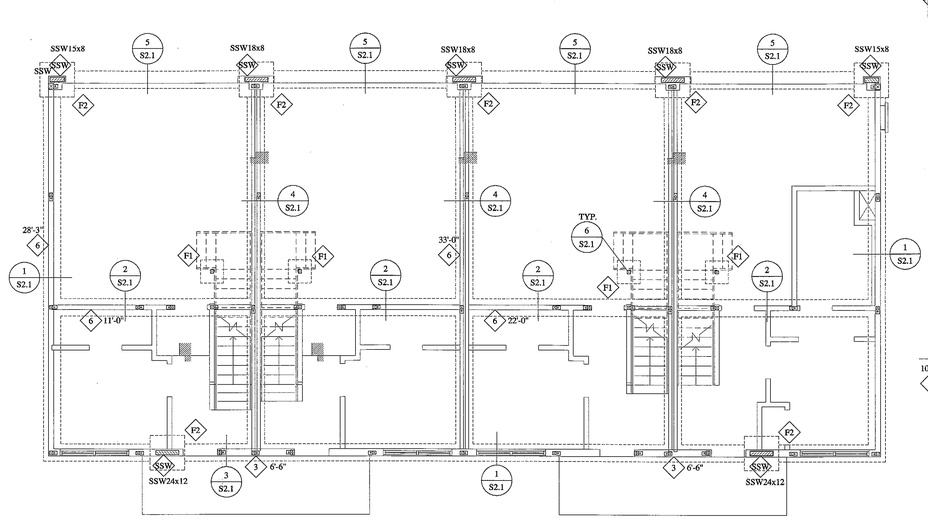
PER DETAIL 3/S2.5 FOR HEADER FRAMING DETAIL AND SIZE. U.O.N.

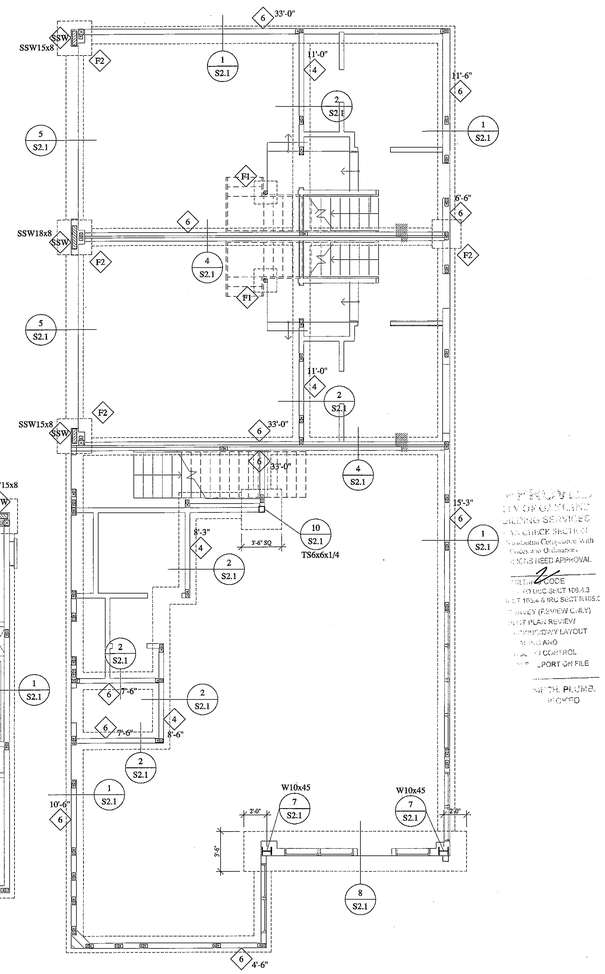
X'-Y" — DENOTES SHEAR WALL AT MAIN FLOOR.
X'-Y" DENOTES THE MINIMUM LENGTH OF THE SHEAR WALL PER S.W. SCHEDULE AT 1/S2.4

DENOTES HOLDOWN ON CONCRETE.
SEE DETAIL 3/S2.4 AND 12/S2.4 FOR HDU4 ON NEW CONCRETE AND SEE DETAIL 12/S2.6 FOR HDU2 ON EXISTING CONCRETE. U.O.N

HOT-DIPPED GALVANIZED STEEL OR STAINLESS STEEL FASTENERS (i.e., NAILS, SCREWS, A.B. HANGERS, ETC.) MUST BE USED WHEN DIRECTLY IN CONTACT WITH PRESSURE-TREATED LUMBERS.

PER DETAIL 8/S2.5 FOR NON STRUCTURAL PARTITION CONNECTION
PER DETAIL 8/S2.6 FOR EXISTING OPENING INFILL.





FOOTING SCHEDULE

MARK	SIZE AND DEPTH	REINFORCING	REFERENCE DETAIL
F1	2'-6"x2'-6"x18" DEEP	4-#4 AT EA. WAY (T&B)	4/S2.2
F2	3'-0"x3'-0"x18" DEEP	4-#5 AT EA. WAY (T&B)	5/S2.2 & 6/S2.2
F2	3'-6"x3'-6"x18" DEEP	5-#5 AT EA. WAY (T&B)	5/S2.2 & 6/S2.2

APPLICANT COPY

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REGISTERED PROFESSIONAL ENGINEER
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No.		Date

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35th St. & School St.
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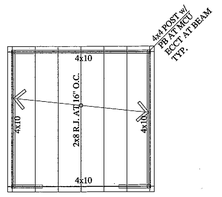
FOUNDATION PLAN

Project GE2382	Sheet S1.1
Date 3/28/2014	
Scale	



SECOND FLOOR FRAMING PLAN

SCALE: $\frac{1}{8}$" = 1'-0"

FRAMING PLAN NOTES:

ALL FLOOR JOIST TO BE 11 $\frac{7}{8}$" TJI/230 AT 16" O.C. U.O.N.

ALL NEW STUD TO BE 2x4 AT 16" O.C. U.O.N.

DENOTES SHEAR WALL AT MAIN FLOOR.
X'-Y" DENOTES THE MINIMUM LENGTH OF THE SHEAR WALL PER S.W. SCHEDULE AT 1/S2.4

X'-Y"

DENOTES WALL BELOW FRAMING

DENOTES WALL ABOVE FRAMING.

CMSTC16 STRAP TIE PER DETAIL 3/S2.4, 7/S2.4 AND 10/S2.4

SEE GENERAL NOTES FOR ROOF & FLOOR SHEATHING SPECIFICATION AND DETAIL 4/S2.4 FOR NAILING

PER DETAIL 3/S2.5 FOR HEADER FRAMING DETAIL AND SIZE. U.O.N.

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www.geotrinity.com
Email: info@geotrinity.com
Tel : 510-383-9950
Fax: 510-383-9957

REGISTERED PROFESSIONAL ENGINEER
JIYH-RONG YANG
No. C 48655
Exp. 08/30/16
CIVIL
STATE OF CALIFORNIA

Jerry Yang, P.E., G.E.

OWNER:
Ms. Mona Hsieh
Green Oak Builders Inc.
888 Brannan St. #101
San Francisco, CA 94103
Tel : 510-928-7888

No.		Date

Project Name and Address

NEW MIXED-USE BUILDING
35th St. & School St.
Oakland, CA

Sheet Title

SECOND FLOOR FRAMING PLAN

Project	GE2382	Sheet
Date	3/28/2014	S1.2
Scale		

THIRD FLOOR FRAMING PLAN

SCALE: $\frac{1}{4}$" = 1'-0"

FRAMING PLAN NOTES:

ALL FLOOR JOIST TO BE 11 $\frac{7}{8}$" TJI/230 AT 16" O.C. U.O.N.

ALL NEW STUD TO BE 2x4 AT 16" O.C. U.O.N.

X'-Y" — DENOTES SHEAR WALL AT MAIN FLOOR.
X'-Y" DENOTES THE MINIMUM LENGTH OF THE SHEAR WALL PER S.W. SCHEDULE AT 1/S2.4

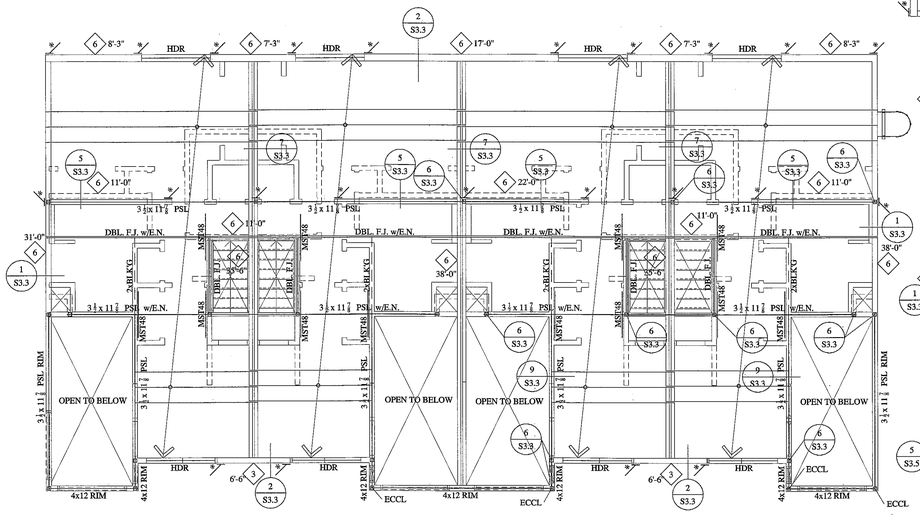
DENOTES WALL BELOW FRAMING

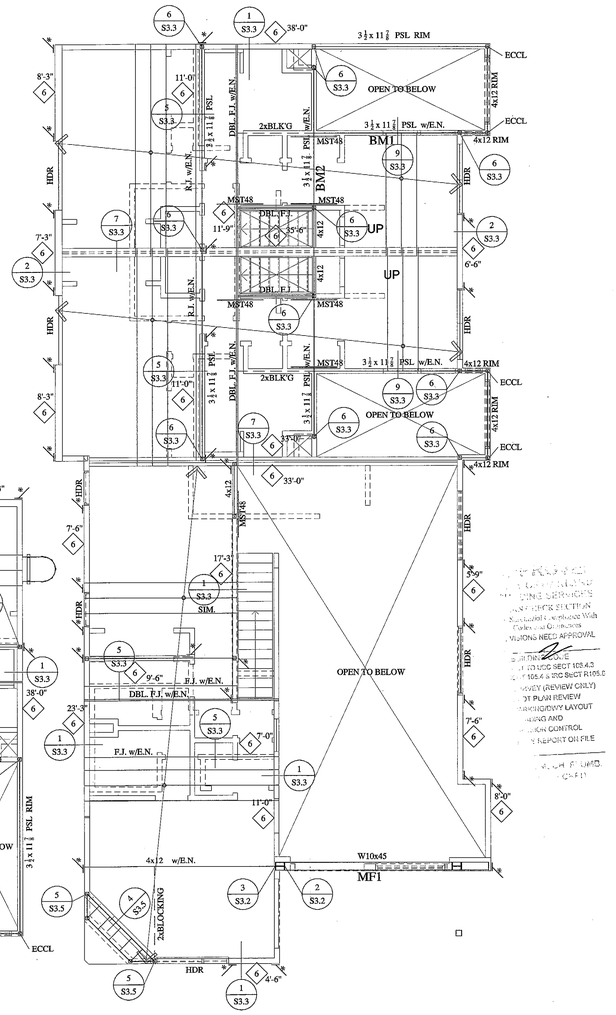
DENOTES WALL ABOVE FRAMING.

*/ — CMSTC16 STRAP TIE PER DETAIL 3/S2.4, 7/S2.4 AND 10/S2.4

SEE GENERAL NOTES FOR ROOF & FLOOR SHEATHING SPECIFICATION AND DETAIL 4/S2.4 FOR NAILING

PER DETAIL 3/S2.5 FOR HEADER FRAMING DETAIL AND SIZE. U.O.N.





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35th St. & School St.
Oakland, CA

Sheet Title

THIRD FLOOR FRAMING PLAN

Project	GE2382	Sheet
Date	3/28/2014	S1.3
Scale		

ROOF FRAMING PLAN

SCALE: $\frac{1}{8}$" = 1'-0"

FRAMING PLAN NOTES:

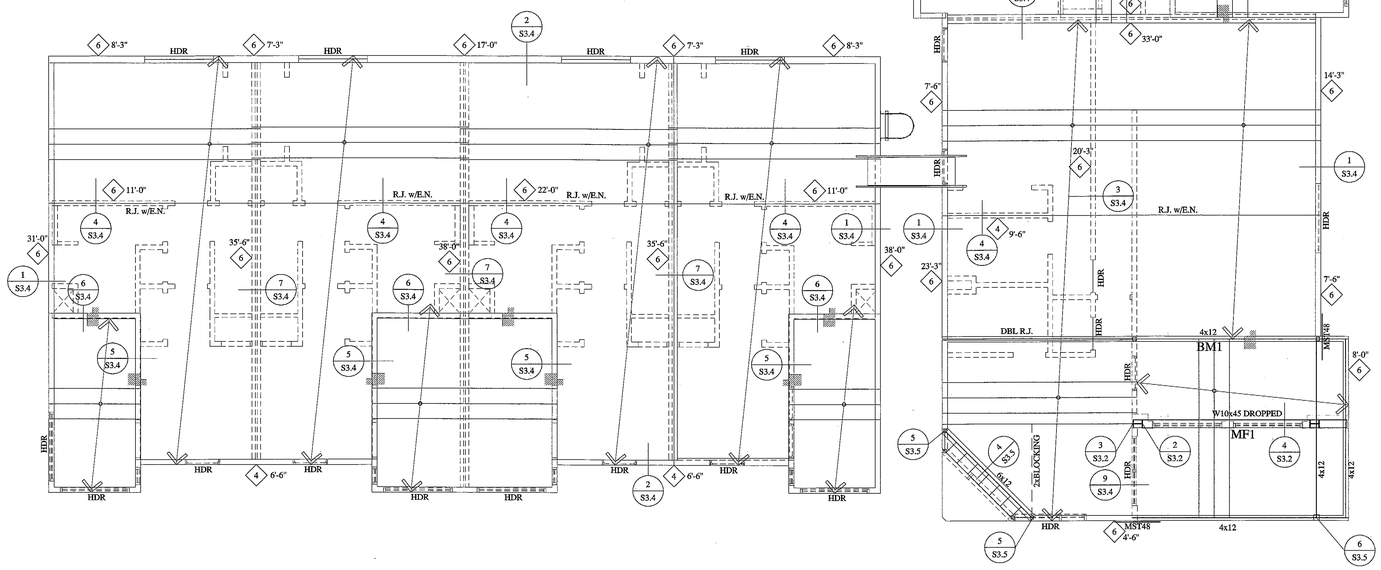
ALL ROOF JOIST TO BE 11 $\frac{7}{8}$" TJI/210 AT 24" O.C.

X'-Y" — DENOTES SHEAR WALL AT MAIN FLOOR. X'-Y" DENOTES THE MINIMUM LENGTH OF THE SHEAR WALL PER S.W. SCHEDULE AT 1/S3.4

DENOTES WALL BELOW FRAMING

SEE GENERAL NOTES FOR ROOF & FLOOR SHEATHING SPECIFICATION AND DETAIL 4/S3.4 FOR NAILING

PER DETAIL 3/S2.5 FOR HEADER FRAMING DETAIL AND SIZE. U.O.N.



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REGISTERED PROFESSIONAL ENGINEER JIAN-RONG YANG No. C 48855 Exp. 06/30/16 CIVIL STATE OF CALIFORNIA

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No.		Date

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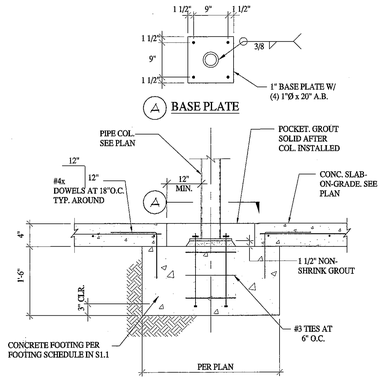
NEW MIXED-USE BUILDING
35th St. & School St.
Oakland, CA

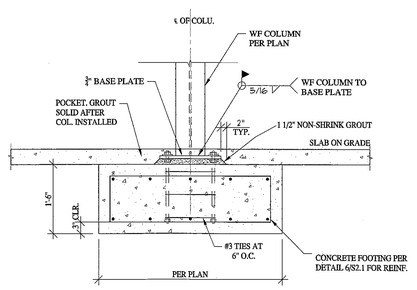
Sheet Title

ROOF FRAMING PLAN

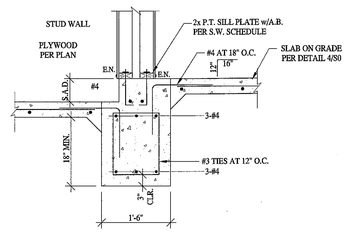
Project	GE2382	Sheet
Date	3/28/2014	S1.4
Scale		



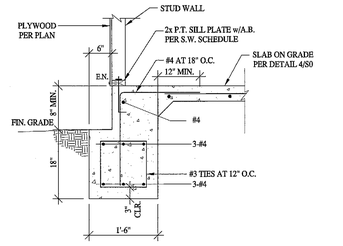
STEEL PIPE COLUMN FOOTING | 10



WF COLUMN ANCHORAGE IN CONCRETE | 7



INTERIOR WALL FOOTING | 4



EXTERIOR WALL FOOTING | 1

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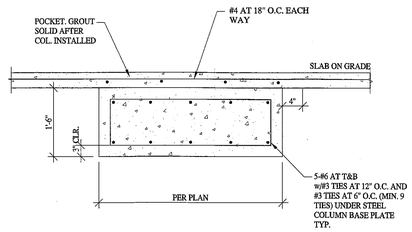
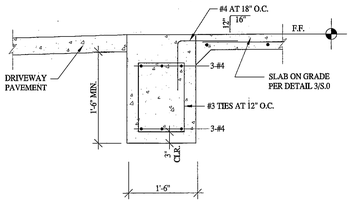
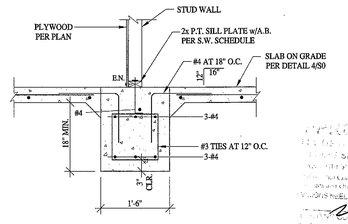


(N) CONCRETE TIE BEAM | 8



FOOTING AT GARAGE ENTRY | 5



INTERIOR WALL FOOTING | 2

APPLICANT COPY

No.	Date

Project Name and Address

NEW MIXED-USE BUILDING
35th St. & School St.
Oakland, CA

Sheet Title

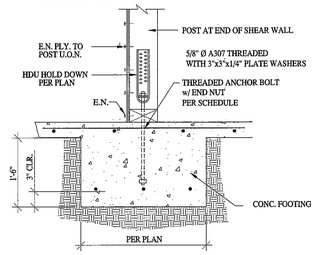
CONCRETE DETAILS

Project GE2382	Sheet S2.1
Date 3/28/2014	
Scale	

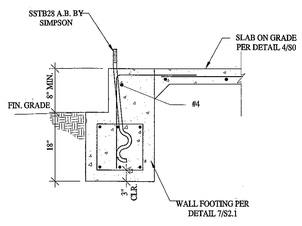
HD TYPE	ANCHOR BOLT	POST SIZE	MIN. EMBED (le)	ALLOW UPLIFT
HDU2	5/8"Ø	2-2x	12"	3075#
HDU4	5/8"Ø	2-2x	12"	4565#
HDU5	5/8"Ø	2-2x	12"	5645#
HDU8	7/8"Ø	3-2x	12"	7870#

NOTES:

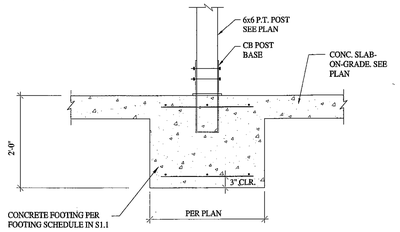
(1) SEE SIMPSON CATALOG FOR ANCHOR BOLTS PLACEMENT IN CONC. WALL.



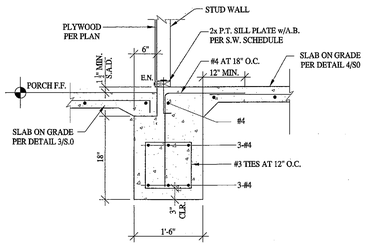
HOLDOWN DETAIL | 12



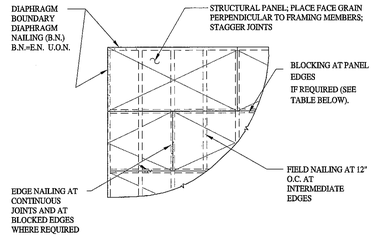
STRONG WALL AT FOOTING | 9



POST FOOTING | 6



EXTERIOR WALL FOOTING AT PORCH | 3

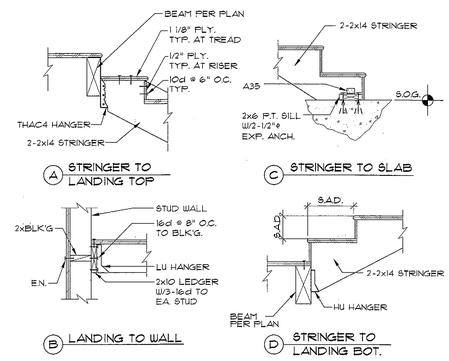


NOTES

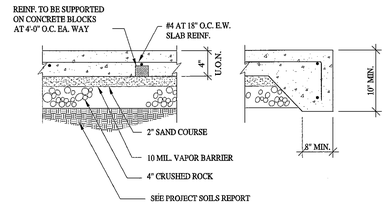
1. SEE GENERAL NOTES, SHEET S.0 FOR PANEL THICKNESS AND GRADE.
2. UNLESS OTHERWISE NOTED, NAILING SHALL BE:

	NAIL SIZE	E.N.	B.N.	BLOCKING REQUIRED
FLOOR	10d	6" O.C.	6" O.C.	YES
ROOFS	8d	6" O.C.	6" O.C.	NO

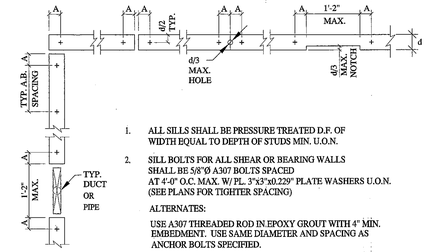
FLOOR/ROOF SHEATHING ATTACHMENT | 10



WOOD STAIR FRAMING | 7



SLAB-ON-GRADE | 4



1. ALL SILLS SHALL BE PRESSURE TREATED D.F. OF WIDTH EQUAL TO DEPTH OF STUDS MIN. U.O.N.
2. SILL BOLTS FOR ALL SHEAR OR BEARING WALLS SHALL BE 5/8"Ø A307 BOLTS SPACED AT 4'-0" O.C. MAX. W/ PL. 3"x3"x0.229" PLATE WASHERS U.O.N. (SEE PLANS FOR TIGHTER SPACING)

   ALTERNATES:

   USE A307 THREADED ROD IN EPOXY GROUT WITH 4" MIN. EMBEDMENT. USE SAME DIAMETER AND SPACING AS ANCHOR BOLTS SPECIFIED.

   SET-XP EPOXY AS MANUFACTURED BY SIMPSON COMPANY OR AN APPROVED EQUAL PRODUCT. FOLLOW MANUFACTURER'S INSTALLATION REQUIREMENTS.
3. SILL BOLTS SHALL HAVE A MINIMUM EMBEDMENT OF 7 INCHES
4. EACH SILL PIECE SHALL HAVE 2 BOLTS MINIMUM. LOCATE BOLTS CLEAR OF STUDS AND POSTS.
5. "A" DIMENSION SHALL BE 5-1/4" MINIMUM AND 1'-0" MAXIMUM A HD TIE-DOWN BOLT CAN SUBSTITUTE FOR AN ANCHOR BOLT IF IT IS INSTALLED WITH AN ADDITIONAL NUT AND PLATE WASHER SNUG TIGHT TO THE MUD SILL.

TYPICAL ANCHOR BOLT REQUIREMENTS | 1

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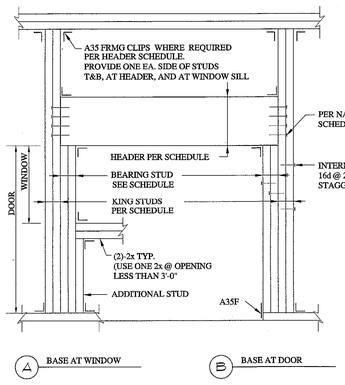
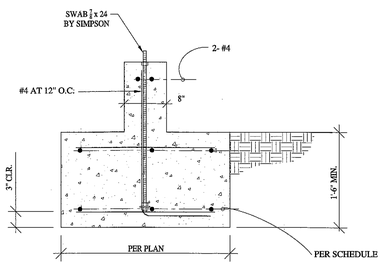


TYPICAL FRAMING OPENINGS IN BEARING WALLS | 11

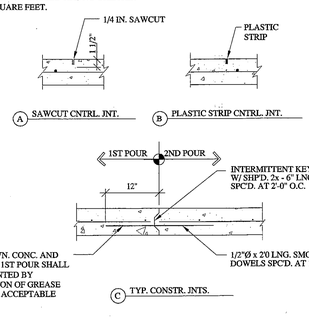


SEE SIMPSON MANUFACTURER FOR SPECIFICATIONS; INSTALLATION; AND MORE DETAILS NOT SHOWN

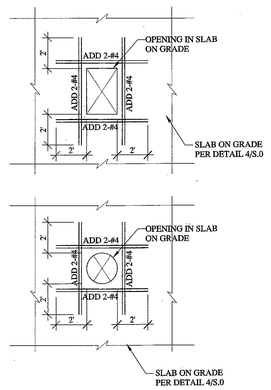
STRONG WALL FOOTING | 9

NOTES:

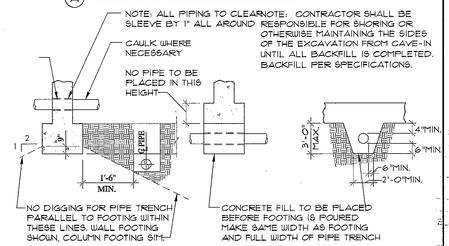
1. AT CONTRACTOR'S OPTION USE EITHER SAWCUT OR PLASTIC STRIP CNTRL JNTS.
2. LOCATE CNTRL. AND CONSTR. JNTS. TO ENCLOSE APPROXIMATELY SQUARE AREAS (WIDTH TO LENGTH RATIOS OF ENCLOSED AREAS SHALL NOT EXCEED 1.33) NO GREATER THAN 400 SQUARE FEET.

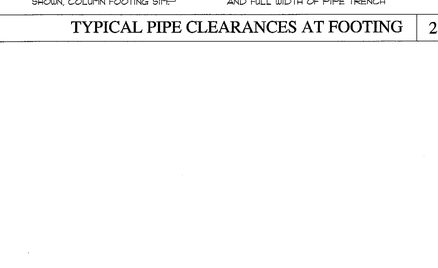


TYP. SLAB ON GRADE CNTRL. /CONSTR. JNTS. | 5



TYPICAL OPENING IN SLAB ON GRADE | 6





TYPICAL PIPE CLEARANCES AT FOOTING | 2

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APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLANS CHECK SECTION
Set Forth Under Conditions Of Building Permit Or Are Specified In Building Ordinances
ARE SUBJECT TO APPROVAL
BY THE BUILDING OFFICIAL
THESE PLANS MUST BE KEPT ON JOB AT ALL TIMES
NO WORK SHALL BE DONE BEYOND THAT AUTHORIZED BY THE BUILDING PERMIT
NO CHANGES SHALL BE MADE IN THE APPROVED PLANS EXCEPT AS AUTHORIZED BY THE BUILDING OFFICIAL
EROSION CONTROL MEASURES INCORPORATED PER ESCP
ELECT, MECH, PLUMB. NOT CHECKED

No.	Date

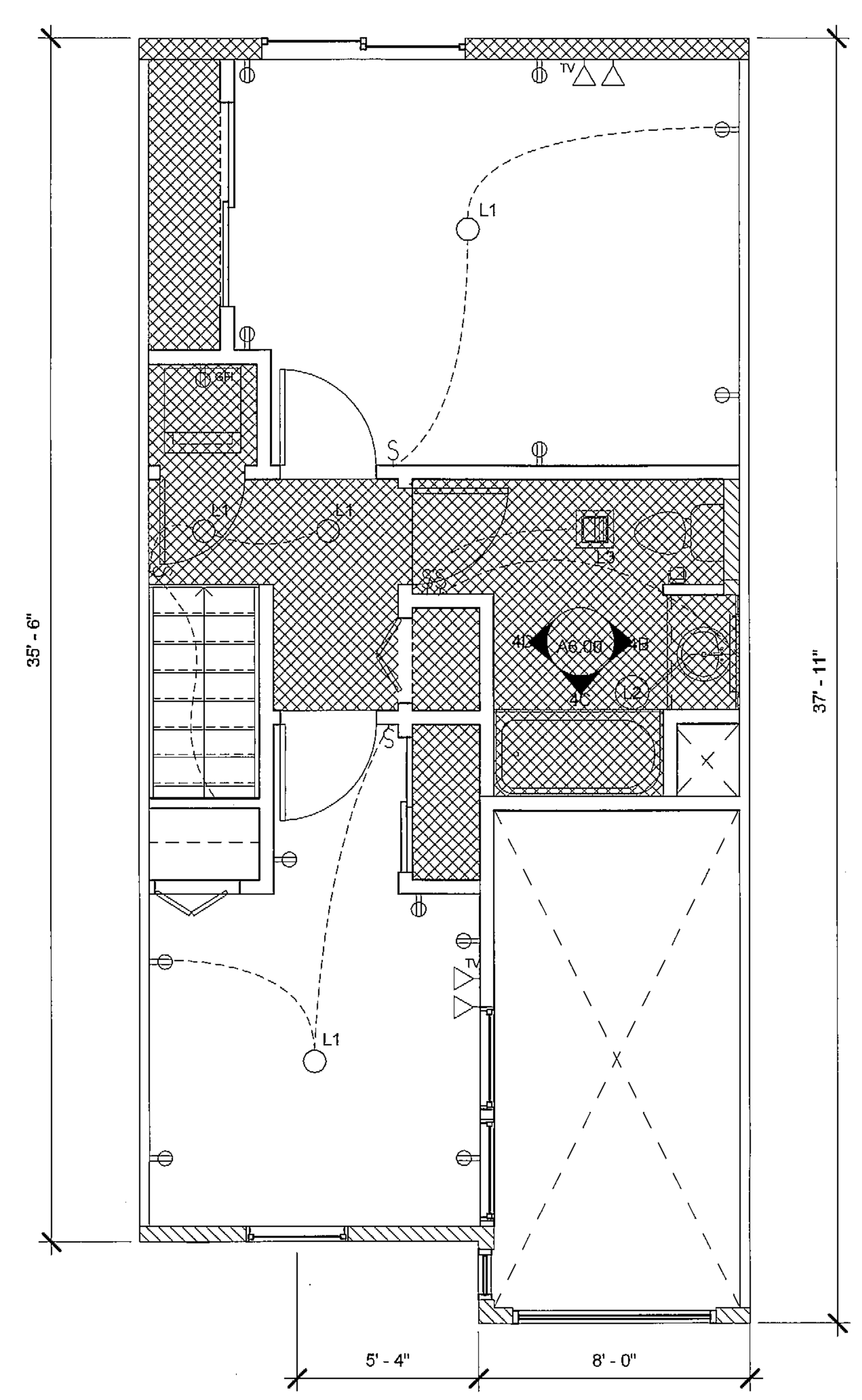
Project Name and Address

NEW MIXED-USE BUILDING
35th St. & School St.
Oakland, CA

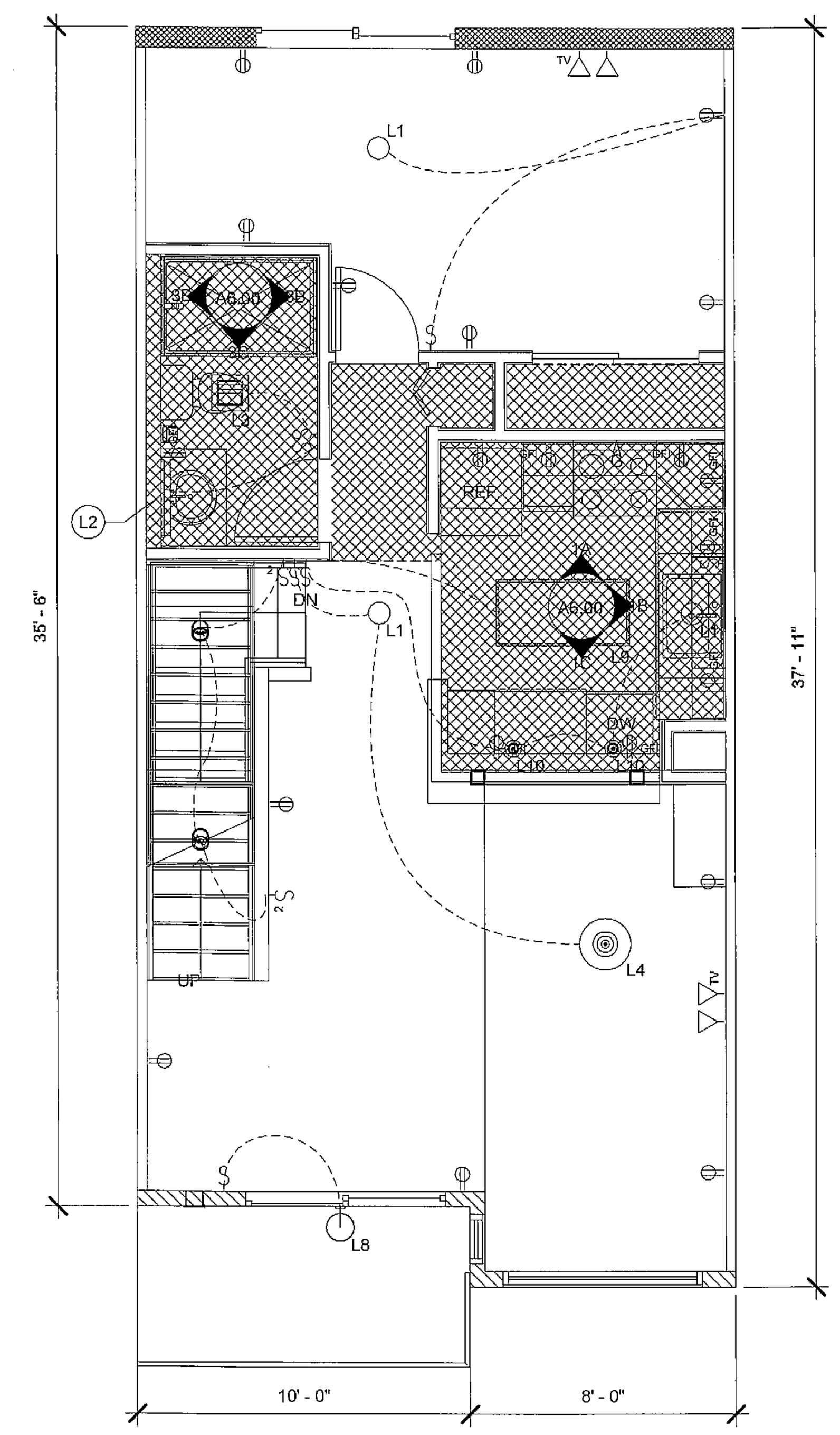
Sheet Title

CONCRETE DETAILS

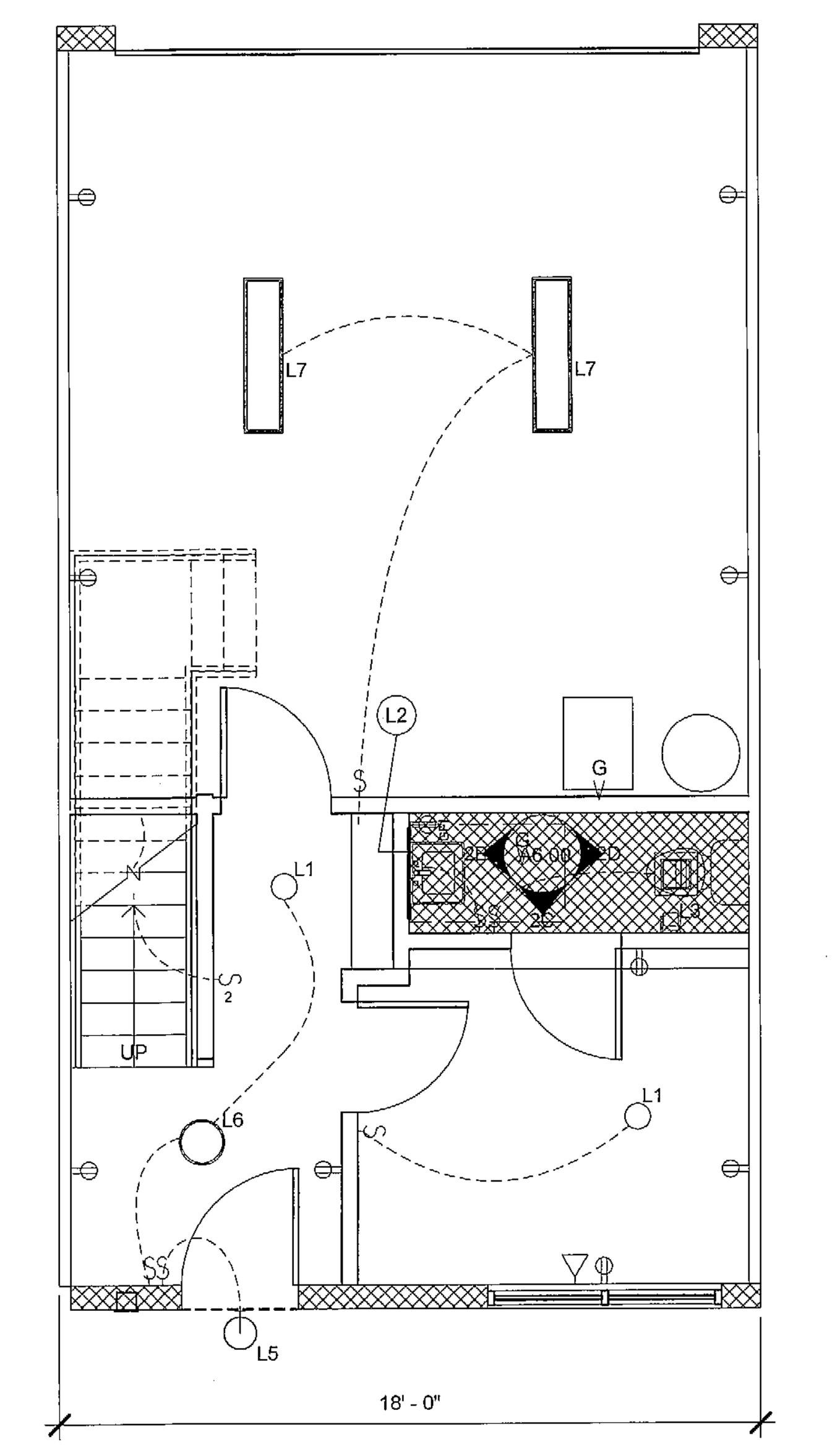
Project	GE2382	Sheet	S2.2
Date	3/28/2014		
Scale			



③ ElecPlan UNIT A 3RD FLOOR
1/4" = 1'-0"



② ElecPlan UNIT A 2ND FLOOR
1/4" = 1'-0"



① ElecPlan UNIT A 1ST FLOOR
1/4" = 1'-0"

L1 - RECESSED
L1A - EXTERIOR RECESSED
L2 - VANITY WALL FIXTURE
L3 - CEILING FAN W/ LIGHT
L4 - DINING ROOM PENDANT
L5 - EXTERIOR LIGHTING - ENTRY
L6 - FLUSH MOUNTED LIGHT
L7 - STRIP FLUORESCENT
L8 - EXTERIOR LIGHTING - DECK
L9 - FLOURESCENT CEILING LIGHT - MINKA ENERGY STAR (17 1/4" x 4 1/2" x 51 1/2")
L10 - KITCHEN ISLAND PENDANT
L11 - CEILING MOUNT

DROPPED CEILING, 8'-0" TYP., U.N.O.
GAS
TV OUTLET
TELEPHONE
DUPLEX OUTLET
GFI DUPLEX OUTLET
LIGHT SWITCH DOUBLE
LIGHT SWITCH SINGLE

ELECTRICAL NOTES:

(A)- WALLS 2 FEET WIDE AND GREATER SHALL HAVE AN ELECTRICAL OUTLET. OUTLETS SHALL BE LOCATED WITH A MAXIMUM SPACING OF 12 FEET AND WITHIN 6 FEET OR ENDS OF WALLS AND OPENINGS.

(B)- LOCATE RECEPTACLE OUTLETS IN KITCHEN AT EVERY COUNTER SPACE WIDER THAN 12 INCHES SO THAT NO POINT IS MORE THAN 24 INCHES FROM AN OUTLET.

(C)- ALL EXTERIOR LIGHTING MUST BE HIGH EFFICACY PER CEC SECTION 150. AS AN EXCEPTION THE EXTERIOR LIGHTS MAY BE INCANDESCENT LIGHTING CONTROLLED BY A MOTION SENSOR, EXCEPTION 1, SECTION 150(K) 6.

(D)- ROOMS WITH PERMANENT LIGHTING MUST HAVE HIGH EFFICACY OR NON-HIGH EFFICACY LIGHTING SHALL BE CONTROLLED BY A MANUAL ON MOTION SENSOR OR DIMMER SWITCH CONTROL PER CEC SECTION 150(K)4. EXCEPTIONS (1), (2) & (3)

(E)-ALL OTHER INTERIOR ROOMS- ALTERNATE OPTION: MANUAL-ON OCCUPANT SENSOR, OR DIMMER

(F)- BATHROOM, LAUNDRY,UTILITY- ALTERNATE OPTION: MANUAL-ON OCCUPANT SENSOR. AT LEAST ONE RECEPTACLE OUTLET, IN ADDITION TO ANY PROVIDED FOR LAUNDRY EQUIPMENT, SHALL BE INSTALLED PER 2004 C.E.C. ARTICLE 210-52 f.

(G)- KITCHEN-ALTERNATE OPTION: UP TO 50% OF RELAMPING RATED WATTAGE CAN BE OTHER THAN HIGH EFFICACY

(H)- ALL CLOSETS EXCEEDING 70 SQUARE FEET, MUST HAVE HIGH EFFICACY LIGHTING.

(I)- ALL LUMINARIES INSTALLED IN WET OR DAMP LOCATIONS MUST BE SUITABLE FOR WET LOCATIONS.

(J)- SWITCH ALL HIGH EFFICACY LIGHTING SEPARATE FROM LOW EFFICACY LIGHTING.

(K)- ELECTRONIC BALLASTS FOR ALL FLUORESCENT LAMPS RATED 13 WATTS OR GREATER.

(L)- PROVIDE DEDICATED CIRCUITS AT ALL REQD LPG SENSORS

(M)-RECESSED LUMINARIES IN ALL INSULATED CEILINGS APPROVED FOR ZERO-CLEARANCE INSULATION COVER (IC) AND CERTIFIED AIRTIGHT.

(N)- ALL BRANCH CIRCUITS THAT SUPPLY RECEPTACLE OUTLETS IN BEDROOMS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER(S) LISTED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT, INCLUDING LIGHTING OUTLETS AND SMOKE DETECTORS.

(O) USE 110V SMOKE DETECTORS W/ BATTERY BACKUP (WHICH ARE AUDIBLE IN ALL SLEEPING AREAS) AT ALL BEDROOMS, CENTRALLY LOCATED IN CORRIDOR AND HALLWAYS LEADING TO BEDROOMS, ABOVE TOPS OF STAIRS, AND AT LEAST ONE AT EVERY LEVEL, INCLUDING BASEMENTS.

(P)- PROVIDE TWO OR MORE 20-AMPERE SMALL APPLIANCE BRANCH CIRCUITS EVENLY PROPORTIONED IN THE KITCHEN, PANTRY, BREAKFAST ROOM, DINING ROOM, OR SIMILAR AREAS, SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS.

(Q) RECEPTACLE OUTLETS IN BATHROOMS, GARAGES, OUTDOORS AND CRAWL SPACES SHALL HAVE GFCI PROTECTION FOR PERSONNEL, IN ACCORDANCE WITH CEC 210.8 A

ARCHITECTURE

PHILIP BANTA & ASSOCIATES
6050 HOLLIS STREET
EMERYVILLE, CALIFORNIA 94608
TEL | 510.654.3255
FAX | 510.654.3259
www. | bantadesign.com

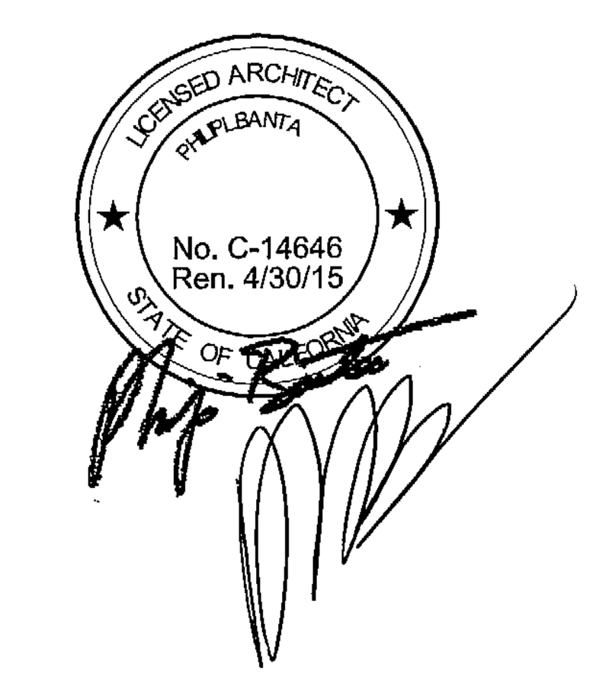
REVISIONS: △ ISSUES: ○

No.	Description	Date
1 (revision)	1ST PLAN CHECK REVIEW	01/14/14
1 (issue)	BUILDING PERMIT	12/12/13

PROJECT:

35th @ School

Oakland, CA 94619



SHEET DESCRIPTION:

UNIT A RCP/ELECTRICAL PLANS

PROJECT NUMBER:	0714
DATE:	01/14/14
DRAWN BY:	JH/JY
CHECKED BY:	PB
SCALE:	As indicated

A3.00

12/7/2013 4:01:05 PM

SHEAR WALL SCHEDULE

SHEAR WALL SYMBOL	SW 6	SW 4	SW 3	SW 2	SW 4 4	SW 3 3	SW 2 2
PLYWOOD THICKNESS GRADE NO. OF SIDES	½" STRUCT 1	½" STRUCT 1	½" STRUCT 1	½" STRUCT 1	½" STRUCT 1 TWO SIDES	½" STRUCT 1 TWO SIDES	½" STRUCT 1 TWO SIDES
PANEL EDGE NAILING	10d @ 6"	10d @ 4"	10d @ 3"	10d @ 2"	10d @ 4"	10d @ 3"	10d @ 2"
FIELD NAILING	10d @ 12"	10d @ 12"	10d @ 12"	10d @ 12"	10d @ 12"	10d @ 12"	10d @ 12"
SILL SCREWS	SDS ¼x4½"@12"	SDS ¼x4½"@8"	SDS ¼x4½"@6"	SDS ¼x4½"@5"	SDS ¼x4½"@4"	SDS ¼x4½"@3"	SDS ¼x4½"@2"
FRAMING ANGLE	A35 @ 16"	A35 @ 8"	A35 @ 8"	A35 @ 4"	A35 @ 4"	LTP4 @ 4"	LTP4 @ 3"
ALTERNATE FRAMING ANGLE (FLAT)	LTP4 @ 16"	LTP4 @ 8"	LTP4 @ 8"	LTP4 @ 6"	LTP4 @ 4"	LTP4 @ 4"	LTP4 @ 3"
ANCHOR BOLTS	⅝" Ø@32"	⅝" Ø @24"	⅝" Ø @16"	⅝" Ø @12"	⅝" Ø @12"	⅝" Ø @8"	⅝" Ø@8"
SHEAR CAPACITY	340 PLF	510 PLF	665 PLF	870 PLF	1020 PLF	1330 PLF	1740 PLF

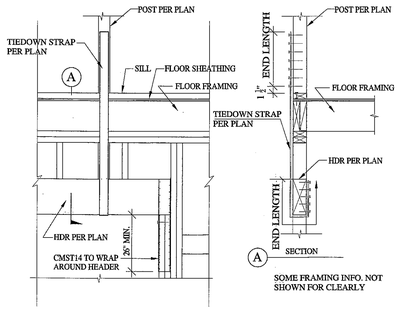
SW SIMPSON STRONG-WALL SEE SIMPSON MANUFACTURER FOR SPECIFICATIONS

ALL FRAMED EXTERIOR WALL AND ELEVATOR WALL SHALL BE SHEATHED WITH SHEAR WALL TYPE 6 U.O.N.

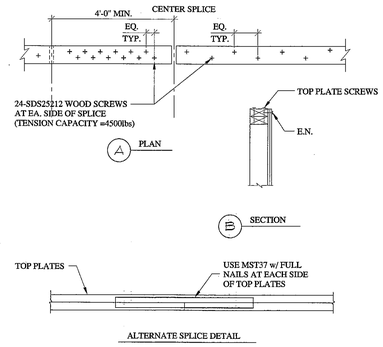
FOOTNOTES:

1. NAILS SHALL BE COMMON WIRE.
2. 3x FRAMING SHALL BE USED AT ALL ABUTTING PANEL EDGES.
3. ANCHORS BOLTS SHALL BE INSTALLED WITH 3"x3"x$\frac{5}{16}$" PLATE WASHERS.
4. SILLS w/ LAG SCREWS OR WITH NAILS SPACING LESS THAN OR EQUAL TO 3" SHALL BE NAILED TO 3x BLOCKING U.O.N.
5. WHERE 3x BOTTOM PLATES ARE REQUIRED IN NOTE 3, SILL SCREWA SHALL BE SDS ¼ x6.

SHEAR WALL SCHEDULE | 7



TYPICAL POSTS ON HEADER | 4



ALTERNATE SPLICE DETAIL

TOP PLATE SPLICE AT SHEAR WALLS, TYP. | 1

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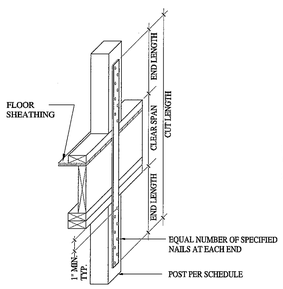
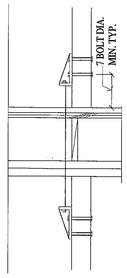
REGISTERED PROFESSIONAL ENGINEER
JERRONG YANG
No. C 48655
Exp. 06/30/16
CIVIL
STATE OF CALIFORNIA

Jerry Yang, P.E., G.E.

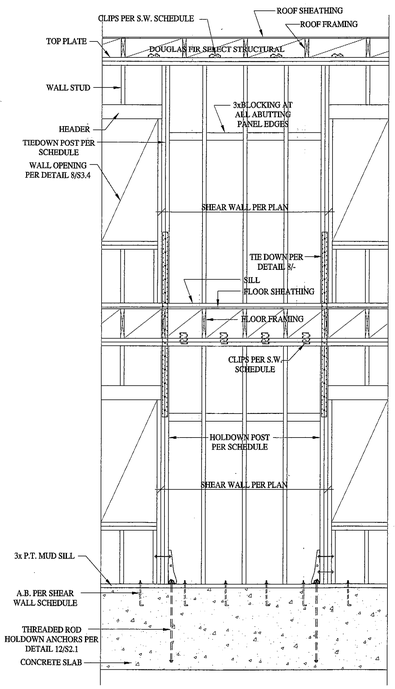


TIEDOWN SCHEDULE					
MARK PER	STRAP TYPE	END LENGTH MINIMUM	NAILING REQ'D AT EACH END LENGTH	ALLOW UPLIFT	POST SIZE (MIN)	HOLDOWN OPTION
*	CMST14	26"	28-16d	6490#	2-2x	HDU8
	CMST12	33"	37-16d	9200#	3-2x	HDU11

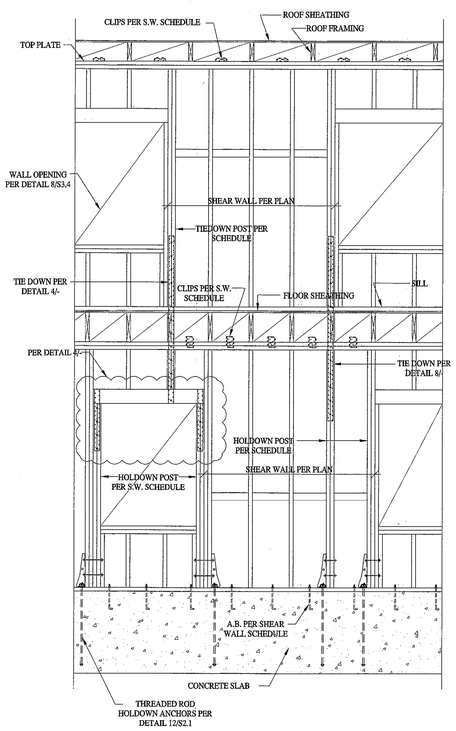
NOTES:
1. STRAP MAY BE INSTALLED OVER PLYWOOD.
2. EDGE NAIL PLYWOOD TO STRAP POST.



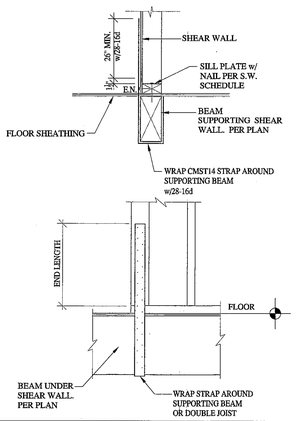
VERTICAL TIEDOWN AT FLOOR | 8

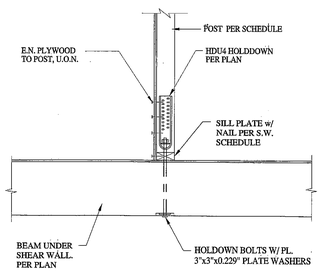


STACKED SHEARWALL



OFFSET SHEARWALL





FLOOR JOIST NOT SHOWN FOR CLARITY

STRAP TIEDOWN/HOLDOWN ON WOOD BEAM | 9

TYPICAL SHEARWALL SCHEMATIC | 3

OWNER:
Ms. Mona Hsieh
Green Oak Builders Inc.
888 Brannan St. #101
San Francisco, CA 94103
Tel : 510-928-7888

APPROVED
CITY OF OAKLAND
BUILDING SERVICES
THIS PLAN SHALL CONFORM WITH
ALL APPLICABLE LAWS
REGULATIONS AT FROM
BY
SEE STRUCT. MECH. PLMG.
NOT CHECKED

No.	Date

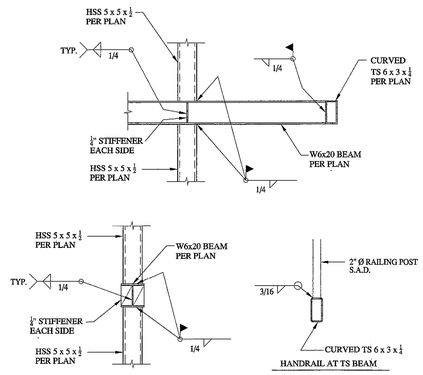
Project Name and Address

NEW MIXED-USE BUILDING
35th St. & School St.
Oakland, CA

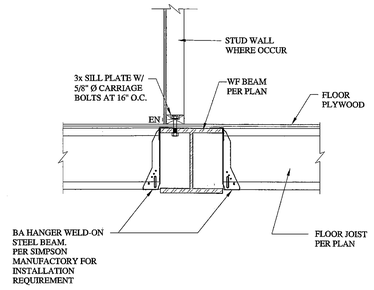
Sheet Title

FRAMING DETAILS

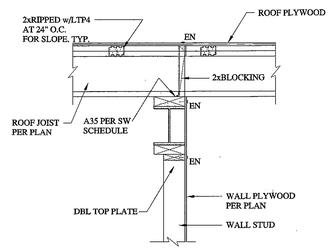
Project	GE2382	Sheet	S3.1
Date	3/28/2014		
Scale			



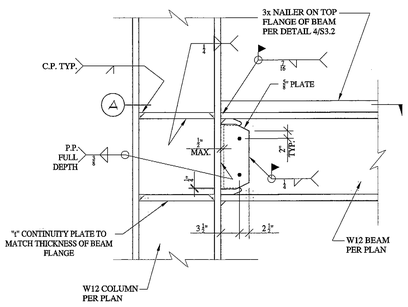
HSS COLUMN ON WF STEEL BEAM | 10

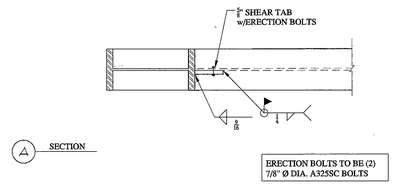


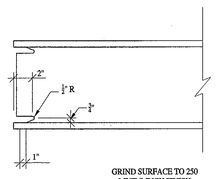
FLOOR JOIST AT WF BEAM | 7



ROOF JOIST PERP. TO INTERIOR WALL | 4







MOMENT CONNECTION | 2

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REGISTERED PROFESSIONAL ENGINEER SIYHRONG YANG No. C 48855 Exp. 06/30/16 CIVIL STATE OF CALIFORNIA
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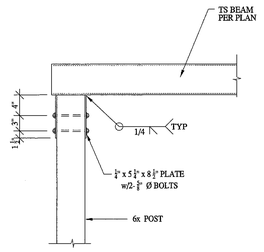
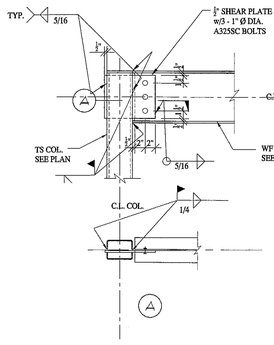
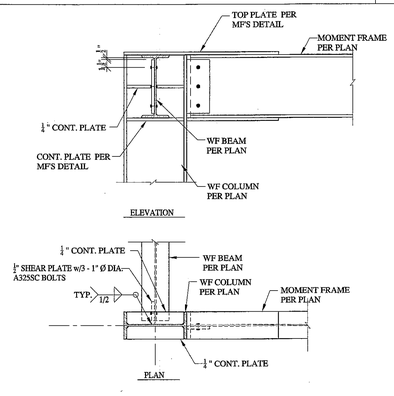


TS BEAM TO POST CONNECTION | 11

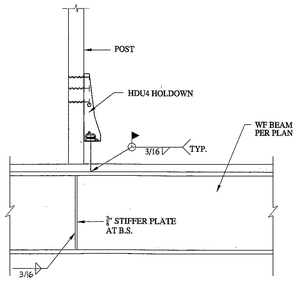


WF TO TS COLUMN CONNECTION | 8

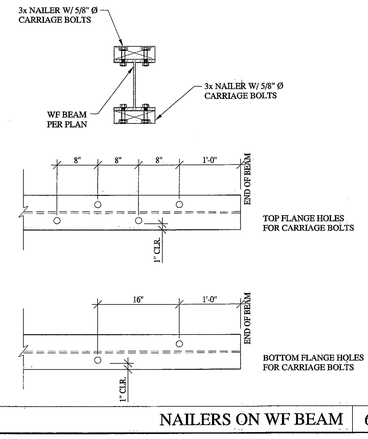


WF BEAMS AT WF COLUMN | 5

BRACED FRAME CONNECTION | 3



HOLDOWN ON WF BEAM | 9



NAILERS ON WF BEAM | 6

BRACED FRAME CONNECTION | 3

HOLDOWN ON WF BEAM | 9

NAILERS ON WF BEAM | 6

TS BEAM TO POST CONNECTION | 11

WF TO TS COLUMN CONNECTION | 8

WF BEAMS AT WF COLUMN | 5

MOMENT CONNECTION | 2

No.	Date

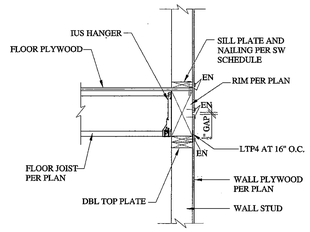
Project Name and Address

NEW MIXED-USE BUILDING
35th St. & School St.
Oakland, CA

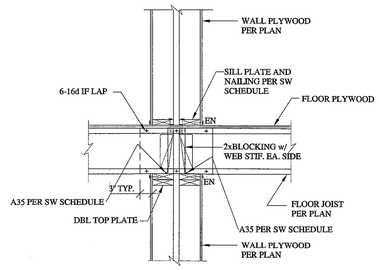
Sheet Title

FRAMING DETAILS

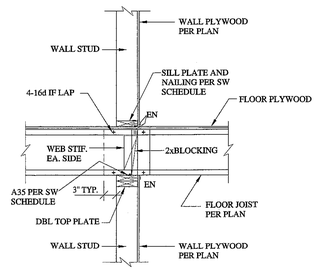
Project	Sheet
GE2382	S3.2
Date: 3/28/2014	
Scale:	



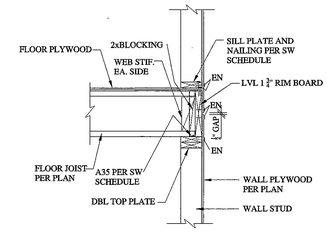
FLOOR JOIST PERP. TO EXTERIOR WALL | 10



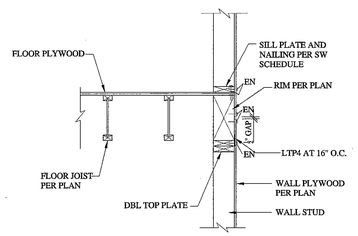
FLOOR JOIST PERP. TO INTERIOR WALL | 7



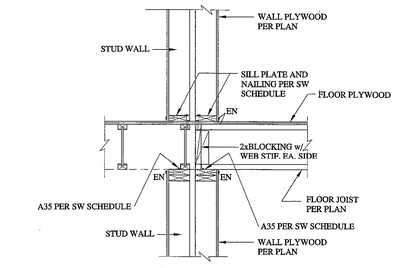
FLOOR JOIST PERP. TO INTERIOR WALL | 4



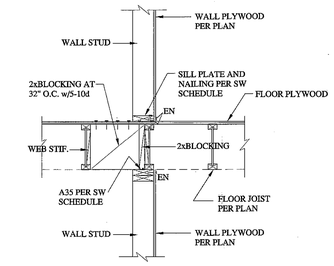
FLOOR JOIST PERP. TO EXTERIOR WALL | 1



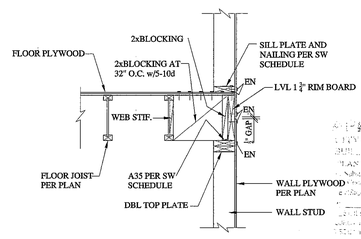
FLOOR JOIST PARA. TO EXTERIOR WALL | 11



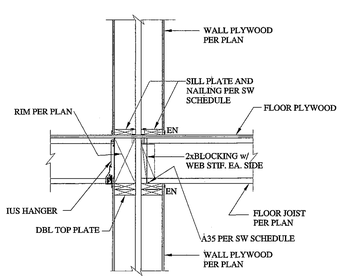
FLOOR JOIST AT INTERIOR WALL | 8



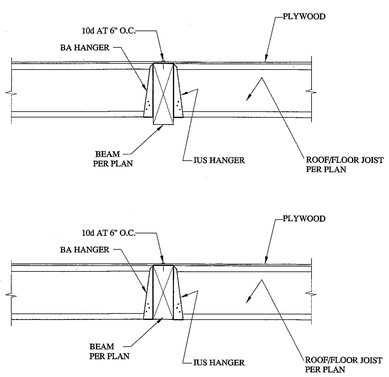
FLOOR JOIST PARA. TO INTERIOR WALL | 5



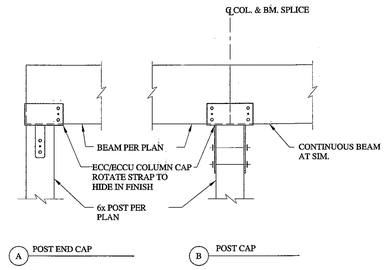
FLOOR JOIST PARA. TO EXTERIOR WALL | 2



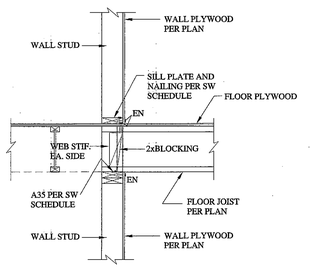
FLOOR JOIST PERP. TO INTERIOR WALL | 12



JOIST AT WOOD BEAM | 9



BEAM TO POST CONNECTION | 6



FLOOR JOIST AT INTERIOR WALL | 3

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REGISTERED PROFESSIONAL ENGINEER JIN-RONG YANG No. C 48655 Exp. 06/30/16 CIVIL STATE OF CALIFORNIA

Jerry Yang, P.E., G.E.

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APPROVED
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CITY OF OAKLAND
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Approved as Noted
BUILDING CODE
SECT. 106.4.3 & 106.4.3.1
SIGNATURE REQUIRED
PLOT PLAN REVIEW
ENVIRONMENTAL
GRADING AND
EROSION CONTROL
SOILS REPORT ON FILE
CT. MECH. PLUMB.
NOT CHECKED

APPLICANT COPY

No.		Date

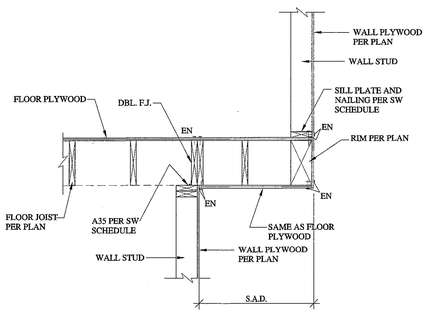
Project Name and Address

NEW MIXED-USE BUILDING
35th St. & School St.
Oakland, CA

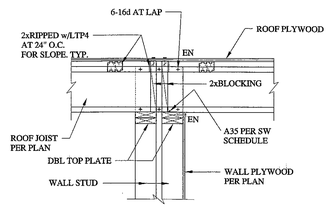
Sheet Title

FRAMING DETAILS

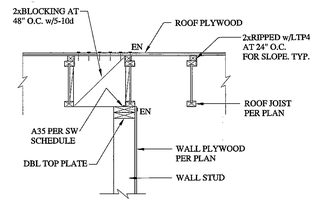
Project GE2382	Sheet S3.3
Date 3/28/2014	
Scale	



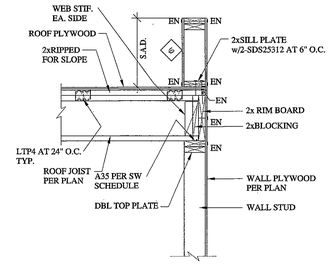
CANTILEVERED FLOOR | 10



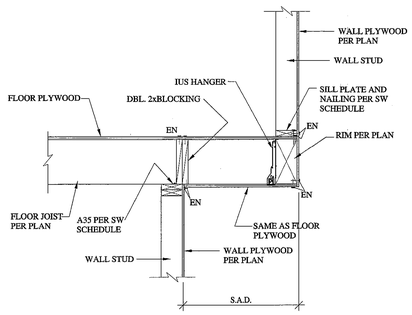
ROOF JOIST PERP. TO INTERIOR WALL | 7



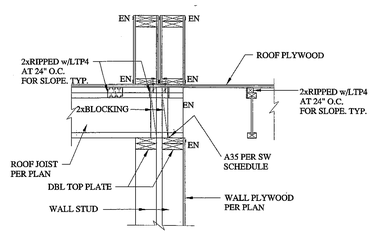
ROOF JOIST PARA. TO INTERIOR WALL | 4



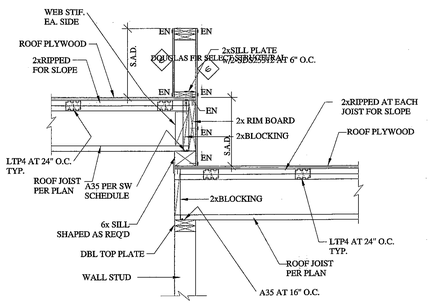
ROOF JOIST PERP. TO EXTERIOR WALL | 1



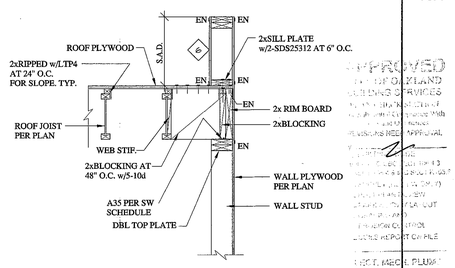
CANTILEVERED FLOOR | 11



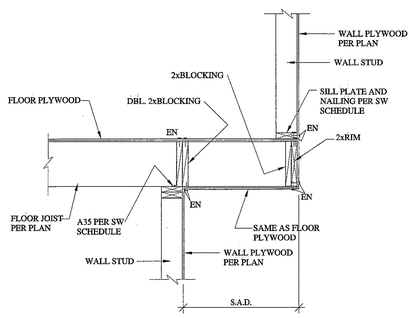
ROOF JOIST PERP. TO INTERIOR WALL | 8



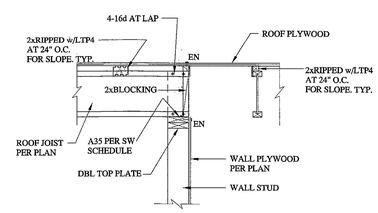
ROOF JOIST PERP. TO EXTERIOR WALL | 5



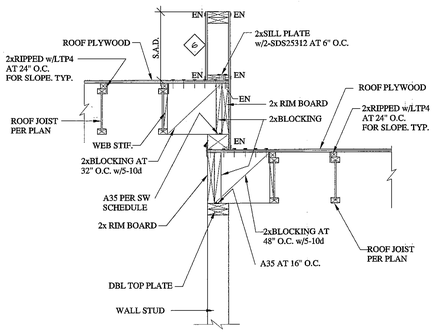
ROOF JOIST PARA. TO EXTERIOR WALL | 2



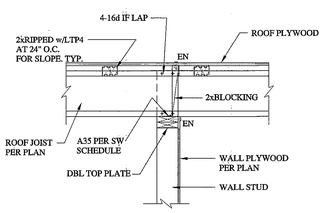
CANTILEVERED FLOOR | 12



ROOF JOIST AT INTERIOR WALL | 9



ROOF JOIST PARA. TO EXTERIOR WALL | 6



ROOF JOIST PERP. TO INTERIOR WALL | 3

GTC GeoTrinity Consultants, Inc.
GeoTrinity Consultants, Inc.
7770 Pardee Lane, Suite 101
Oakland, CA 94621
www.geotrinity.com
Email: info@geotrinity.com
Tel : 510-383-9950
Fax: 510-383-9957

REGISTERED PROFESSIONAL ENGINEER
JIN-RONG YANG
No. C 48655
Exp. 08/30/16
CIVIL
STATE OF CALIFORNIA

Jerry Yang, P.E., G.E.

OWNER:
Ms. Mona Hsieh
Green Oak Builders Inc.
888 Brannan St. #101
San Francisco, CA 94103
Tel : 510-928-7888

APPROVED
CITY OF OAKLAND
BUILDING SERVICES
PLANS MUST BE KEPT ON JOB
BUILDING INSPECTION
CORRECTIONS NEED APPROVAL
FIELD INSPECTION REQUIRED
SPECIAL INSPECTION REPORT ON FILE
ELECT. MECH. PLUMB.
NOT CHECKED

No.		Date

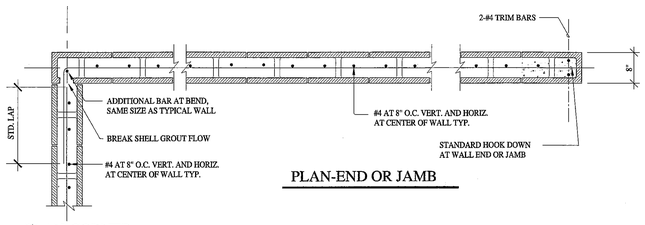
Project Name and Address

NEW MIXED-USE BUILDING
35th St. & School St.
Oakland, CA

Sheet Title

FRAMING DETAILS

Project	GE2382	Sheet
Date	3/28/2014	S3.4
Scale		



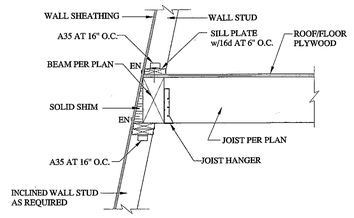
PLAN-END OR JAMB

PLAN-CORNER

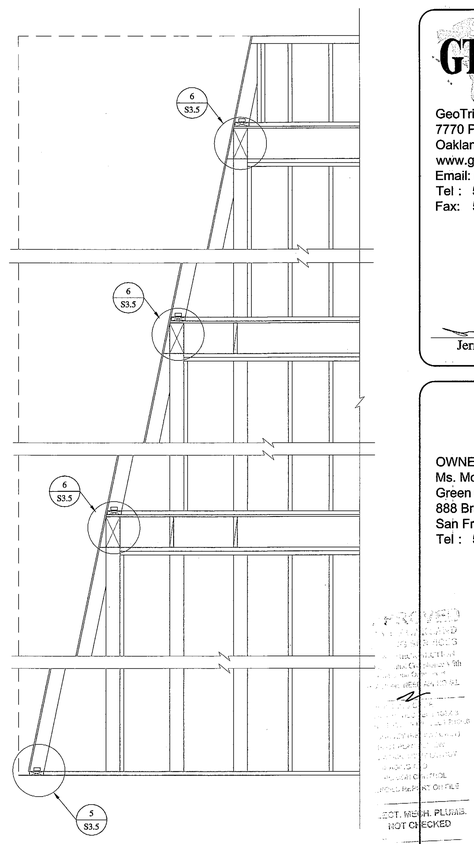
NOTES:

1. UNITS: MEDIUMWEIGHT BLOCKS CONFORMING TO ASTM C90, GRADE N, TYPE 1, UNIT STRENGTH = 1900 psi
2. BARS: ASTM A615, GRADE 60. ALL WALLS TO BE REINFORCED.
3. WELDED BARS: ASTM A706, GRADE 60
4. MORTAR: ASTM C270, TYPE S. fc'= 1900 psi
5. GROUT: COMPRESSIVE STRENGTH OF 1900 PSI AT 28 DAYS. ALL CELLS SHALL BE FULLY GROUTED.
6. REINFORCING STEEL: ASTM A615 GRADE 60
7. ALL CELLS SHALL BE GROUTED SOLID.
8. PROVIDE ADDITIONAL #4 VERTICAL BAR AT CORNERS AND WALL INTERSECTIONS.
9. HORIZ. REINF. AT WALL ENDS OR WHICH DO NOT CONTINUE INTO INTERSECTING WALLS SHALL TERMINATE WITH STD. 90 HOOK TURNED DOWN
10. STANDARD LAP SHALL BE 48 BAR DIAMETERS.

TYP. CMU WALL REINF. | 7

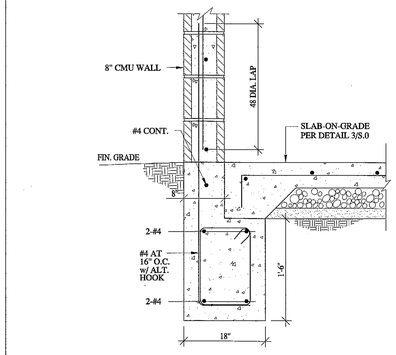


INCLINED WALL FRAMING | 4

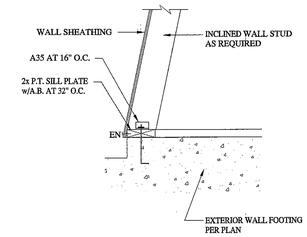


INCLINED WALL SCHEMATIC | 2

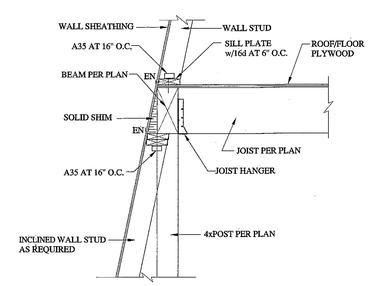
11



CMU WALL FOUNDATION | 8



INCLINED WALL AT CONCRETE FOOTING | 5



12

9

INCLINED WALL FRAMING | 6

3

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REGISTERED PROFESSIONAL ENGINEER JIN-RONG YANG No. C 48655 Exp. 08/30/16 CIVIL STATE OF CALIFORNIA

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No.		Date

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NEW MIXED-USE BUILDING
35th St. & School St.
Oakland, CA

Sheet Title

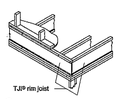
FRAMING DETAILS

Project	GE2382	Sheet	S3.5
Date	3/28/2014		
Scale			

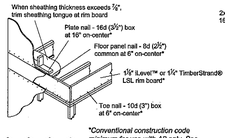
THINK SAFETY-READ INSTALLATION INFORMATION BEFORE PROCEEDING

JOIST DETAILS

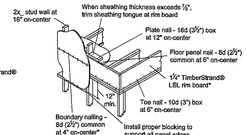
A1



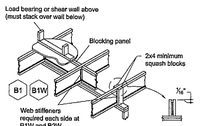
A2 ***Must have 9¼" minimum joist bearing at ends***



A3 A3.1 A3.2 A3.3 *Conventional construction code minimum for use with A3 only. See iLevel Framer's Pocket Guide for A3.1-A3.3 installation specifications.

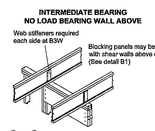


A3.4 ***See iLevel Framer's Pocket Guide for additional Installation specifications.***

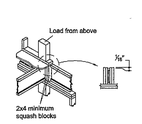


B1 B1W B2 B2W

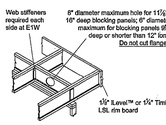
INTERMEDIATE BEARING NO LOAD BEARING WALL ABOVE



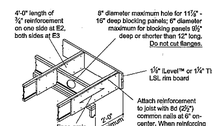
B3 B3W



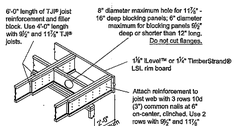
CS ***Use 2x4 minimum squash blocks to transfer load around TJIs joist***



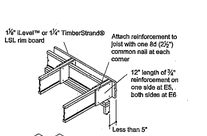
E1 E1W



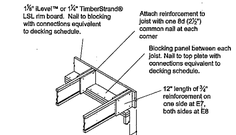
E2 E3



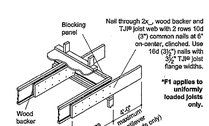
E4 ***Not for use with 3½" TJI® joist flange widths***



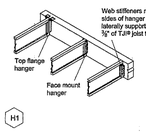
E5 E6



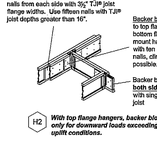
E7 E8



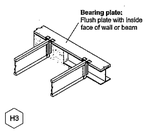
F1 ****F1 applies to uniformly loaded joists only.***



H1

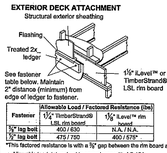


H2 ***With top flange hangers, backer block required only for downward loads exceeding 350 lbs or for uplift conditions.***



H3

EXTERIOR DECK ATTACHMENT

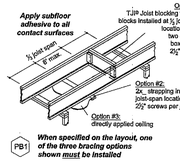


Fastener	Allowable Load / Factored Resistance (Use)	
	1⅛" TimberStrand® LSL rim board	1¼" iLevel™ rim board
½" lag bolt	400 / 630	N.A. / N.A.
⅝" lag bolt	479 / 750	400 / 575*

*This factored resistance is with a ⅝" gap between the rim board and deck ledger

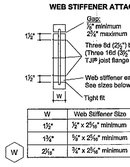
- Allowable load determined in accordance with AC 124.
- Corrosion-resistant fasteners required for wet-service applications.

LA



PB1 ***When specified on the layout, one of the three bracing options shown must be installed***

WEB STIFFENER ATTACHMENT



W	Web Stiffener Size	W	Web Stiffener Size
1½"	½" x 2½" minimum	2½"	½" x 2½" minimum
1¾"	½" x 2½" minimum	2½"	1" x 2½" minimum
2½"	½" x 2½" minimum	3½"	2x4

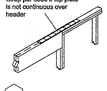
W

BEAM and COLUMN DETAILS

BEARING AT WALL

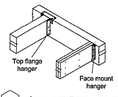
L1

BEARING FOR DOOR OR WINDOW HEADER



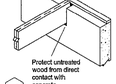
L2

BEAM TO BEAM CONNECTION



L3 ***See current iLevel literature for framing connectors***

BEARING AT CONCRETE WALL



L4

CONNECTION OF MULTIPLE PIECES OF TOP-LOADED BEAMS (1)

1½" Width Pieces:
- Minimum of 3 rows 10d (3" x 0.128") nails at 12" o.c.
- Minimum of 4 rows 10d (3" x 0.128") nails at 12" o.c. for 14" and deeper beams
- If using 12d (3½") or larger nails, the number of nailing rows may be reduced by one.

3½" Width Pieces:
- Minimum of 2 rows ½" bolts at 24" o.c. staggered

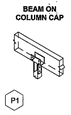
(1) Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams.

Additional nailing or bolting may be required with side-loaded multiple-member beams. Refer to current product literature.

BEARING AT COLUMN


Verify column capacity and beam bearing length. See current iLevel literature.
L5

BEAM ON COLUMN CAP


P1

COLUMN BASE

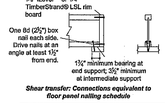

P2

ELEVATED COLUMN BASE

P3

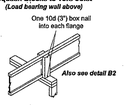
TJI® JOIST NAILING REQUIREMENTS at BEARING

TJI® Joist to Bearing Plate



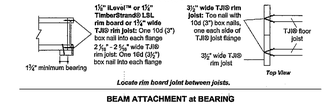
Shear transfer: Connections equivalent to floor panel nailing schedule

Squash Blocks to TJI® Joist
(Load bearing wall above)



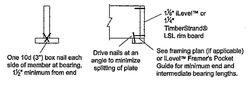
Also see detail B2

Rim to TJI® Joist



Locate rim board joist between joists.

BEAM ATTACHMENT at BEARING



FASTENING of FLOOR PANELS

Nail Size	Closest On-Center Spacing per Row						
	TJI®		Rim Board		TimberStrand® LSL 1½" or wider	Microllame LVL	Parallam PSL
	110 & 210	230, 360, 560	1⅛"	1¼"			
8d (2½") box	2½"	2"	6"	4"	3"	3"	3"
8d (2½") common	3½"	2"	6"	4"			
10d (3"), 12d (3½") box	3"	2"	6"	4"			
10d (3"), 12d (3½") common	4½"	3"	6"	4"	4"	4"	4"
16d (3½") common	N.A.	4"	10"	6"(1)	6"(1)	8"	6"

(1) Can be reduced to 4" on-center with maximum nail penetration of 1¾" into the narrow edge.

- Recommended nailing is 12" on-center in field and 6" on-center along panel edge. Nailing requirements on engineered drawings supersede recommendations listed above.
- Nailing rows must be offset at least ½" and staggered.
- 14 ga. staples may be substituted for 8d (2½") nails if minimum penetration of 1" into the TJI® joist or rim board is achieved.

Fastener On-Center Spacing per Row
Maximum spacing of nails is:
- For joist widths 9½" or less: 18" on-center
- For joist widths greater than 11⅞": 24" on-center

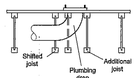
FILLER and BACKER BLOCK SIZES

TJIe Joists	110		210		230 or 360		560		100C or 300C		400C	
Depth	9½" or 11⅞"	14"	9½" or 11⅞"	14" or 16"	9½" or 11⅞"	14" or 16"	18" or 20"	11⅞"	14" or 16"	18" or 20"	9½" or 11⅞"	14" or 16"
Filler Block* (Detail H2)	2x6	2x8	2x8 + ½" sheathing	2x8 + ½" sheathing	2x8 + ½" sheathing	2x8 + ½" sheathing	2x12 + ½" sheathing	Two 2x6	Two 2x8	Two 2x12	2x8 + ½" sheathing	2x8 + ½" sheathing
Cantilever Filler (Detail E4)	2x6 4'-0" long	2x10 6'-0" long	2x6 + ½" sheathing 4'-0" long	2x10 + ½" sheathing 6'-0" long	2x6 + ½" sheathing 4'-0" long	2x10 + ½" sheathing 6'-0" long	Not applicable	Not applicable			2x8 + ½" sheathing 4'-0" long	2x10 + ½" sheathing 6'-0" long
Backer Block* (Detail F1 or F2)	½" or ¾"		¾" or ⅞"		1" Net			2x6	2x8	2x12	1" Net	

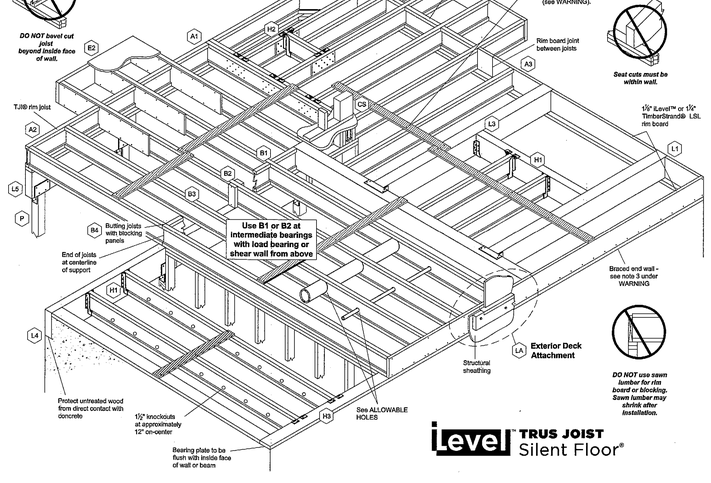
*If necessary, Ironwood filler and backer block height for face mount hangers. Maximum TJI® joist depth for 2x_ filler and backer block height should accomodate required nailing without splitting (1½" minimum for backer blocks and 3½" minimum for filler blocks).

INSTALLATION TIPS

- Subfloor adhesive will improve floor performance, but may not be required.
- When joists are doubled at non-load bearing parallel partitions, space joists apart the width of the wall for plumbing or HVAC.
- Additional joist at plumbing drop (see detail).



- Squash blocks and blocking panels carry stacked vertical loads (details B1 and B2). Packing out the web of a TJI® joist (with web stiffeners) is not a substitute for squash blocks or blocking panels.



iLevel™ TRUS JOIST Silent Floor®

This sheet is intended as a supplement to the iLevel™ Framer's Pocket Guide, which should be referenced for additional information.

ALLOWABLE HOLES - TJI® Joists

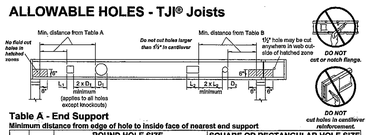


Table A - End Support
Minimum distance from edge of hole to inside face of nearest end support

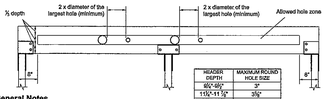
DEPTH	TJI®	ROUND HOLE SIZE								SQUARE OR RECTANGULAR HOLE SIZE							
		2"	3"	4"	5"	6½"	7"	8⅝"	11"	13"	2"	3"	4"	5"	6½"	7"	8⅝"	11"	13"
9½"	110	5'-0"	5'-0"	5'-0"	5'-0"						5'-0"	5'-0"	5'-0"	5'-0"					
	210	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"					5'-0"	5'-0"	5'-0"	5'-0"	5'-0"				
	230	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"					5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"			
	360	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"					5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"			
	560	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"			5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		
11⅞"	110	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	210	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	230	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	360	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	560	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"
14"	110	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	210	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	230	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	360	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	560	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"
16"	110	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	210	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	230	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	360	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	560	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"
		4"	5"	6"	7"	8"	10"	12"	15"	17"	4"	5"	6"	7"	8"	10"	12"	15"	17"
18"	360	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	560	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
20"	360	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
	560	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"		5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	

Rectangular holes based on measurement of longest side.

- Holes may be located vertically anywhere within the web. Leave ⅛" of web (minimum) at top and bottom of hole.
- Knockouts are located in web at approximately 12" on-center; they do not affect hole placement.
- For simple span (0 minimum), uniformly loaded joists used in residential applications, one maximum size round hole may be located at the center of the joist span **provided no other holes occur in the joist.**
- Distances are based on the maximum uniform loads shown in current iLevel product guides. For other load conditions or hole configurations contact your iLevel representative.

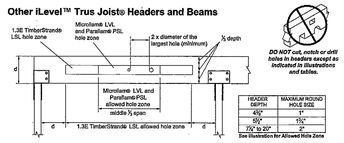
ALLOWABLE HOLES - Headers and Beams

1.55E TimberStrand® LSL Headers and Beams



General Notes
- Round holes only
- No holes in headers or beams in plank orientation.

Other iLevel™ Trus Joist® Headers and Beams



General Notes
- Allowed hole zone suitable for **uniformly loaded headers and beams only.**
- Round holes only
- No holes in cantilevers.
- No holes in headers or beams in plank orientation.

WARNING

Joists are unstable until braced laterally

Bracing Includes:
- Blocking
- Hangers
- Sheathing
- Rim Board
- Strut Lines
- Rim Joist


DO NOT walk on joists until braced. INJURY MAY RESULT.


DO NOT walk on joists that are lying flat.


DO NOT stack building materials on unsheathed joists. Stack only over beams or walls.

WARNING NOTES:

Lack of proper bracing during construction can result in serious accidents. Observe the following guidelines:

1. All blocking, hangers, rim boards and rim joists at the end supports of the TJIe joists must be completely installed and properly nailed.
2. Establish a permanent deck (sheathing), nailed to the first 4 feet of joists at the end of the bay or braced end wall.
3. Safety bracing of 1x4 (minimum) must be nailed to a braced end wall or sheathed area and to each joist.
4. Sheathing must be properly nailed to each TJIe joist before additional loads can be placed on the system.
5. Ends of cantilevers require safety bracing on both the top and bottom flanges.
6. TJI® joist flanges must remain straight within 1/2" from true alignment.

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Oakland, CA 94621
www.geotrinity.com
Email: info@geotrinity.com
Tel : 510-383-9950
Fax: 510-383-9957

REGISTERED PROFESSIONAL ENGINEER JIH-RONG YANG No. C 48655 Exp. 08/30/16 CIVIL STATE OF CALIFORNIA

Jerry Yang, P.E.; G.E.

OWNER:
Ms. Mona Hsieh
Green Oak Builders Inc.
888 Brannan St. #101
San Francisco, CA 94103
Tel : 510-928-7888

No.		Date

Project Name and Address

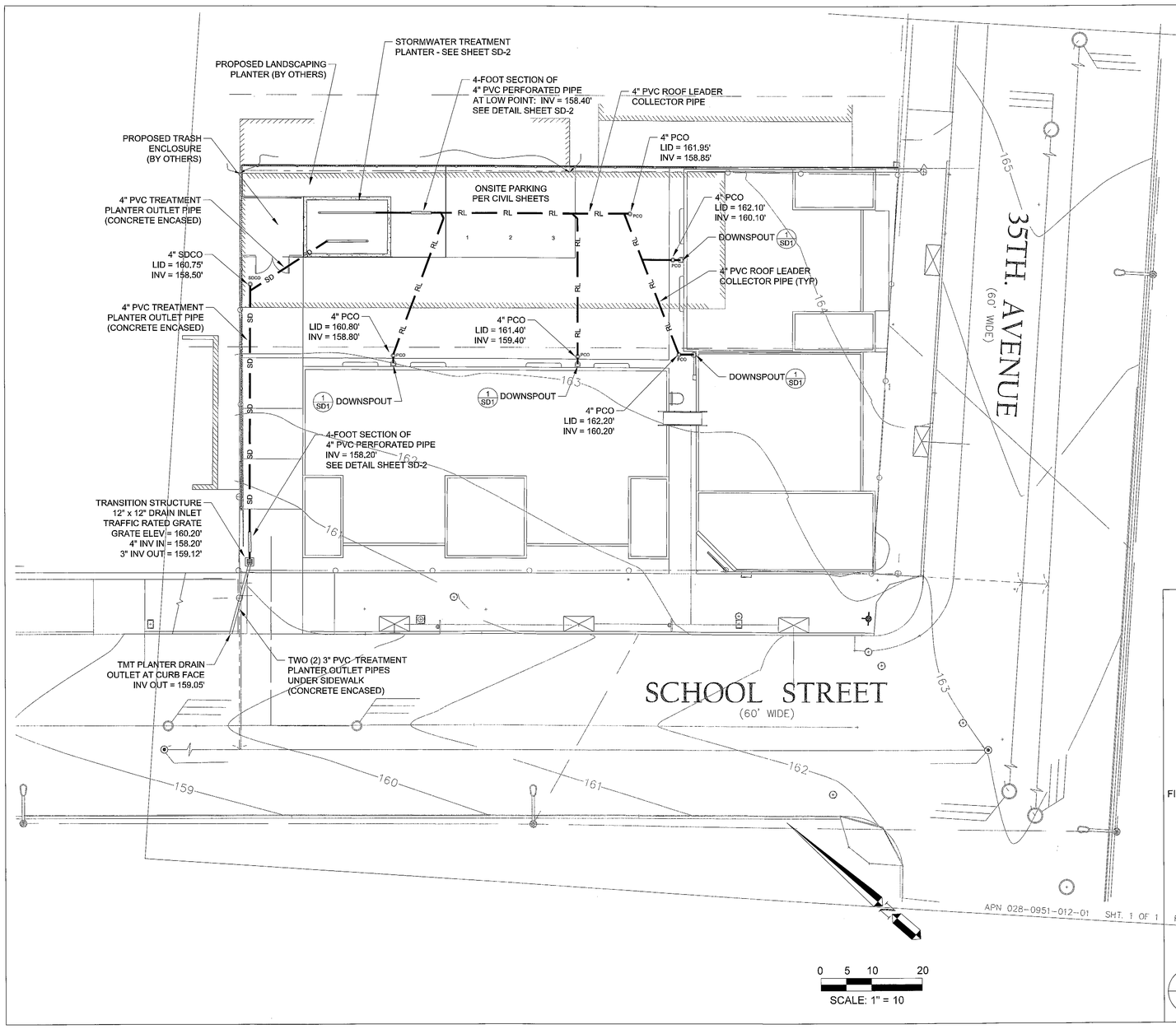
NEW MIXED-USE BUILDING
35th St. & School St.
Oakland, CA

Sheet Title

TYPICAL I JOIST INSTALLATION DETAILS

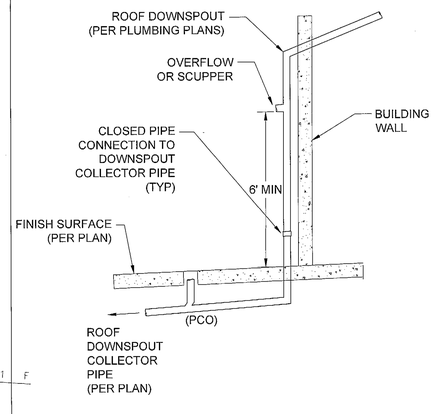
Project	GE2382	Sheet	S4.1
Date	3/28/2014		
Scale			

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES
0 1 2 3



ABBREVIATIONS

CMU = CONCRETE MASONRY UNIT
CO = CLEANOUT
CONC = CONCRETE
DI = DRAIN INLET
ELEV = ELEVATION
FL = FLOWLINE
FS = FINISH SURFACE (ELEVATION)
INV = INVERT
PCO = PRESSURE CLEANOUT
PVC = POLYVINYL CHLORIDE (PIPE)
RL = ROOF LEADER
SD = STORM DRAIN
SDCO = STORM DRAIN CLEANOUT
SS = SANITARY SEWER
TC = TOP OF CURB
TG = TOP OF GRATE



1/SD1 ROOF DOWNSPOUT CONNECTION DETAIL
Scale: NTS

Matt Wheeler Engineering
WATER
WASTEWATER
STORMWATER
GENERAL CIVIL ENGINEERING
CONSTRUCTION MANAGEMENT
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MattW@mwheelereng.com

REGISTERED PROFESSIONAL ENGINEER
MATTHEW J. WHEELER
No: 61741
Exp. 6-30-15
CIVIL
STATE OF CALIFORNIA

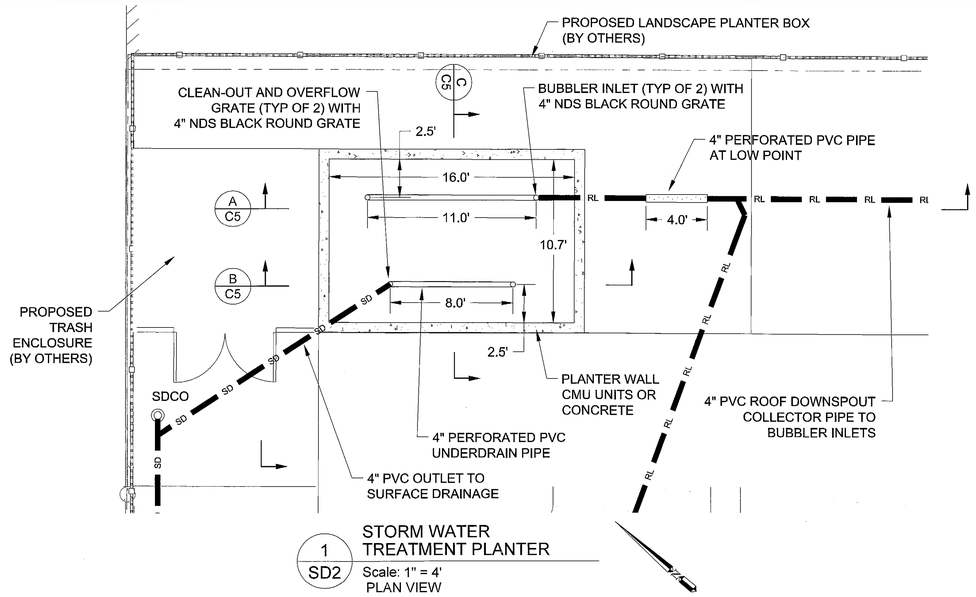
DATE SIGNED

STORMWATER TREATMENT SYSTEM - PLAN
3101 35th Avenue
Oakland, CA 94619

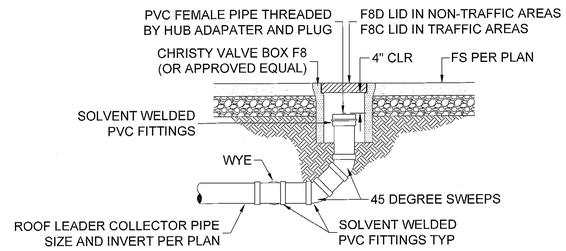
JOB #: 032-01
DESIGNER: MJW
DRAWN BY: MJW
DATE: 12-11-13

DRAWING NO.
SD-1
1 OF 2 SHEETS

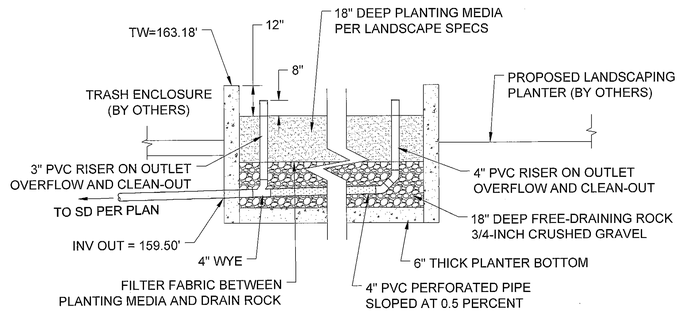
FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES 0 1 2 3



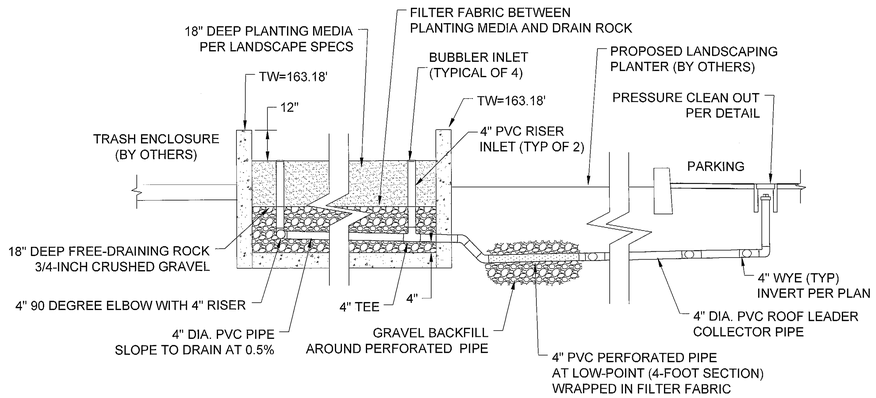
1 SD2 **STORM WATER TREATMENT PLANTER**
Scale: 1" = 4'
PLAN VIEW



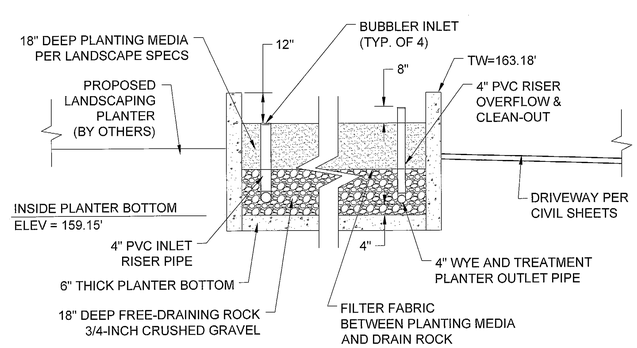
2 SD2 **STORM DRAIN PRESSURE CLEANOUT**
Scale: NTS



B SD2 **OUTLET PIPE ELEVATION VIEW TREATMENT PLANTER BOX**
Scale: NTS
LOOKING NORTHEAST



A SD2 **INLET PIPE ELEVATION VIEW TREATMENT PLANTER BOX**
Scale: NTS
LOOKING NORTHEAST



C SD2 **SECTION VIEW TREATMENT PLANTER BOX**
Scale: NTS
LOOKING SOUTHEAST

Matt Wheeler Engineering
WATER
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STORMWATER TREATMENT SYSTEM - DETAILS
3101 35th Avenue
Oakland, CA 94619

JOB #: 032-01
DESIGNER: MJW
DRAWN BY: MJW
DATE: 12-16-13

DRAWING NO.
SD-2
2 OF 2 SHEETS