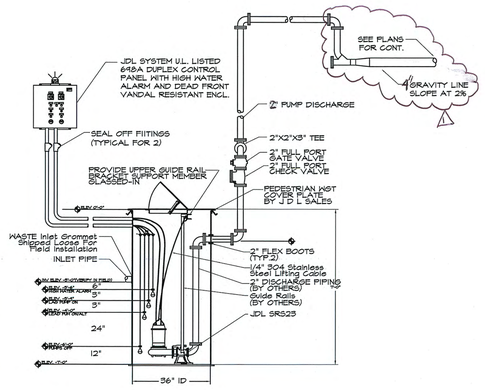


SECTION VIEW

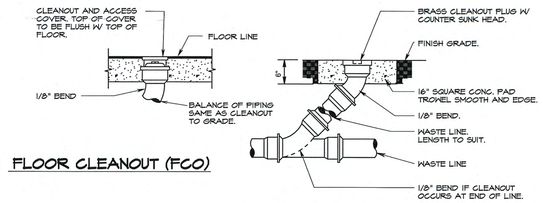
SUPPLIER:	J.D.L. Systems, Inc. Manufacturing Solutions Arcadia, California, Phone: (888) 648-5345
DESCRIPTION:	DUPLEX SUMP PUMP LIFT STATION
CUSTOMER:	—
JOB:	SATICOY
SCALE: NONE	DWG. NO.: 0311105 | Saticoy Sump Pump Lift Station.dwg

PUMP SCHEDULE

PUMP No.	MANUFACTURER	MODEL No.	GPM	HEAD	HP	RPM	VOLTS	PHASE	REMARKS
SP 1 / SP 2	JDL SYSTEMS	2JCSVE2	50	25'	2	1750	208	3	FM APPROVED EXPLOSION PROOF MOTORS
SP 1 / SP 2	JDL SYSTEMS	2JCSVE2	50	25'	2	1750	208	3	WITH SRS2 PUMP REMOVAL SYST.

SUMP PUMP DETAIL (FOUNDATION DRAINAGE)

NOT TO SCALE — 6 / P-1.0.0

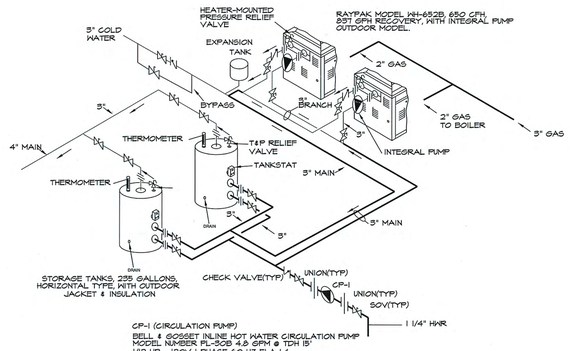


FLOOR CLEANOUT (FCO)

CLEANOUT TO GRADE (COTG)

CLEANOUT DETAILS

NOT TO SCALE — 3 / P-1.0.0



CP-1 (CIRCULATION PUMP)
BELL & GOSSET INLINE HOT WATER CIRCULATION PUMP
MODEL NUMBER: PL-3CB 4.8 GPM @ TDH 15'
1/12 HP - 120V 1 PHASE 60 HZ FLA 1.4

DOMESTIC HOT WATER SCHEMATIC

NOT TO SCALE — 4 / P-1.0.0

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	MIN. BRANCH SIZE W	V	CW	HW	TRAP	REMARKS	MNFGR	MODEL	ADDITIONAL NOTES
WC-1	WATER CLOSET	4"	2"	3/4"	—	INT	FLR. MTD., FLUSH TANK (REG)	AMERICAN STANDARD	CADET 264.135	WITH OLSONITE 40, CLOSED FRONT, WHITE, ROUND FRONT SEAT
L-1	LAVATORY	2"	1-1/2"	1/2"	1/2"	1-1/2"	COUNTER MOUNTED (HAND)	AMERICAN STANDARD	LEDELYN 521.000	WITH DELTA 21T483 FAUCET, AMERICAN STANDARD 241.015 GRID STRAINER, C.P. "P" TRAP
FD-1	FLOOR DRAIN	2"	1-1/2"	1/2"	—	1-1/2"	WITH TRAP PRIMER ADAPTER	JR. SMITH	2005AP	NICKEL BRONZE 6" STRAINER, HEEL PROOF GRID WITH FLASHING COLLAR
FS-1	FLOOR SINK	2"	1-1/2"	1/2"	—	1-1/2"	WITH TRAP PRIMER ADAPTER	CEGO	406-2	WITH HALF GRATE
RC-1	ROOF CEPTOR	2"	2"	—	—	2"	WITH 2" WATER DAM	JR. SMITH	5410	
HB-1	HOSE BIBB	—	—	3/4"	—	—	WITH VACUM BREAKER	ACORN	8151	DOOR AND FRAME
TP-1	TRAP PRIMER	—	—	1/2"	—	—	WITH ACCESS PANEL	PPP	PR-500	RUN 1/2" COLD WATER TO FLOOR DRAINS.
LS-1	LAUNDRY SINK	2"	1-1/2"	1/2"	1/2"	1-1/2"	COUNTER MOUNTED	ELKAY	LR-1517	WITH TRAP, STOPS & SUPPLY PIPES, LK-99B STRAINER AND DELTA 566 FAUCET
KS-1	KITCHEN SINK	2"	1-1/2"	3/4"	3/4"	1-1/2"	COUNTER MOUNTED	ELKAY	LR-3322	WITH SD-1
DW-1	KITCHEN SINK	2"	1-1/2"	3/4"	—	—	-	-	-	-
GD-1	GARBAGE DISPOSAL	2"	—	—	—	—	1/2 HP	INSINK ERATOR	333	
R-1	RANGE	—	—	—	—	—	65,000 BTU			WITH GAS COCK
GWB-1	CLOTHES WASHER BOX	2"	1-1/2"	3/4"	3/4"	1-1/2"	VERIFY LOCATION	ACORN	8186	
BT-1	BATH TUB	2"	1-1/2"	3/4"	3/4"	1-1/2"	ANTI-SCALDING	MOEN	8575	SINGLE-HANDLE PRESSURE BALANCING VALVE WITH TUB SPOUT AND DIVERTER
CD-1	CLOTHES DRYER	—	—	—	—	—	35,000 BTU	MOEN	8575	SINGLE-HANDLE PRESSURE BALANCING VALVE INTERNAL STOPS, CHROME PLATED
ED-1	EMERGENCY DRAIN	4"	—	—	—	—	HEAVY DUTY DRAIN	JR. SMITH	2248	

PLUMBING LEGEND

SYMBOLS	ABBREV.	DESCRIPTION
———	S OR W	SEWER OR WASTE ABOVE FLOOR OR GRADE
———	S OR W	SEWER OR WASTE BELOW GRADE
— — —	V	VENT
— — —	CW	COLD WATER
— — —	HW	HOT WATER
— — — —	HWR	HOT WATER RETURN
—SD—	SD	STORM DRAIN
—OD—	OD	OVERFLOW DRAIN
—CD—	CD	CONDENSATE DRAIN
—G—	G	GAS
—MPG—	MPG	MEDIUM PRESSURE GAS
—F—	F	AUTO FIRE SPRINKLER
—D-D—	SOV	SHUT OFF VALVE
—↑—	CV	CHECK VALVE
—D-D—	BV	BALANCING VALVE
—U—	U	UNION
—GC—	GC	GAS COCK
—○	UP	PIPING UP
—○	DN	PIPING DOWN OR DROP
—⊕	FCO	FLOOR CLEANOUT
—||	WCO	WALL CLEANOUT
—|	CO	CLEANOUT
—⊕	COTG	CLEANOUT TO GRADE
■	TP	TRAP PRIMER
●	WHA	WATER HAMMER ARRESTER
	A.P.	ACCESS PANEL
	CONN.	CONNECTION
	FIN. FLR.	FINISH FLOOR
	F.U.	FIXTURE UNIT
	IN. EL.	INVERT ELEVATION

PIPE MATERIAL SCHEDULE

SERVICE	MATERIAL	COPPER TYPE "M"	COPPER TYPE "L"	COPPER TYPE "K"	ABS	BLACK STEEL	GALVANIZED STEEL	CAST IRON SOIL PIPE & FITTINGS	VITRIFIED CLAY	DURIRON	
WATER	INSIDE		•								
	OUTSIDE		•								
SANITARY DRAINAGE	INSIDE							•			
	OUTSIDE							•			
SAN. VENT	INSIDE							•			
GAS	INSIDE					•					
	OUTSIDE					•					
CONDENSATE DRAINAGE	INSIDE	•									
	OUTSIDE	•									
STORM DRAINAGE	INSIDE							•			
	OUTSIDE							•			

NOTE:
ALL WASTE PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE OR RECEIVE PRIOR APPROVAL OF THE ENGINEER.

Department of Building and Safety, Los Angeles
Mechanical Plan Check

Plan Checked for:

Plumbing:
☐ Complete Plumbing ☐ Rain Water ☐ Irrigation
☒ Gas ☐ Portable Water ☒ Waste & Vent
☐ Methane Vent System ☒ Subsurface Drainage ☐ Pool/Spa
☒ Sump/Sewage Pump ☐ Other: .....

Fire Protection:
☐ Fire Sprinkler ☐ Standpipe ☐ Fire Pump ☐ Fire Tank
☐ Fire Hydrants ☐ Other: .....

HVAC:
☐ Hoods ☐ Ventilation ☐ Comfort Heating/Cooling
☐ Smoke Control ☐ Energy Conservation
☐ Other: .....

Elevator:
☐ Hydraulic ☐ Residential ☐ Cable ☐ Escalator
☐ Other: .....

Installation in the City of Los Angeles subject to the requirements of Article 4 (Plumbing), Article 5 (HVAC) and Article 2 (Elevators) of Chapter 9 of Los Angeles Municipal Code

GENERAL NOTES:

1. COMPLY WITH ALL LOCAL, COUNTY, STATE AND FEDERAL CODES, ORDINANCES, RULES AND REGULATIONS.
2. COMPLY WITH ALL REQUIREMENTS OF THE SERVING AGENCIES. PAY ALL COSTS REQUIRED FOR METER INSTALLATIONS, SEWER TAPS, OR FEES IN RELATIONSHIP TO THIS CONSTRUCTION.
3. COMPLY WITH ALL REFERENCED COMMERCIAL STANDARDS, SPECIFICATIONS, CODES, RULES, ETC.
4. INSTALL DIELECTRIC FITTING BETWEEN FERROUS AND NON-FERROUS MATERIALS.
5. PIPE RELIEF DRAIN FOR WATER HEATER TO BE DRAINED TO AN APPROVED RECEPTACLE, OR SPILL ON GRADE.
6. CONTRACTOR SHALL VERIFY LOCATION, DEPTH AND SIZE OF POINTS OF CONNECTIONS TO CIVIL WORK AS IN WATER AND SEWER MAINS.
7. CONTRACTOR SHALL INSTALL SHUT OFF VALVES ON EACH WATER SUPPLY AT EACH PLUMBING FIXTURE.
8. GENERAL, MECHANICAL, PLUMBING, AND ELECTRICAL CONTRACTORS SHALL COORDINATE THEIR WORK PRIOR TO INSTALLATION TO PROVIDE FOR PROPER CLEARANCES BETWEEN EQUIPMENT, DUCT WORK, PIPING, JOISTS, CEILINGS, ETC.
9. SEE MECHANICAL PLANS FOR EXACT LOCATION OF MECHANICAL EQUIPMENT, COORDINATE ROUGH IN LOCATIONS OF CONDENSATE DRAINS WITH MECHANICAL CONTRACTOR.
10. ALL HORIZONTAL WASTE PIPING, AND CONDENSATE DRAINS SHALL HAVE A MINIMUM SLOPE OF 2% (1/4" P.L.F.) UNLESS NOTED OTHWISE ON PLANS.
11. PLUMBING CONTRACTOR TO PROVIDE AND COORDINATE ALL FINAL PLUMBING CONNECTIONS AND HOOK-UPS TO ALL OWNER FURNISHED APPLIANCES.
12. ALL BURIED PIPING SHALL BE AT LEAST 2" BELOW BOTTOM OF CONCRETE SLAB.
13. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF PLUMBING FIXTURES.
14. ALL CLEANOUTS SHALL BE ACCESSIBLE.
15. VALVES SHALL BE LINE SIZE UNLESS OTHERWISE NOTED.
16. PROVIDE ACCESS DOORS TO ALL CONCEALED VALVES, TRAP PRIMERS, AND WATER HAMMER ARRESTERS, ETC. ALL PANELS SHALL BE STAINLESS STEEL IN WET AREAS. COORDINATE FINISH WITH ARCHITECT, WITH NO ADDITIONAL COST TO OWNER.
17. ALL PIPING IN FINISHED AREAS SHALL BE RUN CONCEALED; EXPOSED PIPING, WHERE NECESSARY, SHALL BE RUN AS HIGH AS POSSIBLE AND TIGHT TO THE WALLS.
18. ALL PIPING PENETRATING WALL, CEILING AND FLOOR SHALL BE ISOLATED FROM BUILDING STRUCTURES WITH RESILIENT SEALS.
19. DESIGN AND CONSTRUCT A COMPLETE AUTO SPRINKLER SYSTEM TO OCCUPIED AND UNOCCUPIED SPACES OF ENTIRE PROJECT. SUBMIT FOR APPROVAL OF FIRE BUREAU.
20. ALL WATER CLOSETS FOR USE BY HANDICAPPED PEOPLE SHALL HAVE THE FLUSHOMETER VALVE HANDLE MOUNTED ON THE WIDE SIDE OF THE WATER CLOSET.
21. PROVIDE CLEANOUTS FOR ALL WASTE BRANCH LINES EXCEEDING 5 FT. FROM THE MAIN. THE CONTRACTOR SHALL ALSO INSTALL A WALL CLEANOUT FOR ALL URINALS. SIZE ALL CLEANOUTS PER UPC TABLE 7-6.
22. ALL ROOF DRAINS ARE SIZED ON 4" RAIN FALL.
23. CONTRACTOR SHALL OFFSET 3" WASTE FROM CLOTHES WASHER BOX TO PREVENT SUDS BUILD UP AND PER CODE.
24. CONTRACTOR SHALL INSTALL FLOOR DRAINS IN SECOND & THIRD FLOOR STAIRS. SPILL PIPING ON GRADE.
25. CONTRACTOR SHALL SEE ARCHITECTURAL DRAWINGS FOR CONDENSATE PIPE ROUTING.

SPECIAL NOTES:
1. INSTALLATION OF ALL PLUMBINS FIXTURES SHALL BE PER MANUFACTURES STRICT INSTRUCTIONS. IN CASE OF DISCREPANCIES BETWEEN MANUFACTURES INSTALLATION INSTRUCTIONS AND FIELD CONDITIONS, CONTACT THE ARCHITECT/ENGINEER FOR DIRECTIONS.

WATER CALCULATION

METER ADDRESS: 20223 SATICOY ST
WATER PRESSURE INFORMATION: TELEPHONE: (213) 367-1250
WATER PRESSURE MAX: 72 PSI MIN.: 56 PSI ELEV.:
DEVELOPED LENGTH (LENGTH FROM WATER METER TO FURTHEST FIXTURE)
425 FT. X 1.25 = 531 FT.
TOTAL WATER DEVELOPED LENGTH: 531 FT.

IF THE MAXIMUM WATER PRESSURE IS OVER 80 PSI, THEN A PRESSURE REDUCING VALVE IS NEEDED. UNIFORM PLUMBING CODE, SECTION 1007 (B) OF PRESSURE REDUCING VALVE IS REQUIRED AND NONE IS STATED. THIS OFFICE ASSUMES THAT A WILKINS 500YSBR SET AT 80 PSI WILL BE USED.

PRESSURE OUT OF BOOSTER PUMP	75.00 PSI
AVAILABLE PRESSURE	56.00 PSI
RESIDUAL PRESSURE	20.00 PSI
LOSS DUE TO ELEVATION 50 FT. X 0.43	25.80 PSI
LOSS THRU 3" METER	9.00 PSI (BEFORE PUMP)
LOSS THRU 3" RPBP (WILKINS 975)	15.00 PSI (BEFORE PUMP)
LOSS THRU	PSI
PRESSURE AVAILABLE FOR FRICTION LOSS	75.0 - 45.80 = 29.2 PSI
FRICTION LOSS PER 100 FEET. = 29.2 PSI X 100 FT. /531= 5.49 PER 100FT.	

PIPE SIZE SCHEDULE

TYPE "L" COPPER
BASED ON MAX. PRESSURE DROP OF 5.0 PSI/ 100FT.

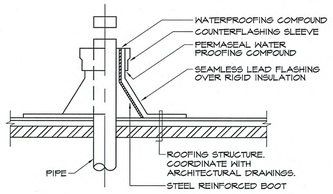
PIPE SIZE	COLD WATER FIXTURE UNITS SYSTEM SIZED ON 8 FPS MAX. VELOCITY	HOT WATER FIXTURE UNITS SYSTEM SIZED ON 5 FPS MAX. VELOCITY
1/2"	1	1
3/4"	6	6
1"	15	15
1 1/4"	24	24
1 1/2"	47	47
2"	158	120
2 1/2"	350	246
3"	641	412
4"	1143	851

NEW FIXTURE COUNT

NO.	TYPE OF FIXTURE	FIXTURE UNITS PER FIXTURE	TOTAL
92	WC (FT)	2.5	230
92	L	1	92
91	TUB	4	364
91	KS	1.5	136.5
91	DW	1.5	136.5
10	GW	4	40
1	LS	1.5	1.5
1	HB	2.5	2.5
5	HB	1	5
		TOTAL FIXTURE UNITS	1008
		TOTAL GALLONS PER MINUTE	210

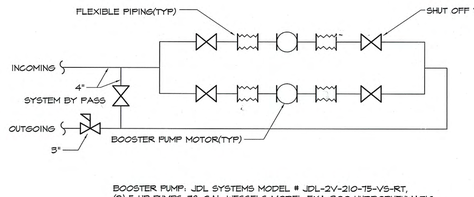
WATER & WASTE LOAD CALC.

TYPE OF FIXTURE	COLD WATER NO. OF FIXTURES	COLD WATER FIXTURE UNITS (EA.)	COLD WATER TOTAL	HOT WATER NO. OF FIXTURES	HOT WATER FIXTURE UNITS (EA.)	HOT WATER TOTAL	WASTE NO. OF FIXTURES	WASTE FIXTURE UNITS (EA.)	WASTE TOTAL
WATER CLOSET	92	2.5	230	-	-	-	92	3 (26)	276
LAVATORY	92	1	92	42	0.75	64	42	1	92
BATH TUB	91	4	364	91	3	273	91	2 (42)	182
KITCHEN SINK	91	1.5	136.5	91	1.125	102.375	91	2	182
DISH WASHER	91	1.5	136.5	-	-	-	91	-	-
CLOTHES WASHER	10	4	40	10	3	30	10	3 (42)	30
LAUNDRY SINK	1	1.5	1.5	1	1.125	1.125	1	2	2
HOSE BIBB	1	2.5	2.5	-	-	-	-	-	-
HOSE BIBB (Add...)	5	1	5	-	-	-	-	-	-
FLOOR DRAIN	1	-	-	-	-	-	1	2	2
	TOTAL FIXTURE UNITS	1008		TOTAL FIXTURE UNITS	475.5		TOTAL FIXTURE UNITS	766	



PIPE THRU ROOF DETAIL

NOT TO SCALE — 5 / P-1.0.0

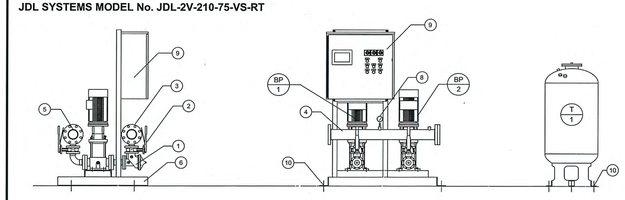


BOOSTER PUMP: JDL SYSTEMS MODEL # JDL-2V-210-75-VS-RT,
(2) 5 HP PUMPS, 78 GAL WESSELS MODEL FXA-300 HIDROPNEUMATIC TANK, ALL ON SKID, 3450 RPM, 208 VOLT, 3 PHASE, WITH CONTROL PANEL, FACTORY MANUFACTURED, COMPLETE SYSTEM

BOOSTER PUMP SYSTEM PIPING DIAGRAM DETAIL

NOT TO SCALE — 2 / P-1.0.0

DUPLEX DOMESTIC WATER BOOSTER SYSTEMS:
JDL SYSTEMS MODEL No. JDL-2V-210-75-VS-RT



KEY

1. 2" PRESSURE REDUCING / CHECK VALVE (TYPICAL FOR 2)
2. BUTTERFLY VALVE (TYPICAL FOR 4)
3. 4" 150 ASA FLANGE (TYPICAL FOR 4)
4. 4" TYPE "304L" STAINLESS STEEL DISCHARGE HEADER
5. 4" TYPE "304L" STAINLESS STEEL SUCTION HEADER
6. 4X4X1/4 ASTM A36 STRUCTURAL BASE
7. INDIVIDUAL THERMAL PURGE VALVE (TYPICAL FOR 2) NOT SHOWN
8. 2½" LIQUID FILLED PRESSURE GAUGES (TYPICAL FOR 2)
9. DUPLEX CONTROL PANEL W/ (2) 5 HP VFD'S
10. 3/4" HOLD DOWN BOLT HOLES (TYPICAL FOR 4)

CITY OF LOS ANGELES RESEARCH REPORT No. 5610

PUMP SCHEDULE

PUMP NO	MANUFACTURER	MODEL No.	GPM	HEAD	HP	RPM	VOLTS	PHASE	REMARKS
BP 1 / BP 2	JDL SYSTEMS GRUNDFOS	CR 15-3	105	106'	5	3450	208	3	4" TYPE 304L STAINLESS STEEL SUCTION & DISCHARGE HEADERS
BP 1 / BP 2	JDL SYSTEMS GRUNDFOS	CR 15-3	105	106'	5	3450	208	3	
—									
T 1	WESSELS	FXA-300	-	-	-	-	-	-	79 GALLON, 125# ASME HYDROPNEUMATIC TANK REMOTE MOUNTED BY OTHERS

J D L Systems, Inc. Manufacturing Solutions Arcadia, California, Phone: (888) 648-5345

DRAWN BY: JD | CAD FILE: Saticoy VMS Booster.dwg | DATE: 06/30/2008
DESCRIPTION: DUPLEX VARIABLE SPEED BOOSTER SYSTEMS
PROJECT: SATICOY
LOS ANGELES

THIS DRAWING, ALL SPECIFICATIONS, TECHNICAL DATA AND WIRING SCHEMATICS ARE THE PROPERTY OF JDL SYSTEMS AND ARE NOT TO BE REPRODUCED BY ANY MEANS WITHOUT THE WRITTEN AUTHORIZATION FROM JDL SYSTEMS.

City of Los Angeles, Department of Building & Safety
APPROVED PLANS

- ☒ This perforated set of plans are not approval for construction until the required permit fees are paid and the permit is issued.
- ☒ This permit(s) is valid for two years from the date the permit fees are paid.
- ☐ Visit http://www.ladbsservices2.lacity.org/planfindcom to check the status of this set of plans by entering the 13-digits Permit number. "Issued" status means the permit fees have been paid.
- ☒ No inspection can be scheduled until the permit fees are paid.

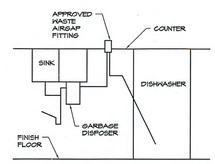
BY: W.T. Guerrero DATE: 3/24/09
Permit No./ 08042-10000-12637
Application No.

- This set of plans MUST be at the job site during construction.
- It is unlawful to alter, change, or deviate from these plans.
- The stamping of this plan SHALL NOT be held to permit or to be an approval of the violation of any provisions of any Ordinance or Law.
- SEPARATE permits are required for BUILDING, ELECTRICAL, PLUMBING, FIRE SPRINKLER, ELEVATOR, HEATING or REFRIGERATION work, unless this permit was issued as a combination permit for a One or Two Family Dwelling pursuant to LAMC Section 91.0107.2.2. and the work by that trade does not require Plan Check.

BUILDING SHRINKAGE NOTE:

PLUMBING CONTRACTOR SHALL MAKE ALL WOOD CUTS AROUND PIPING 3/8" TO 1/2" LARGER THAN THE PIPE SIZE FOR FUTURE MOVEMENT.

NOTES:
1. NO GAS PIPING SHALL BE INSTALLED UNDER THE BUILDING.
2. INSTALL A GAS SHUT OFF VALVE ON EACH GAS SYSTEM.
3. INSTALL A SEISMIC GAS SHUT OFF VALVE ON EACH GAS SYSTEM. PACIFIC SEISMIC PRODUCTS MODEL 300-3/4", 301-1"
4. THE SEISMIC SHUT OFF VALVE SHALL BE MOUNTED RIGIDLY TO THE EXTERIOR OF THE BUILDING OR STRUCTURE CONTAINING THE FUEL GAS PIPING.



DISHWASHER PIPING DETAIL

NOT TO SCALE — 1 / P-1.0.0

ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

jag architecture
15 HUBBLE IRVINE CALIFORNIA 92618
(949) 752-9333
FAX: (949) 752-1207

Saticoy Investment PROPERTIES, LOS ANGELES, CALIFORNIA

APARTMENT BUILDING
20223-20237 SATICOY STREET
WINNETKA, CALIFORNIA

LEGEND, SCHEDULES, DETAILS AND NOTES

DATE: 04-11-2006
DRAWN BY: HA
J&G NO. 030703
SCALE: AS NOTED
SHEET P-1.0.0

DAVAR & ASSOC.
CONSULTING ENGINEERS
12016 Telegraph Road, Suite 205
Santa Fe Springs, California 90670
Tel: (562) 777-8050 Fax: (562) 777-0155