City of Riverside

Pierce Street Pump Station Upgrade

Volume 2
Drawings

May 1994

MONTGOMERY WATSON

INDEXED 1-31-05 HH

CITY OF RIVERSIDE

PIERCE STREET PUMP STATION UPGRADE

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VOLUME 2 - DRAWINGS

MAY 1994

MONTGOMERY WATSON

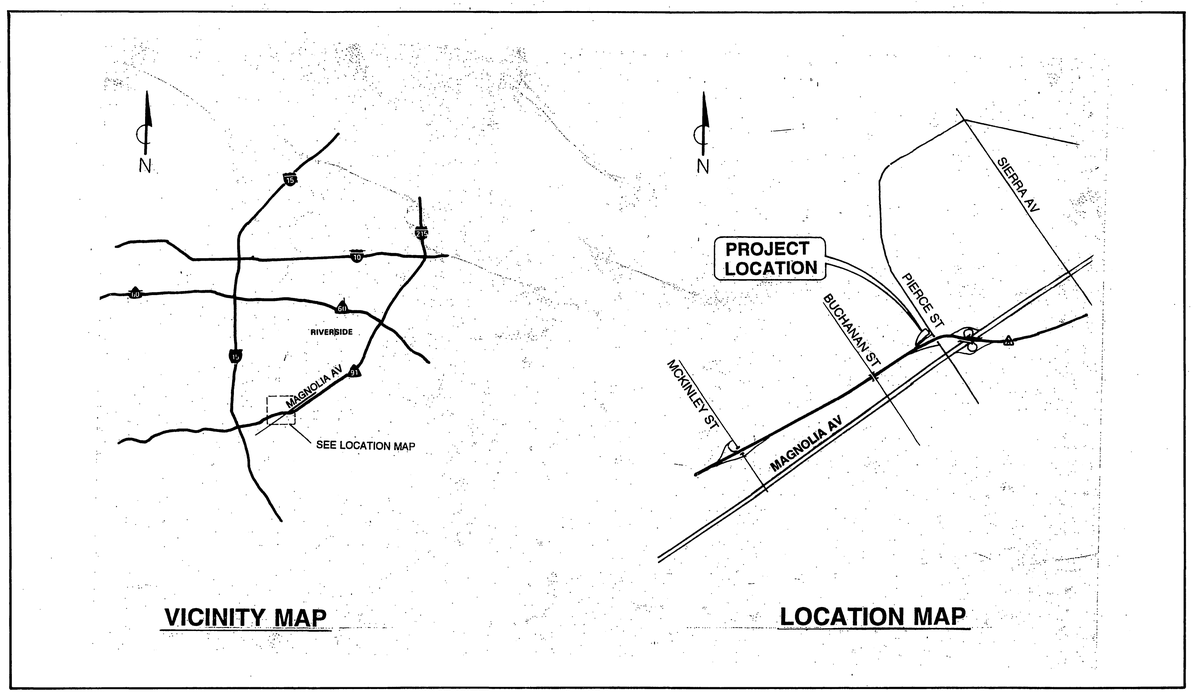
APPROVED FOR CITY OF RIVERSIDE

Barry Beck — 5/27/94

PUBLIC WORKS DIRECTOR — DATE

JOB. NO.	S-1636
DRAWING NO.	G-1
SHEET NO.	1 OF 44

INDEXED 1-31-05 LFH



VICINITY MAP

LOCATION MAP

LIST OF DRAWINGS

GENERAL

G-1 COVER SHEET
G-2 LOCATION MAP AND LIST OF DRAWINGS
G-3 ABBREVIATIONS
G-4 SYMBOLS

CIVIL

C-1 DEMOLITION PLAN
C-2 HORIZONTAL CONTROL AND PAVING

LANDSCAPE

L-1 LANDSCAPE PLAN
L-2 IRRIGATION PLAN

MECHANICAL

M-1 MECHANICAL STANDARD DETAILS-1
M-2 MECHANICAL STANDARD DETAILS-2 AND EQUIPMENT LIST
M-3 TOP PLAN
M-4 DEMOLITION-FIRST FLOOR AND BASEMENT PLANS
M-5 PUMP STATION - BASEMENT PLAN
M-6 ENCLOSURE AND PUMP STATION - TOP PLAN
M-7 PUMP STATION - FIRST FLOOR PLAN
M-8 PUMP STATION - SECTION 1
M-9 PUMP STATION - SECTION 2
M-10 PUMP STATION - SECTION 3 AND 4

STRUCTURAL

S-1 STANDARD STRUCTURAL DETAILS
S-2 PUMP STATION - PLANS
S-3 PUMP STATION - SECTIONS
S-4 MISCELLANEOUS STRUCTURES - PLANS & SECTIONS

ELECTRICAL

E-1 ELECTRICAL SYMBOLS
E-2 ELECTRICAL ABBREVIATIONS AND GENERAL NOTES
E-3 ELECTRICAL SITE PLAN
E-4 SINGLE LINE DIAGRAM AND ELEVATION
E-5 CONDUIT, PANEL, & FIXTURE SCHEDULE
E-6 LIGHTING AND POWER PLAN TOP LEVEL
E-7 CONTROL PLAN - LOWER FLOOR
E-8 LIGHTING PLAN FIRST AND LOWER FLOOR
E-9 MCC BUILDING
E-10 STANDARD DETAILS - 1
E-11 STANDARD DETAILS - 2

INSTRUMENTATION

I-1 INSTRUMENTATION SYMBOLS AND ABBREVIATIONS P&ID AND LOOP SYMBOLS (1)
I-2 INSTRUMENTATION SYMBOLS AND ABBREVIATIONS P&ID AND LOOP SYMBOLS (2)
I-3 INSTRUMENTATION SYMBOLS AND ABBREVIATIONS P&ID AND LOOP SYMBOLS (3)
I-4 PROCESS AND INSTRUMENTATION DIAGRAMS - 1
I-5 PROCESS AND INSTRUMENTATION DIAGRAMS - 2
I-6 PROCESS AND INSTRUMENTATION DIAGRAMS - 3
I-7 LOCAL CONTROL PANEL LAYOUT AND DETAILS
I-8 CONTROL SCREENS LAYOUT - 1
I-9 CONTROL SCREENS LAYOUT - 2
I-10 INSTALLATION DETAILS
I-11 SCHEMATIC DIAGRAMS

JOB NO. S-1636

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED J. Gentry
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CHECKED QA

SUBMITTED: Pardha Namuduri — PROJECT ENGINEER — C-49471 — R. C. E. NO. — 5-23-94 — DATE
RECOMMENDED: Surendra Thakral — MONTGOMERY WATSON — C-44599 — R. C. E. NO. — 5-23-94 — DATE

MONTGOMERY WATSON
Pasadena, California

APPROVED _____ DATE
APPROVED _____ DATE

CITY OF RIVERSIDE
PIERCE STREET PUMP STATION UPGRADE
LOCATION MAP AND LIST OF DRAWINGS

SHEET G-2 OF 44 SHEETS

JOB No. 193.0453 FILE No. USR5/PRJ/RIVERPS/CIV/ppsg02.dgn

INDEXED 1-31-05 LH

A	AIR
AB	ANCHOR BOLT
ABBR	ABBREVIATION
ABS	ABSOLUTE TEMPERATURE
AC	ACTIVATED CARBON, ASPHALTIC CONCRETE, OR ALTERNATING CURRENT
A/C	AIR CONDITIONING
ACOUS	ACOUSTIC OR ACOUSTICAL
ACP	ASPHALTIC CONCRETE PAVEMENT OR ASBESTOS CEMENT PIPE
ADJ	ADJUSTABLE
AER	AERATION
AL	ALUMINUM OR ALUM
ALUM	ALUMINUM
AMB	AMBIENT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE (FORMERLY A.S.A.)
API	AMERICAN PETROLEUM INSTITUTE
APPD	APPROVED
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ASA	AMERICAN STANDARDS ASSOCIATION (NOW ANSI)
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIAL
ASSY	ASSEMBLY
AT	ACOUSTICAL TILE
ATM	ATMOSPHERE
AVAR	AIR VACUUM AND AIR RELEASE VALVE
AWWA	AMERICAN WATER WORKS ASSOCIATION
BC	BEGIN CURVE, BOLT CIRCLE OR BETWEEN CENTERS
BCR	BEGIN CURB RETURN
BD	BOARD
BF	BLIND FLANGE
BFP	BACK FLOW PREVENTER
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BLD FLG	BLIND FLANGE
BLK	BLACK OR BLOCK
BLKG	BLOCKING
BM	BEAM OR BENCH MARK
BO	BLOW-OFF ASSEMBLY
BOD	BIOCHEMICAL OXYGEN DEMAND OR BOTTOM OF DUCT
BOT	BOTTOM
BPV	BACK PRESSURE VALVE
BRK	BRICK
B & S	BELL AND SPIGOT
BSMT	BASEMENT
BT	BOLT
BTU	BRITISH THERMAL UNIT
BV	BUTTERFLY VALVE
BVC	BEGIN VERTICAL CURVE
BWV	BACK WATER VALVE
C	CENTIGRADE
CAB	CABINET
CAP	CAPACITY
CB	CATCH BASIN OR CHALK BOARD
CC	CENTER TO CENTER
CD	CEILING DIFFUSER
CLR	CLEAR
CEM	CEMENT
CER	CERAMIC
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CFS	CUBIC FEET PER SECOND
CHEM	CHEMICAL
CHG	CHANGE
CHK V	CHECK VALVE
CHKD PL	CHECKERED PLATE
CI	CAST IRON
CJ	CONSTRUCTION JOINT
CL	CHLORINE GAS, CHLORINATOR, CHAIN LINK, OR CENTERLINE
CLG	CEILING
CLOS	CLOSET
CLR	CLEAR
CM	CENTIMETER
CML & C	CEMENT MORTAR LINED AND COATED
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
COL	COLUMN
CONC	CONCRETE OR CONCENTRIC
COND	CONDENSER OR CONDENSATE
CONN	CONNECTION
CONSTR	CONSTRUCTION OR CONSTRUCT
CONT	CONTINUED OR CONTINUOUS
CONTR	CONTRACTOR
COMP	COMPRESSOR
COTG	CLEAN-OUT TO GRADE
CPLG	COUPLING
CPVC	CHLORINATED POLYVINYL CHLORIDE
CS	CAUSTIC SODA OR CAST STEEL
CT	CERAMIC TILE
CTSK	COUNTERSUNK
CTS	CORROSION TEST STATION
CTR	CENTER
CU	COPPER OR CUBIC
CY	CUBIC YARDS
CYL	CYLINDER
d	PENNY
DBL	DOUBLE
DC	DIRECT CURRENT
DET	DETAIL
DF	DRINKING FOUNTAIN OR DOUGLAS FIR
DG	DOOR GRILLE
DI	DUCTILE IRON
DIA	DIAMETER
DIAG	DIAGONAL
DIAPH	DIAPHRAGM
DISCH	DISCHARGE
DISP	DISPENSER
DN	DOWN OR DECANT
DO	DISSOLVED OXYGEN
DR	DOOR OR DRAIN
DS	DRENCH SHOWER AND EYE WASH
DWG	DRAWING
DIFF	DIFFUSER OR DIFFERENTIAL

E	EAST
EA	EACH
EB	EXPANSION BOLT OR ANCHOR
EC	END CURVE
ECC	ECCENTRIC
ECR	END CURB RETURN
EF	EACH FACE OR EXHAUST FAN
EFF	EFFLUENT
EG	EXHAUST GRILLE OR EXISTING GRADE
EL	ELEVATION
ELEC	ELECTRICAL OR ELECTRONIC
ENG	ENGINE
EPT	ETHYLENE PROPYLENE
ENCL	ENCLOSURE
ENT	ENTRANCE
EQ	EQUAL
EQUIP	EQUIPMENT
EVAP	EVAPORATOR
EVC	END VERTICAL CURVE
EW	EACH WAY OR EYE WASH
EXH	EXHAUST
EX-HY	EXTRA HEAVY
EXIST	EXISTING
EXP JT	EXPANSION JOINT
EXT	EXTERIOR OR EXTENSION
EXTR	EXTRUDED
F	FAHRENHEIT OR FINISH
FABR	FABRICATION, FABRICATE OR FABRICATED
FAI	FRESH AIR INTAKE
FB	FLAT BAR, FLOOR BEAM OR FIELD BOOK
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN OR FIRE DAMPER
FDR	FEEDER
FE	FIRE EXTINGUISHER OR FINAL EFFLUENT
FEM	FEMALE (PIPE THREAD)
FF	FLAT FACE OR FAR FACE
F TO F	FACE TO FACE
FG	FINISHED GRADE
FH	FIRE HYDRANT
FIG	FIGURE
FIN	FINISHED
FIX	FIXTURE
FL	FLOWLINE OR FLOOR
FLEX	FLEXIBLE
FLOCC	FLOCCULATOR OR FLOCCULATION
FLG	FLANGE OR FLOORING
FLGD	FLANGED
FLR	FLOOR
FM	FACTORY MUTUAL (LAB. APPROVED)
FMH	FLEXIBLE METAL HOSE
FND	FOUNDATION
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOS	FACE OF STUDS
FOW	FACE OF WALL
FPC	FLEXIBLE PIPE COUPLING
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FR	FRAME
FRP	FIBERGLASS REINFORCED PLASTIC
FS	FAR SIDE, FLOOR SINK, FINISHED SURFACE, FORGED STEEL FROTH SPRAY OR FACTOR OF SAFETY
FT	FEET OR FOOT
FT. LB	FOOT-POUND
FTG	FOOTING
FUT	FUTURE
GA	GAGE OR GAUGE
GAL	GALLON
GALV	GALVANIZED
GB	GRADE BREAK
GEN	GENERAL OR GENERATOR
GFA	GROOVED FLANGE ADAPTER
GI	GALVANIZED IRON
GL	GLASS
GL/BM	GLUE LAMINATED BEAM
GLV	GLOBE VALVE
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GRD	GRADE OR GROUND
GR BRK	GRADE BREAK OR GRADE CHANGE
GRTG	GRATING
GV	GATE VALVE
GYP	GYPSUM
H/B	HOSE BIBB
HD	HUB DRAIN
HDR	HEADER
HDW	HARDWARE
HEX	HEXAGONAL
Hg	MERCURY
HGR	HANGER
HGT	HEIGHT
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HP	HORSEPOWER OR HIGH PRESSURE
HP	HIGH POINT
HR	HEATING RETURN OR HOUR
HTG	HEATING
HTR	HEATER
H & V	HEATING AND VENTILATING
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
HWL	HIGH/WATER LEVEL
HWD	HARDWOOD
HWO	HANDWHEEL OPERATED
HV	HORIZONTAL AND VERTICAL CONTROL POINT
HYD	HYDRAULIC OR HYDRANT

ID	INSIDE DIAMETER
IF	INSIDE FACE
IN	INCH
INFL	INFLUENT
IN. LB	INCH-POUND
INSL	INSULATION OR INSULATED
INSTR	INSTRUMENT
INT	INTERIOR
INV	INVERT ELEVATION
IP	IRON PIPE
IPS	IRON PIPE SIZE
IRRG	IRRIGATION
JAN	JANITOR
JT	JOINT
K	KELVIN, KILO OR KARAT
KG	KILOGRAM
KM	KILOMETER
KV	KILOVOLT
KW	KILOWATT
KWH	KILOWATT HOUR
LP	LOW POINT
L	LITER OR LENGTH
LAB	LABORATORY
LAM	LAMINATED
LAV	LAVATORY
LB	POUND
LDG	LANDING
LEV	LEVEL
LG	LENGTH OR LONG
LT	LEFT OR LIGHT
LWL	LOW WATER LEVEL
LWR	LOWER
M	METER OR MALE (PIPE THREAD)
MAG	MAGNETIC
MAN	MANUAL
MACH	MACHINE
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MED	MEDIUM
MEMB	MEMBRANE
MFR	MANUFACTURER
MFR'D	MANUFACTURED
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MI	MALLEABLE IRON
MICRON	1/1,000,000 METER
MIL	MILITARY, 1/1,000 INCH
MIN	MINIMUM OR MINUTE
MIR	MIRROR
MISC	MISCELLANEOUS
MK	MARK
MO	MOTOR OPERATED OR MANSONRY OPENING
MOD	MODEL, MODIFY, OR MODIFIED
MS	MOP SINK
MTC	MECHANICAL-TYPE COUPLING
MTD	MOUNTED
MTG	MOUNTING
MTL	MATERIAL OR METAL
MTR	MOTOR
N	NORTH
NBS	NATIONAL BUREAU OF STANDARDS
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NF	NEAR FACE
NG	NATURAL GRADE OR NATURAL GAS
NIC	NOT IN CONTRACT
NO	NUMBER OR NORMALLY OPEN
NOM	NOMINAL
NPS	NOMINAL PIPE SIZE (FORMERLY I.P.S.)
NPT	NATIONAL PIPE THREAD
NRS	NON-RISING STEM
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	OVER-CROSSING OR ON CENTER
OD	OUTSIDE DIAMETER OR OVERALL DIMENSION
OF	OVERFLOW OR OUTSIDE FACE
OFF	OFFICE
OH	OVER HEAD
OPER	OPERATOR OR OPERATING
OPNG	OPENING
OS & Y	OUTSIDE SCREW AND YOKE
OWG	OIL, WATER, GAS
OZ	OUNCE

P/S	POLE AND SHELF
P	POLE, PAGE OR PIPE
PART	PARTITION
PAVMT	PAVEMENT
PB	POLYBUTYLENE
PC	PRIMARY CLARIFIER OR PORTLAND CEMENT
PCC	PORTLAND CEMENT CONCRETE
PC CONC.	PORTLAND CEMENT CONCRETE
PCOTG	PRESSURE CLEANOUT TO GRADE
PD	PLANT DRAIN
PE	PLANT EFFLUENT, POLYELECTROLYTE POLYMER OR POLYETHYLENE
PG	PRESSURE GAGE
pH	HYDROGEN ION CONCENTRATION
PI	PLANT INFLUENT OR POINT OF INTERSECTION
PL	PLATE, PROPERTY LINE OR PLACE
PLAS	PLASTER OR PLASTIC
PLYWD	PLYWOOD
PMH	PRESSURE MANHOLE
PNEU	PNEUMATIC
PNL	PANEL
PM	PRESSED METAL
PP	POWER POLE OR POLYPROPYLENE
PLT	PLANT
PO	PLANT OVERFLOW
PPD	POUNDS PER DAY
PPH	POUNDS PER HOUR
PPM	PARTS PER MILLION
PR	PAIR
PRCT	PRECAST
PREFAB	PREFABRICATED
PRESS	PRESSURE REGULATING, RELIEF OR REDUCING VALVE
PRV	
PS	PRESSURE SWITCH
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAUGE
PT	PAINT
PTDF	PRESSURE TREATED DOUGLAS FIR
PTFE	POLYTETRAFLUOROETHYLENE (TEFLON®)
PW	POTABLE WATER
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
PVDF	POLYVINYLIDENE FLUORIDE (KYNAR®)
QT	QUARRY TILE
QTY	QUANTITY
R	RADIUS, RISER, RETURN OR RATE OF SLOPE
RAG	RETURN AIR GRILLE
RC	REINFORCED CONCRETE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN, ROUND, OR ROAD
RDWD	REDWOOD
RECIRC	RECIRCULATED
RED	REDUCER OR REDUCING
REF	REFERENCE OR REFER
REG	REGULATING
REIN	REINFORCE OR REINFORCED
RE-STL	REINFORCING STEEL
REQD	REQUIRED
RESIL	RESILENT
REV	REVISION
RFG	ROOFING
RF	ROOF OR RAISED FACE
RM	ROOM
RO	ROUGH OPENING
RP	RADIAL POINT
RPM	REVOLUTIONS PER MINUTE OR REINFORCED PLASTIC MORTAR
RR	RAILROAD
RS	RISING STEM
RT	RIGHT
RTP	REINFORCED THERMOSETTING PLASTIC
R/W	RIGHT OF WAY
RW	REDWOOD, RECLAIMED WATER
RWL	RAINWATER LEADER
S	SOUTH, SCUM, SINK, SECOND OR SLOPE
SA	SAMPLE
SBR	STYRENE BUTADENE (RUBBER)
SC	SPARE CHEMICAL OR SECONDARY CLARIFIER
SCD	SCREWED
SCFM	STANDARD CUBIC FEET PER MINUTE
SCH	SCHEDULE
SDR	STORM DRAINS
SEC	SECONDARY
SECT	SECTION
SER	SERIES
SETT	SETTLING
SH	SHOWER
SHT	SHEET OR SHELF
SHTG	SHEATHING
SIM	SIMILAR
SL	SLUDGE OR SLOPE
SOLN	SOLUTION
SLDG	SLIDING
SP	STATIC PRESSURE
SPECS	SPECIFICATIONS
SPECF	SPECIFIED
SQ	SQUARE
SS	SANITARY SEWER, STAINLESS STEEL OR SERVICE SINK
SSPWC	STANDARD SPECIFICATIONS PUBLIC WORKS COMMITTEE
SSU	SECONDS SAYBOLT UNIVERSAL
STA	STATION
STC	SLEEVE-TYPE COUPLING
STD	STANDARD
STL	STEEL
STM	STEAM
STN	STAINLESS
STN STL	STAINLESS STEEL
STRUCT	STRUCTURAL OR STRUCTURE
SUCT	SUCTION
SV	SOLENOID VALVE
SWR	SIDEWALL REGISTER
SYM	SYMMETRICAL OR SYMBOL
SYS	SYSTEM

T	THERMOSTAT, TREAD OF STAIR, TANGENT OR TOP
TB	TACK BOARD
T & B	TOP AND BOTTOM
TBE	THREAD BOTH ENDS
TBM	TEMPORARY BENCH MARK
TC	TOP OF CURB
TEL	TELEPHONE
TEMP	TEMPERATURE OR TEMPORARY
T & G	TONGUE AND GROOVE
THK	THICK OR THICKNESS
THR	THRESHOLD
THR'D	THREADED
TK	TANK
TOA	TOP OF AREA DRAIN
TOE	THREAD ONE END
TOG	TOP OF GRATE
TOL	TOILET
TOW	TOP OF WALL
TP	TELEPHONE POLE OR TELEGRAPH POLE
TRANS	TRANSITION OR TRANSMITTER
TSB	TOP SET BASE
TV	THERMOSTATIC VALVE OR TELEVISION
TW	TOP OF WALL OR THERMOMETER WELL
TYP	TYPICAL
UB	UNION BONNET
UC	UNDER-CROSSING
UG	UNDERGROUND
UGC	UNDERGROUND CONDUIT
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
V	VACUUM, VALVE, VERTICAL, VENT, VOLT OR VOLUME
VAR	VARIES OR VARIABLE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VOL	VOLUME
VTC	VENT TO CEILING
VTR	VENT THROUGH ROOF
VWC	VINYL WALL COVERING
W	WEST OR WASTE
W/	WITH
WC	WATER COLUMN OR WATER CLOSET
WCO	WALL CLEANOUT
WD	WOOD
WH	WATER HEATER
WI	WROUGHT IRON
W/O	WITHOUT
WOG	WATER, OIL OR GAS WORKING PRESSURE
WP	WATER PROOFING
WS	WATER SURFACE
WSTP	WATER STOP
WT	WEIGHT
WWM	WELDED WIRE MESH
WWP	WATER WORKING PRESSURE
WV	WATER VALVE
XS	EXTRA STRONG
XXS	DOUBLE EXTRA STRONG
YD	YARD
YR	YEAR
Z	ZERO OR ZONE
ZN	ZINC

NOTES:

ELECTRICAL ABBREVIATIONS SHOWN ON ELECTRICAL SHEETS

ADDITIONAL ABBREVIATIONS CONFORM TO ANSI STANDARD ABBREVIATIONS Z32.2.3

ADDITIONAL HEATING, VENTILATING AND AIR CONDITIONING ABBREVIATIONS

SAD	SUPPLY AIR DUCT
RAD	RETURN AIR DUCT
EAD	EXHAUST AIR DUCT
OA	OUTSIDE AIR
RAR	RETURN AIR REGISTER
EAR	EXHAUST AIR REGISTER
SAG	SUPPLY AIR GRILLE
VCD	VOLUME CONTROL DAMPER
F/A	FROM ABOVE
T/A	TO ABOVE
F/B	FROM BELOW
T/B	TO BELOW
DL	DOOR LOUVRE
UTR	UP THRU ROOF
VAV	VARIABLE AIR VOLUME
VTR	VENT TO ROOF

Cornelius G. Santos 9-30-95 CIVIL STATE OF CALIFORNIA

JOB NO. S-1636

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED J. Gaskey
DRAWN R. Dupre
CHECKED CLY

SUBMITTED Pradhe Namuduri C-49971 5-23-94
PROJECT ENGINEER R. C. E. NO. DATE

RECOMMENDED Surendra Thakral C-44599 5-23-94
MONTGOMERY WATSON R. C. E. NO. DATE

MONTGOMERY WATSON
Pasadena, California

APPROVED ____ DATE
APPROVED ____ DATE

CITY OF RIVERSIDE
PIERCE STREET PUMP STATION UPGRADE
LIST OF ABBREVIATIONS

SHEET G-3 OF 44 SHEETS

INDEXED 1-31-05 GH

JOB No. 193.0453 FILE No. USR5/PRJ/RIVERPS/CIV/PPSG03.DGN

- MASONRY
- AC PAVEMENT REMOVAL
- CAST IRON
- CONCRETE PAVEMENT REMOVAL
- STEEL
- NEW AC PAVEMENT
- BRONZE
- NEW CONC. PAVEMENT
- INSULATION
- GRAVEL
- CONCRETE
- EARTH
- SAND
- ALUMINUM OR METAL DECKING
- CHECKERED PLATE
- SPAN — GRATING
- PLASTIC, RUBBER OR NEOPRENE
- WOOD (FINISH)
- WOOD (ROUGH FRAMING) OR, OPENING OR DEPRESSION IN SLAB OR WALL
- 12x24 — DUCT (FIRST DIMENSION DUCT SIDE SHOWN, SECOND DIMENSION DUCT SIDE NOT SHOWN)
- 24x12 — SUPPLY OR OUTSIDE AIR DUCT (FIRST DIMENSION, DUCT WIDTH)
- 24x12 — EXHAUST OR RETURN AIR DUCT (FIRST DIMENSION, DUCT WIDTH)
- SIZE / CFM — CEILING SUPPLY DIFFUSER (SIZE IN INCHES)
- SIZE / CFM — CEILING RETURN OR EXHAUST AIR GRILLE OR REGISTER (SIZE IN INCHES, WIDTH X HEIGHT)
- SIZE / CFM — EXHAUST OR RETURN AIR GRILLE OR REGISTER (SIZE IN INCHES, WIDTH X HEIGHT)
- SIZE / CFM — SUPPLY GRILLE OR REGISTER (SIZE IN INCHES, WIDTH X HEIGHT)
- AIR TURNING VANES IN DUCT
- DD — DEFLECTING DAMPER
- FHC — FIRE HOSE CABINET
- FE — FIRE EXTINGUISHER
- UNIT HEATER
- ℄ — CENTERLINE
- PL — PROPERTY LINE
- NEW STRUCTURE OR FACILITY
- EXISTING STRUCTURE OR FACILITY
- FUTURE STRUCTURE OR FACILITY
- NEW FENCE
- EXISTING FENCE
- NEW PIPELINE (CIVIL SHEETS) 36" DIA. AND LARGER
- NEW PIPELINE (CIVIL SHEETS) 12" DIA. TO 34" DIA.
- NEW PIPELINE (CIVIL SHEETS) 10" DIA. AND SMALLER
- EXISTING PIPELINE

- 123 — CONTOUR LINE, FINISHED GRADE
- 123 — CONTOUR LINE, EXISTING GRADE
- 123.20 — FINISHED ELEVATION
- (123.20) — EXISTING ELEVATION
- TOP / TOE — CUT OR FILL SLOPE TO BE CONSTRUCTED
- NEW A.C. PAVING
- EXISTING A.C. PAVING
- RAILING
- FH — FIRE HYDRANT
- MH — MANHOLE
- PCOTG — PRESSURE CLEANOUT TO GRADE
- WCO — WALL CLEANOUT
- FCO — FLOOR CLEANOUT
- COTG — CLEANOUT TO GRADE
- BLOW OFF ASSEMBLY
- HUB DRAIN
- FLOOR DRAIN
- FLOOR SINK
- DRAIN TRAP
- SOIL BORING
- BENCH MARK
- HORIZONTAL AND VERTICAL CONTROL POINT
- VAULT OR JUNCTION STRUCTURE
- CHANGE IN PIPING MATERIAL
- ROUND OR DIAMETER
- SQUARE
- @ — AT
- ∠ — ANGLE
- 24" RW-RCP — PIPE SIZE, FLUID ABBREVIATION AND TYPE OF PIPE
- 2" UW (2) — PIPE CALLOUT (SEE PIPING SCHEDULE)
- ME-2 — EQUIPMENT NUMBER (SEE EQUIPMENT SCHEDULE)
- BACKWATER VALVE
- BACKFLOW PREVENTER
- STOP GATE
- SLIDE GATE
- SLUICE GATE

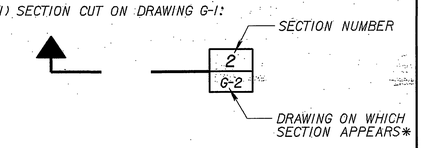
- GATE VALVE, BURIED WITH VALVE BOX
- BUTTERFLY VALVE, BURIED WITH VALVE BOX
- ECCENTRIC PLUG VALVE, BURIED WITH VALVE BOX
- LUBRICATED PLUG VALVE, BURIED WITH VALVE BOX
- GATE VALVE
- BUTTERFLY VALVE
- ECCENTRIC PLUG VALVE
- LUBRICATED PLUG VALVE
- GLOBE VALVE
- BALL VALVE
- DIAPHRAGM VALVE
- CHECK VALVE
- PRESSURE REGULATING VALVE
- BACK-PRESSURE VALVE
- M / P — MOTOR OPERATOR FOR VALVES (M = ELECTRIC, P = PNEUMATIC)
- T — TEMPERATURE CONTROL VALVE
- S — SOLENOID VALVE
- MULTIPORT VALVE - 3 WAY
- MULTIPORT VALVE - 4 WAY
- FLOAT OPERATED VALVE
- NEEDLE VALVE
- PRESSURE RELIEF VALVE
- ANGLE VALVE
- HOSE BIBB (H/B)
- B — BUBBLER LEVEL CONTROL
- CENTRIFUGAL OR TURBINE PUMP OR FAN
- METERING PUMP
- PROGRESSING CAVITY, POSITIVE DISPLACEMENT PUMP
- BLOWER OR COMPRESSOR
- INJECTOR OR EDUCTOR
- F/A — FLAME ARRESTER
- AIR VACUUM AND AIR RELEASE ASSEMBLY
- THERMOMETER
- PIPE ANCHOR

- T — ROOM THERMOSTAT
- G — PRESSURE GAUGE
- G — PRESSURE GAUGE WITH DIAPHRAGM SEAL
- S — PRESSURE SWITCH
- S — PRESSURE SWITCH WITH DIAPHRAGM SEAL
- FLANGED FITTING
- WELDED FITTING
- MECHANICAL-TYPE FITTING (GROOVED)
- SCREWED, SOCKET-WELD, BELL AND SPIGOT OR HUBLESS FITTING
- SLEEVE-TYPE COUPLING
- FLANGED ADAPTER COUPLING
- FLANGED ADAPTER - SET SCREW TYPE
- EXPANSION JOINT
- MECHANICAL TYPE COUPLING
- FLEXIBLE COUPLING
- UNION
- QUICK DISCONNECT COUPLER
- CAPPED END OR PLUGGED END
- BLIND FLANGE
- REDUCER OR INCREASER
- CUT PIPE
- STRAINER
- DRAIN
- FLOW TUBE
- M M — MAGNETIC METER
- D M — DENSITY METER
- P M — PROPELLER METER
- ORIFICE PLATE AND FLANGES
- ROTAMETER
- T — CONDENSATE TRAP
- PIPE SUPPORT (IN PLAN ONLY)
- CB — CATCH BASIN
- PULSATION DAMPENER
- EXPANSION CHAMBER WITH RUPTURE DISC
- RUPTURE DISC
- FG — FLOW SIGHT GLASS
- X

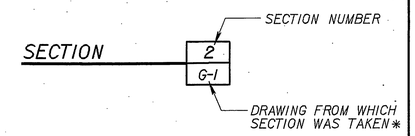
SECTION AND DETAIL IDENTIFICATION

SECTION IDENTIFICATION

(1) SECTION CUT ON DRAWING G-1:

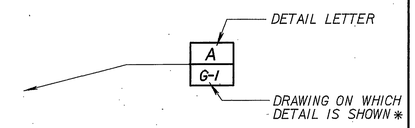


(2) ON DRAWING G-2 THIS SECTION IS IDENTIFIED AS:

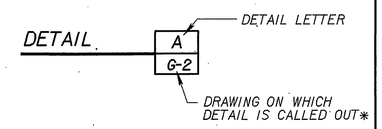


DETAIL IDENTIFICATION

(1) DETAIL CALL-OUT ON DRAWING G-2 AS:



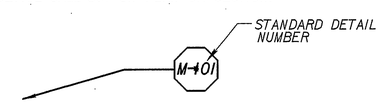
(2) ON DRAWING G-1 THIS DETAIL IDENTIFIED AS:



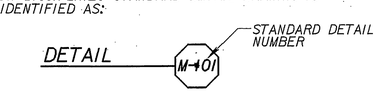
*NOTE: IF PLAN AND SECTION (OR DETAIL CALL-OUT AND DETAIL) ARE SHOWN ON SAME DRAWING, DRAWING NUMBER IS REPLACED BY A LINE.

STANDARD DETAIL IDENTIFICATION

(1) DETAIL CALL-OUT ON PLAN OR SECTION:



(2) ON DISCIPLINES STANDARD DETAIL DRAWING IS IDENTIFIED AS:



NOTES:

(1) ELECTRICAL SYMBOLS SHOWN ON ELECTRICAL SHEETS.

(2) FOR WELDING SYMBOLS USE AMERICAN WELDING SOCIETY STANDARD SYMBOLS. SEE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL.

REGISTERED PROFESSIONAL ENGINEER — CARMELO J. CANTRELL — Reg. 34674 — Exp. Date 9-30-95 — CIVIL — STATE OF CALIFORNIA

JOB NO. S-1636

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 ½ 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED J. Gantney
DRAWN R. Bigote
CHECKED CJC

SUBMITTED Prabhu Namuduri — PROJECT ENGINEER — C-49471 — R. C. E. NO. — 5-23-94 — DATE
RECOMMENDED Surendra Thakral — MONTGOMERY WATSON — C-44599 — R. C. E. NO. — 5-23-94 — DATE

MONTGOMERY WATSON — Pasadena, California

APPROVED ____ DATE
APPROVED ____ DATE

CITY OF RIVERSIDE
PIERCE STREET PUMP STATION UPGRADE
LIST OF SYMBOLS

SHEET G-4 OF 44 SHEETS

JOB No. 193.0453 FILE No. USR5/PRJ/RIVERPS/CIV/PPSG04.DGN

INDEXED 1-31-09 HH