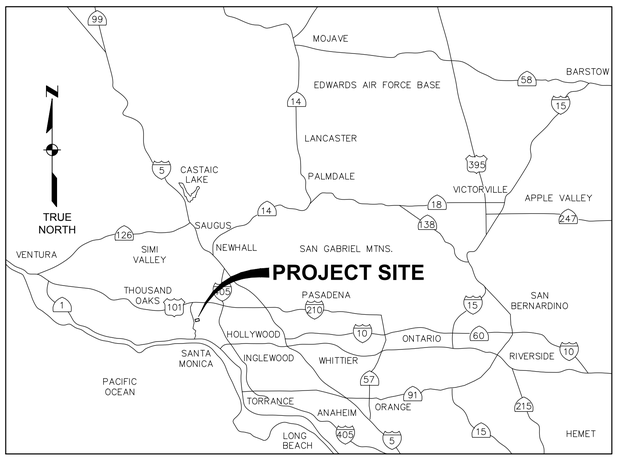
LAS VIRGENES - TRIUNFO
JOINT POWERS AUTHORITY
RANCHO LAS VIRGENES THIRD DIGESTER

LAS VIRGENES MUNICIPAL WATER DISTRICT EST. 1958

TRIUNFO SANITATION DISTRICT
A PUBLIC AGENCY

2012



VICINITY MAP
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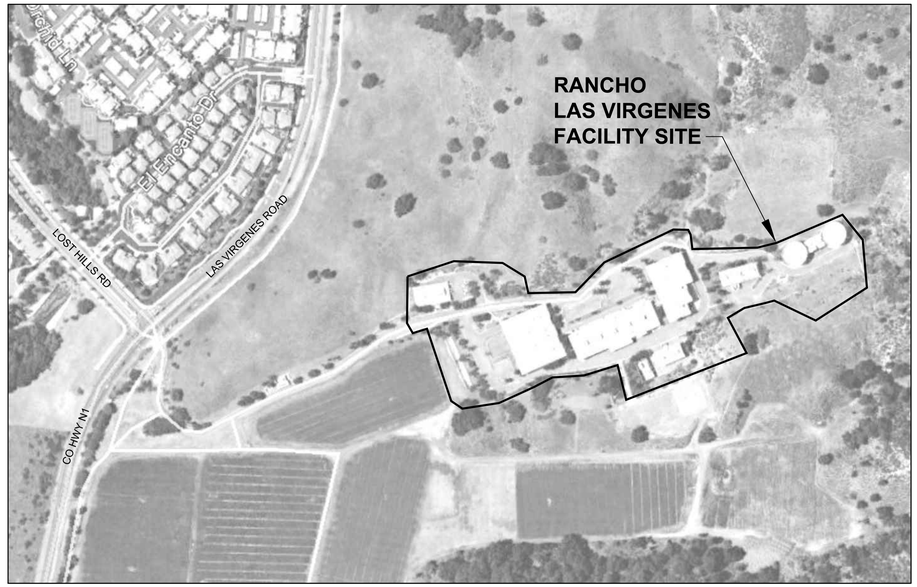

LOCATION MAP
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811
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UNDERGROUND SERVICE ALERT(USA) OF SOUTHERN CALIFORNIA

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DRAWN BY	VL
CHECKED BY	JMW
DATE	NOV 2012
PROJECT ENGINEER	KAPIL VERMA
REG NUMBER / EXP DATE	C74589 / 12/31/13
PROJECT NUMBER	1188026*00
CADD STANDARDS	KENNEDY/JENKS

KENNEDY/JENKS CONSULTANTS
2775 NORTH VENTURA ROAD, SUITE 100
OXNARD, CALIFORNIA 93036

LAS VIRGENES MUNICIPAL WATER DISTRICT EST. 1958

TRIUNFO SANITATION DISTRICT
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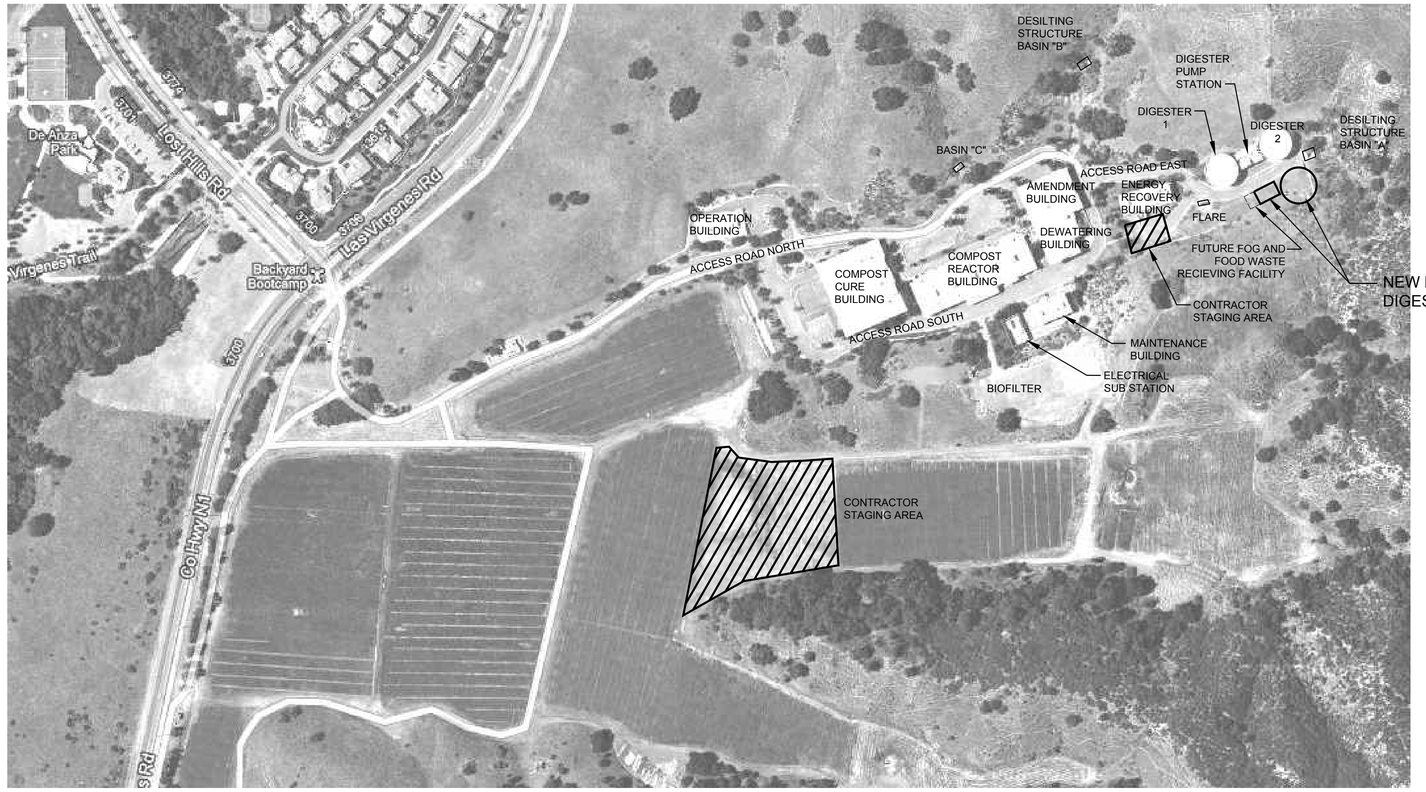
LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY
RANCHO LAS VIRGENES THIRD DIGESTER

TITLE SHEET

DRAWING **G-01**
SHEET 1 OF 86



FACILITY SITE MAP

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FACILITY SITE MAP AND INDEX TO PLANS

DRAWING G-02
SHEET 2 OF 86

DWG: \\KJ\KJ-root\KJ-Cad\SantaClara\11\1188026.00-Las Virgenes-Third Digester Design\1088026-G02.dwg USER: mkemorx
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ABBREVIATIONS

&	AND
∠	ANGLE
±	APPROXIMATELY
@	AT
℄ ℄	CENTERLINE
△	DEFLECTION
°	DEGREE
=	EQUALS
'	FOOT
>	GREATER THAN
"	INCH
Ø	PHASE
<	LESS THAN
#	NUMBER
%	PERCENT
A	AREA
AB	ANCHOR BOLT(-S)
ABAN	ABANDON (-ED)
ABS	ABSOLUTE
A.B.S.	ACRYLONITRILE-BUTADIENE-STYRENE
AC	ACRE
A.C.	ASBESTOS CEMENT
A/C	ASPHALT CONCRETE
ACOUS	ACOUSTICAL
ACT.	ACTIVATE
ADDL, ADDIT	ADDITIONAL
ADJ	ADJUST(-ED,-MENT,-ABLE)
ADJT	ADJACENT
ADWF	AVERAGE DRY WEATHER FLOW
AF	ACRE-FEET
AFD	ADJUSTABLE FREQUENCY DRIVE
AGG	AGGREGATE
AIR-CON	AIR CONDITION (-ER,-ING)
AIRVAC	AIR AND VACUUM VALVE
AL, ALUM.	ALUMINUM
ALT	ALTERNAT(-E,-IVE)
ALTD	ALTITUDE
ANC	ANCHOR
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
APPROX	APPROXIMAT(-E,-LY)
ARCH.	ARCHITECT (-URAL)
ARV	AIR RELEASE VALVE
ASB	ASBESTOS
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATING & AIR CONDITIONING ENGINEERS
ASPH	ASPHALT
ASST	ASSISTANT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATM	ATMOSPHERE (14.7 LB/IN SQ)
AWG	AMERICAN WIRE GAUGE
AWWA	AMERICAN WATER WORKS ASSOCIATION
AUX	AUXILIARY
AVE	AVENUE
AVG	AVERAGE
AVV	AIR AND VACUUM VALVE
BARM	BARMINUTOR
BC	BEGINNING OF HORIZONTAL CURVE
BCV	BALL CHECK VALVE
BD	BOARD
BF	BLIND FLANGE
BFP	BACKFLOW PREVENTER
BFV	BUTTERFLY VALVE
BHP	BRAKE HORSEPOWER
BIO	BIOFILTER
BIOL	BIOLOGICAL
BITUM	BITUMINOUS
BL	BUILDING LINE
BLDG	BUILDING
BLK	BLOCK(-S)
BLKG	BLOCKING
BM	BEAM
B.M.	BENCH MARK
BOD 5	BIOCHEMICAL OXYGEN DEMAND (5 DAY)
BOT	BOTTOM
BRG	BEARING
BS	BLACK STEEL
BSMT	BASEMENT
BTU	BRITISH THERMAL UNIT
BTWN	BETWEEN
BV	BALL VALVE
BVC	BEGINNING OF VERTICAL CURVE
°C	DEGREES CELSIUS (CENTIGRADE)
C	CONDUIT
CAB.	CABINET
CAV	COMBINATION AIR VALVE
CB	CATCH BASIN
CC	CENTER TO CENTER
CEM	CEMENT
CEN	CENTRAL
CF	CUBIC FEET
CFM	CUBIC FEET PER MINUTE
CFS	CUBIC FEET PER SECOND
CH	CHAMBER
CHAN	CHANNEL
CHEM	CHEMI (-CAL,-STRY)
CHKD	CHECKERED
CI	CAST IRON
CIP	CAST IRON PIPE
CIRC	CIRCULA(-R,-TION)
CIRCUM	CIRCUMFERENCE
CISP	CAST IRON SOIL PIPE
CKT.	CIRCUIT
CL ℄	CENTERLINE
CL2	CHLORINE
CLASS.	CLASSIFICATION
CLG	CEILING
CLOS	CLOSET
CLR	CLEAR (-ANCE)
CM 3	CUBIC CENTIMETER
CM 2	SQUARE CENTIMETER
CM	CENTIMETER
CMC	CEMENT MORTAR COATED
CML	CEMENT MORTAR LINED
CML&C	CEMENT MORTAR LINED & COATED
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT(-S)
CNTR	COUNTER
CNTRSK	COUNTERSUNK
CO	CLEANOUT
CO2	CARBON DIOXIDE
C.O.D.	CHEMICAL OXYGEN DEMAND
COL	COLUMN
COMM	COMMUNICATION
COMP	COMPRESSOR
CONC	CONCRETE
COND	CONDENSATE
CONN	CONNECT (-S,-ION)
CONST	CONSTRUCT (-ION)
CONST JT,CJ	CONSTRUCTION JOINT
CONT	CONTINU (-ED,-OUS,-ATION)
CONTR	CONTRACTOR
COORD	COORDINATE
COR	CORNER
CORR	CORRUGATED
COUP.,CPLG	COUPLING
CP	CONTROL PANEL
CPVC	CHLORINATED POLYVINYL CHLORIDE
C/S, CS	CONSTANT SPEED
CT	COURT
CTR	CENTER
CTS	CATHODIC TEST STATION
CV	CHECK VALVE
CW	COLD WATER
CWT	ONE HUNDRED POUNDS
CY	CUBIC YARD
D	DRAIN
DBL	DOUBLE
DEG	DEGREE(-S)
DEMO, (D)	DEMOLISH
DET, DTL	DETAIL(-S)
DF	DOUGLAS FIR; DRINKING FOUNTAIN
DGRM	DIAGRAM
DI	DUCTILE IRON
DIA	DIAMETER
DIAG	DIAGONAL(-S)
DIAPH	DIAPHRAGM
DIM.	DIMENSION(-S)
D.I.P., DIP	DUCTILE IRON PIPE
DIR	DIRECTION
DISCH	DISCHARGE
DIST	DISTRIBUTION
DN	DOWN
D.O.	DISSOLVED OXYGEN
DR	DOOR
DRG	DOUBLE RUBBER GASKET JOINT
DS	DOWN SPOUT
DUP	DUPLEX
DWG(S)	DRAWING(-S)
E	EAST
EA	EACH
EC	END OF HORIZONTAL CURVE
ECC	ECCENTRIC
ECD	EPOXY COATED
EF	EACH FACE; EXHAUST FAN
EFFIC	EFFICIENCY
EFFL, EFF	EFFLUENT
EGL	ENERGY GRADE LINE
E.L.	EPOXY LINED
EL, ELEV.	ELEVATION
ELB, ELL	ELBOW
EL&C	EPOXY LINED & COATED
ELEC	ELECTRIC (-AL)
ELEM	ELEMENTARY
EMERG	EMERGENCY
ENCL	ENCLOSURE
ENGR	ENGINEER
ENTR	ENTRANCE
EP	EDGE OF PAVEMENT
EPA	ENVIRONMENTAL PROTECTION AGENCY
EQ	EQUAL (-LY)
EQUAL.	EQUALIZATION
EQUIP.	EQUIPMENT
EST	ESTIMATE (-D)
ETC	ET CETERA
EUC	EUCALYPTUS
EXC	EXCAVATE
EXH	EXHAUSTER (-S)
EXIST., (E)	EXISTING
EXP	EXPANSION
EXP JT	EXPANSION JOINT
EXT	EXTERIOR
EVC	END OF VERTICAL CURVE
EW	EACH WAY
°F	DEGREE FAHRENHEIT
FT	FEET, FOOT
FA	FIRE ALARM
FAI	FRESH AIR INTAKE
FB	FLAT BAR
FC	FLEXIBLE COUPLING
FCA	FLANGED COUPLING ADAPTER
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FE	FIRE EXTINGUISHER
FF	FAR FACE, FINISH FLOOR
FG	FLAP GATE
FH	FIRE HYDRANT
FL	FLOW LINE
FM	FLOW METER
FOS	FACE OF STUD
FRC	FLEXIBLE RUBBER COUPLING
FRP	FIBERGLASS REINFORCED PLASTIC
FAB	FABRICATE(-D)
FAC	FACTORY
FACIL	FACILITY (-IES)
FDR	FEEDER
FIG.	FIGURE
FILT	FILTER
FIN.	FINISH(-ED)
FIN. GD	FINISH GRADE
FLASH.	FLASHING
FLEX.	FLEXIBLE
FLG	FLANGE(-D)
FLR	FLOOR
FLUOR	FLUORESCENT
FDN	FOUNDATION
FREQ	FREQUENCY
FT 3	CUBIC FEET
FT 2	SQUARE FEET
FTG	FOOTING
FURN	FURNACE
FURR	FURRING
FUT, (F)	FUTURE
FWD	FORWARD
GA	GAUGE
GAL	GALLON (-S)
GALV	GALVANIZE(-D)
GASO	GASOLINE
GC	GROOVED COUPLING
GDL	GROUND LEVEL
GEN	GENERATOR
GENL	GENERAL
GL	GLASS
GLV	GLOBE VALVE
GLL	GLASS LINED
GND	GROUND
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRAM
GRL	GUARDRAIL
GS	GALVANIZED STEEL
GV	GATE VALVE
GYP BD	GYPSUM BOARD
H	HIGH
HB	HOSEBIBB
HC	HEAT CONSERVATION
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HGR	HANGER
HGT, HT	HEIGHT
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HP	HORSEPOWER
HPT, H.P.	HIGH POINT
HR	HOUR
HRL	HANDRAIL
HTR	HEATER
HVAC	HEATING, VENTILATING & AIR CONDITIONING
HVY	HEAVY
HW	HOT WATER
HWD, HDWD	HARDWOOD
HWL	HIGH WATER LEVEL
HWY	HIGHWAY
HYD	HYDRAULIC
HZ	HERTZ
I & C	INSTRUMENTATION AND CONTROLS
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
I.F.	INSIDE FACE
IN 3	CUBIC INCHES
IN 2	SQUARE INCHES
IN	INCH (-ES)
INFL, INF	INFLUENT
INSTR	INSTRUMENT
INSUL	INSULAT(-E,-ION)
INT	INTERIOR
INV	INVERT
IPS	INTERNATIONAL PIPE STANDARD
IW	INDUSTRIAL WASTES
JAN	JANITOR
JB, J-BOX	JUNCTION BOX
JST	JOIST
JT	JOINT
KG	KILOGRAM; KNIFE GATE
KIP	ONE THOUSAND POUNDS
Km	KILOMETER
KV	KILOVOLTS
KVA	KILOVOLT-AMPERES
KW	KILOWATT
L	LENGTH; LITER
LAB	LABORATORY
LAM	LAMINATE
LAT	LATERAL
LAV	LAVATORY
LB	POUND(-S)
L/D	LITERS PER DAY
LDG	LANDING
LE	LIFTING EYE
LEL	LOWER EXPLOSION LIMIT
LF	LINEAR FEET
LG	LONG
LGT	LIGHT
LH	LEFT HAND
LIQ	LIQUID
LL	LIVE LOAD
LLV	LONG LEG VERTICAL
LO	LIVE OAK
LOC	LOCATION
LONG.	LONGITUDINAL
LOS	LOCK OUT SWITCH
LP	LOW POINT
LPG	LIQUIFIED PETROLEUM GAS (PROPANE OR BUTANE AS NOTED)
LS	LIMIT SWITCH
LT	LEFT
LTG	LIGHTING
LVMWD	LAS VIRGENES MUNICIPAL WATER DISTRICT
LWL	LOW WATER LEVEL
(M)	MODIF (-Y, -IED)
M 3	CUBIC METERS
M 2	SQUARE METERS
M	METER
MACH.	MACHINE
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MET.	METAL
MFR	MANUFACTURER
MG	MILLIGRAMS
M.G.	MILLION GALLONS
MGD	MILLION GALLONS PER DAY
MG/L	MILLIGRAMS PER LITER
MH	MANHOLE
MIL(S)	1/1000 INCH
MIN	MINIMUM; MINUTE
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
ML	MILLILITER(-S)
MM	MILLIMETER(-S)
MODIF	MODIFICATION(-S)
MON	MONUMENT
MPH	MILES PER HOUR
MT	MOUNT
MTD	MOUNTED
MTG	MOUNTING
MTR	MOTOR
MUL	MULLION
MV	MUD VALVE
N	NORTH
(N)	NEW
N/A	NOT APPLICABLE
NAT G, NG	NATURAL GAS
N.C.	NORMALLY CLOSED
NE	NORTHEAST
NEUT	NEUTRAL
NF	NEAR FACE
NGVD	NATIONAL GEODETIC VERTICAL DATUM
NIC	NOT IN CONTRACT
N.O.	NORMALLY OPEN
NO.	NUMBER
NOM	NOMINAL
NORM	NORMAL
NRS	NON-RISING STEM (VALVE)
NT	NORMALLY THROTTLED
NTS	NOT TO SCALE
NV	NEEDLE VALVE
NW	NORTHWEST
NWL	NORMAL WATER LEVEL
OA	OVERALL
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER
O/C	OPEN/CLOSE SERVICE
OD	OUTSIDE DIAMETER
O.F.	OUTSIDE FACE
OF.	OVERFLOW
OFF.	OFFICE
OFS	OUTSIDE FACE OF STUD
O.H.	OVERHEAD
OL	OVERLOAD
OPNG	OPENING
OPP	OPPOSITE
ORIG	ORIGINAL
OS&Y	OUTSIDE SCREW & YOKE (RISING STEM-VALVE)
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION
OZ	OUNCE(-S)
P	PIPE
PC	PIECE
P.C.	POINT OF HORIZONTAL CURVE
PCC	POINT OF COMPOUND CURVE
PCF	POUNDS PER CUBIC FEET
PCO	PRESSURE CLEANOUT
PDV	PLUG DRAIN VALVE
P.E.	PLAIN END
PE, POLY	POLYETHYLENE
PEN.	PENETRATION
PERF	PERFORAT(-E, -ED, -ES, -ATION)
PF	PROFILE
PG	PRESSURE GAUGE
PH	PIPE HANGER
PHMS	PAN HEAD MACHINE SCREW
P.I.	POINT OF HORIZONTAL INTERSECTION
P & ID	PROCESS (OR PIPING) & INSTRUMENTATION DIAGRAM
PIV	POST INDICATOR VALVE
P.L., P/L	PROPERTY LINE
PL, P	PLATE
PLAS	PLASTER
PLY.	PLYWOOD
PNL	PANEL
P.O.T	POINT OF TANGENCY
PP	PAGES, PERSONEL PROTECTION
P.P.	POWER POLE
PPB	PARTS PER BILLION
PPM	PARTS PER MILLION
PR	PAIR
P.R.	PULL RING
PRESS.	PRESSURE
PRFV	PRESSURE RELIEF VALVE
PRV	PRESSURE REDUCING VALVE
PRI	PRIMARY
PROJ	PROJECT(-ION)
PROP.	PROPERTY
PROT	PROTECTOR
PRS	PRESSURE SNUBBER
PRV	PRESSURE REDUCING VALVE
PS	PIPE SUPPORT
PSF	POUNDS PER SQUARE FEET
PSI	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH ABSOLUTE (PRESSURE ABOVE VACUUM)
PSIG	POUNDS PER SQUARE INCH-GAUGE (PRESSURE ABOVE ATMOSPHERE)
P.SL.	PIPE SLEEVE
P.STA.	PUMP STATION
P. SW.	PRESSURE SWITCH
PT	POINT
PV	PLUG VALVE
P.V.C.	POINT OF VERTICAL CURVE
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PWWF	PEAK WET WEATHER FLOW
PVMT	PAVEMENT
PWR	POWER
Q.	FLOW OR DISCHARGE
R	RISER
R, RAD	RADIUS
RC	REINFORCED CONCRETE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REC	RECEIVING
RECIRC	RECIRCULAT(-E, -ION)
RED.	REDUCE(-R)
REF	REFERENCE
REFR	REFRIGERATOR
REG	REGULAT(-E, -OR, -ION, -ING)
REINF	REINFORC(-E, -ED, -ING, -MENT)
REL	RELATIVE
REQD	REQUIRED
REQT	REQUIREMENT
RES, RSVR	RESERVOIR
RESIL	RESILIENT
REV	REVISION
RH	RIGHT HAND
RM	ROOM
RWD	REDWOOD
R/W	RIGHT-OF-WAY
RTN	RETURN
RTE	ROUTE
RT	RIGHT
RR	RAILROAD
RPS	REVOLUTIONS PER SECOND
RPM	REVOLUTIONS PER MINUTE
RND	ROUND
S	SOUTH; SLOPE
SAN	SANITARY
SARV	SEWAGE AIR RELIEF VALVE
SAVV	SEWAGE AIR/VACUUM RELIEF VALVE
SCAV	SEWAGE COMBINATION AIR VALVE
SCFM	STANDARD CUBIC FEET PER MINUTE
SCHED, SCH	SCHEDULE
SD	STORM DRAIN
SE	SOUTHEAST
SEC	SECOND(-S, -ARTY)
SECT	SECTION(-S)
SED	SEDIMENTATION
SEW.	SEWER
SG	SLUICE GATE
SHT, SH	SHEET
SI	SIDEWALK INLET
SIG	SIGNAL
SIM	SIMILAR
SL	SLUDGE
SO 2	SULFUR DIOXIDE
SP	STATIC PRESSURE
SP. GR.	SPECIFIC GRAVITY
SPC	SPACE
SPCD	SPACED
SPCNG	SPACING
SPCS	SPACES
SPEC	SPECIFICATIONS
SQ	SQUARE
SQ FT, SF	SQUARE FEET
SQ IN	SQUARE INCHES
SRG	SINGLE RUBBER GASKET JOINT
SS	SANITARY SEWER
SS 304	STAINLESS STEEL TYPE 304
SS 316	STAINLESS STEEL TYPE 316
ST	STREET
STA	STATION
STD	STANDARD
STIFF	STIFFEN (-ER)
STL	STEEL
STM	STEAM
STN	STAINLESS
STOR	STORAGE
STRUCT	STRUCTUR(-E, -AL)
SUB	SUBNATANT
SUBM	SUBMISSION (SUBMIT)
SUP	SUPERNATANT
SUPP	SUPPORT(-S)
SURF.	SURFACE
SUSP	SUSPEND(-ED)
SV	SOLENOID VALVE
SW	SOUTHWEST; SWITCH
SWBD	SWITCHBOARD
S/W	SIDEWALK
SWGR	SWITCHGEAR
SYM	SYMMETRICAL
T	TIMER; TIME
T/	TOP OF
TAN.	TANGENT(-IAL)
TB	THRUST BLOCK
TBM	TEMPORARY BENCH MARK
T & B	TOP & BOTTOM
TC	TOP OF CURB
TCV	TWIN ELEMENT CHECK VALVE
TDH	TOTAL DYNAMIC HEAD
TEL, TELE	TELEPHONE
TEMP	TEMPERATURE
TEMPY	TEMPORARY
TERM.	TERMINAL; TERMINATION
T & G	TONGUE & GROOVE
THK	THICK(-ENED, -ENER, -NESS)
TOC	TOP OF CONCRETE
TOD	TOTAL OXYGEN DEMAND
T.O.P.	TOP OF PAVEMENT
TOPO	TOPOGRAPHY
TOS	TOP OF STEEL; TOP OF SLAB
T.O.W.	TOP OF WALL
T-__-S	TYPE ___ SUPPORT
T-__-P	TYPE ___ PIPE
TYP	TYPICAL
TURB	TURBIDITY
TS, T'STAT	THERMOSTAT
TRTMT	TREATMENT
TRANSV	TRANSVERSE
TRANSF	TRANSFORMER
T-R	THROUGH ROOF
TR	TREAD(-S)
TP	TELEPHONE POLE
UG	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
UH	UNIT HEATER
UPR	UPPER
V	VOLT
VAC	VACUUM
VAR	VARIABLE
V.A.T.	VINYL ASBESTOS TILE
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VEL	VELOCITY
VERT	VERTICAL
VERTS	VERTICAL BARS
VEST.	VESTIBULE
VOL	VOLUME
VPI	VERTICAL POINT OF INTERSECTI
V/S, VS	VARIABLE SPEED
VT	VENT
W	WIDTH; WIDE; WEST
W/	WITH
WC	WATER CLOSET
W CL	WATER COLUMN
WD	WOOD
WH	WATER HEATER
WM	WATER METER
W/O	WITHOUT
WP	WEATHERPROOF
WS	WELDED STEEL
WST	WATERSTOP
WT	WEIGHT
WTR	WATER
WW	WATER WASTE
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH
YD 3	CUBIC YARD
YD 2	SQUARE YARD
YD	YARD
YR	YEAR

DIGALERT
DIAL TOLL FREE
811
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT(USA) OF SOUTHERN CALIFORNIA

RECORD DRAWING
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DRAWN BY VL
CHECKED BY JMW
DATE NOV 2012
PROJECT ENGINEER KAPIL VERMA
REG NUMBER C74589
EXP DATE 12/31/13
PROJECT NUMBER 1188026*00
CADD STANDARDS KENNEDY/JENKS

KENNEDY/JENKS CONSULTANTS
2775 NORTH VENTURA ROAD, SUITE 100
OXNARD, CALIFORNIA 93036

LAS VIRGENES MUNICIPAL WATER DISTRICT EST. 1958

TRIUNFO SANITATION DISTRICT
A PUBLIC AGENCY

LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY
RANCHO LAS VIRGENES THIRD DIGESTER

ABBREVIATIONS

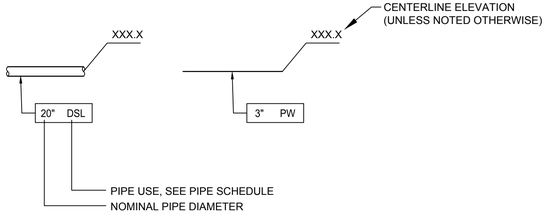
DRAWING G-03
SHEET 3 OF 86

DWG: \\K-V\K-root\KJ-Coat\SantaClara\111\1188026.00–Las Virgenes–Third Digester Design\1088026–G03.dwg USER: mkemarx
DATE: Feb 12, 2015 3:56pm XREFS: X–1088026–TBLK IMAGES: LVMWD_BW.tif TS02746–1.5–BW.tif

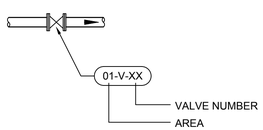
GENERAL PIPING NOTES

1. INFORMATION PROVIDED ON THIS SHEET ARE MINIMUM REQUIREMENTS. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. LAY PIPE TO UNIFORM GRADE BETWEEN INDICATED ELEVATION POINTS. MINIMUM COVER SHALL BE 3'-0" UNLESS OTHERWISE SHOWN.
3. SIZE OF FITTINGS SHOWN ON DRAWINGS SHALL CORRESPOND TO ADJACENT STRAIGHT RUN OF PIPE, UNLESS OTHERWISE INDICATED. TYPE OF JOINT AND FITTING MATERIAL SHALL BE THE SAME AS SHOWN FOR ADJACENT STRAIGHT RUN OF PIPE.
4. NUMBER OF PIPE HANGERS AND PIPE SUPPORTS SHOWN IS ONLY APPROXIMATE. FINAL SUPPORT REQUIREMENTS SHALL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. MAXIMUM SPACING SHALL BE SPECIFIED.
5. APPROPRIATE STANDARD WALL PIPE DETAIL SHALL BE USED WHEREVER PIPING PASSES FROM A STRUCTURE TO BACKFILL.
6. ALL FLEXIBLE CONNECTORS OR FLANGED COUPLING ADAPTERS SHALL BE PROVIDED WITH THRUST TIES, BLOCKS, OR ANCHORS, UNLESS OTHERWISE NOTED. THRUST PROTECTION SHALL BE ADEQUATE FOR TEST PRESSURES SPECIFIED.
7. SYMBOLS, LEGENDS, AND PIPE IDENTIFICATIONS SHOWN SHALL BE FOLLOWED THROUGHOUT THE DRAWINGS. ALL OF THE ITEMS SHOWN ARE NOT NECESSARILY USED IN THE PROJECT.
8. ALL PIPING WITH UNRESTRAINED JOINTS, SHALL BE PROVIDED WITH THRUST PROTECTION AT ALL DIRECTION CHANGES, UNLESS OTHERWISE NOTED. SEE THRUST DETAILS AND NOTES ON DRAWINGS.
9. NUMBER AND LOCATION OF UNIONS SHOWN ON DRAWINGS ARE ONLY APPROXIMATE. PROVIDE ALL UNIONS NECESSARY TO FACILITATE CONVENIENT REMOVAL OF VALVES AND MECHANICAL EQUIPMENT.
10. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PERFORMING THE CONNECTION OF THE PIPING AND ASSOCIATED APPURTENANCES INSTALLED UNDER THIS CONTRACT TO THE EXISTING PIPING AND FACILITIES, AND TO THE WORK OF OTHER CONTRACTORS.
11. PRIOR TO SUBMITTING PIPING DRAWINGS FOR ANY NEW PIPE THAT IS TO CONNECT TO AN EXISTING PIPE OR STRUCTURE, THE CONTRACTOR SHALL EXPOSE THE EXISTING PIPE OR STRUCTURE TO VERIFY ITS EXACT LOCATION, SIZE, MATERIALS, AND INVERT ELEVATIONS.
12. ALL PIPING IS TO BE PAINTED AND LABELED UNLESS NOTED OTHERWISE. LABELING SHALL INCLUDE FLOW DIRECTION ARROW AND PIPE USE.
13. ALL PIPING UNDER STRUCTURES TO BE CONCRETE ENCASED UNLESS NOTED OTHERWISE.

PIPING DESIGNATION



VALVE DESIGNATION



PIPE SYMBOLS

DESCRIPTION	SINGLE LINE	DOUBLE LINE
EXISTING PIPE		
NEW PIPE		
PIPE TO BE REMOVED		
FLANGED, WELD NECK		
FLANGED, SLIP ON		
SCREWED OR SOCKET WELD		
BELL & SPIGOT		
MECHANICAL JOINT		
ELBOW - STRAIGHT		
ELBOW - REDUCING		
ELBOW - DOWN		
ELBOW - UP		
CROSS		
REDUCER		
TEE		
TEE - DOWN		
TEE - UP		
UNION		
FLEXIBLE RUBBER CONNECTOR		
FLEXIBLE HOSE CONNECTOR		
FLANGED COUPLING ADAPTER		
FLEXIBLE COUPLING		
DISASSEMBLING JOINT	DJ	DJ
FLOOR DRAIN		
CLEAN OUT		

PIPE SUPPORT DESIGNATION

VALVE SYMBOLS

DESCRIPTION	SINGLE LINE	DOUBLE LINE (PLAN)	DOUBLE LINE (ELEVATION)
GATE VALVE			
KNIFE GATE VALVE			
GLOBE VALVE			
PLUG VALVE			
SWING CHECK VALVE			
LIFT CHECK VALVE			
BUTTERFLY (FLANGED)			
BUTTERFLY (WAFER)			
BALL VALVE			
DIAPHRAGM VALVE			
CAPILLARY CONTROL VALVE			
CONTROL VALVE			
PRESSURE RELIEF VALVE (ELEVATION)			
PRESSURE RELIEF VALVE (PLAN)			
HOSE BIBB	HB		

ACTUATOR SYMBOLS

MOTOR	M
SOLENOID	S
PNEUMATIC	

FLOWMETER SYMBOLS

DESCRIPTION	SINGLE LINE	DOUBLE LINE
MAGMETER	M	M
TURBINE METER		
VENTURI METER		

PIPE SCHEDULE

ID	DESCRIPTION	SIZE	SERVICE	MATERIAL	VALVE SYSTEM***
PW	PLANT WATER	ALL	ALL	CPVC SCH 80	A
D	DRAIN	ALL	ALL	CI	A
SD	STORM DRAIN	ALL	ALL	CISP	N/A
SG	DIGESTER GAS	ALL	ALL	SS	F
SS	SANITARY SEWER	ALL	ALL	CISP	N/A
DSL	DIGESTED SLUDGE	≤8"	ALL	DICML	B
		>8"	ALL	WSCML	B
HWR	HOT WATER RETURN	ALL	ALL	BS **	K
HWS	HOT WATER SUPPLY	ALL	ALL	BS **	K
NPW	PROCESS WATER (NON-POTABLE)	ALL	ALL	CPVC SCH 80	A
REW	RECLAIMED WATER	ALL	ALL	BS	A
RSL	RAW SLUDGE	ALL	ALL	DIGL	B

** INSULATED PER SECTION 15050
*** PER SECTION 15050

SERVICE LEGEND

B = BURIED
E = EXPOSED
C = CONCRETE ENCASED

VALVES AND ACCESSORIES

AIRVAC	AIR AND VACUUM VALVE
ARV	AIR RELEASE VALVE
BCV	BALL CHECK VALVE
BFV	BUTTERFLY VALVE
BV	BALL VALVE
CO	CLEANOUT
CV	CHECK VALVE
GLV	GLOBE VALVE
GV	GATE VALVE
HB	HOSEBIBB
MV	MUD VALVE
PDV	PLUG DRAIN VALVE
PINV	PINCH VALVE
PRFV	PRESSURE RELIEF VALVE
PRV	PRESSURE REDUCING VALVE
PV	PLUG VALVE
SG	SLUICE GATE
SV	SOLENOID VALVE
TCV	TWIN ELEMENT CHECK VALVE

PIPE LININGS, COATINGS

CMC	CEMENT MORTAR COATED
CML	CEMENT MORTAR LINED
CML&C	CEMENT MORTAR LINED & COATED
EC	EPOXY COATED
EL	EPOXY LINED
EL&C	EPOXY LINED & COATED
GL	GLASS LINED
IC	INSULATION COATED
PC	PLASTIC COATED

PIPE JOINTS

BC	BOLT-ON COUPLING
DRG	DOUBLE RUBBER GASKET JOINT
FC	FLEXIBLE COUPLING
FCA	FLANGED COUPLING ADAPTER
GC	GROOVED COUPLING
MJ	MECHANICAL JOINT
SRG	SINGLE RUBBER GASKET JOINT
TA	TENSION ANCHOR
T/G	TONGUE & GROOVE JOINT

PIPE MATERIAL TABLE

ABS	ACRYLONITRILE-BUTADIENE-STYRENE PIPE
AL	ALUMINUM PIPE
BI	BLACK IRON PIPE
BS	BLACK STEEL PIPE
CC	CONCRETE CYLINDER
CI	CAST IRON PIPE
CPVC	CHLORINATED POLYVINYL CHLORIDE PIPE
CU	COPPER PIPE
DI	DUCTILE IRON PIPE
DICML	DUCTILE IRON CEMENT MORTAR LINED
DICML&I	DUCTILE IRON CEMENT MORTAR LINED AND INSULATED
DIGL	DUCTILE IRON GLASS LINED
DICML&I	DUCTILE IRON GLASS LINED AND INSULATED
FRP	FIBERGLASS REINFORCED PLASTIC PIPE
GI	GALVANIZED IRON PIPE
GS	GALVANIZED STEEL PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
PE	POLYETHYLENE PIPE
PVC	POLYVINYL CHLORIDE PIPE
RC	REINFORCED CONCRETE PIPE
RPM	REINFORCED PLASTIC MORTAR PIPE
SS	STAINLESS STEEL
WS	WELDED STEEL PIPE
WSCML	WELDED STEEL CEMENT MORTAR LINED

NOTE

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DESIGNED BY KRV
DRAWN BY VL
CHECKED BY JMW
DATE NOV 2012
PROJECT ENGINEER KAPIL VERMA
REG NUMBER C74589 EXP DATE 12/31/13
PROJECT NUMBER 1188026*00
CADD STANDARDS KENNEDY/JENKS

KENNEDY/JENKS CONSULTANTS
2775 NORTH VENTURA ROAD, SUITE 100
OXNARD, CALIFORNIA 93036

LAS VIRGENES MUNICIPAL WATER DISTRICT EST. 1958

TRIUNFO SANITATION DISTRICT
A PUBLIC AGENCY

LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY
RANCHO LAS VIRGENES THIRD DIGESTER

PIPE MATERIAL TABLE, PIPE SCHEDULE, SYMBOLS AND GENERAL NOTES

DRAWING G-04
SHEET 4 OF 86

CIVIL/GENERAL SYMBOLS

- FIRE PROTECTION WATER (EXISTING) — FW FW FW
- SEWER (EXISTING) — SS SS SS
- STORM DRAIN (EXISTING) — SD SD SD
- WATER LINE (EXISTING) — W
- RECLAIMED WATER (EXISTING) — RW
- GAS LINE (EXISTING) — G G G G
- TELEPHONE LINE (EXISTING) — T T T
- ELECTRICAL LINE (EXISTING) — E E E
- OVERHEAD POWER (EXISTING) — OH OH OH
- PUBLIC UTILITY DISTRICT (EXISTING) — PUD
- CABLE TV (EXISTING) — CTV
- CROSSING UTILITIES (EXISTING)
- FENCE — X X
- PROPERTY LINE/RIGHT-OF-WAY
- CONTRACTORS WORK AREA LIMITS — WA
- CENTERLINE
- CULVERT WITH END SECTIONS
- HANDRAIL OR GUARDRAIL
- WATER SURFACE
- GRADE CHANGE LINE
- RIDGE LINE
- FLOW LINE
- GRADED SLOPE — TOP, TOE
- DITCH OR SWALE
- CONTOUR MAJOR (NEW) — 110
- CONTOUR MINOR (NEW)
- CONTOUR MAJOR (EXIST) — 110
- CONTOUR MINOR (EXIST)

- BENCH MARK — BM
- SOIL BORING, IDENTIFICATION NUMBER — B-10
- SOIL TEST PIT, IDENTIFICATION NUMBER — TP-10
- SPOT ELEVATION — 10.35
- ELECTROLYSIS TEST STATION — ETS
- WATER METER — WM
- FIRE DEPT. CONNECTION
- FIRE HYDRANT
- UTILITY BOX (AS LABELED)
- POWER POLE
- STREET LIGHT
- STREET LIGHT AND TRAFFIC SIGNAL
- YARD LIGHT
- TRAFFIC SIGNAL
- TELEPHONE RISER — T RISER
- GUY ANCHOR
- CATCH BASIN — CB
- DROP INLET — DI
- CLEAN OUT — CO
- DRIVEWAY
- HANDICAP ACCESS RAMP
- CURVE NO. — 14
- SURVEY PANEL
- MONUMENT OR SURVEY POINT
- SECTION CORNER
- ELEVATION MARK (REFERENCE)
- ELEVATION MARK (DESIGN)
- FLAG NOTE — 1
- WATER GATE VALVE

- STRUCTURE OR PIPE (NEW)
- STRUCTURE OR PIPE
- DEMOLITION
- CONCRETE IN SECTION
- STEEL IN SECTION
- WOOD IN SECTION
- GRATING IN PLAN
- CHECKERED PLATE IN PLAN
- GRAVELED AREA IN PLAN OR SECTION
- SAND
- BRICK OR CONCRETE BLOCK IN SECTION
- GRADE
- FILL
- ASPHALT CONCRETE (IN PLAN)
- ASPHALT CONCRETE (IN SECTION)

SECTION OR DETAIL REFERENCE

SECTION (LETTER) / DETAIL (NUMERAL) — A / M-04 — DRAWING REFERENCED TO/FROM

NOTES:

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CHECKED BY: JMW
DATE: NOV 2012
PROJECT ENGINEER: KAPIL VERMA
REG NUMBER: C74589 EXP DATE: 12/31/13
PROJECT NUMBER: 1188026*00
CADD STANDARDS: KENNEDY/JENKS

KENNEDY/JENKS CONSULTANTS
2775 NORTH VENTURA ROAD, SUITE 100
OXNARD, CALIFORNIA 93036

LAS VIRGENES MUNICIPAL WATER DISTRICT — EST. 1958

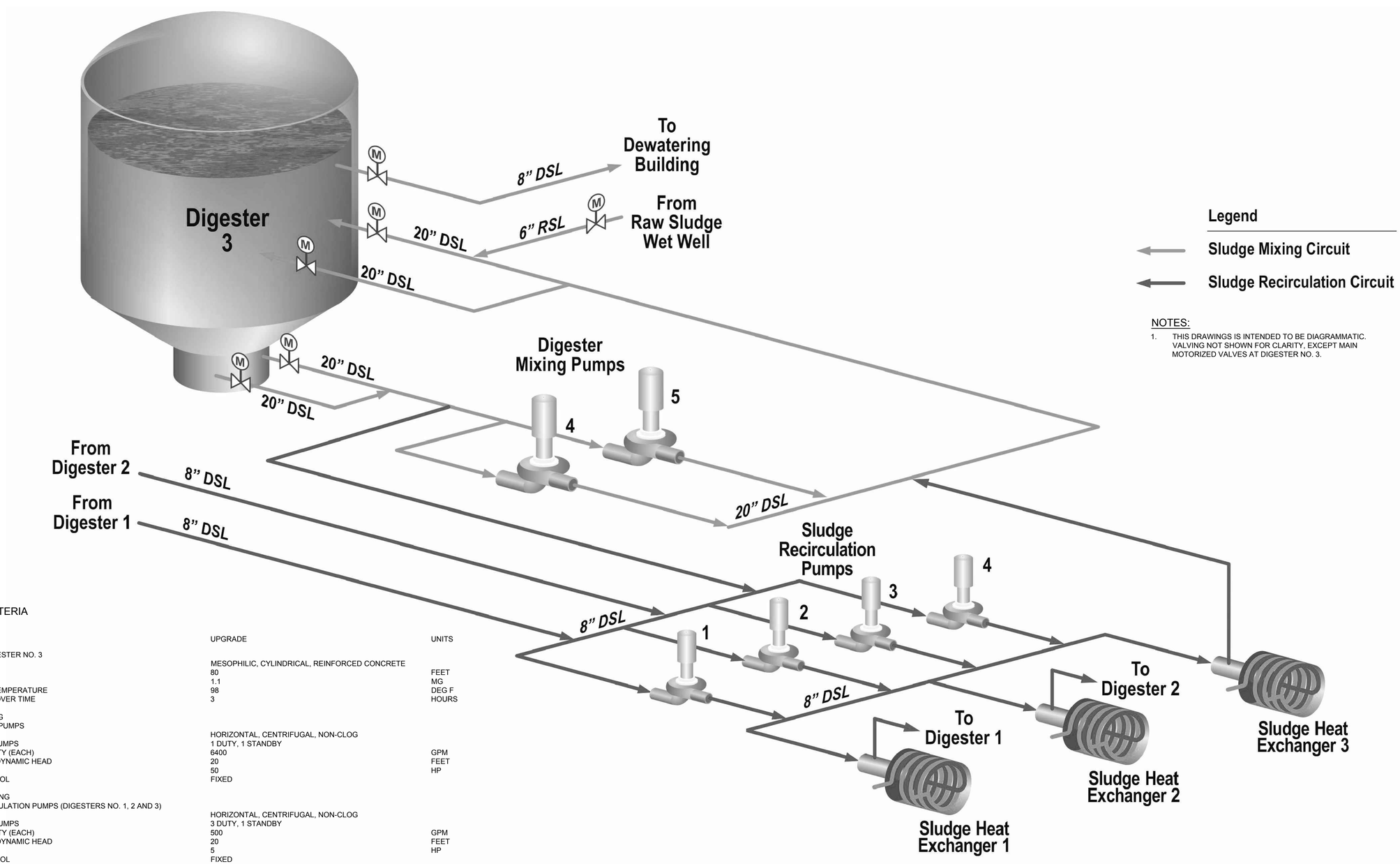
TRIUNFO SANITATION DISTRICT
A PUBLIC AGENCY

LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY
RANCHO LAS VIRGENES THIRD DIGESTER

CIVIL SYMBOLS AND NOTES

DRAWING G-05
SHEET 5 OF 86

DWG: \\Vjks-root\VJ-Corf\SantaClara\11\1188026.00-Las Virgenes-Third Digester Design\1088026-G05.dwg USER: mikemorx
DATE: Feb 12, 2015 3:58pm XREFS: X-1088026-TBLK X-1088026-Disclaimers IMAGES: LVWMD_BW.tif TS02746-1.5-BW.tif



NOTES:

1. THIS DRAWINGS IS INTENDED TO BE DIAGRAMMATIC. VALVING NOT SHOWN FOR CLARITY, EXCEPT MAIN MOTORIZED VALVES AT DIGESTER NO. 3.

DESIGN CRITERIA

DESCRIPTION	UPGRADE	UNITS
ANAEROBIC DIGESTER NO. 3		
TYPE	MESOPHILIC, CYLINDRICAL, REINFORCED CONCRETE	
DIAMETER	80	FEET
CAPACITY	1.1	MG
OPERATING TEMPERATURE	98	DEG F
MIXING TURNOVER TIME	3	HOURS
DIGESTER MIXING		
SLUDGE MIXING PUMPS		
PUMP TYPE	HORIZONTAL, CENTRIFUGAL, NON-CLOG	
NUMBER OF PUMPS	1 DUTY, 1 STANDBY	
PUMP CAPACITY (EACH)	6400	GPM
PUMP TOTAL DYNAMIC HEAD	20	FEET
PUMP MOTOR	50	HP
SPEED CONTROL	FIXED	
DIGESTER HEATING		
SLUDGE RECIRCULATION PUMPS (DIGESTERS NO. 1, 2 AND 3)		
PUMP TYPE	HORIZONTAL, CENTRIFUGAL, NON-CLOG	
NUMBER OF PUMPS	3 DUTY, 1 STANDBY	
PUMP CAPACITY (EACH)	500	GPM
PUMP TOTAL DYNAMIC HEAD	20	FEET
PUMP MOTOR	5	HP
SPEED CONTROL	FIXED	
SLUDGE HEATING DEMAND		
WINTER RAW SLUDGE HEATING DEMAND	1,741	MBH (10^3 BTU/HR)
WINTER DIGESTER HEAT LOSS (EACH DIGESTER)	533	MBH
WINTER TOTAL SLUDGE HEATING DEMAND (DIGESTER 3 ONLY)	2,274	MBH
WINTER TOTAL COMBINED HEAT DEMAND (2 DIGESTERS)	2,807	MBH
SUMMER RAW SLUDGE HEATING DEMAND	1,393	MBH
SUMMER DIGESTER HEAT LOSS (EACH DIGESTER)	137	MBH
SUMMER TOTAL SLUDGE HEATING DEMAND (DIGESTER 3 ONLY)	1,530	MBH
SUMMER TOTAL COMBINED HEAT DEMAND (2 DIGESTERS)	1,667	MBH

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RANCHO LAS VIRGENES THIRD DIGESTER

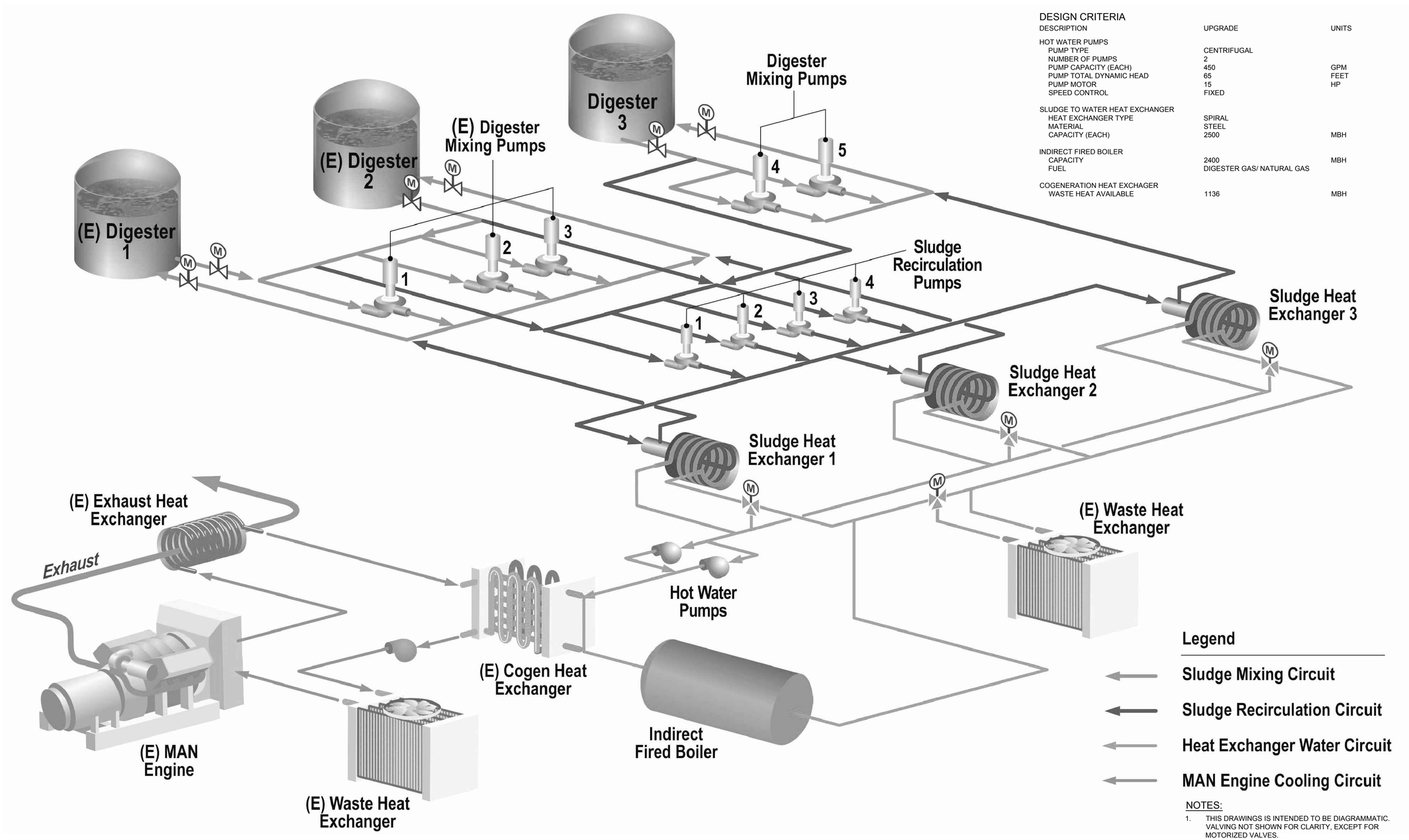
SOLIDS PROCESS FLOW DIAGRAM AND DESIGN CRITERIA

DRAWING G-06
SHEET 6 OF 86

DWG: \\Kj-root\Kj-Corp\SantaClara\11\1188026.00-Las Virgenes-Third Digester Design\1088026-G06.dwg USER: mikemorx
DATE: Feb 12, 2015 3:59pm XREFS: X-1088026-TBLK X-1088026-Disclaimers IMAGES: LasVFlowDiagram2-BW.jpg LVMWD_BW.tif TSD2746-1.5-BW.tif

DESIGN CRITERIA

DESCRIPTION	UPGRADE	UNITS
HOT WATER PUMPS		
PUMP TYPE	CENTRIFUGAL	
NUMBER OF PUMPS	2	
PUMP CAPACITY (EACH)	450	GPM
PUMP TOTAL DYNAMIC HEAD	65	FEET
PUMP MOTOR	15	HP
SPEED CONTROL	FIXED	
SLUDGE TO WATER HEAT EXCHANGER		
HEAT EXCHANGER TYPE	SPIRAL	
MATERIAL	STEEL	
CAPACITY (EACH)	2500	MBH
INDIRECT FIRED BOILER		
CAPACITY	2400	MBH
FUEL	DIGESTER GAS/ NATURAL GAS	
COGENERATION HEAT EXCHAGER		
WASTE HEAT AVAILABLE	1136	MBH



NOTES:

1. THIS DRAWINGS IS INTENDED TO BE DIAGRAMMATIC. VALVING NOT SHOWN FOR CLARITY, EXCEPT FOR MOTORIZED VALVES.

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REV	DATE	DESCRIPTION	APPR
–	2–2015	RECORD DRAWING	WCY

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

DESIGNED BY KRV
DRAWN BY VL
CHECKED BY JMW
DATE NOV 2012
PROJECT ENGINEER KAPIL VERMA
REG NUMBER C74589 EXP DATE 12/31/13
PROJECT NUMBER 1188026*00
CADD STANDARDS KENNEDY/JENKS

KENNEDY/JENKS CONSULTANTS
2775 NORTH VENTURA ROAD, SUITE 100
OXNARD, CALIFORNIA 93036

LAS VIRGENES MUNICIPAL WATER DISTRICT EST. 1958

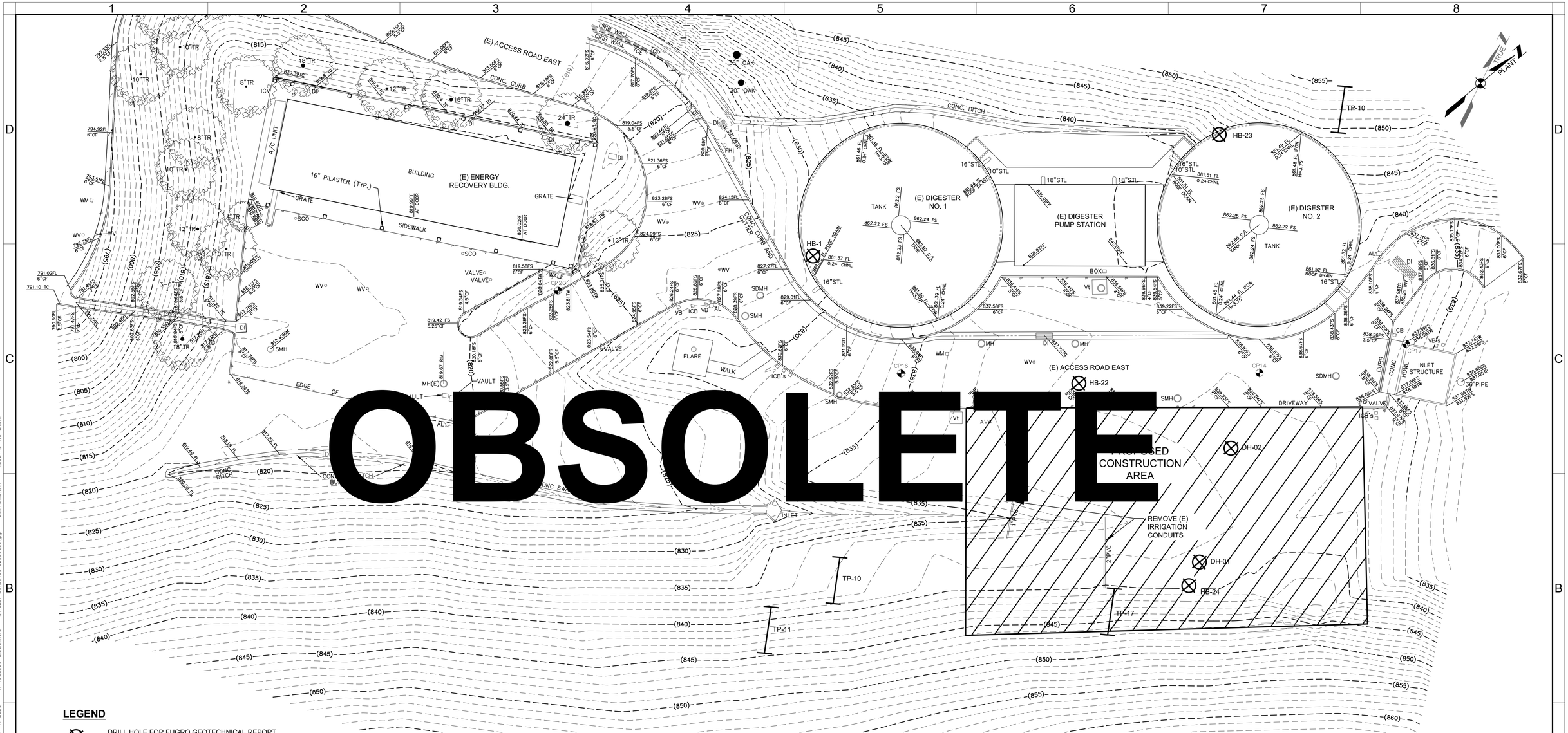
TRIUNFO SANITATION DISTRICT
A PUBLIC AGENCY

LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY
RANCHO LAS VIRGENES THIRD DIGESTER

HEATING LOOP SCHEMATIC AND DESIGN CRITERIA

DRAWING G-07
SHEET 7 OF 86

DWG: \\Kj-vs-root\Kj-Corp\SantaClara\11\1188026.00-Las Virgenes-Third Digester Design\1088026-G07.dwg USER: mkemorx
DATE: Feb 12, 2015 4:00pm XREFS: X-1088026-TBLK X-1088026-Disclaimers IMAGES: LasYflowDiagram-BW.jpg LVWMD_BW.tif TSD2746-1.5-BW.tif



LEGEND

- DH — DRILL HOLE FOR FUGRO GEOTECHNICAL REPORT DATED APRIL 2012
- HB — HISTORICAL BORING LOCATIONS (HLA, 1991)
- TEST PIT LOCATION (HLA, 1991)

CONTROL POINTS

NO.	NORTHING	EASTING	ELEV.	DESCRIPTION
14	26067.21	6404.50	838.88	FOUND SPIKE AND TIN
16	25953.27	6311.72	834.49	FOUND SPIKE AND TIN
17	26121.25	6433.23	838.59	SET SCRIBED "X" ON HEADWALL
20	25865.85	6196.43	823.93	SET SCRIBED "X" ON CURB

VERTICAL CONTROL:

ELEV = 838.88 ASSUMED ELEVATION AT CONTROL POINT No. 14, AS SHOWN ON AS-BUILT SHEET C-9 (HORIZONTAL CONTROL AND PAVING AREA H), FURNISHED BY LAS VIRGENES MUNICIPAL WATER DISTRICT.

SITE PLAN EXISTING CONDITION

0 10 20 30
1"=20'

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PROJECT ENGINEER JEFFREY T. SAVARD
REG NUMBER C51156 EXP DATE 09/30/13
PROJECT NUMBER 1188026*00
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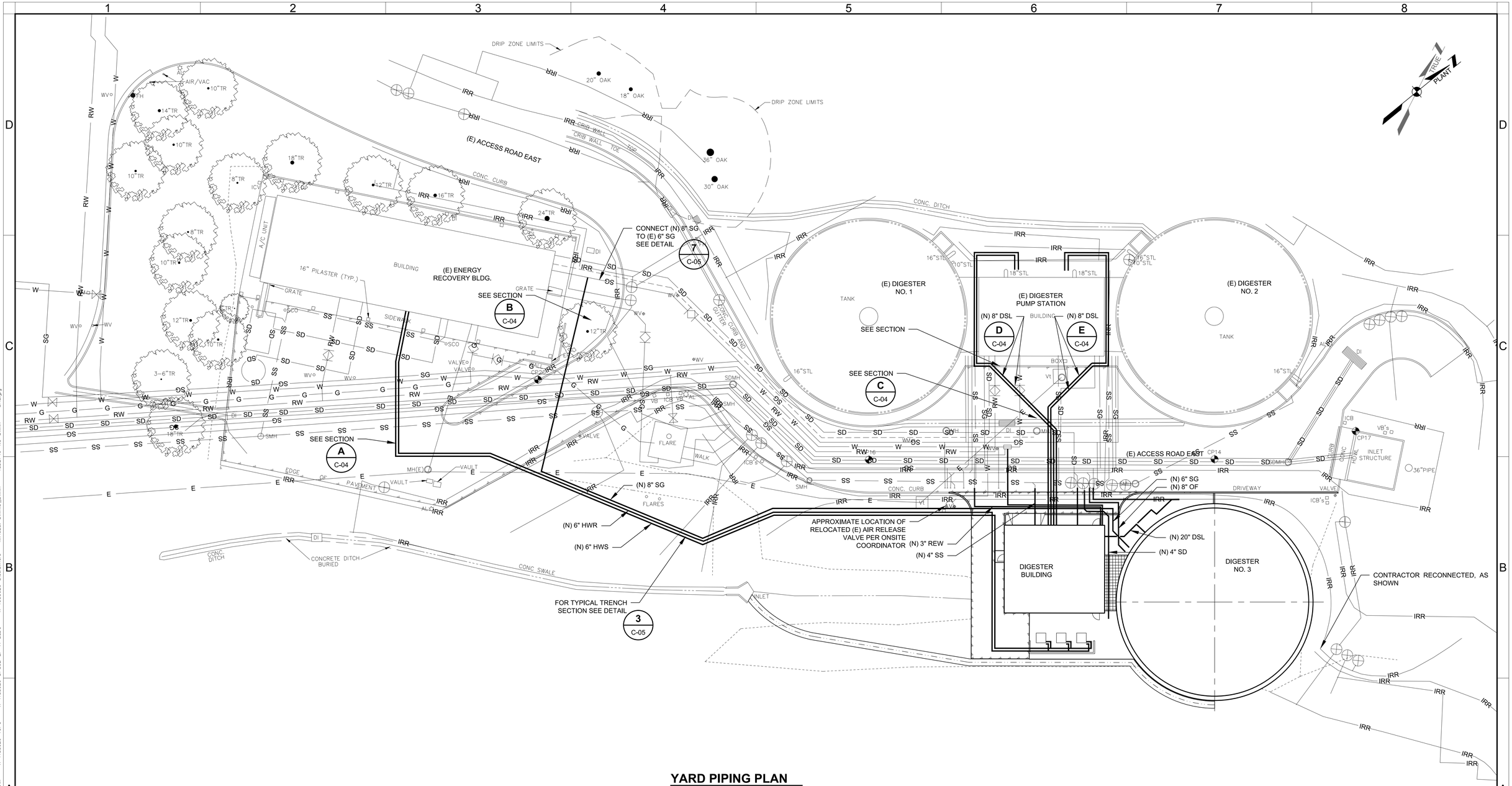
SITE PLAN EXISTING CONDITION

DRAWING C-01
SHEET 8 OF 86



YARD PIPING PLAN

0 10 20 30

1"=20'

NOTES:

1. CONTRACTOR SHALL POTHOLE EXISTING UTILITIES FOR LOCATION AND DEPTH PRIOR TO CONSTRUCTION.

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REG NUMBER	C51156
EXP DATE	09/30/13
PROJECT NUMBER	1188026*00
CADD STANDARDS	KENNEDY/JENKS

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RANCHO LAS VIRGENES THIRD DIGESTER

YARD PIPING PLAN

DRAWING C-02

SHEET 9 OF 86

DWG: \\K-Vs-root\K-Corel\SantaClara\11\1188026.00-Las Virgenes-Third Digester Design\1188026-C02.dwg USER: mkemorx
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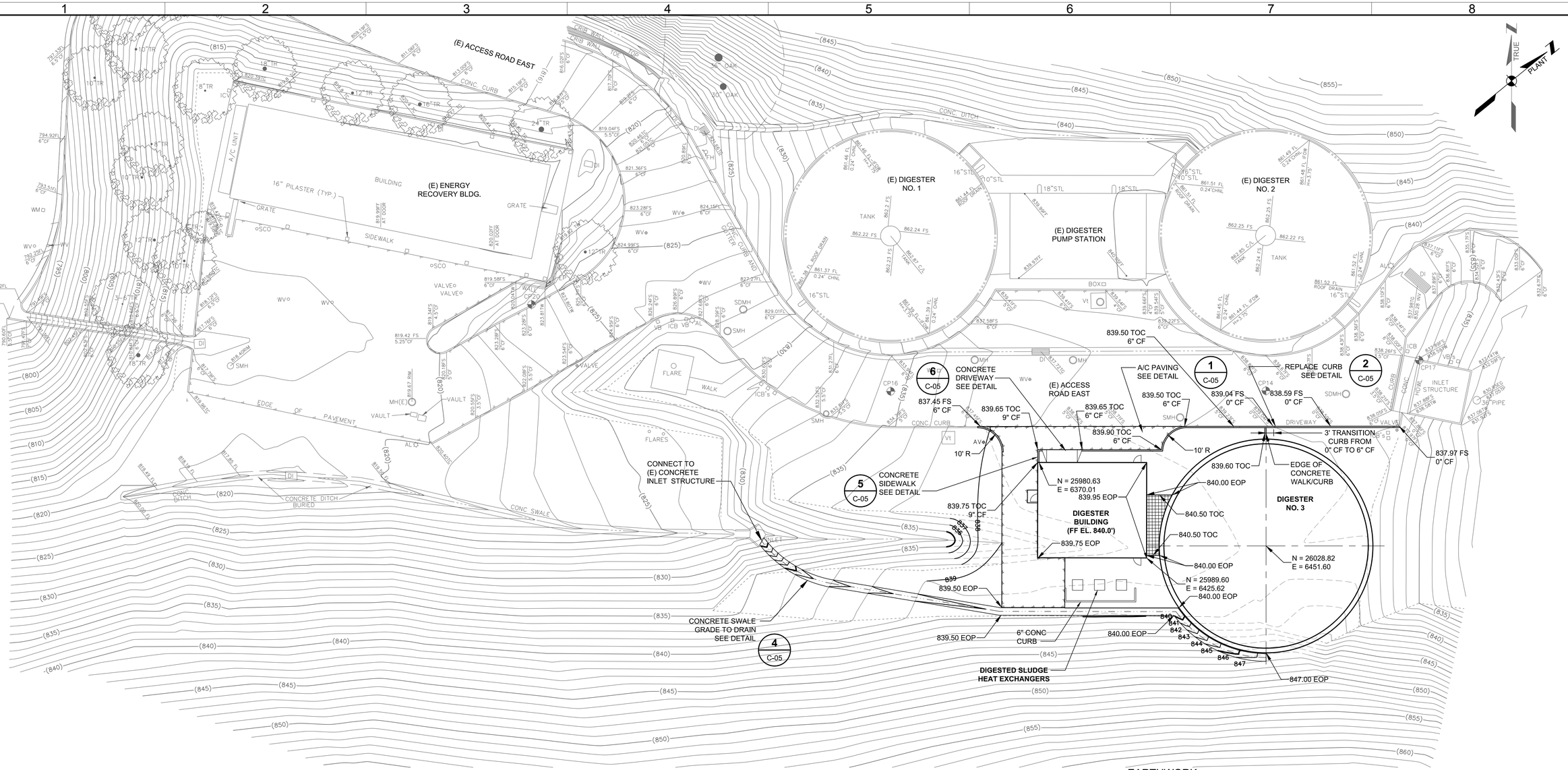

NOTES:

1. CONTRACTOR SHALL POTHOLE EXISTING UTILITIES FOR LOCATION AND DEPTH PRIOR TO CONSTRUCTION.

SITE PLAN

0 10 20 30

1"=20'

EARTHWORK

1. CONTRACTOR SHALL OVEREXCAVATE AN AREA AT LEAST 5 FEET OUTSIDE THE PERIMETER OF THE DIGESTER FOUNDATION TO NATIVE BEDROCK. EXISTING FILL AND ALLUVIUM ARE EXCAVATABLE WITH NORMAL EQUIPMENT AND BEDROCK IS MODERATELY HARD BUT ANTICIPATED TO BE RIPPABLE.
2. DUE TO CONCERNS AND RISKS WITH SLOPE STABILITY, CONTRACTOR SHALL SHORE THE EXCAVATION IN ACCORDANCE WITH THE SPECIFICATIONS.
3. ONCE BEDROCK IS EXPOSED, CONTRACTOR SHALL SCARIFY THE TOP 6" OF EXPOSED SURFACE AND RECOMPACT TO A RELATIVE COMPACTION OF 95%.
4. AFTER SCARIFICATION, CONTRACTOR SHALL PROVIDE STRUCTURAL FILL IN ANY AREAS REQUIRING FILL UP TO THE THE FINISH SUBGRADE ELEVATION.
5. DUE TO THE EXPANSIVE AND SLIPPERY NATURE OF THE NATIVE MATERIAL, CONTRACTOR SHALL PLACE A BASE LAYER OF 18" OF NON-EXPANSIVE FILL OR AGGREGATE BASE (SELECT FILL) ON THE PREPARED SUBGRADE.
6. WHERE DIGESTER BUILDING DOORS OPEN ONTO AC PAVEMENT, PROVIDE A CONCRETE LANDING 4 FEET OUT FROM THE FACE OF THE BUILDING AND 5 FEET LONG PROVIDING SPACE AT THE SWING SIDE OF THE DOOR. RECESS THE LANDING 1/4-INCH BELOW THE BUILDING FLOOR AND REINFORCE PER DETAIL 5 ON SHEET C-05, HEIGHT NOT TO EXCEED 6 INCHES.

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REG NUMBER C51156 EXP DATE 09/30/13
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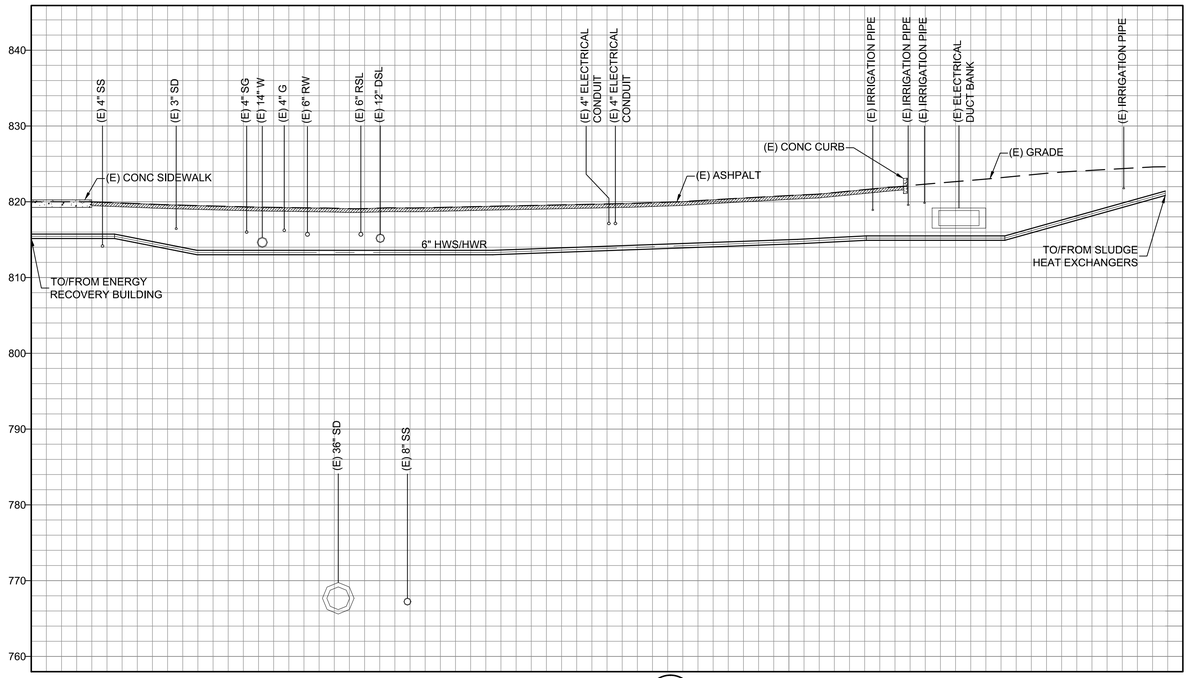
RANCHO LAS VIRGENES THIRD DIGESTER

SITE GRADING AND PAVING PLAN

DRAWING C-03

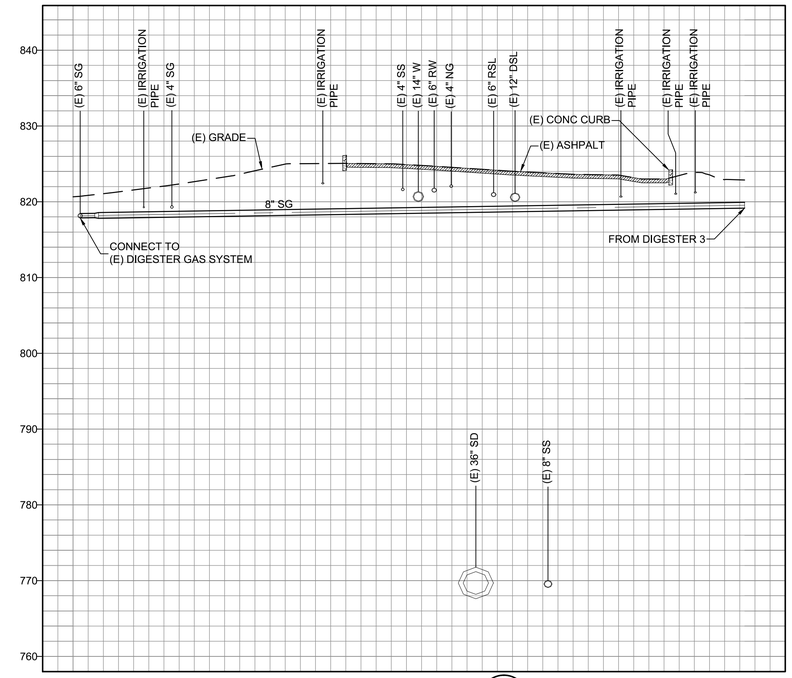
SHEET 10 OF 86



SECTION A — C-02

0 10 20

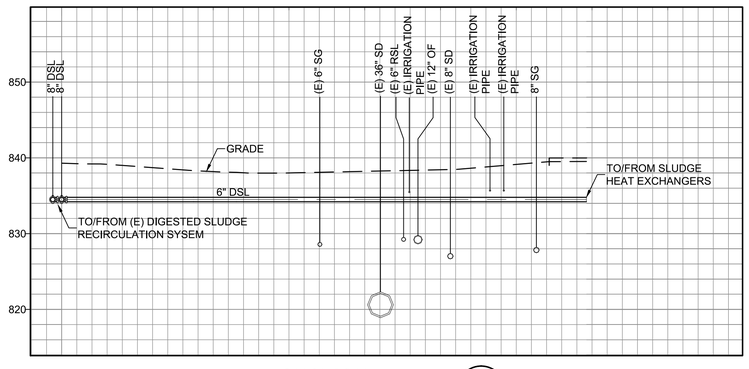
1"=10'



SECTION B — C-02

0 10 20

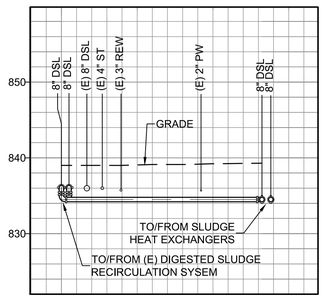
1"=10'



SECTION C — C-02

0 10 20

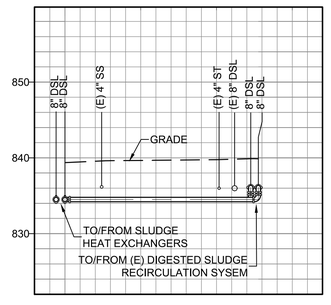
1"=10'



SECTION D — C-02

0 10 20

1"=10'



SECTION E — C-02

0 10 20

1"=10'

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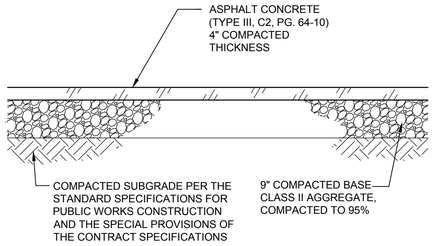
PIPE SECTIONS

DRAWING **C-04**

SHEET 11 OF 86

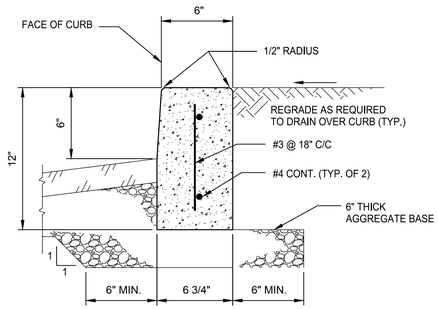
DWG: \\KJ-v1-root\KJ-Coat\SantaClara\11\1188026.00-Las Virgenes-Third Digester Design\1188026-C04.dwg USER: mikemorx
DATE: Feb 12, 2015 4:17pm XREFS: X-1088026-TBLK X-1188026-Pipes X-1088026-Disclaimers IMAGES: LVWMD_BW.tif TSD2746-1_5-BW.tif



TYPICAL ASPHALT CONCRETE PAVING DETAIL

SCALE: NONE

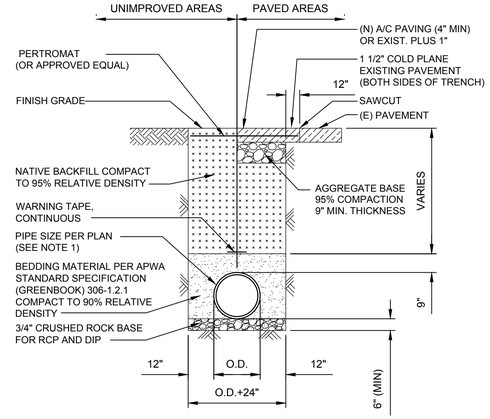
1 / C-03



TYPICAL CONCRETE CURB DETAIL

SCALE: NONE

2 / C-03



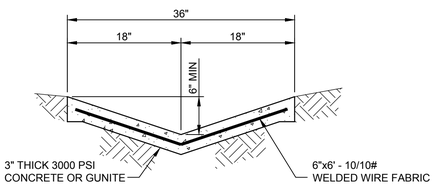
NOTES:

1. FOR TRENCHS WHICH CONTAIN MORE THAN ONE PIPE USE STANDARD PIPE SPACING.

TYPICAL TRENCH SECTION FOR PIPES UNDER 24" DIA.

SCALE: NONE

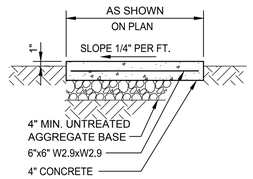
3 / C-03



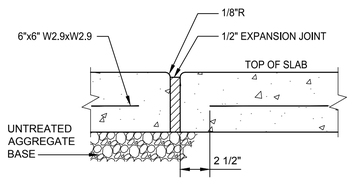
TYPICAL CONCRETE VEE TRENCH DETAIL

SCALE: NONE

4 / C-03



SECTION



EXPANSION JOINT

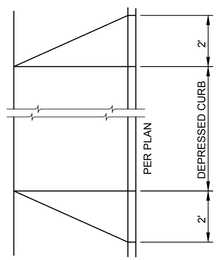
NOTES:

1. WALK SHALL BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE.
2. EXPANSION JOINTS OF ONE-HALF INCH RIGID BITUMINOUS MATERIAL SHALL BE PLACED AT APPROXIMATELY 25-FEET SPACING.
3. SCORE LINES AT RIGHT ANGLES TO CENTER LINE SHALL BE MARKED AT 36-INCH INTERVALS. ON WALKS EXCEEDING FOUR FEET IN WIDTH, A CONTINUOUS SCORE LINE SHALL BE MARKED ON CENTERLINE.
4. WALKS SHALL BE SLOPED AWAY FROM STRUCTURES.

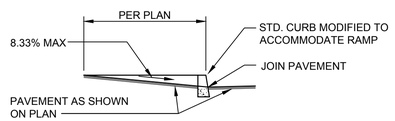
TYPICAL SIDEWALK DETAIL

SCALE: NONE

5 / C-03



PLAN

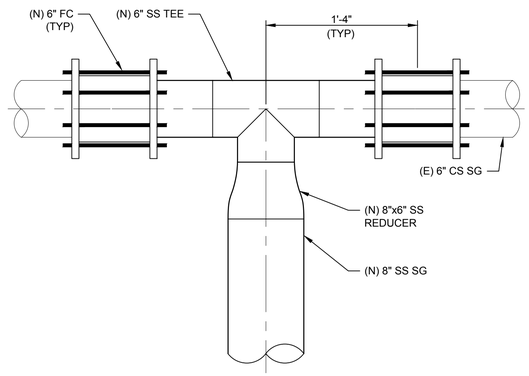


SECTION

TYPICAL DRIVEWAY DETAIL

SCALE: NONE

6 / C-03



SLUDGE GAS PIPING CONNECTION DETAIL

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

7 / C-02

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MISCELLANEOUS CIVIL DETAILS

DRAWING C-05

SHEET 12 OF 86

DWG: \\K-V-K-J-root\K-J-Coat\SantaClara\11\1188026.00-Las Virgenes-Third Digester Design\1188026-C05.dwg USER: mikemarx
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