

GENERAL, CIVIL AND TRACK

TRACK GEOMETRY - VERTICAL

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STATION COMMUNICATIONS				SIGNALS		TRAIN CONTROL COMMUNICATION		AGENCIES, ORGANIZATIONS AND CODES	
ACS	ADVANCED COMMUNICATION SYSTEM	PA	PUBLIC ADDRESS	AK	APPROACH TRACK INDICATION	AMPL	AMPLIFIER	AASHTO	AMERICAN ASSOCIATION OF STATE HIGH- WAY AND TRANSPORTATION OFFICIALS
BER	BIT-ERROR RATE	PAS	PUBLIC ADDRESS SYSTEM			ATCS	ADVANCE TRAIN CONTROL SYSTEM	AAR	ASSOCIATION OF AMERICAN RAILROADS
		PDA	PERSONAL DIGITAL ASSISTANT	DAX	DOWNSTREAM ADJACENT CROSSING			ACI	AMERICAN CONCRETE INSTITUTE
		PDU	POWER DISTRIBUTION UNIT			BER	BIT ERROR RATE	ADA	AMERICANS WITH DISABILITIES ACT
		PLC	PROGRAMMABLE LOGIC CONTROLLER	EMS	EMERGENCY ALARM CONTROL CIRCUITS	BPF	BAND PASS FILTER	AMTRAK	NATIONAL RAILROAD PASSENGER CORPORATION
C	CONDUIT	PSTN	PUBLIC SWITCHING TELEPHONE NETWORK			BS	BASE STATION	ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
CC	COMMUNICATIONS CABINET	PTB	PROTECTED TERMINAL BLOCKS					APWA	AMERICAN PUBLIC WORKS ASSOCIATION
CCTV	CLOSED CIRCUIT TELEVISION- VIDEO SECURITY	PTT	PUSH TO TALK					AREA	AMERICAN RAILWAY ENGINEERING ASSOCIATION
CER	COMMUNICATIONS EQUIPMENT ROOM	PVC	PRIVATE VIRTUAL CIRCUIT			CRC	CYCLIC REDUNDANCY CHECKS	AREMA	AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION
CIC	COMMUNICATIONS INTERFACE CABINETS			FLT	SIGNAL FLEETING FLASHER RELAY	CSU	CHANNEL SERVICE UNIT	ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
CID	CARD INTERFACE DEVICE	QOS	QUALITY OF SERVICE	FR		CTC	CENTRALIZED TRAIN CONTROL	ATT	ATLANTIC TELEPHONE AND TELEGRAPH COMPANY
CIR	CIRCUIT			GCR	GATE CONTROL RELAY	CTCSS	CONTINUOS-TONE-CODED SQUELCH SYSTEM	AWG	AMERICAN WIRE GAUGE
CIS	CUSTOMER INFORMATION SYSTEM			GD	GATE DOWN			AWS	AMERICAN WELDING SOCIETY
CS	COMMUNICATION SHELTER	RPR	RESILIENT PACKET RING	GE	GREEN SIGNAL LAMP				
CSMH	COMMUNICATIONS SYSTEM MANHOLE	RTU	REMOTE TERMINAL UNIT (COMMUNICATIONS)	GPR	GATE REPEATER RELAY (GATE IN UP POSITION)			BNSF	BURLINGTON NORTHERN SANTA FE
CST	COMBINED SYSTEM TRUNK					dB	DECIBEL		
DC	DISTRIBUTION CABINET					dBm	DECIBEL REFERENCED TO A MILLIWATT		
DDS	DEDICATED DIGITAL SERVICE	SCC	STATION COMMUNICATION CABINET			dBW	DECIBEL REFERENCED TO A WATT		
DSO	SINGLE DATA CHANNEL OF 56-65 Kbps	SFX	SMALL FORM (PLUGGABLE) CROSS- CONNECT	LOS	LOSS OF SHUNT	DBU	DIAL BACKUP	CALCAS	CALIFORNIA ACCESS COMPLIANCE SOURCE
		SLA	SERVICE LEVEL AGREEMENT			DED	DRAGGING EQUIPMENT DETECTOR	CALDAG	CALIFORNIA DISABLED ACCESSIBILITY GUIDEBOOK
		SM	SINGLE MODE	NGHS	NORTHWARD SIGNAL REQUEST	DSU	DATA SERVICE UNIT	CALTRANS	CALIFORNIA DEPARTMENT OF TRANSPORTATION
		SMFOC	SINGLE-MODE FIBER OPTIC CABLE	NGK	NORTHWARD SIGNAL CLEAR INDICATION			CCR	CALIFORNIA CODE OF REGULATIONS
E	EXISTING	SNMP	SIMPLE NETWORK MANAGEMENT PROTOCOL	NJSP	DUAL SELECTOR LEVER	ERP	EFFECTIVE RADIATED POWER	CEC	CALIFORNIA ELECTRICAL CODE
EDC	ELECTRICAL DISTRIBUTION CENTER			NWK	NORMAL SWITCH INDICATION			CMF	CENTRAL MAINTENANCE FACILITY
E&M	EAR AND MOUTH	SONET	SYNCHRONOUS OPTICAL NETWORK	NWP	NORMAL SWITCH POINT POSITION			CPUC	CALIFORNIA PUBLIC UTILITIES COMMISSION
E-LAN	ETHERNET LAN	SPDU	SWITCHED POWER DISTRIBUTION UNIT	NWR	NORMAL SWITCH CONTROL RELAY	FAT	FACTORY ACCEPTANCE TEST		
EOS	ETHERNET OVER SONET			NWS	NORMAL SWITCH REQUEST	FDP	FIBER DISTRIBUTION PANEL	EIA	ELECTRONICS INDUSTRIES ALLIANCE
EPL	ETHERNET PRIVATE LINE					FEC	FORWARD ERROR CONNECTION	FAA	FEDERAL AVIATION ADMINISTRATION
EVC	ETHERNET VIRTUAL CIRCUIT					FM	FREQUENCY MODULATION	FCC	FEDERAL COMMUNICATIONS COMMISSION
EVPL	ETHERNET VIRTUAL PRIVATE LINE	T1C	SINGLE DATA CHANNEL OF 1.544 Mbps			FO	FIBER OPTIC	FRA	FEDERAL RAILROAD ADMINISTRATION
EVPLAN	ETHERNET VIRTUAL PRIVATE LAN	T1MUX	A MULTIPLEXING DEVICE BY WHICH A SINGLE T1 CHANNEL IS UTILIZED TO PROVIDE DSO CHANNELS	RE	RED SIGNAL LAMP	FOPP	FIBER OPTIC PATCH PANEL		
FDP	FIBER DISTRIBUTION PANEL	TDM	TIME DIVISION MULTIPLEXING	RWK	REVERSE SWITCH INDICATION	FR	FRAME RELAY	LAUS	LOS ANGELES UNION STATION
FO	FIBER OPTIC			RWP	REVERSE SWITCH POINT POSTION				
FOC	FIBER OPTIC CABLE			RWR	REVERSE SWITCH CONTROL RELAY			MOC	METROLINK OPERATIONS CENTER
FPS	FRAME PER SECOND			RWS	REVERSE SWITCH REQUEST	GMSK	GAUSSIAN MINIMUM SHIFT KEYING	MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
FSE	FIBER SLACK ENCLOSURE					GPS	GLOBAL POSITIONING SYSTEM	NEC	NATIONAL ELECTRICAL CODE
		UP-LINK	1000 MBPS SWITCH EXPANSION PORTS					NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
GBIC	GIGABIT INTERFACE CONVERTER	UPS	UNINTERRUPTIBLE POWER SUPPLY	SEH	SIGNAL EQUIPMENT HOUSE			NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
GBPS	GIGABITS PER SECOND	UPSR	UNIDIRECTIONAL PATH SWITCH RING	SGHS	SOUTHWARD SIGNAL REQUEST			NIC	NOT IN CONTRACT
GIGE	GIGABIT ETHERNET	UTP	UNSHIELDED TWISTED PAIR	SGK	SOUTHWARD SIGNAL CLEAR INDICATION	ISDN	INTERGRATED SERVICES DIGITAL NETWORK		
GND	GROUND							PCMCIA	PERSONAL COMPUTER MEMORY CARD INTERNATIONAL ASSOCIATION
GRP	GLASS REINFORCED PLASTIC ROD			TEK	SIGNAL IN TIME INDICATION	KO	KEYBOARD OPERATOR	SCE	SOUTHERN CALIFORNIA EDISON
GRS	GALVANIZED RIGID STEEL	VCAT	VIRTUAL CONCATENATION	TK	OS TRACK INDICATION	KVM	KEYBOARD VIDEO MOUSE	SCRRA	SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY (METROLINK)
GUI	GRAPHICAL USER INTERFACE	VLAN	VIRTUAL LOCAL AREA NETWORK	TOB	TON PER OPERATIVE BRAKE			SPR	SPRINT NEXTEL
		VPN	VIRTUAL PRIVATE NETWORK			MAS	MULTIPLE ADDRESSING SCHEME	SPTC	SOUTHERN PACIFIC TRANSPORTATION COMPANY
IC	INTERFACE CONVERTER					MC	MEDIA CONVERTER		
IP	INTERNET PROTOCOL					MDF	MAIN DISTRIBUTION FRAME		
		WA	WORK AREA	UAX	UPSTREAM ADJACENT CROSSING				
Kbps	KILO BITS PER SECOND	WAN	WIDE AREA NETWORK						
		WAP	WIRELESS APPLICATION PROTOCOL						
		WCM	WAYSIDE COMMUNICATIONS MANAGER	WBC	SWITCH CONTROL RELAY BACK CHECK	NIC	NETWORK INTERFACE CARD		
LAN	LOCAL AREA NETWORK					NMS	NETWORK MANAGEMENT SYSTEM		
LCD	LIQUID CRYSTAL DISPLAY								
LDF	LOCAL DISTRIBUTION FRAME								
LID	LOCAL INJECTION AND DETECTION (FUSION SPLICING)			XR	CROSSING CONTROL RELAY	RF	RADIO FREQUENCY		
LPM	LOCAL PAGING MICROPHONE					RX	RECEIVE	TIA	TELECOMMUNICATIONS INDUSTRY ASSOC
				YE	YELLOW SIGNAL LAMP			UBC	UNIFORM BUILDING CODE
								UL	UNDERWRITERS LABORATORIES
								UPC	UNIFORM PLUMBING CODE
								UPRR	UNION PACIFIC RAILROAD
Mbps	MEGA BITS PER SECOND					SPKR	SPEAKER		
MDF	MAIN DISTRIBUTION FRAME					SINAD	SIGNAL TO NOISE AND DISTORTION		
MDPE	MEDIUM DENSITY POLYETHYLENE (CABLE SHEATH)					SVR	SERVER		
MEF	METRO ETHERNET FORUM								
MM	MULTI-MODE								
MMFOC	MULTI-MODE FIBER OPTIC CABLE					TC/C	TRAIN CONTROLS AND COMMUNICATION		
MOPE	MAIN POINT OF ENTERY					TCT	TRAIN CONTROL TRENCH		
MS	MILLISECOND					TX	TRANSMITTER		
MSPP	MULTI-SERVICE PROVISIONING PLATFORM								
NID	NETWORK INTERFACE DEVICE								
NMP	NETWORK MEDIA PLAYER								
NMS	NETWORK MANAGEMENT SYSTEM								
NTP	NETWORK TIME PROTOCOL								
NVR	NETWORK VIDEO RECORDER								
OCC	OPERATION CONTROL CENTER								
OSP	OUTSIDE PLANT								

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									GENERAL ABBREVIATIONS SIGNAL, COMMUNICATIONS AND STATION COMMUNICATIONS		SCALE: NTS
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ACOUS	ACOUSTICAL
ALUM	ALUMINUM
AFF	ABOVE FINISHED FLOOR

BD	BOARD
BITUM	BITUMINOUS
BLKG	BLOCKING
BM	BEAM

CAB	CABINET
CER	CERAMIC
CI	CAST IRON
CIP	CAST IRON PIPE
CLG	CEILING
CLKG	CAULKING
CORR	CORRIDOR
CT	CERAMIC TILE
CTSK	COUNTERSUNK

DF	DRINKING FOUNTAIN
DISP	DISPENSER
DO	DOOR OPENING
DR	DOOR
DS	DOWNSPOUT
DSP	DRY STANDPIPE

ENCL	ENCLOSURE
ESCL	ESCALATOR
EXPD	EXPOSED
ESEW	EMERGENCY SHOWER/ EYE WASH

FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT

FE	FIRE EXTINGUISHER
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FLR	FLOOR
FLUOR	FLUORESCENT
FOF	FACE OF FINISH
FOS	FACE OF STUDS
FPRF	FIREPROOF
FSK	FLOOR SINK
FUR	FURRING

GL GLASS
GYP GYPSUM
GYPBD GYPSUM BOARD

HDWE	HARDWARE
HM	HOLLOW METAL

INCAND INCANDESCENT

JAN JANITOR

LAM	LAMINATE
LAV	LAVATORY
LKR	LOCKER

MO	MASONRY	OPENING
MSK	MOP	SINK
MTD	MOUNTED	
MUL	MULLION	

OFD OVERFLOW DRAIN

AC	ALTERNATING CURRENT
AF	AMPERE FUSE
AFR	AMPERE FRAME
ACC	AUTOMATIC GAIN CONTROL
AMP	AMPERE
ANN	ANNUNCIATOR
AS	AMPERE SENSOR
ASW	AMPERE SWITCH
AUX	AUXILIARY
ASSY	ASSEMBLY
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AVI	AUTOMATIC VEHICLE IDENTIFICATION

BC	BARE COPPER
BCW	BARE COPPER WIRE
BAT	BATTERY
BKR	BREAKER

CBKR	CIRCUIT BREAKER
CCD	CHARGE COUPLED DEVICE
CGB	CHASSIS GROUNDING BUS-BAR
CKT	CIRCUIT

CLF	CURRENT LIMITING FUSE
C/O	CONDUIT ONLY
COMM	COMMUNICATIONS
COND	CONDUCTOR
CNTL	CONTROL
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFER
C/R	CONTACT RAIL
CR	CONTROL RELAY
CRI	COLOR RENDENING INDEX
CRS	PVC COATED RIGID

CS	STEEL CONDUIT
CT	COMMUNICATION SHELTER
CTB	CURRENT TRANSFORMER
CU	COMPUTER TERMINAL BOARD
	COPPER

DIM	DIMMER
DC	DIRECT CURRENT
DISC	DISCONNECT
DP	DISTRIBUTION PANEL
DSP	DIGITAL SIGNAL PROCESSING

EMI	ELECTROMAGNETIC INTERFACE
EMT	ELECTRICAL METALLIC TUBING
EPF	EXPLOSION PROOF
ETM	ELAPSED TIME METER

FC	FRAMMING CHANNEL
FDR	FEEDER
FS	FLOW SWITCH
FVNR	FULL VOLTAGE NON-REVERSING

GFI GROUND FAULT INTERRUPTER
GRS GALVANIZED RIGID STEEL
GTS GROUND TEXT STATION

HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTO SWITCH
HPS	HIGH PRESSURE SODIUM
HV	HIGH VOLTAGE

IC INTERRUPTING CAPACITY

KVA	KILOVAR
KW	KILOWATT

ASA	ACOUSTICAL SOUND ATTENUATOR
AC	AIR COMPRESSOR
ACD	ACCESS DOOR
ACU	AIR CONDITIONING UNIT
AF	AIR FILTER/AIR FOIL
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
APD	AIR PRESSURE DROP
ASR	AUTOMATIC SPRINKLER RISER

BD	BALANCING DAMPER
BDD	BACK DRAFT DAMPER
BFP	BACKFLOW PREVENTER
BFV	BUTTERFLY VALVE

CA	COMPRESSED AIR
CC	COOLING COIL
CEG	CEILING EXHAUST GRILLE
CG	CEILING GRILLE
COND	CONDENSATE
CU	CONDENSING UNIT
CV	CHECK VALVE
CW	COLD WATER
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY

DB	DRY BULB
DEG	DUCT EXHAUST GRILLE
DX	DIRECT EXPANSION

EA	EXHAUST AIR
EAD	EXHAUST AIR DAMPER
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EFF	EFFICIENCY
ESP	EXTERNAL STATIC PRESSURE
EUH	ELECTRIC UNIT HEATER
EXTR	EXTRACTOR

FC	FORWARD CURVE
FCD	FLOW CONTROL DEVICE
FLA	FULL LOAD AMPERES
FLEX	FLEXIBLE
FMN	FORCE MAIN

GPM	GALLONS PER MINUTE
GR	GRILLE
GV	GATE VALVE

HC	HEATING COIL
HD	HEAD
HDN	HOPPER DRAIN
HP	HORSEPOWER/HEAT PUMP
HSC	HOSE STORAGE CABINET
HVA	HOSE VALVE, ANGLE
	GLOBE TYPE
HVS	HOSE VALVE, STRAIGHTWAY
	GATE TYPE
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY

IPS	IRON PIPE SIZE
IW	INDUSTRIAL WASTE

LAT	LEAVING AIR TEMPERATURE
LCP	LOCAL CONTROL PANEL
LR	LONG RADIUS

MAV	MANUAL AIR VENT
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CONTROL PANEL
MD	MOTOR OPERATED DAMPER

NC	NORMALLY	CLOSED
NO	NORMALLY	OPEN
OA	OUTSIDE	AIR
OAD	OUTSIDE	AIR DAMPER

PD	PUMP DISCHARGE
PDN	PLANTER DRAIN
PH	PHASE
PIV	POST INDICATOR VALVE
PRV	PRESSURE REDUCING VALVE
PS	POSITION SWITCH

RA	RETURN AIR
RAD	RETURN AIR DAMPER
RF	RETURN FAN
RH	RADIANT HEATER
RL	REFRIGERANT LIQUID
RS	REFRIGERANT SUCTION
RV	ROOF VENTILATOR

SA	SUPPLY AIR
SANT	SANITARY
SAR	SOUND ATTENUATOR
SCAC	SELF CONTAINED AIR CONDITIONER
SCHP	SELF CONTAINED HEAT PUMP
SDP	SPLITTER DAMPER
SF	SUPPLY FAN
SPWG	STATIC PRESSURE WATER GAUGE
SP	SUMP PUMP

T&P	TEMPERATURE AND PRESSURE RELIEF VALVE
TEMP	TEMPERATURE
TG	TRANSFER GRILLE
THR	TOTAL HEAT REJECTION
TSP	TOTAL STATIC PRESSURE
TV	TURNING VANE

UC UNDER CUT
UH UNIT HEATER

VB	VACUUM BREAKER
VD	VOLUME DAMPER
VEL	VELOCITY
VTR	VENT THROUGH ROOF

WST	WASTE
WB	WET BULB
WCO	WALL CLEAN OUT
WEG	WALL EXHAUST GRILLE
WG	WATER GAUGE
WH	WATER HEATER
WHA	WATER HAMMER ARRESTOR
WL	WALL LOUVER
WSP	WET STANDPIPE

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GENERAL

ABBREVIATIONS

&	AND	COMM	COMMUNICATIONS	FG	FINISHED GRADE	MAINT	MAINTENANCE
@	AT	COMM R/W	COMMISSION RIGHT OF WAY	FH	FIRE HYDRANT	MANG	MANGANESE
AB	AGGREGATE BASE	CONC	CONCRETE	FIN	FINISH, FINISHED	MAX	MAXIMUM
ABM	AIR-BLOWN MORTAR	CONN	CONNECTION	FL	FLOW LINE	M/C	MILL CUT
ABN	ABANDON	CONST	CONSTRUCTION	FLR	FLOOR	MECH	MECHANICAL
ABUT	ABUTMENT	CONT	CONTINUOUS	FOC	FIBER OPTIC CABLE	MED	MEDIAN, MEDIUM
AC	ASPHALTIC CONCRETE	CONTR	CONTRACTOR	FR	FRAME	MEM	MEMBRANE
AD	AREA DRAIN	COORD	COORDINATE	FT	FOOT, FEET	MET	METAL
ADJ	ADJUSTABLE	COS	COSINE	FTG	FOOTING	MFG	MANUFACTURER
AHD	AHEAD	CP	CONTROL POINT, CLEARANCE POINT	FW	FIELD WELD	MH	MANHOLE
ALIGN	ALIGNMENT	CPUC	CALIFORNIA PUBLIC UTILITIES COMMISSION	FWY	FREEWAY	MIC	MICROPHONE
ALT	ALTERNATE	CRV	CURVE			MIN	MINIMUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	CSP	CORRUGATED STEEL PIPE	GA	GAUGE	MISC	MISCELLANEOUS
AOBE	AS ORDERED BY ENGINEER	CT	COURT	GALV	GALVANIZED	ML	MAINLINE
APPROX	APPROXIMATE, APPROXIMATELY	CTC	CENTER TO CENTER, CENTRALIZED	GCL	GRADING CONTROL LINE	MOD	MODIFIED
ARCH	ARCHITECTURAL		TRAFFIC CONTROL	GM	GUIDE MARKER	MON	MONUMENT
AREA	AMERICAN RAILWAY ENGINEERING ASSOCIATION	CTR	CENTER	GND	GROUND	MOW	MAINTENANCE OF WAY
AREMA	AMERICAN RAILWAY ENGINEERING & MAINTENANCE OF WAY ASSOCIATION	CULV	CULVERT	GP	GRADING PLANE	MP	MILE POST
		CVD	CURVED	GR	GUARDRAIL/GRADE	MPH	MILES PER HOUR
A/R	AS REQUIRED	CVR	COVER	GSP	GALVANIZED STEEL PIPE	MSL	MEAN SEA LEVEL
AS	AGGREGATE SUBBASE	CWR	CONTINUOUSLY WELDED RAIL			MTL	MATERIAL
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	CY	CUBIC YARD	HB	HOSE BIBB	(N)	NEW
ASPH	ASPHALT, ASPHALT CONCRETE PAVING			HC	HANDICAP, HANDICAPPED	N	NORTH
ASSY	ASSEMBLY	Dc	DEGREE OF CURVE	HD	HEAVY DUTY	N/A	NOT APPLICABLE
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS	DEL	DELINEATORS	HEX	HEXAGONAL	NB	NORTHBOUND
ATR	ABOVE TOP OF RAIL	DEP	DEPTH	HF	HEEL OF FROG, HEAD FREE RAIL	NEG	NEGATIVE
AVE	AVENUE	DET	DETAIL	HH	HANDHOLE	NEUT	NEUTRAL
AVM	ADD VALUE MACHINE	DFX	DIRECT FIXATION	HI	HIGH	NIC	NOT IN CONTRACT
AWWA	AMERICAN WATER WORKS ASSOCIATION	DGAC	DENSE GRADED ASPHALT CONCRETE	HL	HEEL LENGTH	NO, #	NUMBER
		DI	DROP INLET, DRAINAGE INLET	HMAC	HOT MIX ASPHALT CONCRETE	NOM	NOMINAL
BAA	BOARDING ASSISTANCE AREA	DIA, Ø	DIAMETER	HORIZ	HORIZONTAL	NTS	NOT TO SCALE
BB	BATTERY BOX	DIAG	DIAGONAL	HP	HEEL PLATE, HIGH POINT		
BBR	BEGINNING OF BRIDGE	DIM	DIMENSION	HR	HANDRAIL	OA	OVERALL
BCR	BEGIN CURB RETURN	DIR	DIRECTION	HS	HEEL OF FROG, HIGH STRENGTH	OC	ON CENTER
BEG	BEGIN, BEGINNING	DIST	DISTRIBUTION	HST	HOLLOW STEEL TIE	OCTA	ORANGE COUNTY TRANSPORTATION AUTHORITY
BK	BACK	DN	DOWN	HT	HEIGHT, HIGH TENSILE, HAND THROW	OD	OUTSIDE DIAMETER
BKF	BACKFILL	DR	DRIVE	HW	HEADWALL	OHD	OVERHEAD
BL	BASELINE	DRWY	DRIVEWAY	HWY	HIGHWAY	OP	OVERPASS
BLDG	BUILDING	DTR	DETOUR	HZ	HERTZ	OPNG	OPENING
BLLBRD	BILLBOARD	DWG	DRAWING			OPP	OPPOSITE
BLST	BALLAST			ID	INSIDE DIAMETER	OTM	OTHER TRACK MATERIAL
BLVD	BOULEVARD	(E)	EXISTING	I.D.	IDENTIFICATION	OZ	OUNCE
BM	BENCHMARK	E	EAST	IE	INVERT ELEVATION		
BNSF	BURLINGTON NORTHERN SANTA FE RAILWAY	EA	EACH	IJ	INSULATED JOINT	PB	PULL BOX
BOC	BOTTOM OF CURB	EB	EASTBOUND	IN	INCH(ES)	PED	PEDESTRIAN
BOS	BOTTOM OF SLOPE	EBR	END OF BRIDGE	INSUL	INSULATION	PERF	PERFORATED
BOT	BOTTOM	ECR	END CURB RETURN	INT	INTERIOR	PERM	PERMEABLE, PERMANENT
BOW	BOTTOM OF WALL	EE	EACH END	INV	INVERT	PF	POINT OF FROG
BR	BRIDGE, BLUE ROD	EF	EACH FACE	IR	INSIDE RADIUS	PG	PAGE
		EIC	EMPLOYEE IN CHARGE			PGL	PROFILE GRADE LINE
C/W	COMES WITH	EJ	EXPANSION JOINT	JB	JUNCTION BOX	PH	POTHOLE
CAB	CABINET	ELEC	ELECTRICAL	JJ	JOINTED RAIL	PITO	POINT OF INTERSECTION OF TURNOUT
CALP	CORRUGATED ALUMINUM PIPE	EL	ELEVATION	JT	JOINT	PL	PLATE
CAP	CAPACITY	ELEV	ELEVATOR	LACFCD	LOS ANGELES COUNTY FLOOD CONTROL DISTRICT	P/L	PROPERTY LINE
CB	CATCH BASIN	EMB	EMBANKMENT	LACMTA	LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY	PNA	PASSENGER NEEDING ASSISTANCE
CEM	CEMENT	EMER	EMERGENCY			PNL	PANEL
CF	CUBIC FEET	ENGR	ENGINEER, ENGINEERING	LAUPT	LOS ANGELES UNION PASSENGER TERMINAL	PP	POWER POLE
CG	CENTER OF GRAVITY	EP	EDGE OF PAVEMENT	LB, LBS	POUND, POUNDS	PPL	PREFORMED PERMEABLE LINE
CI	CAST IRON	EQ	EQUAL, EQUATION	LF	LINEAL FEET	PPP	PERFORATED PLASTIC PIPE
CIP	CAST IN PLACE	EQUIP	EQUIPMENT	LG	LONG	PR	PAIR
CJ	CONSTRUCTION JOINT	ES	EDGE OF SHOULDER, ENGINEERING STANDARD	LGT	LIGHT	PROP	PROPOSED
CL, L	CENTERLINE	ESMT	EASEMENT	LGTH	LENGTH	PS	POINT OF SWITCH
CLK	CHAIN LINK	ET	END OF TRACK	LH	LEFT HAND	PSI	POUNDS PER SQUARE INCH
CLR	CLEAR, CLEARANCE	ETW	EDGE OF TRAVELLED WAY	LN	LANE	PSM	PARK BY SPACE MACHINE
CMP	CORRUGATED METAL PIPE	EW	END WALL	LOC	LOCATION	PT	POINT
CMPA	CORRUGATED METAL PIPE ARCH	EX	EXISTING	LOL	LAYOUT LINE	PTM	PARKING TICKET MACHINE
CMU	CONCRETE MASONRY UNIT	EXC	EXCAVATION	LP	LOW POINT	PVC	POLYVINYL CHLORIDE
COMPJT	COMPROMISE JOINT	EXP	EXPANSION	LPL	LIGHT POLE	PVMT	PAVEMENT
CND	CONDUIT	EXT	EXTERIOR	LT	LEFT		
CNTR	COUNTER			LTG	LIGHTING		
CNTRLR	CONTROLLER	(F)	FUTURE	LVL	LEVEL		
CO	CLEANOUT	FC	FACE OF CONCRETE				
COC	CENTER ON CENTER	FDN	FOUNDATION				
COL	COLUMN	FF	FILTER FABRIC				

NOTES:

SEE SCRRA ES2201 AND ES2202-01 FOR HORIZONTAL AND VERTICAL ALIGNMENT ABBREVIATIONS.

				DRAWN BY: HDR DATE: 03/31/2011		<div>SCRRA ENGINEERING STANDARDS ARE INTENDED FOR SCRRA APPROVED USES ONLY. FOR NON-SCRRA APPROVED USES, SCRRA SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE DATA OR INFORMATION CONTAINED HEREIN. THE SELECTION AND USE OF THESE STANDARDS IS THE SOLE RESPONSIBILITY OF THE USER AND SHOULD NOT BE USED WITHOUT CONSULTING A REGISTERED PROFESSIONAL ENGINEER. ALL WARRANTIES AND REPRESENTATIONS OF ANY KIND ARE DISCLAIMED. ANYONE MAKING USE OF THIS INFORMATION AGREES THAT IT ASSUMES ALL LIABILITY ARISING FROM SUCH USE. NO PART OF THESE STANDARDS SHOULD BE REPRODUCED OR DISTRIBUTED IN ANY FORM OR BY ANY MEANS WITHOUT THE PRIOR WRITTEN PERMISSION OF SCRRA. ALL RIGHTS RESERVED.</div> <div> METROLINK®</div> <div>SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY ONE GATEWAY PLAZA, 12TH FLOOR, L. A., CA. 90012</div>		ENGINEERING STANDARDS		STANDARD 1201	
								SCALE: NONE			
								REVISION SHEET			
								- 1 OF 4			
						CADD FILE: ES1201-01					

GENERAL

QTY	QUANTITY
(R)	RELOCATED
R	RADIUS
RBM	RAIL BOUND MANGANESE
RC	REINFORCED CONCRETE
RCP	REINFORCED CONCRETE PIPE
RCTC	RIVERSIDE COUNTY TRANSPORTATION COMMISSION
RD	ROAD
RDWY	ROADWAY
RECT	RECTANGULAR
REF	REFERENCE
REINF	REINFORCED
REL	RELOCATE(D)
REQ'D	REQUIRED
REV	REVISION, REVISED
RH	RIGHT HAND
RO	ROUGH OPENING
RP	REFERENCE POINT
RR	RAILROAD
RT	RIGHT
RTE	ROUTE
R/W	RIGHT OF WAY
S	SOUTH
SAE	SOCIETY OF AUTOMOBILE ENGINEER
SANBAG	SAN BERNARDINO ASSOCIATED GOVERNMENTS
SAV	STAND ALONE VALIDATOR
SB	SOUTHBOUND
SCHD	SCHEDULE
SCRRRA	SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SDNG	SIDING
SECT	SECTION
SERV	SERVICE
SF	SQUARE FEET
SG	SUBGRADE
SHLDR	SHOULDER
SHT	SHEET
SIM	SIMILAR
SIN	SINE
SL	SLOPE
SLPA	SIGNAGE/LIGHTING/PUBLIC ADDRESS
SMC	SWIVEL MOVEABLE JOINT
S/N	SERIAL NUMBER
SPEC	SPECIFICATION
SQ	SQUARE
SS	SANITARY SEWER
SST	STAINLESS STEEL
ST	STREET
STA	STATION
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STR	STRAIGHT
STRL	STRUCTURAL
STRUCT	STRUCTURE
SW	SWITCH
SWK	SIDEWALK
SWL	SOUNDWALL
SY	SQUARE YARD(S)
SYMM	SYMMETRICAL

ABBREVIATIONS

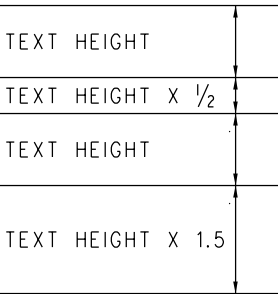
T&B	TOP AND BOTTOM
TAN	TANGENT
TBD	TO BE DETERMINED
TBR	TO BE REMOVED
TC	TRACK CENTER
TD	TRENCH DRAIN
TDS	TRAIN DESTINATION SIGN
TEL	TELEPHONE
TF	TRACK FEET
THDS	THREADS
THK	THICKNESS
TK	TRACK
TL	TOE LENGTH
TO	TURNOUT
TOC	TOP OF CURB
TOG	TOP OF GRATE
TOL	TOLERANCE
TOP	TOP OF PAVEMENT
TOS	TOP OF SLOPE
TOT	TOP OF TIE
TOW	TOP OF WALL
T/R	TOP OF RAIL
TRANS	TRANSITION
TTB	TELEPHONE TERMINAL BOARD
TVM	TICKET VENDING MACHINE
(TYP)	TYPICAL
UB	UTILITY BOX
UD	UNDERDRAIN
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UP	UNDERPASS
UPRR	UNION PACIFIC RAILROAD
UR	UNIFORM RISER
UTIL	UTILITY
VAR	VARIES
VCTC	VENTURA COUNTY TRANSPORTATION COMMISSION
VERT	VERTICAL
VMB	VISUAL MESSAGE BOARD
VMS	VISUAL MESSAGE SIGN
W	WEST
W/	WITH
W/O	WITHOUT
WB	WESTBOUND
WI	WROUGHT IRON
WP	WORK POINT
WPF	WATERPROOF
WRT	WITH RESPECT TO
WSM	WELDED SPRING MANGANESE
WT	WEIGHT
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH
XING	CROSSING
XOVER	CROSSOVER
YD	YARD(S)
•20POTO RH	NUMBER 20 POWER OPERATED TURNOUT - RIGHT HAND
•10HOTO LH	NUMBER 10 HAND OPERATED TURNOUT - LEFT HAND
+/-, ±	PLUS OR MINUS, APPROXIMATELY

NOTES:

SEE SCRRRA ES2201 AND ES2202-01 FOR HORIZONTAL AND VERTICAL ALIGNMENT ABBREVIATIONS.

					DRAWN BY: HDR		DATE: 03/31/2011	<div>SCRRRA ENGINEERING STANDARDS ARE INTENDED FOR SCRRRA APPROVED USES ONLY. FOR NON-SCRRRA APPROVED USES: SCRRRA SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE DATA OR INFORMATION CONTAINED HEREIN. THE SELECTION AND USE OF THESE STANDARDS IS THE SOLE RESPONSIBILITY OF THE USER AND SHOULD NOT BE USED WITHOUT CONSULTING A REGISTERED PROFESSIONAL ENGINEER. ALL WARRANTIES AND REPRESENTATIONS OF ANY KIND ARE DISCLAIMED. ANYONE MAKING USE OF THIS INFORMATION AGREES THAT IT ASSUMES ALL LIABILITY ARISING FROM SUCH USE. NO PART OF THESE STANDARDS SHOULD BE REPRODUCED OR DISTRIBUTED IN ANY FORM OR BY ANY MEANS WITHOUT THE PRIOR WRITTEN PERMISSION OF SCRRRA. ALL RIGHTS RESERVED.</div>	<div>METROLINK[®]</div> <div>SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY ONE GATEWAY PLAZA, 12TH FLOOR, L. A., CA. 90012</div>	ENGINEERING STANDARDS		STANDARD	1201
							SCALE:			NONE			
							REVISION			SHEET			
							-			2 OF 4			
							CADD FILE:					ES1201-02	
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REV.	DATE		DESCRIPTION	DES.	ENG.								

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L M N O P Q R S T U
V W X Y Z & @ - . →



TEXT
SPACING

UNRELATED LINE

NOTES:

- 1. "ARIAL BOLD" LETTERS AND NUMERALS SHALL BE USED ON ALL SIGNS UNLESS OTHERWISE SPECIFIED ON SIGN STANDARD.
- 2. LETTERS AND NUMERALS MAY BE MADE PROPORTIONALLY NARROWER THAN ILLUSTRATED IF NEEDED TO FIT AVAILABLE SPACE ON THE SIGN. HEIGHT SHALL NOT BE ADJUSTED.
- 3. ALL LETTERS AND NUMERALS SHALL BE BLACK 3M 3650-12 "SCOTCH PLUS" NON-REFLECTIVE.
- 4. THE LETTER "I" AND THE NUMERAL "1" ARE IDENTICAL.
- 5. USE TEXT SPACING PATTERN ON THIS SHEET UNLESS OTHERWISE SPECIFIED ON SIGN STANDARD.

				DRAWN BY: A. CARLOS		DATE: 03/31/2011	SCRRRA ENGINEERING STANDARDS ARE INTENDED FOR SCRRRA APPROVED USES ONLY. FOR NON-SCRRRA APPROVED USES, SCRRRA SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE DATA OR INFORMATION CONTAINED HEREIN. THE SELECTION AND USE OF THESE STANDARDS IS THE SOLE RESPONSIBILITY OF THE USER AND SHOULD NOT BE USED WITHOUT CONSULTING A REGISTERED PROFESSIONAL ENGINEER. ALL WARRANTIES AND REPRESENTATIONS OF ANY KIND ARE DISCLAIMED. ANYONE MAKING USE OF THIS INFORMATION AGREES THAT IT ASSUMES ALL LIABILITY ARISING FROM SUCH USE. NO PART OF THESE STANDARDS SHOULD BE REPRODUCED OR DISTRIBUTED IN ANY FORM OR BY ANY MEANS WITHOUT THE PRIOR WRITTEN PERMISSION OF SCRRRA. ALL RIGHTS RESERVED.		 METROLINK® SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY ONE GATEWAY PLAZA, 12TH FLOOR, L. A., CA. 90012		ENGINEERING STANDARDS		STANDARD 1212	
				 ASSISTANT DIRECTOR: STANDARDS & DESIGN						SCALE: NONE		SHEET 1 OF 1		
				 DIRECTOR OF ENGINEERING AND CONSTRUCTION						LETTERING FOR SIGNS				
X	XX-XX-XX	REVISION	XX	XX										
REV.	DATE	DESCRIPTION	DES.	ENG.									ES1212	