

ABBREVIATIONS

AC	ASPHALTIC CONCRETE	MAX	MAXIMUM
AGGR	AGGREGATE	MH	MANHOLE
APPROX	APPROXIMATELY	MIN	MINIMUM
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MON	MONUMENT
AVG	AVERAGE		
		N	NORTH
BC	BEGIN CURVE	NIC	NOT IN CONTRACT
BDY	BOUNDARY	NTS	NOT TO SCALE
BLDG	BUILDING		
BM	BENCH MARK	OC	ON CENTER
BOP	BOTTOM OF PIPE	OD	OUTSIDE DIAMETER
BRG	BEARING		
BVC	BEGIN VERTICAL CURVE		
		PC	POINT OF CURVE
CB	CATCH BASIN	PCT, %	PERCENT
C	COMMUNICATION	PI	POINT OF INTERSECTION
C TO C	CENTER TO CENTER	PIV	POST INDICATOR VALVE
CF	CURB FACE	PIVC	POINT OF INTERSECTION, VERTICAL CURVE
CJ	CONSTRUCTION JOINT	POC	POINT OF CONNECTION
CL, E	CENTERLINE	POVC	POINT ON VERTICAL CURVE
CLR	CLEAR	PSI	POUND-FORCE PER SQUARE INCH
CMP	CORRUGATED METAL PIPE	PT	POINT OF TANGENCY
CO	CLEANOUT, CONDUIT ONLY, CONTRACTION JOINT	PVC	POLYVINYL CHLORIDE
		PVMT	PAVEMENT
		PW	POTABLE WATER
COL	COLUMN	R	RADIUS, RIDGE
CONC	CONCRETE	RAD	RADIAL
CONSTR	CONSTRUCTION	RCP	REINFORCED-CONCRETE PIPE
CONT	CONTINUATION	RD	ROAD
CP	CONCRETE PIPE	RDCR	REDUCER
CPB	COMMUNICATIONS PULLBOX	REF	REFERENCE
CS	CARBON STEEL	REINF	REINFORCEMENT
CU FT	CUBIC FEET	REQD	REQUIRED
CULV	CULVERT	REV	REVISION
CWR	CHILLED WATER RETURN	RG	ROUGH GRADE
CWS	CHILLED WATER SUPPLY	R/W	RIGHT-OF-WAY
CY	CUBIC YARD		
		S	SLOPE, SOUTH
Δ	DELTA = ANGLE	SCH, SCHED	SCHEDULE
D	DUCT	SD	STORM DRAIN
DEG	DEGREE	SG	SUBGRADE
DET	DETAIL	SHT	SHEET
DI	DUCTILE IRON	SIM	SIMILAR
DIA, Ø	DIAMETER	SO FT, SF	SQUARE FOOT
DL	DRAIN LINE	SS	SANITARY SEWER
DWG	DRAWING	STA	STATION
		STD	STANDARD
E	EAST	STL	STEEL
EA	ELECTRICAL	SW	SIDEWALK
EC	END CURVE		
EDB	ELECTRICAL DUCT BANK	T	TANGENT
EJ	EXPANSION JOINT	TEL	TELEPHONE
EL, ELEV	ELEVATION (HEIGHT)	TG	TOP OF CURB
ELEC	ELECTRICAL	TG	TOP OF GRATE
ELL	ELBOW	TOC	TOP OF CONCRETE
EMH	ELECTRICAL MANHOLE	TOP	TOP OF PIPE
EPB	ELECTRICAL PULLBOX	TOPO	TOPOGRAPHY
EV	ELECTRICAL VAULT	TW	TOP OF WALL
EVC	END VERTICAL CURVE	TYP	TYPICAL
EW	EACH WAY		
EXIST, EX	EXISTING	UG	UNDERGROUND
		UON	UNLESS OTHERWISE NOTED
FH	FIRE HYDRANT	VC	VERTICAL CURVE
FIN	FINISH	VCP	VITRIFIED CLAY PIPE
FIN FL	FINISH FLOOR	VERT	VERTICAL
FG	FINISH GRADE	VOL	VOLUME
FL	FLOOR		
FLG	FLOW LINE	W	WEST
FOF	FACE OF FLANGE	W/	WITH
FS	FINISH SURFACE	W/O	WITHOUT
FT	FOOT, FEET	WSDOT	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
FTG	FOOTING	WW	WASTE WATER
FW	FIRE WATER	WWF	WELDED WIRE FABRIC
GALV	GALVANIZED	XFMR	TRANSFORMER
GA	GAGE		
GB	GRADE BREAK	YD	YARD
GPM	GALLONS PER MINUTE		
GR	GRADE		
GVL	GRAVEL		
HORIZ	HORIZONTAL		
HP	HIGH POINT		
ID	INSIDE DIAMETER		
IN	INCH		
INCL	INCLUDE		
INTSCT	INTERSECTION		
INV	INVERT		
JB	JUNCTION BOX		
JT	JOINT		
L	LENGTH		
LB	POUND		

LEGEND

EXISTING	NEW	DESCRIPTION
		CENTERLINE, E
		BUILDING OR STRUCTURE
		FENCE LINE
		ROAD
		ASPHALT CONCRETE PAVING
		MULTIPLE BITUMINOUS SURFACE
		CONCRETE
		DIRECTION OF SHEET FLOW
		FLOWLINE
		CLEANOUT
		DRAIN LINE
		POTABLE WATER
		ELECTRICAL
		ELECTRICAL DUCT BANK
		STORM DRAIN
		SANITARY SEWER
		TELEPHONE
		WATER
		FIRE WATER
		CHILLED WATER SUPPLY
		CHILLED WATER RETURN
		COMMUNICATIONS
		FIRE HYDRANT
		GATE VALVE
		MANHOLE
		STORM DRAIN CATCH BASIN
		CULVERT
		POWER POLE
		GUARD POST
		PLUG OR CAP
		INDEX CONTOUR LINE
		INTERMEDIATE CONTOUR LINE
		CUT/FILL SLOPE
		FINISH GRADE ELEVATION
		FINISH SURFACE ELEVATION
		FLOW LINE ELEVATION
		TOP OF CURB
		TOP OF WALL
		INVERT ELEVATION
		ROUGH GRADE ELEVATION
		SECTION CUT
		DETAIL INDICATION
		DETAIL TITLE
		PROFILE
		REVISION CLOUD
		REVISION TRIANGLE & NUMBER ON FACE OF DRAWING

GENERAL NOTES

- THE TOPOGRAPHY WITHIN THE PROPERTY LINES, WAS GENERATED BY COMPUTER METHODS FROM A SURVEY PERFORMED BY J-U-B ENGINEERS, INC., KENNEWICK, WASHINGTON, DATED SEPTEMBER 23, 1993.
- HORIZONTAL AND VERTICAL DATUMS ARE ALSO FROM THE J-U-B ENGINEERS, INC. SURVEY, AND ARE AS FOLLOWS:
 HORIZONTAL DATUM: THE COORDINATE GRID SYSTEM ORIGINATES AT THE VERTEX POINT (N 410990, 1636, E 1915712.5766) AND IS CONSIDERED COINCIDENT WITH STATE PLANE COORDINATES AT THAT POINT AND ALSO INDICATED AS STATION 0+00.00 FOR EITHER BEAM TUBE ARM. REFERENCE STATE PLANE IS WASHINGTON STATE PLANE LAMBERT SOUTH ZONE NAD 83/91
 VERTICAL DATUM: NAVD 88 BENCH MARK "McKINLEY"
 (AVG LAT. 46°27'25.68") GRID FACTOR 0.999917130
 (AVG ELEV. 532.80) SEA LEVEL FACTOR 0.999974515
 COMBINED PROJECT SCALE FACTOR = 0.999891645
 STATE PLANE 999.891645' = 1000.000 MEASURED GROUND.
 VERTEX 0 ELEVATION = 537.29' PROJECT DATUM
- STRAIGHT GRADE BETWEEN SPOT ELEVATIONS, UNLESS OTHERWISE SHOWN ON PLANS.
- NOTES RELATING TO A SPECIFIC DRAWING WILL BE FOUND ON THE DRAWING FOR WHICH THEY ARE APPLICABLE.
- DIMENSIONS, ELEVATIONS AND LOCATION OF EXISTING UTILITIES, STRUCTURES, OR GRADING ARE TO BE VERIFIED PRIOR TO START OF CONSTRUCTION BY CONTRACTOR. ANY DISCREPANCY WITH THE DRAWINGS SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE CONSTRUCTION MANAGER. ANY ADDITIONAL WORK PERFORMED BY THE CONTRACTOR DUE TO HIS FAILURE TO VERIFY AND SO ADVISE, SHALL BE COMPLETELY AT HIS OWN COST AND AT NO COST TO THE INSTITUTE.
- AN EXISTING 6" WATERLINE IS LOCATED ALONG THE WEST SIDE OF THE SOUTHWEST ARM, WHICH BEGINS AT A WELL PUMP POINT NEAR THE SOUTHWEST END STATION AND TERMINATES AT A POND LOCATED ADJACENT TO THE CORNER STATION PAD ON THE SOUTHWEST SIDE. EXACT LOCATION AND ALIGNMENT SHALL BE VERIFIED IN THE FIELD. APPROXIMATE ALIGNMENT OF WATERLINE IS SHOWN ON SHEETS WA-C-031 THRU WA-C-040. SEE DETAIL 7, SHEET WA-C-055.
- FINISHED SURFACES SHALL BE SLOPED UNIFORMLY FROM HIGH POINTS, RIDGE LINES, AND AROUND FOUNDATIONS TO FLOW LINES AND AREA DRAINS UNLESS INDICATED OTHERWISE.
- STORM DRAIN, SANITARY SEWER, AND UTILITY LINES SHALL BE SLOPED AT A UNIFORM GRADE BETWEEN INVERT ELEVATIONS.
- BORING SUMMARIES ARE FROM A FOUNDATIONS INVESTIGATION CONDUCTED BY DAMES AND MOORE. A COPY OF THE REPORT IS ON FILE WITH THE CLIENT.
- ALL UNDERGROUND PIPES SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION FROM HEAVY MOVING EQUIPMENT.
- WELL PUMP AT SOUTHWEST END STATION SHALL BE ENCLOSED WITH A 7'x9'8" HIGH PREFABRICATED SHELTER WITH STANDARD DOOR, ANCHORED TO A NEW 6" THICK CONCRETE SLAB, PER CONTRACTOR DESIGN.
- ALL NEW SIDE SLOPES 3 (HORIZONTAL) : 1 (VERTICAL) OR STEEPER SHALL HAVE A MINIMUM 3 INCHES OF SLOPE PROTECTION MATERIAL.
- ALL UNPAVED FLAT SURFACES, ROADS OR FUTURE PAVED AREAS SHALL CONTINUALLY HAVE DUST CONTROL DURING THE COMPLETE CONSTRUCTION PERIOD, UNTIL PAVED OR BITUMINOUS SURFACE TREATED.
- THE LIGO VERTEX POINT IS DEFINED AS THE INTERSECTION OF THE BEAM TUBE CENTERLINES OR THE (0,0,0) POINT EQUIVALENT TO (NORTH, EAST, ELEVATION) PROJECT COORDINATES DEFINED IN NOTE 2 ABOVE.

STANDARD PLANS

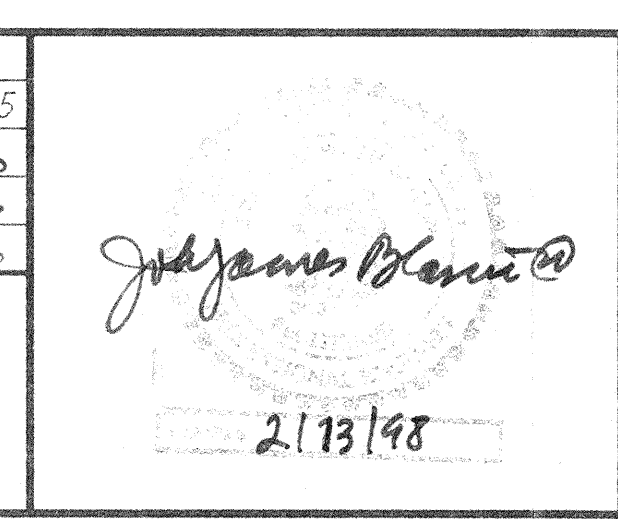
TO THE EXTENT REFERENCED, THE FOLLOWING WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD PLANS FOR ROAD, BRIDGES AND MUNICIPAL CONSTRUCTION SHALL BE CONSIDERED PART OF THE CONSTRUCTION DOCUMENTS:

PLAN	TITLE	LAST DATE
B-19	HYDRANT SETTING TYPE A & B	10/3/83
C-1	BEAM GUARDRAIL (W BEAM), SHEET 1 OF 2	6/4/93
C-1	BEAM GUARDRAIL (W BEAM), SHEET 2 OF 2	6/4/93
C-2p	GUARDRAIL PLACEMENT	6/19/92
C-7	BEAM GUARDRAIL TERMINAL SECTION (DESIGN G)	1/21/85
H-5c	PAVEMENT MARKINGS	7/17/81
H-6	SURVEY MONUMENTS	7/17/81
L-2	CHAIN LINK FENCE, SHEET 1 OF 2	5/24/91
L-2	CHAIN LINK FENCE, SHEET 2 OF 2	5/24/91
L-3	CHAIN LINK GATES	1/21/85
L-6	ACCESS CONTROL GATE	1/21/85

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NO.	DATE	BY	CHKD	ENGR	PROJ	DESCRIPTION

FOR CONSTRUCTION	9/28/95
DRAWN	WRB
CHECKED	ML
ENGINEER	7/19/96
PROJ	1/19/96



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 PASADENA, CALIFORNIA

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 CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

LASER INTERFEROMETER
 GRAVITATIONAL-WAVE OBSERVATORY
 SITE NO. 1 - HANFORD, WASHINGTON

TITLE	CIVIL GENERAL NOTES, LEGEND & ABBREVIATIONS
SCALE	NONE
PROJECT NUMBER	PP150969
SHEET NUMBER	8094
REVISIONS	WA - C - 002

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