

BRIDGE ELEVATION

GENERAL NOTES

- DESIGN STRESSES ARE IN ACCORDANCE WITH THE MANUAL OF STEEL CONSTRUCTION FOR ALLOWABLE STRESS DESIGN AS ADOPTED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), 9th EDITION. (ALSO MEETS OR EXCEEDS
- 2. BRIDGE MEMBERS ARE FABRICATED FROM HIGH STRENGTH, LOW ALLOY, ENHANCED ATMOSPHERIC CORROSION RESISTANT ASTM A847 COLD-FORMED WELDED SQUARE AND RECTANGULAR TUBING, AND ASTM A588, ASTM A606, OR ASTM A242 PLATE AND STRUCTURAL SHAPES (Fy=50,000 PSI).

- HAVE THE EFFECTIVE THROAT OF A FILLET WELD) OF A SIZE EQUAL TO THE THICKNESS OF THE LIGHTEST GAGE MEMBER IN THE CONNECTION. WELDS SHALL BE
 - BOTH ENDS OF VERTICALS, DIAGONALS, AND FLOOR BEAMS SHALL BE WELDED
 - BRACE DIAGONALS WILL BE WELDED ALL AROUND.
 - THEIR SUPPORTING MEMBERS.
- - A. 100 PSF UNIFORM LIVE LOADING ON THE FULL DECK AREA OR ONE 8,000 POUND VEHICLE LOAD. THE VEHICLE LOAD SHALL BE DISTRIBUTED AS A FOUR-WHEEL VEHICLE WITH 60% OF THE LOAD ON THE REAR WHEELS. THE WHEEL TRACK WIDTH OF THE VEHICLE SHALL BE 5'-0" AND THE WHEEL BASE SHALL BE 8'-6". THE VEHICLE SHALL BE POSITIONED SO AS TO PRODUCE THE MAXIMUM STRESS IN EACH MEMBER, INCLUDING DECKING.

 - 20 PSF UPWARD FORCE APPLIED AT THE WINDWARD QUARTER POINT OF THE
 - SEISMIC LOADING PER CALTRANS SDC (SEE NOTE)
- WITH STEEL STRUCTURES PAINTING COUNCIL SURFACES PREPARATION SPECIFICATIONS NO. 7 BRUSH-OFF BLAST CLEANING. SSPC-SP7-LATEST EDITION.

SCHEDULE OF MEMBERS	
TOP CHORD	HSS 6 x 4 x 3/8
BOTTOM CHORD	HSS 6 x 4 x 3/8
VERTICAL	HSS 6 X 6 x 1/4
VERTICAL STUB	HSS 3 x 2 x 1/4
DIAGONAL	HSS 3 x 3 x 1/4 🐈
BRACE DIAGONAL	HSS 4 x 4 x 1/4 ★★
FLOOR BEAM	HSS 8 x 6 x 3/8
END FLOOR BEAM	HSS 10 x 6 x 3/8
SIDE DAM	Δ6 x 4 x 5/16
TOP RAIL	HSS 2 x 2 x 3/16
SAFETY RAIL	L 1 1/4 x 1 1/4 x 1/8

★ USE HSS 5 x 3 x 1/4 & DOUBLE MITER END BAY ONLY (TYP. BOTH ENDS DOUBLE MITER ALL DIAGONALS ON BOTTOM CHORD SINGLE MITER TO VERTICAL ON TOP ★ USE HSS 6 x 4 x 1/4 END BRACE DIAGONAL

ONLY. TYP. BOTH ENDS OF BRIDGE

CONTECH

CONTRACT

DRAWING



PEDESTRIAN BRIDGE **DUTCH BILL CREEK** 75'-0" × 8'-0'

6/5/09 CMA

DAN SJH 91039\

OF

DRAINAGE BRIDGE SECTION

TYP. ALL FLOOR BEAMS

NOTCH CORNERS FOR

-3/8" STIFFENER ₽

TOE PLATE .

1/4" x 6'

DIAGONAL

6" CONCRETE

- FLOOR BEAM

SPACING OF SAFETY RAIL AND TOE PLATE PRODUCE

SAFETY RAIL

SIDE DAM

(MITER, CAP &

GRIND SMOOTH)

Jobs/91039-Y Camp Meeker CA Dutch Bill Creek/Engineering/91039Y, dwg. 7/13/2009 2:33:25 PM, \\ctprint01\) BSI91039-Y CAMP MEEKER CA DUTCH BILL CREEKIENGINGI91039Y DWG. 1/13/2009 2:33 PM

OPENINGS OF LESS THAN 4" UP TO A HEIGHT OF 54".

> TOP CHORD GALVANIZED FORM DECK SUPPLIED BY CONTECH. CONCRETE, REINFORCING AND EXPANSION MATERIAL SUPPLIED BY OTHERS. SEE CONCRETE DECK SHEET. SHOP NOTE: MIDBAY SUPPORTS 4. THE GAS METAL ARC WELDING PROCESS OR FLUX CORED ARC WELDING PROCESS ARE REQUIRED. USE HSS 1 1/2 x 1 1/2 - DIAGONAL x 1/8 (CAP ENDS) & 5. ALL TOP AND BOTTOM CHORD SHOP SPLICES TO BE COMPLETE PENETRATION TYPE FLT 1 x 1/2 FOR END WELDS. WELD BETWEEN TOP CHORD AND END VERTICAL SHALL BE COMPLETE TOP RAII BAY PENETRATION TYPE WELDS ON BOTH SIDES WITH A PARTIAL PENETRATION GROOVE (CAP ENDS) WELD ON THE TOP SIDE AND A FILLET WELD ON THE BOTTOM SIDE. 6. UNLESS OTHERWISE NOTED, WELDED CONNECTIONS SHALL BE FILLET WELDS (OR **VERTICAL**

APPLIED AS FOLLOWS:

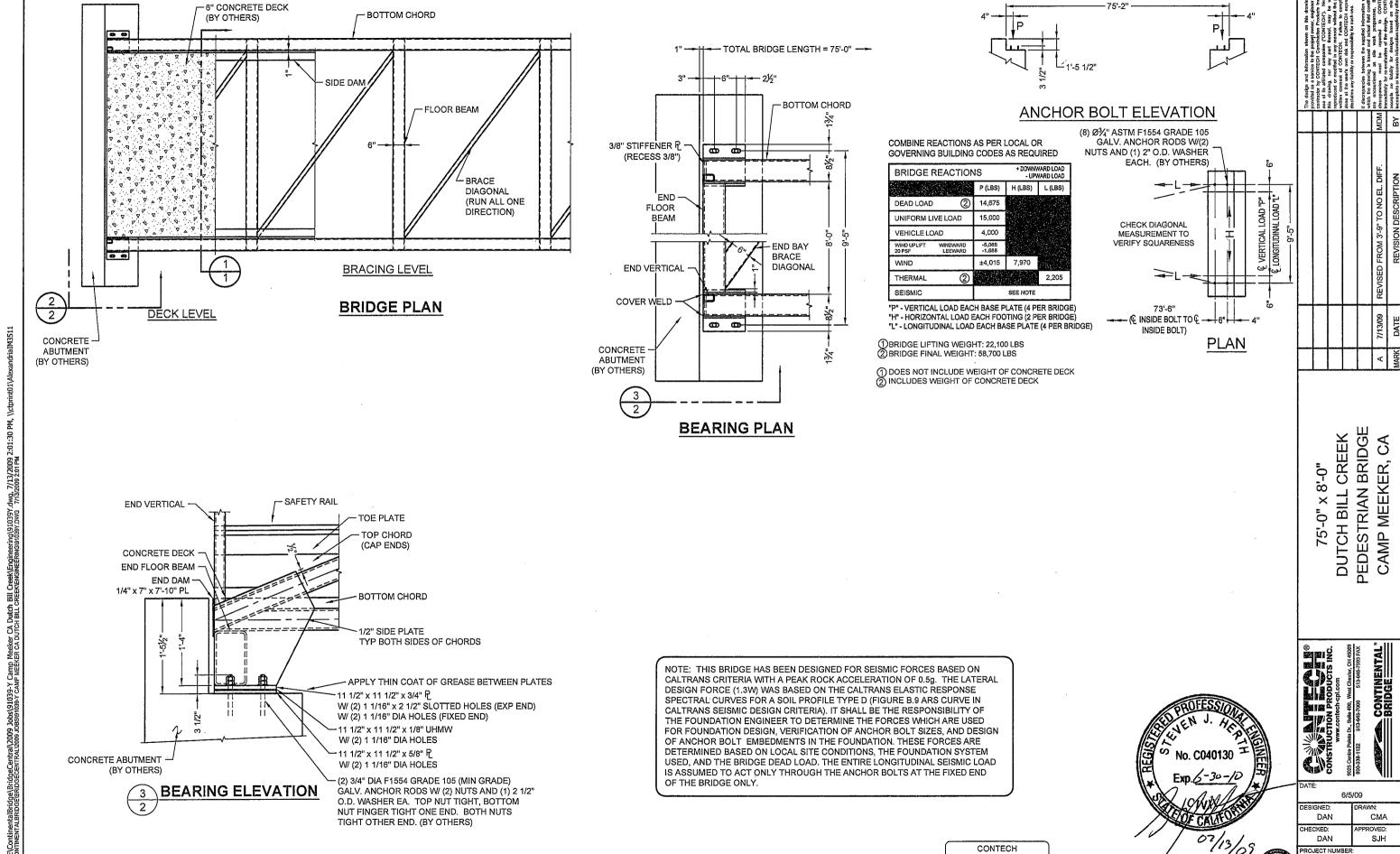
MISCELLANEOUS NON-STRUCTURAL MEMBERS WILL BE STITCH WELDED TO

7. BRIDGE DESIGN WAS ONLY BASED ON COMBINATIONS OF THE FOLLOWING LOADS WHICH WILL PRODUCE MAXIMUM CRITICAL MEMBER STRESSES.

> 25 PSF WIND LOAD ON THE FULL HEIGHT OF THE BRIDGE, AS IF ENCLOSED. (MEETS OR EXCEEDS 2007 CBC)

> TRANSVERSE BRIDGE WIDTH (AASHTO 3.15.3).

8. CLEANING: ALL EXPOSED SURFACES OF STEEL SHALL BE CLEANED IN ACCORDANCE

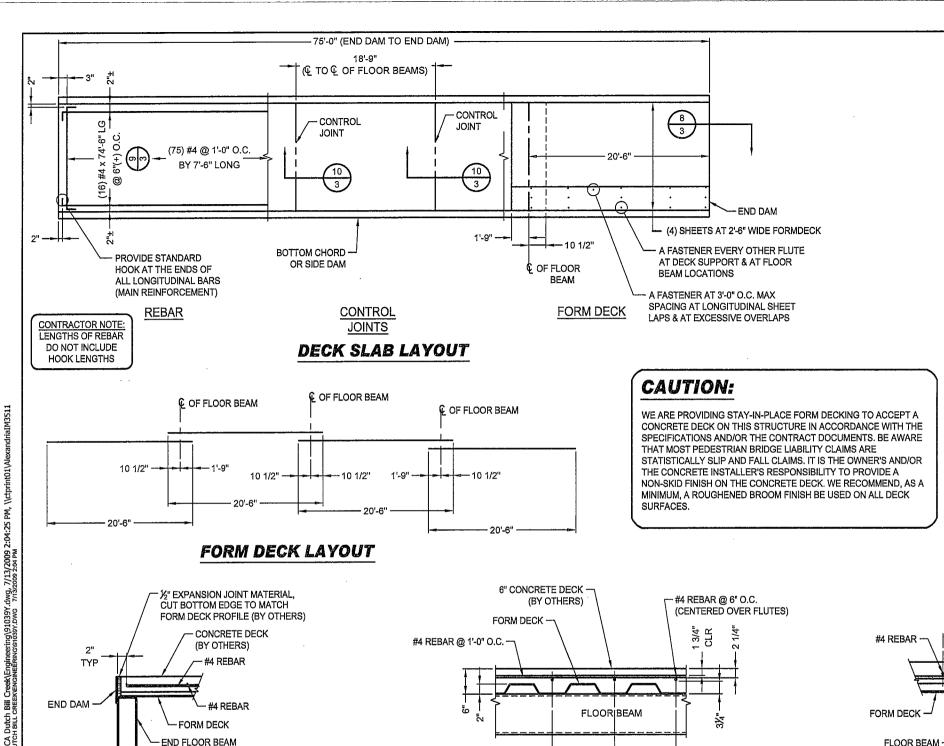


CONTRACT

DRAWING

91039Y

2 OF



SLAB REINFORCEMENT DETAIL

fc = 3,500 PSI (MINIMUM 28 - DAY STRENGTH)

GRADE 60 REINFORCING (fy = 60,000 PSI)

IF SPLICE IS REQUIRED IN LONGITUDINAL REBARS, LAP SPLICE LENGTH WILL BE AS

SHOWN, STAGGER SPLICED REBAR EVERY

OTHER LONGITUDINAL BAR AND LOCATE

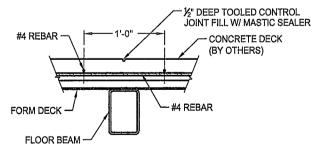
AT 1/3 DISTANCE BETWEEN FLOOR BEAMS.

1. GALVANIZED FORM DECK SHALL BE UNITED STEEL DECK U2X-20 GAGE. FORM DECK WILL BE SHOP ATTACHED TO FLOOR BEAMS WITH #12-24 X 1 1/4" SELF-DRILLING FASTENERS WITH 1" O.D. WASHERS OR 1" X 3/16" POWER ACTUATED FASTENERS.

DECK & CONCRETE NOTES

- 2. BAR REINFORCEMENT SHALL BE GRADE 60 MINIMUM AND CONFORM TO THE REQUIREMENTS OF ASTM A 615.
- 3. CONCRETE DECK AND REINFORCING TO BE AS SHOWN ON DRAWINGS AND TO BE FURNISHED AND INSTALLED BY OTHERS. THE COMPRESSIVE STRENGTH OF THE CONCRETE (fc) MUST BE A MINIMUM OF 3,500 PSI (28 DAY STRENGTH). BRIDGE IS DESIGNED FOR REGULAR WEIGHT (145 PCF) CONCRETE WITH A MAXIMUM AGGREGATE SIZE OF 3/4". INSTALL BRIDGE PRIOR TO POURING CONCRETE
- 4. CONCRETE COVER OF 2 1/4" ABOVE LONGITUDINAL REINFORCEMENT SHALL BE STRICTLY MAINTAINED.
- 5. CONCRETE DESIGN, QUALITY, MIXING, AND PLACING SHALL BE IN ACCORDANCE WITH BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE ACI 318-99 AND SPECIFICATIONS FOR STRUCTURAL CONCRETE ACI 301-99.
- 6. COMPRESSION TEST SPECIMENS SHALL BE TAKEN DURING CONSTRUCTION TO INSURE COMPLIANCE WITH CONCRETE STRENGTH REQUIREMENTS. EVALUATION AND ACCEPTANCE OF THE COMPRESSIVE STRENGTH OF CONCRETE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318-99, CHAPTER 5 "CONCRETE QUALITY, MIXING, AND PLACING." ALL CONCRETE WHICH FAILS TO MEET THE ACI REQUIREMENTS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE COST OF THE
- 7. THE CONTRACTOR MUST EXERCISE CARE TO CONTROL TRAFFIC AND STORAGE OF MATERIALS ON THE FORM DECK BEFORE POURING THE SLAB. SPANS MUST BE PLANKED OR OTHERWISE PROTECTED AGAINST DAMAGE FROM WORKERS WALKING ON THE MATERIAL, CONSTRUCTION TRAFFIC AND CONCRETE PLACING EQUIPMENT.

THESE SPECIFICATIONS SHALL BE THE MINIMUM REQUIREMENTS FOR THE BRIDGE DECK SLAB. MORE STRINGENT REQUIREMENTS SPECIFIED BY LOCAL GOVERNING BODIES MAY BE APPLICABLE.



SECTION - CONTROL JOINT

No. C040130

CONTECH

CONTRACT



910391

OF

PEDESTRIAN BRIDGE **DUTCH BILL CREEK**

75'-0" × 8'-0"

CAMP MEEKER,

1/2" DEEP TOOLED CONTROL JOINT FILL W/ MASTIC SEALER 1" x 2" KEY CONCRETE DECK #4 REBAR (BY OTHERS) LOCATE AT 1/3 DISTANCE #4 REBAR BETWEEN FLOOR BEAMS

(AS REQUIRED)

- SPLICE -

PSI (MINIMUM) AND fy = 60,000 PSI STANDARD SPLICE AND HOOK LENGTH DETAILS

SPLICE

20"

27°

33"

40"

SECTION - EXPANSION JOINT

LENGTH (INCHES)

HOOK X

6"

9"

11"

THE TABLES SHOWN ARE FOR fc = 3,500

√3

✓ LOCATE AT EACH END FLOOR BEAM

#3

#4

#5

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NORMAL WEIGHT CONCRETE (145 PCF)

CONSTRUCTION JOINT DETAIL