MANUFACTURED PEDESTRIAN BRIDGE

A. BRIDGE DESIGN SHALL BE STANDARD TRUSS CONSTRUCTED OF WEATHERED HSS STRUCTURAL STEEL WITH A CONCRETE BRIDGE DECK AS SHOWN BELOW.

B. ALL CONSTRUCTION AND DESIGN IS TO BE IN ACCORDANCE WITH THE PROVISIONS OF THE INTERNATIONAL BUILDING CODE (IBC) AS ADOPTED BY THE CITY OF BELLINGHAM.

C. PROVIDE A COMPLETE, INTEGRATED SET OF BRIDGE MANUFACTURER'S STANDARD COMPONENTS THAT FORM A BRIDGE. INCLUDE PRIMARY AND SECONDARY FRAMING AND ACCESSORIES.

D. INFORMATION ON THIS DRAWING ESTABLISHES REQUIREMENTS FOR SYSTEM'S AESTHETIC EFFECTS, AS INDICATED BY SIZES, RELATIONSHIPS AND PROFILES OF COMPONENTS.

1. DO NOT MODIFY INTENDED AESTHETIC EFFECTS, AS JUDGED SOLELY BY PARK PROJECT MANAGER, EXCEPT WITH PRIOR APPROVAL BY PARK PROJECT MANAGER. IF MODIFICATIONS ARE PROPOSED, SUBMIT COMPREHENSIVE EXPLANATORY DATA FOR REVIEW.

E. MANUFACTURER QUALIFICATIONS: A FIRM WITH AT LEAST FIVE YEARS EXPERIENCE IN MANUFACTURING PEDESTRIAN BRIDGE SYSTEMS SIMILAR TO THOSE INDICATED FOR THE PROJECT. THE FIRM SHALL BE AISC CERTIFIED FOR THIS TYPE OF CONSTRUCTION.

1. ENGINEERING RESPONSIBILITY: PROVIDE COMPREHENSIVE ENGINEERING ANALYSIS AND DESIGN BY A QUALIFIED STRUCTURAL ENGINEER REGISTERED WITH WASHINGTON STATE (HEREAFTER REFERRED TO AS "STRUCTURAL ENGINEER").

F. PROVIDE FRAMING AND DECKING SYSTEMS CAPABLE OF WITHSTANDING THE EFFECTS OF GRAVITY AND ENVIRONMENTAL LOADS AS SPECIFIED BY STRUCTURAL ENGINEER. DESIGN FOR THERMAL MOVEMENTS WITHOUT OVER STRESSING OR FAILURE OF COMPONENTS OR CONNECTIONS.

G. BRIDGE SYSTEM DESIGN: AS SPECIFIED BY STRUCTURAL ENGINEER

1. PRIMARY FRAME TYPE: PARALLEL CHORD TRUSS WITH VERTICAL ENDS BUILT UP OF HSS STEEL SECTIONS AS INDICATED ON DRAWINGS IN PRATT, FINK, OR WARREN WEB CONFIGURATIONS. OVERHEAD (PORTAL) BRACING IS PROHIBITED.

2. DESIGN THE BRIDGE TO HAVE DEPTHS, SPANS, CLEARANCES AND GENERAL CONFIGURATIONS AS SHOWN. NOMINAL CHANGES TO SUIT THE MANUFACTURER'S SYSTEMS WILL BE ACCEPTED PROVIDED THAT THE INSIDE CLEARANCE, MINIMUM SPAN AND REQUIRED TOP OF RAIL HEIGHT WILL NOT CHANGE. THE BRIDGE SHALL BE DESIGNED TO ACCOMMODATE FLOOD STAGE REQUIRED BY THE REGULATORY AGENCIES. NO PORTION OF THE BRIDGE SHALL BE ALLOWED BELOW BOTTOM OF STEEL ELEVATION AS MANDATED BY THE REGULATORY AGENCIES.

H. DECK SYSTEM DESIGN: THE DECK SYSTEM WILL BE CAST-IN-PLACE OR PRECAST CONCRETE. FINISH SHALL BE MEDIUM-COARSE BROOM FINISH. IF CAST-IN-PLACE IS USED, LEAVE-IN-PLACE FORM SYSTEMS WILL NOT BE PERMITTED.

1. PLACEMENT OF WET CONCRETE ON THE DECK AFTER THE BRIDGE IS PLACED IN ITS FINAL LOCATION WILL NOT BE PERMITTED.

I. PROVIDE FRAMING AND DECKING SYSTEMS CAPABLE OF WITHSTANDING THE EFFECTS OF GRAVITY AND ENVIRONMENTAL LOADS AS INDICATED BY THE STRUCTURAL ENGINEER INCLUDING DEAD, LIVE, SNOW, WIND, CONSTRUCTION, AND SEISMIC EFFECTS COMBINED AS REQUIRED BY THE APPLICABLE CODE.

J. MINIMUM LIVE LOADS SHALL BE IN ACCORDANCE WITH THE IBC AS ADOPTED BY THE CITY OF BELLINGHAM.

K. DESIGN FOR MINIMUM VEHICLE LOAD OF 10,000 POUNDS.

L. PRECAST CONCRETE BRIDGE DECK, TYP

1. PRECAST CONCRETE BRIDGE DECK, TYP SEE DWG 5120.02 FOR SECTION VIEW.

M. ALL STEEL SHALL BE ASTM A588 OR ASTM A847 WEATHERING STEEL EXCEPT CONCRETE REINFORCEMENT AND PILING.

N. CAMBER SHALL BE AS SPECIFIED BY THE STRUCTURAL ENGINEER.

O. THE BRIDGE SHALL BE DESIGNED FOR VIBRATION.

P. WELDING: QUALIFY PERSONNEL ACCORDING TO AWS D1.1, "STRUCTURAL WELDING CODE – STEEL."

Q. COMPLY WITH APPLICABLE PROVISIONS OF THE FOLLOWING SPECIFICATIONS AND DOCUMENTS:

1. AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS – ALLOWABLE STRESS DESIGN AND PLASTIC"

2. ASTM A 6 "SPECIFICATION FOR GENERAL REQUIREMENTS FOR ROLLED STEEL PLATES, SHAPES, SHEETING PILING, AND BARS FOR STRUCTURAL USE."

3. ERECTION TOLERANCES: AISC S303, "STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES"

R. ALL EXPOSED SURFACES OF WEATHERING STEEL SHALL BE CLEANED IN ACCORDANCE WITH SSPC SP-6, COMMERCIAL BLAST CLEANING.

S. DESIGN ABUTMENTS AND FOOTINGS. COORDINATE SIZE AND LOCATION OF CONCRETE FOUNDATIONS AND CASTING OF ANCHOR–BOLT INSERTS INTO FOUNDATION WALLS AND FOOTINGS.

T. DESIGN COMPONENTS AND FABRICATE FRAMING TO PRODUCE CLEAN, SMOOTH CUTS AND BENDS. PUNCH ALL HOLES OF PROPER SIZE, SHAPE AND LOCATION.

U. DESIGN AND FABRICATE ALL WEATHERING STEEL PARTS SO AS TO AVOID LOCATIONS WHICH WILL IMPEDE OR PREVENT DEVELOPMENT OF THE SURFACE OXIDE COATING.

V. SHOP FABRICATE ALL COMPONENTS