

1.2 TERMS AND ABBREVIATIONS

1.2.1 GENERAL

This Bridge Design Memo (BDM) defines terms and standard abbreviations used in the BDMs. Unless indicated otherwise, interpret the meaning of a term or abbreviation used in the BDMs as defined in this memo.

1.2.2 TERMS

AASHTO xx.x-x—Caltrans currently adopted *AASHTO LRFD Bridge Design Specifications* Equation xx.x-x

Article—Article in the Caltrans currently adopted *AASHTO LRFD Bridge Design Specifications* and *California Amendments*.

CA xx.x-x—Caltrans currently adopted *California Amendments* Equation xx.x-x

May—Indicates a permissible criterion.

Must—Synonymous with *Shall*, which indicates a requirement for compliance unless a design exception is approved.

Shall—Indicates a requirement for compliance unless a design exception is approved.

Should—Indicates a strong preference for a given criterion.

1.2.3 ABBREVIATIONS

The abbreviations and acronyms herein need not be spelled out or redefined in other BDMs.

1.2.3.1 National Organizations

AASHTO—American Association of State Highway and Transportation Officials

ACI—American Concrete Institute

AISC—American Institute of Steel Construction

AISI—American Iron and Steel Institute

AREMA—American Railway Engineering and Maintenance-of-Way Association

ASBI—American Segmental Bridge Institute

ASCE—American Society of Civil Engineers

ASTM—American Society for Testing and Materials



AWS—American Welding Society
FEMA—Federal Emergency Management Agency
FHWA—Federal Highway Administration
NCHRP—National Cooperative Highway Research Program
NHI—National Highway Institute
NOAA—National Oceanic and Atmospheric Administration
NSBA—National Steel Bridge Alliance
NTSB—National Transportation Safety Board
PCI—Precast/Prestressed Concrete Institute
PTI—Post-tensioning Institute
TRB—Transportation Research Board
USDOT—United States Department of Transportation

1.2.3.2 Common Terminologies Used in Caltrans

AADT—Annualized Average Daily Traffic
ABC—Accelerated Bridge Construction
ADT—Average Daily Traffic
ADTT—Average Daily Truck Traffic
ASD—Allowable Stress Design
CIDH—Cast-in-Drilled-Hole
CIP—Cast-in-Place
CISS—Cast-in-Steel-Shell
CMP—Corrugated Metal Pipe
CPM—Capacity Protected Members
CRC—Corrosion Resistant Concrete
CSL—Cross-Hole Sonic Logging
CVN—Charpy V-notch
ECR—Epoxy-Coated Reinforcement
EDA—Elastic Dynamic Analysis
EPS—Earthquake Protection System
ERE—Earthquake-Resisting Element
ERS—Earth Retaining System; Earthquake Resisting System
ESA—Equivalent Static Analysis



FCM—Fracture Critical Member
FEA—Finite Element Analysis
FEE—Functional Evaluation Earthquake
FE—Finite Element
FEM—Finite Element Model
FPSB—Friction Pendulum Sliding Bearing
GD—Geotechnical Designer
GGL—Gamma-Gamma Logging
GP—General Plan
HDPE—High Density Polyethylene
IQA—Independent Quality Assurance
JSA—Joint Seal Assembly
LFD—Load Factor Design
LRB—Lead-core Rubber Bearing
LRFD—Load and Resistance Factor Design
MSE—Mechanically Stabilized Embankment
MT—Magnetic Particle Testing
NBI—National Bridge Inventory
NDT—Nondestructive Testing
NHS—National Highway System
NSTM—Nonredundant Steel Tension Member
NTHA—Nonlinear Time History Analysis
P&Q—Plans and Quantities
PC RCB—Precast Reinforced Concrete Box
PC/PS—Precast/Prestressed Concrete
PCC—Portland Cement Concrete
PDCA—Probabilistic Damage Control Approach
PE—Project Engineer
PS&E—Plans, Specifications and Estimates
PSDC—Caltrans Project-Specific Design Criteria
PS—Prestressed
PT—Post-Tensioned; Post-Tensioning
PVC—Polyvinyl Chloride



QA—Quality Assurance

QC—Quality Control

RCB—Reinforced Concrete Box

RCP—Reinforced Concrete Pipe

RC—Reinforced Concrete

RSC—Rapid Strength Concrete

RSP—Rock Slope Protection

SCM—Seismic Critical Member, Supplementary Cementitious Material

SD—Structural Designer

SEE—Safety Evaluation Earthquake

SHS—State Highway System

SIPMF—Stay-In-Place Metal Forms

UHPC—Ultra-High Performance Concrete

UT—Ultrasonic Testing

WIM—Weigh-in-Motion

1.2.3.3 Caltrans Organizations

BD—Bridge Design

Caltrans—California Department of Transportation

DES—Division of Engineering Services

GS—Geotechnical Services

METS—Materials Engineering and Testing Services

OEEAR—Office of Earthquake Engineering Analysis & Research

PPMOE—Program/Project Management and Office Engineer

SC—Structure Construction

SES—Structures and Engineering Services

SMI—Structure Maintenance and Investigation

SPB—Structure Policy Board

1.2.3.4 Commonly Referenced Manuals and Publications

AASHTO GSBPB—AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges

AASHTO GSSID—AASHTO Guide Specifications for Seismic Isolation Design



AASHTO MBE—AASHTO The Manual for Bridge Evaluation

AASHTO-CA BDS-8—8th Edition of the AASHTO LRFD Bridge Design Specifications and accompanying California Amendments

BCM—Caltrans Bridge Construction Memos

BDD—Caltrans Bridge Design Details

BDM—Caltrans Bridge Design Memos

BDP—Caltrans Bridge Design Practice

BDPPM—Caltrans Bridge Design Process and Procedure Manual

BSD—Caltrans Bridge Standard Details Sheets

CFR—Code of Federal Regulations

FWM—Caltrans Falsework Manual

GM—Caltrans Geotechnical Manual

LAPM—Caltrans Local Assistance Procedures Manual

NSSP—Caltrans Nonstandard Special Provisions

PSP—Caltrans Project Special Provisions

SDC—Caltrans Seismic Design Criteria

SDSSB—Caltrans Seismic Design Specifications for Steel Bridges

SP—Caltrans Standard Plans

SS—Caltrans Standard Specifications

SSP—Caltrans Standard Special Provisions

STP—Caltrans Structure Technical Policy