Discipline: Bridge							
Section / Subsection(s):	apter 10 - Structural Design						
Reason for modification:	neral Update						
Expected consequences: N	lone						
Modification Text:	General Update						
Completed Coordination:							
☐ Technical Services Bra	nch Chiefs	Construction Branch Chiefs					
Highway Design / Pro	ject Development Branch Chiefs	Project Management Branch Chiefs					
Design Discipline Cha	mpion	Construction Discipline Champion					
⊠ Bridge Discipline Char	mpion	Hydraulics Discipline Champion					
Project Management	Discipline Champion	Geotechnical Discipline Champion					
☐ Hydrualics Discipline	Champion	☐ Environmental Discipline Champion					
Safety Discipline Char	npion	Materials Discipline Champion					
Pavements Discipline	Champion	 Planning Discipline Champion 					
Certification: I certify the fo	llowing:						
 Above coordination v satisfactory to all app 	•	ncerns have been addressed and resolved in a manner					
	•	ne Champion. All research and development documentation the certifying FLH Discipline Champion.					
FLH Discipline Champion HRATCH H PAKHCHANIAN		Digitally signed by HRATCH H PAKHCHANIAN Date: 2024.12.03 12:34:39 -05'00'					
Approval: The above descr	ibed modification(s) is approved for ir	nmediate implementation:					
Chief of Engineering (CFLHD)	CURTIS R SCOTT	Digitally signed by CURTIS R SCOTT Date: 2025.01.08 12:41:37 -07'00'					
Chief of Engineering (EFLHD)	KURT A DOWDEN	Digitally signed by KURT A DOWDEN Date: 2024.12.10 15:08:22 -05'00'					
Chief of Engineering (WFLHD)	BRENT L COE	Digitally signed by BRENT L COE Date: 2024.12.03 12:37:39 -08'00'					
Director, Office of Federal Land	ds Programs SCOTT T JOHNSON	Digitally signed by SCOTT T JOHNSON Date: 2025.01.08 15:49:53 -05'00'					

Discipline: Project Manageme	ent					
Section / Subsection(s): N	New Chapter 2A - Project Management (Will become Chapter 3 once reorganization is complete.)					
Reason for modification:	New Chapter needed					
	enumbering current Chapter 3 to Chap hapter 9. Correcting links and reference	ter 4. Adding information from current Chapter 4 to es as needed.				
Modification Text: N	ew Chapter					
Completed Coordination:						
☐ Technical Services Bra	nch Chiefs	Construction Branch Chiefs				
Highway Design / Proj	ject Development Branch Chiefs					
□ Design Discipline Chai	mpion	Construction Discipline Champion				
Bridge Discipline Char	npion	Hydraulics Discipline Champion				
	Discipline Champion	Geotechnical Discipline Champion				
☐ Hydrualics Discipline (Champion	☐ Environmental Discipline Champion				
Safety Discipline Chan	npion	Materials Discipline Champion				
Pavements Discipline	Champion	☐ Planning Discipline Champion				
Certification: I certify the following	llowing:					
 Above coordination v satisfactory to all appl 	•	ncerns have been addressed and resolved in a manner				
	•	ne Champion. All research and development documentation the certifying FLH Discipline Champion.				
FLH Discipline Champion	May alle	Digitally signed by NATHAN MATTHEW ALLEN Date: 2024.02.28 14:13:43 -07'00'				
Approval: The above descri	bed modification(s) is approved for ir	nmediate implementation:				
Chief of Engineering (CFLHD)	CURTIS R SCOTT	Digitally signed by CURTIS R SCOTT Date: 2024.03.25 08:37:29 -06'00'				
Chief of Engineering (EFLHD)	LAURIN R LINEMAN	Digitally signed by LAURIN R LINEMAN Date: 2024.03.25 10:33:15 -04'00'				
Chief of Engineering (WFLHD)	BRENT L COE	Digitally signed by BRENT L COE Date: 2024.03.25 07:40:11 -07'00'				
Director, Office of Federal Lanc	ds Programs SCOTT T JOHNSON	Digitally signed by SCOTT T JOHNSON Date: 2024.03.25 10:47:10 -04'00'				

Discipline:	Project Management and Highway Design	1		
Section / Subs Updates, and v	ection(s): Chapter 1, Subsection 1. arious references and corrections throughout		leral Lands Management of Risk, 1.1.5 Revisions a	and
Reason for mo modification an	edification: Chapter 1 modifications d approval process, and abbreviations and o		s updated risk guidance for R09 and R10, SHR ns related to 3D modeling.	P2,
Expected cons	sequences: The updated Chapter will p	provide	current and consistent guidance to all FLH staff.	
Modification Te	xt:			
Completed Cod	ordination:			
	Project Development Branch Chiefs Design Discipline Champion Bridge Discipline Champion Project Management Discipline Champion Hydraulics Discipline Champion Safety Discipline Champion Pavements Discipline Champion		Construction Branch Chiefs Project Management Branch Chiefs Construction Discipline Champion Hydraulics Discipline Champion Geotechnical Discipline Champion Environmental Discipline Champion Materials Discipline Champion Planning Discipline Champion	
Above satisfactAll resoccertifying	ctory to all applicable parties. Comments ar	nd resolu eded to	ncerns have been addressed and resolved in a man utions are on file with the FLH Discipline Champion. In support the above modification(s) is on file with $\frac{11/16/2017}{Date}$	

Approval: The above described modification(s) is approved for immediate implementation:

Digitally signed by LAURIN R LINEMAN LAURIN R LINEMAN DN: c=US, o=U.S. Government, ou=FHWA FHWASterlingVA, ou=DOT FHWASterlingVA, cn=LAURIN R LINEMAN

Date: 2018.02.08 14:52:32 -05'00'

Director, EFL Office of Project Delivery

CURTIS R SCOTT

Digitally signed by CURTIS R SCOTT
DNb: c=US, o=U.S. Government, ou=DOT FHWALakewoodCO,
ou=FHWA FHWALakewoodCO, cn=CURTIS R SCOTT
Date: 2018.02.06 10:31:22-07'00'

Director, CFL Office of Project Delivery

EDWARD S HAMMONTREE Digitally signed by EDWARD S HAMMONTREE DN: c=US, o=U.S. Government, ou=FHWA FHWALakewoodCO, ou=DOT FHWALakewoodCO, cn=EDWARD S HAMMONTREE Date: 2018.02.06 09:12:23 -08'00'

Director, WFL Office of Project Delivery

Setto OT. Thusan

Digitally signed by SCOTT T JOHNSON
DN: c=US, o=US. Government, ou=FHWAHQ, ou=DOT
Headquarters, cn=SCOTT T JOHNSON
Date: 2018.02.08 15:09:04 -05:00'

Director, Office of Program Development

Click to enter date.

Date

02/06/2018

Click to enter date.

Date

Click to enter date.

Date

Click to enter date.

Date

Dis	cipline: Design (Survey)	
Sec	ction / Subsection(s): Chapter	5, Section 5.4.6
Rea	ason for modification:	
	ded new Section 5.4.6 to describe the use of I dates made to rest of chapter.	Unmanned Aircraft Systems (UAS) on FLH projects. Minor link
Exp	pected consequences:	
	e new section provides policy guidance for the hology.	e use of UAS preparing FLH to take advantage of new
Мо	dification Text:	
	See attached	
Cor	mpleted Coordination:	
√	Technical Services Branch Chiefs	Construction Branch Chiefs
✓	Highway Design/Project Dev. Branch Chiefs	Project Management Branch Chiefs
√	Design Discipline Champion	Construction Discipline Champion
	Bridge Discipline Champion	Hydraulics Discipline Champion
	Project Management Discipline Champion	Geotechnical Discipline Champion
Ш	Hydraulics Discipline Champion	
	Safety Discipline Champion	
Ш	Pavements Discipline Champion	Planning Discipline Champion
•	a manner satisfactory to all applicable parable Discipline Champion. All research and development documentation the certifying FLH Discipline Champion. STEPHEN C CHAPMAN	comments / concerns have been addressed and resolved in arties. Comments and resolutions are on file with the FLH on needed to support the above modification(s) is on file with the STEPHEN C 20 12:39:06 -07'00' 6/20/2018
	FLH Discipline Champion	Date

Approval: The above described modification(s) is approved for immediate implementation:

LAURIN R LINEMAN Digitally signed by LAURIN R LINEMAN DN: c=US, o=U.S. Government, ou=FHWA FHWA SterlingVA, ou=DOT FHWASterlingVA, cn=LAURIN R LINEMAN Date: 2018.07.19 13:22:44 -04'00'	7/19/2018	
Chief of Engineering, Eastern Federal Lands	Date	
BRIAN M. KOZY Digitally signed by BRIAN M. KOZY Date: 2018.07.19 11:11:50 -06'00'	7/19/2018	
Chief of Engineering, Central Federal Lands	Date	
EDWARD S HAMMONTREE Date: 2018.07.19 10:05:07 -07'00'	7/19/2018	
Chief of Engineering, Western Federal Lands	Date	
SCOTT T JOHNSON Date: 2018.07.19 14:09:37 -04'00'		
Director, Office of Program Development	Date	

Design									
ction / Subsection(s): Chapter 12 – Right-of-Way and Utilities									
erences for reg	ulations, manuals, website			_					
•		rovide	e current and consistent guidance to all Survey, Mappin]					
Text:				-					
ee PDDM Chapte	12, attached.								
oordination:									
Technical Serv Project Develor Design Disciplin Bridge Disciplin Project Manage	ement Branch Chiefs ne Champion e Champion ement Discipline Champion		Construction Branch Chiefs Project Management Branch Chiefs Construction Discipline Champion Hydraulics Discipline Champion Geotechnical Discipline Champion Environmental Discipline Champion Materials Discipline Champion						
	bsection(s): modification: ferences for regular other miscellar msequences: , Utilities and High Text: fee PDDM Chapter oordination: Technical Service Project Developed Design Discipling Bridge Discipling Project Manager	bsection(s): Chapter 12 – Right-of-Way modification: Chapter 12 has been upon ferences for regulations, manuals, websites and other miscellaneous revisions. The updated Chapter will post of the product of the produc	bsection(s): Chapter 12 – Right-of-Way and Unodification: Chapter 12 has been updated ferences for regulations, manuals, websites, etc. dother miscellaneous revisions. Insequences: The updated Chapter will provide the dother will provide the project Dother will provide the dother will provide the project Dother will provide the dother will provide the project Dother will provide the dother will provide the project Dother will	bsection(s): Chapter 12 – Right-of-Way and Utilities modification: Chapter 12 has been updated to amend new program requirements; update ferences for regulations, manuals, websites, etc.; revise process flow charts; correct and clarify d other miscellaneous revisions. msequences: The updated Chapter will provide current and consistent guidance to all Survey, Mapping, Utilities and Highway Design staff. Text: the PDDM Chapter 12, attached. coordination: Technical Services Branch Chiefs Project Development Branch Chiefs Design Discipline Champion Bridge Discipline Champion Project Management Discipline Champion Geotechnical Discipline Champion					

Certification: I certify the following:

- Above coordination was completed and all comments / concerns have been addressed and resolved in a manner satisfactory to all applicable parties. Comments and resolutions are on file with the FLH Discipline Champion.
- All research and development documentation needed to support the above modification(s) is on file with the certifying FLH Discipline Champion.



11/17/2017

Date

Approval: The above described modification(s) is approved for immediate implementation:

LAURIN R LINEMAN FHWASterlingVA, ou=DOT FHWASterlingVA, cn=LAURIN R

Digitally signed by LAURIN R LINEMAN DN: c=US, o=U.S. Government, ou=FHWA LINEMAN

Date: 2018.02.23 10:38:12 -05'00'

Chief of Engineering, Eastern Federal Lands

CURTIS R SCOTT

Digitally signed by CURTIS R SCOTT DN: c=US, o=U.S. Government, ou=DOT FHWALakewoodCO, ou=FHWA FHWALakewoodCO, cn=CURTIS R SCOTT Date: 2018.02.26 07:57:08 -07'00'

Chief of Engineering, Central Federal Lands

EDWARD S HAMMONTREE Digitally signed by EDWARD S HAMMONTREE DN: c=US, o=U.S. Government, ou=FHWA FHWALakewoodCO, ou=DOT FHWALakewoodCO, cn=EDWARD S HAMMONTREE Date: 2018.02.23 07:57:00 -08'00'

Chief of Engineering, Western Federal Lands

Sette OT. Thusan

Digitally signed by SCOTT T JOHNSON DN: c=US, o=U.S. Government, ou=FHWAHQ, ou=DOT Headquarters, cn=SCOTT T JOHNSON Date: 2018.02.26 08:48:22 -05'00'

Director, Office of Program Development

Click to enter date.

Date



Date: December 29, 2014

Subject: **INFORMATION:** Transmittal 16, Revision to the FLH

Project Development and Design Manual (PDDM)

From: Joyce A. Curtis

Associate Administrator for

In Reply Refer To:
HFPD-1

Associate Administrator for Office of Federal Lands Highway

To: Federal Lands Highway Division Directors TRANSMITTAL No. 16

This memorandum transmits the revised PDDM.

DELETE		ADD		DESCRIPTION
Page(s)	Dated	Page(s)	Dated	DESCRIPTION
Chapter 10	3/2008	Chapter 10	12/2014	Minor updates throughout, added Section 10.3.8 on Non-Destructive Evaluation.

The updated PDDM with these chapter changes can be accessed at the FLH website located at http://flh.fhwa.dot.gov/resources/manuals/pddm/.

If there are any questions, please contact Mr. Richard Seabrook, Design Champion, Office of Program Development at (202) 366-9490.

cc: FLH Directors, FLH Discipline Champions



Subject: **ACTION:** Transmittal 15, Revision to the

Federal Lands Highway (FLH)

Project Development and Design Manual

(PDDM)

From: Terry K. Haussler

Director, Office of Program Development

In Reply Refer To:

Date: January 23, 2014

HFPD-3

To: Federal Lands Highway Division Engineers

This memorandum transmits revisions to the PDDM.

DELETE		ADD		DESCRIPTION	
Page(s)	Dated	Page(s)	Dated	DESCRIPTION	
Chapter 1	3/2008	Chapter 1	7/2012	Revised Sections 1.1.4, 1.1.5, 1.2.5, and 1.4.1.	
Chapters 3 & 6 Chapter 5 Chapter 12	3/2008	Chapters 3 & 6 Chapter 5 Chapter 12	7/2012 9/2012 12/2012	Changed or removed links to obsolete resources	
Chapter 4	3/2008	Chapter 4	7/2012	Modified text of Sections 4.3 and 4.6 to 4.9	
Chapter 7	3/2008	Chapter 7	12/2012	Modified text of Sections 7.1 and 7.3 to 7.5	
Chapter 9	3/2008	Chapter 9 8/201		Updated entire chapter	

These changes have been added to the web site copy of the PDDM located at http://flh.fhwa.dot.gov/resources/manuals/pddm/.

If you have any question, please contact Mr. John Seabrook P.E., Design and Project Delivery Engineer at (202) 366-9490.

cc: FLH Directors, FLH Discipline Champions



Subject: **INFORMATION:** Transmittal 14, Revision to the

Federal Lands Highway (FLH) Project Development and

Design Manual (PDDM)

From: John R. Baxter, P.E.

Associate Administrator for Office of Federal Lands Highway

To: Federal Lands Highway Division Engineers

In Reply Refer To: HFPD-3

Date: February 8, 2008

TRANSMITTAL No. 14

This memorandum transmits the revised PDDM.

DELETI	Ξ	ADD		DESCRIPTION	
Page(s)	Dated	Page(s)	Dated	DESCRIPTION	
Chapters 1 to 11	5/2005	Chapters 1 to 13	3/2008	Complete content revision to all chapters, new chapters on Pavements (Chapter 11) and Right-of-way (Chapter 12).	

The WFLHD is adding this change to their web site copy of the PDDM located at http://www.wfl.fhwa.dot.gov/design/manual/.

The PDDM is approved for the FLH use through the Federal Lands Highway Office of Program Development. The PDDM has gone through a rigorous review and update by the Functional Discipline Leaders (FDL) and associated cross divisional teams.



The PDDM has been reviewed by the Divisions, certified by the FDLs, assured as valid by the FDL's respective supervising directors and recommended for approval by the Board of Directors.

The PDDM documents the FLH best practices and standards for project development and design to be followed both internally and by our A/E consultants.

The FLH has developed the 2008 PDDM to provide current policies and guidance for the interdisciplinary project development and design related activities performed by FLH Divisions and their consultants. It also serves as a guide for administrators, public officials and others, both within and outside FLH, who are responsible for advancing projects through the project development process.

Begin to explore and follow the manual at http://www.wfl.fhwa.dot.gov/design/manual/. Western Federal Lands is charged with maintaining the official link for the PDDM, however a link is provided through any of the Division's internet or intranet sites.

Directors and Branch Chiefs should discuss the PDDM with their staff and reinforce the manual as FLH's policy and guidance for project development and design.

If you have any question, please contact Mr. John Seabrook P.E., PMP, Design and Construction Operation Engineer at (202) 366-9490.

cc: FLH Directors, FLH Functional Discipline Leaders



Federal Highway Administration

Subject: **INFORMATION**: Transmittal 13, Revision to the FLH

Project Development and Design Manual (PDDM)

JUN 1 3 2005

Reply to

Attn. of: HFPD-1

From: J.B. Wlaschin

Director, Office of Program Development

To: Federal Lands Highway Division Engineers

TRANSMITTAL No. 13

This memorandum transmits the revised PDDM and updates to the FLH Standard Drawings.

DELETE ADD		D	DESCRIPTION	
Page(s)	Dated	Page(s)	Dated	DESCRIPTION
Chapters 1 to 11	-	Chapters 1 to 11	6/10/2005	Minor corrections to all chapters, updated in dual units, re-formatted style for electronic publishing, hyperlinked, and 508 compliant.
Chapter 9, Exhibit 9.38	12/4/1998	Chapter 9, Exhibit 9.38	6/10/2005	New and revised standard drawings. (Revised List of Approved Standard Drawings and Description of Revisions to Standard Drawings.)

The WFLHD is adding this change to their web site copy of the PDDM located at http://www.wfl.fhwa.dot.gov/design/manual/. Standard drawings may be viewed at http://www.wfl.fhwa.dot.gov/design/standard/.

Attachments

cc: FLH Directors, FLH Functional Discipline Leaders



Federal Highway Administration

Subject: **INFORMATION**: Transmittal 12, Revision to the FLH

Project Development and Design Manual (PDDM)

NOV 28 2000 Date:

Reply to

HFPD-1 Attn. of:

J.B. Wlaschin
Director, Office of Program Development

To: Federal Lands Highway Division Engineers

TRANSMITTAL No. 12

This memorandum transmits the revised Chapter 7 and a minor correction to Chapter 9.

DELETE		ADD		DESCRIPTION
Page(s)	Dated	Page(s)	Dated	DESCRIPTION
Chapter 7	6/13/1996	Chapter 7	11/10/2000	Revises all of Chapter 7 including the index and exhibits
Chapter 9, page 129	6/13/1996	Chapter 9, page 129	11/10/2000	Corrects dimensions of letter sized sheet

The WFLHD is adding this change to their web site copy of the PDDM. The address of this site is http://www.wfl.fhwa.dot.gov/projects/pddm/pddm.pdf.

Attachments

cc: Jose Ramirez



Federal Highway Administration

Subject: <u>INFORMATION</u>: Transmittal 11, Revision to the FLH Project Development and Design Manual (PDDM)

DEC 4 1998

From: Chief, Engineering and Operations Division

To: Federal Lands Highway Division Engineers

TRANSMITTAL No. 11

This memorandum transmits the revised Chapter 8 and approves one new and several revised standard drawings for inclusion in the PDDM. The electronic copies of the revised standard drawings have been forward directly from the WFLHD.

DELETE ADD		DESCRIPTION		
Page(s)	Dated	Page(s)	Dated	
Chapter 8	6/3/1996	Chapter 8	12/4/1998	Revises all of Chapter 8 including the index and exhibits.
Chapter 9, Exhibit 9.38	1/15/1998	Chapter 9, Exhibit 9.38	12/4/1998	New and revised standard drawings. (Revised List of Approved Standard Drawings and Description of Revisions to Standard Drawings.)

A summary of the resolution of the comments, which includes each Division's incoming comments from the September 21 draft distribution of Chapter 8, is also attached. The WFLHD is adding this change to their website copy of the PDDM as well as the CD-ROM Library version they are currently producing.

J.B. Wlaschin



Federal Highway Administration

Subject: **INFORMATION**: Transmittal 10, Revision to the FLH

Project Development and Design Manual

From: Chief, Engineering and Operations Division Federal Lands Highway Office

To: Federal Lands Highway Division Engineers

TRANSMITTAL No. 10

This transmittal documents the approval of standard drawings for inclusion in the Project Development and Design Manual (PDDM). The electronic files and hard copies of the revised drawings are being forwarded directly from the WFLHD.

DELETE		ADD		DESCRIPTION
Page(s)	Dated	Page(s)	Dated	BESCRII ITON
Index for Exhibit 9.38 Pages 1-4	9/8/1997	Index for Exhibit 9.38 Pages 1-4	1/9/1998	Revise Exhibit 9.38 Index to reflect new and updated standard drawings

The attached Index for Exhibit 9.38 includes the original approval date and latest revision date for each approved standard drawing. A summary is also attached that briefly describes the reasons for the current revisions.

J.B. Wlaschin



Federal Highway Administration

Subject: **INFORMATION**: Transmittal 9, Revision to the FLH

Project Development and Design Manual

From: Chief, Engineering and Operations Division Federal Lands Highway Office

To: Federal Lands Highway Division Engineers

TRANSMITTAL No. 9

This transmittal documents the approval of 29 revised standard drawings for inclusion in the Project Development and Design Manual (PDDM). The electronic files (on CD ROM) and hard copies of the revised drawings are being forwarded directly from WFLHD. They are also available on the WFLHD's Web file server (Internet address ftp:/198.145.188.2).

Most of the drawing changes were required due to the decision by the Concrete Reinforcing Steel Institute not to stock hard converted reinforcing steel sizes. The drawings reflect the comments received from the drafts that were forwarded for comments on January 9.

DELETE		ADD		DESCRIPTION
Page(s)	Dated	Page(s)	Dated	BESCHI HOLV
Index for Exhibit 9.38 Pages 1-4	6/3/1996	Index for Exhibit 9.38 Pages 1-4	9/8/1997	Revise Exhibit 9.38 Index to reflect revisions to standard drawings (sent separately)

Besides the revised Index for Exhibit 9.38, a table briefly describing the changes is also attached.

J.B. Wlaschin



Federal Highway Administration

Subject: **INFORMATION**: Transmittal 8, Revision to the FLH

Project Development and Design Manual (PDDM)

From: Chief, Engineering and Operations Division

Federal Lands Highway Office

To: Federal Lands Highway Division Engineers

TRANSMITTAL No. 8

Several revisions to the PDDM are underway, including the rewrite of several chapters. The current revision is the first since the electronic version was transmitted in June 1996. The WFLHD will include the revisions in the electronic version on their Web Page. The WFLHD is also continuing efforts to update the standard drawings for the reinforcing steel changes and will make the standard drawings and other exhibits in the PDDM available on CD ROM in the near future.

DELETE		ADD		DESCRIPTION	
Page(s)	Dated	Page(s)	Dated	DESCRI HOW	
Exhibit 8.3 Pages 1-3	6/3/1996	Exhibit 8.3 Pages 1-3	5/28/1997	Revise Exhibit 8.3 to reflect correct NCHRP Report number.	

This change is needed to prevent users outside FLH from mistakenly believing that the aesthetic barrier systems noted have been tested under NCHRP 350. Currently, FLH has no plans to retest those systems under NCHRP 350. As new systems are developed, they will be tested under the criteria approved by FHWA at the time of testing.

J.B. Wlaschin



Federal Highway Administration

Subject: **INFORMATION**: Electronic Metric Version

Project Development and Design Manual

From: Chief, Engineering and Operations Division

Federal Lands Highway Office

To: Federal Lands Highway Division Engineers

TRANSMITTAL No. 7

The metric version of the Federal Lands Highway Project Development and Design Manual (PDDM) is attached on floppy disks. Comments received from users of the August 1995 "Working Draft" have been incorporated. This metric version is intended to be kept only electronically. Information on extracting the compressed files is included on the attached Supplemental Information sheet.

DELETE		AI)D	DESCRIPTION
Page(s)	Dated	Page(s)	Dated	DESCRIPTION
All (Chapter 1 through Chapter 11)	10/21/1988 to 6/29/1994	Chapter 1 through Chapter 11	6/3/1996	Metric Revision of Entire PDDM

Several chapters have comprehensive revisions underway or planned, and some exhibits are not included on the disks. The supplemental Information sheet also has the status of the revisions and exhibits.

Hugh B. Jones

