

**TECHNICAL APPENDIX CHECKLIST FOR
FLOOD HAZARD AREA DELINEATION STUDIES**

Instructions:

1. Engineer shall submit a completed copy of this checklist with the technical appendix submittal
2. For deviations from checklist, include a separate sheet with numbered comments and write the corresponding number in the "Note #" column

Notes:

1. Bold text represents the technical appendix folders
2. Italicized text represents individual files
3. Indentations represent folders or files within folders
4. Folder and file naming shall match those shown in this checklist
5. Text included in parenthesis is for information only and should not be included in folder or file names

FOLDER AND FILE NAMES		NOTE #
FHAD	FHAD and/or DFIRM (if required)	<input type="checkbox"/>
	<i>FHAD [Drainageway Name] (entire final report PDF)</i>	<input type="checkbox"/>
	AutoCAD Files	<input type="checkbox"/>
	FHAD	<input type="checkbox"/>
	<i>FHAD Flood Maps</i>	<input type="checkbox"/>
	Flooding Elements	<input type="checkbox"/>
	<i>FHAD 100-Year Floodplain (existing infrastructure and future land use conditions)</i>	<input type="checkbox"/>
	<i>FHAD 500-Year Floodplain (existing infrastructure and future land use conditions)</i>	<input type="checkbox"/>
	<i>FHAD Floodway (0.5')</i>	<input type="checkbox"/>
	<i>Cross Sections</i>	<input type="checkbox"/>
	<i>Cross Section Text</i>	<input type="checkbox"/>
	<i>Cross Section Symbol</i>	<input type="checkbox"/>
	<i>FHAD Base Flood Elevations (BFEs - specify datum)</i>	<input type="checkbox"/>
	<i>FHAD BFE Text</i>	<input type="checkbox"/>
	<i>Study Limits</i>	<input type="checkbox"/>
	Structure Elements	<input type="checkbox"/>
	<i>Stream Centerline</i>	<input type="checkbox"/>
	<i>Centerline Stationing</i>	<input type="checkbox"/>
	<i>Culverts</i>	<input type="checkbox"/>
	<i>Bridges</i>	<input type="checkbox"/>
	<i>Foot Bridges</i>	<input type="checkbox"/>
	<i>Other Structures</i>	<input type="checkbox"/>
	<i>Structure Text</i>	<input type="checkbox"/>
	Base Map Elements	<input type="checkbox"/>
	<i>Roads</i>	<input type="checkbox"/>
	<i>Road Text</i>	<input type="checkbox"/>
	<i>Railroads</i>	<input type="checkbox"/>
	<i>Railroad Text</i>	<input type="checkbox"/>
	<i>Buildings</i>	<input type="checkbox"/>
	<i>Major Contours (specify datum)</i>	<input type="checkbox"/>
	<i>Minor Contours (specify datum)</i>	<input type="checkbox"/>
	<i>Water Bodies (Lakes, ponds, etc.)</i>	<input type="checkbox"/>
FHAD Flood Profiles	<input type="checkbox"/>	
<i>FHAD 100-Year Flood Profile (existing infrastructure and future land use conditions)</i>	<input type="checkbox"/>	
<i>Other Flood Profiles [typically 10-year, 50-year, and 500-year] (existing infrastructure and future land use conditions)</i>	<input type="checkbox"/>	
<i>Thalweg (stream bed) profile</i>	<input type="checkbox"/>	
<i>Cross Section Text</i>	<input type="checkbox"/>	
<i>Cross Section Symbol</i>	<input type="checkbox"/>	
<i>Structures</i>	<input type="checkbox"/>	
<i>Axis labels (provide datum reference for elevations)</i>	<input type="checkbox"/>	
<i>Grid lines</i>	<input type="checkbox"/>	
<i>Text (Stationing, elevations, hydraulic structures, pertinent peak discharges)</i>	<input type="checkbox"/>	
<i>Match lines</i>	<input type="checkbox"/>	

FHAD	Any other figures included in the FHAD report, clearly labeled with the figure title	<input type="checkbox"/>	
	XREFs (optional, if not inserted into the final plans due to large file sizes)	<input type="checkbox"/>	
	Existing Base (i.e. planimetrics)	<input type="checkbox"/>	
	Existing Mapping (i.e. parcels, street centerlines, etc.)	<input type="checkbox"/>	
	Existing Topography (specify datum)	<input type="checkbox"/>	
	Existing Utilities	<input type="checkbox"/>	
	Any other XREFs used, clearly labeled with "Existing...." or "FHAD..."	<input type="checkbox"/>	
	If all existing XREFs are included in one drawing, label the drawing "Existing")	<input type="checkbox"/>	
	FHAD Supplemental Information	<input type="checkbox"/>	
	Models	<input type="checkbox"/>	
	Include all additional models used in the FHAD (other than models included in the "Hydrology" and "Hydraulics" folders). Clearly label models with "FHAD...."	<input type="checkbox"/>	
	Spreadsheets	<input type="checkbox"/>	
	Agreement Table	<input type="checkbox"/>	
	Floodplain Data Table	<input type="checkbox"/>	
	Include any other spreadsheets used for the FHAD. Spreadsheets may include tables used for final report, UDFCD worksheets, etc. Remove extraneous information from spreadsheets and clearly label spreadsheets with "FHAD..."	<input type="checkbox"/>	
	Other	<input type="checkbox"/>	
	Include any other information used in the FHAD. Additional folders may be added, or files with clearly marked names may be added to an "Other" folder	<input type="checkbox"/>	
	GIS Files	<input type="checkbox"/>	
	Flooding Elements	<input type="checkbox"/>	
	FHAD 100-Year Floodplain (existing infrastructure and future land use conditions)	<input type="checkbox"/>	
	FHAD 500-Year Floodplain (existing infrastructure and future land use conditions)	<input type="checkbox"/>	
	FHAD Floodway (0.5')	<input type="checkbox"/>	
	Cross Sections	<input type="checkbox"/>	
	Cross Section Text	<input type="checkbox"/>	
	Cross Section Symbol	<input type="checkbox"/>	
	FHAD Base Flood Elevations (BFEs - specify datum)	<input type="checkbox"/>	
	FHAD BFE Text	<input type="checkbox"/>	
	Study Limits	<input type="checkbox"/>	
	Structure Elements	<input type="checkbox"/>	
	Stream Centerline	<input type="checkbox"/>	
	Centerline Stationing	<input type="checkbox"/>	
	Culverts	<input type="checkbox"/>	
	Bridges	<input type="checkbox"/>	
	Foot Bridges	<input type="checkbox"/>	
	Other Structures	<input type="checkbox"/>	
	Structure Text	<input type="checkbox"/>	
	Base Map Elements	<input type="checkbox"/>	
	Roads	<input type="checkbox"/>	
	Road Text	<input type="checkbox"/>	
	Railroads	<input type="checkbox"/>	
Railroad Text	<input type="checkbox"/>		
Buildings	<input type="checkbox"/>		
Major Contours (specify datum)	<input type="checkbox"/>		
Minor Contours (specify datum)	<input type="checkbox"/>		
Water Bodies (Lakes, ponds, etc.)	<input type="checkbox"/>		
Hydraulics	<input type="checkbox"/>		
HEC-RAS v. XXX (i.e. HEC-RAS v. 4.1.0)	<input type="checkbox"/>		
HEC-RAS Cross Sections	<input type="checkbox"/>		
Include final FHAD HEC-RAS model with FHAD files only, labeled as such. Include (for HEC-RAS) the Project (.prj) file, with each Plan clearly identified (multiple-profile and floodway at a minimum); and all input data files used to analyze pertinent Plans [plan files (.p0#) with corresponding geometry (.g0#) and flow (.f0#) files (complete with file dates)]. Include a description for the FHAD model Plans that states the conditions (existing infrastructure, future land use hydrology, multiple-profile, floodway, etc).	<input type="checkbox"/>		

FHAD	Other	<input type="checkbox"/>	
	<i>Include any other information used in the FHAD hydraulic analysis (special culvert hydraulics, all rating curve calculations, etc.). Additional folders may be added, or files with clearly marked names may be added to an "Other" folder</i>	<input type="checkbox"/>	
	Hydrology (If no MDP/OSP with FHAD: Include same items listed for Baseline hydrology from Major Drainageway Planning checklist (but only 10-year, 50-year, 100-year, and 500-year information required); otherwise, include only if 500-year models are different than baseline hydrology models)	<input type="checkbox"/>	
	CUHP XXXX - v. XXX (i.e. CUHP 2005 - v. 1.3.3)	<input type="checkbox"/>	
	Input Files <i>[Drainageway Name] FHAD 500-Year CUHP Input</i>	<input type="checkbox"/>	
FOLDER AND FILE NAMES			NOTE #
FHAD	Output Files <i>[Drainageway Name] FHAD 500-Year CUHP Output</i>	<input type="checkbox"/>	
	EPA SWMM XXX - v. XXX (i.e. EPA SWMM 5.0 - v. 5.0.022)	<input type="checkbox"/>	
	Input Files <i>[Drainageway Name] FHAD 500-Year EPA SWMM Input</i>	<input type="checkbox"/>	
	Output Files <i>[Drainageway Name] FHAD 500-Year EPA SWMM Output</i>	<input type="checkbox"/>	
	Spreadsheets <i>Include any spreadsheets used for FHAD 500-year hydrology. Spreadsheets may include tables used for</i>	<input type="checkbox"/>	
	Other <i>Include sketches/description of outlet works/supporting calculations for any Regional Detention Facility included in the FHAD (or DFIRM) hydrology. Require rating curves for stage versus volume and stage versus discharge.</i>	<input type="checkbox"/>	
	<i>Include any other information used in the FHAD 500-year hydrology. Additional folders may be added, or files with clearly marked names may be added to an "Other" folder</i>	<input type="checkbox"/>	
	Report Documents <i>[Drainageway Name] FHAD (in Word format)</i>	<input type="checkbox"/>	
	<i>Include any other final report documents not included in another section</i>	<input type="checkbox"/>	