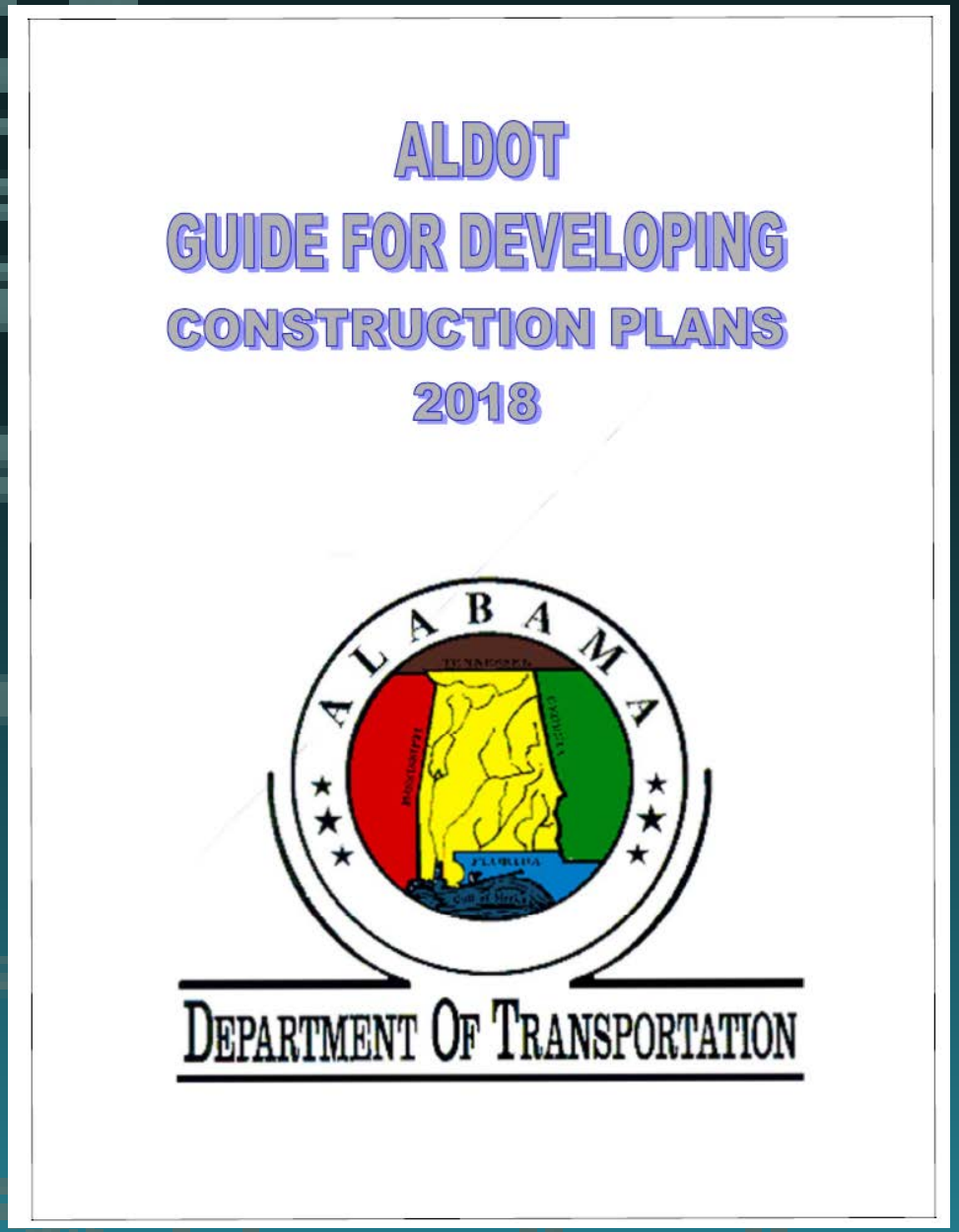
GDCP FOR PROJECT DEVELOPMENT AND PLAN DELIVERY

2019 Pre-Construction Conference
April 10, 2019

GUIDE FOR DEVELOPING CONSTRUCTION PLANS (GDCP)

- 100 Steps
- Attachments
  - Traffic Data Request
  - Project Action Responsibility Matrix
  - Hydraulic Report Guidance
  - Bridge Hydraulic Submittal
  - Design Exceptions
  - 30% Review Checklist
  - Plan-In-Hand Checklist
  - Value Engineering Program
  - Railroad Notes
  - GDCP #71 Template
  - GDCP #71.01 Concurrence
  - GDCP #71.01 Non-concurrence
  - GDCP #72.0 ROW Authorization Approval
  - PS&E Checklist



GDCP REVISED TO 100 STEPS

Alabama Department of Transportation
Guide For Developing Construction Plans

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Milestones –noted by italics and bold print

Alabama Department of Transportation
Guide for Developing Construction Plans

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Milestones –noted by italics and bold print

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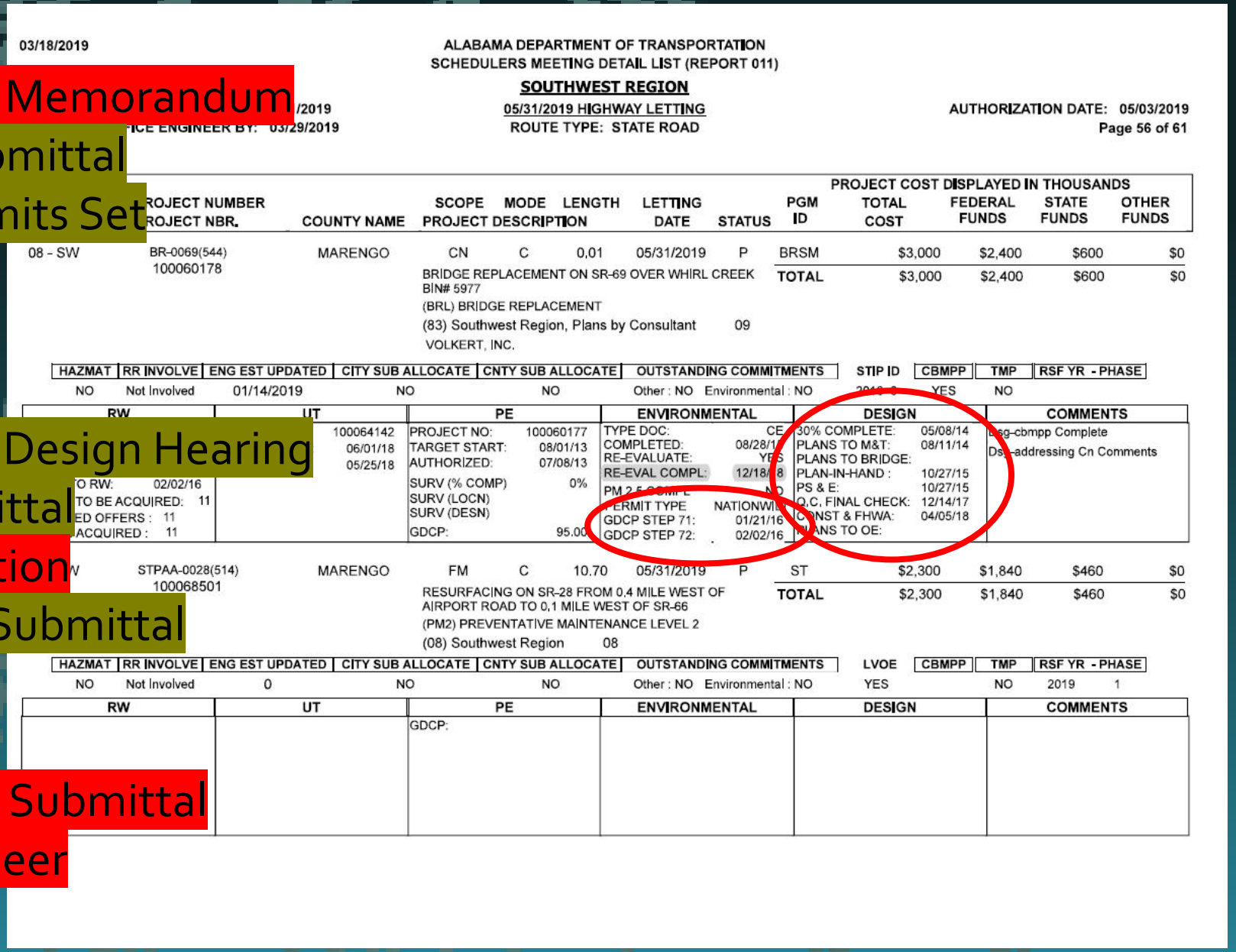

03/18/2019

ALABAMA DEPARTMENT OF TRANSPORTATION
SCHEDULERS MEETING DETAIL LIST (REPORT 011)
SOUTHWEST REGION
05/31/2019 HIGHWAY LETTING
ROUTE TYPE: STATE ROAD

AUTHORIZATION DATE: 05/03/2019
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/2019
ICE ENGINEER BY: 03/29/2019

PROJECT COST DISPLAYED IN THOUSANDS

	PROJECT NUMBER / PROJECT NBR.	COUNTY NAME	SCOPE	MODE	LENGTH	LETTING DATE	STATUS	PGM ID	TOTAL COST	FEDERAL FUNDS	STATE FUNDS	OTHER FUNDS
08 - SW	BR-0069(544) 100060178	MARENGO	CN	C	0.01	05/31/2019	P	BRSM	$3,000	$2,400	$600	$0
								TOTAL	$3,000	$2,400	$600	$0

BRIDGE REPLACEMENT ON SR-69 OVER WHIRL CREEK
BIN# 5977
(BRL) BRIDGE REPLACEMENT
(83) Southwest Region, Plans by Consultant 09
VOLKERT, INC.

HAZMAT	RR INVOLVE	ENG EST UPDATED	CITY SUB ALLOCATE	CNTY SUB ALLOCATE	OUTSTANDING COMMITMENTS	STIP ID	CBMPP	TMP	RSF YR - PHASE
NO	Not Involved	01/14/2019	NO	NO	Other : NO Environmental : NO		YES	NO	

RW	UT	PE	ENVIRONMENTAL	DESIGN	COMMENTS
O RW: 02/02/16 TO BE ACQUIRED: 11 ED OFFERS : 11 ACQUIRED : 11	100064142 06/01/18 05/25/18	PROJECT NO: 100060177 TARGET START: 08/01/13 AUTHORIZED: 07/08/13 SURV (% COMP) 0% SURV (LOCN) SURV (DESN) GDCP: 95.00	TYPE DOC: CE COMPLETED: 08/28/1 RE-EVALUATE: YES RE-EVAL COMPL: 12/18/18 PM 2.5 COMPL: NO PERMIT TYPE NATIONWI GDCP STEP 71: 01/21/16 GDCP STEP 72: 02/02/16	30% COMPLETE: 05/08/14 PLANS TO M&T: 08/11/14 PLANS TO BRIDGE: PLAN-IN-HAND : 10/27/15 PS & E: 10/27/15 Q.C. FINAL CHECK: 12/14/17 CONST & FHWA: 04/05/18 PLANS TO OE:	Dsg-cbmpp Complete Dsg-addressing Cn Comments

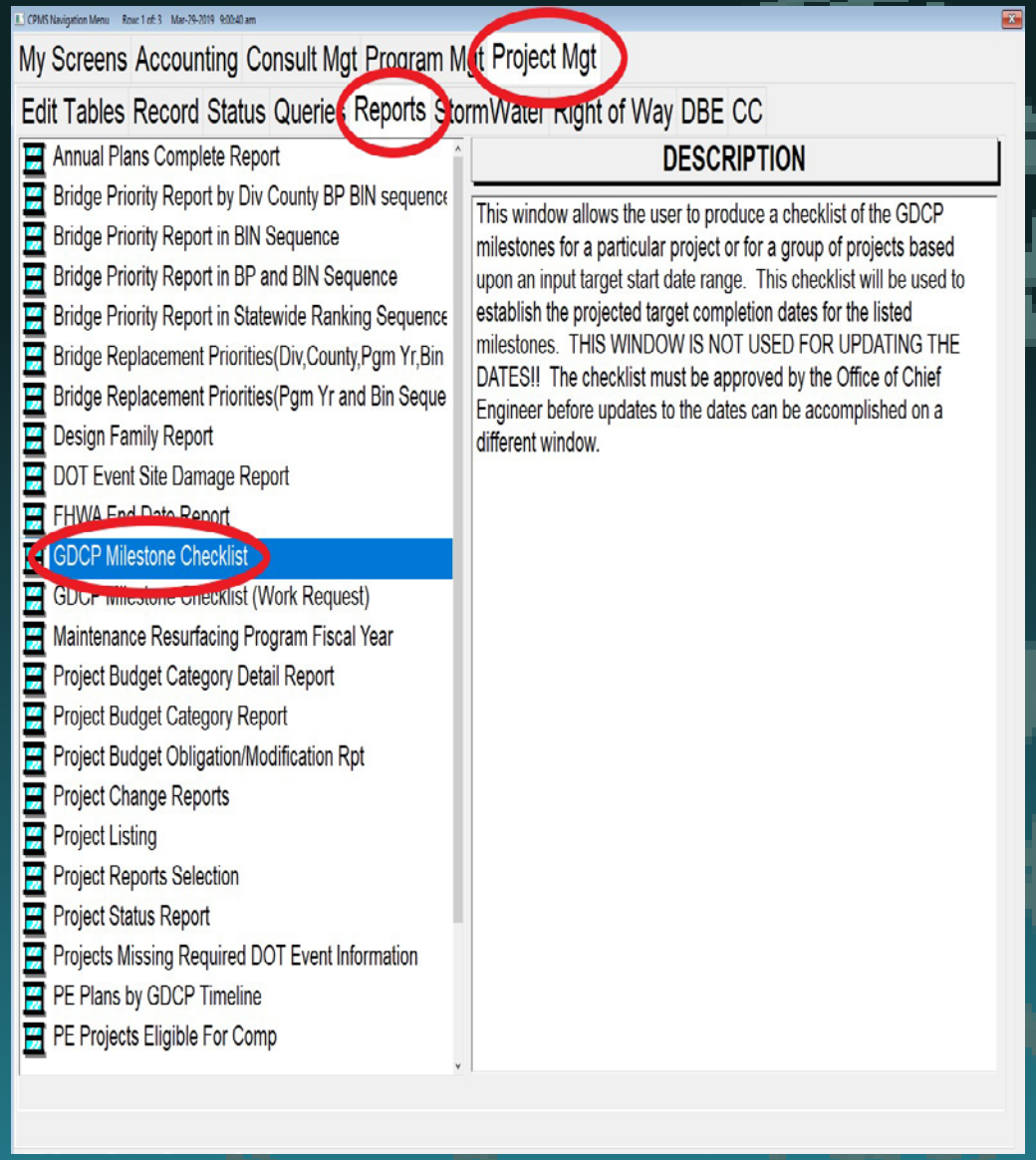
W	STPAA-0028(514) 100068501	MARENGO	FM	C	10.70	05/31/2019	P	ST	$2,300	$1,840	$460	$0
								TOTAL	$2,300	$1,840	$460	$0

RESURFACING ON SR-28 FROM 0.4 MILE WEST OF AIRPORT ROAD TO 0.1 MILE WEST OF SR-66
(PM2) PREVENTATIVE MAINTENANCE LEVEL 2
(08) Southwest Region 08

HAZMAT	RR INVOLVE	ENG EST UPDATED	CITY SUB ALLOCATE	CNTY SUB ALLOCATE	OUTSTANDING COMMITMENTS	LVOE	CBMPP	TMP	RSF YR - PHASE
NO	Not Involved	0	NO	NO	Other : NO Environmental : NO	YES		NO	2019 1

RW	UT	PE	ENVIRONMENTAL	DESIGN	COMMENTS
		GDCP:			

GDCP MILESTONE CHECKLIST



Final Design GDCP Checklist for Project 100064176 BR 0010 (545)
As of 3/29/2019

****** AUTHORIZED PROJECT ******

SR-10 Begins at 228.6 and ends at 228.686 For a Length of 0.09 In Henry County
Work Code BRG REPLACEMENT Project is targeted to start on 7/1/2018 Project was Authorized on 6/4/2018 The Plans are to be Completed By "Not Yet Determined"

Project Description is : Replace Bridge , Bin 002543, Sr-10 Over Mcrae Mill Creek (suff=55.2, Status=fo)

Step No.	Step Activity	Original Target	Target Completion
0	MILESTONE: Final Design PE authorization and beginning of the final survey.		Completed
1.00	MILESTONE: Location Section/Region shall transmit survey information and location memorandum to project lead.		Completed
19.00	MILESTONE: BRIDGE HYDRAULIC SUBMITTAL AND REQUEST FOR BIN	4/5/2019	Completed
22.00	MILESTONE: PRELIMINARY RIGHT-OF-WAY LIMITS SET		
30.00	MILESTONE: 30% INSPECTION (Geometric design review) The design section supervisor will be responsible for scheduling and conducting the inspection (if the inspection is required),	4/19/2019	4/19/2019
36.00	MILESTONE: MATERIALS AND TESTS SUBMITTAL FOR SOIL SURVEY, SOILS PROFILE, SLOPE STUDY INFORMATION, AND/OR MATERIALS BUILDUP	5/3/2019	5/3/2019
44.00	MILESTONE: APPROVED GEOTECHNICAL AND MATERIALS INFORMATION RECEIVED FROM THE MATERIALS AND TESTS BUREAU		
46.06	MILESTONE: PUBLIC INVOLVEMENT / DESIGN HEARING If required the designer shall bring (3) roll maps and (1) set of plans for possible use at the hearing . The design superviser and		
60.00	MILESTONE : BRIDGE DESIGN SUBMITTAL Transmit (6) copies of the preliminary sequence of the construction and traffic control plan. Indicate whether or not	5/3/2019	5/3/2019
65.00	MILESTONE: PLAN_IN_HAND INSPECTION Designer shall check topographicaland survey information during the field review for accuracy and update as necessary. Review	7/5/2019	7/5/2019
72.00	MILESTONE: FINAL SUBMISSION FOR RIGHT-OF-WAY AUTHORIZATION A submittal to the Right-of-Way Engineer for acquisition of	7/20/2019	7/20/2019
85.00	MILESTONE - PS&E INSPECTION NOTE: All major design and / or right-of-way changes to high	1/3/2020	1/3/2020
90.00	MILESTONE - FINAL BACK CHECK The designer shall transmit plan sets and other items as noted below. This plan submittal shall be made no later that 16 weeks	1/31/2020	1/31/2020
95.00	MILESTONE - CONSTRUCTION REVIEW SUBMITTAL Construction Review submittal must be at least 12 weeks prior to the letting date or sooner if special circumstances exist (refer to the GDCP	2/28/2020	2/28/2020
99.00	MILESTONE - FINAL PLANS TO OFFICE ENGINEER Transmit (1) full-size plan set with required signatures, (1) disposition of Construction Bureau Review comments, (1) CD	3/27/2020	3/27/2020
99.05	MILESTONE - PROJECT LETTING	5/29/2020	5/29/2020

DURATIONS FOR GENERIC PROJECT

0.0	PE Authorization
1.0	Survey (3-6 months)
30.0	30% Review (2 months)
36.0	M&T Submittal (1 month)
44.0	M&T Reports (6-9 months)
46.06	Public Involvement/Design Hearing (7 months)
60.0	Bridge Design Submittal
60.01	TS&L (6 weeks)
65.0	Plan-In-Hand Submittal (2 months after #44)
85.0	PS&E Inspection (4 months)
90.0	FBC Inspection (1 month)
95.0	Construction Submittal (1 month)
99.0	Office Engineer Submittal (1 month)
99.05	Project Letting (2 months)
Total	Authorization to Letting – 29 months

EXPEDITING ACTIONS

- Prioritization of efforts and management of resources and schedules
  - Identify urgent vs. important
  - Assess value (make sure the boss's pet project is handled)
  - Order tasks by estimated effort
- Process efficiency
  - Kick-off meeting
  - Instill teamwork
  - Break into definable stages
  - Continuous project development appraisal
- Parallel processing
  - Network diagrams
  - Critical Path Method
  - Gantt Chart
  - Work Breakdown Structure
- Risk/schedule trade-offs
  - Scope
  - Duration
  - Risk
  - Cost

And of Course There Is Always The Problem Of Failing To Manage The Process

DEVELOPING A WORK BREAKDOWN STRUCTURE

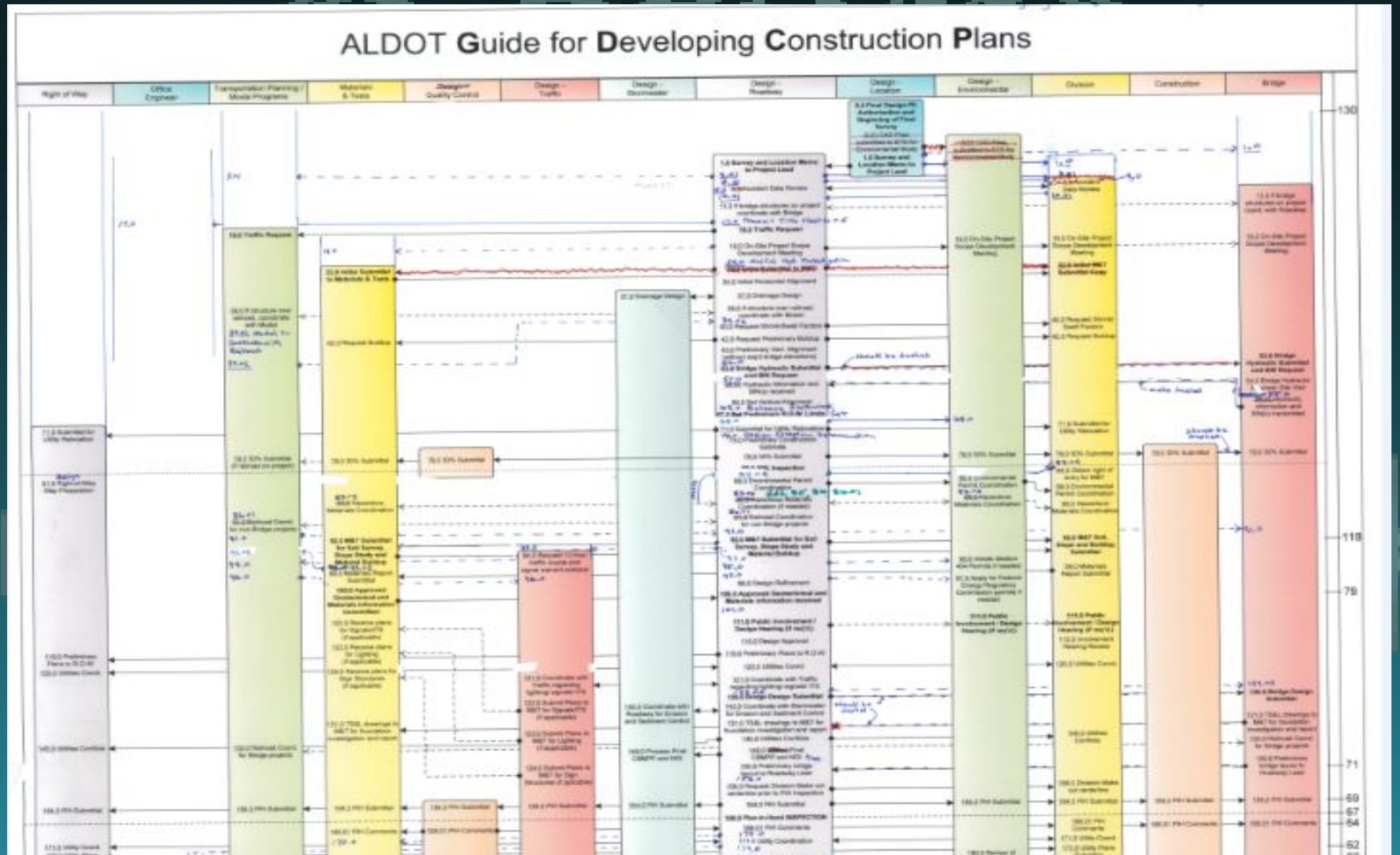
- Fundamental to project planning (easier to track activities than whole project)
- Divide project into subordinate tasks and subtasks
- Delays can be analyzed and corrective action taken (before it's too late!)
- Basis for:
  - Project Budget
  - Negotiation
  - Monitoring Project Design Progress
  - Paying Design Consultant

Considerations

- Always use scope elements, not accounting activities
- Include project management as a discrete element
- Base WBS on deliverables


YOU DIDN'T FINISH YOUR ASSIGNMENT BY THE DEADLINE.
Dilbert.com DilbertCartoonist@gmail.com
IT WON'T MATTER AS LONG AS ONE OTHER EMPLOYEE IS ALSO LATE, BECAUSE THE PROJECT CAN'T MOVE FORWARD UNTIL EVERYONE DOES THEIR TASKS.
6-21-13 ©2013 Scott Adams, Inc./Dist. by Universal Uclick
WAIT FOR IT... WAIT...
YOU KNOW HOW I WAS SUPPOSED TO FINISH THAT THING?

GDCP SWIM LANE FLOWCHART



DESIGN PROJECT MANAGEMENT

2.0	**Organization of Project Data**
2.01	Designer shall organize survey information in accordance with ALDOT CAD standards
2.02	Review Location Memorandum, ALDOT commitments, and environmental document
2.03	Design lead contact Region ROW to begin blanket ROE process and notify Railroad
3.01	Request initial estimated buildup from Region/Area Materials Engineer
3.02	For Welcome Center projects, request Utilities Engineer investigate utilities availability
4.01	Designer shall retrieve accident data, transmit to Region Traffic Engineer for comment
4.02	Retrieve FEMA Flood Insurance Rate Map (FIRM) for the project
5.0	**Project Coordination**
5.01	Determine if project is VE candidate (allow 8 weeks)
5.02	Determine if a Public Involvement meeting is required
5.03	Determine if a Design Hearing is required
5.04	Contact local floodplain administrator to determine watershed compatibility
5.05	Coordinate with Bureau and Region stormwater to determine water quality requirements
5.06	Coordinate with Bridge Bureau to determine required bridge structure work
6.0	**CPMS Coordination**
6.01	Design Section supervisor set up all relevant projects in CPMS
6.02	Design Section supervisor ensure adequate PE funding
7.0	Design Section supervisor obtain approval of off-site detour if required
8.0	Design Section supervisor and lead designer shall visit project site
9.0	Review CPMS for scheduled letting and ROW dates, and establish project schedule

DESIGN PROJECT MANAGEMENT (cont.)

10.0	**Initial Project Development**
10.02	Request a construction project number from Office Engineer Bureau
11.0	Request traffic data from Transportation Planning
12.0	Design Section supervisor shall coordinate on-site project scope meeting
12.01	Design Engineer superior shall approve project scope
12.02	Design Section supervisor should understand the project
12.03	Submit project scope to State Design Engineer, Region Engineer, and FHWA for approval
13.0	Design section supervisor and lead designer shall conduct initial hydraulic investigation
13.01	Designer create project hydraulics notebook
14.0	Develop design criteria
14.01	Design section supervisor submit design criteria to design engineer superior for approval
14.02	Design Engineer superior, and State Design Engineer or Region Engineer shall approve criteria
14.03	Appropriate parties shall approve design criteria
14.04	Design Engineer superior and Design Section supervisor resolve criteria comments
14.05	Submit final design criteria for final approval signatures
14.06	Get State Design Engineer and Chief Engineer approval for design criteria
15.0	**Project Development**
15.04	Coordinate with Stormwater Engineer to acquire latest data for water resources
15.05	Coordinate with Stormwater Engineer to determine stormwater effect on hydraulics design
16.0	**Initial Railroad Coordination**
16.01	Coordinate with Modal Programs to determine number of tracks to be spanned
16.03	Modal Programs shall notify project lead of railroad requirements

DESIGN PROJECT MANAGEMENT (cont.)

17.0	Materials and Geotechnical Requests
17.01	Request preliminary shrink/swell factors from Region Materials Engineer
17.02	Request preliminary materials buildup for existing pavement
18.0	**Continued Project Development**
18.05	If FHWA Order No. 5520.1, Preliminary Plan Review is applicable, notify Engineering superior
19.0	Request bridge hydraulic study
19.01	Coordinate with Bridge Bureau for preliminary bridge information
19.02	Bridge Hydraulic Engineer may request designer attend site visit
19.03	Obtain BINs
20.0	**Post Bridge Hydraulic Submittal Project Development**
23.0	Designer submit CAD files to Environmental Technical Section
24.0	Designer submit CAD files to Region Utilities Section
25.0	**Pre-30% Project Development**
26.0	Determine if design exception is required
27.0	Calculate preliminary construction estimate
28.0	Design Section supervisor and design engineer superior determine if 30% inspection is required
28.01	Design section supervisor shall review 30% plans prior to submittal
28.02	Design engineer superior shall approve 30% plans prior to submittal
29.0	Design Section supervisor shall schedule and conduct 30% review
30.0	Design Section supervisor shall write and transmit comments to design engineer superior

DESIGN PROJECT MANAGEMENT (cont.)

31.0	**Post 30% Project Coordination**
31.02	Design Section supervisor provide 30% comments to participants
31.03	Designer send plans to M&T Hazmat Coordinator
31.04	Designer send plans to Region for Hazmat investigation ROE
31.05	Region should obtain ROE for Hazmat investigation
33.0	Design Section supervisor shall determine if design exception should be requested
35.0	Make ETS submittal for document
36.0	Make M&T submittal for soil info, slope study, and materials buildup
37.0	Request a traffic signal review from Traffic Design Section
39.0	Post 30% Railroad Involvement
39.01	Project lead shall include applicable railroad notes on the Project Note sheet
39.02	Coordinate with Modal Programs for survey/drilling work ROE
39.03	Coordinate non-bridge projects affecting railroad ROW with Modal Programs
40.0	Submit plans to ETS for initiation of Section 404 permit
41.0	Coordinate with ETS if FERC permit is required
45.0	**Post Materials and Geotech Plan Development**
46.0	Public Involvement/Design Hearing Process
46.01	Coordinate PI/DH necessity with ETS
46.02	Designer shall complete preliminary Public Involvement/Design Hearing Map
46.03	Region and FHWA review and comment on map
46.04	Complete PI/DH Map
46.05	Region schedules and conducts PI/DH meeting

DESIGN PROJECT MANAGEMENT (cont.)

46.06	Design supervisor and designer answer design questions at the meeting
46.07	Project lead coordinates with ETS to address comments and design change considerations
46.09	Design Section supervisor shall address PI/DH comments and make approved design changes
47.0	Submit plans to Chief Engineer and FHWA for Design Approval
49.0	Transmit plans to Region for municipal agreements if required
50.0	Determine preliminary construction cost estimate in accordance with approved design
51.0	Transmit CAD files to ROW Bureau for preparation of preliminary ROW map
52.0	Design section supervisor contact Region Utilities Engineer on utility status
53.0	**Traffic Design Coordination**
53.01	Coordinate with Traffic Design Engineer if lighting, signals, or ITS items are involved
53.02	Designer submit plans to M&T for signal pole foundation design
53.03	Designer submit plans to M&T for lighting pole foundation design
54.0	Designer submit plans to M&T for overhead sign pole foundation design
56.0	Coordinate with Region to determine if ROW or easements required for drainage outfalls
57.0	Notify ETS if tail ditching or channel changes are required
58.0	Designer shall develop a preliminary sequence of construction and traffic control plan
59.0	Notify Bridge Bureau if non-standard drainage structures are involved
60.0	Request updated bridge structure details six weeks after bridge design submittal
60.01	Project lead request roadway and bridge culvert foundation investigation
61.0	**Pre Plan-In-Hand Plan Development**

DESIGN PROJECT MANAGEMENT (cont.)

62.0	**Pre Plan-in-Hand Project Coordination**
62.01	Submit Geometric Layout to Location Section for stakeout prior to PIH
62.02	Submit plans to Region and ROW Bureau Utilities Engineer for review
62.03	Utilities Engineer formally advise design section supervisor on utility status
62.03	Submit updated plans to Traffic Design Engineer
62.04	Coordinate with Stormwater Section to determine latest requirements
62.05	After coordinating with Region, submit plans and request centerline stakeout for PIH
63.0	Design Section supervisor shall review PIH plan assembly
63.01	Design Engineer superior shall approve PIH plan assembly prior to submittal
66.0	**Plan Development**
66.05	Project lead shall coordinate with M&T about special soil study requirements
67.0	**Post Plan-In-Hand Project Coordination**
67.01	If materials addendum is necessary, request from Region Materials Engineer
67.02	Transmit updated plan sheets to Traffic Design Engineer, request their revisions
67.03	Traffic Design Section submit required traffic elements to Region for PS&E stakeout
67.04	Submit plans for city/county lighting maintenance agreements
67.05	Submit revised plans for Bridge Bureau review
67.07	Submit plans to M&T Hazmat Coordinator for hazardous material investigation
67.08	Get updated traffic information from Modal Programs Bureau

DESIGN PROJECT MANAGEMENT (cont.)

68.0	Utility Process
68.01	Submit plans to Utility Engineer for utility company coordination
68.03	Utilities Engineer shall coordinate special requirements or ROW with project lead
68.04	Coordinate with utility requirements to sequence utility construction
69.0	Project lead to review environmental commitments to make sure they are addressed
69.01	If utility work is in project, request quantities from Utilities Engineer
70.0	ITS Designer to coordinate with Project Lead for scheduling ITS Stakeholders Meeting
71.0	Request ETS approval for Right-of-Way
71.01	ETS provide concurrence to design lead
72.0	Submit plans to ROW for property acquisition
73.0	Submit plans to ETS for FERC permit
74.0	Submit plans to ETS for TVA 26A committee review
75.0	Submit plans to Modal Programs for railroad agreement
75.02	Consult Modal Programs for necessary project notes to be included
75.03	Project lead submit plans to Modal Programs for railroad agreement
76.0	Designer request Bridge Bureau submittal
77.0	Continued Plan Development
78.0	Check with ROW Engineer for all known property owner commitments
78.01	Follow up with ROW Engineer for ROW and easement adjustments
79.0	Notify ETS if any environmental conflicts exist
79.01	Coordinate with ETS to determine any commitments or notes not in plans

DESIGN PROJECT MANAGEMENT (cont.)

80.0	Finalize design exception letter and request approval
81.0	Create detailed construction estimate using Project Estimating System (PES)
81.01	Update construction estimate in CPMS
82.0	Design Section supervisor notify design engineer superior if VE study is required
82.01	Design Section supervisor shall review the Value Engineering plan assembly
82.02	Design Engineer Superior shall approve VE plan assembly prior to submittal
82.03	Design Section supervisor request approval to contact VE Coordinator for VE Study
82.07	Designer shall make approved VE revisions
83.0	Incorporate all sheets into the plan assembly
83.01	Design Section supervisor shall review PS&E plan assembly
83.02	Design Engineer superior shall approve PS&E plan assembly prior to submittal
85.01	Designer to begin changes resulting from PS&E inspection
85.04	Coordinate with Region M&T Engineer for materials addendum
86.0	Post PS&E Inspection Coordination
86.01	Project lead submit plans to relevant parties for attention
86.02	After all PS&E comments have been disposed, project lead shall submit 90% ROW plans
86.03	Transmit plans to Utilities Engineer with detailed description of changes since 62.02
86.04	Utilities Engineer coordinate with project lead if additional information is needed
86.05	Project lead notify QC Bureau whenever a new unique number is required
86.06	Project lead request traffic design CAD files
86.07	Project lead request updated traffic information for title sheet
86.08	Project lead request final utility quantities and files

DESIGN PROJECT MANAGEMENT (cont.)

86.09	Receive updated traffic information for title sheet
86.10	Traffic design submit CAD files
86.11	Utility Engineer submit CAD files
86.12	Designer begin GFO 3-61 (Work Zone Safety and Mobility) if required
86.13	Notify region to obtain and submit City and/or County Resolutions
86.16	Designer shall submit partial plans to M&T Hazmat Coordinator, if required
86.17	Designer submit to Location Section for airport clearance review
86.19	Location Section notify project lead of airport clearance status
86.20	Coordinate with ETS to determine if additional info or permit is needed
86.21	Assure Materials Addendums are approved and distributed
87.0	**Post PS&E Project Tasks**
87.01	Update cost estimate for Final Back Check submittal
87.03	Incorporate all sheets into plan assembly (except final bridge plans)
88.0	Design Section supervisor shall review FBC plan assembly
89.0	Design Engineer superior shall approve FBC plan assembly prior to submittal
91.0	**Post FBC Coordination**
91.02	Designer request copy of Railroad Agreement
91.04	Submit partial plan to Location Section for review of control points and other survey
91.05	Designer submit plans to other parties that need to make revisions
91.07	Submit partial plan to ETS for Environmental Limits review

DESIGN PROJECT MANAGEMENT (cont.)

91.08	Project lead to request bridge plans ready for Construction Review
91.09	Designer enter NPDES data in CPMS
91.11	Coordinate required CBMPP changes with Stormwater section
93.0	**Post FBC Plan Tasks**
93.01	Designer shall start revisions resulting from FBC comments
93.02	Incorporate all sheets into the plan assembly
93.03	Update construction estimate using PES
93.04	Designer to check plans using checklist
93.05	Design Section supervisor shall review Construction Review plan assembly
93.06	Design Engineer superior shall approve Construction Review plan assembly prior to submittal
94.0	**Post FBC Approvals**
94.01	ETS coordinate with project lead to resolve any issues preventing approval
94.02	Receive complete bridge plans
94.03	Submit CBMPP to Region for signatures
94.04	Region return CBMPP with signatures
95.02	Designer submit plans to other parties that need to make revisions
95.04	Project lead request full size bridge, lighting, signal and utility sheets

DESIGN PROJECT MANAGEMENT (cont.)

96.0	**Post CN Bureau Submittal Coordination**
96.05	Update cost estimate using PES
96.06	Design Section supervisor shall review Office Engineer plan assembly
96.07	Design Engineer superior shall approve Office Engineer plan assembly prior to submittal
97.0	Design Section supervisor and lead designer shall sign each plan sheet
98.0	Design Engineer superior shall sign each plan sheet
99.03	Project lead will make required corrections to final plans
100.0	After award, designer shall archive the project

ETS in GDCP

2.02	Review environmental document if complete
12.02	ROW limits provided by Location Section are equivalent to environmentally cleared limits
23.0	Submit CAD files to ETS
29.0	Submit 30% plans to ETS
31.03	Send plans to ETS for identification of hazmat sites not previously identified
35.0	Send plans to Design Bureau ETS and Region ETS to start NEPA process
41.0	If project involves backwater impoundments check with ETS regarding FERC permit
46.01	Transmit partial plans to ETS for determination of public involvement meeting requirement
46.02	Designer shall complete public involvement meeting map
46.03	Transmit public involvement meeting map to Region/Area ETS and FHWA for review comments
46.04	Complete PI meeting map
46.05	Transmit PI meeting maps to Region for their use in conducting the meeting
46.06	Design supervisor and designer shall bring PI maps and attend PI meeting
46.07	Design Bureau ETS coord. with project lead to address design changes resulting from PI meeting
46.08	If required, Region ETS submit environmental document preparation items to Design ETS
46.09	Design Section Supervisor shall make approved design changes where necessary
57.0	If “tail ditching” or channel changes are required, transmit plans to ETS
60.03	Bridge Bureau will coordinate with ETS regarding documents for Coast Guard permit
61.14	Submit partial plans to ETS any time revisions are made to environmental cleared limits

ETS in GDCP (cont.)

64.0	Submit PIH plans to ETS
68.01	A letter from ETS is required before any utilities may be relocated
69.0	Project lead ensure environmental commitments are addressed/included in plans
71.0	Request ETS approval for ROW authorization
71.01	ETS provide concurrence to design lead
72.0	Submit ETS concurrence to ROW Engineer
72.01	ROW Bureau make submittal to ETS for review and concurrence
73.0	If Alabama Power impoundment, submit plans to ETS for FERC permit
74.0	If TVA watershed, notify ETS for determination of 26A committee review with TVA
79.0	Notify ETS if any environmental conflicts exist
79.01	Coordinate with ETS to determine any known commitments or plan notes required
84.0	Submit PS&E plans to ETS
86.02	If there are ROW changes outside environ. limits, a new approval letter from ETS is required
86.20	Coordinate with ETS for any additional information or permits not yet acquired.
91.07	Submit partial plans to ETS for environmental limit and commitments confirmation
94.01	ETS should provide approval of environmental limits and commitments

M&T in GDCP

3.01	Initial submittal to Region/Area Materials Engineer for estimated buildup
6.02	Project lead consult with M&T (and others) to determine balance of PE funding required
11.01	Transportation to submit traffic data to M&T (and others)
12.0	Design Section Supervisor to consult with M&T (and others) to develop project scope
17.0	Materials and Geotechnical Requests
17.01	Request preliminary shrink/swell factors from Region/Area Materials Engineer
17.02	Submit plans/traffic data and request materials buildup from Region/Area Materials Engineer
29.0	Submit 30% plans to M&T Bureau
31.03	Designer submit plans to M&T Hazmat Coordinator for hazmat sites not previously identified
31.04	Designer submit plans to Region for ROE for hazmat and geotechnical investigations
31.05	The Region should begin obtaining ROE for hazmat and geotechnical investigations
36.0	Transmit plans to Region/Area M&T for soil survey, soils profile, slope study, and buildup
43.0	Region/Area M&T submit materials report to M&T Bureau for approval
44.0	M&T Bureau distribute approved report
45.02	Complete earthwork calculations
45.03	Incorporate soil profile and borings into plan assembly

M&T in GDCP (cont.)

53.01	Traffic Engineer will coordinate boring locations with M&T
53.02	Designer submit plans to M&T for signal/ITS required boring and graphs
53.03	Designer submit plans to M&T for lighting required boring and graphs
54.0	Designer submit plans to M&T for overhead and cantilever sign required boring and graphs
60.01	Bridge Bureau submit TS&L drawing to M&T Engineer for foundation investigation and report (Project lead requests foundation investigation and report for roadway and bridge culverts)
64.0	Submit PIH plans to M&T Bureau
66.03	M&T Bureau transmit approved materials addendum to Project Lead (and others)
66.04	Project Lead make plan revisions in accordance with approved materials addendum
66.05	M&T Bureau submit special soil studies to project lead and to Traffic Design Section
67.01	Submit PIH plans to Region M&T for materials report addendum
67.07	Submit plans to M&T hazmat coordinator
84.0	Submit PS&E plans to M&T Bureau
85.04	Submit revised PS&E plans to Region M&T for materials report addendum
86.16	Designer submit plans to M&T Hazmat Coordinator for hazmat review
86.21	Be sure Material Report Addendums have been approved and furnished to appropriate parties

UTILITIES in GDCP

2.02	Review Location Memorandum for major utility problems that may influence design
3.02	Request Utilities Engineer investigate availability of utilities for Rest Area projects
6.01	Design Supervisor verify Utility project in CPMS
18.04	Generate design view utility sheets
24.0	Submit partial plan set to Utility Engineer for conflict identification and remediation
30.0	At 30% review give consideration to utility conflict avoidance
31.05	Region should actively identify utility conflicts
37.0	Project lead submit CAD files to Traffic Design Section for traffic signal review
61.08	Consider utility conflicts in preliminary TCP development
62.03	Utilities Engineer shall notify design supervisor in there are any design conflicts
68.01	After PIH disposition, submit plans to Utilities Engineer (ETS letter req'd before utility relocation)
68.02	Utilities Engineer submit plans to Region/Area Utilities Engineer for coordination with owners
68.03	Utilities Engineer ascertain if special utility or ROW requirements.
68.04	Coord with Utilities Engineer and Region Utilities Engineer to determine construction sequence
69.01	Request quantities if utility work to be included in construction project
84.0	Submit PS&E plans to Utilities Section

UTILITIES in GDCP (cont.)

86.01	If PS&E revisions affected utilities, make revised submittal to Utilities Section
86.03	Transmit CAD files to Utilities Engineer after PS&E revisions are made
86.04	Utilities Engineer to determine if revised submittal to owners is required
86.08	Project lead request final utility quantities (request 21 weeks PTL, received 19 weeks PTL)
86.11	Utilities Engineer submit final utility quantities (19 weeks PTL)
95.0	Utility Certificates to be submitted with Construction Review Submittal
95.04	Project lead request signed full size utility plans (received 9.5 weeks PTL)
96.03	Utilities Engineer send Utility Certification to Construction Bureau and Office Engineer

ROW in GDCP

2.03	Design lead contacts Region ROW for blanket ROE
6.01	Design supervisor verify ROW project in CPMS
9.0	Check ROW authorization date routinely
15.05	Begin preliminary drainage design to insure adequate ROW
20.08	Design lead begin setting ROW limits using 4:1 slopes
20.09	Show ROW limits on cross-sections and in appropriate files
20.10	Check cross-sections to insure no design elements are encroaching
20.11	Recalculate earthwork when necessary and revise ROW
21.0	Determine clear zone and revise ROW if necessary
22.0	Preliminary ROW limits set
23.0	Submit ROW CAD file to ETS
29.0	Submit 30% plans to ROW Bureau
31.01	ROW Engineer assign ROW map preparation responsibilities
51.0	Transmit CAD files to ROW for ROW map preparation
55.0	Continue drainage design to anticipate additional ROW
56.0	Coordinate with Region to determine if ROW or easements are required
61.13	Designer firm up easements and ROW limits
64.0	Submit PIH plans to ROW Bureau
64.01	ROW Bureau coordinate ROW map and request individual tract cost estimates

ROW in GDCP (cont.)

66.02	ROW changes after PIH disposition require State Design Engineer or Region Engineer approval
71.0	Request ETS approval for ROW acquisition
71.01	ETS concurrence
72.0	Submit to ROW Engineer for ROW authorization
72.01	ROW submit to ETS for concurrence
78.0	Check with ROW Engineer for any known commitments to owners
78.01	Coordinate with ROW Engineer concerning any adjustments to ROW
84.0	Submit PS&E plans to ROW Bureau
86.02	After PS&E disposition, submit 90% plans to ROW Engineer

TRAFFIC in GDCP

4.01	Send project limit accident data to Region Traffic Engineer
11.0	Request traffic info from Transportation Planning
11.01	Transportation Planning submit traffic data to project lead, Traffic Design, M&T, & Region
12.03	Send copy of project scope to Traffic Design Section
37.0	When necessary, request Traffic Design Section traffic signal review
37.01	Traffic Design Section will determine how to proceed
37.02	Traffic signal designer shall prepare warrant analysis for existing and potential installations
38.0	Transportation Planning transmit 12 hour traffic counts/movements to Traffic Design Section
45.01	Traffic updates may require materials addendums
53.0	**Traffic Design Coordination**
53.01	Coordinate with Traffic Design Engineer for lighting, signals or ITS items required
62.03	If project design has changed since GDCP 53 submittals, resubmit affected sheets
66.05	M&T shall complete all special soil studies and submit to Traffic Design Section
67.02	Request Traffic Design Engineer make required Plan-In-Hand revisions
67.03	Traffic Design Section submit corrected plan sheets
67.04	Copy the Traffic Design Section on any maintenance agreement submittals
86.06	Project lead request Traffic Design CAD files, quantities, and unique numbers
86.10	Traffic Design shall submit CAD files, quantities, and unique numbers
91.01	Region provide maintenance agreement copies to Traffic Design Section

BRIDGE in GDCP

5.06	Coordinate with Bridge Bureau to determine if bridge structures will be involved
6.02	Project lead consult with Bridge Bureau to determine PE funding needs
16.01	Designer coordinate with Modal Programs and transmit bridge rail plan sheets
16.03	Modal Programs shall notify project lead of number of tracks spanned
18.01	Develop vertical alignment to provide bridge clearance per Bridge Bureau Design Manual
19.0	Request bridge hydraulic study for existing and required bridge structures
19.01	Designer coordinate with Bridge Bureau to determine preliminary bridge length and details
19.02	Bridge Hydraulic Engineer may require design supervisor and lead designer to visit site
19.03	Request BINs for proposed bridge structures
29.0	Submit 30% plans to bridge engineer
31.02	Design supervisor shall address necessity of staged bridge construction
33.0	Nonstandard bridge width is a controlling criteria requiring a design exception
36.0	Bridge culvert/structure stationing is required for initial M&T submittal
39.03	Bridge barrier rail projects require Modal Programs submittal if over railroad
55.0	Show bridge hydraulic data on required sheets
58.0	Coordinate construction sequence and TCP with the Bridge Bureau
59.0	Notify Bridge Bureau if culverts will have non-standard conditions

BRIDGE in GDCP (cont.)

60.0	Submit 30% plans and TCP to Bridge Engineer for bridge design
60.01	Bridge Bureau shall submit TS&L drawings for M&T to perform foundation investigation
60.02	Bridge Bureau shall submit information to Modal Programs for Railroad Coordination
60.03	Bridge Bureau is responsible for Coast Guard permit when required
60.04	Bridge Bureau shall furnish completed preliminary bridge layout for FHWA submittal
64.0	Submit PIH plans to Bridge Bureau (if bridge work involved)
67.05	Designer submit plans to Bridge Bureau after PIH disposition
67.06	Bridge Bureau coordinate with Modal Programs to determine additional railroad coordination
67.07	If paint removal or bridge demolition involved, submit plans to M&T Hazmat Coordinator
76.0	Designer request bridge drawings and estimate
84.0	Submit PS&E plans to Bridge Bureau (if bridge work involved)
86.04	Project lead request bridge plans and pay items for Final Back Check review
86.05	Bridge Bureau coordinate with appropriate individuals for any new unique number required
87.03	Complete bridge plans not required to be in FBC plan assembly
90.0	Submit FBC plans to Bridge Bureau (if bridge work involved)
91.08	Project lead request bridge plans for Construction Review 13 ½ weeks prior to letting
94.02	Bridge Bureau submit plans for Construction Review 13 weeks prior to letting
95.04	Project lead request full size, signed bridge plans 9 ½ weeks prior to letting
96.01	Bridge Bureau submit full size plans to the project lead 9 weeks prior to letting

RAILROAD in GDCP

2.03	Give preliminary notification to the railroad
16.0	Initial Railroad Coordination
16.01	Designer shall coordinate with Modal Programs on work within railroad ROW
16.02	Modal Programs shall coordinate with railroad to determine number of tracks spanned
16.03	Modal Programs shall notify project lead of railroad requirements
29.0	Provide 30% plans to railroad
39.0	Post 30% Railroad Involvement
39.01	Project lead shall reference attachment 9 and include railroad note on Project Notes Sheets
39.02	Send request for ROE to Modal Programs for coordination with railroad
39.03	Project lead to submit info to Modal Programs for securing non-bridge railroad agreement
60.02	Bridge Bureau to submit info to Modal Programs for bridge involved railroad agreement
64.0	Submit PIH bridge involved project plans to Modal Programs
67.06	Bridge Bureau shall coord. with Modal Programs to determine additional railroad information
75.0	Project lead shall submit railroad/roadway/bridge ROW plans to Modal Programs
75.01	Modal Programs shall submit ROW plans to ROW Bureau for Norfolk Southern Railway project
75.02	Consult Modal programs for additional railroad project notes to be included in plans
75.03	Project lead shall submit summary and partial plans to Modal Programs for railroad agreement
84.0	Submit PS&E bridge involved project plans to Modal Programs
91.02	Designer request Railroad Agreement from Modal Programs prior to Construction Review
91.03	Modal Programs transmit Railroad Agreement to project lead and Office Engineer
95.0	Project lead submit Railroad Agreement with plans for Construction Review

THANK YOU FOR COMING

QUESTIONS?