

General Field Plan Review: Environmental Responsibilities

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OVERVIEW

The field plan review (FPR) is a major milestone in a project's development. It allows everyone working on a project the chance to inspect the plan set and provide comments on the design. The focus of this plan set review is to ensure that the project's design has satisfied the purpose and need of the programmed project and that the project can be built and maintained. FPR reviewers can ensure the plans reflect their expectations and can provide comments if the plans need to be revised. FPRs can involve a variety of GDOT disciplines, consultants, and stakeholder personnel; however, this guide only addresses the role of environmental subject matter experts in these reviews. An FPR will be scheduled and led by an FPR Coordinator from the GDOT Office of Engineering Services (see GDOT Policy 2440-1-Field Plan Review Inspections).

Preliminary Field Plan Review

The Preliminary Field Plan Review (PFPR) occurs prior to approval of the environmental document (GEPA/NEPA document) and prior to completion of right-of-way (ROW) plans (at least 16 weeks prior to ROW authorization). A main component of the PFPR is establishing the appropriate ROW requirements to construct the proposed project as well as establishing the treatment of environmental resources.

Final Field Plan Review

The Final Field Plan Review (FFPR) occurs at least 24 weeks prior to letting. This review includes final plans and specifications, special provisions, permits, ROW agreements, and utility conflict resolutions.

Interim or Supplemental Field Plan Reviews

Although not standard in GDOT's Plan Development Process (PDP), these additional plan reviews could be required when significant plan changes occur or when a project is delayed

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(An Interim FPR can occur on projects that have greater than 30 months between the ROW date and the Let date; a Supplemental FPR can occur when the previous FPR was conducted more than two years prior to the current Let date).

General Responsibilities

The Environmental Analyst conducts much of the communication and coordination regarding FPRs. They notify environmental personnel of the FPR review, collect plan comments, and compile those comments into the FPR Review Form. The steps in this process vary slightly if a consultant Environmental Analyst is assigned to the project, but the general approach is the same. Even though the Environmental Analyst is directing the environmental review, involvement from all environmental specialists is necessary. Every FPR provides an important milestone to identify and correct plan issues that affect environmental resources.

STEP-BY-STEP ENVIRONMENTAL RESPONSIBILITIES

Prior to Scheduling

Everyone assigned to the project in TPro will receive two different letters for FPRs. The letters will come from project schedulers or FPR coordinators.

- > The first letter will be an FPR Request Letter. This letter requires no action, but it lets project personnel know a field plan review will be scheduled soon.
- > The second letter is the FPR Schedule Letter, which typically comes with a calendar invite but could be an email FPR with a comment due date. This letter should come 3-4 weeks prior to the FPR. At this point, project plans are available, and reviews and collection of comments should begin.

It is important to note that the review is time-sensitive as all comments must be compiled and submitted several days prior to the meeting. Environmental Analysts should forward the schedule letter, plan set, and FPR Review Form to consultant specialists as detailed in the guidance below. All consultant specialists may not be listed in TPro and may not otherwise receive this information.

Step 1 – Initiating and Routing the FPR Review Form

This step is performed by the OES and/or consultant Environmental Analyst.

The OES Environmental Analyst (a.k.a. NEPA) will always fill out the Project Details section of the FPR Review Form.

If there is only an OES Environmental Analyst on the project, the OES Environmental Analyst will input “Not Applicable” into the Comments Due to NEPA from Consultant field of the review form, fill out the Specialist Review Verification* section, and input the Comments Required by Specialists to NEPA date (typically four days prior to the scheduled FPR or the date specified in the schedule letter). This is the date that the OES Environmental Analyst

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requires all assigned specialists to return their comments to OES. Then the OES Environmental Analyst will send an email to the assigned specialists using the template for routing the review form located in SharePoint. The email will include:

- > FPR Review Form – partially filled out
- > FPR Schedule Letter
- > Environmental Commitments Table (ECT) and Environmental Resource Impact Table (ERIT)– prepared prior to FPR scheduling
- > FPR plan set – Please note that consultant specialists often cannot easily access plans stored on GDOT’s ProjectWise. It is advisable to include alternate ways to access project plans such as the GDOT FTP.

It is the responsibility of the OES Environmental Analyst to ensure that specialists complete the appropriate sections in the FPR Review Form prior to the due date.

If there is a consultant Environmental Analyst on the project, the OES Environmental Analyst will input a date into the Comments Due to NEPA from Consultant field of the review form (typically four days prior to the scheduled FPR or the date specified in the schedule letter). This is the date that the OES Environmental Analyst expects the consultant Environmental Analyst to return the compiled review form including the consultant’s and specialists’ comments to OES. Then the OES Environmental Analyst will send the review form to the consultant Environmental Analyst using the email template for routing the FPR Review Form to a NEPA Consultant located in SharePoint.

The consultant Environmental Analyst will then be required to fill out the Specialist Review Verification* section of the form, input the Comments Required by Specialists to NEPA date, and ensure that the Comments Required by Specialists to NEPA and Comments Due to NEPA from Consultant dates are BOTH in line with when comments are due to the FPR coordinators within Engineering Services. Then the consultant Environmental Analyst will send an email to the assigned specialists using the template for routing the review form located in SharePoint. The email will include:

- > FPR Review Form – partially filled out
- > FPR Schedule Letter
- > ECT
- > FPR plan set – see recommendation above regarding accessibility.

It is the responsibility of the consultant Environmental Analyst to ensure that specialists complete the appropriate sections of the FPR Review Form prior to the due date.

*The Specialist Review Verification section should be comprised of the actual doers of each specialty, except for History and Archaeology. Verification will always go to the GDOT

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assigned historian and archaeologist even if a consultant is doing the work. If the project is OES NEPA in-house, the OES Environmental Analyst will need to identify the assigned consultant specialists.

Step 2 – Specialist Coordination and Plan Review

This step is performed by the OES or consultant Environmental Analysts and specialists (Air/Noise, Cultural Resources, and Ecology).

Once the FPR Review Form and associated information has been distributed, plan reviews should begin immediately. All environmental personnel assigned to a project will review applicable plan sheets. This step is a major milestone for quality assurance of the plan sheets by validating that environmental resources and their demarcation and treatment are accurately being presented on plan sheets, as well as any narrative information required from the GDOT OES office. Plan comments may be general (i.e., applies to an entire plan series) or specific (i.e., refers to a specific resource or an item on a specific sheet). Keep in mind that designers are required to respond to every comment. Comments should be worded carefully to ensure that mistakes/problems can be easily identified and corrected (i.e., Sheet 13-1-OBF placement for Resource 1 requires additional length to Station 130+50 to provide full protection). The materials should be checked by everyone to ensure that all environmental resources are correctly identified and discussed. Comments outside an individual's specialty or that are not environmental in nature are strongly suggested to be recognized and referenced to enhance the project for that community (i.e., Driveway grade on Parcel 1 appears to be very steep; is this appropriate?).

Step 3 – Returning Comments and Submitting to Engineering Services

This step is performed by OES and consultant Environmental Analysts, if applicable.

The OES Environmental Analyst generally needs to return all review comments to Engineering Services four days prior to the scheduled FPR. Therefore, it is important for specialists to return their comments to the Environmental Analyst (OES or consultant) by the Comments Required by Specialist to NEPA date indicated on the FPR Review Form. A consultant Environmental Analyst will return the compiled form to the OES Environmental Analyst by the Comments Due to NEPA from Consultant date indicated on the FPR Review Form.

On projects with consultant Environmental Analysts or specialists, the OES Environmental Analyst and OES specialists may still choose to review the project documents and provide comments. Any comments will be sent to the OES Environmental Analyst by the review deadline (typically four days prior to the FPR) and included in the consolidated field plan review comments.

Step 4 – Participating in the Field Plan Review Meeting

This step is performed by OES or consultant Environmental Analysts and may be performed by specialists.

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In the past, it was typical for a field plan review meeting to occur in two parts over the course of a day. The first part of the day consisted of an in-person plan review session. During this time, a variety of project personnel would meet in a conference room to go over many of the plan comments and to achieve a resolution or correction. The second part of the day included a visit to the project site in which specific questions or design issues could be pointed out and discussed.

These day-long meetings have largely been eliminated. Virtual meetings have taken the place of the in-person plan reviews and site visits are now conducted on a smaller scale and on an as-needed basis. It is incumbent upon each SME to verify (in the field, if necessary) any concerns in advance of the FPR. If a specific issue requires an on-site meeting between environmental personnel, design, and any other necessary parties, these can be scheduled and coordinated with the PM. An email-based FPR may also be employed for some projects where comments or concerns are anticipated to be minor.

While all environmental specialists should review the plan set prior to the meeting and submit comments if needed, it is at an individual's discretion to attend the FPR meeting. Most issues raised by environmental specialists can be captured in the FPR Review Form. The following list includes notations of when attendance would be recommended for each specialty:

- > Environmental Analyst (OES or consultant): Should generally attend all meetings.
- > OES Environmental Analyst (in addition to consultant): Must attend when there are many resources. In this case, if the OES Environmental Analyst cannot attend, they must coordinate closely with the consultant Environmental Analyst to compile OES plan comments and incorporate them into the FPR Review Form. The OES Environmental Analyst must also inform the Project Manager (PM) if they are unable to attend and identify who will represent OES in their place. As such, all environmental comments provided must be understood by the attendee if clarification is requested by others at the FFPR meeting.
- > Air/Noise Specialist: Should only plan to attend if there are concerns regarding noise walls and potential conflict with other design elements.
- > Cultural Resources (Archaeologist and Historian): Should only plan to attend if there are significant concerns regarding design element effects on these resources.
- > Ecologist: Should typically attend these meetings when water resources or protected species are present, as work adjacent to and within these resources generally warrants more detailed discussion.

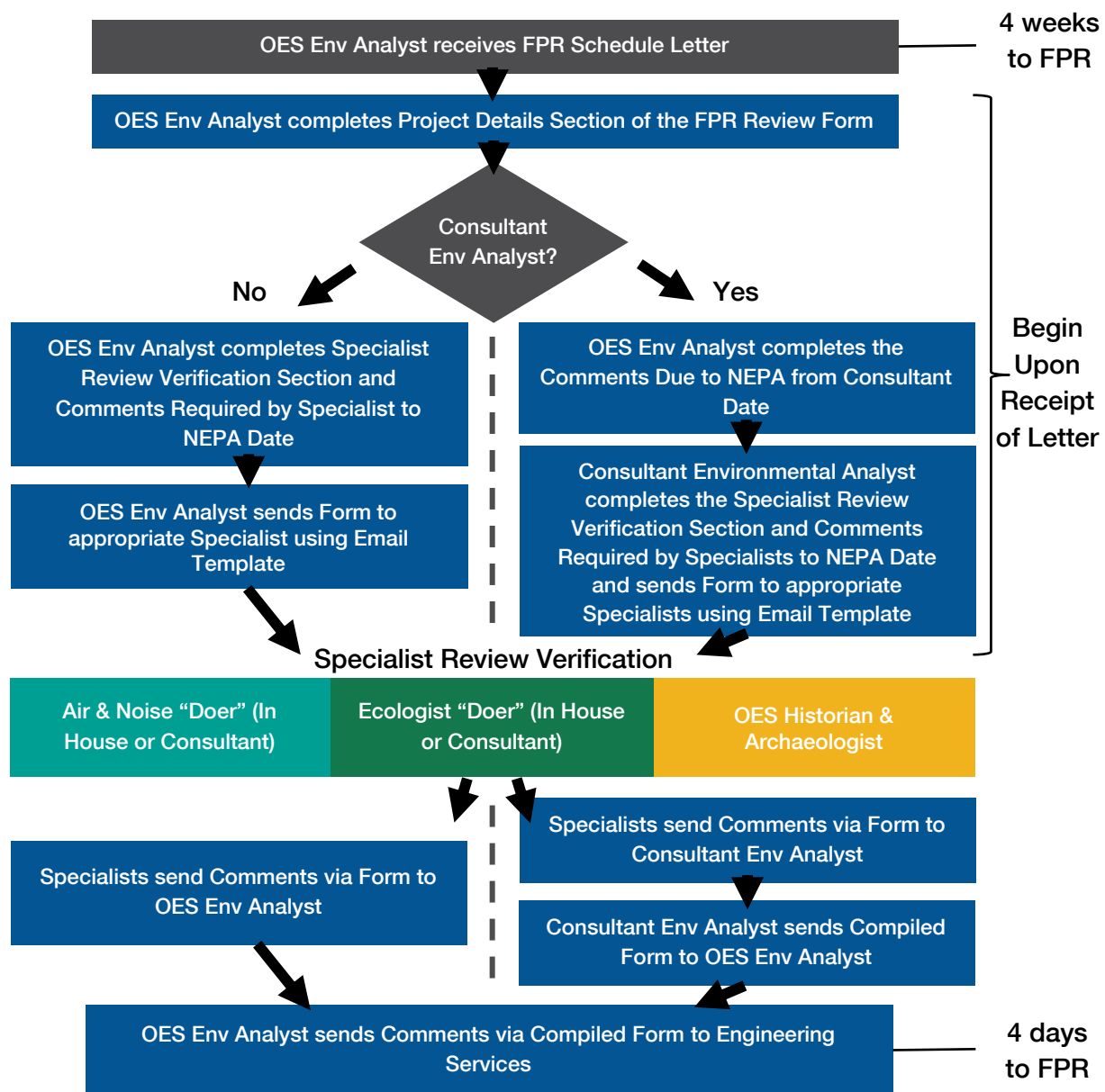
Step 5 – Comment Follow Up

This step is performed by OES or consultant Environmental Analysts and may be performed by specialists.

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If a reviewer provides comments, additional coordination and communication with design (or other parties) may be required to ensure that comments are addressed adequately. If design changes are expected because of the FPR, the Environmental Analyst (OES or consultant) must inform the entire team and the Environmental Program Manager immediately. Responses to FPR comments and post-FPR (Corrected FPR) plans will be issued after the meeting. If plan comments were made, Environmental Analysts and specialists must review these post-FPR documents to ensure all changes have been incorporated.

Figure 1 – FPR Review Form Flowchart



PLAN REVIEW EXPECTATIONS AND EXAMPLES

Environmental plan reviews typically involve two key sections of the plans:

- > General Notes (Series 4), which contains the Environmental Resource Impact Table (ERIT)
- > Mainline Roadway (Series 13), which shows the Environmental Survey Boundary (ESB), Environmentally Sensitive Area (ESA), ROW/Easements, or Orange Barrier Fence (OBF)

Reviews should also cover the ECT and Special Provisions. Other sections of the plans may need to be reviewed in more detail, but Series 4 and 13 are the primary concerns. The following discussions include explanations and examples of several aspects of plan reviews.

Plans

General comments that apply to all plan sheets or a particular series should be described as such. Specific comments should include a sheet number or station location as well as a resource number or other specific identifying information.

Specialists must ensure that resources identified, or design element characteristics assumed for impact calculations (i.e., noise wall heights or stream impacts) match project plans. If there are discrepancies, a comment is necessary.

Plans should be cross-referenced with the ECT and ERIT (discussed below). Commitments indicated in those tables should be included in the plan set as well. Examples could include noting no equipment is to be staged in front of a community resource, protecting trees, protecting a trail, moving a sign, or noting Underground Storage Tanks (USTs).

Example Comment: (General Comment) History ESAs missing from Series 13.

Example Comment: (Specific Comment) Symbology for Wetland 10 on Sheet 13-006 is incorrectly depicted.

Example Comment: (Specific Comment) Noise walls shown on Sheet 33-001 do not match heights used to calculate noise impacts. Revise wall heights to match dimensions previously provided or coordinate with environmental to revise noise calculations.

ERIT

This table is included in Series 4 of the plan set. It includes a list of resources and their locations and impacts to those resources. Any discrepancies between resources included in environmental reports or on the ECT would necessitate a comment. The ERIT preparation may become a responsibility for being generated as part of the ECT preparation in requesting scheduling a PFPR.

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Example Comment: The Lacy Farm is an eligible historic resource included in the plan set and in the ECT. This resource and the amount of ROW and easement taken should be added to the ERIT.

ESB

Ensure that all areas where project work is depicted (cut/fill, easements, ROW, etc.) are surveyed. If work is depicted beyond the ESB, this needs to be a comment. If work has extended outside the ESB, additional survey may be required.

Example Comment: Easements depicted on Sheet 13-004 near station +125.75 depict cut lines outside the surveyed ESB. If this area of work is required, additional archaeology and ecology survey may be needed. Shift this cut line to fall within the existing ESB or coordinate with environmental to complete additional survey work.

ESAs/Resources

All resources identified in Survey Reports should be depicted on the plans with ESAs (unless they are outside the plan sheets), if an ESA is not on the plans, but should be within the plan sheets, this must be commented on. If possible, provide the sheet number where the resource should appear.

Example Comment: Stream 12 should be depicted on the northeast corner of the proposed roundabout on Sheet 13-002. Add line and label for stream and associated ESA to this plan sheet.

Example Comment: On Sheet 13-007 the ESA for the National Register-eligible Jacobs House is incorrect. Adjust ESA lines to match the property boundary.

ROW/Easements

Check that ROW and easements match what was used for the Assessment of Effects Report (AOE). If the location or amount of ROW/easement has changed, a comment is required and revisions to AOE's may be needed.

Example Comment: The Cultural Resource AOE identified 0.5 acre of required ROW from the Miller Historic District near Station +154.25. FPR plans depict roughly 0.6 acre of ROW in this area. Revise ROW to match with previous depictions (post-A3M plans) or coordinate with environmental to revise studies to account for additional ROW amount.

OBF

Typically, all environmental resources within the limits of project work have OBF placed between the ESA and the work areas (indicated with a sawtooth line type). Ensure that OBF is depicted correctly around (but not within) ESAs and that there is sufficient room to place OBF in the locations depicted.

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Example Comment: OBF is not indicated along the southern portion of the Jones Cemetery within the ESB on Sheet 13-001. Correct the placement of OBF in this location per the latest transmittal from the archaeological SME.

Example Comment: On Sheet 13-010 OBF is indicated across the driveway at Parcel 12. OBF should be revised to stop at the edges of the driveway so that it does not restrict access.

ECT/Special Provisions

Ensure that all resources are identified, names and impacts are accurate, and the most recent documentation (AOE or other) is listed. If items are incorrect or missing, provide a comment and details. The Environmental Analyst should fill in the Special Provision information, and specialists should review these Special Provisions.

More Examples, Expectations, and Common Issues

More example FPR comments are provided in the reference below. The reference also illustrates how comments are often more effective when shown directly on the plan sheets. These can be shared along with the FPR Review Form when transmitted to the Environmental Analyst.

Example FPR Comments
GDOT Office of Environmental Services

Additionally, Environmental Analysts may consult the GDOT Projectwise Workflows that offer some details on the roles and expectations of the FPR process.

GDOT Projectwise Workflows
Georgia Department of Transportation

Table 1 below identifies some common issues found on field plans that require environmental comments.

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Table 1 – Common Issues Requiring Environmental Comments

Environmental Area/Specialty	Items to Check / Common Issues Requiring Environmental Comments
Environmental Analyst	Check that general project information on the Cover Sheet is correct (project funding, limits, length, etc.).
	Check that the ERIT matches the most updated version of the ECT.
	Ensure environmental commitments related to community resources, USTs, hazardous waste, and other general environmental concerns are included or depicted in plans.
	Check that ROW/Easements match what was depicted in post-A3M plans used for AOE's.
Air/Noise	Check that ESAs are depicted on all plan view sheets (not just Series 13).
	Check that noise barrier heights are accurate.
	Noise barrier heights shown in plans need to be equal or greater than the barrier heights used in traffic noise models.
Cultural Resources	Coordinates depicted on plans for noise barrier locations need to match the coordinate inputs from traffic noise models.
	Check that all resource ESAs are depicted accurately and that they match those boundaries included in survey reports and AOE's.
	Check that resource ESAs are labeled correctly.
	Ensure that archaeology ESAs are depicted but site boundaries are not shown. Archaeology resources should not be labeled as such on plan sheets to maintain confidentiality.
	If a resource is large enough that the ESA line is beyond the limits of the plan sheet, a note should be added to indicate that everything on the sheet is within the boundary of the resource (include resource name).
	Ensure that OBF is placed outside ESAs and that the existing conditions will allow access to place OBF without entering the ESA.
	Ensure that avoidance and minimization measures are accurately reflected in the plans (OBF, plan notes, walls, reduced ROW/easements).
Ecology	Ensure that special provisions adequately capture context sensitive design elements or mitigation.
	Cut and fill lines should not cross stream channels.
	No BMPs should cross stream channels.
	Ensure that OBF is correctly displayed on plan sheets.
	Ensure that wetland symbology is included on wetlands.
	Ensure that all top of bank lines are displayed and consistent across all streams.
	Ensure all culverts are appropriately sized.
	Ensure stream buffers are turned on and properly displayed.
Check that all streams have arrows indicating the direction of flow.	
Ensure that all culverts are embedded 20%. Double check the math for each culvert (Section 39).	

PLAN PRESENTATION REFERENCE

There are nearly 50 different plan sections currently included in GDOT's Plan Presentation Guidance. Though each serves a purpose within the realm of design, all sections are not included in every plan set and all included sections are not necessarily relevant to

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environmental reviewers. Table 2 below lists sections (or series) often reviewed by environmental personnel and a brief explanation of what is included in each section.

Table 2 – Plan Sections and Typical Involvement

Plan Section No.	Description	Plans Include:
01	Cover Drawing	Project identification information such as project description, limits, and project length
02	Index Drawing	A list of plan contents
04	General Notes	General project notes as well as the ERIT
05	Typical Sections	Cross sections depicting lane widths, curbs, sidewalks, medians, and ditches and other elements
10	Traffic Diagrams	Schematic drawings of traffic movements and volumes
12	Corridor Location Map or Aerial Photo Mosaics	Large scale plans depict the proximity of community resources and environmental resources (Only for new location projects)
13	Mainline Roadway, Crossroad, Side Street, Frontage Road, and Ramp Plan Drawings	Details of the project in a plan view (ESAs, OBF, ROW, easements, etc.)
19	Construction Staging Plan Drawings and Staging Cross-Section Drawings	Illustration of a method to construct the project while accommodating traffic
20	Construction Staging Details	Illustrates road closings and off-site detours if required
22	Drainage Profiles	Profiles of all drainage structures and pipe systems, flowline elevations, height of structures, etc.
23	Cross-Sections	Both existing ground conditions and new facility
24	Utility Plans	Existing, proposed, and adjusted utility facility locations, both overhead and underground (when work is performed by utility owners or their contractors)
25	Lighting Plans and Details	Location and type of new or modified fixtures
30	Mitigation Plans	Wetland, stream, or stream buffer mitigation sites or landscaping plans for environmental resource mitigation
33	Noise Barrier Envelopes	Establishes the top and bottom of noise barriers
34	Noise Barrier Plans	Shows the location of noise barriers
39	Special Design Box Culverts	Depicts the location and elevation as well as the size and slope of box culverts
44	Utility Relocation Plans	Utility relocation or adjustment when incorporated into the roadway contract
54	Erosion Control Plans-BMP Details	Shows the location of all BMPs installed during project construction

Plan 13 Series, identified in bold in Table 2, is the most important plan set to review as it includes details of what will be constructed and where project elements will be located. Even if other plan sets are not included or do not require review, the 13 Series always needs to be examined.

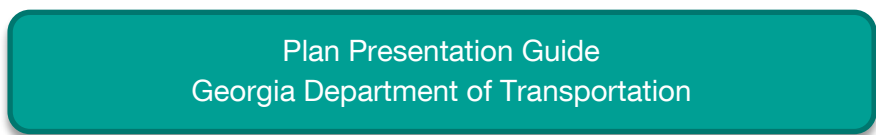
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Table 3 below identifies the environmental specialties that often review the various plan sections. It is not intended to limit environmental reviewers, but to identify the most reviewed sections. While some sections should be reviewed by all environmental specialists, not every plan section will be relevant for all environmental reviewers.

Table 3 – Plan Sections and Typical Involvement

Plan Section No.	Description	Env. Analyst	Air / Noise	Cultural Resources	Ecology
01	Cover Drawing	■	■	■	■
02	Index Drawing	■	■	■	■
04	General Notes	■	■	■	■
05	Typical Sections	■	■	■	■
10	Traffic Diagrams	■	■		
12	Corridor Location Map or Aerial Photo Mosaics	■	■	■	■
13	Mainline Roadway, Crossroad, Side Street, Frontage Road, and Ramp Plan Drawings	■	■	■	■
19	Construction Staging Plan Drawings and Staging Cross-Section Drawings	■			■
20	Construction Staging Details	■			■
22	Drainage Profiles				■
23	Cross-Sections	■	■	■	■
24	Utility Plans				
25	Lighting Plans and Details	■		■	■
30	Mitigation Plans	■		■	■
33	Noise Barrier Envelopes		■		
34	Noise Barrier Plans		■		
39	Special Design Box Culverts				■
44	Utility Relocation Plans	■	■	■	■
54	Erosion Control Plans-BMP Details				■

For additional explanation of plan sections and what they include. See GDOT’s plan presentation guide.



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Guidebook Revision History

Revision Description	Relevant Sections	Revision Date
Initial Publication	All	2/9/2024