

**TURNPIKE PLANS PREPARATION AND
PRACTICES HANDBOOK (TPPPH)**

VOLUME 2



**FLORIDA'S TURNPIKE ENTERPRISE
PRODUCTION DESIGN DEPARTMENT**

OCOEE, FL

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Introduction

As part of the Turnpike's continuing quality enhancement effort, the Turnpike Plans Preparation and Practices Handbook (TPPPH) that includes Volumes 1, 2, and the Turnpike Enterprise Guide Drawings, has been developed to provide Consultants, Reviewers and Management with a single source of additional Turnpike specific requirements that modify or add to the normal requirements included in the FDOT Plans Preparations Manual (PPM). These two sources include the normal criteria that govern our work and help our projects to better "conform to requirements", the official FDOT definition of quality.

For Turnpike requirements related to tolling, please see the General Toll Requirements (GTR) which is a separate document.

The TPPPH Table of Contents for Volumes 1 and 2 show the PPM's Chapters and Sections that have been modified. If a section has been modified, the user can refer to the specific section in the TPPPH shown in the Table of Contents.

The TPPPH is updated on an annual basis (following the revisions to the PPM). We hope that you will find this document helps with the efficient production of quality plans.

Should you have any comments or suggestions for this TPPPH document, please contact the Turnpike Design Engineer.

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No changes to the entire chapter

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No changes to the entire chapter

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No changes to the entire chapter

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No changes to the entire chapter

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No changes to the entire chapter

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No changes to the entire chapter

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No changes to the entire chapter

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Chapter 1

Production of Plans

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

1.2 Displaying Information and Data

Add the following section

1.2.1 Format and Scale

The following are recommended scales for plans on projects for Florida's Turnpike Enterprise System.

Plan Sheet (RRR Projects Only)

Mainline & Ramp

1:200 Scale (2,800' per sheet) – show 500' Station Callout with 100' minor ticks

Plan Sheet (including Traffic Control)

Mainline

1:100 Scale (1400' per sheet) – show 500' Station Callouts with 100 minor ticks

Ramp

1:50 Scale (700' per sheet) – show 100' Station Callouts

1:100 Scale (1400' per sheet) – Traffic Control – show 100' Station Callouts

Profile Sheets (including Traffic Control)

Mainline

1:100 Scale Horiz (1400' per sheet) – Show 100' Station – on standard 2x2 grid

1:5 Scale Vert (50' Vert) – Show 2' Elevations on standard 2x2 grid

Ramp

1:50 Scale Horiz (700' per sheet) – Show 100' Station – on standard 2x2 grid

1:5 Scale Vert (50' Vert) – Show 2' Elevations on standard 2x2 grid

Project Layout

1:400 Scale – 500' Stations for Mainline, 100' Stations on Ramps

Ramp Terminal

Plan – 1:50 Scale – 100' Stations

Profile

1:50 Scale – Horiz – Show 100' Station on standard 2x2 grid sheet

1:5 Scale – Vert – Show 2' Elevations on standard 2x2 grid sheet

Cross Sections (including Traffic Control)

1:50 Horiz

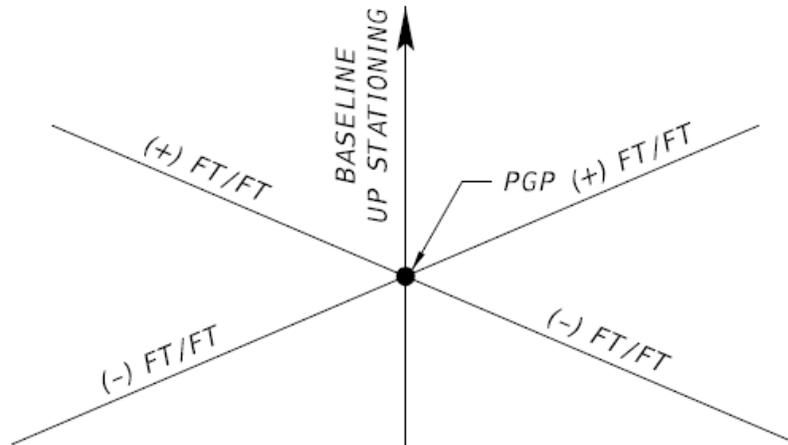
1:10 Vert = 30'-50' Elevations per Section – 2 Sections per sheet

Show 10' Elevations on standard 5x10 grid

Add the following section

1.2.2 Cross Slope Sign Convention

The sign convention for roadway cross slopes as detailed in the roadway plans must be as follows:



Any cross slope which slopes away from the PGP is considered a negative (-) cross slope.

Any cross slope which slopes towards the PGP is considered a positive (+) cross slope.

Chapter 2

Sequence of Plans Preparation

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

2.1 General

Add the following paragraphs

If the plans are for a stand-alone landscape project the landscape plans become the lead project. Any other sheets incidental to the project typically found in the roadway plans or other component plans (i.e., drainage, traffic control, etc.) may be included in the plans and numbered consecutively.

Comply with Exhibit 2-1 FTE Guidelines for Project File Creation + Naming for all deliverables submitted to Florida's Turnpike Enterprise.

Review and become familiar with the August 21, 2013 Agreement and Global Settlement between FDOT and Florida Gas Transmission (FGT) which describes the dimensions of the FGT Specified Width associated with FGT facilities within the Turnpike's right of way. For all design submittals up to and including Phase IV, show, label, and dimension the FGT Specified Width on applicable sheets in the component plan sets. Applicable sheets may include roadway, signing, lighting, ITS, architecture, structures, and toll facility plans including but not limited to, plan sheets, roll plots, typical sections, details, cross sections, drainage structures, and utility adjustment sheets. Do not include the FGT Specified Width on the final signed and sealed contract plans. This paragraph does not apply to landscaping plans.

Exhibit 2-1

FTE Guidelines for Project File Creation + Naming

General Requirements:

Do not include the following characters in any folder or file names → \ / : * ? " < > | # { } % ~ &

Indicate the submittal phase and date (MM-DD-YYYY) on the front cover page of each file.

Print / plot / export to PDF file format directly from software used to create files.

For design documentation, the PDF file must have either 1) interactive table of contents or 2) bookmarks to assist with navigation.

For plan sets, provide either 1) individual PDFs for each components or 2) one PDF for the entire plan set with bookmarks for each component.

If the PDF file has bookmarks, ensure the bookmarks tab shows when the PDF file is opened. In Adobe, select File → Properties → Initial View and then change Navigation Tab to “Bookmarks Panel and Page” drop-down option.

Scanning Requirements:

Scan pages only if absolutely necessary (ex: scan signed + sealed cover page only, not entire report).

Set scanner resolution to a minimum of 300 dpi.

Ensure scanned pages have the Optical Character Recognition (OCR) feature enabled (allows searchable text on scanned images).

If scanning a page with a crimped seal, shade the seal to ensure it is visible when scanned.

File Naming Convention:

Formula → 7-digits of FPID + phase + document description + date submitted to FTE (YYYY-MM-DD)

Example → 123456-1 PH.IV Plans 2016-09-26.pdf

Example → 123456-1 PH.IV Roadway Design Documentation 2016-09-26.pdf

If the document is independent of a phase submittal, use DRAFT, REVISED, INITIAL or FINAL.

Example → 123456-1 DRAFT Typical Section Package 2016-09-26.pdf

If a document has been signed + sealed, include S+S in the file name.

Example → 123456-1 S+S Typical Section Package 2016-09-26.pdf

Example → 123456-1 S+S Roadway Design Documentation 2016-09-26.pdf

NOTES:

These guidelines do not supersede CADD Manual standards for Digital Delivery processes and related file naming conventions.

Contact the Turnpike Program Services Manager if there are questions prior to submittal to the Turnpike.

2.2 Data Collection and Presentation

2.2.2 Presentation of Existing Data

Add the following paragraph

Minor projects, such as milling and resurfacing, may not require a full set of plan sheets. When directed by the Project Manager, the design engineer will develop a full set of plan sheets on aerial background, to be used in gathering utility data. The scale should typically be 1"=200'. When available, aerial photographs will be supplied by the Turnpike.

Landscape projects may not require a full Design Survey. When directed by the Project Manager, the Landscape Architect of Record will develop a full set of plan sheets on aerial background, to be used in gathering project and utility data utilizing best available data. The scale should not be less than 1"=100'. When available, aerial photographs and project data will be supplied by the Turnpike.

2.3 Phase Submittals

Add the following paragraph

Modification for Non-Conventional Project:
Delete TPPPH, Vol. 2, 2.3 and follow PPM, Vol. 2, 2.4.

2.3.1 General

Add the following paragraph

Comply with Exhibit 2-1 FTE Guidelines for Project File Creation + Naming for all deliverables submitted to Florida's Turnpike Enterprise.

2.3.2 Phases

Add the following paragraphs

All phase and interim submittals will include an additional plan sheet(s) titled 'Notes for Reviewers'. This sheet must also be added to the phase submittal listings in PPM Sections 2.3.2.1 to 2.3.2.4. To ensure completeness, the 'Notes to Reviewers' sheet(s) must be submitted to the Turnpike Project Manager two weeks prior to the regular phase submittals.

On Turnpike projects this sheet will also contain Design Variations and Exceptions.

Examples of Variations and Exceptions could say, "The ramp 'A' crest K value of 8 falls below PPM value of 9 due to proximity of right of way and CR 44 (Submitted 6-6-96).

Special directives will note the source and date of the directive. Variations and exceptions must note the latest current phase submittal status (preparing, submitted, approved/denied), and the appropriate date. Each note is not meant to be more than one or two sentences long. It must

locate and define the issue's impact. Full details are not needed. These notes are to be a log or diary of issues as they occur and must be updated at least monthly.

Without exception, Phase 1 (30%) Plans or the first submittal in the case of a project with reduced submittal requirements must show all existing underground and overhead utilities, regardless of size or type.

Landscape Plans:

Stand-alone landscape projects must have four phase submittals as follows, two of which must be accompanied by a full Electronic Plans Review process:

- Phase I Submittal (30% plans) (Limited Review)
- Phase II Submittal (60% plans) (Full ERC Review)
- Phase III Submittal (100% plans) (Full ERC Review)
- Phase IV Submittal (Final Plans) (Limited Review)

Final Plans will be submitted following acceptable resolution of all Phase III ERC comments. The Final Plans review will consist of a back-check by the District Landscape Architect or assignee.

Figure 2.1 Summary of Phase Submittals*Revise the following table*

Item	Phase I	45%	Phase II	Phase III	Phase IV
Key Sheet	P	P	P	C	F
Signatures Sheet			P	C	F
Summary of Pay Items			P	C	F
Drainage Map	P	P	C	C	F
Interchange Drainage Map	P	P	C	C	F
Typical Section	P	P	C	C	F
Summary of Quantities			P	C	F
Box Culvert Data			P	C	F
Summary of Drainage Structures			P	C	F
Optional Materials Tabulation			P	C	F
Project Layout	P	P	C	C	F
Roadway Plan-Profile	P	P	P	C	F
Special Profile	P	P	P	C	F
Back-of-Sidewalk Profile	P	P	C	C	F
Interchange Layout	P	P	P	C	F
Ramp Terminal Details			P	C	F
Intersection Layout/Detail	P	P	P	C	F
Drainage Structures			P	C	F
Lateral Ditch Plan-Profile		P	P	C	F
Lateral Ditch Cross Section		P	P	C	F
Retention/Detention Ponds		P	C	C	F
Cross Section Pattern			P	C	F
Roadway Soil Survey		P	P	C	F
Cross Sections	P	P	P	C	F
Stormwater Pollution Prevention Plan		P	C	C	F
Traffic Control Plans	P	P	P	C	F
Utility Adjustment			P	C	F
Project Network Control Sheets	P		C	C	F
Selective Clearing and Grubbing			P	C	F
Mitigation Plans		P	C	C	F
Miscellaneous Structures Plans		P	P	C	F
Signing and Pavement Marking Plans			P	C	F
Signalization Plans			P	C	F
Intelligent Transportation System (ITS) Plans			P	C	F
Lighting Plans			P	C	F
Landscape Opportunity Plans	F	F	F	F	F
Landscape Plans	P		P	C	F
Utility Work by Highway Contractor					
Agreement Plans				C	F
Computation Book				C	F
Contract Time				P	F
3D Model Files			P	C	F
KMZ Files		P	P	C	F

For toll related plan sheet status for each phase submittal see the General Toll Requirements

2.3.2.1 Requirements for Phase I Submittal

Add the following

LANDSCAPE OPPORTUNITY PLAN (LOP) (for Roadway projects with no landscape component)

Landscape Opportunity Plan can be a roll plot for the Phase I submittal and must include at a minimum, the following elements:

- Project Centerline
- Edge of pavement (edge of travel lanes)
- Curbs and gutter
- Drainage systems
- Guardrails
- Right of way and/or limited access fence line
- Sidewalls or other planned or existing structures
- Lighting, signs, and signal poles
- Intersections and driveways which are noted in the plans
- Existing and proposed overhead and underground utilities
- Clear Zone/Lateral offset (should be plotted or noted frequently on each plan sheet)
- Outdoor advertising signs and view zones for permitted signs
- Existing vegetation (to remain or be removed)
- Existing off site features and conditions that affect or are affected by the project
- Fence and gate locations
- Setbacks from structural elements or drainage system
- Limits of clear sight
- Transit facilities
- Proposed planting areas (bubble diagram noted as association type: trees, shrubs, etc.)

LANDSCAPE PLANS – PHASE I (CONCEPTUAL)

Phase I Landscape Plans may be submitted as a roll plot and must include at a minimum, the following elements:

- North Arrow and Scale
- Drainage divides and ground elevations (if available)
- Drainage areas and flow direction arrows
- Street names
- Baseline of Survey or Project Centerline
- Begin & end stations of project, construction and exceptions
- Existing structures and pipes with relevant information
- Existing conditions analysis including but not limited to:
 - Steep Slopes

Significant erosion
Soil conditions
Existing vegetation
Existing off site features and conditions that affect or are affected by the project
Edge of pavement and traffic lanes
Curbs or curb and gutter
Guardrails
Right of way and/or limited access fence line and gate locations
Sidewalks or other planned or existing structures
Lighting, signs, signal poles and ITS facilities
Existing and proposed overhead or underground utilities
Clear Zone/Lateral offset (plotted and noted frequently on each plan sheet)
Outdoor advertising signs and view zones for permitted outdoor advertising signs
Limits of clear sight
Transit facilities
Proposed planting plan (plant symbols and quantities)

VEGETATION DISPOSITION PLANS

Vegetation Disposition Plans are intended to be included in the Roadway Plans set as details for Selective Clearing and Grubbing and include detailed plans showing existing vegetation to be removed, preserved or relocated.

LANDSCAPE PLANS – DETAILS AND CROSS SECTIONS

Applicable landscape details as identified in the project scope

Add the following paragraph

During the scoping and estimating of the project, the engineer must determine if a conceptual master signing plan is required by the Turnpike. When required, the conceptual master signing plan must be submitted concurrently with the Phase 1 Submittal. The designer must prepare a signing roll plot at a legible scale and include existing signs; proposed regulatory, warning and guide signs on the mainline, ramps and cross street approaches; route markers; service and logo signs; post-interchange signs; call box locations; mile markers; dynamic message signs (DMS); toll signs; destination signs; lane control signs; proposed pavement markings; and proposed roadway geometry. The plan must use symbols to represent overhead cantilevers, overhead truss spans, bridge mounts, single post and multi post ground mount sign structure types. The designer must include basic notes to indicate sign removals and relocates. The intent of conceptual master signing plan is to confirm overall traffic operations, sign spacing and sign messages.

2.3.2.2 Requirements for Phase II Submittal

Add the following

TRAFFIC CONTROL PLANS

Identify Pay Items

LANDSCAPE PLANS - TABULATION OF QUANTITIES AND PLANT SCHEDULE

Project Specific

LANDSCAPE PLANS - TABULATION OF QUANTITIES AND SCHEDULE FOR IRRIGATION AND SITE AMENITIES

Project Specific

LANDSCAPE PLANS – PLANTING PLAN SHEETS

Project centerline

Edge of pavement (edge of traffic lanes) Curbs or curb and gutter

Drainage systems Guardrails

Right of way and/or limited access fence line Sidewalks or other planned or existing structures

Lighting, signs, and signal poles

Intersections and driveways which are noted in the plans

Existing and proposed overhead and underground utility locations

Clear Zone/Lateral offset (should be plotted or safety setback distances noted frequently on each plan sheet)

View zones for permitted outdoor advertising signs

Canopy limits

Existing vegetation (to remain or be removed)

Existing off site features and conditions that affect or are affected by the project

Fence and gate locations

Setbacks from structural elements or drainage system

Limits of clear sight Transit facilities

Proposed Planting Plan (Plant symbols and Plant quantities)

LANDSCAPE PLANS - IRRIGATION PLAN SHEETS

(If applicable) Type of system

Location and size of mainlines and lateral lines Type and location of spray heads and rotors Type and location of valves, sleeves, controllers, water sources/point of connection, backflow preventers, and isolation valves

LANDSCAPE PLANS – DETAILS SHEET

Applicable landscape details

Irrigation symbology with associative descriptions (if applicable)

2.3.2.3 Phase III Plans Submittal

Add the following paragraph

Phase III Landscape plans submittals must include the Landscape Maintenance Plan.

2.4 Design-Build Phase Submittals**2.4.2 Phases**

Add the following paragraph

The Design/Build Team has the option to adopt the Landscape Opportunity Plan (LOP) that was provided as a reference document (or attachment) in the RFP or create their own LOP as part of the Technical Proposal.

Add the following to Figure 2.2

ITEM	TECHNICAL PROPOSAL	90% PLANS	FINAL PLANS
Landscape Plans	LOP	C	F

Status Key:

LOP – Landscape Opportunity Plan

2.4.2.1 Requirements for Technical Proposal Submittal

Add the following

LANDSCAPE OPPORTUNITY PLAN (LOP)

Landscape Opportunity plan can be a roll plot for the Technical Proposal submittal

Project Centerline

Edge of pavement (edge of travel lanes)

Curbs and gutter

Drainage systems

Guardrail

Right of way and/or limited access fence line

Sidewalls or other planned or existing structures

Lighting, signs, and signal poles

Intersections and driveways which are noted in the plans

Existing and proposed overhead and underground utilities

Clear Zone/Lateral offset (must be plotted or noted frequently on each plan sheet)

Outdoor advertising signs and view zones for permitted signs
Existing vegetation (to remain or be removed)
Existing off site features and conditions that affect or are affected by the project
Fence and gate locations
Setbacks from structural elements or drainage system
Limits of clear sight
Transit facilities
Proposed planting areas (bubble diagram noted as association type: trees, shrubs, etc.)

VEGETATION DISPOSITION PLANS

Vegetation Disposition Plans are intended to be included in the Roadway Plans set as details for Selective Clearing and Grubbing and include detailed plans showing existing vegetation to be removed, preserved or relocated.

2.4.2.2 Requirements for 90% Plans Component Submittal

Remove all reference to Landscape Plans and add the following

Landscape Opportunity Plans must be submitted with the 90% submittal as a roll plot and must include at a minimum, the following elements:

LANDSCAPE PLANS – PHASE I (CONCEPTUAL)

North Arrow and Scale
Drainage divides and ground elevations (if available)
Drainage areas and flow direction arrows
Street names
Baseline of Survey or Project Centerline
Begin & end stations of project, construction and exceptions
Existing to remain or proposed roadway improvements, structures and drainage facilities with relevant information
Existing conditions analysis including but not limited to:
 Steep Slopes
 Significant erosion
 Soil conditions
 Existing vegetation (to remain, be relocated or removed)
Existing off site features and conditions that affect or are affected by the project
Edge of pavement and traffic lanes
Curbs or curb and gutter
Guardrails
Right of way and/or limited access fence line and gate locations
Sidewalks or other planned or existing structures
Lighting, signs, signal poles and ITS facilities
Existing and proposed overhead or underground utilities
Clear Zone/Lateral offset (plotted and noted frequently on each plan sheet
Outdoor advertising signs and view zones for permitted outdoor advertising signs

Limits of clear sight

Transit facilities

Proposed areas which are reserved for landscape improvements (shown in bubble diagram format)

VEGETATION DISPOSITION PLANS

Vegetation Disposition Plans are intended to be included in the Roadway Plans set as details for Selective Clearing and Grubbing and include detailed plans showing existing vegetation to be removed, preserved or relocated.

LANDSCAPE PLANS – DETAILS AND CROSS SECTIONS

Applicable landscape details as needed or identified in the project scope

Chapter 3

Key Sheet and Signature Sheet

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

3.2 Key Sheet

3.2.1 Financial Project ID, Federal Funds, County Name and State Road Number

Add the following

Include a descriptive Project Name under the State Road Number.

3.2.3 Project Location Map and North Arrow

Add the following language

When applicable, the county milepost as well as the Turnpike system milepost must be shown correct to three decimal places under the begin project station.

3.2.5 Index of Roadway Plans

Add the following language

Each sheet in the plan set must have a unique sheet number. Do not duplicate sheet numbers within the plan set.

3.2.9 Revisions

Add the following language

When the “Revisions” area becomes so large that a new sheet is required to allow for the additional text, the Lead Key Sheet should still be included in the revision for reference. A numbered revision triangle as well as “See Sheet 1A” note should be placed in the “Revisions” area on the Lead Key Sheet.

When new sheets are being introduced as a part of the revision, identify those added sheets in the “Revisions” area as shown in the example below:

*REVISIONS**FINANCIAL PROJECT ID 419570-1-52-01 & 419570-3-52-01*

 *Roadway Sheets 1, 2, 3, 6, 11, 17, 18, 23, 25, 27, 32, 33 & 37 (Revised 12-2-08)*
Roadway Sheet 33A (Added 12-2-08)

When new sheets are being introduced as a part of the revision, identify those added sheets in the Index of Plans.

See both the TPPPH and PPM Volume I Chapter 20 for additional information on formatting the Key Sheet for revisions.

Add the following section

3.2.11 Bench Mark Datum

Add one of the following notes, to the right side of the key sheet, depending on the type of datum used:

“This project is designed to NAVD, 1988 Datum.”

Or

“This project is designed to NGVD, 1929 Datum.”

Chapter 4

Summary of Pay Items

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

No changes to the entire chapter

Chapter 5

Drainage Map and Bridge Hydraulic Recommendation Sheet

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

5.1 Drainage Map

Replace 2nd sentence with the following

Drainage maps must be developed using a photographic (aerial or other) base map and must be included in the construction plans.

5.1.1 Plan View

Add the following as items

8. General location of landfills or contamination sites must be indicated on the plan view of the drainage maps. Include a drainage map note to describe known details of site and potential for restrictions to construction methods.
9. Wellfield Protection areas, if any, must be shown on the plan view. Include the wellfield name and associated regulatory agency.
10. FDEP impaired water body basin boundaries, if any, must be shown on the plan view. Include the impaired water body name.
11. Place the following information note on the drainage map when plan elevations are given in NAVD 1988 Datum. (The **X.XX** value below is the conversion between NGVD '29 and NAVD '88 for the project location. (It may vary for the length of long projects. Add note as appropriate.)

If the conversion is negative, suggest showing the NGVD '29 value as **0.00** and the NAVD '88 as a positive number. The **YY.YY** below is relative to the conversion.)

NOTE:

All elevations are NAVD '88 Datum
(NAVD '88 EL 0.00 = NGVD '29 EL X.XX)

For Example: 15.98 shown in plans is equal to YY.YY
NGVD '29

5.1.2 Profile View

Replace 1st sentence with the following

The profile view must comply with the following requirements:

Chapter 6

Typical Sections

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

6.1 General

Add the following

Include typical sections for each proposed electronic toll point. These typical sections are intended to represent the required 100 feet of loop pavement underneath the toll gantry. Include these typical sections in contract plans and the typical section package.

6.2 Mandatory Information

Add item e. to Bullet #2

e. Truck DDHV

Exhibit 6-1 Standard Notes for Typical Section Sheets

Add the following

4. 1:6 FOR FILLS TO 5'
1:6 TO EDGE OF CLEAR ZONE & 1:4 FOR FILLS 5' TO 10'
1:6 TO EDGE OF CLEAR ZONE & 1:3 FOR FILLS 10' TO 20'
1:2 WITH GUARDRAIL FOR FILLS OVER 20' AND MUST INCLUDE SHOULDER GUTTER
SLOPES STEEPER THAN 1:4 MUST INCLUDE SHOULDER GUTTER FOR ALL FILL HEIGHTS

Chapter 7

Summary of Quantities

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

No changes to the entire chapter

Chapter 8

Summary of Drainage Structures and Optional Materials Tabulation

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

No changes to the entire chapter

Chapter 9

Project Layout

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

No changes to the entire chapter

Chapter 10

Roadway Plan-Profile and General Notes

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

10.2 Roadway Plan Portion

10.2.2 Horizontal Curves

Add the following to required Curve Data Information

DS (Design Speed)

Replace the second paragraph with the following

Horizontal curve information must be shown on their own individual sheets known as “Coordinate and Curve Data” and must contain all horizontal curve information as identified in the PPM and the TPPPH as well providing the “Northing/Easting” information for the PC, PI, PT, and CC of the curves.

10.4 General Notes

Exhibit GN-01 General Notes for Roadway Plan and Roadway Plan-Profile Sheets

Add the following notes

5. All bottom profile elevations and cross section elevations for treatment/attenuation swales must be constructed to within 0.1 feet +/- of the values shown on the plans. Also, ditch-block top elevations and/or any longitudinal berms adjacent to treatment/attenuation swales must also be constructed within this earthwork tolerance.
6. Where a concrete collar/jacket is called for in the plans, the pipe is to be removed to the nearest joint to begin the placement of the new pipe; unless it would require encroachment into the adjacent lane. If a concrete collar/jacket is still necessary, the concrete is to be cured and inspected to assure the integrity of the collar prior to placement of fill material. Pipe joints must be wrapped in accordance with Index 280. Filter fabrics used to wrap pipe joints in accordance with Specification 430 and must be Type D-3 with an A.O.S. of 70 to 100. *Designer Note: With the above comment, there needs to be added an additional 8' length of pipe in the quantities for the tie in at each site where a concrete collar would have been used. Also, if there is any way to do a mechanical type collar, it would be preferable.*

Chapter 11

Special Profiles & Back-of-Sidewalk Profiles

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

Add the following section

11.4 Treatment/Attenuation Swales

The following labels must be used to locate and identify treatment swales in the profile view of the plans:

Begin Treatment/Attenuation Swale Sta. 99+99 Left (or Right)

End Treatment/Attenuation Swale Sta. 108+46 Left (or Right)

Construct Ditch Block; Sta. 99+99 Left (or Right); Top Elevation 10.30

Begin Treatment/Attenuation Berm Sta. 99+99 Left (or Right); Top Elevation 10.50

End Treatment/Attenuation Berm Sta. 108+46 Left (or Right); Top Elevation 10.50

For plan sets that do not have a profile view, the stations and elevations above must be summarized in a table that uses the same naming convention. Suggested formats are shown below.

Summary of Treatment/Attenuation Swale Locations				
Begin Station	Begin DPI	End Station	End DPI	Side
99+99	10.30	108+46	10.30	Left
103+02	10.70	106+53	10.20	Right
107+98	9.45	110+78	9.00	Right

Summary of Ditch Blocks		
Station	Side	Top Elev.
99+99	Left	10.30
100+02	Right	11.25
123+56	Left	9.70

Summary of Treatment/Attenuation Berm Locations				
Begin Station	Begin Top Elev.	End Station	End Top Elev.	Side
99+99	12.30	108+46	12.30	Left
103+02	13.00	106+53	12.50	Right

Note that Treatment/Attenuation Berm locations need only be specified when a special longitudinal berm is to be constructed above natural ground in order to increase storage in the swale. Where the outside boundary of the treatment/attenuation swale is the intersection between the backslope and natural ground, the drainage engineer will ensure that the design high water does not exceed 0.5 foot below the elevation of the intersection point and no special berm information is necessary in the plans. See Chapter 10 Exhibit GN-01 for required standard project notes.

Chapter 12

Project Control

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

No changes to the entire chapter

Chapter 13

Intersection and Interchange Details/Layouts

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

No changes to the entire chapter

Chapter 14

Drainage Structures

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

14.2 Required Information

Add the following sentence to paragraph 6 “For each drainage structure...”

Label all wall zone pipes.

Chapter 15

Lateral Ditch/Outfalls, Retention/Detention and Mitigation Areas

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

No changes to the entire chapter

Chapter 16

Special Details

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

No changes to the entire chapter

Chapter 17

Soil Survey

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

No changes to the entire chapter

Chapter 18

Roadway Cross Sections

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

18.2 Required Information

Add the following paragraph

Critical cross sections must be provided on all projects containing new bridges, widening of existing bridges, new toll gantries, and existing toll gantries where the roadway pavement underneath the gantry is being modified. Critical cross sections must be provided at the beginning and end of all bridges as well as at the center line of the toll gantries. Critical cross sections must also need to be included in the critical cross sections for all TTCF phases affecting the design elements mentioned in this paragraph.

Chapter 19

Temporary Traffic Control Plan

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

No changes to the entire chapter

Chapter 20

Utility Adjustments

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

No changes to the entire chapter

Chapter 21

Selective Clearing and Grubbing

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

No changes to the entire chapter

Chapter 22

Miscellaneous Structures Plans

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

No changes to the entire chapter

Chapter 23

Signing and Pavement Marking Plans

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

23.4 Tabulation of Quantities and Pay Item Notes

Add the following paragraph

The format of the quantity sheets must include a breakdown of pay items by type. For example, quantities for RPM's must be categorized by RPM type (mono-directional white, bi-directional yellow, bi-directional white/red, etc.)

23.5 General Notes

Add the following paragraphs

Typical General Notes are shown in the TPPPH Traffic Plans Guide Drawings, sheet 101-1.

The Applicable notes shown on the guide drawing should be added to the plans.

23.7 Guide Sign Worksheet

Add the following paragraph

The **FHWA Standard Highway Signs Manual** and **MUTCD** guidelines for sign panel design, font usage and letter spacing must be used as a standard. The Turnpike encourages the use of the "GuidSign" software by Transoft Solutions (version 5.0 or later) software for sign panel layouts. However, this software includes numerous user options that must be set as described in the remainder of this paragraph to obtain acceptable output. Coordinate settings (i.e., x and y) must not be used. Sufficient vertical and horizontal dimensions must be provided on the sign face graphic to specify proper location of all elements. Code names for symbols, shields and arrows in the spacing table must not be used. All elements (shields, symbols, arrows, etc.) must be properly dimensioned within the sign layout area. The panel dimensions in the summary table must not include the size of the exit number panel. The Exit Panel is manufactured separately, so the details for this panel must be shown separately.

23.8 Sign Supports

23.8.1 Multi-Post Signs

Add the following paragraph

All multi-post signs must have cross-sections. The cross sections must include the location of ditches, guardrails, barrier walls, right of way lines, potentially conflicting utilities and lane lines for proper location of the signs. Sign cross sections should be drawn as viewed by approaching traffic. The edge of travel elevation of the roadway and all appropriate references to this point must be clearly labeled. More than one multi-post cross section may be placed within a single cross section sheet as long as legibility is maintained. These types of cross sections do not require full roadway coverage. The recommended scale for the cross section is 1"= 10' horizontally and vertically. A graphic representation of each sign panel legend must be shown on the cross section sheet.

23.8.2 Overhead Sign Cross Section and Support Structure

Add the following paragraph

Proposed overhead truss span, overhead cantilever and bridge-mounted signs require cross sections. Sign panel replacements on overhead structures require cross sections. The cross sections must include the location of ditches, guardrails, barrier walls, right of way lines, potentially conflicting utilities and lane lines for proper location of the signs. Sign cross sections should be drawn as viewed by approaching traffic. The grade elevation at the top of the foundation (along with its location), the elevation at the highpoint of the roadway directly beneath the structure and the vertical clearance from the high point of the roadway directly beneath the structure to the bottom of the sign luminaries must be clearly labeled. A graphic representation of each sign panel legend must be shown on the cross section sheet. For overhead signs with down arrows, up arrows at 45 degrees, or other lane specific legends, for which lateral placement is critical, that portion of the legend should be shown over the corresponding lane to ensure correct placement relative to the roadway. Any arrows, including down arrows and up arrows (straight or at 45 degrees), that designate lane assignments should be located within the center 1/3 of the associated lane. For overhead signs with down or up arrows, show the lane lines on the sign cross section to ensure the down arrow is centered over the appropriate lane. Where applicable, for historical documentation, a note must be added to each sign structure cross-section that the design accounts for the 25% increase in area.

Chapter 24

Signalization Plans

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

24.1 General

Add the following items

8. Interconnect/Communication Plan (if required)
9. Temporary Signalization Sheets (if required)
10. Internally Illuminated Street Name Signs Detail(s) (if required)
11. Electrical Power Service Detail (if required)

24.5 General Notes

Add the following

The designer must coordinate with the Maintaining Agency of the traffic signal and include the appropriate notes that comply with Maintaining Agency requirements.

24.6 Plan Sheets

24.6.2 Required Information

Modify the following

6. Electrical service location and proposed electrical service routing.
7. Location of signal poles and span wires (ground elevation and elevation of roadway crown and bearing data).

24.7 Interconnect/Communication Plan

Add the following after last paragraph

The designer must coordinate with the Traffic Signals Maintaining Agency and verify if proposed interconnect cables and conduits are required.

Chapter 25

Lighting Plans

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

25.1 General

Replace the third paragraph with the following

The Lighting Plans must be assembled as follows:

1. Key Sheet
2. Tabulation of Quantities
3. Lighting General Notes
4. Legend Sheet *
5. Pole Data *
6. Underdeck Luminaire Data *
7. Sign Luminaire Data *
8. Layout Sheets (as applicable)
9. Plans Sheets
10. Underdeck Lighting Plan Sheets
11. Underdeck Lighting Section/Details Sheet
12. Load Center Schematic One-Line Diagram, Power Riser Diagram, Service Point Details, Panelboard Schedules, and Grounding Details Sheet(s)
13. Power Riser Diagram and Panelboard Schedules (for projects with box girders) Sheet(s)
14. Miscellaneous Details Sheet (as applicable)
15. Foundation Details - High Mast (if required)
16. Boring Data Sheets - High Mast (if required)

* Sheets may be combined based on project size.

25.4 Tabulation of Quantities and Standard Notes

Add the following section

25.4.1 Lighting General Notes Sheet

A lighting general notes sheet must be provided (see the latest Lighting Guide Drawings). All notes must be modified as necessary to make them project specific and to describe any special considerations and directions to the Contractor. Remove general notes that do not apply. A note indicating “not all notes are applicable” or similar is not acceptable.

Add the following section

25.4.2 Pay Items

Provide pay item notes below Tabulation of Quantities Table on first sheet only or reference the location of the pay item notes in all Tabulation of Quantities Tables (if not shown on the first sheet).

25.5 Pole Data and Legend Sheet

Add the following to the list in paragraph 2

7. Pole Number
8. Tilt angle (in degrees) for pole-top luminaires
9. Aiming angle and direction/orientation for each luminaire on high mast poles

Note:

When a pole has two arms, then the number "two" must be placed under the respective arm and luminaires column.

Pole numbering must be coordinated and follow the maintenance scheme

Add the following

The following information must be given for each sign luminaire:

1. Sign Panel
2. Circuit Number
3. Roadway Station and Offset
4. Arm Length
5. Tilt angle (in degrees)
6. Luminaire Wattage
7. Luminaire Placement (Configuration, Sign Size, Spacing Dimensions)

The following information must be given for each underdeck luminaire:

1. Luminaire Name
2. Circuit Number
3. Roadway Station and Offset
4. Luminaire Wattage
5. Mounting Height
6. Pay Item Number

Provide a tilt angle convention detail for all fixtures types that are tilted.

The Legend section of this sheet should include the following information:

1. Provide a separate and unique symbol for each condition. Basically, a separate symbol is needed for each bid item number used on the tabulation of quantities. Do not use the same light pole luminaires symbol for two different mounting heights or two different mounting types.
2. Provide symbol with proper description for the conduit and pull boxes that are embedded in the bridge structures or traffic barrier walls.
3. Remove any symbols that are not applicable. A note indicating “not all symbols are applicable” or similar is not acceptable.

25.6 Plan Sheets

25.6.2 Required Information

Modify the second paragraph as follows

The lighting layout must be shown on the plan format. This must be accomplished by symbols which represent poles, underdeck luminaires, pull boxes, conduit, service points and all necessary light fixtures or electrical devices to be part of the project design. A flag or note must be used to identify conduit runs.

Add the following

The lighting plan sheet that shows the load center must show, label and identify the power company point of service and must also show the routing of the service feeder from the power company service pole to the load center. The plan must show the branch circuit conduit runs from the last light pole to the load center with a wiring call-out identifying the circuit designations in addition to the conductor sizes and quantities (in cross section). The phase, neutral, and ground conductors must be clearly identified. Provide a detailed description of the load center to include the following information:

1. Load Center designation.
2. Station and offset of the load center.
3. Full description of the service voltage.
4. Service Type (Overhead or Underground).

Specifics for grounding must be shown in equipment details in the plans. Notes must not be solely relied upon for grounding.

An underdeck lighting plan sheet must be prepared for each underdeck lighting location. This plan sheet must be drawn to scale with the scale used properly identified, must use the bridge plan as background with the intensity reduced, and must also indicate the electrical work associated with bridge mounted signs if applicable. The plan must show the location of the embedded junction boxes, conduits and associated electrical work with proper notation to indicate what items are incidental to the bridge. A separate section/detail sheet must be prepared

to show all necessary mounting details and associated hardware needed for the installation of the underdeck luminaires.

All widening, resurfacing, and All Electronic Tolling (AET) projects must show existing light fixture locations.

Add the following section

25.8 Box Girder Maintenance Lighting and Power Plan Sheet(s)

FDOT Design Standards Index No. 21240 must be used as a guide in the preparation of the box girder lighting/power plans. The Box Girder Maintenance Lighting Notes are minimum requirements that must be maintained and met except as revised hereafter. A sheet must be prepared for each box girder. This sheet must show the internal lighting, receptacles, switches, load centers, life safety devices, and wiring needed for maintenance. The sheet must be drawn to scale and must provide a list or table identifying the quantity of each electrical item within each box girder.

A panelboard schedule must be provided for the distribution panelboard and for each mini power center.

Add the following section

25.9 Load Center Schematic One-Line Diagram, Power Riser Diagram, Service Point Details, Panelboard Schedules, and Grounding Details Sheet(s)

Provide a detailed design of the load center to include the following information:

1. Load Center designation.
2. Station and offset of the load center.
3. Full description of the service voltage.
4. Service Type (Overhead or Underground).
5. Indicate whether the enclosure will be pole mounted or pedestal mounted.
6. Indicate the enclosure NEMA rating.
7. Whether a photocell is required.
8. Power distribution riser diagram with short circuit values.
9. Conductor ampacities (sizes) and insulation type.
10. Circuit interrupting devices and fault current interrupting capability.
11. Location and characteristics of surge protective devices.
12. Main and distribution equipment, control devices, locations and sizes.
13. Load computations.
14. Grounding and bonding must indicate at a minimum the following:
 - A. Type and location of grounding electrodes.

- B. Bonding requirements.
 - C. Testing requirements.
 - D. Conductor material type, size and protection requirements.
 - E. Connections of separate grounding systems, bonded, and use requirements.
15. A note requiring shop drawings for all the electrical equipment associated with the load center. The load connected to each branch circuit breaker and the overall total load connected.
16. If future luminaires are included in the branch circuit conductor size, the affected lighting plans must be provided with a proper note defining the number of future luminaires include.

Add the following section

25.10 Lighting Design Analysis Report (LDAR)

A Lighting Design Analysis Report (LDAR) must be provided (LDAR guidelines can be found at the link below). LDAR guidelines must be modified as necessary to make them project specific and to describe any special considerations.

<http://floridasturnpike.com/design/disciplines/lighting.html>

Chapter 26

Landscape Plans

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

26.1 General

Add the following section

26.1.1 Phase Submittals

Stand-alone landscape projects must have four phase submittals as follows, two of which must be accompanied by a full Electronic Plans Review process:

- Phase I Submittal (30% plans) (Limited Review)
- Phase II Submittal (60% plans) (Full ERC Review)
- Phase III Submittal (100% plans) (Full ERC Review)
- Phase IV Submittal (Final Plans) (Limited Review)

Final Plans will be submitted following acceptable resolution of all Phase III ERC comments. The Final Plans review will consist of a back-check by the District Landscape Architect or assignee.

Depending on the project size and complexity, the consultant may be tasked with the development of a Purpose, Need and Feasibility Study which will include a comprehensive inventory and analysis of the existing conditions and preparation of a Concept Level or Landscape Opportunities Plan. The Purpose, Need and Feasibility Study will be submitted for full ERC review.

26.4 Tabulation of Quantities and Schedule

Add the following section

26.4.3 Bid Factor Tabulation of Quantities

Landscape projects that are scheduled to be let through the Bid Factor Contract must include a separate spread sheet tabulation of quantities showing the item no., plant type, size, quantity and price in accordance with the applicable Bid Factor Contract documents. This spreadsheet is not intended to be a part of the contract documents.

26.5 General Notes

Add the following paragraphs

General notes must identify FDOT standard specification sections, included materials sections that are appropriate for the landscape project.

Where the FDOT specifications do not exist or where they are not adequate for the landscape design, existing site conditions or proposed plant materials, provide technical specification sections as required to include, but not limited to, soil mixtures, fertilizer requirement for different plant materials, mulches, plant material, vegetation, irrigation systems, site amenities, hardscape elements, and any fences or lighting included in the project.

All FTE landscape designs must comply with the “Florida Turnpike Enterprise Landscape BRAND Guidelines” most current issue. This document can be found at:

<http://floridasturnpike.com/design/docsandpubs.html>

Designer must review MOT General Notes and incorporate in plans the applicable traffic control notes and Regional contact information. This document can be found at:

<http://floridasturnpike.com/design/tppph.html>

Utility Notes:

1. Utility information shown in the drawings is schematic in nature and a graphic depiction only. No utility facilities will be relocated. If a utility is in conflict with the proposed landscape, notify the engineer immediately.
2. Comply with Chapter 556 of the Florida Statutes during the performance of excavation or demolition operations. Notify utility owners through Sunshine State One Call of Florida, Inc. (ph# 811). The contractor must have a representative present when the utility company designates their facilities. Have all utilities designated prior to the commencement of any construction.
3. FDOT/Turnpike (Department) owned utilities will not be located through the Sunshine State One Call system. Department owned utility facilities may include buried electric, Intelligent Transportation System (ITS) fiber optic lines, buried telephone, water, and sewer. The contractor must designate all Department owned subsurface utility facilities within the project limits and, if necessary, physically expose Department owned utility facilities that may be affected.
4. There will be no separate compensation for performing this utility locate work. All costs must be included in the unit cost for plant materials.
5. The Contractor must exercise extreme care while excavating near utilities. The Contractor must be responsible for the repair of any damage to existing utilities caused as a result of the work of this contract.

Bid Factor Contract Projects:

The following note must be added to the general notes section:

“Contractor must determine if more than one acre of soil will be disturbed as a result of the construction activities. If more than one acre of soil is disturbed, the contractor is responsible for submittal of a Notice of Intent (NOI) to the Florida Department of Environmental Protection

(FDEP) for use of the NPDES permit, per FDOT Specification 104. Contractor must be responsible for any information necessary to use the NPDES permit, including a sediment control plan and a Stormwater Pollution Prevention Plan (SWPPP).”

All other FDOT FTE Projects:

During design phase of the project, the designer must prepare an erosion and sediment control plan as well as a SWPPP if more than one acre of soil is anticipated to be disturbed, based on the proposed construction activities. The following note must be used in the general notes section:

“Contractor must determine if more than one acre of soil will be disturbed as a result of the construction activities. If more than one acre of soil is disturbed, the contractor is responsible for submittal of a Notice of Intent (NOI) to the Florida Department of Environmental Protection (FDEP) for use of an NPDES permit, per FDOT Specification 104. Contractor may choose to use the provided erosion and sediment control plan and SWPPP within the plan set, or develop independent documentation for submittal to FDEP.

26.6 Plan Sheets

Replace the entire section

Contract Plan sheets must be prepared in a manner that is consistent with a set of construction documents rather than an illustrative plan. Therefore plan sheets must utilize simplified symbols depicting the location of materials in a legible manner. Plan sets must employ a level of detail and clarity that allows the reviewer to assess the relationship between the proposed landscape design, the roadway plans, utilities, outdoor advertising signs, and adjoining land use.

Concept Plans and Landscape Opportunity Plans must be plotted on a roll plot and be of sufficient size and scale as to adequately depict the inventory, analysis and concept design.

All Landscape Plans will include, at a minimum, the following General Notes and/or Specifications:

1. Construction documents must include a provision that the Contractor must restore all landscaped areas to roadway plan grading specification and cross section to original grade or grades acceptable to the Engineer.
2. Landscaping must be located such that drainage pipes, ditches and swales are not blocked or flows impeded. When available, the DHW of ditches, swales and ponds must be shown on landscaping plans. If DHW elevations are not available, approximate pond breaks (top and bottom of mainstream berm and side slope breaks) and top and bottom of swales/ditches must be shown within the plans. Landscaping location must also consider maintenance access along/across ditches and around stormwater management facilities. Maintenance access should be provided so that maintenance forces may gain access to the facility.
3. All planting details for beds on a 2:1 (1:2 rise:run) slopes or greater must include the use of weed control and erosion control fabric. Fabrics must be anchored or toed so that storm water cannot run underneath the mat. Weed control fabric and erosion control fabric must be biodegradable within 3 years.

4. The planting plans and/or maintenance plans must clearly indicate the limits of the installation contractor's mowing limits and maintenance limits. Mowing limits must be a minimum of 6 feet outside the outermost plant when plants are "bedded" or 6 feet around a tree which is located in a turfgrass area.
5. Bid Factor Projects (BF) will not require landscape general notes, specifications or details. This information is included in the Contract Specifications. BF plans must be prepared in accordance with these documents. Project cost estimates must be generated utilizing the bid factor units included in the BF contract.
6. BF plans will not require an establishment period Maintenance Plan. A post-establishment Maintenance Plan must be required for all projects.

Although the clear zone, horizontal clearance and/or guardrail setback distance is plotted on the plans, these distances may not be enough to satisfy horizontal sight distance requirements along every horizontal curve, particularly along ramps and loop ramps at interchanges. There may be cases where the horizontal sight offset (HSO) requirement is outside either the clear zone or the guardrail setback line. In these instances the greater controlling criteria (e.g. the HSO) should be shown on the plans and be free from obstructions.

Setbacks from roadway and other related features to proposed landscape materials must be as indicated on the "FTE Minimum & Preferred Landscape Setbacks for Installation and Maintenance Operations". Should there be conflicts between any FDOT standards or Indexes, the FDOT criteria must control.

26.6.2 Requirements for Plan Sheets

Add the following to Item 4(after Drainage systems)

(including but not limited to existing and proposed storm sewer systems, cross drains, underdrain systems, french drain systems, ditches, retention/detention facilities, floodplain compensation areas, etc.).

Add the following item

20. All FTE owned utilities (fiber optic, water, sanitary sewer, electric etc.)

26.7 Details Sheet

Add the following paragraph

Bid Factor projects may not include details or specifications which materially differ from the FDOT standard details. Details describing unique effects, locations or which modify the FDOT standard details based on unique environmental conditions may be utilized.

Chapter 27

Utility Work by Highway Contractor Agreement Plans

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

No changes to the entire chapter

Chapter 28

Stormwater Pollution Prevention Plan

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

28.3 Site Map

Add the following item

9. The limits of construction and silt fence installation must be indicated at the same location on the plans.

Chapter 29

Intelligent Transportation Systems Plans

The following are changes, additions or deletions to the January 2017, Topic #625-000-008, Plans Preparation Manual (PPM), for use on Turnpike projects only.

29.6 Plan Sheets

29.6.2 Required Information

Add the following paragraphs

Service voltage, circuit numbers with load center identification, the number of ungrounded conductors, neutral conductors, and equipment grounding conductors must be labeled on all ITS power conduit call-outs on all ITS plan sheets. Service point details must be provided with a one line diagram, riser diagram, reference and general notes, and panel schedules. Panel schedules must include assignment of panel ratings such as KAIC, enclosure type, service voltage, ground bus, circuit breakers and ampacities, and total and demand loads. The panel schedules must match the load analysis submitted as part of the ITS Power Design Analysis Report (PDAR). Location of source points and ITS load centers must be stationed in the ITS plans. Specifics for grounding must be shown in equipment details in the plans. Notes must not be solely relied upon for grounding.

The ITS PDAR must include all items in Section 7.7 of Volume I of the TPPPH including the power company correspondence and maximum available fault current letters. Technical Special Provisions (TSP) must be provided for automatic transfer switches (ATS) and engine generators, where ITS generators are provided as part of the ITS scope of the project.

29.6.2.5 Fiber Optic Cable and Interconnect

Add the following paragraph

A detail must be included for the design of the ITS Splice Box. The Splice Box must be a concrete drainage style manhole.

All butt end splices completed in the field must be included in the as-built plans.

29.6.2.6 Vehicle Detection and Data Collection

Add the following paragraph

For express lane projects, include cross sections at every non-intrusive express lane detector location showing detector pole, detector mounting, detector cabinet and detection zones.