

Florida Greenbook

Manual of Uniform Minimum Standards for Design,
Construction and Maintenance for Streets and Highways

Subcommittee Meeting

Chapter 12 – Construction

Agenda

March 10, 2026
2:00 PM – 3:00 PM

Virtual on Microsoft Teams
[MS Teams Link](#)

2:00 PM	Welcome and Introductions	Derwood Sheppard
2:10 PM	Chapter 12 Review and Discussion (17 th Edition)	Jacqui Morris, Kittelson Staff
2:30 PM	Sub-Committee Discussion	Chapter 12 Sub-Committee
2:40 PM	Action Items and Next Steps	Jacqui Morris, Kittelson Staff
2:50 PM	Closing remarks <ul style="list-style-type: none">Public Comment	Jacqui Morris

Florida Greenbook

Manual of Uniform Minimum Standards for Design,
Construction and Maintenance for Streets and Highways

Subcommittee Meeting

Chapter 12 – Construction

Agenda

March 10, 2026
2:00 PM – 3:00 PM

Virtual on Microsoft Teams

Attendees	Rick Baldocchi Ryan Buck Juan Diaz Gene Howerton John W Macdonald Nikesh Patel	Jacqueline (Jacqui) Morris Jennifer Musselman Carrigan Allison
Topic		
1	Welcome and Introductions [Slide #1 – 3]	Jacqui Morris
	Jaqui Morris introduced herself and welcomed everyone.	
	Jacqui asked meeting attendees to introduce themselves. Each of the participants introduced themselves when called upon.	
2	Chapter 12 Outline Review (17th Edition) [Slide #4]	Jacqui Morris, Kittelson Staff
	<ul style="list-style-type: none">- Jennifer introduced Chapter 12, noting it is a lighter chapter that primarily directs users to other references rather than providing detailed criteria.	

Florida Greenbook

Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways

- Chapter updates are relatively minor and focused on consistency, grammar, and punctuation edits.
- In the Plans and Contract Documents section, language was simplified to reference “contract documents” rather than listing specific document types.
- The section also leaves decisions on submitting electronic plans to local jurisdictions.
- A new condition was added stating that proper personal protective equipment shall be worn by all individuals present in a work zone at all times.
- Jacqui noted that the revisions were informed by the previous subcommittee meeting and the user survey regarding potential updates.

3	Sub-Committee Discussion [Slide #5]	Chapter 3 Sub-Committee
	<ul style="list-style-type: none"> - Gene Howerton and Nikesh Patel indicated they were comfortable with the updates and supported maintaining the simplified language and general cleanup. 	
4	Action Items and Next Steps [Slide #5]	Jacqui Morris, Kittelson Staff
	<ul style="list-style-type: none"> - Jacqui proposed presenting the chapter updates to the advisory committee and noted that a follow-up subcommittee meeting may not be necessary. 	
5	Public Comment [Slide #6]	Jacqui Morris
	<ul style="list-style-type: none"> - John Macdonald asked whether language related to utility coordination during construction could be included in the chapter. He noted that their office uses the Utility Accommodation Manual (UAM) and asked whether it is already referenced. - Jennifer noted that the chapter does not currently reference the UAM. - Ryan Buck asked whether utilities are addressed elsewhere in the Greenbook. - Jacqui noted many local governments have their own utility coordination processes, which may make it challenging to standardize language. - Jacqui asked the group whether adopting or referencing the UAM should be considered. 	

Florida Greenbook

Manual of Uniform Minimum Standards for Design,
Construction and Maintenance for Streets and Highways

- Nikesh Patel noted that Florida Statutes would need to be reviewed, as the UAM currently applies to state roads and not necessarily to local municipalities. He suggested evaluating whether UAM guidance could be adapted for local governments.
- Jacqui stated the team will review the issue internally and revisit the topic during the April meeting.
- Rick Baldocchi asked whether the intent of the chapter is to provide guidance for local governments on construction activities for non-DOT projects.
- Jacqui responded that the Greenbook applies broadly to all roads in Florida, including local and private roads, particularly where the FDOT FDM is not used.
- Rick asked whether having a construction engineer with a PE on-site is a requirement or recommendation, noting that some jurisdictions may not have a PE on staff and may need to hire one.
- Rick also noted that as an Engineer of Record (EOR), he must sign and seal plans and would not be comfortable with others modifying CAD files after approval.
- Ryan Buck noted that safeguards typically exist to protect signed and sealed files.
- Jennifer suggested the committee could consider adding language preventing edits to signed and sealed plans.
- Jacqui noted that this topic could be brought to the full committee to ensure consistent practices.

6

Closing Remarks [Slide #7]

Jacqui Morris

Jacqui thanked the committee for their time and thoughtful review. Committee members were encouraged to contact Jacqui Morris or Derwood Sheppard with any questions regarding the chapter. Jacqui adjourned the meeting.

Florida Greenbook

Chapter 12 Subcommittee Meeting **Construction**

March 10, 2026



Public Meeting

*Welcome &
Introductions*

Agenda

March 10, 2026

2:00 PM	Welcome and Introductions	Derwood Sheppard
2:10 PM	Chapter 12 Review and Discussion (17 th Edition)	Jacqui Morris, Kittelson Staff
2:30 PM	Sub-Committee Discussion	Chapter 12 Sub-Committee
2:40 PM	Action Items and Next Steps	Jacqui Morris, Kittelson Staff
2:50 PM	Closing remarks <ul style="list-style-type: none">Public Comment	Jacqui Morris

Online Attendees *Meeting Logistics*



The chat feature can be used to ask questions to the presenters or share resources.



Be sure to mute your microphone unless you are asking a question.



You may turn on or off your video camera accordingly.



Raise your virtual hand to ask a live question.

Chapter 12

Draft

Chapter 12

Construction

12.1 Introduction.....	12-1
12.2 Objectives.....	12-2
12.3 Control of the Work.....	12-3
12.3.1 Plans and Contract Documents	12-3
12.3.2 Coordination of Plans, Specifications, and Special Provisions	12-4
12.3.3 Conformity of Work with Plans.....	12-4
12.3.4 Conformity of Work Shown in Regulatory Permits	12-5
12.3.5 Authority of the CE.....	12-5
12.3.6 Engineering and Layout.....	12-5
12.3.7 Contractor's Supervision.....	12-6
12.3.8 General Inspection Requirements	12-6
12.3.9 Final Construction Inspection Maintenance until Final Acceptance	12-7
12.4 Control of Materials	12-8
12.4.1 Source of Supply and Quality Requirements	12-8
12.4.2 Inspection and Tests at Source of Supply.....	12-8
12.4.3 Control by Samples and Tests	12-8
12.4.4 Quality Control System.....	12-9
12.1 Introduction.....	12-1
12.2 Objectives.....	12-2
12.3 Control of the Work.....	12-3
 12.3.1 Plans and Contract Documents	12-3
 12.3.2 Coordination of Plans, Specifications, and Special Provisions	12-4
 12.3.3 Conformity of Work with Plans.....	12-4
 12.3.4 Conformity of Work Shown in Regulatory Permits	12-5
 12.3.5 Authority of the Construction Engineer.....	12-5
 12.3.6 Engineering and Layout.....	12-5
 12.3.7 Contractor's Supervision.....	12-6
 12.3.8 General Inspection Requirements	12-6
 12.3.9 Final Construction Inspection Maintenance until Final Acceptance	12-7



*Committee Discussion
& Next Steps*

General Discussion

OPEN FOR PUBLIC COMMENT



Online Attendees *Meeting Logistics*



The chat feature can be used to ask questions to the presenters or share resources.



Be sure to mute your microphone unless you are asking a question.



You may turn on or off your video camera accordingly.



Raise your virtual hand to ask a live question.



CONTACT

If you have any questions, comments or suggestions regarding the *Florida Greenbook*, please contact:

Derwood Sheppard, P.E.

State Roadway Design Engineer

Email: Derwood.Sheppard@dot.state.fl.us

Phone: (850) 414-4334

Jacqui Morris, CPM, CNUa

Criteria Publications Coordinator

Email: jacqueline.Morris@dot.state.fl.us

Phone: (850) 414-4352

Thank you for attending!



Chapter 12

Construction

12.1 Introduction.....	12-1
12.2 Objectives.....	12-2
12.3 Control of the Work.....	12-3
12.3.1 Plans and Contract Documents	12-3
12.3.2 Coordination of Plans, Specifications, and Special Provisions	12-4
12.3.3 Conformity of Work with Plans	12-4
12.3.4 Conformity of Work Shown in Regulatory Permits	12-5
12.3.5 Authority of the CE.....	12-5
12.3.6 Engineering and Layout.....	12-5
12.3.7 Contractor’s Supervision.....	12-6
12.3.8 General Inspection Requirements	12-6
12.3.9 Final Construction Inspection Maintenance until Final Acceptance	12-7
12.4 Control of Materials	12-8
12.4.1 Source of Supply and Quality Requirements	12-8
12.4.2 Inspection and Tests at Source of Supply	12-8
12.4.3 Control by Samples and Tests	12-8
12.4.4 Quality Control System	12-9
12.1 Introduction.....	12-1
12.2 Objectives.....	12-2
12.3 Control of the Work.....	12-3
 12.3.1 Plans and Contract Documents	12-3
 12.3.2 Coordination of Plans, Specifications, and Special Provisions	12-4
 12.3.3 Conformity of Work with Plans	12-4
 12.3.4 Conformity of Work Shown in Regulatory Permits	12-5
 12.3.5 Authority of the Construction Engineer	12-5
 12.3.6 Engineering and Layout.....	12-5
 12.3.7 Contractor’s Supervision.....	12-6
 12.3.8 General Inspection Requirements	12-6
 12.3.9 Final Construction Inspection Maintenance until Final Acceptance	12-7

12.4 Control of Materials	12-8
12.4.1 Source of Supply and Quality Requirements	12-8
12.4.2 Inspection and Tests at Source of Supply	12-8
12.4.3 Control by Samples and Tests	12-8
12.4.4 Quality Control System	12-9

12 Construction

12.1 Introduction

The purpose of this chapter is to establish guidelines for field procedures, as they pertain to control of construction projects, supervision, and contract administration. All construction projects require an inspection process, ~~to administer the contract~~, to certify both that the project has been constructed within reasonable conformance with the plans/specifications, and that the materials which were incorporated into the project were properly tested/certified, to administer the contract.

All construction projects require:

- An inspection procedure to administer the contract
- Certification

The ~~e~~Engineer of ~~r~~Record (EOR) is a ~~P~~professional ~~E~~engineer registered in the State of Florida ~~who~~that develops the criteria and concept for the project, performs the analysis, and is responsible for the preparation of the ~~p~~Plans and ~~s~~Specifications. The ~~m~~Maintaining ~~a~~Authority's ~~EOR~~Engineer of Record may be in-house staff or a consultant.

The ~~c~~Construction ~~e~~Engineer (CE) is a ~~p~~Professional ~~e~~Engineer registered in the State of Florida ~~who~~that supervises the construction of the project. The ~~m~~Maintaining ~~a~~Authority's ~~Construction Engineer~~CE (or D designee) may assign in-house staff or a consultant to act on their behalf.

12.2 Objectives

Construction of street and highway facilities is the result of the efforts of the ~~engineer,~~Engineer of Record (EOR), the contractor, and the owner. Minimum construction standards shall be followed to provide for proper implementation of the design. The following general objectives for roadway construction should be followed to ensure proper construction:

- All construction performed and all materials utilized shall be in reasonably close conformity with the construction plans and contract documents.
- The responsibilities and obligations of the ~~owner, engineer, and contractor~~EOR, contractor, and owner should be clearly defined.
- A safe working environment shall be provided in accordance with **Chapter 11—~~Work~~ Work Zone Safety and Mobility**.
- Adequate procedures through established methods of sampling and testing shall be implemented to provide for the control and placement of materials.

12.3 Control of the Work

12.3.1 Plans and Contract Documents

The ~~c~~Contractor will be furnished an appropriate number of copies of the plans and contract documents~~special provisions~~ as required for the particular project. The ~~c~~Contractor shall have available at the work site, at all times, one copy each of the plans and contract documents ~~(including relevant dDesign sStandards), sSpecifications, and sSpecial pProvisions.~~ Electronic plans may be submitted at the discretion of the maintaining agency.

12.3.1.1 Plans

The plans furnished consist of general drawings showing such details ~~that~~ which are necessary to give a comprehensive idea of the construction contemplated. Roadway plans will show, in general, alignment, profile grades, typical cross sections, and general cross sections, as necessary. Structure plans, in general, will show in detail all dimensions of the work contemplated.

12.3.1.2 Alterations in Plans

No changes shall be made ~~to~~ on any plan or drawing after it is approved by the EOR, except as authorized in writing by the EOR. Minor changes may be approved by the ~~C~~Engineer in consultation with the EOR.

All authorized alterations affecting the requirements and information given on the approved plans shall be in writing.

12.3.1.3 ~~Working Drawings~~Working, Shop, and Erection Drawings (for Structures)

12.3.1.3.1 General

The ~~C~~contractor shall furnish such working, shop, and erection drawings, as may be required, to complete the structure in compliance with the design shown on the plans.

12.3.1.3.2 Submission of Working, Shop, and Erection Drawings

All working, shop, and erection drawings prepared by the ~~c~~Contractor or ~~their~~his agents (subcontractor, fabricator, supplier, etc.) shall be reviewed, dated, stamped, approved, and signed by the ~~c~~Contractor prior to submission to the EOR for review. The ~~c~~Contractor's signed approval of submitted drawings ~~submitted~~ shall confirm they have ~~he/she has~~ verified the work requirements, field measurements, construction criteria, sequence of assembly and erection, access and clearances, catalog numbers, and other similar data. Each series of drawings shall

indicate the specification section and page or drawing number of the contract plans to which the submission applies. The ~~C~~contractor shall indicate on the working, shop, and erections drawings all deviations from the contract drawings and shall itemize all deviations in theirhis letter of transmittal.

12.3.1.3.3 Responsibility for Accuracy of Working Drawings

It is understood that approval by the EOR of the ~~c~~CContractor's working drawings does not relieve the ~~c~~CContractor of any responsibility for accuracy of dimensions and details, or for conformity of dimensions and details. The ~~c~~CContractor shall be responsible for agreement and conformity of theirhis working drawings with the approved plans and specifications.

12.3.2 Coordination of Plans, Specifications, and Special Provisions

The plans, specifications, ~~plans~~, special provisions, and all supplemental documents are integral parts of the contract, and a requirement occurring in one is as binding as though occurring in all. They are to be complementary and to describe and provide for a complete work.

In cases of discrepancy, the governing order of the documents shall be as follows:

- 1. Special ~~p~~Provisions
- 2. Plans
- 3. Standard ~~plans~~Drawings
- 4. Specifications

12.3.3 Conformity of Work with Plans

All work performed and all materials furnished shall be in reasonably close conformity with the lines, grades, cross sections, dimensions, and material requirements, including tolerances, shown on the plans or indicated in the specifications.

In the event the CE finds the materials or the finished product in which the materials are used to not be within reasonably close conformity with the plans and specifications, but reasonably acceptable work has been produced, the CEhe/she shall then make a determination if the work shall be accepted and remain in place. In this event, the CE will document the basis of acceptance by contract modification, which will provide for an appropriate adjustment in the contract price for such work or materials as the CEhe deems necessary to conform to theirhis determination based on engineering judgment.

In the event the CE finds the materials, or the finished product in which the materials are used, or the work performed, are not in reasonably close conformity with the plans and specifications and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected by and at the expense of the cContractor.

12.3.4 Conformity of Work Shown in Regulatory Permits

All work shall be accomplished in accordance with special conditions of the regulatory permits applicable to the project.

12.3.5 Authority of the ~~C~~onstruction Engineer

All work shall be performed to the satisfaction of the CE.

12.3.6 Engineering and Layout

12.3.6.1 Control Points Furnished

Horizontal and vertical control points are required at appropriate intervals along the line of the project to facilitate the proper layout of the work. The cContractor shall preserve all control points furnished.

12.3.6.2 Layout of Work

Utilizing the control points furnished, all horizontal and vertical controls shall be established as necessary to construct the work in conformance with the plans and specifications. The work shall include performing all calculations required and setting all stakes needed, such as grade stakes, offset stakes, reference point stakes, slope stakes, and other reference marks or points necessary to provide lines and grades for construction of all roadway, bridge, and miscellaneous items.

12.3.6.3 Personnel, Equipment, and Record Requirements

The cContractor shall employ only competent personnel and utilize only suitable equipment in performing layout work.

Adequate field notes and records, including those required by permit agencies, shall be kept as layout work is accomplished. These field notes and records shall be available for review by the CE as the work progresses, and copies shall be furnished to the CE at the time of completion of the project. Any inspection or checking of the cContractor's field notes or layout work by the CE, and the acceptance of all or any part thereof, shall not relieve the cContractor of their responsibility to achieve the lines, grades, and dimensions shown in the plans and

specifications. Proper personal protective equipment shall be worn by all people present in the work zone at all times. -

12.3.7 Contractor's Supervision

12.3.7.1 Prosecution of Work

The cContractor shall give the work the constant attention necessary to assure~~maintain~~ the scheduled progress and shall cooperate fully with the CE and with other contractors at work in the vicinity.

12.3.7.2 Contractor's Superintendent

The cContractor shall at all times have on the work site, as their~~his/her~~ agent, a competent superintendent capable of thoroughly interpreting the plans and specifications and thoroughly experienced in the type of work being performed. This individual,~~and who~~ shall receive the instructions from the CE or his/her authorized representatives.~~The superintendent shall have full authority to execute the orders or directions of the CE and to supply promptly any materials, tools, equipment, labor, and incidentals~~ that~~which~~ may be required. Such superintendence shall be furnished regardless of the amount of work sublet.

12.3.7.3 Supervision for Emergencies

The cContractor shall have a responsible person available at or reasonably near the work site on a twenty-four~~-~~hour basis, seven days a week, in order that they~~he/she~~ may be contacted in emergencies and in cases where immediate action must be taken to maintain traffic or to handle any other problems that might arise. The cContractor shall be responsible for initiating, installing, and maintaining all traffic control devices as described in **Chapter 11**~~—~~Work Zone Safety and Mobility and in the plans.

12.3.8 General Inspection Requirements

12.3.8.1 Cooperation by Contractor

No work shall be done nor materials be used without suitable supervision or inspection by the CE. The cContractor shall furnish the CE with every reasonable facility for ascertaining whether the work performed and materials used are in accordance with the requirements and intent of the plans and specifications.

12.3.8.2 Failure of ~~Construction Engineer~~ **CE** to Reject Defective Work During Construction

If, during or prior to construction operations, the CE should fail to reject defective work or materials, whether from lack of discovery of such defect or for any reason, such initial failure to reject shall in no way prevent ~~their~~his/her later rejection when such defect is discovered.

12.3.8.3 Qualifications for Services for FDOT Administered Projects

For projects administered by a local government that are wholly or partially funded by the Florida Department of Transportation (-FDOT), there are limitations on who may perform design; as well as ~~and~~ Construction Engineering and Inspection services (CEI). See **F.S. 337.14 (7) Application for qualification; certificate of qualification; restrictions, request for hearing** for more information.

12.3.9 Final Construction Inspection Maintenance until Final Acceptance

The ~~c~~CContractor shall maintain all work in ~~first-class~~ acceptable condition in accordance with both the plans and contract documents until it has been completed as a whole and has been accepted by the CE. When all materials have been furnished, all work ~~has been~~ performed, and the construction contemplated ~~by~~per the contract ~~has been satisfactorily completed~~, the CE will make the final inspection.

12.4 Control of Materials

12.4.1 Source of Supply and Quality Requirements

12.4.1.1 Only Approved Materials to ~~B~~be Used

Only materials conforming to the requirements of the specifications and approved by the ~~EOR~~engineer of Record shall be used in the work. Any materials proposed for use may be inspected or tested at any time during their preparation and use. No material which, after approval, has in any way become unfit for use, shall be used in the work.

12.4.2 Inspection and Tests at Source of Supply

12.4.2.1 General

The CE may undertake the inspection of materials at the source of supply.

12.4.2.2 Cooperation by Contractor

The ~~c~~Contractor shall assure the CE has free entry at all times to such parts of the plant as concern the manufacture or production of the materials ordered, and shall bear all costs incurred in providing all reasonable facilities to assist in determining whether the material furnished complies with the requirements of the specifications.

12.4.3 Control by Samples and Tests

12.4.3.1 Materials to be Tested, Samples

The CE may require any or all materials to be subjected to tests, by means of samples or otherwise, at production points, after delivery, or both ~~as they, as he/she may~~ may determine.

12.4.3.2 Applicable Standards

Methods of sampling and testing materials shall conform to the CE's requirements and should be in accordance with Florida Sampling and Testing Methods (FSTM) so far as covered therein. Otherwise, they should be in accordance with ~~the s~~Standards of ~~the American Association of State Highway and Transportation Officials (-AASHTO), the American Society for Testing and Materials (ASTM)~~, or other criteria as specifically designated by the CE. Where an AASHTO, ASTM, or other non-Florida ~~m~~Method is designated ~~while, but~~ a similar Florida ~~m~~Method ~~which is similar~~ exists, sampling and testing should be in accordance with the Florida ~~m~~Method.

Whenever in these ~~s~~Specifications, FSTM, AASHTO, ASTM, or other standards are referenced without identification of the specific time of issuance, the reference should be construed to

mean the most current issuance, including interims or addendums thereto, at the time of advertisement for bids for a project.

12.4.4 Quality Control System

12.4.4.1 General Requirements

The Contractor shall furnish and maintain a quality control system that will provide reasonable assurance that all materials and products submitted for acceptance conform to the contract requirements, whether manufactured or processed by the Contractor or procured from suppliers or subcontractors. The Contractor shall perform or have performed the inspection and tests required to substantiate product conformance to contract requirements and shall also perform or have performed all inspections and tests otherwise required by the contract.

12.4.4.2 Documentation

The Contractor shall maintain adequate records of all inspections and tests. The records shall indicate the nature and number of tests made, the number and type of deficiencies found, the quantities approved and rejected, and the nature of corrective actions taken, as appropriate.

12.4.4.3 Corrective Actions

The Contractor shall take prompt action to correct any errors, equipment malfunctions, process changes, or other assignable causes that which have resulted or could result in the submission of materials, products, and completed construction that which do not conform to the requirements of the specifications.