Marion County

Land Development Regulation Commission

Meeting Agenda

Wednesday, October 16, 2024 5:30 PM McPherson Governmental Campus Auditorium

ROLL CALL AND PLEDGE OF ALLEGIANCE

Acknowledgement of Proof of Publication

1. ADOPT THE FOLLOWING MINUTES

1.1. October 2, 2024

2. SCHEDULED ITEMS

2.1. PUBLIC HEARING: Consideration for Proposed Marion County Land Development Code (LDC) Amendments to Revise Division 8.6. - Technical Standards and Requirements, to Review and Update Table 6.8-2 Land Use Categories for Buffers Table to Reflect the Proposed Table

2.2. PUBLIC HEARING: Consideration for Proposed Marion County Land Development Code (LDC) Amendments as a Result of the Passing of Senate Bill 812 to Revise Section 2.18.4. Construction, Completion, and Close Out

2.3. WORKSHOP: Discussion for Proposed Marion County Land Development Code (LDC) Amendments to Revise Section 6.13.3 - Types of Stormwater Management Facilities

2.4. WORKSHOP: Discussion for Proposed Marion County Land Development Code (LDC) Amendments to Revise Section 6.13.8 - Stormwater Conveyance Criteria

3. NEW BUSINESS

ADJOURN

Marion County

Land Development Regulation Commission

Agenda Item

File No.: 2024-16925 **Agenda Date:** 10/16/2024 **Agenda No.:** 1.1.

SUBJECT:
October 2, 2024

DESCRIPTION/BACKGROUND:
Minutes from the previous LDRC workshop.

The Marion County Land Development Regulation Commission met on October 2, 2024 at 5:30 p.m. in the Growth Services Main Training Room, 2710 E Silver Springs Blvd, Ocala Florida.

CALL TO ORDER

Chairman, David Tillman Called the Meeting to Order at 5:41pm and Autumn Williams called roll.

ROLL CALL & PLEDGE OF ALLEGIANCE

Chairman, David Tillman led the Pledge of Allegiance.
Board members present were Chairman David Tillman, Gene Losito, Richard Busche, and alternate member Erica Larson.

Staff members present were Chief Assistant County Attorney Dana Olesky, Growth Services Director Chuck Varadin, Deputy Director Ken Weyrauch, Planners Chris Rison, County Engineer Steven Cohoon, Stormwater Engineer Jason Cambre, Land Development Manager Aaron Pool and Administrative Staff Assistant Autumn Williams.

There were no members of the public present.

ACKNOWLEDGEMENT OF PROOF OF PUBLICATION

Autumn Williams read the Proof of Publication and advised that the meeting was properly advertised.

1. ADOPT THE FOLLOWING MINUTES

Richard Busche made a motion to adopt the minutes from the September 18, 2024 meeting. Motion was seconded by Gene Losito. Motion passed unanimously (4-0).

2. SCHEDULED ITEMS

2.1. Discussion for Proposed Marion County Land Development Code (LDC) Amendments to Revise Section 6.13.3 – Types of Stormwater Management Facilities

Steven Cohoon, County Engineer, opened discussion regarding this item.

Board Members voiced their recommendations and comments regarding the current language.

Aaron Pool, Land Development Manager made changes to the document as needed and noted items that need to be followed up on. The Board agreed more

discussion on the language was needed. It was agreed that the discussion of this item would be continued at the October 16, 2024 LDRC Workshop.

It was discussed that the next meeting will be held at the BCC Auditorium, 601 SE 25th Ave, Ocala, FL 34471

3. NEW BUSINESS

3.1. Discussion for Proposed Marion County Land Development Code (LDC) Amendments to Revise Section 6.13.8 – Stormwater Conveyance Criteria

Steven Cohoon, County Engineer, opened discussion regarding this item.

Board Members voiced their recommendations and comments regarding the current language.

Aaron Pool, Land Development Manager made changes to the document as needed and noted items that need to be followed up on. The Board agreed more discussion on the language was needed. It was agreed that the discussion of this item would be continued at the October 16, 2024 LDRC Workshop.

It was discussed that the next meeting will be held at the BCC Auditorium, 601 SE 25th Ave, Ocala, FL 34471

ADJOURNMENT

The meeting adjourned at 7:00 PM

Attest: _____
David Tillman, Chairman

_____
Autumn Williams,
Administrative Staff Assistant

Land Development Regulation Commission Attendance Report

2024	January	February	March	April	May	June	July	August 7	August 21	September 4	September 18	October 2	October 16	November	December
Christopher Howson	-	-	-	-	-	-	-	X	X	-	X				
James Stockton, III	-	-	-	-	-	-	-	X	X	-					
Gene Losito	-	-	-	-	-	-	-	X	X	-	X	X			
Jonny Heath	-	-	-	-	-	-	-	X	X	-					
Richard Busche	-	-	-	-	-	-	-	X	X	-	X	X			
Robert Stepp	-	-	-	-	-	-	-		X	-					
David Tillman	-	-	-	-	-	-	-	X	X	-	X	X			
Erica Larson*	-	-	-	-	-	-	-	X	X	-	X	X			

X Present

- N/A

Updated 10-4-24 aw

Marion County

Land Development Regulation Commission

Agenda Item

File No.: 2024-16928 **Agenda Date:** 10/16/2024 **Agenda No.:** 2.1.

SUBJECT:
PUBLIC HEARING: Consideration for Proposed Marion County Land Development Code (LDC) Amendments to Revise Division 8.6. - Technical Standards and Requirements, to Review and Update Table 6.8-2 Land Use Categories for Buffers Table to Reflect the Proposed Table

INITIATOR:
Kenneth Weyrauch, Deputy Director

DEPARTMENT:
Growth Services

DESCRIPTION/BACKGROUND:
Staff has attached the proposed table to update LDC Division 8.6 - Technical Standards and Requirements, Table 6.8-2 Land Use Categories for Buffers table to improve consistency and efficiency with identifying and implementing buffer requirements as necessary. Staff, Planning & Zoning along with the Board of Commissioners have identified a need of clarifying the best buffers to be applied in various instances, staff hopes to correct that with this table update.

The proposed LDC amendments were considered by the Land Development Regulation Commission (LDRC) in a public hearing held on September 18, 2024, per LDC Section 1.4.3.A and B. The LDRC voted to recommend approval of the proposed LDC amendments subject. Applicant and staff's final proposed Ordinance materials to be considered by the LDRC in public hearing scheduled for November 19, 2024, per LDC Section 1.4.3.A and B.

BUDGET/IMPACT:
None

RECOMMENDED ACTION:
Motion to recommend approval of the proposed LDC Amendments.

Buffers Table Proposed by LDRC

Proposed Use		Permitted or Existing Use						
		AG	SFR	MF	COM	IND	PUB	ROW
	AG	-	-	-	-	-	-	-
	SFR	E	~~-~~E**	C	A	B	C	C
	MF	E	~~A~~D	-	A	B	C	C
	COM	D	B	B	-	B	C	C
	IND	B	B	B	B	-	B	C/D*
	PUB	E	B	C	C	C	-	C

*D Type Buffer if residential adjacent to ROW

** A 6' opaque fence may be used in lieu of a vegetative buffer

Potential Addition to Multiple Family Dwelling (R-3)

When multiple-family residential uses are provided within 100 feet of the boundary edge of the parcel, the following shall apply to that development when the abutting existing use is a single-family use or the zoning classification that permits only single-family residential uses:

a. A multiple-family structure may not exceed a height that is twice the height of the closest existing single-family residence; however, the height of the multiple-family structure shall also not exceed the maximum height allowed in the abutting residential zoning classification.

b. If single-family residential classification zoned land directly adjacent to the parcel is vacant land, then the height of a multiple-family structure within the parcel shall not exceed the maximum height allowed in the abutting residential single-family residential classification.

Buffer Table from direction during BCC workshop

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Proposed Use		Permitted or Existing Use						
		AG	SFR	MF	COM	IND	PUB	ROW
	AG	-	-	-	-	-	-	-
	SFR	E	C/D**	C	A	B	C	C
	MF	E	~~A~~B***	-	A	B	C	C
	COM	D	B	B	-	B	C	C
	IND	B	B	B	B	-	B	C/D*
	PUB	E	B	C	C	C	-	C

*D Type Buffer if residential adjacent to ROW
**Type D Buffer is required if new SFR is adjacent to an age restricted community.
***Buffer wall shall be at least 10' in height.

Marion County

Land Development Regulation Commission

Agenda Item

File No.: 2024-16929 **Agenda Date:** 10/16/2024 **Agenda No.:** 2.2.

SUBJECT:
PUBLIC HEARING: Consideration for Proposed Marion County Land Development Code (LDC) Amendments as a Result of the Passing of Senate Bill 812 to Revise Section 2.18.4. Construction, Completion, and Close Out

INITIATOR:
Kenneth Weyrauch, Deputy Director

DEPARTMENT:
Growth Services

DESCRIPTION/BACKGROUND:
Staff has attached the proposed language to update Land Development Code (LDC) Section 2.18.4. Construction, Completion, and Close Out due to the passing of Senate Bill 812 which changes the percentage requirements of our building code. Staff and LDRC will need to come to an agreement and recommend the necessary language to suggest to the Board of Commissioners so that update language can be ratified by October 1, 2024 as required by the Bill.

The proposed LDC amendments were considered by the Land Development Regulation Commission (LDRC) in a public hearing held on September 18, 2024, per LDC Section 1.4.3.A and B. The LDRC voted to recommend approval of the proposed LDC amendments subject. Applicant and staff's final proposed Ordinance materials to be considered by the LDRC in public hearing scheduled for November 19, 2024, per LDC Section 1.4.3.A and B.

BUDGET/IMPACT:
None

RECOMMENDED ACTION:
Motion to recommend approval of the proposed LDC Amendments.

Sec. 2.18.4. Construction, completion, and close out.

A. Improvement Plans shall be valid for five years with a one-time extension of two years if requested by the applicant in writing and approved by DRC.

B. Pre-Construction Conference.

(1) A pre-construction conference shall be scheduled by the Office of the County Engineer for offsite improvements.

(2) Maintenance of Traffic plans for offsite improvements and signal installation shall be submitted at the pre-construction conference to be approved by the County Engineer.

(3) Applicant shall notify the Office of the County Engineer of onsite improvement work 72 hours prior to commencing construction.

C. All subdivision improvements shall be constructed in accordance with approved plans and shall conform to regulations and specifications in effect on the date of approval of the improvement plans.

D. If an applicant desires to file a Final Plat prior to improvements beingare not completed, an Improvement Agreement containing the estimate of cost of remaining subdivision improvements as shown on the approved Improvement Plans shall be provided. The Improvement Agreement form is available at the Office of the County Engineer. A security, limited to an irrevocable letter of credit, or bond, or other form approved by the County Attorney only, shall be provided in the amount of 120 percent of the estimated cost of remaining improvements certified by a Florida Registered Professional Engineer, as well as a partial As-Built/Record Survey; no survey is required if the security is provided for the cost of all improvements. The Improvement Agreement shall be approved by the Board.

E. If an applicant desires to construct a limited number of sales offices, model homes, or similar type features, prior to selling lots and prior to the Final Plat being recorded, an indemnification agreement shall be provided subject to:

(1) Approval of the Preliminary Plat andapplicable Minor Site Plan, Major Site Plan and/or Improvement Plans;

(2) The development being served by a central sewer and central water system; Connection is made to the final approved potable water and wastewater system (tTemporary connection to well or onsite sewage treatment disposal system (OSTDS) is not allowed if the subdivision is to be served by central water or central sewer);

(3) An approved water supply capable of supplying the required fire flow for fire protection provided in accordance Compliance with the State Fire Code; The Final Plat has been submitted for review including cost estimate with appropriate assurance for subdivision improvements if incomplete;

(4) No more than 20 building permits being issued on nNo more than 10 percent of the total number of building lots., and none of these lots can have flood plain or flood prone encroachments;, not to exceed 50 building permits; and

(5) Partial Certification of Final Completion for the improvements constructed to support the subject building lots considering safe pedestrian and vehicle access for the public visiting these sites; and

(6) A restrictive covenant recorded in public record that requires a change in building occupancy permit to convert from temporary use to permanent use and limits the ability to sell or lease such structure prior to recording the Final Plat.; and

(57) Approval by the Board.

Commented [ST1]: The state Fire Code requires: "An approved water supply capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities, buildings, or portions of buildings are hereafter constructed or moved into the jurisdiction."

The Fire Marshall has considered alternatives on a case-by-case temporary basis when hydrants are not yet active.

F. If an applicant desires to construct a limited number of homes, or similar type features, prior to the Final Plat being recorded, an indemnification agreement shall be provided subject to:

(1) Approval of the applicable Minor Site Plan, Major Site Plan and/or Improvement Plans;

(2) ~~Connection is made to the final approved potable water and wastewater system (t~~Temporary connection to well or onsite sewage treatment disposal system (OSTDS) is not allowed if the subdivision is to be served by central water or central sewer;

(3) ~~An approved water supply capable of supplying the required fire flow for fire protection provided in accordance~~ Compliance with the State Fire Code;

(4) Submittal and approval of a cost estimate with security, limited to an irrevocable letter of credit, bond, or other form approved by the County Attorney, provided in the amount of 120 percent of the estimated cost of remaining subdivision improvements certified by a Florida Registered Professional Engineer as well as a partial As-Built/Record Survey; no survey is required if the security is provided for the cost of all improvements; no additional security is required if it has been provided for an Improvement Agreement;

(5) Permits being issued for no more than 50 percent of the density on a per lot or unit basis (~~exclusive~~ inclusive of permits approved under section E.); and

(6) Approval by the Board.

~~F~~G. As-Built Submittal.

(1) ~~Two~~ One set~~s~~ of As-Built/Record Survey signed and sealed by a Florida Licensed Professional Surveyor and Mapper meeting standards set forth in Ch. 5J-17 FAC shall be submitted prior to final inspection along with a digital version of the survey in a format pre-approved by the Office of the County Engineer.

(2) Inspection and material testing of all improvements shall be submitted in one report with the As-Built/Record Survey.

(3) Certification of Final Completion. When all required improvements have been constructed, the applicant shall so advise the Office of the County Engineer and submit a request for final inspection with a certification of final completion. The certification form is available at the Office of the County Engineer. After all work is completed, inspected, and accepted by the County, a letter of completion will be issued to the applicant.

~~G~~H. For public road subdivisions, the applicant is required to provide for the inspection of the surface water management system by a Florida Registered Professional Engineer to assure that the system is properly constructed and maintained. The inspection shall occur within 30 days of project completion. The County shall be copied on all inspection reports required by the governing Water Management District permit for operation and maintenance.

~~H~~I. For public road subdivisions, the applicant is required to provide a maintenance agreement with a security, limited to an irrevocable letter of credit, ~~or~~ bond, ~~only~~ or other form approved by the County Attorney, in the amount of 20~~twenty~~ percent of the original construction cost of subdivision improvements shown on the approved Improvement Plans certified by a Florida Registered Professional Engineer. The maintenance agreement form is available at the Office of the County Engineer. Subdivision improvements shall be maintained by the Developer for a minimum period of two years from the date of construction completion acknowledged by the Office of the County Engineer and 60 percent occupancy prior to acceptance for maintenance by the County. The ~~letter of credit or bond~~ security shall be released upon acceptance of the constructed improvements for maintenance by the County.

Commented [ST2]: Permits on no more than 50% of the lots – this means a lot can have multiple permits (main house and accessory structure)

Commented [ST3]: Replace with notification for record on the BCC agenda?

~~I~~J. For public road subdivisions, upon completion of the minimum two year period and 60 percent occupancy, the applicant shall make a written request for the County to accept the subdivision for maintenance. Within fourteen calendar days, County staff shall provide a final walk-thru inspection, review of any outstanding obligations and provide an itemized list requesting all deficiencies to be corrected within ~~3~~60 days. If the deficiencies are not addressed within ~~3~~60 days, the applicant shall make a new written request when ready and the inspection and review process starts over. Once deficiencies are addressed, the applicant shall complete the transfer of ownership documentation with the governing Water Management District including payment of any required Water Management District fees, ~~upon review and approval by the County~~and acceptance of the subdivision for maintenance shall be scheduled for consideration of approval by the Board at the next available meeting.~~.~~

K~~J~~. For private road subdivisions, documentation shall be submitted as to maintenance responsibilities and the name of the entity responsible for such maintenance with the appropriate legal documents.

(Ord. No. 13-20, § 2, 7-11-2013)

Sec. 2.18.4. Construction, completion, and close out.

A. Improvement Plans shall be valid for five years with a one-time extension of two years if requested by the applicant in writing and approved by DRC.

B. Pre-Construction Conference.

(1) A pre-construction conference shall be scheduled by the Office of the County Engineer for offsite improvements.

(2) Maintenance of Traffic plans for offsite improvements and signal installation shall be submitted at the pre-construction conference to be approved by the County Engineer.

(3) Applicant shall notify the Office of the County Engineer of onsite improvement work 72 hours prior to commencing construction.

C. All subdivision improvements shall be constructed in accordance with approved plans and shall conform to regulations and specifications in effect on the date of approval of the improvement plans.

D. If an applicant desires to file a Final Plat prior to improvements being completed, an Improvement Agreement containing the estimate of cost of remaining subdivision improvements as shown on the approved Improvement Plans shall be provided. The Improvement Agreement form is available at the Office of the County Engineer. A security, limited to an irrevocable letter of credit, bond, or other form approved by the County Attorney, shall be provided in the amount of 120 percent of the estimated cost of remaining improvements certified by a Florida Registered Professional Engineer, as well as a partial As-Built/Record Survey; no survey is required if the security is provided for the cost of all improvements. The Improvement Agreement shall be approved by the Board.

E. If an applicant desires to construct a limited number of sales offices, model homes, or similar type features, prior to the Final Plat being recorded, an indemnification agreement shall be provided subject to:

(1) Approval of the applicable Minor Site Plan, Major Site Plan and/or Improvement Plans;

(2) Temporary connection to well or onsite sewage treatment disposal system (OSTDS) is not allowed if the subdivision is to be served by central water or central sewer;

(3) Compliance with the State Fire Code;

(4) No more than 20 building permits being issued on no more than 10 building lot.;

(5) Partial Certification of Final Completion for the improvements constructed to support the subject building lots considering safe pedestrian and vehicle access for the public visiting these sites; and

(6) A restrictive covenant recorded in public record that requires a change in building occupancy permit to convert from temporary use to permanent use and limits the ability to sell or lease such structure prior to recording the Final Plat.

(7) Approval by the Board.

F. If an applicant desires to construct a limited number of homes, or similar type features, prior to the Final Plat being recorded, an indemnification agreement shall be provided subject to:

(1) Approval of the applicable Minor Site Plan, Major Site Plan and/or Improvement Plans;

(2) Temporary connection to well or onsite sewage treatment disposal system (OSTDS) is not allowed if the subdivision is to be served by central water or central sewer;

(3) Compliance with the State Fire Code;

(4) Submittal and approval of a cost estimate with security, limited to an irrevocable letter of credit, bond, or other form approved by the County Attorney, provided in the amount of 120 percent of the estimated cost of remaining subdivision improvements certified by a Florida Registered Professional Engineer as well as a partial As-Built/Record Survey; no survey is required if the security is provided for the cost of all improvements; no additional security is required if it has been provided for an Improvement Agreement;

(5) Permits being issued for no more than 50 percent of the density on a per lot or unit basis (inclusive of permits approved under section E.); and

(6) Approval by the Board.

G. As-Built Submittal.

(1) One set of As-Built/Record Survey signed and sealed by a Florida Licensed Professional Surveyor and Mapper meeting standards set forth in Ch. 5J-17 FAC shall be submitted prior to final inspection along with a digital version of the survey in a format pre-approved by the Office of the County Engineer.

(2) Inspection and material testing of all improvements shall be submitted in one report with the As-Built/Record Survey.

(3) Certification of Final Completion. When all required improvements have been constructed, the applicant shall so advise the Office of the County Engineer and submit a request for final inspection with a certification of final completion. The certification form is available at the Office of the County Engineer. After all work is completed, inspected, and accepted by the County, a letter of completion will be issued to the applicant.

H. For public road subdivisions, the applicant is required to provide for the inspection of the surface water management system by a Florida Registered Professional Engineer to assure that the system is properly constructed and maintained. The inspection shall occur within 30 days of project completion. The County shall be copied on all inspection reports required by the governing Water Management District permit for operation and maintenance.

I. For public road subdivisions, the applicant is required to provide a maintenance agreement with a security, limited to an irrevocable letter of credit, bond, or other form approved by the County Attorney, in the amount of 20 percent of the original construction cost of subdivision improvements shown on the approved Improvement Plans certified by a Florida Registered Professional Engineer. The maintenance agreement form is available at the Office of the County Engineer. Subdivision improvements shall be maintained by the Developer for a minimum period of two years from the date of construction completion acknowledged by the Office of the County Engineer and 60 percent occupancy prior to acceptance for maintenance by the County. The security shall be released upon acceptance of the constructed improvements for maintenance by the County.

J. For public road subdivisions, upon completion of the minimum two year period and 60 percent occupancy, the applicant shall make a written request for the County to accept the subdivision for maintenance. Within fourteen calendar days, County staff shall provide a final walk-thru inspection, review of any outstanding obligations and provide an itemized list requesting all deficiencies to be corrected within 60 days. If the deficiencies are not addressed within 60 days, the applicant shall make a new written request when ready and the inspection and review process starts over. Once deficiencies are addressed, the applicant shall complete the transfer of ownership documentation with the governing Water Management District including payment of any required Water Management District fees, and acceptance of the subdivision for maintenance shall be scheduled for consideration of approval by the Board at the next available meeting.

K. For private road subdivisions, documentation shall be submitted as to maintenance responsibilities and the name of the entity responsible for such maintenance with the appropriate legal documents.

(Ord. No. 13-20, § 2, 7-11-2013)

Marion County

Land Development Regulation Commission

Agenda Item

File No.: 2024-16926 **Agenda Date:** 10/16/2024 **Agenda No.:** 2.3.

SUBJECT:
WORKSHOP: Discussion for Proposed Marion County Land Development Code (LDC) Amendments to Revise Section 6.13.3 - Types of Stormwater Management Facilities

DESCRIPTION/BACKGROUND:
Staff has attached the proposed changes to update LDC Section 6.13.3 - Revision following presentation to LDRC on October 2, 2024, types of stormwater management facilities. Staff, has identified a need to clarify language of this section to mirror the Water Management District, for consistency, and address private industry feedback.

Sec. 6.13.3. Types of stormwater management facilities.

A. Existing public.

(1) An adjacent public retention/detention area may be utilized for disposal of runoff generated by an applicant's improvements if it can be proven that capacity is sufficient.

(2) A Stormwater Connection Application is required for any connection to or expansion of a County retention/detention area, including but not limiting to drainage retention/detention areas or conveyance systems, not previously designed or permitted to consider the applicant's improvements.

(3) If the retention/detention area is still under a maintenance agreement, approval in writing must be received from the maintenance entity, when not the County, stating no objection to the use of the facility.

B. Natural.

(1) A natural facility may be used without further excavation upon the applicant's submittal of calculations demonstrating the existing capacity is sufficient.

(2) Proof of control, ownership or easement for operation and maintenance of the natural facility shall be provided.

(3) Runoff from adjacent property, to a natural facility, must be perpetuated to the extent of protecting upland owner interest.

C. Proposed public.

(1) Retention/detention areas shall have side slopes no steeper than 4:1 (horizontal: vertical) from top of berm to bottom of dry water retention/detention facility or to a depth of two feet below the water control surface of a wet facility with a minimum berm width of ~~12~~ 5 feet stabilized at six percent grade maximum around the entire perimeter of the facility. Side slopes steeper than 4:1 may be allowed with additional accommodations related to public safety~~, maintenance, and~~ such as fencing or other protection from public access upon approval by the County Engineer or ~~his~~ their designee.

(2) Stormwater management systems servicing a public development shall be owned and maintained by Marion County. They may be privately owned and maintained, upon approval by the County Engineer and granting of an easement to Marion County, minimally allowing but not obligating, emergency maintenance, as well as access to, drainage of, conveyance of, and storage of stormwater.

(3) If fencing is used, it shall be per the County Fence Detail found in Section 7.3.1 Transportation and Stormwater details.

(4) The bottom of all dry water retention areas shall have appropriate vegetative cover.

(5) A retention/detention area that is adjacent to a public right-of-way shall be constructed to be aesthetically pleasing with curvilinear form and shall be landscaped with a mixed plant pallet meeting Marion-friendly landscaping standards minimally consisting of four shade trees and 200 square feet of landscaping comprised of shrubs and/or groundcover for every 100 lineal feet of frontage or fractional part thereof, or, in the case of a wet facility, a littoral zone meeting the governing water management district criteria. The proposed landscaping shall be arranged to provide ease of maintenance and screening of stormwater structures.

D. Proposed private.

(1) Residential subdivisions. Retention/detention areas shall have side slopes no steeper than 4:1 (horizontal: vertical) from top of berm to bottom of dry water retention/detention facility or to a depth of two feet below the water control surface of a wet facility with a minimum berm width of ~~12~~ 5 feet

Commented [CJ1]: Mirrors water management district language.

Commented [CJ2]: Made distinction between dry and wet facilities.

Commented [CJ3]: Berm width based on private industry feedback and waiver requests.

Commented [CJ4]: Mirrors water management district language.

Commented [CJ5]: OCE believes this language belongs in landscaping section of code.

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Commented [CJ6]: Mirrors water management district language.

stabilized at six percent grade maximum around the entire perimeter of the facility. Side slopes steeper than 4:1 may be allowed with additional accommodations related to public safety such as fencing or other protection from public~~, maintenance, and~~ access upon approval by the County Engineer or ~~his~~ their designee.

Berm widths under 5 feet may be allowed upon approval by the County Engineer or their designee.

(2) Commercial lots or subdivisions. Retention/detention areas shall be designed with a minimum berm width of 5 feet stabilized at six percent grade maximum around the entire perimeter of the facility and side slopes:

(a) No steeper than 4:1 (horizontal: vertical) from top of berm to bottom of dry water retention/detention facility or to a depth of two feet below the water control surface of a wet facility; or

(b) Steeper than 4:1 with ~~an access path provided to the bottom of the facility at a slope of no steeper than 3:1~~additional accommodations related to public safety such as fencing or other protection from public access upon approval by the County Engineer or their designee; or

(c) As vertical walls with a structural detail for the wall design provided, adhering to Florida Building Code~~,~~ with a~~n~~ 12-foot wide access path provided to the bottom of the facility at a slope of no steeper than 3:1 and additional accommodations related to public safety such as fencing or other protection from public access~~, and an~~ A ~~appropriate~~ barrier shall be provided when adjacent to vehicular paths and parking areas. The type of barrier shall be determined by the design speed of the travel way and available horizontal clearance.

Berm widths under 5 feet may be allowed upon approval by the County Engineer or their designee.

(3) The bottom of all dry water retention areas shall have appropriate vegetative cover.

(4) A retention/detention area that is adjacent to a public right-of-way shall be constructed to be aesthetically pleasing with curvilinear form and shall be landscaped with a mixed plant pallet meeting Marion-friendly landscaping standards minimally consisting of four shade trees and 200 square feet of landscaping comprised of shrubs and/or groundcover for every 100 lineal feet of frontage or fractional part thereof, or, in the case of a wet facility, a littoral zone meeting the governing water management district criteria. The proposed landscaping shall be arranged to provide ease of maintenance and screening of stormwater structures.

(Ord. No. 13-20, § 2, 7-11-2013)

Commented [CJ7]: Mirrors water management district language.

Commented [CJ8]: Mirrors water management district language.

Commented [CJ9]: Better defined access path.

Commented [CJ10]: Mirrors water management district language.

Commented [CJ11]: Prevents waiver requests in odd cases.

Commented [CJ12]: OCE believes this language belongs in landscaping section of code

Marion County

Land Development Regulation Commission

Agenda Item

File No.: 2024-16927 **Agenda Date:** 10/16/2024 **Agenda No.:** 2.4.

SUBJECT:
WORKSHOP: Discussion for Proposed Marion County Land Development Code (LDC) Amendments to Revise Section 6.13.8 - Stormwater Conveyance Criteria

DESCRIPTION/BACKGROUND:
Staff has attached the proposed changes to update LDC Section 6.13. - Revision following presentation, as a walk on item, to LDRC on October 2, 2024, stormwater conveyance criteria. Staff, has identified a need to clarify language of this section.

Sec. 6.13.8. Stormwater conveyance criteria.

A. Methodology. ~~Calculations for stormwater~~ Stormwater collection and transmission systems shall be designed using the Rational Method based on ~~FDOT Zone 7 Intensity - Duration Curves~~NOAA Atlas 14 rainfall intensity-duration data. Cross culverts and bridges (cross drains) shall be designed using the Rational Method or Natural Resources Conservation Service (NRCS) Peak Discharge Method based on NOAA Atlas 14 rainfall intensity-duration data or other available flow data as permitted by the County Engineer or their designee. Ditch and storm drain flow capacity shall be determined from Manning's Formula with coefficients of roughness based on an assumption of conditions of ultimate development.

B. Minimum requirements.

(1) Design storm. Conveyance systems shall be sized to accommodate the following minimum design storm events based on the condition of ultimate development:

(a) Stormwater conveyance pipes, Driveway Culverts, and Open Channels shall be designed to accommodate a~~.~~ 25-year ~~24-hour~~ storm event ~~based on the condition of ultimate development~~.

(b) Cross Drains shall be designed to accommodate a~~.~~ 50-year storm event. ~~for c~~Crossing Arterial, Collector, and Major Local roads~~.~~ shall be designed to accommodate a 25-year storm event. ~~for c rossing Subdivision Local and Minor Local Roads.~~ The backwater created by the cross culvert shall remain below the travel lanes for crossing subdivision local and minor local roads. If located within a FEMA Special Flood Hazard Area, the 100-year storm event shall be analyzed for potential upstream impacts.

(2) Tailwater.

(a) The tailwater elevation utilized shall be based on the tailwater elevation of the receiving water body plus 6 inches at the peak discharge time of the 25-year 24-hour design storm.

(b) Alternatively, the tailwater elevation utilized can be the design high water elevation of the 25-year 24-hour design storm.

(c) Note that future connections must be able to demonstrate that conveyance can be achieved at all connections, future and existing, meeting one of the above criteria.

(3) Lane spread. Lane spread shall be calculated using FDOT criteria considering the 4-inch per hour or 10-year frequency storm as appropriate, to produce the following results:

(a) Subdivision Local and Minor Local Roads. The allowable lane spread shall be no greater than the crown (or high side) of the road. For all divided roadways the allowable lane spread shall be no greater than the inside (or high side) edge of pavement.

(b) Arterial, Collector, and Major Local Roads. The allowable lane spread shall leave 8 feet of the outside travel lane dry in each direction.

(c) Auxiliary or Turn Lanes. The allowable lane spread on subdivision local and minor local roads shall be no greater than the full width of the lane. On all other road classifications, the allowable lane spread shall leave half of the lane dry.

(4) Drainage rights-of-way. All retention/detention areas within subdivision developments shall have direct access to a right-of-way. A drainage right-of-way may be necessary to establish this access. A minimum 12-foot wide, stabilized vehicle access at six percent maximum grade shall be provided to allow for ingress and egress of the retention/detention area. Drainage rights-of-way shall be a minimum of 30 feet in width. As an alternative to right-of-way, access may be provided by an easement of the same width.

Commented [CJ1]: FDOT no longer uses these IDF curves and refers to NOAA Atlas 14.

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Commented [CJ2]: These types of conveyances have a higher likelihood of crossing streams and culvert hydraulics could have offsite upstream consequences.

Commented [CJ3]: Added for clarification.

Commented [CJ4]: Original language was unclear whether this applied to any lane (such as inside) for multi-lane roads. Also, is 6.12.6 consistent with this section?

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Commented [CJ5]: Clarification was needed for turn lanes/non-through lanes whether they are subject to gutter spread requirements.

(5) Drainage easements. All drainage swales to facilities or underground stormwater conveyance systems shall be within drainage easements, except where rights-of-way or drainage parcels are provided. Drainage easement required widths shall be ~~a minimum of 20 feet in width.~~dependent upon the type, size and depth of the proposed conveyance system. The minimum required easement width is 10 feet for interceptor swales and 20 feet for outfalls. Easement widths for underground conveyance systems shall be in accordance with details in Sec. 7.3.1. and table 6.13-2. Reduced easement widths may be permitted by the County Engineer or their designee subject to the following requirements:

(a) Documentation that the proposed easement will provide adequate room for removal and replacement or maintenance of the underground infrastructure. At minimum, the engineer shall demonstrate that adequate space exists for a trench meeting OSHA sloping and excavation requirements within the limits of the easement.

(b) Written acceptance of the reduced easement width by the owner and their successors.

Table 6.13-2 Maximum Invert Depth by Easement Width

Nominal Pipe Diameter (inch)	Maximum Invert Depth in 15' Easement (feet)*	Maximum Invert Depth in 20' Easement (feet)*	Maximum Invert Depth in 25' Easement (feet)*	Maximum Invert Depth in 30' Easement (feet)*
12	4.6	7.1	9.6	12.1
15	4.5	7.0	9.5	12.0
18	-	6.8	9.3	11.8
24	-	6.5	9.0	11.5
30	-	6.1	8.6	11.1
36	-	-	8.3	10.8
42	-	-	8.0	10.5
48	-	-	7.7	10.1
60	-	-	-	9.5

*Assumes an additional width of 1 foot on each side of pipe and a maximum trench side slope of 1 foot per foot.

(6) Floodways. If in a FEMA designated floodway ~~or flood prone area~~, the cross drain shall be sized and certified to accommodate the ~~design intent~~base flood discharge of that basin with no rise in flood height.

(7) Sizes. The following minimum pipe or culvert sizes are required for stormwater conveyance systems unless otherwise approved by the County Engineer or their designee:

(a) Stormwater conveyance pipes shall be a minimum of 15 inches diameter or equivalent within private rights-of-way or easements and a minimum of 18 inches diameter or equivalent within public rights-of-way or easements.

(b) ~~and cross~~ Cross culverts shall be a minimum of 18 inches diameter or equivalent.

(c) Driveway culverts shall be a minimum of 15 inches diameter or equivalent ~~for residential use and a minimum of 18 inches diameter or equivalent for commercial use~~.

(d) Yard and parking lot drain pipes shall be a minimum of 8 inches diameter.

(e) Roof drains, prior to connection to the overall stormwater system, and pipe exfiltration or underdrain systems, such as French drains, are exempt from minimum diameter requirements.

Commented [CJ6]: Prevents waiver requests for minimum easement size subject to additional provided information.

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Commented [CJ7]: This change is in order to comply with NFIP 60.3(d)(3) – Floodway Requirement.

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Commented [CJ8]: Prevents waiver requests for minimum culvert size for cases that fall outside of these requirements.

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Commented [CJ9]: Sizing based on private industry feedback (15 inch is a frequent waiver request which is normally granted).

Commented [CJ10]: Note that Section 7.1.13.J(1)a wasn't consistent with this as previously written.

Commented [CJ11]: Sizing based on private industry feedback (pipe sizes smaller than 18 inch is a frequent waiver request which is normally granted).

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C. Design considerations.

(1) Culvert flow capacity shall be determined for the conditions of inlet control or outlet control as applicable.

(2) Stormwater collection and transmission systems shall be by inlets, swales, culverts, etc. The use of siphons, pumps, or similar devices is not allowed.

(3) Ditch blocks shall be designed and constructed with hard core centers.

(4) Stormwater flow velocity shall be taken into consideration in the design of all ~~drainage ditches~~conveyance systems. ~~and a~~Appropriate channel and outlet erosion protection shall be provided in accordance with the FDOT Drainage Manual. Physical pipe slopes shall be that which produce a velocity of at least 2.5 feet per second (fps) when flowing full. Where 2.5 fps is not feasible due to flat terrain or site constraints, slopes which produce a velocity below 2.5 fps are allowable with additional consideration for upkeep in the operations and maintenance document and approval by the County Engineer or their designee.

(5) Where any storm pipe terminates at an earthen slope a mitered end section and concrete collar, or approved equal, is required. Concrete mitered end sections are required for culverts, cross drains and side drains when within a County right-of-way with posted speeds of 40 mph or greater.

(6) Yard and parking lot drain pipes shall not be installed in rights-of-way and shall only begin or end at drainage inlet structure.

(Ord. No. 13-20, § 2, 7-11-2013)

Commented [CJ12]: Self-cleansing velocity from FDOT drainage manual.

Commented [CJ13]: There was a request to allow for yard drains to end in an earthen slope, but there are two concerns: 1) daylighting plastic pipe material isn't recommended and 2) the reduced size of yard drains make them more prone to being covered up.