

Public Works Department Traffic Operations Program 2725 Judge Fran Jamieson Way Viera FL 32940

EXHIBIT A

BOARD OF COUNTY COMMISSIONERS

Technical Memorandum

TO:	Marc Bernath, P.E., Public Works Director
FROM:	Corrina Gumm, P.E., Traffic Operations Manager Corring Humm
DATE:	March 8, 2024
REF:	Rockledge Drive Trees
SUBJECT:	Traffic Operations Vertical Clearance Standards – Rockledge Drive

I. INTRODUCTION

This memorandum provides a comprehensive assessment of the vertical clearance standards on Rockledge Drive, a county-maintained road, primarily designed to facilitate vehicle access to adjacent properties and intersecting roads. Vertical clearance, the minimum height clearance for vehicles under obstructions such as tree limbs and utility lines, is a critical component of road design to ensure the safety of all road users. This evaluation seeks to determine whether the existing vertical clearance on Rockledge Drive complies with current standards and identifies any necessary modifications to enhance road safety and functionality.

II. REFERENCES

The **Brevard County Code of Ordinances Sections 86-69** (Attachment A) and the **Florida Statutes** (Attachment B), alongside the **Florida Department of Transportation (FDOT) Standards** (Attachment C) and the **Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways**, commonly known as **Florida Greenbook** (Attachment D), establish the regulatory framework for public roadways. These documents dictate that all transportation facilities, including Rockledge Drive, adhere to uniform minimum standards for design, construction, and maintenance to ensure safety and consistency across the county road system.

III. DISCUSSION

Rockledge Drive, spanning approximately 2.6 miles from US Highway 1 (US-1) to its northern endpoint of county-maintenance at 1855 Rockledge Drive, functions as a two-lane, two-way low-volume, local road facilitating access between residential areas and major arterial roadways. There are four (4) county-maintained road connections between US-1 and Rockledge Drive along this segment, including Coquina Road, Bonaventure Drive, McIver Lane, and US-1 directly.

As required by Florida Statutes, FDOT has established the Florida Greenbook as the uniform minimum standards and criteria for the county road system and Brevard County recognizes FDOT's guidance within the Florida Greenbook for county roads and reaffirms this acceptance within the Brevard County Code of Ordinances. All roads part of the county road system are required to conform with the Florida Greenbook standards unless the county road is part of the Florida State Highway System (map provided in Attachment E) or the National Highway System (map provided in Attachment E) or the National Highway System (map provided in Attachment F), in which case the road is required to conform with the FDOT Design Manual or AASHTO A Policy on Geometric Design Highways and Streets (AASHTO Green Book). FDOT Design Manual and the AASHTO Green Book are generally more stringent than Florida Greenbook criteria; although, on the subject of vertical clearance, the criteria are the same.

Further, FDOT has reaffirmed this road is not part of the State Highway System and that the local government entity has jurisdiction over the roadway. Staff has also confirmed that the road is not on the National Highway System. As such, the Florida Greenbook is the applicable engineering design standard for this road, as Rockledge Drive is a local road and not on a State or National Highway System.

The Florida Greenbook Chapter 3 Section C.7 (Geometric Design, Cross Section Elements) states that "streets, other than a freeway or arterial road, should have a clearance of 16 feet unless the provision of a reduced clearance is fully justified by a specific analysis of the situation (14 feet minimum)". The Greenbook also recommends that an allowance of 6 inches be added to the vertical clearance on local roads to accommodate future resurfacing, as opposed to freeways and arterial roadways where the added 6 inches is required. As there are no bridges crossing the road or other non-natural vertical obstructions, the reduced vertical clearance is determined by the height of the trucks that travel the roadway while keeping the trees trimmed, but not less than 14 feet minimum.

The Florida Greenbook encourages context-based transportation planning and design to meet the needs of pedestrians, bicyclists, motorists, and freight handlers. In considering context-sensitive criteria that works for all modes of travel, the responsible agency must consider the users of the roadway and their abilities. The Florida Greenbook allows for the horizontal and vertical clearances to be evaluated individually based on the type and volume of expected traffic, while also providing reasonable access for the largest vehicle that should be accommodated on the road.

The following is the type of expected larger vehicular traffic on Rockledge Drive:

- 1. School Buses are typically 10.5 feet in height, which provide service to Rockledge Drive.
- 2. Waste Management trucks are 13.5 feet in height. They have some somewhat smaller trucks that they currently use on Rockledge Drive, which are nearing end of life and will be replaced with the 13.5 ft trucks. Waste Management has advised that a minimum clearance of 14 feet would provide the level of safety necessary to avoid impact and damage to a collection vehicle from a tree branch while remaining within the appropriate travel lane.
- 3. A **Motor Home** or **Recreational Vehicle (RV)**, which are typically **10 to 12 ft in height**, operated by a resident needing access through Rockledge Drive.
- 4. A moving/box truck or appliance delivery truck with a specific need to access a property on Rockledge Drive. Single-unit box trucks vary from **11 to 13.5 feet in height**.

5. Fire Rescue Department fire engines that respond to this area along Rockledge Drive have a travel height of 10'7". The Fire Marshal has advised as per the Florida Fire Prevention Code (FFPC), fire department access roads shall have an **unobstructed vertical clearance** of not less than 13.5 feet.

In considering context-sensitive criteria, we must contemplate the users of the roadway and their abilities. To provide reasonable access on Rockledge Drive, the 14-foot minimum vertical clearance standard must be provided to maintain safe and reasonable access for these users.

It has been suggested that Rockledge Drive should be recognized as a scenic route with lesser vertical clearance standards. Brevard County Code Section 246-1 has designated Rockledge Drive as a "scenic drive", which simply allows for county staff to install signs that the road is designated by Code as a scenic drive. The Code does not provide any opportunity that allows staff to reduce engineering standards, including the minimum vertical clearance standards, for that designation.

The term "scenic drive" is not typically associated with engineering design standards. Instead, it is a term used in the context of tourism and transportation to describe a road or route that offers picturesque views of natural landscapes, scenic vistas, or other visually appealing features. Scenic drives are designed and maintained to enhance the experience of travelers and tourists who wish to enjoy the beauty of the surroundings.

Engineering design standards, on the other hand, refer to specific guidelines, regulations, and criteria that engineers follow when designing and constructing various structures and infrastructure, such as buildings, bridges, roads, and highways. These standards are focused on safety, functionality, durability, and compliance with regulations, unrelated to aesthetics or scenic beauty.

Engineers can take exceptions to the minimum criteria recommended in the Florida Greenbook, to increase design flexibility where appropriate. To take an exception, they weigh a number of factors, including a road's accident history and the type of vehicles using the road (e.g., recreational vehicles, waste collection vehicles, fire engines, and moving/box trucks) and document their analysis to justify taking the exception.

Brevard County has taken design exception on Rockledge Drive for the horizontal clearance, which preserves certain mature trees and roadside obstructions such as stone walls along Rockledge Drive that are within the required minimum horizontal clearance (within 6 ft from edge of paved travel way). This decision is based on careful consideration of various factors, including traffic calming, environmental preservation, context-sensitive design, and roadway design speed. Despite the occurrence of single-vehicle off-road crashes involving trees on Rockledge Drive, the decision is supported by the fact that the close horizontal proximity of the trees promotes traffic calming which can naturally encourage slower traffic speeds, enhancing safety in this residential area. Further, the physical space required to meet the standard horizontal clearance is not available without substantial property acquisition and complete demolition of existing trees and structures. The costs of such actions would significantly outweigh the potential safety benefits of meeting the horizontal clearance requirement.

Brevard County has <u>not</u> taken design exception on Rockledge Drive for the 14-foot minimum vertical clearance standard. The vertical clearance criterion applies to any type of roadway including local roads. They are set to provide at least a 6-inch differential between the maximum legal vehicle height and the roadway. In Florida, no vehicle may exceed a height of 13.5 feet (except an automobile transporter, which may not exceed 14 feet). It is noted that the 14-foot clearance is without additional recommended allowance for future road resurfacing. The minimum clearance applies to the entire roadway width (traveled way).

The adverse effects of the insufficient vertical clearance on Rockledge Drive are apparent from reported crash experience. Impacts to low tree limbs create risk for the driver of the vehicle and others on the roadway. There have been a number of reported incidents on Rockledge Drive that have resulted in temporary closure of the road and serious safety concerns resulting from a larger vehicle impacting a tree limb.

Engineering staff conducted an analysis of crash experience on the county-maintained portion of Rockledge Drive, which revealed at total of 26 reported crashes from January 1, 2014 to December 31, 2023. A complete list is provided in Attachment G. Four (4) of these crashes involved a vehicle colliding with a tree limb overhanging the road and a description of each is summarized below. The frequency of crash experience involving tree limbs confirms that there is insufficient vertical clearance on Rockledge Drive which has resulted in damage to vehicles, power lines, utility poles, and trees.

- 1. On 11/1/2017, a Moving (box) truck struck tree limb that crossed the roadway at 2015 Rockledge Drive.
- 2. On 1/17/2018, a Semi-Trailer Truck working at a property in the area struck a large tree limb that was hanging low over the roadway at 2081/2085 Rockledge Drive, causing the limb to break and fall onto power lines and damaging the utility pole. The tree limb had to be cut up and removed with special heavy equipment.
- 3. On 1/29/2018, a Land Clearing Truck working in the area struck a large tree limb that was hanging low over the roadway, causing limb to break and fall to ground and block the road at 2029 Rockledge Drive.
- 4. On 2/23/2019, a Moving (box) truck struck tree limbs that crossed the roadway at 2245 Rockledge Drive and came to rest with the enclosed box unit of the truck embedded into the tree limbs.

There is existing "No Trucks" and "Clearances Restricted" traffic control signage that has been in place for many years. It is apparent that the signage does not deter all trucks and it does not prevent the vehicular impacts with tree limbs overhanging the roadway, as is demonstrated by the reported crash history for Rockledge Drive. The physical space required to meet the standard vertical clearance is available by trimming tree limbs and removing the trees which lean into the roadway and are causing the physical constraint. The cost of these modifications is disproportionately low relative to the safety benefits gained by meeting the vertical clearance requirement. As such, an exception to the vertical clearance requirement cannot be justified by engineering analysis.

IV. CONCLUSION

The purpose of this assessment was to evaluate the vertical clearance requirement on Rockledge Drive and determine whether the existing vertical clearance aligns with current standards and safety requirements, given the road's low-volume and scenic nature. The results of this evaluation reveal that the existing vertical clearance is not adequate based on crash experience with tree limbs, despite the presence of advance vertical clearance warning signs and large vehicle (truck) restrictions.

The evaluation confirms that a 14-foot minimum vertical clearance standard must be provided without design exception, to accommodate the largest design vehicle using Rockledge Drive with considerable frequency.

Attachments:

- A. Brevard County Code of Ordinances, Chapter 86 (Roads and Bridges) Section 86-69
- B. Florida Statutes (F.S.) Chapter 334 (Transportation Administration), Section 334.044 and Chapter 336 (County Road System), Section 336.045
- C. Florida Department of Transportation (FDOT) Design Manual (FDM), AASHTO Vertical Clearance Criteria
- D. Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (commonly known as the Florida Greenbook), Chapter 3 Section C.7 (Geometric Design, Cross Section Elements)
- E. State Highway System Map
- F. National Highway System Map
- G. Summary Report of Crashes from January 1, 2014 to December 31, 2023

Attachment "A"

Brevard County Code of Ordinances, Chapter 86 (Roads and Bridges) Section 86-69

Sec. 86-69. Design and construction requirements.

- (a) All road and easement improvements shall comply to the applicable regulations of the county and state, including, but not limited to, articles VII and VIII of chapter 62, and article II, chapter 22 of this Code, FDOT standards and specifications and exhibits approved by the board of county commissioners.
- (b) The location, manner, installation and adjustment of utilities on county roads shall be performed in accordance with the FDOT utility accommodation guide.
- (c) The edge of the driveway shall be at right angle to the curbline or edge of pavement and shall cross the sidewalk area at the sidewalk grade. There shall be a minimum of five feet, between any driveway and any side property line measured at the property line or at the edge of the paved road surface or curb, not including the driveway flares. Two driveways for a parcel or lot may be permitted if the minimum distance between the two driveway approaches equal or exceeds 30 feet. Driveways shall not interfere with the drainage of the road or adjacent property.
- (d) Maintenance of traffic shall conform with FDOT standards.
- (e) Temporary culverts may be approved for use for access. The minimum size culvert shall be 12 inches in diameter and 20 feet in length. However, a larger diameter culvert may be required.

(Ord. No. 2006-16, § 4, 4-11-06)

Attachment "B"

Florida Statutes (F.S.) Chapter 334 (Transportation Administration), Section 334.044 and Chapter 336 (County Road System), Section 336.045

The 2023 Florida Statutes (including Special Session C)

Title XXVI	Chapter 334	View Entire Chapter			
PUBLIC TRANSPORTATION	TRANSPORTATION ADMINISTRATION				

334.044 Powers and duties of the department.—The department shall have the following general powers and duties:

(1) To assume the responsibility for coordinating the planning of a safe, viable, and balanced state transportation system serving all regions of the state, and to assure the compatibility of all components, including multimodal facilities.

(2) To adopt rules pursuant to ss. 120.536(1) and 120.54 to implement the provisions of law conferring duties upon it.

(3) To adopt an official seal.

(4) To maintain its headquarters in Tallahassee and its district offices and necessary field offices at such places within the state as it may designate, and to purchase, build, or lease suitable buildings for such uses.

(5) To purchase, lease, or otherwise acquire property and materials, including the purchase of promotional items as part of public information and education campaigns for the promotion of scenic highways, traffic and train safety awareness, alternatives to single-occupant vehicle travel, commercial motor vehicle safety, electric vehicle use and charging stations, autonomous vehicles, and context design for electric vehicles and autonomous vehicles; to purchase, lease, or otherwise acquire equipment and supplies; and to sell, exchange, or otherwise dispose of any property that is no longer needed by the department.

(6) To acquire, by the exercise of the power of eminent domain as provided by law, all property or property rights, whether public or private, which it may determine are necessary to the performance of its duties and the execution of its powers.

(7) To enter into contracts and agreements.

(8) To sue and be sued as provided by law.

(9) To employ and train staff, and to contract with qualified consultants. For the purposes of chapters 471 and 472, the department shall be considered a firm.

(10)(a) To develop and adopt uniform minimum standards and criteria for the design, construction, maintenance, and operation of public roads pursuant to the provisions of s. 336.045.

(b) The department shall periodically review its construction, design, and maintenance standards to ensure that such standards are cost-effective and consistent with applicable federal regulations and state law.

(c) The department shall work with the Statewide Office for Suicide Prevention in developing a plan to consider the implementation of evidence-based suicide deterrents on all new infrastructure projects.

(d) The department is authorized to adopt rules relating to approval of aggregate and other material sources.

(11) To establish a numbering system for public roads and to functionally classify such roads.

(12) To coordinate the planning of the development of public transportation facilities within the state and the provision of related transportation services as authorized by law.

(13) To plan proposed transportation facilities as part of the State Highway System, and to construct, maintain, and operate such facilities.

(14) To establish, control, and prohibit points of ingress to, and egress from, the State Highway System, the turnpike, and other transportation facilities under the department's jurisdiction as necessary to ensure the safe, efficient, and effective maintenance and operation of such facilities.

(15) To regulate and prescribe conditions for the transfer of stormwater to the state right-ofway as a result of manmade changes to adjacent properties.

(a) Such regulation shall be through a permitting process designed to ensure the safety and integrity of the Department of Transportation facilities and to prevent an unreasonable burden on lower properties.

(b) The department is specifically authorized to adopt rules which set forth the purpose; necessary definitions; permit exceptions; permit and assurance requirements; permit application procedures; permit forms; general conditions for a drainage permit; provisions for suspension or revocation of a permit; and provisions for department recovery of fines, penalties, and costs incurred due to permittee actions. In order to avoid duplication and overlap with other units of government, the department shall accept a surface water management permit issued by a water management district, the Department of Environmental Protection, a surface water management permit issued by a delegated local government, or a permit issued pursuant to an approved Stormwater Management Plan or Master Drainage Plan; provided issuance is based on requirements equal to or more stringent than those of the department. The department may enter into a permit delegation agreement with a governmental entity if issuance of a permit is based on requirements that the department finds will ensure the safety and integrity of facilities of the Department of Transportation.

(16)(a) To plan, acquire, lease, construct, maintain, and operate toll facilities; to authorize the issuance and refunding of bonds; and to fix and collect tolls or other charges for travel on any such facilities.

(b) Notwithstanding any other provision of law, the department may not enter into a leasepurchase agreement with an expressway authority, regional transportation authority, or other entity. This paragraph does not invalidate a lease-purchase agreement authorized under chapter 348 or chapter 2000-411, Laws of Florida, existing as of July 1, 2013, and does not limit the department's authority under s. 334.30.

(17) To designate limited access facilities on the State Highway System and turnpike projects; to plan, construct, maintain, and operate service roads in connection with such facilities; and to regulate, reconstruct, or realign any existing public road as a service road.

(18) To establish and maintain bicycle and pedestrian ways.

(19) To encourage and promote the development of multimodal transportation alternatives.

(20) To conduct research studies, and to collect data necessary for the improvement of the state transportation system.

(21) To conduct research and demonstration projects relative to innovative transportation technologies.

(22) To cooperate with and assist local governments in the development of a statewide transportation system and in the development of the individual components of the system.

(23) To cooperate with the transportation department or duly authorized commission or authority of any state in the development and construction of transportation facilities physically connecting facilities of this state with those facilities of any adjoining state.

(24) To identify, obtain, and administer all federal funds available to the department for all transportation purposes.

(25) To do all things necessary to obtain the full benefits of the national Highway Safety Act of 1966, and in so doing, to cooperate with federal and state agencies, public and private agencies, interested organizations, and individuals to effectuate the purposes of that act, and any and all amendments thereto. The Governor shall have the ultimate state responsibility for dealing with the

Federal Government in respect to programs and activities initiated pursuant to the national Highway Safety Act of 1966, and any amendments thereto.

(26) To provide for the enhancement of environmental benefits, including air and water quality; to prevent roadside erosion; to conserve the natural roadside growth and scenery; and to provide for the implementation and maintenance of roadside conservation, enhancement, and stabilization programs. At least 1.5 percent of the amount contracted for construction projects shall be allocated by the department on a statewide basis for the purchase of plant materials. Department districts may not expend funds for landscaping in connection with any project that is limited to resurfacing existing lanes unless the expenditure has been approved by the department's secretary or the secretary's designee. To the greatest extent practical, at least 50 percent of the funds allocated under this subsection shall be allocated for large plant materials and the remaining funds for other plant materials. Except as prohibited by applicable federal law or regulation, all plant materials shall be purchased from Florida commercial nursery stock in this state on a uniform competitive bid basis. The department shall develop grades and standards for landscaping materials purchased through this process. To accomplish these activities, the department may contract with nonprofit organizations having the primary purpose of developing youth employment opportunities.

(27) To conduct studies and provide coordination to assess the needs associated with landside ingress and egress to port facilities, and to coordinate with local governmental entities to ensure that port facility access routes are properly integrated with other transportation facilities.

(28) To require persons to affirm the truth of statements made in any application for a license, permit, or certification issued by the department or in any contract documents submitted to the department.

(29) To advance funds for projects in the department's adopted work program to governmental entities prior to commencement of the project or project phase when the advance has been authorized by the department's comptroller and is made pursuant to a written agreement between the department and a governmental entity.

(30) To take any other action necessary to carry out the powers and duties expressly granted in this code.

(31) To provide oversight of traveler information systems that may include the provision of interactive voice response telephone systems accessible via the 511 number as assigned by the Federal Communications Commission for traveler information services. The department shall

ensure that uniform standards and criteria for the collection and dissemination of traveler information are applied using interactive voice response systems.

(32) To enter into agreement with Space Florida to coordinate and cooperate in the development of spaceport infrastructure and related transportation facilities contained in the Strategic Intermodal System Plan and, where appropriate, encourage the cooperation and integration of airports and spaceports in order to meet transportation-related needs.

(33) To develop, in coordination with its partners and stakeholders, a Freight Mobility and Trade Plan to assist in making freight mobility investments that contribute to the economic growth of the state. Such plan should enhance the integration and connectivity of the transportation system across and between transportation modes throughout the state. The department shall deliver the Freight Mobility and Trade Plan to the Governor, the President of the Senate, and the Speaker of the House of Representatives by July 1, 2013.

(a) The Freight Mobility and Trade Plan shall include, but need not be limited to, proposed policies and investments that promote the following:

1. Increasing the flow of domestic and international trade through the state's seaports and airports, including specific policies and investments that will recapture cargo currently shipped through seaports and airports located outside the state.

2. Increasing the development of intermodal logistic centers in the state, including specific strategies, policies, and investments that capitalize on the empty backhaul trucking and rail market in the state.

3. Increasing the development of manufacturing industries in the state, including specific policies and investments in transportation facilities that will promote the successful development and expansion of manufacturing facilities.

4. Increasing the implementation of compressed natural gas (CNG), liquefied natural gas (LNG), and propane energy policies that reduce transportation costs for businesses and residents located in the state.

(b) Freight issues and needs shall also be given emphasis in all appropriate transportation plans, including the Florida Transportation Plan and the Strategic Intermodal System Plan.

(34) To assume the responsibilities of the United States Department of Transportation with respect to highway projects within the state under the National Environmental Policy Act of 1969, 42 U.S.C. ss. 4321 et seq., and with respect to related responsibilities for environmental review, consultation, or other action required under any federal environmental law pertaining to review or

approval of a highway project within the state. The department may assume responsibilities under 23 U.S.C. s. 327 and enter into one or more agreements, including memoranda of understanding, with the United States Secretary of Transportation related to the federal surface transportation project delivery program for the delivery of highway projects, as provided by 23 U.S.C. s. 327. The department may adopt rules to implement this subsection and may adopt relevant federal environmental standards as the standards for this state for a program described in this subsection. Sovereign immunity from civil suit in federal court is waived consistent with 23 U.S.C. s. 327 and limited to the compliance, discharge, or enforcement of a responsibility assumed by the department under this subsection.

(35) To provide a construction workforce development program, in consultation with affected stakeholders, for delivery of projects designated in the department's work program.

(36) To expend funds, within its discretion, for training, testing, and licensing for full-time employees of the department who are required to have a valid Class A or Class B commercial driver license as a condition of employment with the department.

History.—s. 11, ch. 84-309; s. 9, ch. 85-180; s. 26, ch. 86-243; s. 2, ch. 88-224; s. 155, ch. 92-152; s. 56, ch. 93-164; s. 15, ch. 96-423; s. 1, ch. 98-105; ss. 69, 232, 233, ch. 98-200; s. 1, ch. 99-250; s. 6, ch. 2000-266; s. 3, ch. 2002-13; s. 8, ch. 2002-20; s. 39, ch. 2003-286; s. 65, ch. 2006-60; s. 27, ch. 2007-259; s. 1, ch. 2009-89; s. 64, ch. 2010-5; s. 28, ch. 2011-66; s. 23, ch. 2012-174; s. 6, ch. 2014-223; s. 10, ch. 2016-181; s. 2, ch. 2019-43; s. 3, ch. 2020-39; s. 2, ch. 2021-161; s. 11, ch. 2021-186; s. 9, ch. 2023-70; s. 5, ch. 2023-197.

The 2023 Florida Statutes

Title XXVI	Chapter 336	View Entire Chapter
PUBLIC TRANSPORTATION	COUNTY ROAD SYSTEM	

336.045 Uniform minimum standards for design, construction, and maintenance; advisory committees.—

(1) The department shall develop and adopt uniform minimum standards and criteria for the design, construction, and maintenance of all public streets, roads, highways, bridges, sidewalks, curbs and curb ramps, crosswalks, where feasible, bicycle ways, underpasses, and overpasses used by the public for vehicular and pedestrian traffic. In developing such standards and criteria, the department shall consider design approaches which provide for the compatibility of such facilities with the surrounding natural or manmade environment; the safety and security of public spaces; and the appropriate aesthetics based upon scale, color, architectural style, materials used to construct the facilities, and the landscape design and landscape materials around the facilities. The department shall annually provide funds in its tentative work program to implement the provisions of this subsection relating to aesthetic design standards. The minimum standards adopted must include a requirement that permanent curb ramps be provided at crosswalks at all intersections where curbs and sidewalks are constructed in order to give handicapped persons and persons in wheelchairs safe access to crosswalks.

(2) An advisory committee of professional engineers employed by any city or any county in each transportation district to aid in the development of such standards shall be appointed by the head of the department. Such committee shall be composed of: one member representing an urban center within each district; one member representing a rural area within each district; one member within each district who is a professional engineer and who is not employed by any governmental agency; and one member employed by the department for each district.

(3) Notwithstanding the provisions of any general or special law to the contrary, all plans and specifications for the construction of public streets and roads by any municipality or county shall provide for permanent curb ramps at crosswalks at all intersections where curbs and sidewalks are constructed in order to give handicapped persons and persons in wheelchairs safe access to crosswalks.

(4) All design and construction plans for projects that are to become part of the county road system and are required to conform with the design and construction standards established pursuant to subsection (1) must be certified to be in substantial conformance with the standards

established pursuant to subsection (1) that are then in effect by a professional engineer who is registered in this state.

(5) Curb ramps which are required by subsections (1) and (3) to be provided at all intersections of curbs and sidewalks on public streets and roads shall be constructed to be in substantial conformance with the Uniform Federal Accessibility Standards published by the General Services Administration, Department of Housing and Urban Development, Department of Defense, and United States Postal Service. The provisions of this subsection apply to curb ramps let to contract on or after July 1, 1986.

(6) If the governing body of a county or municipality has adopted a design element as part of its comprehensive plan pursuant to part II of chapter 163, the department shall consider such element during project development of transportation facilities. The design of transportation facilities constructed by the department within the boundaries of that county or municipality must be consistent with that element to the maximum extent feasible.

History.—s. 1, ch. 72-328; ss. 2, 3, ch. 73-58; ss. 1, 2, ch. 74-242; s. 8, ch. 77-165; s. 1, ch. 78-398; ss. 5, 6, ch. 83-52; ss. 1, 2, 3, ch. 84-151; s. 69, ch. 84-309; s. 16, ch. 85-180; s. 31, ch. 86-243; s. 5, ch. 91-429; s. 5, ch. 92-152.

Note.-Former s. 335.075.

Attachment "C"

Florida Department of Transportation (FDOT) Design Manual (FDM) AASHTO Vertical Clearance Criteria

- (b) Open-graded friction courses (HMA pavement)
- (c) Pavement edge drains
- (d) Modified shoulder cross slope to mitigate cross-slope break on the high side of superelevated curves.

122.5.9 Vertical Clearance

122.5.9.1 AASHTO Criteria

Type Facility		Vertical Clearance (feet) ⁽²⁾	AASHTO				
Freeways		16 ^{(1),(4)}	pg. 8-5, 10-24				
Arterials (New Structures):	Rural Urban	16 ⁽¹⁾ 16 ⁽¹⁾	pg. 7-9, 10-24 pg. 7-51, 10-24				
Arterials (Existing Structures)	: Rural Urban	14 14	pg. 7-9, 10-24 pg. 7-51, 10-24				
Other Highways		14	pg. 5-9, 8-5				
Sign Trusses		17	pg. 7-9,51, 8-5				
Pedestrian Overpass		17	pg. 7-9,51, 8-5				
Tunnels: Free	ways	16	pg. 4-62				
Othe	r Highways	14	pg. 4-62				
Railroads		23 ⁽³⁾	pg. 10-25				

Table 122.5.12 AASHTO Vertical Clearance (Minimum)

Notes:

- (1) 14 feet allowed in highly developed urban areas if alternate route has 16 feet.
- (2) An allowance of 6 inches should be added to vertical clearance to accommodate future resurfacing.
- (3) See FDM 220.3.4 and the latest version of American Railway Engineering and Maintenance-of-Way Association (AREMA) guidelines, or the design office of the highspeed rail line of interest for specific high-speed guidelines and specifications. Over Electrified Railroad, the minimum vertical clearance is 24 feet 3 inches. (See Topic No. 000-725-003: South Florida Rail Corridor Clearance.)
- (4) Design Exceptions to the 16-ft vertical clearance standard on rural Interstate routes or on a single Interstate route through urban areas must be coordinated with Surface Deployment and Distribution Command Transportation Engineering Agency (SDDCTEA) as described in *FDM* 122.5.9.2.

Attachment "D"

Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (commonly known as the Florida Greenbook) Chapter 3 Section C.7 (Geometric Design, Cross Section Elements) **Florida Department of Transportation**



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

(Commonly known as the Florida Greenbook)

https://www.fdot.gov/roadway

FDOT Office Office of Design Topic # 625-000-015

Date of Publication 2018 Edition

PURPOSE

The purpose of this Manual is to provide uniform minimum standards and criteria for the design, construction, and maintenance of all transportation facilities off the State Highway System (SHS), roads, highways, bridges, sidewalks, curbs and curb ramps, crosswalks, bicycle facilities, underpasses, and overpasses used by the public for vehicular and pedestrian traffic as directed by **Sections 20.23(3)(a)**, **316.0745**, **334.044(10)(a)**, and **336.045**, **F.S.**

The Florida Greenbook encourages context-based transportation planning and design. Context-based planning and design offers a diverse approach using existing tools in creative ways to improve the transportation system and meet the needs of users of all ages and abilities. This includes pedestrians, bicyclists, transit riders, motorists, and freight handlers. Planning and design of streets and highways must be based on the surrounding development patterns for existing and planned land development patterns. The approach also considers community needs, trade-offs between those needs, and alternatives to achieve multiple objectives. Context-based design principles help to promote safety, quality of life, and economic development.

In the following statutory excerpts, the term "Department" refers to the Florida Department of Transportation.

Section 20.23, F.S. Department of Transportation. There is created a Department of Transportation which shall be a decentralized agency.

(3)(a) The central office shall establish departmental policies, rules, procedures, and standards and shall monitor the implementation of such policies, rules, procedures, and standards in order to ensure uniform compliance and quality performance by the districts and central office units that implement transportation programs. Major transportation policy initiatives or revisions shall be submitted to the commission for review.

Section 316.0745, F.S. Uniform signals and devices. –

(1) The Department of Transportation shall adopt a uniform system of traffic control devices for use on the streets and highways of the state. The uniform system shall, insofar as is practicable, conform to the system adopted by the American Association of State Highway Transportation Officials and shall be revised from time to time to include changes necessary to conform to a uniform national system or to meet local and state needs. The Department of Transportation may call upon

representatives of local authorities to assist in the preparation or revision of the uniform system of traffic control devices.

Section 334.044, F.S. Department; powers and duties. The department shall have the following general powers and duties:

(10)(a) To develop and adopt uniform minimum standards and criteria for the design, construction, maintenance, and operation of public roads pursuant to the provisions of *Section, 336.045, F.S*.

Section 336.045, F.S. Uniform minimum standards for design, construction, and maintenance; advisory committees.

(1) The department shall develop and adopt uniform minimum standards and criteria for the design, construction, and maintenance of all public streets, roads, highways, bridges, sidewalks, curbs and curb ramps, crosswalks, where feasible, bicycle ways, underpasses, and overpasses used by the public for vehicular and pedestrian traffic. In developing such standards and criteria, the department shall consider design approaches which provide for the compatibility of such facilities with the surrounding natural or manmade environment; the safety and security of public spaces; and the appropriate aesthetics based upon scale, color, architectural style, materials used to construct the facilities, and the landscape design and landscape materials around the facilities.

(2) An advisory committee of professional engineers employed by any city or any county in each transportation district to aid in the development of such standards shall be appointed by the head of the department. Such committee shall be composed of: one member representing an urban center within each district; one member representing a rural area within each district; one member within each district who is a professional engineer and who is not employed by any governmental agency; and one member employed by the department for each district.

(4) All design and construction plans for projects that are to become part of the county road system and are required to conform with the design and construction standards established pursuant to subsection (1) must be certified to be in substantial conformance with the standards established pursuant to subsection (1) that are then in effect by a professional engineer who is registered in this state.

These standards are intended to provide basic guidance for developing and maintaining a highway system with reasonable operating characteristics and a minimum number of hazards.

Standards established by this Manual are intended for use on all transportation facilities off the State Highway System (SHS). Certain projects off the SHS but on the National Highway System (NHS) utilizing federal funds may be required to follow additional design criteria. Please see <u>Chapter 19</u> of the Department's <u>Local Agency Program Manual</u> for further information. Information on roadways included in the NHS is found at the Department's website: <u>National Highway System Maps</u>.

Standards are provided for the design of new construction and reconstruction projects as well as maintenance and resurfacing projects. It is understood that existing streets and highways may not conform to all minimum standards applicable to the design of new and reconstruction projects. For existing roads not being replaced or reconstructed, it is intended the requirements provided in *Chapter 10 – Maintenance and Resurfacing* are applied. For all projects, there may be practical reasons a certain standard is not met. A process is provided in *Chapter 14 – Design Exceptions and Variations* to address those situations.

The Federal Highway Administration's <u>Manual on Uniform Traffic Control Devices</u>, <u>2009 Edition (MUTCD)</u>, has been adopted by <u>Rule 14 – 15.010, F.A.C</u>., and establishes a uniform system of traffic control devices. The <u>Manual on Uniform Traffic Control</u> <u>Devices (2009 Edition with Revision Numbers 1 and 2, May 2012, MUTCD)</u> includes additional requirements.

When this Manual refers to guidelines and design standards given by current American Association of State Highway and Transportation Officials (AASHTO) publications, these guidelines and standards shall generally be considered as minimum criteria. The Department may have standards and criteria that differ from the minimum presented in this Manual or by AASHTO for streets and highways under its jurisdiction. A county or municipality may substitute standards and criteria adopted by the Department for some or all portions of design, construction, and maintenance of their facilities. Department standards, criteria, and manuals must be used when preparing projects on the state highway system or the national highway system.

Criteria and standards set forth in other manuals, which have been incorporated by reference, shall be considered as requirements within the authority of this Manual.

This Manual is intended for use by qualified engineering practitioners for the communication of standards and criteria (including various numerical design values and use conditions). The design, construction, and maintenance references for the infrastructure features contained in this Manual recognize many variable and often complex process considerations. The engineering design process, and associated use of this Manual, incorporates aspects of engineering judgment, design principles, science, and recognized standards towards matters involving roadway infrastructure.

Users of this Manual are cautioned that the strict application of exact numerical values, conditions or use information taken from portions of the text may not be appropriate for all circumstances. Individual references to design values or concepts should not be used out of context or without supporting engineering judgment.

The contents of this Manual are reviewed annually by the Florida "Greenbook" Advisory Committee. Membership of this committee is established by the above referenced **Section 336.045(2), F.S.** Comments, suggestions, or questions may be directed to any committee member.

The minimum roadway width for bridges on urban streets with curb and gutter shall be the same as the curb-to-curb width of the approach roadway. Sidewalks on the approaches should be carried across all structures. Curbed sidewalks should not be used adjacent to traffic lanes when design speeds exceed 45 mph. When the bridge rail (barrier wall) is placed between the traffic and sidewalk, it should be offset a minimum distance of 2½ feet from the edge of the travel lane, wide curb lane or bicycle lane. For long (500 feet or greater), and/or high level bridges, it is desirable to provide an offset distance that will accommodate a disabled vehicle. The transition from the bridge to the adjacent roadway section may be made by dropping the curb at the first intersection or well in advance of the traffic barrier, or reducing the curb in front of the barrier to a low sloping curb with a gently sloped traffic face. See **Chapter 17 – Bridges and Other Structures** for additional requirements.

C.7.j.4.(a) Lateral Offset

Supports for bridges, barriers, or other structures should be placed at or beyond the required shoulder. Where possible, these structures should be located outside of the required clear zone. See *Chapter 4 – Roadside Design* for additional information on lateral offsets for structures.

C.7.j.4.(b) Vertical Clearance

Vertical clearance should be adequate for the type of expected traffic. Freeways and arterials shall have a vertical clearance of at least 16 feet-6 inches (includes 6 inch allowance for future resurfacing). Other streets and highways should have a clearance of 16 feet unless the provision of a reduced clearance is fully justified by a specific analysis of the situation (14 feet minimum). The minimum vertical clearance for a pedestrian or shared use bridge over a roadway is 17 feet. The minimum vertical clearance for a bridge over a railroad is 23 feet; however additional clearance may be required by the rail owner.

Attachment "E"

State Highway System Map

1



Attachment "F"

National Highway System Map



Attachment "G"

Summary Report of Crashes from January 2014 to December 2023

					State C	of Florida Depa	rtment of Transportation						
						General I	nformation						
Section/Ro	adway ID:		Rockledg	ge Drive		-	State Road:						
Intersecting Route: From Riverside Drive to US 1					-	Study Period:	1/1/	14	_ To:12/28/23				
Milepost: County:			Brev	ard		1	Data by: Date:	Signal 4 Analytics					
						-	Sulo.		maroc	ay, 1 coldary 20, 2024			
No.	Date	Day	Time	Sev	verity	Property	Crash Type	Day / Night	Wet /	Contributing Cause			
1	5/19/14	Monday	3:14 PM	-	-	\$4,000	Rear End	DAY	Dry	Vehicles 1 and 2 were traveling southbound on Rockledge Dr. Vehicle 2 slowed to turn into a driveway. Vehicle 1 failed to slow and rear ended Vehicle 2.			
2	5/30/14	Friday	9:50 AM	-	-	\$1,500	Other	DAY	Dry	Vehicle 1 was traveling in reverse in the northbound lane of Rockledge Dr and backed into Vehicle 2, which was pulling out of a driveway.			
3	6/20/14	Friday	8:15 AM	-	-	\$600	Other	DAY	Dry	Vehicle 1 was traveling southbound on Rockledge Dr and sideswiped a parked vehicle as it was trying to yield to a vehicle traveling northbound.			
4	9/17/14	Wednesday	11:05 PM	-	1	\$2,500	Off Road	NIGHT	Dry	Vehicle 1 was traveling northbound on Rockledge Dr and ran off the road onto the east shoulder, striking a coquina rock fence.			
5	12/29/14	Monday	1:44 PM	-	1	\$18,400	Off Road	DAY	Dry	Vehicle 1 was traveling southbound on Rockledge Dr and struck a tree.			
6	3/3/15	Tuesday	9:48 PM	-	1	\$10,200	Off Road	NIGHT	Dry	Vehicle 1 was traveling northbound on Rockledge Dr exceeding the posted speed limit and ran off the road onto the east shoulder, striking a tree.			
7	3/10/15	Tuesday	7:00 PM	-	1	\$2,600	Off Road	NIGHT	Dry	Vehicle 1 was traveling northbound on Rockledge Dr and ran off the road onto the west shoulder, striking some coquina rocks.			
8	3/11/15	Wednesday	5:12 PM	-	-	\$3,100	Rear End	DAY	Dry	Vehicles 1 and 2 were traveling southbound on Rockledge Dr. Vehicle 2 slowed to travel over a speed hump. Vehicle 1 failed to slow and rear ended Vehicle 2.			
9	1/29/16	Friday	6:45 AM	-	1	\$1,500	Pedestrian	NIGHT	Dry	Vehicle 1 was traveling southbound on Rockledge Dr and struck a pedestrian running northbound.			
10	4/9/16	Saturday	10:25 PM	-	-	\$3,500	Off Road	NIGHT	Dry	Vehicle 1 was traveling northbound on Rockledge Dr and ran off the road onto the east shoulder to avoid an animal on the road, striking a tree.			
11	12/10/16	Saturday	5:00 PM	-	1	\$5,000	Angle	DAY	Dry	Vehicle 1 was traveling eastbound on Coquina Rd at the intersection with Rockledge Dr. Vehicle 2 was traveling southbound on Rockledge Dr. Vehicle 1 attempted to turn right onto Rockledge Dr and failed to yield the right of way to Vehicle 2, striking Vehicle 2.			
12	9/6/17	Wednesday	2:00 PM	-	1	\$9,000	Off Road	DAY	Dry	Vehicle 1 was traveling southbound on Rockledge Dr and ran off the road onto the west shoulder, striking a mailbox, coquina rock, and landscaping (D.U.I.).			
13	9/14/17	Thursday	2:45 PM	-	1	\$0	Pedestrian	DAY	Dry	Vehicle 1 was traveling northbound on Rockledge Dr and struck a non-motorist while trying to drive around a parked vehicle.			
14	11/1/17	Wednesday	6:10 PM	-		\$3,500	Off Road	DAY	Dry	Vehicle 1, a moving (box) truck, was traveling northbound on Rockledge Dr and struck a tree limb that crossed the roadway.			
15	11/23/17	Thursday	4:40 AM	-	2	\$8,500	Off Road	NIGHT	Dry	Vehicle 1 was traveling southbound on Rockledge Dr and failed to negotiate a bend in the roadway. Vehicle 1 rolled and struck a tree on the west shoulder.			

16	12/7/17	Thursday	6:45 PM	-	-	\$5,000		Sideswipe	DAY	Dry	Vehi Dr ar V	icle 1 wa nd drifted /ehicle 2	as traveling southbound on Rockledge I into the northbound lane, sideswiping 2, which was traveling northbound.	
17	1/17/18	Wednesday	3:50 PM	-	-	\$11,000		Off Road	DAY	Dry	V north that lim	ehicle 1 bound o was hau b fell oni	, a semi-trailer truck, was traveling n Rockledge Dr and struck a tree limb nging low over the roadway. The tree to power lines, causing damage to a utility pole.	
18	1/29/18	Monday	2:30 PM	-	-	\$10		Off Road	DAY	Wet	Ve north that limb	ehicle 1, bound o was har fell to the s	a land clearing truck, was traveling n Rockledge Dr and struck a tree limb nging low over the roadway. The tree e ground and blocked northbound and outhbound lanes of traffic.	
19	2/10/18	Saturday	7:55 PM	-	1	\$8,000		Left Turn	NIGHT	Dry	Vehi at ti W Vehi and	cle 1 wa he inters vas trave cle 1 att d failed to	is traveling eastbound on Coquina Rd ection with Rockledge Dr. Vehicle 2 ling southbound on Rockledge Dr. empted to turn left onto Rockledge Dr o yield the right of way to Vehicle 2, striking Vehicle 2.	
20	4/22/18	Sunday	9:35 AM	-	1	\$10,500		Off Road	DAY	Dry	Vehi Dra Veh	cle 1 wa Ind failed icle 1 ra	is traveling southbound on Rockledge d to negotiate a bend in the roadway. n off the road onto the east shoulder, striking a tree.	
21	2/23/19	Saturday	12:00 PM	-	-	\$10,000		Off Road	DAY	Dry	Ve north that c tl	Vehicle 1, a moving (box) truck, was tr northbound on Rockledge Dr and struck <i>a</i> that crossed the roadway. The enclosed t the truck was imbedded into the tree I		
22	7/13/19	Saturday	10:00 PM	-	-	\$1,000		Other	NIGHT	Dry	Vehi Dr	Vehicle 1 was traveling northbound on Rod Dr and ran off the road onto the west sho striking some coquina rocks (D.U.I).		
23	11/21/19	Thursday	8:00 AM	-	-	\$2,500		Off Road	DAY	Dry	Vehi Dr an to a	Vehicle 1 was traveling southbound on Rockler Dr and backed into a concrete light post while tr to allow another vehicle to leave a driveway ar enter the roadway.		
24	3/6/21	Saturday	6:43 PM	-	-	\$6,500		Off Road	DAY	Dry	Vehi Dr	cle 1 wa and ran	is traveling northbound on Rockledge off the road onto the east shoulder, striking a wooden post.	
25	8/25/21	Wednesday	10:00 PM	-	-	\$2,000		Off Road	NIGHT	Dry	Vehi Dr	cle 1 wa and ran	s traveling southbound on Rockledge off the road onto the east shoulder, striking a tree.	
26	1/4/22	Tuesday	3:00 PM	-	-	\$550		Sideswipe	DAY Dry		Veh R Vi Vehi	ockledge ockledge ehicle 2 cle 1 fai	and 2 were traveling southbound on e Dr. Vehicle 1 attempted to pass while Vehicle 2 was stopped, but led to properly change lanes, striking Vehicle 2.	
TOTAL				0	12	\$130,960		-						
Total No.	Fatal	Injury	PDO	Rear End	Head on	Angle	Left Turn	Right Turn	Sideswipe	Rollover	Bic Ped	ycle / estrian	Off Road	
26	0	11	15	2	0	1	1	0	2	0		2	15	
PERCENT	0%	42%	58%	8%	0%	4%	4%	0%	8%	0%	8	3%	58%	
Contrib. Cause	Day	Night	PAVEM	ENT CONDIT	'IONS Unknown	Exc	ceeded	Speed		DUI			Careless Driving	
TOTAL	17	9	1	25	0		3			4			3	
PERCENT	65%	35%	4%	96%	0%		12%	6		15%			12%	
Total Vehicle:	al Vehicles Entering/ADT: Collision Rate: PER M.E												PER M.E.V.	

PW OCT 2023 REVIEW											STAR AND					No. of the second						
Rockledge Drive Tree Survey	PHASE	MAJOR ++	MAJOR LIMI TRIMMING	MINOR LIMB TRIMMING	TREE REMOVED BY OWNER	TOTALS	WITHIN RIGHT OF WAY	WITHIN ONE WAY STUDY	STUDY TREE ID N	COULD ONE-WAY SAVE TREE	PAVEMENT DAMAGED BY TREE	ASSESSED TOTAL (YES & NO)										
MAIOR LIMB REMOVAL - SIGNIFICANT TRIMMING TO CAN	ORY OR MULTIPLE RE	ANCHES	1	0	3	5	0	8	5	0	N/A	0	0									
MAJOR ++ - SUBSTANTIAL TRIMMING TO CANOPY/TRUNK	WHICH MAY IMPACT	TREE VIABILITY	2	2	3	10	2	17	7	0	N/A	0	3	65	a the later				н	EALTH: 1-GOOD	D; 2-FAIR; 3-POOR; 4-DEAD)
			4	2	2	5	0	9	0	0	N/A N/A	0	13						NDEPEND	ENT NR	M MAR 202	4 REVIEW
OWNER	STREET NO.	STREET NAME	STREET TYPE	OWNER STREET NAME *	ACRES	ASSESSED TREES	REMARKS	PHASE	WITHIN RIGHT OF WAY	WITHIN ONE WAY STUDY	STUDY TREE ID	COULD ONE- WAY SAVE TREE	PAVEMENT DAMAGED BY TREE	ASSESSED IN 2023	GIS FID#	APPROX DBH SI	PECIES HEALT	H VEH DAMAGE	% CANOPY LOSS POST TRIMMING*	OLD GROWTH	EXEMPT FROM BCC 62-4334 LANDSCAPING CODE	NOTES
BAYLISS, JON A	105	RIVER ROAD	CIR	105 RIVER RD CIR	0.44	1	MAJOR LIMB TRIMMING	1	NO				NO	YES	95	50	MISC 3	YES	90	NO	YES	TRIPLE 50" - HICKORY - TRUNK HEAVILY DAMAGED
FOX LAUREN A	106	OAKLEDGE	CIR	106 OAKLEDGE DR	0.43	1	MAJOR LIMB TRIMMING	1	YES				NO	YES	216	48	OAK 2.5	YES	0	NO	YES	LIFT; TWIN 24"
KYNG&QUEENS MANAGEMENT LLC	150	OAKLEDGE	CIR	150 OAKLEDGE DR	0.26	1	MINOR LIMB TRIMMING	1	YES				NO	YES	214	18	OAK 3 PINE 3	YES	0	NO	YES	VINES & BOARDS NAILED TO TREE
SACIK, KAREN A	2296	ROCKLEDGE	DR	2296 ROCKLEDGE DR	0.67	1	MAJOR LIMB TRIMMING	1	NO				NO	YES	96	24	OAK 3	YES	15	NO	YES	
YOUNG, GABRIEL JOHN (TREE ACROSS FROM PARCEL)	2340	ROCKLEDGE	DR	2357 ROCKLEDGE DR	1.54	1	MINOR LIMB TRIMMING	1	YES				NO	YES	217	14	OAK 2	NO	0	NO	NO	BCC NOT APPLICABLE TO MINOR TRIMMING
WALKER, JOHNNY TR	2365	ROCKLEDGE	DR	2365 ROCKLEDGE DR	1.34	1	MINOR LIMB TRIMMING	1	YES				NO	YES	218	12	DAK 3	NO	0	NO	YES	
BRADFORD, THOMAS G (ACTIVE OSPREY NEST)	2105	ROCKLEDGE	DR	2105 ROCKLEDGE DRVE	0.5	1	MAJOR ++	2	NO				YES	YES	10	24	OAK 2	YES	100	NO	YES	
MCMAHON FAMILY REVOCABLE TRUST	2121	ROCKLEDGE	DR	2121 ROCKLEDGE DR	0.48	1	MINOR LIMB TRIMMING	2	NO				NO	YES	104	12	OAK 3	YES	90	NO	YES	
BELMONTE, LORENZA V ESTATE	2129	ROCKLEDGE	DR	9616 ASH CT	0.48	1	TREE REMOVED BY OWNER	2	N/A				YES	YES	228	30	OAK 3	YES	10	NO	YES	TWIN 18-12
KARR, MICHAEL J	2181	ROCKLEDGE	DR	2181 ROCKLEDGE DR	1.06	1	MINOR LIMB TRIMMING	2	YES				NO	YES	103	12	MISC 3	YES	20	NO	YES	CODOM; ELM
KARR, MICHAELJ	2181	ROCKLEDGE	DR	2181 ROCKLEDGE DR	1.06	1	MINOR LIMB TRIMMING	2	YES				NO	YES	229	48	MISC 3	YES	0	NO	YES	TWIN CARROTWOOD
KNUUTILA, ROBERT	2191	ROCKLEDGE	DR	2191 ROCKLEDGE DRIVE	0.5	1 1	MAJOR LIMB TRIMMING MAJOR LIMB TRIMMING	2	NO				NO	YES	8	36	OAK 3	YES	33	NO	YES	TWIN
ALTMAN, THIRREL A JR	2237	ROCKLEDGE	DR	1225 N HIGHWAY A1A	0.93	1	MAJOR ++	2	YES				NO	YES	102	20	OAK 3	YES	100	NO	YES	TOPPED
GARCEAU, ROBERT M	2245	ROCKLEDGE	DR	2245 ROCKLEDGE DR	0.97	1	MINOR LIMB TRIMMING	2	YES		anter forter	anter tellettel	NO	YES	100	16	OAK 3	YES	0	NO	YES	
GARCEAU, ROBERT M	2245	ROCKLEDGE	DR	2245 ROCKLEDGE DR	0.97	1	MINOR LIMB TRIMMING	2	YES				NO	YES	99	10	OAK 2	NO	0	NO	YES	
GARCEAU, ROBERT M	2245	ROCKLEDGE	DR	2245 ROCKLEDGE DR	0.97	1	MINOR LIMB TRIMMING	2	YES				NO	YES	230	14	OAK 2	YES	0	NO	NO	BCC NOT APPLICABLE TO MINOR TRIMMING
ANICE K PACK REVOCABLE LIVING TRUST	2261	ROCKLEDGE	DR	2261 ROCKLEDGE DR	1.03	1	TREE REMOVED BY OWNER	2	N/A				NO	NO	98							ALREADY REMOVED, NOT ASSESSED
CARTER DONALD I	2281	ROCKLEDGE	DR	2281 ROCKLEDGE DR	1.02	1	MINOR LIMB TRIMMING	2	NO				NO	YES	232	14	OAK 3.5	YES	100	NO	YES	TOPPED
MYERS, CURTIS L	1981	ROCKLEDGE	DR	1981 ROCKLEDGE DR	0.96	1	MINOR LIMB TRIMMING	2	NO	VES	27	VEC	NU	YES	97	14	OAK 2	NO	0	NO	YES	
BIRD, GERALD W	1983	ROCKLEDGE	DR	1983 ROCKLEDGE DR S	1.51	1	MAJOR ++	3	NO	N/A	N/A	N/A	YES	YES	112	14	OAK 3	YES	100	NO	YES	
BIRD, GERALD W	1983	ROCKLEDGE	DR	1983 ROCKLEDGE DR S	1.51	1	MAJOR ++	3	NO	YES	36	YES	NO	YES	25	12	OAK 3	YES	100	NO	YES	LEANING
BIRD, GERALD W	1983	ROCKLEDGE	DR	1983 ROCKLEDGE DR S	1.51	1	MAJOR LIMB TRIMMING	3	NO	YES	35	YES	YES	YES	24	12	OAK 3	YES	100	NO	YES	LEANING
RONALD & ELIZABETH EASON	2001	ROCKLEDGE	DR	2001 ROCKLEDGE DR	0.83	1	MINOR LIMB TRIMMING	3	NO	YES N/A	33 N/A	YES N/A	NO	YES	23	12	OAK 3	YES	50	NO	YES	
RONALD & ELIZABETH EASON	2001	ROCKLEDGE	DR	2001 ROCKLEDGE DR	0.83	1	MINOR LIMB TRIMMING	3	NO	N/A	N/A	N/A	YES	YES	241	16	OAK 3	YES	100	NO	YES	
MARICIC FAMILY TRUST MARICIC FAMILY TRUST	2005	ROCKLEDGE	DR	2005 ROCKLEDGE DR	0.9	1	MAJOR LIMB TRIMMING	3	NO	YES	29	YES	NO	YES	107	24	OAK 2	YES	10	NO	YES	
MARICIC FAMILY TRUST	2005	ROCKLEDGE	DR	2005 ROCKLEDGE DR	0.9	1	MAJOR LIMB TRIMMING	3	NO	YES N/A	31	YES N/A	NO	YES	22	36	OAK 2	YES	50	NO	YES	
MARICIC FAMILY TRUST	2005	ROCKLEDGE	DR	2005 ROCKLEDGE DR	0.9	1	MAJOR LIMB TRIMMING	3	NO	N/A	N/A	N/A	NO	YES	111	48	OAK 2	YES	30	NO	YES	
SCHUMANN, ROBIN S	2009	ROCKLEDGE	DR	16875 S OCOTILLO VIEW	1.04	1	MAIOR ++	3	NO	YES	27	NO	YES	YES	21	36	OAK 2	YES	100	NO	YES	
SCHUMANN, ROBIN S	2009	ROCKLEDGE	DR	16875 S OCOTILLO VIEW	1.04	1	MAJOR LIMB TRIMMING	3	NO	YES	26	NO	YES	YES	20	16	OAK 3	YES	40	NO	YES	
SCHUMANN, ROBIN S	2009	ROCKLEDGE	DR	16875 S OCOTILLO VIEW	1.04	1	MAIOR ++	3	NO	YES	24	YES	YES	YES	19	24	OAK 2	YES	100	NO	YES	
SCHUMANN, ROBIN S	2009	ROCKLEDGE	DR	16875 S OCOTILLO VIEW	1.04	1	MAJOR ++	3	NO	YES	23	NO	NO	YES	17	14	OAK 2	YES	50	NO	YES	ONLY TWO BRANCHES; ONE WOULD BE REMOVED
SCHUMANN, ROBIN S	2009	ROCKLEDGE	DR	16875 S OCOTILLO VIEW	1.04	1	MAIOR ++	3	NO	YES	22	YES	YES	YES	16	16	OAK 3	YES	100	NO	YES	CODOM; TWIN 12-12; LEANING; WITCHES BROOM
SREGORY, GROVER K III	2015	ROCKLEDGE	DR	2015 ROCKLEDGE DRIVE	1.11	1	MAIOR ++	3	NO	YES	20	YES	YES	YES	15	16	OAK 2	YES	100	NO	YES	CODOM; TWIN 12-12
MASTROLONARDO, ANDREA T	2017	ROCKLEDGE	DR	2017 ROCKLEDGE DR	0.49	1	MAJOR ++	3	NO	YES	16	NO	YES	YES	13	14	OAK 2	YES	100	NO	YES	LEAWING
RIVERERONT INVESTMENT PROPERTIES	2025	ROCKLEDGE	DR	2520 PALM LAKE RD	0.71	1	MAJOR ++	3	NO	YES	15	NO	YES	YES	11	24	OAK 3	YES	100	NO	YES	
ELEEN R SZUCHY TRUST	2025	ROCKLEDGE	DR	2035 ROCKLEDGE DR	0.93	1	MAJOR ++ MINOR LIMB TRIMMING	3	NO	YES N/A	14 N/A	NO N/A	NO	YES	12	28	OAK 3	YES	100	NO	YES	CODOM; LEANING; PROXIMITY TO ROAD
SIMON, DOUGLAS	2050	ROCKLEDGE	DR	2050 ROCKLEDGE DR	0.56	1	MAJOR LIMB TRIMMING	3	NO	YES	9	YES	NO	YES	106	24	OAK 2	YES	20	NO	YES	CODOM
OUZA, MADELINE	2055	ROCKLEDGE	DR	2055 ROCKLEDGE DR	0.82	1	MINOR LIMB TRIMMING	3	NO	N/A	N/A	N/A	NO	YES	239	22	OAK 3	YES	0	NO	YES	BAD UTILITY TOPPING
KING, MARY HELEN	2057	ROCKLEDGE	DR	2057 ROCKLEDGE DR	0.72	1	MINOR LIMB TRIMMING	3	NO	YES	8	YES	NO	YES	238				THE CASE OF A PARTY			BUSHES, NOT A TREE
CLARK, ERIC JAMES	2081	ROCKLEDGE	DR	2081 ROCKLEDGE DR	0.77	1	MAJOR LIMB TRIMMING	3	NO	YES	6	YES	NO	YES	237	10	OAK 2.5	MO NO	20	NO	YES	BOTTLEBRUSH; MULTITRUNK
LARK, ERIC JAMES	2081	ROCKLEDGE	DR	2081 ROCKLEDGE DR	0.77	1	MINOR LIMB TRIMMING	3	NO	NO	4	N/A	NO	YES	235	12	OAK 3	NO	0	NO	YES	ALREADY TRIMMED
RUSSELL, TODD M	2081	ROCKLEDGE	DR	2081 ROCKLEDGE DR	0.77	1	MINOR LIMB TRIMMING	3	NO	YES	5	YES	NO	YES	234	14	OAK 3	YES	0	NO	YES	
WADE, KATHLEEN A	2101	ROCKLEDGE	DR	2101 ROCKLEDGE DR	0.30	1	MAJOR LIMB TRIMMING	2	NO	NU		N/A	YES	YES	233	36	OAK 3	YES	33	NO	YES	
GOODSON, JAMES C	1857	ROCKLEDGE	DR	1857 ROCKLEDGE DR	1.99	1	MINOR LIMB TRIMMING	4	NO				NO	YES	223	12	OAK 2	YES	5	NO	NO	BCC NOT APPLICABLE TO MINOR TRIMMING
RAHILL, JONATHAN	1881	ROCKLEDGE	DR	1881 ROCKLEDGE DR	0.67	1	MINOR LIMB TRIMMING	4	NO				NO	YES	222	16 1	VISC 2	NO	30	NO	YES	FICUS
TRATTAN, KAREN S	1889	ROCKLEDGE	DR	1889 ROCKLEDGE DR	0.93	1	MAJOR ++	4	NO				YES	YES	26	26	OAK 3	YES	100	NO	YES	WITCHES BROOM; LEANING
RENVALLC	1919	ROCKLEDGE	DR	1919 ROCKLEDGE DR	0.85	1	MINOR LIMB TRIMMING	4	NO				NO	YES	27	20	DAK 3	YES	100	NO	YES	WITCHES BROOM; LEANING
OSEPH P HOPPESCH & RUBY L HOPPESCH TRUST NO 1	1953	ROCKLEDGE	DR	1953 ROCKLEDGE DR	0.91	1	MINOR LIMB TRIMMING	4	NO				NO	YES	224	12	DAK 2	NO	5	NO	NO	BCC NOT APPLICABLE TO MINOR TRIMMING BCC NOT APPLICABLE TO MINOR TRIMMING
WILLIS, MICHAELD	1965	ROCKLEDGE	DR	1965 ROCKLEDGE DR	0.68	1	MAJOR LIMB TRIMMING	4	NO				NO	YES	225	14	OAK 2	YES	40	NO	YES	
MATTHIAS, ROBERT D	1965	ROCKLEDGE	DR	1967 ROCKLEDGE DR	0.68	1	MAJOR LIMB TRIMMING	4	NO				NO	YES	226	16	OAK 3	YES	30	NO	YES	LEANING
													CHOROLOHOMO	(CHORIDANDI		22	2	1 165	*CONSIDER LON	INC INC	ITY IF 340% CANOPY DEIA	BUC NOT APPLICABLE TO MINOR TRIMMING
						Minor Limb	30	Yes	12	22	Yes	15	17				1 0	51	Yes	0	55	
						Major Limb	18	No	51	2	No	7	48				2 26	10	No	61	6	
					TREE REMON	ED BY OWNER	2	Total	65	31	N/A Total	9	0			+	2.5 2	61	N/A	61	61	
						Total	65									+	3.5 1	-	rotai			
																	4 0					
																	61					

EXHIBIT B







